http://researchcommons.waikato.ac.nz/

Research Commons at the University of Waikato

Copyright Statement:

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

The thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognise the author's right
 to be identified as the author of the thesis, and due acknowledgement will be
 made to the author where appropriate.
- You will obtain the author's permission before publishing any material from the thesis.

Taking the road less travelled Exploring the link between curiosity and resilience with 1NZSAS

A thesis

submitted in fulfilment

of the requirements for the degree

of

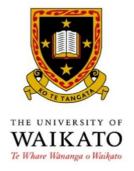
Doctor of Philosophy in Resilience

at

The University of Waikato

by

Alexandrina Bojilova



2021

ABSTRACT

The pivotal question- 'what goes right?' in resilience must be explored further. We need to reconstruct resilience- beyond recovery or equanimity and towards capacity for learning and thriving. This research unveils curiosity as a vital enabler for resilience. The relationship is studied in the context of resilience as a holistic, multifaceted and developable capability.

The primary aim of this research is to understand 'what goes right' for individuals who perform and thrive in ongoing change, ambiguity and significant risks, and to study the contextual conditions enabling their resilience. The overarching research question asks: "How is resilience built, sustained and developed to support capacity for thriving?" or put simply, "What goes right?". The three supporting questions are "In what ways does curiosity serve as a resilience enabler? "What are the heuristics individuals employ to sustain and grow resilient mindsets?", and "What are the contextual conditions that support access to resilience?".

This research employs the principles of social constructivism as a methodological framework. It uses semi-structured interviews and narratives to capture detailed insights from 35 New Zealand Special Air Service (1NZSAS) members, for whom resilience is a critical value-in-action.

The present research extends understanding of and applied ways to resilience, by reconstructing it through the prisms of curiosity. It frames and explores the heuristics individuals nurture and rely upon to thrive in and grow through challenges and setbacks. This research also outlines the contextual conditions that enable capacity for resilience in some of the most demanding conditions. The present research presents an integrated model of the findings, using curiosity and resilience as the

axis that shape, drive and sustain capacity for thriving in ambiguity and change. Further to academic contribution, this thesis offers invaluable contributions to practitioners and leaders, as well as individuals willing to broaden and build greater access to resilience.

ACKNOWLEDGEMENTS

All journeys worth pursuing start with wonder, demand Sherpas and require we are capable of navigating the storms from a place of clarity and truth.

To have minded someone like me on the steep and disrupted ascend of this PhD journey, would have demanded superhuman commitment. It has called for capabilities, far beyond extraordinary academic excellence and rigor. For this alone, I am convinced that if it was not to Professor Kathryn Pavlovich, the stories shared in this work would have been left untold. Utmost gratitude can never be enough to express how humbled I feel that Professor Pavlovich chose, one sharp junction after another, to continue this journey with me. I will never know where Professor Pavlovich sourced the faith, hope, love, determination, clarity and perseverance it took, to continue to believe that this is a worthy pursuit. Even more humbling-that I am a worthy person for her to continue to believe in. The journey has been cathartic, confronting and crucial for all aspects of my life. Kathryn has nurtured me into wide open spaces of possibilities and wonder. She has taught me how to dare to contribute from a stance of faith, strength and curiosity that I could not have conditioned for myself. The energy that ensues from being trusted and seen as worthy by someone like Kathryn, has informed and shaped so much of who I will continue to stive to become. Reaching the point of completion of this work is simply the tangible, obvious gift Kathryn has given me. Learning how to believe, love and have faith in others and in myself, how to persevere and maintain clarity through the fog of doubt- these are Kathryn's gifts that will continue to unwrap and enrich my contribution in all aspects of my life ahead. For that alone, gratitude can never be enough!

Serendipity is a gift, only available to those who sit restless, seeking to create opportunities, to discover and sponsor tectonic shifts towards building-back-better. Dr Erica Seville started this journey for me when she responded to my early morning email from Kabul. She chose the word 'serendipity' for her reply and with that, became my opening and possibility to a journey I would not have considered available otherwise. Erica recognised that the experiences my team had, as their norm, were worth learning from; that their stories can be steppingstones on the treacherous journey to resilience we all must commit to. Erica's energy, zeal, wisdom and her capacity to serve as a conduit to knowledge, curiosity, connection and exploration, continued to be a powerful undercurrent, shaping the commitment to this journey of unknown destinations.

All journeys of importance start with wonder. And if we were to see our blessings, 'wonder' is something that becomes available to us early. Wonder allows us to accept that pursuit of purpose must become the unescapable logic for our narrative of life. For this alone, I am beyond blessed! My father Alexander Bojilov, a tireless explorer, a pure wonder of his own, the truest nurturer of wonders for other, has shared with me the gift of wonder in every step I have been privileged to witness in his life. With this comes freedom and conviction to do good, to gift, to construct possibilities where none can be seen. I am beyond blessed to have been raised by a true nurturer of wonders such as my father, and along the way, to have become the nurturer of the Wonder that is my son- Alexander Bojilov Pennell. My son has sponsored this journey since his conception and has continued to sustain my commitment to it, with his masterful, daily teachings on curiosity and resilience.

Whilst my commitment to wonder was sponsored by my father and my son, it was directed in this work by the countless moments of profound inspiration generated by the remarkable humans that became the subjects of this work. This work is committed to Leon, Douglass, Soldier Y and the countless other unnamed, yet undeniably extraordinary and loyal subjects of resilience and curiosity who "take the road to Samarkand". There could be no better subjects, mentors, teachers or guides on the journey to resilience, because this group have mastered the most important journey to resilience-the journey that unfolds within!

At crucial junctions, wonder needs grounding. So that we, the wonderers, can navigate and weather the storms, we need true north, solid grounds and the equipment (needed albeit not always wanted at the time) to see us make it to the end. I dedicate this work to my husband- who offered me grounding, as true as it was at the time and where it was most needed. As a true minder of wonders, my husband-who upholds the tenets to resilience in all aspects of life, delivered the sense of realism required for me to hold the grip on all that it took to continue ahead. He knew 'what goes where in the order of life', delivered not only the breathing space but also challenged me to harbor, at times when I may have been lost in the storm of pursuits of purpose.

Any journey worth pursuing is marked by crucible moments. The final such moment is defined by the experiences we get to have with those who chose to share our final steps in completing the ascend. Clive Wilkinson became our extraordinary Sherpa at the very final, crucial and crucible steps on this journey. Clive Wilkinson embraced the challenge fully, unreservedly, making it his own. In elevating fears, constraints and doubt Clive's unwavering commitment to seeing this work take a worthy shape became a crucible moment for all that contributed to this work. He treated this work

as if it was extraordinary, leaving no doubt that it is a story worth communicating with the world beyond the pages. For that too, gratitude can never be enough!

TABLE OF CONTENTS

Abstract	ii
Acknowledgements	iv
Table of Contents	viii
List of Figures	xiii
List of Tables	xiii
Prologue	xiv
When You Get Lost, You Trace Yourself Back to the Beginning	xiv
Our Greatest Achievements Always Seem Unlikely	xvi
Distinct Moments and Unexpected Openings	xx
Chapter One: Introduction	1
Background	1
Research Aims and Questions	6
Major Contributions	7
Outline of the Thesis	8
Chapter Two: Review of the Literature	11
Overview	11
Understanding Individual Resilience	12
Defining Resilience	12
Resilience in Predictive Factors and Outcomes	15
Resilience: Fixed or Developable?	17
Individual Resilience and Context	21
Resilience in the Military	23
Demands for Further Research in Individual Resilience	25
Resilience in the Interplay between Organisations & their Actors	27
Defining Organisational Resilience	28
Why Organisational Resilience Matters?	30
The Relationship between Individual and Organisational Resilience	32
Gaps and Limitations of Existing Research in Resilience	36
Exploring Curiosity	40

Curiosity Defined	40
Curiosity for What?	45
Curiosity: Influences and Effect	48
Curiosity and Resilience	51
Dealing with Stress	53
Personal Resource Development and Holistic Well-Being	56
Summary	59
Chapter Three: Methodology	62
Overview	62
Research Paradigms Overview	62
What is my Perspective?	70
Research Design	71
The Qualitative vs Quantitative Debate	71
The Mixed Method Approach	72
Method Selection for the Present Research	74
Sample of Interest and Data Collection	76
Research Methods: Initial Considerations	78
Current Research Methods	81
Data Collection	83
Research Approval	86
The Unique Position of the Researcher	88
Chapter Four: 1NZSAS Context and History	90
Overview	90
History of 1NZSAS	93
The 1NZSAS Selection & Training	98
Shaped by Tenets	103
Chapter Five: Know it by the Company it Keeps	107
Overview	107
Awareness	111
Equanimity: Curiosity's Protective Effect against Fear	113

Clarity: Dealing with Uncertainty and Moral Ambiguity	117
Drive: Adaptive Challenge Disposition	123
Engagement	126
Learning: The Hunger for Knowledge	128
Seeking: The Mentality of an Explorer	130
Adapting: Creative Problem Solving	133
Persistence	135
Purpose: Curiosity and Existentialism	136
Growth Mindset: The Unrelenting Pursuit of Excellence	140
Belief: 'Who Dares Wins'	142
Curiosity and Resiliency: By Virtue of Design	146
Summary	148
Chapter Six: 'Who Dares Wins' and The SAS Resilience Heuristics	151
Overview	151
"Mind Where Your Mind Goes": Mindful Attention	153
Self-Awareness	155
Adaptive Coping	159
Focus	162
"Pursuit of Excellence": Growth Mindset	165
Self-Improvement	166
Acceptance and Readiness	168
Perseverance	172
"Belong and Make Better": Belonging & Sense of Control	176
Belonging	177
Trust	180
Sense of Control	181
"How Healthy is Your Forest of Reasons?": Clarity of Purpose	184
Authenticity	186
Permeation & Articulation	188
Elevation	192

Summary	195
Chapter Seven: A Context to Thrive In	198
Context	198
Learning	201
Shared Frame of Reference	213
Clarity of Purpose	226
Summary	234
Chapter Eight: Integration of Findings and Framework	237
Overview	237
Resilience in the SAS Context	240
Redefining Resilience	240
The SAS Process to Resilience: Steps on an Evolving Journey	248
Recognise	251
Re-orient	253
Re-anchor	255
Re-engage	257
Reconstructing Resilience through Curiosity	258
The Curiosity Effects	259
Curiosity in the Process to Resilience	270
Heuristics in the Process to Resilience	275
Context to Curiosity and Resilience	282
Context in the Approach to Resilience	284
'What Goes Right' through the Axis of Curiosity and Resilience	
Chapter Nine: Conclusion	
Implications for Theory	297
Broadening and Building Resilience through Curiosity	297
Redefining Resilience for Ambiguity	
The Effects of Context on Resilience	
Implications for Practice	
Implications for Leaders and Practitioners	

References	323
Appendix C: Consent Form for Participants	322
Appendix B: Participant Information Sheet	321
Appendix A: Interview Proforma	315
Appendices	315
Limitations and Future Research	311
Implications for individuals	310

LIST OF FIGURES

Figure 1: Iterations of thematic analyses	86
Figure 2: The SAS Tenets	104
Figure 3: 1NZSAS Tenets.	104
Figure 4: Overview of curiosity's resilience-enabling functions	111
Figure 5: Overview of curiosity's resilience-enabling functions	112
Figure 6: Curiosity in cognitive capacity and learning orientation	127
Figure 7: Curiosity in Endurance of personal goals & identity	136
Figure 8: SAS Resilience Heuristics	153
Figure 9: Context for Resilience	200
Figure 10: The Integrated Model of the relationship between curiosity, resilien context	
Figure 11: The 4R model of the approach to resilience	250
Figure 12: Curiosity's resilience enabling functions	258
Figure 13: Curiosity's in the Process to Resilience	271
Figure 14: SAS Heuristics in the Process to Resilience	275
Figure 15: What Goes Right' as a function of resilience and curiosity	293
LIST OF TABLES	
Table 1: Cunliffe (2010) Morgan and Smirich Network of Basic Assumptions	65
Table 2: Contrasting paradigms against research implications	67

PROLOGUE

Professor Kathryn Pavlovich-my chief supervisor, but chiefly my mentor, supporter, my guide to moments of grand and unexpected openings, and my empathetic yet determined leader, once told me these words to warn me of the journey ahead:

"PhD research is a little like walking through the desert."

I am afraid that a smug smile appeared on my face faster than I could consider the true meaning of her warning. I had a different, naïve, bolshie and limiting frame of reference. Perhaps a fixed mindset, driving me to prove I am a worthy candidate for this pursuit whilst masking my convictions' insecurities. Hidden behind models and assumptions around the unshakable worth of the rigour in science, I knew little of the desert Kathryn described. I had seen the desert, a few deserts in fact. I had trained in them, proven myself in them, displayed my resilience and 'rigour' in them, walked with my over-weighted backpack through them, seen others lost in them. However, that desert Kathryn described was a desert of a different kind-its navigation far more meaningful and far more treacherous than I could have anticipated.

When You Get Lost, You Trace Yourself Back to the Beginning

The idea of committing to PhD studies emerged through serendipity-not a word commonly used in the Military and hence, a word I had to google the day I heard it; a word that since has featured a great deal in my life. The day I learned the word "serendipity", I was in Kabul, Afghanistan. My team had endured heart-breaking losses and witnessed many critical incidents, amid a gruelling deployment cycle. It was the early hours of the morning in Kabul. A quiet moment for me after a day of travel and debriefs. I started searching for something else, something more, a 'model'

to help me frame the challenges we had confronted and to help me find a way through. I emailed Dr Erica Seville from Resilient Organisations NZ in a daze, needing to find that 'something more'.

The conversation evolved somehow to the moment when Erica emailed back saying: "Serendipitously, Professor Pavlovich might be interested in a student in this field". I do not remember how we got there, but I remember feeling suddenly awake, alert, inspired, and purposeful. I knew I was in a privileged position, sitting amongst great stories untold. I imagined others could grow from hearing these stories, and I also felt that the people that shared them with me needed to hear these stories for themselves! I did not get the models I was looking for. Perhaps I was the only one that needed one (my mind disciplined in the field of Organisational Psychology, craving an element of rigidity to make sense of chaos that could only be experienced but not framed). It quickly became apparent that the context I was in and the group I was there to support was in no need of models. They needed me to be a good human! Perhaps the model was there but unconsciously- framing the cadence for the peak performing team around me. What was important at that moment was that the word 'serendipity' and Erica's comment unfolded in unexpected ways.

In response, the question of what 'enables and detracts from resilience' emerged. It started as a question-from-a-distance. "The relationship between individual and organisational resilience" was what I set out to research. I wanted to make it clear-gracefully, that the kind of resilience we sought to replicate and spread grew in a context within which a specific set of rules needed to be observed. A context where the environment was by design one that at best-supported individuals' resilience deliberately and at worst-was careful not to take away from it. The 1NZSAS context was shaped by tenets and values that were indeed known and espoused by all. These

left no room for the 'de-railers within'. At its best, in that SAS environment, everyone's relationship and interaction with what was around them was intended to contribute and enrich. Perhaps the magnitude of the threat, demand, and risk that came from the 'outside world' made the 'inside world' of that team so very focused on contributing to everyone's resilience within it?

In the years of 'belonging' and reflecting on the learning with the SAS team, it is clear that not all was always perfect. Nevertheless, the frames of reference around what to expect, how to be, and where to position one's focus to enable self and others' resilience were there, clear and unquestionable. The mere existence of these frames of reference made it impossible not to admire them, 'warts and all,' once I stepped into what seemed to me as 'dusty,' clumsy (and at times even malevolent) world that sat beyond the 1NZSAS Unit. Out of frustration and admiration, the idea was born that the story of these frame of reference to resilience needed to be told; the model needed to be on a page.

Our Greatest Achievements Always Seem Unlikely

I wrote my first (clumsy) proposal on a miserable rainy October day. I remember the moments of that day clearly. It was the funeral of one of my friends, Leon Smith-SAS soldier, killed in Afghanistan. His death was shocking and unexpected. Leon had just received recognition for his heroic acts in aid of others, few days before the day of his death. For many of us, Leon was the most resilient person we knew. Perhaps not always in a way or for reasons others would approve. However, Leon was unrelenting in his commitment to self-actualisation, unwavering in his vision and never anything less than himself.

That day of the funeral, I chose to stay in and write. I was in a house less than 2 km away from Leon's official funeral event. Leon would have loved nothing more than to serve as an inspiration for a written story, doubly so on his funeral day. It was his dream to one day write a book! It reminded me, around every corner, on every wall, in every room and on every pavement block that makes the home of 1NZSAS, there are remarkable stories of heroes that may never be told. This feeling-of great stories untold is so palpable, it draws in and humbles instantly. Nevertheless, behind all those stories of heroism and extraordinary human effort stand very ordinary faces, very ordinary questions, very ordinary challenges. Leon-a clear example of this polarity himself had many stories to tell-most humorous, some strange and some even slightly inappropriate-that was the common in him. His drive for self-actualisation and his ways to authenticity were quite extraordinary, despite all odds, judgment, criticism, failure, and barriers. Leon used to warn:

"Some people accept living like pot plants-they only grow, given the limiting conditions they require are served to them by life. To be, despite your context, your origin and your predicaments, you need to cast your roots wide and grow your crown as broad as you can! Stretch! Always. You cannot be at the mercy of others or restricted by the size of the pot others have planted in you".

He also would call you a butterfly if you thought you were at a crossroads. By that, he meant neither a compliment nor judgment. He would say that you may sometimes find yourself to be like a butterfly, kept in a jar, observing the world around you, seemingly safe from predators and threat. However, that if you allow it, you may someday outgrow your jar. Moreover, when that place (of relative but limiting) safety begins to restrict you, you must break out of the jar and connect freely with the world beyond it-no matter your consequence! It was "free movement and choice" that

mattered more than consequences, Leon argued. Life could not be lived where your capacity was restricted by self-imposed limitations or the rules of others around you; however comforting or familiar they may seem.

The logic of 'butterflies in a jar' always escaped me, but Leon's story's moral is to meunquestionable. It is a story of unrelenting self-actualisation, clarity of purpose, of
self: in service, in materialising vision, in not being a passive observer of life but an
active influencer and participant-whether life seem messy and chaotic, or whether it
is, by order of our will, clear and obvious. Self-actualisation and true authenticity in
the accidental story of the 'butterfly in a jar,' the pot plants and all those stories I later
collected in a far less accidental way framed the starting point to my journey to
studying resilience. The main questions being: "Who are you?" and "Why are
you"? What resilience looks and works like did not seem to matter unless these
questions were answered first. Moreover, as Frankle had said, that question
demands a response-in-action.

The road to my writing this thesis was hard: more challenging than most I have taken, harder than I imagined, for reasons I could not conceive at the beginning of this journey. It has been an arduous journey-filled with doubt, elation, disappointment, roadblock and setbacks, yet extraordinary discoveries and perfect (often quiet and intensely private) A-HA moments and revelations. Concluding this piece of work seemed unimaginable at times, and in my moments of doubt, I felt the most unlikely of PhD candidates. However, as my participants (but chiefly-my mentors, friends, colleagues and even my 'nearly-tormentors' in Syria) seem to show, this is precisely the moral of these tales I have committed to sharing. Serendipitously, the motto of the SAS-a family of misfits, unrelenting dreamers, unwavering grunts and unlikely heroes reads:

"We are the Pilgrims, master; we shall go

Always a little further; it may be

Beyond that last blue mountain barred with snow

Across that angry or that glimmering sea,

White on a throne or guarded in a cave

There lies a prophet who can understand

Why men were born: but surely, we are brave,

Who take the Golden Road to Samarkand."

These are James Elroy Flecker's words, who wrote-"The Golden Road to Samarkand" in 1913. It is irrelevant here, what Flecker's intended purpose or inspiration in writing those words were. What matters is the meaning they have taken on for SAS members and me as a researcher, a practitioner, a human on their journey to do 'good,' a storyteller and an enabler. In the 1NZSAS, these are the words of resilience in their purest form. They recognise that the most wicket of a challenge is seldom imposed on us but that they lay within us. That the only measure of resilience is whether you take that extra step on the road to your calling-once, you understand it for and by yourself, the road to self-actualisation. That to be true, the commitment must be unwavering regardless of whether one feels blessed or forgotten, empowered or profoundly weakened, or whether we find ourselves at the start or near the end of our journey to our own Samarkand. The poem makes no promises of anything but challenge and soul searching. It leaves no doubt the journey will be unrelenting. Perhaps a moment of encouragement, perhaps an even greater burden-it tells us that however we may traverse on our journey is entirely in our own hands, in our minds and our hearts.

Distinct Moments and Unexpected Openings

The focus of my PhD narrowed suddenly and unexpectedly on another afternoon. This time, in the office with my supervisor and mentor-Professor Kathryn Pavlovich, a woman made of spirit like no other and the most profound empathy and clarity. I had just returned from a 14-month military deployment to Syria and Israel. I felt I had grown since that first proposal-in 2013 and 2014. As a UN Military observer in Syria, I had gathered experiences that had humbled me, enraged me, made me more hopeful and more disappointed all at once. I had fewer things to fear, but my primary fear-"Will I be useful?" had grown beyond 'existential' and I had far too many things to do! My mind felt hungry, my body still restless and wired, but I was about to experience one of the most powerful A-HA moments of my life that day. As it always seems to happen between Kathryn and me, the conversation was somewhere between the deeply personal and the pragmatic. We had an epiphany-somewhere inbetween discussing the demise of Kodak (as an example of how the resilience of giants may fall by the ways side) and my experiences amid the war in Syria. Kathryn gracefully and effortlessly carried us right to that epiphany.

Some months before that gloomy afternoon, I was taken hostage in Syria with two UN military colleagues. Three unarmed military observers, taken hostage by over 38-armed militia members who captured us, in their own words to "make a bad video" of us. At the time, videos of decapitation of 'enemies' could be seen on the internet with frightful regularity as a part of the warring parties' propaganda machines. They were intended to show commitment and uncompromising purpose and, of course, to intimidate. If we had stopped to mull over our captors' motivation in the way they articulated it, we would have had no reason to doubt their intent, and we had every precedent to tell us that we were in a world of trouble! However, we did not seem to

have the time to stop and think. We were yanked into and absorbed by an experience I doubt any of us will ever forget and one that influenced each of us in a way we could not have anticipated.

Thus, the story goes that somehow, from those grim and frightening beginnings, where we were promised to serve a merciless and horrendous propaganda machine, we managed to talk our way out of our predicament. Not only did we survive the ordeal (which included us walking over minefields on route to our holding place and back to safety whilst humming The Prodigy's "Minefields" to lift morale discretely), we grew from it in unexpected ways. We had returned 'home' having experienced generous hospitality in the hands of our captors, gleaned in the most profound of ways into the lives and minds of what could have been our tormentors, and walked away with hearts filled with hope, respect, curiosity and love!

Our captors took us to a large, abandoned house in the village of Bi'r al 'Ajam. A house hauntingly filled with the remanence of treasured family life and private traditions, covered in the dust of destruction that to all senses did not belong. Pictures of children side by side with pictures of proud ancestors, leaning precariously into each other and turned sideways by unrelenting explosions; a small table that had undoubtedly hosted rich conversations, with expensive teacups in a handcrafted cabinet nearby for ease of access; treasured carpets on the ground and a small, perfectly crafted silk-tread carpet hanging on walls as a sign of wealth; keepsakes past on through generations; beautiful, lovingly hand-sewn pillows on the ground, children shoes scattered in the entryway, all covered in dust from the constant pounding and shelling of war. This kind of dust did not belong here! This home had been abandoned, along with every other home in this village, in a frenzied hurry. All

material things a family may need, or treasure were left behind. Did they leave voluntarily? Did they leave alive?

The feeling in this place now bore no resemblance to the times in which the decor was set. Bi'r al 'Ajam was a village that had been mercilessly pounded by fire-small arms fire, grenade fire and artillery fire by the Syrian Army and every other warring party for months. We had watched the fighting unfold before our eyes from UN Observation Post 52-perched uncomfortably and (as we erroneously thought) safely on the hills above it. That uncomfortable OP52 had become our home. The feeling of confusion had become as familiar as the smells and sounds of a brutal civil war that surrounded us every minute of every day. For months, we had been perched there, on the hill, equipped with our oversized binoculars to observe and report events that were devastating and yet, we were powerless to influence or prevent, no matter how diligently we crafted our reports.

That memorable night we were sat in that unforgettable, abandoned house was no different to any other we had observed in the months prior-it was a night engulfed in fire, in blasting sounds, apparent nonsense and utter disbelieve. Except that now our senses left no room for the impartiality and objectivity expected of a UNMO, no doubt that we were inside the fireball of dust, nonsense and distraction we had observed, 'objectively' for so long. For once, we had no chance to report yet another day of pointless devastation diligently. We were in the epicentre of the crossfire zoneartillery, grenade and small arms fire around us and not beneath us. We had become beneath, in so many ways-the captives soaked in an agonising ordeal they had observed and reported from a distance. Distinctly and awkwardly, we were aware that it was only the three of us that squinted and braced our bodies involuntarily, with each loud noise and explosion that happened around us. Unsettlingly, the sounds of

destruction and impact-reverberations appeared to wash away seamlessly over our composed captors. The war had become a part of them in a way that seemed inhuman.

And so, back to the most distinct of memories. After a night debating, discussing, pleading, fearing and begging (with dignity) to keep our lives, the oldest of our captors-a man who looked dignified and in his 70s called for attention. He called me in, and he pointed to the word "humility" in a damaged and dusty Arab-English dictionary he had earlier requested. And that was it! We were free. Humility prevailed-in them, but chiefly it had prevailed in us! We had nothing to object, nothing to argue in the views of our captors!

That distinct memory was one of the countless moments in Syria that shaped and framed the study of resilience and, in the same breath, proved there is no framing human nature. We had patrolled streets peppered with Improvised Explosive Devices, observed lively, colourful towns turn into spaces of haunting destruction, witnessed children walk calmly to school as crossfire was tearing their cities and nights engulfed in fire and inconceivable suffering. Utter disbelief reported objectively and impartially.

Weeks before our hostage-taking, I was in the company of two other military observers in OP58. A stunning position perched perfectly and symmetrically between Israel and Jordan's borders and set in the Syrian village of Al Jamla. We had noticed unexpected announcements from the Minaret and began to observe the local population evacuate in mass, but we needed to stay put! In minutes, we found ourselves in a crossfire between rebel forces and the Syrian Army. When the fire intensified, we locked ourselves in our two by three underground bunker, where the three of us stayed for 38 hours, busy reporting events around us. The moral of that

story? I am not sure. However, a moral we were told the ordeal highlighted for others was how a team could survive emotionally and maintain high morale and 'mission focus' in acute conditions. Caveat: how acute our conditions had been did not became apparent to us until we left the observation post 38 hours later. As we drove away from Al Jamla for the last time, the sights of devastation were impossible to describe. The first sights that hit us were the cows and goats that had been grazing on the fields surrounding OP58 just hours prior. They were no longer standing and grazing and no longer whole. These animals were the primary source of subsistence for the families that owned them. They were seen as friends and family members, never before abandoned. The most peculiar of realisations? Our way out of this predicament was not through a "diplomatic corridor" created by the UN. A ceasefire window was organised by a UNDOF soldier whom we had never met but who had once had a great conversation with a rebel group member, guarding a nearby checkpoint. This accidental and unlikely bond allowed for a short ceasefire to be negotiated and secured our extraction from the area of devastation. Serendipity and humility!

Months later, sitting in Professor Pavlovich's office, somewhere between reflections on Kodak's demise and my experiences in the Middle East, it became apparent that she had, as always, been weeding out through my verbose delivery and simmering to find meaning. "So, what is it that saved you?"-she asked! She gave me time to construct my answer. She weeded again. "Could it have been your curiosity that helped you?". In that instance, the word "curiosity" did not belong to just Pippi Long-stockings anymore. It had gained a new meaning I understood. Like "serendipity". It was a simple and obvious question once asked, but one that most could have never extracted out of my stories. It was a moment in which thoughts converge and diverge all at once. A revelation that changed my perceptions of things seen and felt, as if the

puling of that one string of thought had unravelled and aligned years of observing and experiencing the extraordinary and the very, very ordinary.

In that moment and many moments that followed, the focus continued to shift away from gracefully influencing and more towards paying respects to extraordinary openings created by many very ordinary heroes and some extraordinary souls that guided me on the journey. What is resilience made of? Are there heuristics they-those seemingly made of resilience, use to navigate the deserts surrounding them? What is the True North for resilience? What currents skew and fortify the ways to it?

Humbly, the focus also shifted away from trying gracefully to shake up rigid systems or add to existing, perfectly depicted models of imperfect human nature. My few, profoundly meaningful exposures, unexpected openings and humbling shifts in frames-of-reference made it clear that any levels of rigidity or pre-framed intent violates the very nature of resilience. The common phenomenon I set out to study, on that gloomy October afternoon.

As Professor Pavlovich warned me at the beginning of this journey, it has been a lot like taking a walk in the desert. I have seen the desert and now felt that exact desert Kathryn tried to warn my naïve mind about some years back. Here, existing maps, road marks and the set steps of those who have taken the journey before me are quickly blown away into oblivion by the stories I have been entrusted to tell. Those marks become that cruel mirage one succumbs to whilst sitting a mare step away from the Oasis. These untold stories of unlikely and very common heroes of resilience, they bare no further framing. They simply need telling!

The quest at the start of my journey was a simple one. It was born out of pure curiosity! The label I could put on it now and applied then reads a little like this:

"Resilience- Know it by the Company It Keeps".

Faithfully, I have retraced my steps back to the beginning. The chapters of this work have assumed my 'True North' role- the only way to navigate the desert I can think of. They are the True North to resilience, shared and depicted full-heartedly by my extraordinary yet remarkably common participants, volunteers, colleagues, dearest friends, mentors and almost-tormentors-turn-greatest-of-teachers.

CHAPTER ONE: INTRODUCTION

"Almost in the beginning was curiosity."

Background

The question of 'what goes right' in people who negotiate change, potentially

traumatic events and ambiguity with equanimity demands further research (Hamby,

Grych & Banyard, 2018; Resnick & Fins, 2021; Yuan, 2021). Whilst long-standing,

the quest to understand resilience was found to need further depth, robustness and

reliable guideposts on how to survive and thrive, even before the COVID-19 crisis

(Chapman et al., 2020; Duchek, 2020; Walker, Luechtefeld & Walker, 2019). The

unprecedented and profound effects of COVID-19 mark a systematic human crisis of

untold suffering and compounding loss, which will likely continue to unfold and

amplify ahead (Inuaesiet, Okon & Akpan, 2021; Resnick & Fins, 2021; Yildirim &

Solmaz, 2020; Yuan, 2021). The need to understand how to build, sustain and evolve

resilience is even greater now (Giovannini et al., 2020; Inuaesiet, Okon & Akpan,

2021; Resnick & Fins, 2021; Yildirim & Solmaz, 2020; Yuan, 2021). The present

research was motivated by the guest to understand not only what it takes to survive

and recover following setbacks and trials, but also how to anticipate, grow and

intentionally shape our experiences. This work is committed to locating and exploring

the 'playbooks' on thriving in ambiguity, used by individuals and teams who are

selected and trained to do just that.

1

The need for resilience is evident in the military context (Coughlin, 2018). This need is amplified in elite military teams, such as the New Zealand Special Air Service (1NZSAS), who must perform and thrive in conditions of threat, unpredictability and ambiguity (Crosby, 2009). The 1NZSAS or SAS is a highly specialised component of the New Zealand Defence Force (NZDF), tasked with missions of critical importance. Since their conception in 1955, 1NZSAS teams were designed to be self-reliant and capable of operating without resupply, in relative isolation, harsh environmental conditions, or whilst embedded in hostile environments for extensive periods of time (NZSAS Regiment, 2012). SAS members are selected and trained through rigorous processes, they commit to missions that are shrouded in secrecy and involve the highest levels of risk and ambiguity. Resilience is a critical value in action in the SAS and a vital necessity that underpins the survival capacity of each member as well as the organisation as a whole (NZSAS Regiment, 2012, Crosby, 2009).

Whereas the importance of building and sustaining capacity for thriving in ambiguity and change is evident in the SAS context, where the threat is often imminent, direct and significant, it is just as critical in the non-military context (Thompson, Fiorillo, Rothbaum, Ressler & Michopoulos, 2018). For some time, researchers have warned that our experiences will continue to be shaped by increasing economic and environmental unpredictability, tectonic shifts in technological and global trends, geopolitical shocks, and competition for scarce resources (Bhamra et al., 2011; Burnard & Bharma, 2011; Hamel & Valikangas, 2011; Sahebjamnia, Torabi & Mansouri, 2018). Unprecedented changes in the ways we live will also continue to be shaped by natural disasters and globalised employment market (O'Brien, O'Keefe, Rose & Wisner, 2006), the borderless nature of change, resource interdependencies and shared vulnerabilities (Bhamra, Dani & Burnard, 2011). Our ability to remain

creative, evolve, adapt, anticipate, and contribute has always been seen as paramount (Ates & Bititci, 2011; Bharma, Dani & Burnard, 2011; Sahebjamnia, Torabi & Mansouri, 2018; Walker et al., 2019; Yossef & Luthans, 2007). The global COVID-19 pandemic has exemplified such risks on an unprecedented scale. It has reminded us that "new crises of unforeseeable nature are likely to continue to emerge, as the combination of environmental degradation, societies with increasing inequalities and deep economic interconnections have made the world more vulnerable" (Giovannini et al., 2020, p. 3).

The question of what causes some individuals, teams and communities to thrive in adversity, whilst others crumble in the face of ambiguity and change, has been on the minds of practitioners and scholars for some time (Bandura, 1977; Bonanno, 2004; Frankl, 2000; Staw, Sanderlands & Dutton, 1981). More recent literature has continued to demand that resilience is viewed as a dynamic, process-based, proactive and developable meta-capability; a skill to be gained, an umbrella construct and a form of plasticity that supports thriving, rather than a fixed trait (Duchek, 2020; Taylor et al., 2019; Walker et al., 2019; Yuan, 2021).

Whist research continues to identify resilience as a vital necessity (Cornwall, 2018; Liu, Reed & Girard, 2017), it has also signalled risks of oversimplification of the construct through poor or hasty research (Hamby, Grych & Banyard, 2018; Liu et al., 2017). At the same time, research has warned of risks associated with the glorification of resilience and argued that whilst vital, resilience is the "most common miracle" (Bonanno, 2004).

Research also insists that resilience cannot be studied in isolation and that it must be explored in the interactions between the individual and their context (Pickering et al., 2010). As a part of this, Chapman et al. have argued that focus on team resilience is vitally important for both- preventing disastrous outcomes and gaining competitive advantage (2020). Research has also insisted there is an undeniable bi-directional relationship between organisational and individual resilience (Doe, 1994; Hunter, 2006; Ollier-Malaterre, 2010; Shin et al., 2012; Taylor et al., 2019; Vickers & Kouzmin, 2010). However, research also shows that both team and organisational resilience are poorly understood constructs, and that research is disjointed, sporadic and lacking robustness (Boin & van Eeten, 2013; Burnard & Bharma, 2011; Chapman, 2020). Critically needed is a robust theoretical framework and empirical evidence demonstrating the bi-directional and dynamic relationship between individuals and teams as well as context, in a way that helps fortify resilient outcomes (Ates & Butitci, 2011; Duchek, 2020; Kantur & Iseri-Say, 2012; Yossef & Luthans, 2007).

The importance of resilience continues to challenge us to study the construct beyond measures of survival and instead towards anticipation, thriving, and growth. Importantly, recent research on resilience has begun exploring mechanisms, prerequisites and outcomes of resilience that appear aligned with curiosity (Duchek et al., 2020; Walker et al., 2019). Past research has found that curiosity supports perceptual development, learning, exploration, intellectual enrichment and the development of enduring interest (Loewenstein, 1994; Litman & Silvia, 2006; Reio et al., 2006; Voss & Jeller, 1983). One of its primary functions, captured under the concept broaden-and-build, has been seen in curiosity's capacity to expand thought-action repertoire, to value diverse others, broaden the individual's behavioural and cognitive range, and support the development and sustenance of interpersonal relationships (Dowrick et al., 2008; Gallagher & Lopez, 2007). Curiosity has been

linked with the ability to explore alternative courses of action and to build greater physical, social, intellectual and psychological resources (Friborg et al., 2009; Gallagher & Lopez, 2007; Jensen, 1995). Curiosity has also been linked with the effective management of arousal (Silvia, 2008), the processes of active striving and mindful immersion (Karwowski, 2012) as well as "increased focus on, contact with, and engagement in novel and challenging situations" (Gallagher & Lopez, 2007, p. 247). Curiosity has been further linked with openness to novelty and the propensity to view new situations as positively challenging, supporting effectiveness and engagement in environments demanding flexibility, and learning and adaptation more broadly (Harrison, 2009). Reliant on and contributing to self-efficacy, curiosity has also been associated with higher self-esteem, self-reliance, perceived effectiveness, competence and ability to deal with novel situations effectively (Brown, 1996; Kashdan, 2013; Silvia, 2008). Positive appraisal has been found to arouse feelings of absorption, concentration, and interest, which in turn stimulate intellectual mastery, confidence, learning and recall of information (Gallagher & Lopez, 2007; Kang et al., 2013). Curiosity has also been linked with positive cognitive appraisal, whereby offering greater immunity and recovery following setbacks as well as depression (Dowrick et al., 2008).

Curiosity affords for deeper problem comprehension, readiness to work through novel scripts and challenges, the ability to link existing knowledge with novel stimuli, and the exploration of alternative courses of action (Burnard & Bharma, 2011; Sutcliffe & Vogus, 2003; Watson, 2006). The associated flexibility in the context of changing demands has been found to support the ability to find 'workarounds' in situations of rapid change, deprive and high stress (Larsson; 1989; Loewenstein, 1994; Litman & Silvia, 2006; Meredith et al., 2011). The construct of curiosity and resilience also

share several personality factors, suggesting commonalities in their mechanisms (Croft, Dunn, & Quoidbach, 2014; Milojev, Osborne & Sibley, 2014; Karwowski, 2012). Amongst these are optimism and a sense of faith (Kashdan et al., 2013; Lengnick-Hall et al., 2011; Reio et al., 2006 Yossef & Luthans, 2007). Furthermore, both resilience and curiosity are seen as developable (Jensen, 1995; Singh & Pavlovich, 2011) and often as shaped and affected by the context in which we operate (Hamel & Valikangas, 2003; Kantur & Iseri-Say, 2013; Lengnick-Hall et al., 2011).

Whilst recent research has focused attention on the possible impact of curiosity on resilience as one of many personality strengths, it has failed to demonstrate a statistically significant link between the constructs (Goodman, Disabato, Kashdan & Machell, 2017). Nevertheless, the relationship has been confirmed in studies with a narrower scope, such as preventing depression and suicide (Denneson, Smolenski, Bush & Dobscha, 2017). The field will benefit from exploring the relationship between curiosity and resilience further for the benefit of broadening and building resilience.

Research Aims and Questions

This study's primary aim is to understand the phenomenon of resilience and gain new insights from individuals who perform and thrive in conditions of significant demands, stress, and unpredictability. The second and equally important aim is to explore how curiosity contributes to building and sustaining resilience. The third aim, underpinning the above, is to map the SAS cadence or process to resilience and contribute with a model for building and sustaining resilience. The overarching research question for this study is: "How is resilience in the SAS built and sustained

to support thriving?" or put simply "What goes right?" for resilience. Three subquestions elaborate on the above research questions. These ask:

- "In what ways does curiosity support resilience?"
- "What are the core heuristics that sustain and broaden SAS members' resilience?"
- "What are the contextual conditions that sustain, broaden and build resilience for thriving in ambiguity?"

Major Contributions

The present work responds to demands for further research on resilience, by exploring the construct in a context where the capacity to deal with and thrive in change, significant demands, stress and ambiguity is critical for survival. It aims to broaden awareness around 'what goes right' for people who negotiate potentially traumatic events with equanimity (Hamby et al., 2018)

The present research will contribute by redefining our concept of resilience and studying it in some of the most demanding conditions (Southwick et al., 2014). It will explore the dynamics, antecedents and drivers underpinning resilience as well as how context and specifically, team and organisational context geared towards resilience does to support and sustain capacity for resilience (Ducheck, 2020). Hence, this research furthers and broadens existing research on the interactions between individuals and their context (Liu, Reed & Girard, 2017).

The present research will contribute by exploring how curiosity may serve as a vehicle for resilience. It will explore how the relationship between curiosity and resilience

Chapter One: Introduction

unfolds, study the foundation on which this relationship is built and how it is strengthened or affected by the environment. It aims to enrich the field by offering reflections on how to effectively engender and build curiosity and resilience, supporting our capacity to recover, grow, learn and thrive. Hence, the present research will contribute by identifying how organisational and team context, including culture and values, shape access to resilient outcomes broadly and through curiosity, for teams and individuals (Burnard & Bharma, 2011; Lengnick-Hall et al., 2011; Kantur & Iseri-Say, 2012).

In studying resilience as a holistic, multi-dimensional process, the present research will further contribute by exploring the construct of team resilience (Chapman et al., 2020). It will present a model of the factors that support teams who thrive in ambiguity. Hence, it will reflect on the bi-directional relationship between the individual and their context by mapping the team outcomes expected of resilient individuals.

Outline of the Thesis

The thesis will be organised into the following parts:

- Chapter 1: This current chapter- "Introduction" introduces the thesis and
 frames the present research context. Above, it presented the background to
 the study, as shaped by current literature and applied needs. This chapter
 also outlined the research objective and questions, and the structure of this
 thesis.
- Chapter 2: "Literature review" presents a review of three main strands of
 literature related to the research questions: individual resilience, team and

Chapter One: Introduction

organisational resilience, and curiosity.

- Chapter 3 describes the methodology and method used to obtain data for analysis. The chapter begins with a review of research paradigms, explores the philosophical position shaping this research and outlines the steps taken in collecting and analysing the data.
- Chapter 4- "Context and History" aims to introduce the reader to the unique
 historical, operational and cultural nuances shaping the 1NZSAS. This
 chapter serves an important purpose in positioning this present research, as
 it frames the space in which the research questions are explored.
- Chapter 5, entitled "Know it by the Company it Keeps: How Curiosity Enables
 Resilience", studies the link between curiosity and resilience by framing one
 of the key research aims and responding to the first research question of
 this work.
- Chapter 6, entitled "Who Dares Wins and the SAS Resilience Heuristics", explores the core principles SAS members rely upon to build and sustain their personal resilience in times of significant demands and trials. This chapter explores 'What resilience takes' in terms of the thinking and engagement patterns required to sustain capacity for thriving in ambiguity. It responds to the second sub-question of this research- What are the core principles and practices SAS members rely on to sustain their resilience?
- Chapter 7- "A Context to Thrive In" is primarily focused on what SAS
 members describe they need from their context in order to build and sustain
 capacity for resilience and meet the expectation of thriving in ambiguity.

Chapter One: Introduction

Importantly, this chapter further builds on the relationship between the individual and their context and answers the third sub-question of this research- How does the SAS support and develop its members' resilience?

- Chapter 8, entitled "Integration of Findings and Proposed Framework", connects the findings across the three data chapters (Chapters 5, 6 and 7) by employing curiosity as the frame that holds these together. In this way, Chapter 8 present a view of resilience as reconstructed through curiosity. It delivers an integrated model that links the effects of curiosity on resilience with the effects of context, aligning these together with the SAS resilience heuristics. Crucially, Chapter 8 presents the cadence of the SAS Process to Resilience in a model and reviews the data through the prism of thriving teams, using curiosity and resilience as the axis.
- Chapter 9, entitled "Conclusion", clarifies the contribution of this thesis by extracting specific inputs made by this research to theory and implications for practice.

CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

This chapter reviews existing literature on resilience, curiosity and the role of context

in shaping and influencing resilience. This literature review frames the context for the

overarching research questions of 'What goes right for resilience?' It provides context

for the data chapters, including reviews of existing definitions on curiosity and

resilience and exploring possible links between the constructs. It also delivers context

to better frame the search for resilience mindset principles or heuristics and the

contextual conditions for resilience in some of the most demanding conditions.

This chapter reviews existing research in four key segments. The first segment directs

our attention to individual resilience. It does so by reviewing existing definitions of

resilience, exploring the construct in the context of its' predictors and outcomes and

addressing the extent to which resilience is developable. It also touches on the

relationship between resilience and context and focuses attention on military-specific

resilience research.

The second segment of this chapter directs our attention to organisational resilience

by addressing existing definitions and the importance of the construct broadly and in

the context of this work. It then looks into the bi-directional relationship between

individual and organisational resilience. The third segment of this work invites us to

explore the construct of curiosity. It starts with defining curiosity as a construct. It

then reflects on curiosity in the context of its assumed drivers and reviews literature

11

on curiosity's influences and effect. The fourth segment of this chapter frames the context for exploring the relationship between curiosity and resilience.

Understanding Individual Resilience

The multifaceted construct of resilience has been studied in various contexts, including natural and social science, philosophy, spirituality, medical and military sciences (Burnard & Bhamra, 2011; Kantur & Iseri-Say, 2012; Mandleco & Peery, 2000). Resilience is consistently seen as a crucial life-affirming factor (Hamby, Grych & Banyard, 2018; Southwick et al., 2014). It is also seen as difficult to measure because of the multitude of factors used to refer to it (Karairmak, 2010). As the popularity of resilience has continued to increase, so have ambiguities in definitions and the need for comprehensive models or standards to measure and develop resilience (Liu, Reed & Girard, 2017). To build the foundation for this thesis's overarching question- 'What goes right in resilience?', this chapter explores existing definitions and research on resilience. It then extracts the resilience definition that will be employed for this present research.

Defining Resilience

Even at a glance, researching the construct of resilience triggers a myriad of references and invitations to explore divergent fields of thought. Though daunting, it is essential to explore leading and dominant fields of thought in defining resilience. Resilience is typically recognised in our capacity to adapt to stress, trauma or adversity, and is often measured in the effectiveness of our responses, the outcomes of our coping mechanisms, our capacity to resist the negative effects of significant demands and our ability to maintain equilibrium (Friborg, Hjemdal, Matinussen &

Rosenvinge, 2009; Wu et al., 2013). Pickering et al. defined resilience "as the capacity to respond positively when exposed to negative, traumatic, or stressful experiences" and the "capacity to successfully adapt to change and to stressful events in a healthy and constructive manner" (2010, p. 213). Richardson (2002) emphasised the capacity for adaptation in his definition of resilience. He saw resilience is an umbrella construct and defined it as "a point in time when one has adapted physically, mentally, and spiritually to a set of circumstances whether good or bad" (p. 310). Karairmak (2010) referred to resilience simply as our capacity for stress-resistance. One common definition of resilience is "the ability to withstand stress and thrive in the presence of adversity" (Hart et al., 2005, p. 392). This and similar definitions often include the ability to bounce back following setbacks or untoward events (Sutcliffe & Vogus, 2003). Indeed recovery, bouncing back, adaptation and positive outcomes have all been commonly used to describe resilience (Liu, Reed & Girard, 2017).

To frame a helpful definition of resilience for the present research, we need to explore what resilience does, how it works and crucially-what it is not. For example, whilst much of resilience research has focused on the process of recovery or reintegration following a disruption, scholars have emphasised that we can reintegrate in ways that are dysfunctional (Richardson 2002). To this end, Bonnano (2004) argued that recovery and resilience have separate outcome trajectories and contrasted these against the degree of severity in psychological disruption before returning to healthy functioning (2004).

Most commonly, resilience has been studied retrospectively and in examining trajectories that deviate from expected maladaptive outcomes. Hence, the common references to bouncing back in resilience research. Focus on resilience more recently

has been directed towards indicators of good adjustment and strengths rather than vulnerabilities or the absence of negative adversity impact (Liu, Reed & Girard, 2017, p. 111). Building on this, scholars have argued that resilience should be viewed not only as a process of recovery or the absence of pathology but as a level of plasticity that affords growth, positive transformation and learning (Almedon, 2005; Connor & Davidson, 2003; Friborg et al., 2009). Tedeschi and Calhoun (2004) examined resilience in the context of post-traumatic growth through the mechanisms of both-deliberate rumination and meaning-making. More recent research has built on this, directing definitions of resilience towards the capacity to bounce forward, to develop and grow not only despite but because of adversity (Walker et al., 2019).

Hence, research has focused on resilience not only in the form of survival but in the direction of thriving and pursuit of self-actualisation (Richardson, 2002). Notably, scholars and practitioners have argued that exposure to adversity is essential to broadening and building ones' resilience repertoire (Walker et al., 2019). The reasons for this may be evident in the capabilities, perceived predictors and outcomes of resilience. Arguably, perseverance, self-efficacy, hope and optimism cannot be tested or developed in the absence of challenge (Goodman et al., 2017; Walker et al., 2019). These are explored in the subsequent section of this chapter.

The importance of resilience has been outlined by a long list of desirable characteristics and outcomes associated with it, some of which include "good health, social competence, and functional capacity, such as the ability to be productive" (Pickering et al., 2010, p. 213). Moreover, whilst interest in and the need for greater resilience continues to grow, resilience is seen as a common rather than exceptional trait (Gupta & Bonanno, 2010; Walker et al., 2019). So much so that scholars have argued- the "great surprise of resilience research is the ordinariness of the

phenomenon" (Goodman et al., 2017, p. 423). In looking to find 'what goes right for resilience' then, the present research inevitably seeks to answer why something resilience- common and ordinary, can be elusive and challenging to obtain or sustain for so many.

Resilience in Predictive Factors and Outcomes

In exploring definitions of resilience, we often encounter descriptors of predictors and outcomes associate with the construct. Notably, these are often listed concurrently, and many define resilience in 'abilities'. Referring to the 2017 American Psychological Association's characterisation of resilience, Cornwall (2018) saw resilience as "comprising the ability to make and carry out realistic plans; having positive self-regard; having confidence in one's abilities; the capacity to communicate and solve problems; impulse control; flexibility; and applying lessons learned from past experiences" (p.111). In describing resilience, Walker, Luechtefeld & Walker (2019) listed the abilities to "accept reality, maintain clear purpose, and improvise in the face of challenge", "persistence in problem-solving" and the capacity "to transmute the energy of change to benefit self and others" (p. 216).

Several resilience definitions also refer to examples of capabilities and characteristics. Walker et al. located resilience in seeing challenges as desirable developmental windows rather than a source of threat (2019). Walker et al. (2019) linked resilience to the concept of equifinality, or the belief that there are multiple ways to achieving a desirable outcome. They saw this belief as reliant upon agility, growth-mindset and self-efficacy, amongst others (Walker et al., 2019). In defining resilience, research has further highlighted factors such as problem-solving, positive reinforcement, favourable perception, and faith contributing to individual resilience

(Lengnick-Hall et al., 2011). In an attempt to study resilience, Goodman et al. (2017) explored the effects of personal strengths, including hope, grit, meaning in life, curiosity, gratitude and control beliefs. While accepting that all other factors have a role in resilience, Goodman et al. found hope to have the most considerable moderating effect and be the only statistically significant personality strength in supporting resilient outcomes (2017). Other research has broadened this by focusing on attributes that drive resilient outcomes, including self-esteem, confidence, optimism, self-mastery, perseverance, internal locus of control, ego strength, and flexibility (Pickering et al., 2010; Walker et al., 2019). Framed from yet another angle, Wu & Miao's (2013) research explored how our thinking, dispositions and responses to challenges, stress and ambiguity, influence and shape our resilience, in the context of outcomes and life experiences.

Taking a more specific perspective, personality researchers have proposed clusters of personality traits that predict and shape resilience (Skodol, 2010). Whilst leading resilience researchers like Barbara Fredrikson (cited in Tugade & Fredrickson, 2004) and George Bonanno (2021) identified factors such as positive emotions, flexible thinking and self-enhancement bias as key resilience factors, there is an agreement that at least some resilient outcomes can be attributed to personality, and more specifically, a combination of positive trait-like features referred to as personality strengths (Goodman et al., 2017). Indeed, coping and emotional regulation have been viewed as factors of considerable importance for the development and maintenance of resilience across one's lifespan and seen to prevent psychopathology following traumatic exposure (Compas et al., 2017).

A different perspective of resilience emerges from research in hardiness. For example, the sub-components of individual resilience are seen to be supported by

the individual's commitment (reliance on external life domains as well as industriousness and willingness to commit energy and resources to overcome challenges), control (perceived position of influence rather than helplessness) and experience of challenge (concerning their adaptive capacity, perception of change as an opportunity rather than a threat and the belief that challenge leads to growth) (Eschleman, Bowling & Alacon, 2010; Kobasa, 1979; Sheard & Golby, 2010). Exploring the attitudes of commitment (vs alienation), control (vs powerlessness), and challenge (vs security), Maddi (2004) argued that all three components are needed to constitute hardiness and equated hardiness to existential courage.

The preceding sections of this chapter highlighted the importance of resilience and listed possible predictors and outcomes of resilience and some of the existing definitions of the construct. Evidently, references to resilience are abundant and varied even at a glance. Cumulatively, these appear to spell a long and difficult to navigate wish-list of traits, states and outcomes. This may not always be helpful in confidently making sense of 'what goes right for resilience'.

To define resilience for this present research, we also need to explore views on whether resilience is fixed or developable. We will then address the related question of our context's role in resilience and the extent to which our resilience may be fluid, subject to our context. This is with the aim of a better understanding of what can be done or influenced in better supporting resilience for thriving.

Resilience: Fixed or Developable?

Research into genetic, developmental, epigenetic, and psychosocial factors has highlighted that a part of resilience may be innate or embedded during our development's early formative stages (Wu et al., 2013). However, there is growing

recognition that outcomes associated with resilience, such as resistance to the deleterious effects of stress and effective responses to adversity and ambiguity, can be developed throughout our life span (Chmitorz et al., 2018; Jensen, 1995; Wu et al., 2013). Hence, more recently, resilience has been viewed as a holistic and developable disposition (Chmitorz et al., 2018; Jensen, 1995; Corner, Singh & Pavlovich, 2017). Resilience is also viewed as a dynamic process rather than a stable trait and conceptualised as mental health in relation to stressor load (Chmitorz et al., 2018).

The emphasis on resilience as a developable mindset is such that researchers and practitioners across fields have invested heavily in experiential and simulation training to shape the capabilities required for thriving in ambiguity (Coughlin, 2018; Staal et al., 2008; Walker, Luechtefeld & Walker, 2019). For example, targeted training has been found to enhance purposeful action, minimise demands on working memory and decrease the negative impact on cognitive and psychological capabilities under conditions of perceived threat, all of which provide a broader resilience range (Meredith et al., 2011; Robinson & Bridges, 2011). Commitment to the developable nature of resilience has also manifested in research in the related field of hardiness. The view that hardiness can be assessed and trained has supported commitment to increasing existential courage (Maddi, 2004).

Researchers have called for a positive and constructive approach to resilience in understanding how we can negotiate and grow from potentially traumatic events with equanimity (Hamby, Grych & Banyard, 2018; Southwick et al., 2014). The focus of some resilience research has been on the need to move towards identifying and elucidating "protective factors that tend to mitigate against the development of stress-related disorders" (Tepe & Lukey, 2008, p. 321) and ways in which these may

aid prevention and intervention (Bonanno, 2004; Fergusson & Horwood, 2003). In this context, researchers have demanded a broader commitment to protective factors as a separate psychological dimension-"not the absence of risk, but rather the buffering against the risk to reduce the likelihood of potential negative consequences" (Denneson, Smolenski, Bush & Dobscha, 2017, p. 125).

In examining individual resilience's psychological variables, Lee et al. highlighted self-efficacy as the most robust protective factor and depression as the strongest risk factor for resilience (2013). They also outlined that resilience can be improved and better developed by enhancing protective factors than reducing risk factors (Lee et al., 2013). Organising indicators into higher-order functional domains, Hamby et al. (2017) listed self-regulation, interpersonal strengths and meaning-making as key sources of developable strengths or protective factors for resilience. Their research introduced the concept of poly-strengths-"an indicator of the density and diversity of a person's overall portfolio of strengths" (Hamby et al., 2018, p 1). Further, studying the lifelong contribution of protective factors to resilience, Sattler & Font (2018) found that whilst their buffering effects of protective factors vary by cognitive and social resources, cumulative effects formed by multiple protective factors are strongly linked with long-term resilience. The references in this section present an important context for each of the present work's research questions, offering greater scope for exploring not only 'what goes right for resilience' but also how can we make it so.

Drawing on Seligman's seminal work and specifically, his concepts of 'learned helplessness' vs 'learned optimism', Walker et al. reflected on three reference points to position resilience against: "personal (internal vs external causality), permanence (stable vs unstable), and pervasiveness (global vs local/specific)" (2019, p. 218). Whilst culminating in a dichotomy of optimism vs pessimism, these references were

seen to carve ways of building resilience by enabling individuals to shift or reframe interpretations of events (in Walker et al., 2019). Research of this nature has powered commitment towards resilience-building vehicles such as conditioning or inoculation training. Successful coping in controlled conditions of adversity is seen to set a positive trajectory of resilience development and growth ahead.

The commitment to building and developing resilience has also supported explorations on the role of mentors, teams and feedback, amongst others, in developing resilience (Walker et al., 2019). Examining the role of feedback and reflections in facilitating growth following setbacks, numerous studies have emphasised the importance of timing (Jung & Wickrama, 2008). Walker et al. reflected on the importance of paying attention to the "window of plasticity" such as "periods of extreme challenge... when it is most likely that an individual might be more open to new experiences, opportunities and knowledge (2019, p. 217). This is likely to be particularly important for studying individual resilience in conditions of significant ambiguity and demands and close-knit, interdependent teams such as the 1NZSAS. These studies direct attention beyond whether or not resilience is developable and towards a careful examination of the vital factors required to build and broaden baseline resilience.

In summary, though innate abilities, values and personality may suggest differing resilience baselines, resilience should be viewed as a holistic and a developable disposition. One that can evolve or deteriorate throughout our lifespan, depending on how we reflect on and engage with our predicaments, and irrespective of our baseline (Chmitorz et al., 2018; Jensen, 1995; Singh & Pavlovich, 2011; Walker et al., 2018). Importantly, research shows us that resilience can be shaped and influenced by our context (Hamel & Valikangas, 2003; Kantur & Iseri-Say, 2013; Lengnick-Hall et al.,

2011), and this is an important area to explore further in the context of this present work. The following section examines existing research on the interactions between individual resilience and context and, in particular, how context may influence resilience.

Individual Resilience and Context

Much of the earlier research on resilience appears to frame it as an internal resource or, at best, a set of intrinsic factors that belong to the individual. More recent research has challenged us to think far more broadly. For example, Cornwall (2018) reflected "resilience is not an unproblematic good if it means having to draw solely on internal resources in order to cope with an objectively disordered world" and called for a broader focus on external resources in the study and development of resilience (p. 111). Indeed, many argue the strength of any resilience research is in shining light on the interactions between the individual and their context, as well as the interaction between the individual and the setback or adversity that draws attention to the examination, rather than merely the outcomes of interactions (Liu, Reed & Girard, 2017). Indeed, some researchers have defined resilience as a "series of mechanisms", an interaction between "an individual's unique resources and the events he or she experiences" and a dynamic process that "depends on the context of life events and responses to them" (Goodman et al., 2017, p. 424).

While resilience research is often retrospective and focused on intrapersonal processes, Sandler et al. (2008) demanded that we examine person-environment transactions when thinking of resilience. Similarly, narrative reviews of the literature highlight that further to inner resources (such as self-efficacy, interpretation of events and coping skills), the key to resilient outcomes are the strength and direction of

relationships with others (including family, community and friendships) (Marriott, Hamilton-Giachritsis & Harrop (2013). These are consistent with qualitative and quantitative military research in both-resilience and hardiness, focusing the field on protective effects and individual-context interplay (Bartone, Kelly & Mathews, 2013; Britt, Sinclair & McFadden 2013; Siebold, 2007).

Similarly, resilience is strongly linked with attachments styles, and research has been committed to studying how attachment styles and the contexts that re-enforce different relational patterns support or detract from resilience (Bender & Ingram, 2018). Pickering et al. demanded that resilience is reconceptualised not only against the outcome of interactions between the individual and their context but also "the processes that contribute to these outcomes" (2010, p. 213).

The reference to 'process' as underpinning resilience is important for the present research. Firstly, this research explores individual resilience in the interactions between the individual and their context. It looks to find consistent patterns that enable resilience in these interactions, within and across participants. Secondly, the research sample was of interest because SAS members are trained to and considered to have high levels of resilience. Also, however diverse they may be, they are arguably and comparatively homogenous research sample. In addressing 'what goes right,' this research is interested in the steps and actions (or process) they each take to broaden and build their resilience and how these collectively frame a process that can be deliberately followed to sustain resilience.

More broadly, Mancini and Bonanno (2009) listed factors such as social resources, demographics, worldview, trauma exposure, economic resources, and positive emotions capacity in their model of resilience, aiming to depict the effect of

individual, social support and appraisal differences, on coping capacity and ultimately, on resilience.

Resilience in the Military

The fundamentals of human resilience appear to be well espoused in the fields of the military as well as in developmental and sports psychology (Coughlin, 2018; Gupta & Bonanno, 2010; Hart, Burock, London, Atkins, Bonilla-Santiago, 2005; Jones, Hanton & Connaughton, 2007; Staal, Bolton, Yaroush & Bourne (in print). Scholars have attributed the strength of resilience research in the military to its crucial role in inextremis or dangerous environments, as well as to access to data and insights from individuals with shared experiences of potential trauma (Bonanno et al., 2012; Bonanno, Westphal, & Mancini, 2011; Coughlin, 2018). Britt et al. (2013) pointed out that military personnel "face a wide range of traumatic or potentially traumatic events, including being shot at, knowing someone who has been injured or killed, seeing dead bodies or human remains, witnessing atrocities, and seeing ill or injured civilians (including children)" (p.4). Bartone pointed out that further "to danger and the threat and real risk of death or serious bodily harm", factors such as "workload, long hours and days of combat deployment, isolation, ambiguity, powerlessness, and even boredom" are factors that can place significant demands on soldiers' resilience (2006, cited in Coughlin, 2018, p. 2). Nevertheless, research has shown that while military personnel's risks may be higher, most personnel do not develop severe mental health problems after exposure (Coughlin, 2018). Again, this poses the question of 'what goes right' for people exposed to critical events and demands and make it through with equanimity, and even grow from their exposures.

Boerman et al. (2012) defined military resilience as "the ability to maintain optimal performance during acute situations, positively recover afterwards, and sustain combat motivation while meeting operational demands" (p. 315). Aude et al. (2014) argued that resilience in the military context could be recognised behaviourally as "recovering quickly from setbacks, shock, injuries, adversity, and stress while maintaining a mission and organisational focus" (p. 47).

Resilience in the military context is seen as critical not only for the individual but also for their team and the organisation (Britt, Sinclair & McFadden, 2013). Indeed, some researchers have argued that resilience in the military is essential for the survivability of the individual and their team (Coughlin, 2018).

Examining the military context, Boermans et al. stipulated that whilst resilience demands a degree of internal resilience capacity from the individual, it also relies heavily on external resources to the individual (2012). Meredith et al. (2011) also studied individual and unit or organisational factors to resilience in the military context. The authors explored the interaction between the individual and their context and listed "positive coping, positive affect, positive thinking, realism, behavioural control, physical fitness and altruism" as factors that encourage resilience in military personnel (p. 16). Whilst Aude et al. (2014) commented that resilience behaviours are heavily reliant on proportionate and frequent training, Britt, Sinclair & McFadden (2013) outlined that military resilience is supported by appraisal and coping process that is usually personal as well as organisational.

Research in military resilience supports the view that individual and team or organisational resilience are dependent on the interactions between the individual

and their context. They also support the view that resilience is a complex and multidimensional construct and an essential and developable capability.

Demands for Further Research in Individual Resilience

Calls for more robust research on how to sustain and develop resilience come from all fields. Some argue that much of the existing research has been atheoretical and focusing on static rather than developable variables (Hamby, Grych & Banyard, 2018). Fearing that we are a long way away from being able to meaningfully support resilience, Liu, Reed and Girard highlighted a plethora of concerns, including that resilience research is limited in scope and that "existing models are inadequate in capturing the multidimensional nature of resilience" (2017, p. 111). Arguing that "resilience cannot exist in a vacuum", the authors stressed that discourses in opinions as to whether resilience should be viewed as an outcome, a trait, or a coping strategy (as well as whether it should be viewed as recovery, return to baseline, the absence of pathology or thriving) continue to convolute pathways to resilience (Liu, Reed & Girard, 2017, p. 113). Sonuga-Barke (2017) referred to resilience research as "frustratingly fragmented and methodologically constrained, albeit growing" (p. 358). Karairmak "uncovered a paucity of reliable and valid measures of resilience" and pointed out that the cause for this is the continued focus on psychopathology rather than strengths (2010, p. 351). Hamby, Grych & Banyard argued that current resilience research "remains limited in several respects, including tendencies to operationalise healthy outcomes as low levels of symptoms and to assess protective factors that simply represent the inverse of risk factors" (2018, p 1). Chmitorz et al. (2018) identified significant issues with current references to resilience definitions (including some still signalling it is a trait rather than a state). They insisted on an outcome-oriented definition to support better ways to fostering resilience. Demands for better research in the field are also underpinned by an awareness of the complex, increasing, and heterogeneous nature of adversity and its effects (Sonuga-Barke, 2017).

Specific to military research, even with its evident criticality for individuals and teams, research indicates that resilience is still the least effectively trained behaviour in the military (Coughlin, 2018). Not surprisingly, researchers have called for more data and insights on the nature and workings of resilience, with a view of the increasing complexities in some of the most demanding conditions (Bonanno et al., 2012; Bonanno, Westphal, & Mancini, 2011; Sinclair & Britt, 2013; Coughlin, 2018). Demands for further military research specific in resilience are framed by concerns with the impact of the ever-changing nature of asymmetric warfare and the increase of social and moral ambiguity in modern battlefields, amongst others (Coughlin, 2018).

The risks associated resilience with being vital yet poorly trained capabilities in the military are confronting. Not only because of the impact on the individual's resilience but also on their team and the broader system they are a part of. For example, considering the exposures and demands placed on military personnel, the need for greater focus on resilience is amplified by the fact that the deleterious effects of stress are known to, directly and indirectly, influence their next of kin (Walker et al., 2018). Indeed, research has demonstrated that historically, "the strain and hazards associated with military deployment spill over to negatively influence the family system" through outcomes such as increased relational turbulence, decreased marital satisfaction and poorer academic achievement for children of deployed personnel, amongst others (Walker et al., 2018, p. 3250). Others have argued that whilst this spillover effect has always been a known risk for military families, broad-

spectrum societal changes "that influence the social, legal, political, economic, and technological conditions that frame and inform military experiences" are more complex and demanding than ever before in human history (O'Neil, Martyn & Bowen, 2018, p. 550). Amongst many other factors, societal changes are also found to have informed dramatic shifts in expectations within family units, whilst geopolitical pressures have sponsored more frequent redeployments, rapid shifts and multinuanced exposures for military personnel (O'Neil, Martyn & Bowen, 2018).

In summary, the definition of resilience for this research focuses not only on the ability to recover and bounce back but chiefly on the ability to grow, develop and bounce forward with every experience. The present research will focus on resilience as a developable capability. It will explore resilience as a level of plasticity and a multidimensional construct that underpins capacity for thriving, adaptability and for shaping one's conditions. Notably, the present research will view resilience as a mindset to be nurtured and developed and as a process of engagement rather than an outcome.

Resilience in the Interplay between Organisations & their Actors

The present research focuses on individual resilience and, in particular, 'what goes right' for resilience in some of the most demanding conditions. It also holds that context is crucial for individual resilience. This is doubly the case in tight or highly interdependent teams such as military teams and the 1NZSAS in this particular case. The present section invites a review of existing literature on organisational resilience to better understand the bi-directional and dynamic relationships between individual resilience and context. This research aims to share insights on individual resilience in the context of peak performing teams. This literature review segment is designed

to contextualise how greater individual resilience can enable the broader team and organisational resilience and vice versa. The present section will first explore definitions of organisational resilience, then address why the study of organisational resilience may be necessary for the current research context. It will then review potential links between individual and organisational resilience and the limitations of existing research. These aim to amplify the importance of investing in individual resilience and frame some of the links proposed in this research's Discussion chapter.

Defining Organisational Resilience

Resilience is about how organisations respond to setbacks and challenges and their fortitude and responsiveness to opportunities (Boin & van Eeten, 2013; Hamel & Valikangas, 2003). Indeed, some frameworks demand that organisational resilience is viewed as indicators of the organisation's 'evolvability' (Kantur & Iseri-Say, 2012). One common definition of organisational resilience is "the maintenance of positive adjustment under changing conditions, such that the organisation emerges from these conditions strengthened and more resourceful" (Vogus & Sutcliffe, 2007, p. 3418). Hence, one commonly used definition reflects "the ability to anticipate key opportunities and events from emerging trends, constantly adapting and changing, rapidly bouncing back from disaster and remaining stable in a turbulent environment" (Ates & Bititci, 2011, p. 5604). Lengnick-Hall et al. (2011) refer to organisational resilience as the "firm's ability to effectively absorb, develop situation-specific responses, and ultimately engage in transformative activities to capitalise on disruptive surprises that potentially threaten organisation survival" (p. 248).

Organisational resilience is often measured in the form of capacity. Examples include the capacity to capitalise on change, generate and engage with opportunities following change (Lengnick-Hall, 2005); the "capacity to maintain desirable function in the midst of strain" (Gittell et al., 2006, p. 303), and the capacity to foster future success (Duchek, 2019). Taylor et al. (2019) locate resilience in "the capacity of the organisation to cope with challenges through flexible, adaptable, humane, and interactive systems, whilst maintaining the health, individual resilience, and engagement of employees" (p. 199). Resilience is also seen in the organisation's capacity to withstand various environmental and economic ambiguities and internally driven transformation (Ates & Bititci, 2011; Boin & van Eeten, 2013; Lengnick-Hall et al., 2011).

Organisational resilience is attributed to the ability to "create or retain resources...in a form sufficiently flexible, storable, convertible, and malleable, and hence the ability to successfully cope with and learn from the unexpected" (Vogus & Sutcliffe, 2007, p. 3419). It is also seen as "a function of the overall vulnerability, situational awareness and adaptive capacity of an organisation in a complex, dynamic and interdependent system" (McManus et al., in Seville, Brunsdon, Dantas, Le Masurier, Wilkinson & Vargo, 2006). Different resilience maturity levels take organisations from conducting business as usual, changing and responding to adversity effectively, and ultimately changing and influencing the environment they are in intentionally (Kay and Goldspink, 2012).

Organisational resilience has been referred to as a fluid, dynamic and multidimensional series of outcomes that demands a deliberate commitment to developing risk capacity (Gibson and Tarrant, 2010). Organisational resilience is considered as a meta-capability, an umbrella construct (Duchek, 2019) and as a form

of plasticity (Lundman et al., 2010). It is distinguished from flexibility, agility and robustness in that it demands adaptation and a higher threshold of capabilities to deal with the unexpected (Duchek, 2019).

Why Organisational Resilience Matters?

Research has acknowledged for some time that the context in which we operate will be shaped by increasing economic and environmental unpredictability; the impact of globalisation and technological discontinuities, tectonic shifts in global trends, environmental crisis, geopolitical shocks, and competition for scarce resources (Bhamra et al., 2011; Burnard & Bharma, 2011; Hamel & Valikangas, 2011; Sahebjamnia, Torabi & Mansouri, 2018). Unprecedented changes in the nature and unpredictability of the terrain in which organisations operate can be due to natural disasters, an awakening of consumers' consciousness and competition for talent in an increasingly globalised employment market, amongst many others (O'Brien, O'Keefe, Rose & Wisner, 2006). Events have demonstrated for some time the borderless nature of change and the increasing interdependence and shared vulnerabilities of organisations, industries and communities worldwide (Bhamra, Dani & Burnard, 2011). In this highly ambiguous and changeable environment, organisations' ability to remain creative, evolve, adapt and maintain competitive advantage and effectiveness is paramount (Ates & Bititci, 2011; Bharma, Dani & Burnard, 2011; Sahebjamnia, Torabi & Mansouri, 2018; Yossef & Luthans, 2007). This transforms organisational resilience from a purely aspirational construct and a retrospective diagnosis to a practical and critical necessity.

Put simply, organisational resilience matters beyond its effect on the resilience of organisational members. Organisations are entities capable of maintaining

infrastructures, economies and nations, becoming in-and-of-themselves a driver for recovery and a supporting framework for communities (Seville et al., 2006). The interconnectedness between organisations and the borderless nature of change implies that developing resilience in one organisation may have a positive flow-on effect on others, directly or indirectly intertwined with it (Hamel & Valikangas, 2011).

Organisational resilience has been considered a predictor of success in mergers, downsizing and restructures, the success of new organisational strategies, and the organisation's ability to deal with externally driven changes and demands (Ates & Bititci, 2011; Bhamra et al. 2011). It is viewed as a predictor of readiness to orient towards post-disaster growth, embrace growth following unprecedented structural and functional changes, align and relate to new markets, and develop vital relationships with other organisations (Bhamra et al. 2011; Boin & van Eeten, 2013; Hamel & Valikangas, 2003; Ollier-Malaterre, 2010). Cultivating resilience is seen as conducive not only for an effective response to change and calamities but also for adaptive tolerance for risk and proactive adjustment (Burnard & Bharma, 2011; Sahebjamnia, Torabi & Mansouri, 2018). Further to recovery and positive adjustment, resilience is crucial for organisational learning, foresight, the ability to anticipate threats, and envision new opportunities (Bharma et al., 2011; Hamel & Valikangas, 2011).

Notably, the study of organisational resilience is one of ethical pursuit on behalf of its organisational members. It supports the positive drive for individual self-determination by encouraging self-actualisation in organisational settings (Frankl, 2000). The study of organisational resilience, and the development of an overarching framework informed by the principles of human resilience can also build a shared foundation between different types of organisations and shared understanding in the

management and support of communities in post-disaster recovery following experiences of unprecedented change.

The Relationship between Individual and Organisational Resilience

Understanding how individual and organisational resilience affect each other is vital in our current context, which demands a shift in expectations from maintaining the status quo to flourishing in ambiguity.

Academic and applied work has demonstrated that organisations are largely isomorphic by virtue of their reliance on human creative capacity, commitment, performance, as well as the resilience of their members (Burnard & Bharma, 2011; Shin, Taylor & Seo, 2012). Critically, scholars have argued that the essence of organisational resilience is in the organisation's creativity, its' capacity to foresee and pre-empt change, to re-align faster and without discourse, to go through change with 'zero trauma' and to shape its future without convulsive re-organisation (Ates & Bititci, 2011; Hamel & Valikangas, 2003). It is also argued that the organisation's experience and orientation towards change can impact the outcome of change and determine the organisation's faith (Ates & Bititci, 2011).

Experience and theory provide ample evidence that organisations' success and their ability to withstand and grow from setbacks is unequivocally in the hands and minds of their creative and problem-solving capacity-its people (Burnard & Bharma, 2011; Becker & Gerhart, 1996; Hamel & Valikangas, 2011). The critical centre of gravity and the core of organisations' competitive advantage continue to be found in their human potential (Mello, 2005; Vickers & Kouzmin, 2010).

Researchers have shown for some time that organisations are as resilient as their organisational members and that there is an undeniable bi-directional relationship between organisational and individual resilience (Doe, 1994; Hunter, 2006; Ollier-Malaterre, 2010; Shin et al., 2012; Vickers & Kouzmin, 2010). Indeed, Taylor et al. argue, "organisational problem-solving presages individual resilience" (2019, p.199). Others have worked to demonstrate that it is mainly by enabling positive response and enhancing the factors of personal psychological resources that organisations can achieve resilience, and that the emergent properties of resilience reside within individuals as well as systems, structures and processes (Burnard & Bharma, 2011; Ollier-Malaterre, 2010).

Lengnick-Hall et al. (2011) challenged organisations to deliberately focus on developing individual resilience in employees, such that they continue to foster and support organisations' capacity for resilience. The authors highlighted the importance of employees' contributions and collective cognitive capacity in an organisation. They listed decisiveness, opportunism, expertise and creativity as a key individual and team attributes for organisational resilience (Lengnick-Hall et al., 2011). It is precisely in the space of responsiveness, creativity, capacity to engender, to utilise and retain resources, foresight and engagement, that organisations can develop resilience through their individual psychological capital (Ates & Bititci, 2011; Bhamra et al., 2011; Singh & Pavlovich, 2011; Vickers & Kouzmin, 2010). Thereby, a greater commitment to human-focused organisational resilience goes beyond strengthening the organisation's systems, processes and ability to withstand strain directly. It also indirectly ensures that the organisation is built on and maintains resources, conditions, and practices that enhance and fully benefit from its human potential (King, Newman & Luthans, 2016).

Kay and Goldspink (2012) further re-iterated that the health of organisations' human resource is vital to an organisation's resilience. Similarly, specialist military training has shown that purposeful and carefully designed people management systems can provide for individual, as well as ensuing collective or organisational resilience (Lengnick-Hall et al., 2011). Britt & Oliver (2013) and Meredith et al. (2011) found that teamwork, cohesion, positive command climate and morale enhance individual resilience and drive more resilient outcomes for the team, and therefore the organisation. Resilient decision-makers and, more generally, resilient organisational members are argued to be the vehicle for the organisation's ability to withstand unprecedented change and deal with ambiguity (Shin et al., 2012). This has triggered the long-standing call that organisations need to invest, learn more about, measure, commit to and rely upon their human capital to claim the benefits of resilience (Youssef & Luthans, 2007). Quoting an "increased commonality of shared accountability" and critical interdependency between team members, Chapman et al. further focus on team resilience is vitally important for both- preventing disastrous outcomes and gaining competitive advantage (2020).

Enhancing the human component of organisational resilience not only has the capacity to prevent maladaptive cycles, disengagement, loss of knowledge and resistance to change but also to enhance situational awareness, dramatically increase contingency strategies, restore efficiencies, reduce organisational vulnerabilities and allow for the organisation to maintain homeostasis and proactive adjustment to change (Burnard & Bharma, 2011; Sutcliffe & Vogus, 2003). The ability to create and retain resources and promotes competence and efficacy is considered critical for organisational resilience (Vogus & Sutcliffe, 2007). This is doubly so with the increasing awareness "that dysfunctional team processes may contribute to

decrements in organisational outcomes" (Chapman et al., 2020, p. 60). Therefore, a resilient organisation encourages problem-solving, creativity, and affective commitment in its people. This demands a culture of strong social support, trust and belonging, shared commitment that failure can serve as a springboard to success and enabling shared values, amongst others (Lim & Nakazato, 2018; Walker et al., 2019).

The processes of interaction and the culture that holds teams together can significantly impact individual team members' resilience and thereby on the extent to which they contribute or detract from the overall outcomes for the team and organisation. Indeed, evidence suggests that shared setbacks, significant change or ambiguity can have depleting or strengthening effect on both individuals and teams, depending on the context and the processes that shape these shared experiences (Pickering et al., 2010).

Existing research calls for an integrated approach towards the analysis of the principles of resilience, a transference and application of the principles of individual resilience to the field of team resilience and organisational practices, as well as a systematic, multidisciplinary examination of practices and principles that are seen to support effective organisations and organisational resilience (Singh & Pavlovich, 2011; Yossef & Luthans, 2007). The question then is not 'whether or not focus on the bi-directional relationship between individual and organisational resilience is needed?', but 'what does it look like?', 'what is it build on?' and 'what outcomes can it amplify?'

Gaps and Limitations of Existing Research in Resilience

Researchers have argued that whilst there have been significant developments in the overall team (including team cognition, adaptation and dynamics) and organisational literature, little work has been done in the space of team and organisational resilience (Chapman et al., 2020). Researchers have also assessed that with often-disconnected references to input, process or outcomes, research in team and organisational resilience has excluded "a direct reference to the multilevel nature of this concept (e.g., individuals embedded within a team, bottom-up and top-down processes) (Chapman et al., 2020, p. 70).

The critical importance of organisational resilience has been emphasised in the literature and demonstrated in practice for some time (Taylor, Dollard, Clark, Dormann & Bakker, 2019). Nevertheless, the understanding and application of resiliency principles in organisational design and practices are often sporadic, ill-informed and disjointed (Boin & van Eeten, 2013; Burnard & Bharma, 2011; King, Newman & Luthans, 2016). Recent research also points out that there are "numerous independent, ambiguous, and partly inconsistent definitions" of organisational resilience (Duchek, 2019, p. 218).

Despite increased interest in the construct, many still argue that its conceptualisation is in its infancy. Duchek (2019) recently commented, "there is no consensus about what resilience means" and that "it remains unclear what resilient organisations actually do" (p. 216). Equally, the study of organisational resilience seems plagued by the same bias as individual resilience- it is assessed against the outcomes rather than the processes underpinning it, judged retrospectively and valued predominantly in the absence of 'failure' (Duchek, 2019). Evidently, there is still a lack of a

comprehensive theoretical model of organisational resilience (Doe, 1994; Duchek, 2019; Kantur & Iseri-Say, 2012). The literature review demonstrates that there are still two distinct perspectives on the meaning of organisational resilience: one focusing on rebounding and avoiding dysfunctional behaviour and the other on the development of new capabilities (Boin &van Eeten, 2013; Lengnick-Hall et al., 2011).

Scholars have cautioned that the weak empirical and theoretical basis on which the understanding of organisational resilience is built upon, along with the luring promise of resilience, can be dangerous and misleading (Boin & van Eeten, 2013). Empirical research has demonstrated that in some circumstances, costly efforts to build a more resilient workforce (and therefore- organisations) cannot only fail to reap the rewards but also lead to negative consequences (Ollier-Malaterre, 2010). Furthermore, resilience is found to have theoretical and empirical overlaps with the concepts of hardiness, agility, flexibility, purpose, and sense of coherence (Frankl, 2000; Lundman et al., 2010). However, the apparent similarities between resilience and other constructs, especially in the space of organisational resilience, are argued to continue to cloud the understanding and effective integration of resilience principles (Lengnick-Hall et al., 2011). The literature also shows that the understanding and the operationalisation of organisational resilience may be further obstructed by mistaking resilience for what may be its sources (Kantur & Iseri-Say, 2012).

The calls for a demonstrated relationship between resilience and outputs, a clear definition and understanding of the dimensionality of resilience, as well as a robust empirical work to support understanding of its workings in a different context, and change conditions remain unanswered (Kantur & Iseri-Say, 2012; Hamel & Valikangas, 2003). In the words of Almedom, "addressing the basic questions, "resilience to what?" and "whose resilience?" has often engendered trans-disciplinary

lines of enquiry to interdisciplinary grounds with porous theoretical and methodological boundaries" (2013, p. 15). Nevertheless, the resilience gap appears to be further escalated by historically (and at times artificially) distinct disciplines committed to the study of effective organisations.

Caution around the risks associated with ill-defined and hastily employed organisational resilience recipes also calls for much more work to be done before the medicine for resilience is prescribed to organisations (Boin & van Eeten, 2013). The literature calls for a clear assessment of the role of plasticity and fluidity, along with wether, different skills contribute to resilience differently (Boin & van Eeten, 2013). More recently, researchers have invited us to explore the heterogeneous construct of resilience from a process-based perspective and proposed three successive resilience stages- anticipation, coping and adaptation, as well as their respective relationship with key antecedents and drivers (Duchek, 2019).

The parallels between the constructs of individual and organisational resilience are evident at first glance, not only in the commonalities of conceptualisations or in semantics but also in causalities and correlations (Doe, 1994; Hunter, 2006; Shin, Taylor & Seo, 2012). Whilst organisations are undergoing unprecedented changes, the construct of resilience is typically theorised at an individual level (Taylor et al., 2019). Traditionally and despite the proclaimed importance to organisational sciences, much of the work done in the space of resilience focuses on individual rather than organisational resilience (Lengnick-Hall et al., 2011). Whilst the study of individual resilience has been gaining momentum, the notion of organisational resilience has been overlooked and still assumes the position of an aspirational and a purely conceptual construct, rather than an empirically tested, robustly formulated and applied practical model (Boin & van Eeten, 2013; King, Newman & Luthans,

2016; Vogus & Sutcliffe, 2007). Despite evidence of reliable transferability, more work is needed to meaningfully support the bi-directional relationship between organisational and individual resilience (Duchek, 2019; Kantur & Iseri-Say, 2012; King, Newman & Luthans, 2016).

To summarise this section, the present research rests on the importance of studying individual resilience in context and on the vital link and bi-directional relationship between individual and organisational resilience. In the context of the present SAS research, this relationship is of great significance because a robust, by-directional and positive relationship between the individual and the organisation can be a matter of survival. This literature review on organisational resilience directs this research towards better understanding what resilient organisations actually do, defining the context they intentionally create and nurture, as well as towards the benefits amplified through positive interdependencies in individual and organisational resilience, as a consequence.

In summary, a review of the core themes and research in organisational resilience is essential in studying individual resilience, especially in highly demanding or ambiguous contexts and tightly interdependent teams. This is because of the bidirectional relationship between individual and organisational resilience and, chiefly, the importance of elevating focus on individual resilience beyond the benefits to the person and toward the wider eco-system they are a part of. In this present research, organisational resilience will be viewed as an umbrella, a meta-capability and a multidimensional construct. References to it will be used in the context of resilience being predictive of the organisation's ability to learn, grow and evolve continuously through the capabilities and resilience it builds and nurtures in its individuals and team. Existing research frames the importance of exploring the specific contextual

and processes-based interactions that shape shared experiences as depleting or strengthening (Pickering et al., 2010). Amongst others, it also challenges us to explore how context may encourage decision making, affective commitment, trust-based interactions and creativity in a way that creates greater scope for individual, team and organisational resilience.

To support the present research, the following section focuses on curiosity as a vehicle for resilience. It will not only look to find how curiosity supports individual resilience, but by examining the practices, principles, values and latent organisational structures, also examine how these, in turn, may manifest in organisational resilience (Ates & Bititci, 2011; Bharma et al., 2011; Boin & van Eeten, 2013; Kantur & Iseri-Say, 2013; Yossef & Luthans, 2007).

Exploring Curiosity

The present section explores the construct of curiosity. It examines existing literature with the view of framing the foundation for this work's research questions and, in particular, "how does curiosity enables resilience?" It first examines existing definitions and the context in which curiosity research has been shaped. It looks at constructs commonly viewed as related to curiosity and then explores curiosity's influence and effect. Finally, this section reflects on exiting literature on curiosity and resilience and curiosity in the context of organisational research.

Curiosity Defined

The term 'curiosity' has been used to describe a theoretical construct and an observed behaviour (Byman, 2005). It has been studied as a response "aroused by

novel, complex, or ambiguous stimuli" (Litman, Collins & Spielberger, 2005, p. 123) or a fundamental, trait-based orientation towards things entirely new (Litman, 2010). Curiosity is defined as the intrinsic desire to seek new information, acquire new knowledge, and gain new experiences (Goodman et al., 2017; Litman, 2009; Litman, 2010). It is also defined as an approach-oriented state that promotes exploration (Kashdan et al., 2013) and as a "complex feeling and cognition accompanying the desire to learn what is unknown" (Kang et al., 2009, p. 863). Recent research has defined curiosity is as "a positive emotional-motivational system associated with the recognition, pursuit, and self-regulation of novel and challenging opportunities", as well as "a modifiable character strength" that "stimulates interest in the unknown" (as cited in Goodnam et al., 2017, p. 126). Researchers have pointed out that curiosity is an affectively dual construct that can carry positive or negative valence and ultimately lead to distinctly different behavioural outcomes (Harrison, 2009; Littman, 2005).

Notably, indifference to resilience, research on curiosity related to this present work is more limited. The tumorous orientation towards curiosity, its multivalent nature and the schisms linked with the construct are well captured by R. J. W. Evans, who explains: "curiosity could tempt the incautious, but also impel the enterprising" (as cited in Reinhart, 2008, p.65). The 'dark side' of curiosity has traditionally been unveiled in religious and mythological writings, where it has often been described as a fear-worthy, sin-evoking weakness. More recently, curiosity has been studied in the context of behavioural disorders such as voyeurism, socially deviant behaviours and some forms of crime (Loewenstein, 1994). The dark side of curiosity was also explored in examining the negative consequences of the Internet revolution and the impact of accessing information at the click of a button (Kang et al., 2009).

On the opposite side of the continuum, curiosity has been described as the "major impetus behind scientific discovery and the advancement of civilisation" (Reio et al., 2006, p. 117). It is seen as critical to survival and evolution (Reio et al., 2006) and upheld as a passion and as a manifestation of the "love for truth" that has driven perhaps all of human intellectual achievements (Inan, 2011, p. 1). Loewenstein (1994) described curiosity as "possibly eclipsing even the drive for economic gain" (p. 75). It is depicted as critical for discovery, learning and exploratory behaviours (Kang et al., 2009); a drive-like hunger; a thirst and an appetite for knowledge (Loewenstein, 1994), and seen as the psychological manifestation of the 'novelty bonus' in the reinforcement of learning (Kakade & Dayan, 2002). In this context, curiosity has been at once the object of scrutiny and appeal, considered ultimately good and ultimately bad, a damnable generative frivolity and intrinsically ennobling value (Harrison 2009; Reinhart, 2008). It has been seen as helpful and dangerous (Kang, Hsu, Krajbich, Loewenstein, McLure, Wang & Camerer, 2009), discussed as a vice, vanity and whimsy and depicted as the essential human virtue (Reio, Petrosko, Wiswell & Thongsukmag, 2006).

Perhaps curiously, although epistemology and the nature of enquiry have been a constant source of discussion, curiosity-the core motivation behind our need to enquire into the unknown, has received much less attention (Inan, 2011). Noting the polarities in connotations linked with curiosity Phillips (2014), for example, remarks that "curiosity has been constructed in privileged terms, and also sanitised and constrained" (p.2). Similarly, contemporary psychologists comment that despite its importance, curiosity's psychological and neural underpinnings are still poorly understood (Kang et al., 2009; Kashdan et al., 2013). Byman describes the state of curiosity research as "confusing", highlighting dimensionality and ensuing construct

validation problems, the presence of dozens of instruments to measure otherwise incongruent aspects of the construct, as well as the observation that there is still no explicit agreement on what curiosity means (Byman, 2005, p. 1366).

It is worth exploring constructs commonly linked to or used interchangeably with curiosity to understand and define it. Some scholars view the term curiosity as synonymous with interest (Kashdan et al., 2013; Silvia, 2008). The two terms are often used interchangeably because similar characteristics are clustered under each of them (Kashdan et al., 2013). Though the two constructs are related, curiosity is typically used to describe a relatively stable individual trait or predisposition, whereas interest is associated with a momentary or temporary arousal state (Kashdan et al., 2013).

Personality research has taken a particular interest in curiosity as an expression and a predictor of personality types and engendered commitment to the study of trait curiosity (Karwowski, 2012; Peterson & Seligman, 2004; Litman & Silvia, 2006). In the words of Karwowski (2012), "trait curiosity is a relatively stable disposition, whereas curiosity understood as a state is closely related to easily changing effects, influenced by emotions and stimulating the search for new sensations and experiences." (p. 547). Here, curiosity is found to positively associate with the higher-order personality factor of Stability, which holds factors such as Emotional Stability, Agreeableness and Conscientiousness as composites (Karwowski, 2012).

Curiosity has been studied alongside constructs such as novelty seeking (Pearson, 1971) and sensation seeking (Zuckerman, 1994) based on a shared tendency to engage in exploratory behaviours (Collins et al., 2004; Littman et al., 2005). It is also considered closely related to the constructs of flow, intrinsic motivation and creativity

self-concept, including creative self-efficacy and creative personal identity (Karwowski, 2012). Other constructs studied in conjunction with curiosity include ambiguity tolerance and Need for Closure (Littman, 2010). Ambiguity tolerance is used to describe the personality trait associated with a sense of comfort and even an active pursuit of uncertainty and strongly correlates with curiosity (Herman, Stevens, Bird, Mendenhall & Oddou, 2010; Littman 2005). It is the tendency to "accept rather than resolve uncertainty" (Littman, 2010, p. 398) and the "tendency to perceive ambiguous situations as desirable" (Herman et al., 2010, p. 59). On the other hand, Need for Closure, or the desire for any answer when faced with the unknown (Herman et al., 2010), is inversely related to and seen to reside on the opposite end of the continuum to curiosity (Kashdan et al., 2013). Need for Closure encompasses two unrelated dimensions-need for simple structure and decisiveness (Herman et al., 2010; Littman 2005). Importantly, curiosity has been defined as having two components: stretching and embracing. Stretching refers to actively seeking new experiences and knowledge, while embracing entails a willingness to accept the new and unpredictable nature of daily life (Kashdan et al., 2009).

The literature mentioned above on curiosity presents a good start for exploring the present work's question of 'how curiosity may enable resilience'. As highlighted in the preceding section of this chapter, references such as Littman's tendency to "accept rather than resolve uncertainty" (p. 398) and Herman et al., "tendency to perceive ambiguous situations as desirable" (2010, p. 59) appear to align with commonly addressed prerequisites for resilience. Curiosity as 'strength' responsible for discovery, learning and seeking new information, and as underpinning self-efficacy and capacity for stretching and embracing the unknown, aligns with resilience definitions for thriving in ambiguity, employed in the current research. Whilst there

may be evidence that curiosity can be viewed as a trait or a set of traits, the present research will explore curiosity as a state to be pursuit and conditioned.

Curiosity for What?

Scholars have attempted to streamline the study of curiosity based on its assumed object of interest. In answering the question of 'curiosity for what?', they have researched curiosity for intellectual knowledge (Littman & Spielberger, 2003), sensory stimulation (Collins, Littman & Spielberger, 2004), thrill-seeking (Littman, Collins & Spielberger, 2005) and interpersonal curiosity (Littman & Pezzo, 2007), amongst others. Again, studied in context, curiosity has been linked with negative risk-taking behaviours by some researchers (Jovanović and Gavrilov-Jerković, 2014), whilst others have continued to insist on the range of benefits delivered by curiosity instead (Blunt, Mullarkey & Lathren, 2018; Kashdan et al., 2004).

In the early 1950s, Berlyne, the scholar who "effectively institutionalised the tendency to classify the desire for change and novelty as curiosity", recognised that the construct had become "fragmented" (cited in Loewenstein, 1994, p. 77). His categorisations of the different manifestations of curiosity are still used as reference points by scholars today. Berlyne suggested four categories, including perceptual (driven by novel stimuli and typically extinguished through continuous exposure), epistemic (viewed as belonging to the domain of uniquely human desire for knowledge), specific (targeting a specific piece of information) and diversive curiosity (seen as being brought out by the need to reduce boredom and associated with more generic information/stimuli seeking behaviour) (Byman, 2005; Collins et al., 2004; Loewenstein, 1994). Whilst each of the four categorisations of curiosity may have a

role to play in resilience, the present research will lean towards exploring the role of epistemic curiosity in resilience.

To better contextualise exploring the role curiosity may play in supporting resilience, it is also worth noting two conflicting views of curiosity's role concerning stimuli or novelty: the curiosity-reduction and curiosity-induction views. Early work in psychology depicted curiosity as an innate need, a drive or an expression of instinct (Litman & Silvia, 2006; Loewenstein, 1994). This curiosity-reduction view was based on the understanding that curiosity arises out of incongruity or a discrepancy between available and desired knowledge (Litman & Silvia, 2006; Loewenstein, 1994; Kang et al., 2013). However, stimuli or knowledge-seeking for its own sake was argued to generate at least an equal measure of curiosity, as was the need to resolve dissonance (Litman, 2005; Litman & Jimerson, 2004). Hence, early drive-based theories, which viewed curiosity as aversive, were found lacking in accounts demonstrating that curiosity presented with equal force, even in the absence of curiosity-arousing stimuli (Litman & Silvia, 2006; Loewenstein, 1994). As Loewenstein commented, curiosity's motto 'information for information's sake' posed "an anomaly for rational-choice analyses of behaviour, which assume that the value of information stems solely from its ability to promote goals more basic than the satisfaction of curiosity" (1994, p. 75).

On the other hand, streaming from the optimal-level of arousal model, the curiosity-induction view depicts curiosity as a "positive, emotional-motivational system that energises and directs novelty-seeking behaviours, with the ultimate goal of stimulating one's interest" (Litman & Silvia, 2006, 319). Though the curiosity-induction approach is currently viewed as the dominant one, the curiosity-reduction or drive-based account's legacy continues to shape the field (Litman & Silvia, 2006).

Underpinned by the information-gap hypothesis, studies into brain activity have demonstrated that curiosity triggers reward prediction and anticipation and is associated with arousal, interest, attention and cognitive effort (Kang et al., 2013). Kang et al. (2013) further demonstrated that curiosity is fundamentally associated with the intrinsic value of learning and enhances learning and recall of information significantly.

Related to the above, scholars have worked to delineate between two types of curiosity-one concerned with a general feeling of interest (I-type) and the other, concerned with the need to appease a state of deprivation from perceived information gap in one's existing body of knowledge (D-type) (Litman, 2010). The I and D types of curiosity are reliant on different drivers and are associated with different feeling states (Litman & Silvia, 2006; Litman, 2010). Accordingly, I-type curiosity is associated with the state of 'liking' information, the experience of relishing the opportunity to discover something entirely new, or a pleasurable state (Litman & Silvia, 2006; Litman, 2010). In contrast, D-type curiosity is associated with an intense and unpleasant state of 'wanting' for information, a 'need to know' sense and negative affect (Litman & Silvia, 2006; Litman, 2010). Scholars have reported that although overlapping and strongly correlated, the I and D types of curiosity have independently different correlates, different associations with metacognitive states and link with different exploratory behaviours (Litman, 2005; Litman & Jimerson, 2004; Litman and Silvia, 2006). Nevertheless, Litman and Silvia acknowledged that more research is needed to mark I and D curiosity constructs as practically and meaningfully distinct (2006).

These references to curiosity are helpful in the context of the SAS tenets in the Context chapter of this work and the resilience definitions guiding this work. For

example, the curiosity-induction view where curiosity is seen to energise and directs novelty-seeking behaviours appears well aligned with the resilience needs for thriving in ambiguity in the SAS context.

Curiosity: Influences and Effect

The seminal work of Berlyne in the field of psychology has unveiled curiosity's critical role in development, exploration and adaptation to changing circumstances (Loewenstein, 1994, Harrison, 2009). More recent publications in psychology have solidified the role of curiosity as an antecedent to not only exploration but also intellectual enrichment and the development of enduring interest, as well as adaptability and flexibility to changing environmental demands (Loewenstein, 1994; Litman & Silvia, 2006; Voss & Jeller, 1983). Theoretical writing and empirical evidence have further demonstrated that curiosity forms the basis for secure attachment and is crucial in identity-forming, knowledge acquisition, perceptual development and learning (Reio et al., 2006).

The link between curiosity and adaptability marks a significant relationship. This is manifested in openness to novelty, expansion of behavioural patterns, and supporting the propensity to view novel situations as positively challenging (Harrison, 2009). They support the view that curiosity is essential in environments demanding learning and adaptation (Harrison, 2009). Further, research has demonstrated that trait curiosity correlates positively with the experience of positive affect, self-reported life satisfaction, subjective well-being, overall psychological health and recovery from trauma (Agabi & Wilson, 2005; Gallagher & Lopez, 2007; Kashdan et al., 2013; Peterson & Seligman, 2004). For example, Peterson and Seligman listed curiosity along with hope, zest, gratitude and love as the personal strength most associated

with life satisfaction (2004). Gallagher and Lopez found that curiosity manifested through the components of exploration and absorption predicts a broad range of categorical and continuous indicators of well-being uniquely and beyond other forms of positive affect (2007). They hypothesised that curiosity likely promotes an "increased focus on, contact with, and engagement in novel and challenging situations" (Gallagher & Lopez, 2007, p. 247). Literature review in positive emotions demonstrates that positive effect expands thought-action repertoire, whereby broadening the individual's behavioural and cognitive range and driving them to explore alternative courses of action (Gallagher & Lopez, 2007). It further demonstrates that positive affect increases the ability to identify verbal connections. creates an enlarged cognitive context, and can build greater physical, social, intellectual and psychological resources (Gallagher & Lopez, 2007). Curiosity has also been linked with a greater tolerance for interpersonal differences and lower incidences of interpersonal aggression, and a deeper commitment to broadening oneself and developing interpersonal relationships (Kashdan et al., 2013).

As noted, curiosity appears to be both-reliant on and contributing to self-efficacy. Self-efficacy is the individuals' belief that they can perform the behaviours and tasks expected of them successfully and in a wide variety of situations (Sandri & Robertson, 1993) and concerns the individual's appraisal of their coping potential (Silvia, 2008). Individuals with high self-efficacy are likely to manifest higher self-esteem and see themselves as more capable, effective and competent (Brown, 1996). Therefore, the relationship between self-efficacy and performance reduces the discrepancy between perceived abilities and individual standards and actual performance (Bandura, 1988). Hence, the relationship between curiosity and self-efficacy is positive and by-directional and is well captured in the words of Kashdan:

"States of curiosity arise when there is the recognition of new information to be acquired and sufficient belief that the search for this information is manageable. People high in trait curiosity are more likely to uncover novelty, and when they do, they are more likely to believe they have the ability to comprehend these events" (2013, p. 88).

Highly relevant for the present work is the role of cognitive appraisal in curiosity and resilience. Fundamentally, for an event to induce interest or curiosity (as opposed to negative stress or fear response), it needs to be perceived as positively challenging or at least manageable by the individual. Cognitive appraisal involves two distinct processes: a primary and secondary appraisal. During the first, the individual evaluates the degree of threat presented by a situation, its relevance and whether the situation can potentially become a positive or a negative experience (Folkman & Lazarus, 1980). During the secondary appraisal phase, the person evaluates their coping resources and abilities and the options that might be available to deal with the threat (Folkman & Lazarus, 1980).

Lazarus and Folkman (1984) argue that both appraisal phases are mediated by personality and individual variables, including belief system, commitment to action, perseverance and perceived vulnerability. The phases serve the individual's "management or alteration of the person-environment relationship and the regulation of stressful emotion" (cited in Larsson, 1989, p. 168). For example, trait anxiety is consistently associated with the interpretation of situations as threatening (negative cognitive appraisal), influencing outcome expectations, behaviour and performance (Larsson, 1989). Importantly, cognitive appraisal is related to self-efficacy and is ultimately responsible for the appraisal of complexity and understandability that predict engagement and interest (Silvia, 2008). As with the self-efficacy-curiosity

relationship, the relationship between cognitive appraisal and curiosity is positive and by-directional. For example, the studies of 'flow' have demonstrated that when a situation is perceived as positive and manageable by the person, it arouses feelings of absorption, concentration, and interest, stimulating even greater confidence (Gallagher & Lopez, 2007).

Another way to conceptualise different responses to novelty and whether the experience of novelty is accompanied by positive or negative effect is by considering the event's perceived novelty-complexity characteristics and its perceived comprehensibility (Silvia, 2008). In this context, curiosity is viewed as a way of managing arousal (Silvia, 2008).

Capturing perhaps the most crucial effects and influences of curiosity, Kashdan and Silvia (2009) describe:

"When curious, we are fully aware and receptive to whatever exists and might happen in the present moment. Curiosity motivates people to act and think in new ways, investigate, be immersed, and learn about whatever is the target of their attention. This definition captures the exploratory striving component and the mindful immersion component. By focusing on the novelty and challenge each moment has to offer, there is an inevitable (however slight) stretching of information, knowledge, and skills" (cited in Karwowski, 2012, p. 548).

Curiosity and Resilience

The following section explores links between curiosity and resilience directly and draws parallels and interdependencies between the constructs. Among others, it

specifically reviews the parallels between curiosity and resilience in dealing with stress and personal resource development and holistic well-being.

Although possible parallels between resilience and curiosity can be seen in the literature, little research links the constructs directly (Denneson, Smolenski, Bush & Dobscha, 2017; Goodman, Disabato, Kashdan & Machell, 2017). As noted, while resilience has consistently been studied as a positive and a desirable trait, the degree to which curiosity may be virtuous and even helpful has been the subject of vigorous debates (Harrison 2009; Inan, 2011; Kang et al., 2009; Litman, 2005; Reio, Petrosko, Wiswell, & Thongsukmag, 2006; Phillips, 2014). Although there is little research linking curiosity and resilience directly, a deeper exploration into the constructs indicates several parallels and possible interdependence.

Goodman et al. (2017) have focused on the possible influence of curiosity on resilience, as one of several personality strengths. However, whilst not discarding the possibility that curiosity may play a significant role in supporting resilience the authors failed to demonstrate a statistically significant link between the constructs in the study's context (Goodman et al., 2017). The relationship between the constructs was far more apparent in a recent study of narrower scope, where curiosity was found to be inversely associated with suicidal ideation amongst highly distressed veterans and, more broadly, positively linked with higher degrees of resilience (Denneson, Smolenski, Bush & Dobscha, 2017). Researchers in the field have highlighted this relationship as one demanding further research for the benefit of broadening and building resilience.

The above is important for the present research for two reasons. Firstly, the present research explores the relationship between the constructs of curiosity and resilience

as states to be pursued rather than traits. More importantly, the present research may offer additional nuances to the research conducted by Denneson et al. (2017) as it too has a narrower scope by virtue of the participants pool and the research questions. As noted in this literature review's resilience section, military research is uniquely positioned to explore constructs with participants who share context, frames of reference, values, training, and specific experiences. Such contexts offer depths of insight and richness that may be more challenging to reach with more diverse participant pools.

Dealing with Stress

In this section, the relationship between curiosity and resilience is discussed in the context of stress. Resilience is defined as "the ability to withstand stress and thrive in the presence of adversity" (Hart, Burock, London, Atkins & Bonilla-Santiago, 2005, p. 392) to bounce back following a setback or an untoward event (Sutcliffe & Vogus, 2003). Resilience-in-action reveals our ability to sustain interest and engagement, to think through and effectively explore options in conditions of duress, rapid change, deprive or high stress (Friborg et al., 2009; Jensen, 1995; Larsson; 1989; Meredith et al., 2011; Staal et al., 2008). Research in survival psychology demonstrates that increased anxiety under perceived threat conditions can produce 'cognitive failure', limiting processing and working memory capacity, and lead to situations where "people fail to take action that could improve their chances of survival" (Robinson & Bridges, 2011, p.30).

As noted, curiosity is primarily about exploratory striving and mindful emersion (Karwowski, 2012). Links between curiosity and stress-reducing, positive-affect dispositions suggest that higher levels of curiosity may afford greater opportunity to

engage more of ones' existing knowledge in problem-solving (Meredith et al., 2011; Robinson & Bridges, 2011). Indeed, curiosity is found to share conceptual overlaps with distress tolerance, and curious individuals are more likely to see problems as challenges to be solved rather than insurmountable problems (Denneson, Smolenski, Bush & Dobscha, 2017). Curiosity may also support deeper problem comprehension and broader linking of existing knowledge with novel stimuli; afford a broader range to map out alternative courses of action, and sustain greater capacity to form, explore and materialise more solutions in conditions of stress or significant demands (Meredith et al., 2011; Robinson & Bridges, 2011). Conversely, individuals who have lower levels of curiosity may be less likely to think through solutions and more likely to succumb to the adverse effects of stress, in turn experiencing the limited capacity to cope and recover cognitively, emotionally and otherwise (Robinson & Bridges, 2011). Amongst other factors, researchers have hypothesised that curiosity would have a "buffering effect against risk conferred by multiple sources of distress" (Denneson, Smolenski, Bush & Dobscha, 2017, p. 125). Thus, supporting the view that curiosity is an adaptive motivational process (Gallagher & Lopez, 2007; Kashdan et al., 2013; Litman & Silvia, 2006), curiosity and associated exploratory behaviours have long been seen as "vitally important" in helping "individuals flexibly adapt to changing environmental conditions" (Reio et al., 2006, p. 119).

Resilience has been conceptually linked with curiosity through intellectual mastery and the ability to detach from and think through problems objectively (Agaibi & Wilson, 2005). Whilst high levels of curiosity are linked with "openness to novelty, uncertainty, and complexity", lower curiosity levels are associated with "preferences for the familiar over the new, for stability over variety, for closure, and for structure over uncertainty" (Kashdan et al., 2013, p. 88). Attributed to curiosity, the openness

to seek out new information suggests greater readiness to work through novel or alternative scripts, even when challenges were not deliberately sought out-a fundamental resilience attribute (Burnard & Bharma, 2011; Sutcliffe & Vogus, 2003). Curiosity has also been linked to perseverance and, specifically, the ability to follow ones' interests despite the risk of potential "failure", reaping the benefits of personal growth and satisfaction (Blunt, Mullarkey & Lathren, 2018). Research has also linked curiosity to self-compassion. For example, Blunt, Mullarkey & Lathren (2018) suggest that "as the self-compassionate person takes a mindful, open and non-judgmental perspective on thoughts, emotions and experiences, it is plausible that she would be receptive to new or unpredictable experiences in the same way a highly curious individual seeks novel experiences, skills or knowledge" (p. 3038).

In summary, curiosity may delay or suspend the adverse effects of stress, stimulating instead capacity for exploration, adaptation, deeper problem comprehension, flexibility and mindful emersion, which are vitally important for resilience in ambiguity.

Further, curiosity relies on a greater readiness to evolve or shift existing schemas or conceptual frameworks when they no longer prove fit (Kashdan et al., 2013; Reio et al., 2006). Curiosity's ability to engender and support adaptability and flexibility links it with the underpinning structures of resilience, particularly in changing environmental demands (Loewenstein, 1994; Litman & Silvia, 2006; Staal et al., 2008). Military historians and psychologists have explored this relationship in the context of combat, where the need for resilience is critical (Meredith, Sherbourne, Gaillot, Hansel, Ritschard, Parker & Wrenn, 2011; Watson, 2006). Recounting stories of extreme psychological strain during World War I, Watson comments that soldiers whose resilience collapsed under the "paralysis of the all-powerfulness of war" "stopped asking questions" and "ceased to interpret" (2006, p. 248). Looking into

contemporary warfare, Watson also reports that "troops often exhibited curiosity, indicative of an attempt to gather information about their environment and respond to it", and that the maintenance of curious orientation towards novelty is pivotal for sustaining purposeful engagement and ultimately-for survival (2006, p. 251). In context, these findings are directly relevant to the present research question of 'how curiosity enables resilience'. They emphasise curiosity's role in maintaining engagement, interest, openness, and exploration capacity in some of the most demanding conditions.

Personal Resource Development and Holistic Well-Being

Further to helping us manage discrete situations of significant demands, curiosity may broaden and build our resilience by supporting holistic well-being and longer-term personal resource development. Blunt, Mullarkey & Lathren (2018) reviewed a series of research, identifying that curiosity conferred mental health and linked it with life satisfaction, positive emotions, positive self-perception, social support, and lower interpersonal levels of aggression and lower sensitivity to aggression.

Resilience and curiosity share a common base in the orientation towards the broadening of the self (Kashdan et al., 2013). Curiosity and the associated 'novelty bonus' reinforce learning and support adaptive behavioural patterns (Kakade & Dyan, 2002). It also comes with readiness to actively explore and engage with opportunities (Gallagher & Lopez, 2007; Kashdan et al., 2013). Whilst resilience is found to support levels of plasticity that afford space for learning, growth and transformation (Almedon, 2005), the intrinsic value of learning is central to curiosity (Kang et al., 2013). Kashdan et al. (2013) list factors such as the ability to "stretch one's mind to its limits, and relish new experiences" and the "motivation to be open, receptive, and

willing to explore new information" as intrinsic to curiosity. (p.87). This is seen as linked to the ability to perceive and address novel situations as a positively challenging or promising reward (Kashdan et al., 2013), which is also critical for resilience.

In this context, Cornwall argues, for example, that "giving students the opportunity to exhibit curiosity and take risks is a crucial component of their intellectual development" and ultimately, their resilience (2018, p. 118). Indeed, he argued that discouraging curiosity in a VUCA world is harmful to resilience. In Cornwall's words, this leads to "defeatist quietism: a sense that logical responses simply do not work in a frightening, disordered world, and that there is no way to fight the chaos" (2018, p. 118). Exploring the impact of curiosity on the resilience of academically gifted students, Chen, Cheung, Fan & Wu (2017) similarly challenged academic and family support systems to encourage deeper and broader curiosity with a view of broadening resilience (2017). The above signal again the importance of the aforementioned curiosity-induction function for resilience and, in particular, the pursuit of "knowledge for knowledge sakes".

Curiosity is seen as a key ingredient to our 'personal resilience medicine', offering a protective effect from negative demands and contributing to recovery (Dowrick, Kokanivic, Hegarty, Griffits & Gunn, 2008). Further, Jovanovic & Brdaric (2012) found curiosity to be significantly correlated with multiple measures of well-being. Frederickson's Broaden-and-Build theory further illuminates possible links between curiosity and resilience, in exploring how curiosity may sustain and enrich holistic well-being (cited in Dowrick et al., 2008). For example, as noted, ambiguity tolerance is strongly correlated with curiosity (Littman, 2010). Research has demonstrated that ambiguity tolerance is defined by four distinct dimensions, including valuing diverse

others, liking and tolerance for change, dealing with unfamiliar situations, and readiness to challenge one's perspectives and manage conflicting perspectives (Herman et al., 2010). These factors are also seen as crucially important for building and sustaining resilience (Gruber, Kilcullen & Iso-Ahola, 2010; Herman et al., 2010). Unwrapping these further, the curiosity dimension of 'valuing diverse others' and the associated tendency to be more receptive and accepting of others may support perceived social support, reliance on others, and resilience-building relatedness (Herman et al., 2010; Kashdan et al., 2012; Staal et al., 2008). By encouraging flexibility and interest in one's own and others' experience and motivation, and by encouraging openness, curiosity is seen to shift us away from threat perception and towards more thoughtful and inquisitive engagements (Blunt, Mullarkey & Lathren, 2018).

Further, as noted resilience is associated with greater optimism and a sense of faith (Lengnick-Hall et al., 2011; Luthans & Yossef, 2007) as well as deeper self-efficacy and self-reliance (Gruber et al., 2010). Military research has demonstrated that "if a soldier believes she or he has the resources to overcome stressful situations and complete a task successfully, they will perceive less threat and stress" (Gruber et al., 2010, p. 430) and, in turn, perform to a higher standard and greater probability of success (Gruber et al., 2010; Meredith et al., 2011). Further to greater self-efficacy and optimism, curiosity is also linked with a greater sense of personal competence and disposition towards personal growth (Kashdan et al., 2013, Reio et al., 2006). It is thereby typically seen as a strength and a positive psychological trait that builds and enhances resilience (Luthans & Youssef, 2007).

The research mentioned above invites us to explore the links between curiosity and resilience in support of this work's research question- 'how does curiosity enable

resilience?' Ultimately, it signalled that curiosity is likely to contribute to our resilience on the bases that it can support cumulative resource development and enrichment, expand thought-action repertoire and form an enlarged cognitive context. It also signalled that curiosity strengthens self-efficacy, supports the development and sustainment of interpersonal relationships, and overall, enhances our cognitive, social and psychological resources (Denneson, et al., 2017; Gallagher & Lopez, 2007; Kashdan et al., 2013; Reio et al., 2006). Each of these areas was highlighted in the resilience sections of the literature review as vital for resilience.

Summary

The literature review has outlined relevant research on the importance of resilience and curiosity for thriving in ambiguity. It has also established a common ground and manifested shared interdependencies between the constructs of interest. The literature review has also shown that the components and workings of resilience and curiosity are still ill-defined and ambiguous.

We have learned that resilience is a multidimensional and complex construct that can best be positioned in the individual's adaptability, capacity to bounce forward, evolve and grow through every exposure. Whilst aspects of it can be innate, resilience can be seen as a level of plasticity. It should be viewed as a holistic and developable 'portfolio of strengths', a state and a mindset to pursue and grow, rather than a trait or a set of traits. We have also learned that resilience is not static but instead a dynamic process evolving and affirming how we orient and shape our experiences. With the view that, however subjective, resilience can be studied as a construct and developed irrespective of one's baseline, research has also shown us that we ought to focus less on the outcome and more on the process of interactions underpinning

resilience. In pursuing guidance around 'what goes right' in resilience, the literature review helped frame the opportunity to study resilience as a series of deliberate or intuitive steps or series of choices that may frame a developable mindset for thriving in ambiguity.

We have also learned that resilience does not exist in a vacuum and cannot be viewed in isolation from the individual's context. Indeed, individual, team and organisational resilience can all be seen and influenced in the multitude of relationships and interactions emerging between them and their interactions with the propositions formed or attended to in their context. This literature review focused on organisational resilience, even though this research's primary interest is individual resilience. The attention given to organisational resilience showed us that focus on individual resilience is critical for organisational resilience and vice versa. Indeed, the literature review showed a bi-directional relationship between individual and organisational resilience. As one example, a literature review on organisational resilience created a compelling need to study how organisations can enable positive responses or enhance personal psychological resources to sustain broader resilience. Of particular interest were indicators around trust, creativity, problemsolving, responsiveness, foresight and affective engagement, and the conditions that support or detract from these in the context of resilience. The literature also emphasised that whether shared setbacks are depleting or strengthening for resilience is mainly dependent on the processes of interactions that shape these shared experiences. These insights are significant in tight or highly interdependent teams that operate in ambiguity, such as the present research sample. Additionally, research showed us that organisations are largely isomorphic in terms of resilience needs. Accepting that to understand individual resilience, we must study its context, the question of 'what goes right' for resilience in the interactions between 1NZSAS members and their context will be equally beneficial to other teams and organisations.

The literature review also showed us that curiosity is an important construct to understand and explore in pursuit of resilience. Nevertheless, research is somewhat inconsistent or lacking, and curiosity is still a poorly understood construct. References to curiosity outlined many parallels as well as opportunities to explore the relationship between curiosity and resilience. Amongst others, these included curiosity's relationship to the 'novelty bonus', its ability to drive us to accept and explore rather than avoid uncertainty, as well as its contribution to self-efficacy, stress-tolerance, positive cognitive appraisal, interest and holistic well-being. Again, the literature informed interest in studying curiosity and its relationship to resilience as an adaptive motivational process. Such that it may influence the relationship between the individual and their predicament or experience of life and their broader context. In the context of the present research, this literature review also invited us to explore how context may influence curiosity and how this may shape access to resilient outcomes.

The present work aims to elucidate, inform and demonstrate practices and principles in building and maintaining resilience through curiosity. The literature review helped frame the context for the three research questions of this work, with the overarching aim of identifying 'what goes right' for resilience in some of the most demanding conditions.

CHAPTER THREE: METHODOLOGY

Overview

This chapter overviews the function and role of research paradigms and how, in this

instance- social constructivism has shaped this research. First, it looks to situate the

author's perspectives and own research paradigm, framing the intended

methodology and driving research values. Second, it frames and outlines this

research's design. Third, this chapter explores the sample, considerations around

data gathering, consent and confidentiality, the researcher's unique position and

possible implications for the research, and the selected methodology and data

analysis. It also outlines the research design and describes the sample of interest in

the present research. Conceptually, this research takes a positive psychology

approach to examining how resilience works in some of the most demanding

conditions. As such, it aims to unveil 'what goes right' for people who confront

significant demands and challenges, the strategies they rest on to navigate

complexity with equanimity, and how they thrive and grow, following setbacks.

Research Paradigms Overview

A diligent approach to questions of interest can guide and direct a specific research

methodology approach. Crucially, the researcher's values, beliefs, experiences and

philosophical orientation shape and guide not just the question posed but also how

we go about unveiling, situating and legitimating our discoveries (Cunliffe, 2010). At

the simplest level of review, social sciences can be seen as framed around three

62

fundamental research categories. These include exploratory research (used when the question invites us into uncharted territory); descriptive research (which seeks to understand an already known phenomenon further); and explanatory or correlational research (which looks to find cause-and-effect relationships) (Keppel, Saufley & Tokunaga, 1992). However, a more deliberate examination of research frameworks reveals that infinitely greater complexity shapes researchers, consciously or otherwise.

Guba & Lincoln (1994) define a paradigm as "the basic belief system or worldview that guides the investigator, not only in choices of methods but in ontologically and epistemologically fundamental ways" (p.105). The authors acknowledged the power and significance of a paradigm by describing it as "a set of basic beliefs that deals with ultimates or first principles" (Guba & Lincoln, 1994, p. 107). Such is the influence of one's epistemological and methodological commitments or paradigms that they are seen to shape the researcher's purpose for their enquiry (Schwandt, 1998). Paradigms are seen to sit beyond theory or an approach, however, as they raise meta-theoretical issues (Kratochwill, 2008).

Guba and Lincoln stressed the importance of the 'inquirers paradigm' and demanded a response to three fundamental and interconnected questions (Guba & Lincoln, 1994). These demand that the researcher positions themselves against the question of "what is the nature of reality and, therefore, what is there to be known about it?" (ontology); the question of "what is the nature of the relationship between the knower or the would-be knower and what can be known?" (epistemology), and the question of "how can the inquirer (would-be knower) go about finding out whatever he or she believes can be known?" (methodology) (Guba & Lincoln, 1994, p.108). Burrell &

Morgan (1979) also challenge us to carefully consider our views on human nature prior to committing to methodology.

The question of 'what is the nature of reality' or the ontology the researcher ascribes to informs and further frames philosophical perspectives. These, in turn, shape the research paradigms, epistemological views, views on human nature and subsequently, the methodology and method of research. Fundamentally, if a researcher holds the view that there is an objective reality that exists independently of the cognition of the individual, then it is the role of the researcher to be the detached observer of that reality, who works to eliminate all biases in capturing this objective reality (Campbell & Wasco, 2000). In this way, an objectivist view stimulates a realist ontology and would employ a positivist epistemology to depict objective reality. For a realist, the world is there to be discovered (della Porta & Keating, 2008). In contrast, subjectivists may employ a relativist or nominalist epistemology and an interpretative ontology, in the belief that there is no single reality to be uncovered and instead that the social world cannot exist outside the perceptions and minds of the beholder, who is meaning is there to be studied (Burrell & Morgan, 1979). The nominalist view stipulates then that "categories only exist because we arbitrarily create them" (della Porta & Keating, 2008, p.21).

Building on this, Morgan and Smirich (1980) explained that "knowledge is paradigmatic, encompassing a distinct view and rationality governing research strategies and methods" and that "the emerging research paradigms are often viewed as incommensurable" (Cunliffe, 2010, p. 648). Cunliffe's rework of the Morgan and Smirich network of basic assumptions (Table 1) outlines the continuum of views, along with relevant metaphors and ensuing research methodologies.

Table 1: Cunliffe (2010) Morgan and Smirich Network of Basic Assumptions

Subjectivist						Objectivist	
-							
Core Ontological assumptions	Reality as a projection of human imagination. [Individual experience & consciousness. Transcendental phenomenology & solipsism.	Reality as a social construction. [Individuals create meanings through language, routines, symbols etc.]	Reality as a realm of symbolic discourse. [Meanings sustained in human action & interaction. Subject to both rule-like activities & change.]	Reality as a contextual field of information. [Adapting & changing as information is exchanged.]	Reality as a concrete process. [Interacting, evolving, & contingent process.]	Reality as a concrete structure. [Comprised of constituent parts, observed in concrete behavior & activities.]	
Assumptions about human nature	Man as pure spirit, consciousness, being.	Man as social constructor, the symbol creator.	Man as an actor, the symbol user.	Man as information processor.	Man as an adaptor.	Man as a responder.	
Basic epistemological stance. Some favored metaphors	To obtain phenomenological insight, revelation. Transcendental.	To understand how social reality is created. Language game, accomplishment, text.	To understand the pattern of symbolic discourse. Theatre, culture.	To map contexts. Cybernetic.	To study systems, process, change. Organism.	To construct a positivist science. Machine.	
Research Methods	Exploration of pure subjectivity.	Hermeneutics	Symbolic analysis. Social action theory.	Contextual analysis of Gestalten.	Historical analysis.	Lab experiments, surveys.	

It is evident that a dichotomous framework may hinder research and that it likely oversimplifies perspective. It is worth noting that the continuum between subjectivism and objectivism sponsors a myriad of philosophical perspectives, including positivist, post-positivist, critical theory, constructivism, pragmatism, interpretivism and radical structuralism, amongst others (cited in Davey, 2015).

Schwandt argues that the particular meaning of otherwise distinct methodologies are "shaped by the intent of their user", that they can be "best regarded as sensitising concepts", merely suggesting "the direction in which to look rather than providing descriptions of what to see" (cited in Denzin & Lincoln, 1998, p. 221).

In positioning the present research, it is important to further this review against different paradigms' research implications. Guba & Lincoln (1994) present a detailed overview and contrast positivism/post-positivism, critical theory and constructivism against a series of defining questions. A summary of selected reflections from Guba & Lincoln (1994) is outlined in Table 2 below, and these selected reflections outline the paradigms shaping the present research.

Table 2: Contrasting paradigms against research implications

	Positivism/Post-positivism	Critical Theory	Constructivism
What is the aim or purpose of enquiry?	Explanation: Implied reductionism and determinism	Critique and transformation	Understanding and reconstruction
What is the nature of knowledge?	Knowledge consists of verified/non-falsified hypotheses that can be accepted as facts or laws	Knowledge consists of a series of structural/historical insights that will be transformed as time passes.	Knowledge consists of those constructions about which there is relative consensus amongst those competent to interpret the substance of the construction.
The role of values in inquiry?	Values-free. Values are excluded in putatively objective enquiry.	Values take center stage as ineluctable in shaping inquiry outcomes.	
What 'voice' is mirrored in the enquirer's activity?	The "disinterested scientist"	The "transformative intellectual"	The "passionate participant"

Adaptation from Guba & Lincoln (1994, pp 112-115)

In shaping research journeys, the constructivist perspective holds that "knowledge and truth are created, not discovered by the mind" (Schwandt, 1998, p. 236). Constructivism challenges the extent to which you were not arguing this is beyond semantic systems (Kratochwill, 2008). This perspective sees no unique world that pre-exists human mental activity or symbolic language, and hence, constructivism defines reality as "pluralistic and plastic", as well as "anti-essential" (Kratochwill, 2008).

Constructivism (also referred to as "naturalistic enquiry") ascribes to the relativist ontology in that "realities are apprehendable in the form of multiple, intangible, mental constructions, socially and experientially based, local and specific in nature...

and dependent for their form and content on the individual persons or groups holding the constructions" (Guba & Lincoln, 1994, p. 110). The constructivist perspective asserts that "realities are produced and confirmed in the mind" and hence the "concern with the particular ways in which individuals construe experience is at the heart" of this perspective (Kennedy et al., 2012, p. 182).

Constructivism would further ascribe to transactional or subjectivist epistemology, whereby the investigator and the 'investigated' are one, co-creating through the process of investigation. In holding that "individual constructions can be elicited and refined only through interactions between and among investigator and respondent", constructivism also materialises through hermeneutical and dialectical methodology" (Guba & Lincoln, 1994, p. 111).

In exploring the shared concerns as well as the particular foils for constructivists and interpretivists, Schwandt (1998) argues that the two are "preoccupied with related but somewhat different concerns" (236). The approach and the contribution of this research are framed by the view that "what we view as objective knowledge is nothing more than the result of a specific perspective" (Charreire-Petit & Huauly, 2008, p. 111).

Here, it is important to acknowledge that distinctions are drawn between constructivism and social constructionism. Yong and Collin worked on the premise that:

"Constructivism is distinguished by its focus on how the individual cognitively engages in the construction of knowledge from social construction, which claims that knowledge and meaning are historically and culturally constructed through social processes and actions" (2004, p. 373).

Whilst it is seen as the more generic concept, constructivists view reality as constructed by the individual, whilst the constructionist paradigm focuses on the interaction and how reality is constructed through that interaction (Talja, Tuominen & Savolainen, 2005). Hence, "constructivism focuses on the intentionality of individual minds" whilst social constructionism "focuses on the shaping of our mind by culture" (Kennedy et al., 2012, p. 185). The difference is in the question of whether meaning-making emerges within and 'inside-out' or between and 'outside-in' individuals (Kennedy et al., 2012). Social constructionism focuses our attention on "intersubjectively shared, social constructions of meaning and knowledge", social artefacts, historically situated interchanges and "shared systems of intelligibility" that shape our experience of the world (Schwandt, 1998, p. 240). The focus here is less on the individual mind and more on the collective generation of meaning (Schwandt, 1998, p. 240).

Both constructivism and social constructionism hold that reality only takes shape when meaning is made of it in the mind of the beholder and hence "take issue with the view that a real-world exists and can be known with objective certainty" (Kennedy et al., 2012, p. 176). However, whilst constructivism posits that sense-making occurs within the individual's mind, social constructionism directs us towards the space between people, arguing that "ideas, concepts and memories arise out of social interchange and are mediated through language" (Kennedy et al., 2012, p. 176)

Finally, whilst there is still some debate around the differences between constructivism and constructionism, other scholars are using the terms interchangeably. Hacking (1999) even suggests we should leave constructivism to the mathematicians (cited in della Porta & Keating, 2008). Noting tension in the field and how focus on paradigms may be detracting from the substance in research,

Speed (1991) advocated for the alternative position of co-constructivism: "one which takes into account a relationship between the knower and the known" (p. 395).

Further, whilst many argue for the importance of a clear research paradigm, a debate is even held amongst social scientists as to whether social science if preparadigmatic (in search for unifying principles), post-paradigmatic (the post-modern approach) or non-paradigmatic (there can never be one approach) (Porta & Keating, 2008). Viney and Nagy (2011) similarly argued that whatever the approach, research is conducted in an "exacting and honest manner" and with full appreciation for the needs of the context can be "far more fruitful than classifying research into less than adequate dichotomies". (p. 56). Whilst the debate between, for and against paradigms is important, the present research ascribes to the views that "all meaningful reality...is contingent upon human practices, being constructed in and out of interactions between human beings and their world" and "the socially constructed character of lived realities" (Crotty, 1998, p. 42).

What is my Perspective?

As my research journey progressed, the theoretical framework that best aligned was social constructivism because it focuses on the individual and their perspective and perceptions. This framework challenges the researcher to rely on study participants' views and develop patterns of meaning inductively, in the fullness of respect to the shared experiences and the meaning assigned to those experiences by participants (Creswell, 2013). In the context of this work, the social constructivism framework appeared most aligned as it "includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature of a call for change" (Creswell, 2013, p.44).

Research Design

This present section examines methods of analyses to contextualise the reasons for the method selected to underpin this present research. While the qualitative research method was selected for this PhD research, an overview of the qualitative, quantitative, and mixed-method approaches is also offered in this section. These may inform the scope for future research in the areas explored in this present research. Specifically, whereas this present research selected qualitative methods as the best vehicle for data collection and analyses, the insights gained in this research invite further opportunities to explore the phenomenon unveiled in this work, using quantitative and mixed method approaches in the future.

The Qualitative vs Quantitative Debate

One of the fundamental distinctions in research methodology rests in the debate between qualitative and quantitative research. Polarities in opinions towards either of the approaches are often influenced by fundamental differences in values, adherence to philosophical traditions and expectations of what research is intended to deliver. For example, Denscombe (2008) demonstrated that, though there are no distinct eras, one could observe a timeline of emergent increase in affiliations towards the predominant research approaches. The period between the 1950s-1970s aligned with more positivist orientation and quantitative methodologies, whilst the 1970s-1990s signalled a shift towards more constructivist research and qualitative methodologies (Denscombe, 2008).

Both qualitative and quantitative methods are empirical, and both methods rely on subjectivity, as they are born out of the researcher's preferences and aspirations (Fischer, 2006). Qualitative research is fundamentally focused on discovering and

depicting the quality of a specific experience or a phenomenon, whereas quantitative research focuses on frequencies or magnitude of occurrences (Creswell, 2003). By virtue of their distinct approaches, qualitative and quantitative research can also be differentiated as offering depth or breadth, respectively. To further the distinction, some of the value and appeal of quantitative research appears proportionate to the sample size employed in the research. In contrast, the value of qualitative research often rests in the richness and depth of the subjective insights gained from participants' narratives. In the words of Fischer (2006, p. XVI), "qualitative research methods were devised to study those aspects of being human for which experimental and statistical methods are ill-suited-namely, lived worlds, actions and meanings".

At first glance, the differences between the two approaches appear to offer a complimentary space for research integration and distinctly different contributions. However, some proponents of the qualitative approach argue that research can only be relied upon if it can be replicated through numbers and objectively tested through consistently applied tools (Denscombe, 2008). On the other hand, qualitative research advocates insist on the depth of understanding that can only be offered by less streamlined, subjective experiences and methods that respond to the unique perceptions of reality we each hold.

The Mixed Method Approach

The arguments 'for' and 'against' different research methods have sometimes been found to hinder the aim of the question they were designed to examine, leading to the risk of oversimplified findings and rigidity in scientific examination (Morgan & Smirhich, 1980). The debate between qualitative and quantitative purists has persisted for some time (Johnson & Onwuegbuzie, 2004). However, in the decades

Chapter Three: Methodology

following its publication, Burrell and Morgan's (1979) work and the ensuing four-paradigm grid has stimulated a great deal of support for mixed-method research (Deetz, 1996; Morgan & Smirchich, 1980; Willmott, 1993; Jackson, 2000). According to scholars, the mixed methods approach's appeal evolved quickly, to the point of it shaping its own "worldview, vocabulary and techniques" (Denscombe, 2008, p. 271).

Scholars have attempted to synthesise different typologies in mixed-method research and revealed that the method could serve several different purposes (Denscombe, 2008). For example, scholars may use the method to improve data accuracy; to offer a more comprehensive picture of the phenomenon of interest by resting on different sources of data through qualitative and quantitative approaches; avoid perceived biases in the two primary research methods, as well as develop and build on findings, by using contrasting data gathering approaches (Denscombe, 2008).

Summarising reflections on mixed methodologies, Denscombe (2008) outlines the following as definitive characteristics of the mixed method:

- "Quantitative (QUAN) and qualitative (QUAL) methods within the same research project,
- A research design that clearly specifies the sequencing and priority that is given to the QUAN and QUAL elements of data collection and analysis,
- An explicit account of the manner in which the QUAN and QUAL aspects of the research relate to each other, with a heightened emphasis on how triangulation is used, and
- Pragmatism as the philosophical underpinning for the research" (p. 272).

The mixed-method approach offers the researcher the opportunity to view and discover themes in-depth and seek to find underlying patterns and make findings that may be difficult to reach by qualitative or quantitative methods alone (Franzosi, 2012). Within the mixed-method approach, qualitative and quantitative techniques can be used interactively and irrelatively (Franzosi, 2012). Crucially, recent works argue that the employment of a mixed methodology in social science research is both-fundamental and effective (Johnson & Onwuegbuzie, 2004; Ollier-Malaterre, 2010). In the words of Creswell (2003), "to include only quantitative and qualitative methods falls short of the major approaches being used today in the social and human sciences" (p. 4). Most importantly, the methodology employed has to be informed by the set scientific inquiry's needs (Morgan & Smirchich, 1980).

Method Selection for the Present Research

Before commencing the data collection for this present research, it was felt that the research questions present a strong case for the use of a mixed-methods approach. The design and execution of this research intended to employ Yin (2013) 'tactics' for increasing construct validity (e.g., multiple sources, chain of evidence and key informant review of the draft) and to align with the principles of theoretical sampling (Silverman, 2006). At a glance, the research questions demanded a collection of subjective individual reflections and opinions (e.g., through the use of semi-structured interviews and focus groups) and quantitative data (e.g., through the use of validated psychometric tools and statistical analysis) to define relevant constructs, determine and test the presence of relationships studied. This approach (and particularly the intent of commencing with qualitative research to gain depth and follow this with quantitative assessments to gain breath) appeared well aligned with exploring the possibility of a relationship between curiosity and resilience, both at the

individual and the organisational levels. However, the qualitative approach's findings presented a strong case for narrowing the scope of this current research, in seeking to understand what goes right in harnessing resilience through the experiences of SAS members.

Indeed, the journey of this research was marked by a paradigm shift, appreciation for the power of qualitative methodology and specifically- constructivism. In this instance, depth was abundant not through quantitative data gathered 'objectively' but through the power of specific perspectives and lived realities- shared, constructed and refined through the interactions between the researcher and each participant. Soon after the initial data was gathered from the primary research sample-the 1NZSAS, and with the insights gained through semi-structured interviews with participants, it became evident that this PhD research could make a significant contribution to the field because its intent is to develop new theory.

This present work is hence informed by the use of qualitative methods. As defined by Creswell, qualitative research begins with "assumptions and the use of interpretative/theoretical framework that informs the study of researched problems addressing the meaning individuals and groups ascribe to a social or human problem" (2013, p. 44). The method selected for this present research was informed by the exploratory nature of the research question, the single case study with multiple units of analyses study design and the number of interviewees in this study (Creswell, 2003; Fischer, 2006; Johnson& Onwuegbuzie, 2004; Yin, 2004; 2013). The research question invited interviewees to consider times when they felt most tested and explored their journeys to sustaining and/or broadening their resilience, following setbacks or significant demands. This format employed in this research enabled the researcher to "focus precisely on the content of the interviewee's responses, paying

close attention to tone, content, and body language", and maximised "the ability of the researcher to gain rapport, ensure confidentiality and extend empathy" (Guest et al., 2013, p. 113; Love & Whittaker, 1997). Equally, the research question and the manner in which it was explored positioned this research in the social constructivism paradigm.

The design and execution of this research employed Yin's (2013) tactics, including multiple sources, chain of evidence and key informant review of the draft, and aligned with theoretical sampling principles (Silverman, 2006). The research design and focus on 1NZSAS as a unique case study, allowed the gathering of rich and comprehensive data and insights, deliberate coverage of contextual issues, and the exploration of meanings attributed by interviewees (Yin, 2004; 2013).

Sample of Interest and Data Collection

This research's primary sample of interest is the New Zealand Special Air Service (1NZSAS), a specialist Unit of the New Zealand Defence Force (NZDF). Individuals and teams, who face adversity daily by virtue of their role and training, represent the 1NZSAS. The organisation holds a wealth of data, doctrine, publications and anecdotes depicting its make-up, cultural components, values, functions and organisational members' attitudes from recent phases in the organisation's history. Further, the 1NZSAS operate in an environment of high risk. Before commencing this research, anecdotal evidence suggested that team members are selected and trained to employ curiosity as an effective resilience-supporting mechanism.

As such, the 1NZSAS was considered a sample of significant interest for this research and indeed framed this research as a powerful case study committed to exploring

and learning through "the complexity of one demarcated entity" (Abma & Stake, 2014, p. 1150). Extending this work's alignment with the constructivist paradigm, this research became, in effect, a case study of 1NZSAS - focusing on the intrinsic value, uniqueness and particularity of the context in seeking to glean into insights to be shared. The approach taken in this research is not entirely naturalistic, as Stake (2000, 2006) might have prescribed. For example, whilst the research occurred in the ordinary settings of 1NZSAS, conversations were guided through semi-structured interviews. Nevertheless, the theoretical framework of this research was emergent and not preordained. While it was initially intended to study wider NZDF groups and perhaps contrast and compare, the 1NZSAS case delivered this works insights and theoretical framework as a singular case study.

The present research was informed by key considerations for building representative samples. As such, this research is based on the responses of thirty-five (35) currently serving badged members of the 1NZSAS Regiment, aged between 24-53 years, who volunteered to participate in in-depth, one-on-one interviews on the subject of resilience. The selection of interviewees for this research targeted diversity in age, experience and skill-bases and aimed at balanced representation of the broader 1NZSAS population. All interviewees were males as currently there are no 1NZSAS badged female members. Over 80% of participants had operational combat experience with the 1NZSAS. The remaining 20% were recently badged 1NZSAS members who had completed training missions with 1NZSAS or operational missions with the wider NZDF.

Whilst this present research maintained a commitment to gathering and presenting data from a representative sample within the SAS, it was also informed by the need to focus on the descriptiveness of insights rather than only seek the strength of

evidence for such insights (Green, Camilli & Elmore, 2006). This view was informed by Green, Camilli and Elmore (2006), who commented (p. 114):

"One of the most common misconceptions for you to overcome is believing that case studies are to represent a formal "sample" from some larger universe and that generalising from your cases depends on statistical inference (statistical generalisation); instead, generalising from case studies reflects substantive topics or issues of interest, and the making of logical inferences (analytic generalisation)".

With this in mind and whilst seeking to safeguard the benefits of representative sampling, the present research sample was also formed on the bases of willingness to participate, the likely richness of available data, and evidence of experience or situation relevant to the study from participants (Green, Camilli & Elmore, 2006).

Research Methods: Initial Considerations

To inform its framework, research may be reliant on descriptive, exploratory, and explanatory case study approaches, which can be employed at different framework development stages (Luck, Jackson & Usher, 2006). Importantly, the proposed research sample was seen to lend itself to comparative case study design across multiple cases. It was assessed that this could be achieved through different functional groups within the same larger sample (e.g., NZDF, Emergency Services). This work's initial intent was also that the use of selected standardised and validated quantitative measures and of qualitative methods informed by existing research in the field would permit comparisons with other cases of interest.

For the present work, semi-structured interviews were initially intended to form the bases of the qualitative work and focus on leaders and experts who can offer depth

and detailed context. To confirm, clarify, and build on this, this research's qualitative phase initially intended to also employ focus groups. The use of these two methods was seen as well placed to research in the NZDF, where a larger sample may be available and where there are shared experiences and a degree of context-related specificity across larger groups of participants.

Focus groups aim to gather information through facilitated discussions on a specific topic from a varied and representative group of participants. Focus groups are particularly useful for studying people's attitudes, feelings, thinking and experiences around specific topics (Kitzinger & Barbour, 1999; Krueger & Casey, 2000). They can be used for exploratory research and in the gathering of initial data on a topic of interest (Greenbaum, 1993; Vaughn, Schumm & Sinagub, 1996) or as various steps in a research process from hypothesis generation to hypothesis testing (Krueger, 1994). Focus groups can also be useful for evaluating instruments and programs, stimulating new ideas or concepts, diagnosing problems, explaining unexpected research results, providing appropriate terminology for research, and supplementing quantitative research (Stewart & Shamdasani, 1990; Krueger 1994; Morgan, 1988, 1997). A series of focus groups can serve to compare the reactions of different groups to the same concepts. Focus groups engender and rely on group interaction among participants to facilitate ideas, rely on consensus and are fundamentally reliant on group interaction (Kitzinger & Barbour, 1999).

In the context of the present research, focus groups were initially seen to offer further opportunities to better understand and define the relationship between curiosity and resilience. Finally, the qualitative phase of the present research also intended to involve after-event or retrospective case study analysis to broaden and enrich findings through the wealth of data available in the NZDF.

Initially, the present research also aimed to add depth and breadth through the use of quantitative tools. It was expected that with a deeper understanding of the relationship between curiosity and resilience, the present research might aid the field by testing assumptions with tools such as Litman's (2008) measure of curiosity (in Spencer, 2009) as one example. It was also anticipated that selected measures of curiosity could be used in conjunction with organisational resilience measures such as the Employee Resilience Scale (Naswall, Kuntz, Hodliffe & Malinen, 2013) and organisational benchmarking tools (www.resorgs.orgs.nz) to test assumptions around the impact of context on individual resilience, through curiosity.

The initial focus on the mixed-method approach for this research was also informed by the opportunity to approach different subsets of the research question with different and best-fit approaches. This was to reveal depth and breadth through consecutive research phases and mark a graduated approach towards the set enquiry. Hence, the quantitative measures were intended to inform much needed theoretical and conceptual framework for the constructs of interest and the relationships between them. The qualitative phase of the research was intended to look for depth and focus further on theory building. On the other hand, the quantitative tools were considered for testing the assumptions formed during the qualitative analysis phase as well as examine the breadth and prevalence of the assumed relationships. Linking these with the research questions, for example, the qualitative phase was intended to 'elucidate and define the construct of curiosity' and demonstrate an operational and empirical example of its effect on resilience, amongst others. In contrast, the quantitative phase was intended to 'test and solidify the links between the constructs of interest' and contribute to measuring and

understanding resilience by employing and building on existing tools for measuring the constructs.

Current Research Methods

In the context of the present study, in-depth, semi-structured interviews were seen as ideally suited to developing an understanding of how curiosity may contribute to resilience. In-depth interviews are seen as a primary qualitative method; their pervasiveness attributed to their versatility and adaptability to the research context (Guest et al., 2013). The technique was considered well suited to the present research context. It could provide information on the topics of interest and generate deeper understanding and explore emergent themes through probing questions (Guest et al., 2013). The in-depth interview format was considered suitable for the inductive probing freedoms it offers and the one-on-one format it is typically carried out in. The one-on-one format offered many benefits, including that it "allows the researcher to focus precisely on the content of the interviewee's responses, paying close attention to tone, content, and body language" and "maximises the ability of the researcher to gain rapport, ensure confidentiality and extend empathy" (Guest et al., 2013, p. 113).

As noted, the depth and breadth of insights gained through the semi-structured interviews of this research delivered sufficient data for this PhD research to contribute to the field, without the need for further instruments or methods. Semi-structured interviews are primary qualitative data collection forms (Guest, Namey & Mitchell, 2013). They are assessed as versatile and adaptable and excellent tools to generate reliable information and understanding (Guest et al., 2013). Semi-structured interviews are built on theoretical constructs (Ollier-Malaterre, 2010). In

difference to less prescriptive interviews such as unscripted conversation, semistructured interviews use a general outline of a pre-set sequence of questions on specific topics. Nevertheless, the interviewee can guide the discussion and flexibility in their responses is encouraged. Semi-structure interviews are ideally placed for generating understanding and capturing in-depth knowledge from experts and understanding the context in which the knowledge or experience of interest was formed.

The frame for the semi-structured interviews of this present work was built on existing theoretical constructs (Ollier-Malaterre, 2010). The interview design allowed the identification of the building blocks of individual resilience at times of acute stress, risk and ambiguity, and the effects of the bi-directional relationship between organisational behaviour, organisational factors and outcomes, and individual resilience at times of change. Critically, it looked to extract the role curiosity may play in supporting resilience. As such, it aimed to identify the thread linking psychological effects and organisational outcomes, as well as individuals, groups and the organisation in their experience, behaviour in and responses to change (Staw et al., 1981).

The semi-structured interview (SSI) pro-forma for this research included a series of open-ended questions (Appendix A). These were built around seven broad sections and ordered in a sequence to maintain flow, focus on the overall interview objectives, and freedom to adapt with interviewees' comments (Ollier-Malaterre, 2010). Questions reflected four themes, including interviewees' background, individual and organisational resiliency, shared identity factors, and curiosity. Probing questions were included to help elucidate further detail, where required. The question of how curiosity supports resilience was explored through designated questions at the end

of each section, indirectly throughout the interview and in a section committed to the impact, significance and effect of the 1NZSAS tenets, values and ways of working (see Appendix A).

Data Collection

In-depth interviews are most commonly associated with the Inductive Qualitative Model-in turn, the most common qualitative inquiry approach (Guest et al., 2013). The inductive approach centres on identifying and coding emergent themes; it is rigorous and can inform theoretical models and applied recommendations (Guest et al., 2013).

The design and execution of this research needed to safeguard anonymity and confidentiality. This was crucial because of 1NZSAS members' roles, mission-specific and capability-specific silos requiring confidentiality. The use of semi-structured, 1:1 interview ensured that military rank and experience did not hinder data gathering, as it may have been the case with other qualitative methods such as focus groups (Kitzinger & Barnour, 1999; Krueger & Casey, 2000). Key considerations needed to be made around storage and coding of data for this research.

The 1:1 format was particularly relevant to the present sample for several reasons. Anonymity and confidentiality were crucial in the context by virtue of the role of SAS operators. It was anticipated that interviewees might benefit and wish to share or refer to some details and reflections on events, they may not be at liberty or comfortable to discuss outside the space of a confidential one-on-one interview. It was also acknowledged that different operators across the team might function in mission or capability-specific silos. Even within the team, information may typically be shared on need-to bases only. Compounding the requirement of confidentiality

and anonymity were also factors of different ranks and experience levels across the sample. Thereby, even if there were no operational or mission-specific limitations on information shared between team members, an alternative qualitative method (such as focus groups, for example) may still have led to hesitation to share reflections and opinions.

To accommodate the dynamic and often geographically dispersed roles of 1NZSAS members and support maximum participation, interviews were conducted during the 1NZSAS Regimental Fortnight-an annual occurrence to support reflections, recovery and self-improvement. This research was supported in this forum, as it allowed interviewees to focus on factors they considered enabling and empowering in their work and personal life. Information on the nature and intent of the research was disseminated by the CO 1NZSAS one month before the Regimental fortnight. It was accompanied by Participant Information Sheet (Appendix B) and a Consent Form for Participants (Appendix C). Volunteers were invited to contact the researcher directly to further safeguard anonymity and confidentiality. Interviews were conducted during participants' normal working hours, and no incentives were offered for participation. Interviews were designed to take up to one hour; however, time blocks were set to afford up to two hours per participant, and this was reflected in interviewees' work schedules as 'debrief time'. Further to this research's requirements, the additional time was set to enable assessment and mapping of any further support for participants, if needed (Love & Whittaker, 1997).

Information on the nature and intent of the research was disseminated to all Unit members one month prior to the Regimental forthright and on the bases of all relevant approvals for research having been granted. The invitation to participate was announced by the Commanding Officer of 1NZSAS and accompanied by a Participant

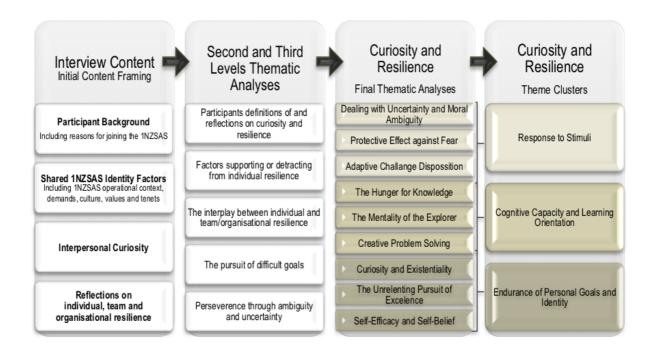
Information Sheet (Annex B) and a Consent Form for Participants (Annex C). Respective commanders then offered interview time slots across different groups of the Unit, and volunteers were invited to respond directly to the researcher with their preferred time slots. This was to ensure that anonymity and confidential participation could be safeguarded. No incentives were offered for participation.

The interviewer captured responses in handwritten notes and voice recordings, which were securely destroyed after data entry. Measures employed to preserve operational security and confidentiality included the use of unique participant's identifiers, exclusion of any details that could identify individuals, locations or events, and secure storage and destruction of interview and participant information on completion of data entry (Love & Whittaker, 1997). Though participants were asked to write their names on research consent forms, their interview comments were recorded against unique identifiers only. Their names did not feature on the same document. Once completed, interview pro-formas were stored securely on location and whilst consent forms were retained, the interview pro-formas were destroyed once comments were inputted into N'Vivo.

The process of identifying and coding emergent themes from the interviews was framed using the Inductive Qualitative Model (Guest et al., 2013). Miles and Huberman's (1994) method of horizontal coding (to understand the patterns) and then vertical analysis (to compare and contrast patterns) was also found to support the interpretation of data collected through the semi-structured interviews (in Ollier-Malaterre, 2010). The coding, sorting, data reduction, and other qualitative procedures were carried out using the NVIVO from QSR International- a software, designed to serve as a platform for collecting, organising, and analysing relevant content. The first level coding was based on the interview pro-forma structure,

whereby themes and sub-themes were identified as the data was coded. Second and third level thematic analyses were then carried out against these using NVIVO nodes, which were then reviewed for fit and labelled accordingly. After the final iteration of data reduction and coding emergent themes, key findings and interviewee comments were structured and presented around each sub-theme. Because of the sensitive nature of the data, interviewees quotes have been presented in an aggregated form. For example, Figure 1 below highlights the process of data analyses that informed the primary chapter of this work-the link between curiosity and resilience.

Figure 1: Iterations of thematic analyses



Research Approval

This research involved human research participants and, in some cases, invited participants to revisit potentially traumatic or stressful events. The research

presented several ethical issues (including mitigating and safeguarding against the risk of re-traumatisation and ensuring adequate support), and ethical approval was an essential step to the process.

In addition to ethical approval, where ethical issues may arise, the research was reliant on:

- Research design, structure and conduct that aims to re-enforce coping mechanisms, self-efficacy and resilience.
- Availability of professional support, where required, to minimise and negate the risk of re-traumatisation or enhance post-incident growth.
- Informed consent and voluntary participation, and
- Anonymity and confidentiality.

Further to the requirement to obtain ethics approval through the University of Waikato's Research Ethics committee, gathering of data with this sample also required a series of approvals from the NZDF, including an authority to conduct research with NZDF personnel in accordance with the Privacy Act (1993) and Defence Force Order 3.14[5]: Authority to Conduct Personnel Research. It also required approval from and alignment with the NZDF Psychology Services (NZDF PS) and the Senior Psychologist NZDF. Though no risks for participants could be anticipated as a part of this research, alignment with the NZDF PS was established to ensure that if a need for support is identified and/or requested through the interviews, it could be met in an effective and timely manner. Once University Ethics and NZDF approvals were obtained, a request to conduct research with the group was also sought, and approval was granted by the Commanding Officer of 1NZSAS (CO 1NZSAS).

The Unique Position of the Researcher

An important remark to be made in this section is on the researcher's unique position in relation to this sample, which may have had an impact on the extent of detail and depth of findings. The researcher had spent six years as the lead psychologist of the 1NZSAS between 2006 and 2012. The researcher was familiar with and had worked closely with several research participants in the past. Further, though as per the design of this research, a number of the participants were relatively new to the Unit and were not familiar with the researcher, the background of the researcher and support for the research was articulated in the introduction to Unit members, creating a positive repetitional frame in support of data gathering. This reflection is important in the context of the otherwise notoriously private nature of the Unit and its members, who are often perceived as inaccessible. The researcher's unique position was such that it allowed the research to commence from a strong position of trust, mutual respect, and familiarity. The history of shared organisational membership and existing reputation also provided important shared frames of references, language, and awareness of key events, milestones, and experiences referred to in the interviews. These factors were assessed as key in allowing the researcher to have a strong rapport, ensure confidentiality and relate, which were seen as highly enabling and conducive to the research (Guest et al., 2013). On reflection, these factors were considered key strengths for the research and seen as key enablers in engendering the necessary levels of trust and openness to explore themes of relevance. It was also assessed that the researcher's experience as an interviewer in the 1NZSAS environment meant that probing questions could be used effectively and were received with little or no hesitation and that the interviews appeared highly conversational (Guest et al., 2013).

Finally, the interviews' overall intent was to explore the concept of resilience and identify what makes it accessible and sustainable in a space where duress, challenges and hardship shape the lives of organisational members. Importantly, the interviews' flow was such that questions pertaining to resilience preceded questions aimed at delving into whether and how curiosity plays a role in the resilience of Unit members. Nevertheless, factors associated with curiosity consistently emerged during the initial phases of the interviews and before delving, specifically into the resilience-curiosity theme. For example, in exploring the perimeters, functions and enablers of resilience, possible links with curiosity emerged at the very start of interviews. For example, possible links emerged when participants were asked to reflect on their reasons to pursue service with the Unit and persevere through the SAS selection and the role's hardships.

Hence, whilst Chapter 5 focuses specifically on how curiosity enables resilience, added insights on this relationship are delivered through Chapter 6 - "The SAS Resilience Heuristics" and Chapter 7- "A Context to Thrive in", by focusing respectively on what this relationship takes and on what it needs to see resilience thriving. As such, this work's data chapters unpack how resilience is encouraged, developed and sustained, from an individual, team and organisational perspective in some of the most demanding conditions.

CHAPTER FOUR: 1NZSAS CONTEXT AND HISTORY

Overview

The following chapter invites the reader to explore the unique context, history and

ways of working within the 1NZSAS. It aims to sponsor deeper appreciation for the

importance, functions and purpose served by the resilience components explored in

this work. Whilst most of this context chapter is informed by formal and historic

information about the 1NZSAS (otherwise referred to as the Unit), crucial nuances

informing the current experience of this SAS context are also shared, as depicted by

research participants. In this way, this chapter illustrates not only what may be

formally known, but also what may be informally felt and how those that currently

shape (and are shaped by) this environment experience, perceive and engage with it.

The 1NZSAS is a highly specialised component of the New Zealand Defence Force

(NZDF), that is often tasked with missions of critical importance. Established in 1955,

the 1NZSAS Regiment (also referred to as 'the Unit') is the tier one unit of the NZDF.

Amongst others, references to the Unit as a "tier 1" military organisation mirror a

world-wide categorisation of Special Forces military units and reflect that Unit

members are selected from the best officers and soldiers in their respective defence

forces. Tier 1 missions are closed teams that are formed by invitation, demand the

highest levels of skills and are shrouded in secrecy. Along with 1NZSAS, other military

units that hold tier 1 categorisation include the Australian SASR (the Special Air

Service Regiment), SAS (including 21, 22 and 23 SAS regiments) from the United

90

Kingdom and Delta Force (Special Forces Operational Detachment-Delta) or Seal Team 6 from the United States.

In the context of operational and training demands, it can be expected that resilience is a critical value-in-action in the 1NZSAS. Equally, it may be expected that curiosity is a value that can play a defining role in the SAS environment. Indications that both resilience and curiosity may be of importance emerge at first glance, when examining SAS principles such as 'Who Dares Wins', 'Go Always a Little Further' and 'Testing the Mettle'-all of which encourage exploration, perseverance and grit. This is evident in the definitions and behavioural statements of each of the tenets and this is explored in some detail in this chapter. Importantly, amongst other factors, these tenets rendered the 1NZSAS an organisation of key interest for the present research.

The 1NZSAS are trained to operate across the military spectrum with Air, Mobility, Mountain and Amphibious troops, in achieving designated strategic, operational or tactical missions. The mandate of the Unit stipulates that the 1NZSAS is responsible for "intelligence gathering, limited offensive operations, recovery operations, and counter-terrorist operations beyond the range or capability of conventional military units" (New Zealand Defence Force, n.d., para. 1). As such, any deployments of Unit members are underpinned by significant escalation or the demand for highly specialised skills. Whilst the 1NZSAS has significantly fewer members than the other tier 1 groups, the Unit is globally recognised for its capabilities to conduct complex combat and unconventional military operations as well as training and mentoring missions in support of indigenous forces.

As noted, the Unit is a component of the NZDF-an organisation that is primarily responsible for the provision of defence and security of New Zealand and its people

(New Zealand Defence Force, n.d.), and who's role can be employed across a wide spectrum of functions in New Zealand and globally. As such, in partnership with the Ministry of Defence, the NZDF is the organisation entrusted with the protection of New Zealand's national security interests and may fulfil its commitment to this mandate by conducting national, multinational as well as United Nations operations, disaster relief and security tasks, locally and globally. Broadly, the mission set out for the NZDF is as follows:

"To secure New Zealand against external threat, to protect our sovereign interests, including the Exclusive Economic Zone, and to take action to meet likely contingencies in New Zealand's area of strategic interest" (New Zealand Defence Force, n.d.).

To fulfil this mission, the NZDF is currently composed of over 14,000 personnel across Army, Navy and Air Force, including regular force, reservist and civilian personnel (New Zealand Defence Force, n.d.). The role of the 1NZSAS Regiment in this context is to operate as a specialised Force, under the command of New Zealand's Chief of Defence Force. Hence, the Unit's focus is on special operations and is reliant on highly trained experts to pre-empt and protect from threats to New Zealand and to defend New Zealand's interest domestically, regionally and globally. As stipulated by its mandate, the capacity to operate at the highest levels of complexity is an explicit requirement for 1NZSAS members. Crucially, whist this requirement places the highest training demands, it also means that any of the 1NZSAS' soldiers and officers must be prepared to deploy 'at a moment's notice' or with a minimal warning, across the globe. And whilst typically, there may be some indication as to the anticipated length of the mission they undertake, the nature of tier 1 operations is such that amongst Unit members, there is also an implicit expectation that this length can shift significantly. In the words of interviewee 21:

"I learned to never promise to be home on time for birthdays, that until my boots are on the ground, no mission is certain and that a 'couple of months' can eventually turn into years."

History of 1NZSAS

Though officially recognised in 1955, the 1NZSAS has a long history preceding its formal establishment. Indeed, the Unit is the continuation of an age-old tradition of elite military forces, stretching "in an unbroken line from the Praetorian Guard of the Caesars, through Napoleon's imperil Old Guard to Britain's Brigade of the Guards" (Quarrie, 1995, p. 8). The practice of gathering small groups of highly trained fighters, equipped with unconventional tactics and for specific purposes, has an enduring legacy in war fighting history. For example, the 1NZSAS is deemed to have originated from the New Zealand Forrest Rangers, who were trained to operate in conditions of hardship and isolation, and to function independently from main military bodies in Maori-held territories (Crosby, 2009). Known as the 'eyes of the Army', the Forrest Rangers were a group of elite scouts who were created in 1863 to aid the New Zealand Government in conflicts with the Maori, by employing specialist bush-fighting skills (NZSAS Regiment, 2012). Both celebrated and notorious, the Forest Rangers were selected and trained to be self-sufficient. Chiefly, in difference to traditional military units where the freedom to express ideas can often be seen as entrenched in and conditional upon the rank of the beholder, in the Forest Rangers each man was encouraged to contribute with their unique perspective and relied upon as equal amongst his team (Crosby, 2009). This point of difference is enshrined in special forces principles and tenets globally and is seen as a key point of appeal to serving with 1NZSAS, amongst contemporary service personnel in New Zealand.

There are many examples of regular forces lifting irregular forces into action to respond to specific needs (Crosby, 2009). Like the modern SAS, historically such forces would serve to gather intelligence and impact the adversary from behind enemy lines (Crosby, 2009). Traditionally summoned to respond to specific emergencies and disbanded soon after, irregular forces seldom became a part of regular military forces upon the completion of their unique missions (Quarrie, 1995). By virtue of design, much of the skills, knowledge, detail on make-up and nature of tasks that defined such irregular forces, were quickly lost at the end of each conflict. It was the unprecedented demands and complexities of World War II that necessitated the use of irregular forces again, this time across battlefields and borderlines, and for broader coalition causes in the form of the Special Forces (Quarrie, 1995).

Innately dependent on diversity of thinking, self-reliance and creativity, the impact and contribution of Special Forces was seen as invaluable and disproportionately greater than their demands during World War II (Quarrie, 1995). Moving away from traditional, cumbersome and trench-based war fighting that marked the pace of regular military forces, irregular formations of highly specialised fighters continued to be centred on intelligence gathering. They sustained operations in highly skilled, lightly armed, agile groups that aimed to infiltrate and affect from within and functioned at the heel of the enemy. Ultimately, the use of small yet highly competent irregular forces, powered by unconventional methods of operations and willingness to operate behind enemy lines, allowed Special Forces formations to have "an effect out of proportion to their size" during World War II (Crosby, 2009, p. 22).

The approach of using small, highly trained groups was of particular relevance to New Zealand during World War II, due to factors such as small population size and limited

resources. These made it difficult for New Zealand to maintain a major conventional Defence Force. Moreover, the Forest Rangers had left a strong legacy, whereby New Zealanders were seen as being able to operate in an unconventional and highly impactful manner. The reputation of the Forest Rangers had paved the way for irregular formations to make unique contribution to the mission and objectives of coalition forces in World War II (Crosby, 2009). This was evidenced by the Long-Range Desert Group (LRDG), where the ranks were formed almost entirely by New Zealanders. The LRDG worked to harry German and Italian lines of communication and gain intelligence between 1940 and 1943 in the North African Deserts (Quarrie, 1995). Members of the LRDG were seen as experts in desert navigation and survival and conducted long-range reconnaissance and raiding missions (NZSAS Regiment, 2012). Their skills enabled them in inserting, supplying and collecting British and Arab undercover agents and in rescuing allied prisoners of war. The LRDG were seen to guide other Special Forces units during World War II, including the Free French and Popski's Private Army, as well as the Special Air Service in their objectives (NZSAS Regiment, 2012).

Similarly, espousing what can be considered as unconventional warfare tactics during World War II was the Special Operations Executive (SOE) in Europe and the Special Operations Australia (SOA), which operated from South East Asia. The SOE was established by the British in 1940, with the aim to train agents to infiltrate behind enemy lines and to operate as liaison officers for resistance groups (Quarrie, 1995). Using an eclectic range of methods and members to achieve coalition's objectives, the SOE in particular was seen as a covertly para-political organisation. For example, the New Zealand contribution to the SOE included a Rhodes scholar, Air Force and Army personnel from a variety of different trades and ranks as well as a number of

females, including Nancy Wake, the most decorated woman in World War II (NZSAS Regiment, 2012).

Though framed by historic use of irregular forces globally, the philosophy and ways of life of modern Special Forces are widely attributed to values and philosophy of the infamous David Stirling. Stirling's efforts during World War II are viewed as the cornerstone of all Special Forces to this day; his concept of operations and the values upheld by his team continue to serve as the backbone of Special Forces globally (Quarrie, 1995). It was in 1941 in Cairo, when under the mounting threats of the Second World War, the then Lieutenant Stirling bluffed his way into the Deputy Chief of the Middle East, grasping in his hands a detailed plan for his concept of new air born Special Unit (Quarrie, 1995). His vision, which materialised later that year, was to attack enemy airfields in the lead up to the British offensive, by parachuting in or infiltrating by small boats or vehicles, highly trained groups of up to five operators behind enemy lines. Stirling, who's energetic and unconventional approach is widely accepted as the foundation of modern SAS, argued that "very small, highly trained parties could achieve far more by using the advantage of surprise in focused pinpoint attacks, with minimal cost in terms of man and materials" (Crosby, 2009, p. 23). The aim of these parties as envisioned by Stirling-to sabotage the enemy's missions or carry out reconnaissance missions, remains the foundational principle of all Special Forces operations today (Quarrie, 1995). Stirling's SAS also shared ideas, views and tactics with members of the LRDG and Popski's Private Army, leading to an even greater evolution of unconventional tactics of operations on the complex battlefield of World War II. Like the Forest Rangers, SAS officers and soldiers freely exchanged ideas and collaborated on dynamic, unconventional tactics, with the mission to obstruct German and Italian operations. Stirling's concept evolved under different commanders across battlefields and was met with strong appreciation for its disproportionately higher value and impact (Quarrie, 1995). Fittingly, the name 'Special Air Service' or SAS was landed on by accident. This name was used for Stirling's unit in communications aimed to deceive German Intelligence into thinking that a British Paratrooper Unit had landed in the Middle East (NZSAS Regiment, 2012).

In maintaining a tradition of mission-based design and task-specific formation, the SAS were disbanded in 1945 with the end of World War II. However, their retirement was short lived and in 1950 a British SAS regiment was established again, this time to defend British interest in Malaya and fight a seemingly unrelenting guerrilla campaign on location (Crosby, 2009). The New Zealanders formed one of the squadrons (the 'Originals') and supported the British efforts in Malaya between 1955 and 1957 at the request of the British Prime Minister. Out of the 800 mostly civilian New Zealand candidates who volunteered to support the Malayan effort, 138 were accepted for service-a ratio of willing-to-able which appears to have remained largely unchanged over time. The newly formed squadron was put under the command of Major Frank Rennie and was relied upon to conduct deep jungle patrols, stretching for periods of no less than three months each, against the Malayan communists (NZSAS Regiment, 2012). They were designed to be self-reliant and capable of operating without resupply, in relative isolation, harsh environmental conditions, and whilst embedded in hostile environments for extensive periods of time.

Though disbanded in 1957, the NZSAS was resurrected again in 1959 with commitment to diversify and evolve sophisticated warfare capabilities outside the original jungle fighting skills. Beyond Malaya, between 1955 and 1971 the NZSAS were deployed to Thailand, Borneo and Vietnam (Crosby, 2009). Domestic

counterterrorism was added to the range of NZSAS roles after the 1978 Sydney Hilton Hotel bombing (NZSAS Regiment, 2012). A subsequent designation of the Unit as a 'Group' in 1985 granted permission to the 1NZSAS to increase in size and supported the further diversification of the Unit's functions. For example, the inclusion of the capabilities to fight domestic terrorism, after the 1978 Sydney bombing, eventually paving the way for the establishment of a dedicated Counter Terrorist Tactical Assault Group (CTTAG) under the NZSAS umbrella. Dedicated primarily to fighting terrorism domestically, CTTAG were formed in 2005 and evolved their size and capability sufficiently to be recognised as a squadron in 2009. They were then renamed 'Commando' and recognised as a separate sub-unit in the 1NZSAS Regiment Order of Battle (NZSAS Regiment, 2012). Over recent decades, the 1NZSAS has had a strong presence across the Middle East, the Pacific region and beyond.

The 1NZSAS Selection & Training

By-and-large, members of the 1NZSAS reign from the three services of the NZDF and are typically experienced service personnel. For the vast majority of 1NZSAS's history, suitability to attend the 1NZSAS selection course could only be considered after a sufficient period of service with the general Defence Force (typically a period of 2-3 years of service). This period of 'stand down' was applied in order to afford sufficient evidence to evaluate candidates' fit for service with the SAS, including their innate capabilities, personality fit and chiefly their integrity. At times in the past and at present, this rule has been relaxed where there may be sufficient evidence of strong performance and value fit of the service person volunteering for selection. Service personnel applying to attend the 1NZSAS selection would typically require a recommendation from their respective commander, before their nomination could be

considered. In 2009, the 1NZSAS broadened the scope of suitability for service with the Unit, by extending the offer to the wider civilian population of New Zealand. This was in response to high operational demands and with the view of broadening further the talent pool of the Unit, through diversity of skills, views and capabilities.

To become members of the 1NZSAS, candidates need to successfully complete a rigorous selection course and if successful, a sequence of highly demanding cycles of training, stretching the course of a year. To be deemed suitable to attend the selection course, all candidates must come with a detailed security clearance, character and performance recommendations as well a medical, health and fitness clearances. They also complete comprehensive psychological and motivation-for-service assessments with registered psychologists at the initial stages of the selection course. These are aimed at assessing personality suitability and cognitive abilities, amongst others. Once pre-selection and screening are complete, successful candidate's embark on a gruelling set of tests, designed to assess their physical stamina and critically, their motivation, intrinsic drive, perseverance, resiliency and ability to work through complex and demanding obstacles on route to achieving their goal.

The 1NZSAS selection course-deemed one of the most rigorous and demanding military selection courses globally, takes nine long days to complete. It includes a 'conditioning' phase, during which candidates are assessed against a series of rigorous and highly demanding fitness tests in close succession; a two day phase of open country navigation, where candidates carry loads of essentials amounting to 35 kilograms, over a distance of approximately 20 kilometres of angulating country; the notorious Von Thempksy phase which takes 20 hours to complete and involves moving through swamp or desert terrains, whilst carrying heavy jerry cans in full

marching order; a three day close country navigation phase, and finally a 60 kilometre walk to the finish line.

Further to the gruelling physical demands of these activities, candidates are expected to operate in condition of limited and in some phases no sleep. They also have limited and strictly regulated food supplies for the duration of the selection course, whereby the energy demands of the activities far exceed their available energy supplies. These strains are deliberately built into the selection course to assess candidates' potential to carry out the essential and basic SAS soldier functions, which, in spite of the evolution of the role and functions remain largely unchanged.

The selection course is designed to assess, amongst others, the candidate's ability to self-motivate and sustain their own resiliency. In the words of one SAS interviewee 7:

"The SAS selection is designed to assess candidates' ability to sustain focus and motivation over challenging terrains and over long distances, whilst carrying heavy loads and maintain key timings and skills in relative isolation, and without any external support or motivation."

During the course, candidates are instructed not to communicate with other candidates and are given no encouragement or criticism by instructors. Further to the intense demands of physical exertion and limited sleep and nutrition, the aspect of isolation and solitude are factors that many candidates appear to find unbearable during the selection course, leading many to withdraw voluntarily from the selection course. Reflecting on his own selection experience, interviewee 2 shared an anecdotal piece of research he found out about after his selection course:

"I remember hearing of this research that said, the best predictor of whether you will make it on selection, is whether you have failed selection before."

Considering the multitude of selection criteria and success predictors, including experience, physical fitness, mental aptitude and personality, this interviewee's comment reflected the fact the demands of the 1NZSAS selection are unique, multifaceted and often overwhelming. This interviewee also stressed the pivotal importance of self-awareness and the extent to which "you know how to re-deploy your resources again and again, with every new low you reach". Interviewee 4 reinforced this by saying:

"No matter how physically tough, many give in along the way, under the heavy burden of doubts left unchecked. Many learn they have never known solitude and discomfort of this nature, how to sit with their daemons and quiet their minds".

If successful at the completion of the selection course, candidates must commit to a yearlong highly demanding cycles of training. This subsequent training cycle, leading onto the badging of successful trainees, is only the beginning of a life-long process of development, including continuous training to build and enhance specific trade skills, on-the-job professional and personal development, and crucially in strengthening the mindset required to effectively operate in the role.

Needless to say, the goal of serving with the SAS is complex, highly demanding but also highly uncertain. For many candidates, pursuing this goal demands years of preparation, evidence of exemplary service in the broader Defence Forces and significant personal sacrifices. Historically, less than 10% of all candidates make it to the finish line of the rigorous selection process.

This long and arduous journey-from the selection course through to the training cycle and into operational deployments and service, offers little certainty that candidates' ambition to be a part of the Unit will reap the rewards they anticipate. The stakes are high. Levels of attrition through injury or failure to complete any of the countless training requirements during the selection course and the training cycle, mean that very few from those who volunteer to sign up for service will ever experience what it means to be a member of the Unit.

Further highlighting the ambiguity associated with this goal is the fact that little detail is known about the Unit. For reasons of operational safety, details of what the SAS role entails are shrouded in secrecy. Beyond the demands on the individual operator, the strain of the role can be felt on all of their personal relationships. Interviewee 32 reflected on the discipline it takes for him to be really present with his family and loved ones, whilst always "in the ready to deploy" as well as on the challenge of maintaining genuine connections "outside of the team", within the bounds of operational secrecy. He also shared what he described as "a peculiar quirk" he has developed since joining the Unit and learned to accept. He commented:

"The thing is, I never unpack my toiletry bag. Putting my things on shelf or in draws makes me anxious. Like I will not be fully prepared. It's one of those weird things I have had to get used to."

Hence, in the context of roles' secrecy, for many who aspire to achieve the goal of serving with the 1NZSAS, the reference points that frames their expectations of service, hinges on the values and the tenets of the Unit, historic publications of the Unit's operational experiences as well as anecdotes and impressions collected through short-term encounters with Unit members. Indeed, when asked why pursue or sustain this career, all interviewees-whether they were relatively new to the Unit or

experienced SAS veterans, referred to the Unit tenets and principles, as a core point of appeal.

Shaped by Tenets

From its conception, the 1NZSAS like other Special Forces groups globally, has operated under an aura of secrecy. This is in order to maintain operational security, the safety of its members and national interest. With the exception of examples such as the Victoria Cross awarded to Corporal Willie Apiata in 2007, many of the achievements of the Unit and its members have remained shrouded in secrecy. Nevertheless, the Unit is widely recognised in New Zealand and globally for their readiness to deploy highly skilled individuals and teams at short notice in a range of roles. For example, the 1NZSAS carries strong reputation as a "highly trained elite body of troops capable of meeting both-the government's external commitments and its obligations to be able to provide the ultimate protective response internally against any terrorist threat or extreme threat to internal security" (Crosby, 2009, p. 446).

The original SAS tactics and philosophies conceived during the Second World War have been further whetted to fit the demands of modern conflicts across the globe. Their impact has been significant, to the extent that these tactics and philosophies are seen to be shaping the core of Special Forces operations today. Specific to New Zealand, it was the Malayan effort of the mid 1950s and the New Zealand attachment to the British SAS Regiment that has most notably influenced the symbolism and heraldry of 1NZSAS today (NZSAS Regiment, 2012). Nevertheless, it was Stirling's unorthodox and impactful approach and the symbolism and values he and his team identified as critical, that continue to be recognised as the cornerstone of SAS units across the globe today. This is clearly seen, for example, in the distinct badge carried

by all SAS members. Seeking to define the identity of the group in the midst of World War II, Stirling proposed the famous 'Who Dares Wins' motto (NZSAS Regiment, 2012).

David Stirling also laid down the values and principles that still shape SAS units today. He saw these as crucial tenets and argued they must always be a part of the fabric of Special Forces units. These are 'The unrelenting pursuit of excellence'; 'Maintaining the highest standard of discipline,' 'The SAS brooks no sense of class' and 'Humour and Humility'. Considering the tenet of 'The unrelenting pursuit of excellence' as explicit enough in itself, Stirling added context to the remaining three tenets. These are listed in Figure 2 below (NZSAS Regiment, 2012, p.43).

Figure 2: The SAS Tenets

Maintaining the highest standard of discipline

In all aspects of daily life of the SAS soldier from the occasional precision drilling on the parade ground to his personal turnout on leave. We always reckoned that a high standard of self-discipline in each soldier was the only effective foundation for Regimental discipline. Commitment to the SAS pursuit of excellence becomes a sham if any single of the disciplinary standards is allowed to slip.

The SAS brooks no sense of class

Particularly, not amongst the wives. This might sound a bit portentous but it epitomises the SAS philosophy. The traditional idea of a crack regiment was one officered by the aristocracy and, indeed, these regiments deservedly won great renown for their dependability and their gallantry in wartime and for the parade ground panache in peacetime. In the SAS we share with the Brigade of Guards a deep respect for quality, but we have a different outlook. We believe, as did the ancient Greeks who originate the word 'aristocracy' that every man with the right attitude and talents, regardless of birth and riches, has a capacity in his own lifetime of reaching that status in its true sense; in fact in our SAS context an individual soldier might prefer to go on serving as an NCO rather than have to leave the Regiment in order to obtain an officer's commission. All ranks in the SAS are of 'one company' in which a sense of class is both alien and ludicrous. A visit to the Sergeants' Mess at SAS HQ in Hereford vividly conveys what I mean.

Humour and Humility

Both of these virtues are indispensable in everyday life of officers and men-particularly so in the case of the SAS which is often regarded as elite Regiment. Without frequent recourse to humour and humility, our special status could cause resentment in other units of the British Army and an unbecoming conceit and big-headedness in our own soldiers."

The 1NZSAS Regiment continues to espouse and ascribe to these values and has elevated their significance further by adapting them to the New Zealand context and our Maori history. As such, the 1NZSAS interpretation of the original SAS tenets reads as outlined in Figure 3 below (NZSAS Regiment, 2012, p.43)

Figure 3: 1NZSAS Tenets.

'Unrelenting pursuit of excellence' (Hiranga Rerenga)

In the Special Air Service Regiment we maintain an unrelenting pursuit of excellence. This drive for knowledge and improvement is likened to a pilgrimage- and is a never ending journey. As the Special Air Service Ode says, we are driven to see 'beyond the last blue mountain barred with snow, or across that angry or that glimmering sea.' We area team of free spirits bound to the pursuit of excellence, able to imagine the unconventional and to not take ourselves too seriously. Yet, we hold ourselves to the highest standards of discipline and when we look at individuals we look for their potential, not their position or their pedigree. In short, we believe in the equality and the potential of honorable man and women whose strength is in their humility and their desire 'to go always a little further'. As a result we are agile and unpredictable.

This tenet is depicted in the carving *Hiranga Rerenga*. *Hiranga Rerenga* means the pursuit of excellence. The gap between the tail of the *manaia* and his body forms a koru. This represents new life and the possibility of things to come. On his body, the *unahi* or fish scales depicts pursuit of excellence in the water. His beak depicts the pursuit of excellence in the air. The *manaia* is rendered in a sand color which links back to the origins of the Special Air Service and the pursuit of excellence on land. The four notches on the outer edge of his tail represent each of the Regiments four tenets. Finally, the three *matihao* or fingers on each hand are the traditional symbol of birth, life and death. On *Hiranga Rerenga* they represent the Regiment's role in selecting and training Special Operations soldiers, employing and deploying them, and then caring for our veterans and our history.

'Humour and humility' (Whakakata Mahaki)

In the Special Air Service Regiment we believe in humour and humility. Humour is an essential ingredient in morale and for coping with the many dangers that we face.

Whereas self-depreciating humour us an engaging example of humility, conceit is the fastest road to disaster. To that end, as members of the Regiment, we seek confidence through knowledge and through trust in each other. But we must never let this go so far that confidence becomes arrogance. Humility is powerful in that it keeps us open to new ideas and prevents us from becoming blind to our own failings.

This tenet is depicted in the carving Whakakata Mahaki. Whakakata Mahaki means humour and humility. The manaia has two heads which are inversely and outwardly oriented. Together they represent the powerful possibilities that come from being able to see yourself and life from a different perspective. The teal blue rendering represents Te Ao Marama, or enlightenment and understanding. These elements are particularly relevant in Special Operations, given that a perceptive and unconventional mindset is an important feature of how we fight.

'Brook no sense of class' (Ririte)

In the Special Air Service Regiment, we brook no sense of class. We are a team and a family. We are all of one company. Regardless of the position or path in life from which we have come, we earn our entry into the Regiment through selection and we earn our right to remain through the daily commitment to excellence...

We believe less in rank and privilege and more in every individual's innate potential and personal responsibility to contribute to their fellows and to the mission. This is equality in its strength.

The tenet is depicted in the craving *Ririte*. *Ririte* means equality. The carving shows two *manaia*. *Manaia* traditionally represent guardians. In our context they are simply used as a medium to portray ideals. In *Ririte*, the *manaia* are in balance and facing each other. Neither has ascendancy over the other. Instead they are complimentary and sharing a hingi, or traditional greeting, which symbolises the sharing of *mauri* or life itself. The *manaia* are entwined in a single twist representing union and they are rendered in earthy orange. This underscores the foundational concept that the Regiment is grounded on equality and teamwork.

'Highest standards of discipline' (Whakahautanga)

In the Special Air Service Regiment we believe in maintaining the highest standard of discipline. This is self discipline. An organization that has disciplined people, disciplined thinking and disciplined action is an organization that wins. In maintaining the highest standard of discipline we reduce the need for beurocracy and unnecessary rules. In the Regiment we rely upon each individual to do what is right and to the right standard. We take the right road, not the easy road. The result is agility and freedom to innovate.

This tenet is depicted in the carving *Whakahautanga*. *Whakahautanga* means discipline. Taken together, the elements of this carving convey strength and success through discipline. The manaia holds a taiaha, representing strength, fortitude, resilience and direction. Inset in the *manaia* are *pungawerewere* or spider's web design which symbolize the capture of knowledge and the pursuit of excellence. The shape of the *manaia*'s mouth is *hei matau*, or fish hook which is the traditional symbol for prosperity and success. To honour sacrifice, the paua shell in *Whakahautanga* is designed to receive poppies on special occasions. Following around the paua and through *Whakahautanga* is a red rendering which represents *toto*, or life blood. This acknowledges the lives of our fallen, given freely so that others might live in peace.

The review of the values, symbolism and tenets of 1NZSAS also unveiled the Regimental Ode, The Golden Journey to Samarkand. Powerful, descriptive and deeply espoused by SAS members today (as evidenced by it being frequently quoted), the ode was adopted by SAS in 1960 and written in 1913 by the poet James Elroy Flecker

Chapter Four: 1NZSAS Context and History

(NZSAS Regiment, 2012). Depicting the story of the character Hassan of Baghdad,

the poem was seen as representative of the nature, essence and unique disposition

of SAS members. One of the most commonly quoted segments of the ode reads

(NZSAS Regiment, 2012, p. 48):

"We are the pilgrims master: we shall always go

Always a little further"

This verse is seen to capture the requirements for physical endurance, innate

resilience, grit and determination, consistent with the desired characteristics of SAS

members (NZSAS Regiment, 2012). I end this chapter with a verse of a poem, seen

to resonate with the distinguishing drive in search for the unknown: "to discover

secrets after great feats of endurance and against impossible odds" with "fierce

courage and determination" (NZSAS Regiment, 2012, p. 48). The poem closes with

the verse:

"We travel not for trafficking (trading) alone;

By hotter winds our fiery hearts are fanned:

For lust of knowing what should not be known,

We take the Golden Road to Samarkand."

106

CHAPTER FIVE: KNOW IT BY THE COMPANY IT KEEPS

How Curiosity Enables Resilience

"Curiosity is asking questions with a purpose.

If there is to be a challenge in life, curiosity helps you deliver your best response."

The insurgents show no regard to whether their assault will impact combatants, that 6year-old chasing joy with a dusty ball down the street or his anxious mother moving through the market. Her hope that today she can afford to break the dry bread diet for what is left of her family is of no relevance to the insurgents. Dusk sets. So does the enemy's intent-to control and to terrorise. Their fire lands in the civilian area, tormenting everyone who scrapes for safety, by scattering and spraying bullets like a heavy summer rain. The small team rapidly deployed to help cease the torment is already on site. The source is quickly located by the erratic movements that he makes. Suddenly, the seconds grow long as soldier X, charged with apprehending the insurgent, collapses on the ground. Rushing to his friend's aid. soldier Y- a highly trained combat medic, hears the final rapid breaths of his friend X. Just hours prior, Y had been hearing the same rapid breaths from X. That time X was gasping for air, because he was laughing at his own outlandish ideas on life after this deployment, whilst trying to keep a cup of instant coffee from spilling all over the table. That time for outlandish ideas will never come for X now. Y knows there is no helping X- his breaths now are just the body's final reactions to the shock. Soldier Y's best friend's life was taken not by an erratic fire, but by a precise shot to the head. In those same long seconds soldier Y sees his best friend's killer. The killer is also wounded, but alive and in pain. Y rushes to the killer's aid- he has now become his patient. It is not Y's role place judgement; it is his role to help a fellow human. As Y is strapping the wounds of yet another victim of war, he recognises the endless similarities between his best friend and his now patient. He too is someone's son, perhaps a parent, a neighbour and a fellow human tormented by the war.

Overview

The present chapter explores the first research question- how does curiosity serve as a resilience enabler? It investigates curiosity's role in some of the most demanding conditions for resilience- the 1NZSAS context. This chapter centers specifically on the role curiosity plays in enabling individual resilience.

As noted in Chapter 3: Methodology of this work, SAS members' comments around the role and functions of curiosity were abundant and emerged during the interviews'

initial phases, as participants explored the construct of resilience in the SAS. For example, references to curiosity were made when SAS members reflected on their reasons for pursuing a career with the Unit. Their comments included the desire "to see what lies behind the gates", to "test the mettle", to "self-actualise by learning and tackling difficult roles", and "in pursuing a life of challenge, learning and adventure". Placing the limelight on curiosity as a key element to the motivation to pursue a role with the Unit, SAS interviewee 12, for example, recounted that his reasons for joining the Unit were in "the need for knowledge and wanting to be one's best". He elaborated:

"Curiosity was a big part of it. I wanted the adventure that the Unit offered for my life. You have to be willing to discover. You cannot learn the best way of being without being curious. Sometimes it can be as simple as just wanting to find out what it will be like to take another step toward your goal. And for that, you need to espouse curiosity and forsake fear."

In addressing the question framing this Chapter, the data offered strong support for the link between curiosity and resilience. Before outlining the specific ways in which curiosity serves as a resilience enabler, it is worth reflecting further on comments that signalled affinity, alignment and broader functions of curiosity, as seen by SAS members. For example, comments consistently highlighted that curiosity is a crucial component of SAS members' makeup and a prevailing attitude amongst the team, a vital element of peak performance and an essential component to SAS members' resilience across every aspect of their career. Interviewees' responses highlighted the role of curiosity in training, operations, and overall, in the pursuit of meaning and self-development, consistently describing curiosity as a key motivator.

Curiosity was of unique importance to Special Forces operators, particularly because they are expected to perform and thrive in the unconventional war space. Though many comments indicated that SAS operators have distinct differences from one another (and that in those differences lies the Unit's strength), the prevalence of curiosity-laden comments indicated curiosity might be innate in all Unit members. For example, SAS interviewee 16 commented-"however different we may be, we are all 'bright eyes bushy tail type people", referring to the openness to novelty, the pursuit of challenge and the innate curiosity amongst the team. Interviewee 2 added:

"What separated the guys here from the rest is the ability to think outside the square, to ask questions. All good knowing what you know, but you must be ready to adapt and to invent better ways of doing things to make it here. It is about asking the 'what if?' question at times when there is little or no certainty."

Building on the above, interviewee 1 commented:

"We are all different in many ways, but we are all alike in that we ascribe to the SAS tenets and are shaped by the 'Who Dares Wins' motto."

In this context, references to the Who Dares Wins SAS motto were consistently made by interviewees, in recognition that Unit members had to be "curious", "ready to be challenged", "to challenge", and to "commit to an exponential learning curve". For example, linked by interviewees to "the sense of adventure", curiosity was seen as supporting the ability to commit to life-long learning. Interviewee 2 commented:

"Curiosity feeds your sense of adventure. In the Unit you get in, you will achieve one milestone, and before you get the chance to celebrate, you discover that there are plenty more goals to be achieved. So, you get there, and you realise you have to go a little

further, always. You could not handle this constant process of stretch and learning if you were not curious."

A more detailed analysis of the responses signalled a strong affirmation of curiosity as an enabler of resilience. Since curiosity was viewed consistently as a decisive factor for success in SAS operators' roles and crucial for their resilience, this chapter examines how it was seen to support resilience in some of the most testing conditions. The ways in which curiosity was seen to enable resilience clustered around three overarching themes. These are briefly defined at the start of respective sections and then explored in the context of interviewees' comments. The first theme centred on how SAS members orient themselves towards the shifts and opportunities in their context. This theme was labelled Awareness. Through it, curiosity was seen to enable resilience by framing an adaptive response to stimuli when SAS members were exposed to a threat, significant demands, strain and ambiguity. The second theme explored in this chapter centred on how curiosity broadens and builds capacity for resilience by sponsoring learning orientation and broadening one's cognitive capacity. This second theme was labelled Engagement. The third theme emerged around curiosity's support for a positive sense of self and, consequently, Persistence by sustaining the endurance of identity and personal goals. Guided by interviewees' comments, each of these overarching themes was broken down further into resilience-enabling subsets as shown in Figure 4.

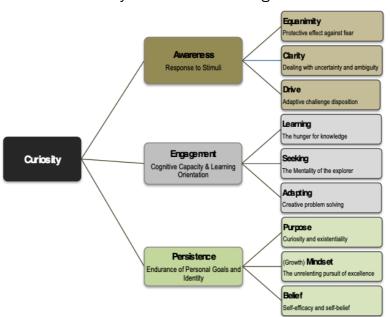


Figure 4: Overview of curiosity's resilience-enabling functions

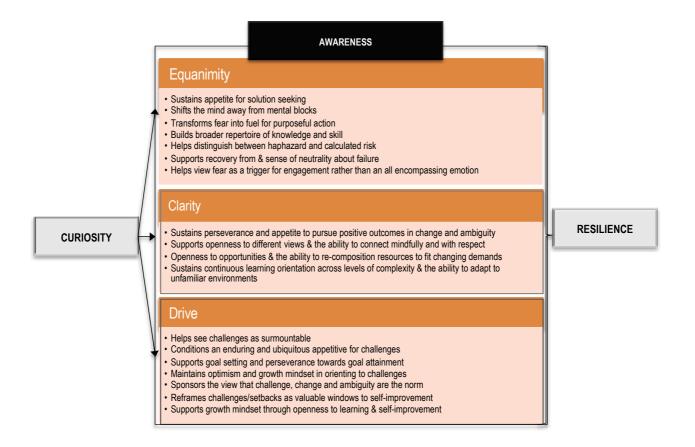
Awareness

Overall, the theme Awareness entailed references to situational-awareness and self-awareness. Curiosity enabled resilience through awareness, by framing an adaptive response to stimuli when SAS members were exposed to threats, significant demands, strain and ambiguity. Through curiosity, awareness enabled SAS members to observe, select and shape their perceptions and responses (rather than react), in the direction of their aim. The label Awareness was selected as an overarching theme for a cluster of three themes. These included Equanimity (reflecting on curiosity's protective effect against fear), Clarity (reflecting oncuriosity's contribution to maintain

resilience in ambiguity), and Drive (reflecting on curiosity's contribution to maintaining an adaptive challenge disposition).

Many interviewees shared specific examples of times when they were most tested and when their experiences clearly demonstrated that curiosity played a key role in sustaining or strengthening their resilience. Interviewees consistently argued that harnessing curiosity "in the moment" enabled their resilience by informing more "positive", "adaptive", and "constructive" responses in times of significant demands. Here, a core curiosity function identified was how it framed SAS members' responses to change, strain, stress, ambiguity or significant demand or, as interviewee 4 put it-"your response to stimuli". Arguing-"you only know your resilience in action" SAS interviewees were able to localise the positive impact of curiosity in sustaining or broadening their resilience to what they referred to as "the crucible" or defining moments in their lives and career. Their insights shared in the context of Awareness, highlight three resilience-enabling functions of curiosity: clustered providing Equanimity by offering protective effect against fear, enabling effective performance and growth by sponsoring Clarity in uncertainty and moral ambiguity, and by sponsoring and sustaining Drive through an adaptive challenge disposition.

Figure 5: Overview of curiosity's resilience-enabling functions



Equanimity: Curiosity's Protective Effect against Fear

As a subset to Awareness, the term 'equanimity' was chosen to illustrate how curiosity enables resilience, by aiding SAS members in buffering the effects of fear, treat, significant demands or uncertainty.

Exploring the first cluster of enabling roles under 'Awareness', comments consistently indicated that interviewees' innate sense of curiosity serves a critical role for resilience-that of offering a protective effect against fear. Comments emphasised that the "hunger for knowledge" and "appetite for challenge and discovery" associated with curiosity mean that curiosity has an unquestionably positive effect on resilience in the SAS operational environment. To exemplify, one interviewee argued that curiosity "shelters you from fear long enough to see yourself past the obstacle", whilst many other SAS members shared specific examples of times when

curiosity has served a vital role for their resilience in testing circumstances. Equally, some interviewees shared they have observed how lack of or diminished access to curiosity in the moment of trial translates into an "inability to look beyond perceived obstacles" and ultimately, into "failure to identify solutions that may otherwise be within one's reach". As such, many comments centred on how fear can be debilitating when the capacity to maintain momentum in the search for solutions is vital and directly linked to survival. In describing the role curiosity played in supporting his resilience, for example, SAS interviewee 6 commented:

"I learned that curiosity has the capacity to turn fear and anxiety into purposeful, positive action".

Exploring the possibility that curiosity may have served as a protective barrier against fear and sustained his resilience, interviewee 12 shared:

"Even if you fail, curiosity helps you pick yourself back up again, so you can learn. Curiosity protected me from fear of failure because I was open to growth and learning. Instead of stopping or worse-not, even trying, through curiosity, I found I kept on striving for solutions."

The context in which the above references were shared demonstrated that through curiosity, SAS members were able to maintain awareness of their own perceptions and responses. They reflected on the importance of recognising that a temporary state or a feeling can be observed and re-calibrated to be more congruent with one's aim. In every experience, there are gains to be made through learning.

Furthermore, SAS interviewee 19 recognised that curiosity supported his resilience by conditioning a sense of "being neutral about failure." He also commented:

"I learned that you should not be afraid to fail. If you focus more on what you could gain and on developing a neutral attitude about failure, then you can allow yourself to be more focused on the possibility of success, learning and discovery, when you feel most tested. You nurture your curiosity-in-action."

Interviewee 22 recalled that curiosity had shifted his mind from "I am in trouble here mode" of thinking to an "I could tackle this" mode in one of his most challenging situations. He emphasised that curiosity enables resilience by sheltering us from the negative effects of fear. The aforementioned sense of neutrality about failure and openness to challenges was ultimately seen as a "resilient neutrality"; or, as described by interviewee 6, the view that "challenge just is".

Further, curiosity was seen to reduce anxiety, stimulating more adaptive behaviours instead when navigating challenging terrains. Recounting the events of a critical incident he was involved in, SAS interviewee 8 concluded that in situations of crisis:

"It is often a case of one or the other: you can either choose fear, or you can choose to switch your whole brain on. If you choose to be curious, you end up with many more options to work with!"

Looking into responses further, interviewees stressed that curiosity plays an important role in controlling negative emotions in challenging times. Comments also demonstrated that in this way, curiosity not only preserves ones' baseline resilience but also helps broaden resilience following significant events. Interviewee 35 explained:

"Being comfortable with the unknown and finding workarounds where there may not be obvious solutions is key in the unconventional space, we operate in. Through curiosity, you accept that the unknown 'just is', and there is no sense being fearful or anxious about setbacks or challenges."

SAS interviewee 3 emphasised the importance of creating and nurturing the type of mindset that supports the pursuit of solutions, marking not only a neutral but, rather, an anticipatory attitude towards the unknown. He argued that by harnessing curiosity, he could negate the effects of fear that may have otherwise limited his capacity for exploration of ideas. He commented:

"You quickly learn that when tested, it is a defeatist and often fatal not to try to improve your situation. You have to be prepared that you may fail, but this is the price you pay when you explore complex goals and the unknown. To push yourself to failure so you can learn-sometimes this is a worthy cause. By being curious, finding a way to work through challenges is a whole lot more rewarding."

Building on this, curiosity was seen to support resilience as in the words of interviewee 12, "It allows you to view even the worst-case scenario as a bit of a mind game". Interviewee 6 elaborated on this further by commenting:

"You learn that fear is never a solution to anything. It is just an indication that there is something in there that matters and a signal that you have to get yourself into a focused, thinking, doing mode."

Acknowledging that the initial emergence of fear is often an involuntary response, SAS members accredited curiosity with the capacity to "re-calibrate and broaden perceptions" towards more adaptive responses. In the words of SAS interviewee 13, curiosity supports resilience by "sponsoring a mind shift away from mental blocks". SAS interviewee 29 suggested that his commitment to curiosity supported his resilience, as it conditioned a mindset whereby "the impossible becomes plausible". He argued further that:

"Curiosity tilts things to the balance of success in situations we may otherwise view as unresolvable."

Leading on from the capacity to overcome the fear of failure for the benefit of learning and discovery, interviewee 6 shared that curiosity allows him to maintain a resilience-enabling sense of adventure in his life and, in this way, supports his resilience. He commented:

"Curiosity opens your eyes and makes you want to explore, to learn. Even when I felt I was nearing a breaking point, it helped me recover, to accept that breaking point is just a state of mind and that we never truly reach our full potential. As a mindset, curiosity reminded me that life could be a worthy adventure, should you let it."

Finally, comments indicated that resilient neutrality about fear also appeared to extend to an adaptive attitude towards risk. For example, SAS members comments suggested that curiosity allowed them to accept and build their risk tolerance and, crucially, the ability "to delineate between calculated and haphazard or impetuous risks".

In summary, curiosity was seen to enable resilience by sustaining equanimity and sponsor richer self and situational awareness. By sustaining openness to growth, learning, problem-solving, and exploration, curiosity helped reduce the negative effects of stress, fear and anxiety. This was seen to stimulate what SAS members described as 'resilient neutrality' about setbacks and the ability to engage more fully in the present rather than worry or ruminate. It sponsors the ability to effectively engage ones' capabilities and resources with the possibilities at hand.

Clarity: Dealing with Uncertainty and Moral Ambiguity

The term 'clarity' as an Awareness sub-theme, was selected to reflect how curiosity enables SAS members to maintain focus on their aim and buffer the potential

effects of overwhelm, distraction, or reactions. The references within this theme highlighted that curiosity enables resilience by encouraging constructive perseverance, learning, openness, and interpersonal curiosity, whilst maintaining or evolving the direction of one's goal.

Captured in the comment-"it is exciting precisely because you do not know", the expectation of "gaining skills and confidence to confront anything" was consistently reported as a primary motivation for joining the 1NZSAS. Similarly, many interviewees explained that the idea of operating in the space of uncertainty and committing to a life where one has to navigate ambiguity consistently was seen by them as "endlessly appealing". In the words of interviewee number 11, it was the idea of "never having a dull day" that stimulated the desire to be a part of the Unit and ultimately made ways for his curiosity to support his resilience. When reflecting on curiosity's role in his pursuit SAS service as well as his success in the role, this interviewee further commented:

"The unknown is what excites me. When I was a builder, I dreaded the morning because I knew what that day might entail. I seek out uncertainty-there in is my challenge and my chance for growth."

Interviewee 26 supported this by saying:

"Doing something that seems unattainable; stepping into the unknown with the confidence that you can deal with whatever comes your way. This is the reason why you join."

Innate curiosity was consistently recognised as a shared characteristic amongst SAS members, which supported individuals' ability to work effectively and thrive in ambiguity. This was captured well in the words of interviewee 4, who commented:

"Curiosity turns uncertainty into something exciting rather than unsettling."

Beyond personal preference rewarded by the environment, the ability to thrive in and navigate effectively through uncertainty and ambiguity was seen as a critical expectation of all 1NZSAS members. For example, commenting, "if you are not curious, you stop at the first obstacle", SAS members credited curiosity with the ability to "achieve the mission no matter how scarce your resources". Arguing that the ability to operate effectively in the unknown and to adapt to unfamiliar environments is "non-negotiable" for success in the role, interviewee 7 added:

"You have to be able to thrive in the unknown out here. Innately and through our training we like working in the unknown. This orientation is what allows us to make space to be surprised, to discover and to adapt, whilst maintaining clear mission focus and commitment."

Considering the degrees of ambiguity and unpredictability in their environment, other interviewees equally argued that SAS members could build and sustain "an ever-increasing baseline of readiness" through curiosity. SAS interviewee 18 commented:

"Here, you have to stay on your toes. You cannot slip into a mode of going through the motions, and you have to have the 'right attitude', or your experiences will be short-lived."

Indeed, curiosity was seen by many as the essence of that-"right attitude" needed in the SAS operational context. This was chiefly because SAS members' experiences suggested, curiosity helps maintain engagement with the ever-changing operational context. Many comments demonstrated that this capacity to maintain engagement purposefully sustained and supported resilience at the time of trials and supported the broadening and building of resilience after the event. For example, comments showed that curiosity was seen to play a crucial role in supporting resilience by

helping SAS members "map out and traverse through new paths" and "seek solutions rather than dwell on problems". Reflecting on the dynamic and trialling operational context, another SAS member (interviewee 31) commented:

"To make it on operations, you have to be curious. Curiosity is a driver. You confront so much uncertainty, and you never have enough information, so you have to be curious to work your way through all the unknowns."

SAS members argued that you could not be a good operator without the ability to embrace the unknown: "uncertainty- this is the only certainty in the organisation". One of the more common reflections amongst interviewees was that curiosity supports resilience by "opening the mind to possibilities" when confronted with uncertainty. Further examples of its role in supporting resilience in uncertainty and moral ambiguity included "fuelling perseverance", "supporting adaptability", and "sustaining the appetite to pursue positive outcomes". Some of the most commonly reported reflections suggested that curiosity can stimulate adaptive attitudes towards the unknown and support effective performance in uncertainty. Not surprisingly, interviewees consistently reported that curiosity motivates the pursuit of goals and the commitment to positive outcomes, especially when adaptive and resilient attitude matters the most.

Overwhelmingly, SAS interviewees commented that the challenge of finding adaptive approaches to uncertainty is set out for them from the very conception of their career as an SAS member. This was echoed by the comments of interviewee 33, who described curiosity as "an opportunity we give ourselves to see us through to the goals we pursue". He elaborated:

"Curiosity is a huge factor to success here! You give yourself a window of opportunity when you are curious. Often the only thing you know is that more ambiguity and demands are coming your way if you make it through the obstacle. If you are not curious, you stop just as soon as you see that barrier and hit the wall."

Another SAS member (interviewee 9) argued that to succeed in the 1NZSAS environment, where "ambiguity is rife", you simply have to be curious. He commented:

"The thing is, we probably would know just enough in the situations we operate in. Just enough to get around the corner. And then, if you are curious and equipped with sufficient knowledge, you can tackle the unknowns, realign things and piece together the bits of information you have so that you can get across to the other side."

This was consistent with interviewee 31, who pointed at the exponential growth curve expected in an operator's life and the significant resilience demands of working in an environment rife with ambiguity and high risk. He added:

"A lot of the time, there are elements to the situation that are entirely novel. At least to you. And so, you have to be ready to realign your thoughts, build new sets of drills and routines about how to go along with this new challenge. Curiosity helps you stay engaged in the mission, in your goal, rather than get side-tracked by fear of failure or the threat. It helps you refocus quickly."

Consistently, comments also highlighted that curiosity helps SAS members be purposeful with the exploration of alternative solutions. They also saw curiosity as the backbone to their "vital learning orientation" across every different level of role complexity and from achieving personal goals to achieve operational and strategic levels goals.

Crucially, many interviewees attribute curiosity with their ability to operate in morally ambiguous situations, humanely and ethically. Curiosity sustained their ability to respect and relate to others, benevolently and empathetically, "even if it may be with your adversary". Such capabilities were seen as critical for success in the role, especially in assignments involving working in foreign environments. In reflecting on the role curiosity played in his ability to work effectively with diverse groups, in some of the most trialling operational conditions, for example, SAS interviewee 20 commented:

"To look past a pile of differences takes curiosity. Through curiosity, you can overcome your biases and even ill feelings. The amount of curiosity you can summon informs the way you orient yourself and deal with different people and ultimately shapes your outcome."

Other interviewees supported this, with interviewee 22 commenting that to be effective, SAS operators need to be:

"Like a turnkey operator-ready to adapt to task demands and the social context around you."

In recounting an operational experience, this interviewee signalled curiosity was of critical importance to SAS operators' ability to adapt to their context and chiefly, to "really understand those around them". He stressed this was particularly important when "fear and ambiguity can drive polarising views", referring to negative biases and assumptions about others. Interviewee 29 explained this further by adding that success and survival in the SAS:

"Is not only a matter of looking out for and being respectful of differences but also, really asking yourself why those differences exist. It demands that you study the undercurrents that shape the space you are in, mindfully and with respect."

This interviewee was referring specifically to the role of cultural and interpersonal curiosity, and how these supported his resilience during a particularly tense incident he was involved in. He argued that curiosity guided him in finding a "genuine and common ground" and aided him in de-escalating a potentially lethal situation. Reflecting on some of the most challenging operational experiences he has had, interviewee 29 also added:

"You have a slim chance doing this role well without curiosity towards others".

In summary, by sustaining clarity, curiosity transformed uncertainty into an opportunity to explore. SAS members found that curiosity enabled resilience by fuelling perseverance, adaptability and engagement. These factors enabled resilience not just through intellectual but also through interpersonal curiosity. In these ways, curiosity also sponsored the ability to maintain clarity in ambiguity and change by enhancing self and situational awareness.

Drive: Adaptive Challenge Disposition

The label 'drive' as a sub-theme of Awareness, was selected to reflect curiosity's contributions ranging from goal setting, optimism, and growth mindset. Put simply, Awareness was found to sustain resilience by directly supporting drive in the direction of one's goal.

The word curiosity was frequently accompanied by the word 'challenge' and its derivatives. Hence, interviewees consistently referred to "adaptive challenge disposition" as key to sustaining and broadening their resilience in the SAS context. Comments evidenced that the desire to be challenged was, for many, an innate

characteristic. Indeed the "pursuit of a life filled with adventures and excitement" were factors consistently described amongst the group as reasons to pursue a career with the SAS. This was captured well in the words of interviewee 23, who noted:

"When I think of it, I had no clear idea what the role was really going to entail, other than expecting an endless string of challenges. I knew enough to want to work my hardest to be here and find out the detail. Just so that I know that after I accomplish each challenge, there will be no delay before I can ask myself, 'OK, what is next?' and know that it will be just as good as the last challenge."

Appreciating its role in sustaining and broadening resilience, comments also highlighted that the SAS context conditions and strengthens openness to challenges through curiosity deliberately. Describing the 1NZSAS context as one where "you will be left on the sideline if you are unwilling to challenge or to be challenged", SAS members invariably attributed this disposition towards the challenge and, ultimately, their resilience to curiosity. Many agreed that their survival and successes in the SAS training and operational environments were ultimately about "learning to enjoy and seek, rather than avoid challenges". Further, comments listed factors such as "the ability to view challenges as surmountable", "accept change and ambiguity as norms", and "to actively manifest growth mindset" as critical success predictors in the SAS role. Comments consistently highlighted that the SAS role and training necessitate and engender an enduring and ubiquitous disposition towards challenges as valuable windows for self-development. Interviewee 17 argued that this supports resilience as it, in turn, "develops an ever-greater hunger and readiness to be tested". He added:

"Your only certainty here is that there are going more challenges if you stick around. To make it here, with every new exposure, you

need to let yourself develop an even bigger appetite for challenges."

This readiness and appetite for cumulative growth through challenges was seen as essential for survival and success for individuals and the team in the SAS environment. SAS members highlighted the importance of this sense of readiness by illustrating the highly ambiguous and ever-changing SAS operational context. In the words of interviewee 13, in this context of ever-evolving challenges, the link between curiosity and resilience is clear in the awareness that:

"You fail the minute you stop seeking to be challenged and be better."

Describing this as an "adaptive challenge disposition", interviewee 20 explained that this resilient outlook is intimately intertwined with and rooted in curiosity. He commented:

"If you do not step outside your comfort zone, you will never know what you could do or experience. The question "what would it be like if...?" is a question that we always have on the back of our minds when we approach challenges, and this is fundamentally a question of curiosity."

Curiosity was consistently accredited with sponsoring the capacity to engage with challenges in a way that ultimately spells success. Examples of how curiosity sponsored greater resilience in this context stretched from choosing to persevere through overwhelming physical pain and exhaustion through to the capacity to envision and work through an 'out of the box solution in combat scenarios. Reflecting on this function of curiosity, interviewee 13 commented:

"Unless you are curious, finding a way to work through some of the challenges that get handed to you will be a drag."

Finally, curiosity was also described as a vehicle for goal setting and attainment in uncertain times. Curiosity was a key enabler that sustains optimism, perseverance, and the capacity to effectively strategise through complex challenges. Arguing, "true challenges and trials are seldom predictable or about the known", interviewee 20 also commented:

"You cannot envision your desired state or map your path forward in the absence of curiosity."

In summary, curiosity sponsored commitment and drive towards ones' purpose and vision. The adaptive challenge disposition stimulated by curiosity ensured awareness of what is possible and how one may go about adapting and evolving their approach towards their goal. By building tolerance for risk and appetite for cumulative growth, curiosity support for resilience through drive was also associated with optimism.

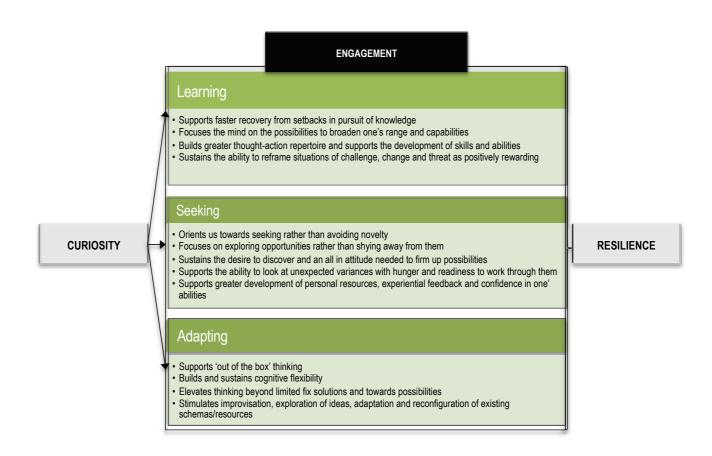
Engagement

Overall, the theme Engagement entailed references to curiosity's ability to sustain and enhance cognitive capacity and learning orientation, whereby sponsoring an enduring and constructive engagement with one's predicament. This second theme in this chapter unpacked how curiosity supports resilience under the emergent subthemes of Learning (commonly referred to by SAS members as 'the hunger for knowledge'), Seeking (the 'Mentality of the Explorer') and Adapting (adaptive problem solving).

Curiosity was seen to support resilience by sponsoring, sustaining and broadening learning orientation, cognitive capacity and problem-solving repertoire. The overall themes from SAS interviewees' reflections signalled that in this way, curiosity engenders a growth mindset disposition, which SAS members considered essential

for tackling complex challenges and for overcoming setbacks. SAS members' comments also demonstrated that this function of curiosity stimulates greater "mental flexibility", broader "thought-action repertoire", "strengthened self-efficacy and creativity", and ultimately- "supported faster recovery". Interviewee 27 highlighted that the key to these resilience-enabling functions was curiosity's contribution to "reframing seemingly overwhelming situations as positively rewarding" for the benefit of learning and self-improvement.

Figure 6: Curiosity in cognitive capacity and learning orientation



Interviewees' comments under this cluster of resilience-enabling functions combined three related but distinct themes of curiosity-sponsored mindsets. SAS members labelled these-Learning described as the "Hunger for Knowledge", Seeking or as SAS

interviewees described it "Mentality of the Explorer" and Adapting (or "Creative Problem Solving").

Learning: The Hunger for Knowledge

The label 'learning' was selected for this subtheme, for comments reflecting on one of curiosity's key contribution- the desire for knowledge and growth. At its core and as a resilience enabler, the learning sub-theme further captured curiosity's contribution to resilience through seeking novelty, hunger for exploration, and enlarged capabilities and cognitive context, amongst others.

From the motivation to pursue a career in an environment they knew little about ("just wanted to know what lies behind the wire"), to continuous improvement ("to be better always") and to the desire to know oneself by "testing the mettle", curiosity and specifically-"the hunger for knowledge", were consistently referred to as a key contributor to resilience. In the SAS role, the hunger for knowledge and the outcomes this mindset stimulated trough curiosity were seen to serve an essential role in survival and recovery. SAS interviewee 24 explained:

"In our space, you are not served much on a plate. You often get given enough to know that a challenge has been put to you... maybe you get given steps 1, 5 and then step 21 as the end state... and you have to work out all the other steps along the way. You have to explore and be prepared to answer and ask questions to fill the gaps. You cannot go far without the hunger for knowledge. You will not make it. You will be left on the side-lines if you are unwilling to develop, to be challenged and also to challenge constantly."

As a part of curiosity, the hunger for knowledge was found to support two key outcomes-resilient neutrality and even "positive anticipation in trialling situations", as

well as the development of an "exponentially greater skills and knowledge base" and "thought-action" repertoire. Notably, SAS members were quick to share their appreciation for knowledge gained through defining past experiences, irrespective of whether these were situations of perceived failure or success. For example, interviewee 28 outlined the importance of the 'hunger for knowledge' by commenting:

"To be resilient in our context, you can never stop learning. No matter how planned, your situation can change in a heartbeat. To feel capable and engaged, you need to be willing to scoop up every new insight and learning that comes your way. Your only certainty here is that there are going to be more challenges if you stick around. We know a resilient person when we see cumulative hunger for knowledge with every new learning gained."

Referring to the hunger for knowledge as an "essential state of restlessness" in the operational context, many SAS member attributed curiosity's contribution to resilience to its ability to reframe situations of challenge, change and threat as "rewarding". As explored in the previous section of this chapter, curiosity was seen to underpin adaptability, flexibility and the ability to maintain openness about change. These resilient outcomes were also attributed to the hunger for knowledge, as they were seen to build broader "scope of confidence and capabilities" for dealing with the unknown. Describing it as a "default mode" amongst his colleagues, interviewee 24 also added that the hunger for knowledge is found to build greater resilience by:

"Minimising the effects of fear and encouraging faster recovery from setbacks, because you aim to learn and gain knowledge from each exposure." Again, interviewees' comments also demonstrated that the hunger for knowledge is deliberately conditioned in training throughout the career life cycle of 1NZSAS members. In the words of interviewee 4:

"In the SAS operational context, you cannot move forward without curiosity and the knowledge that equips you to pick the right direction."

SAS members also pointed out that in difference to conventional military units, where standard drills are the norm to adhere to, the SAS operational context necessitates "unrelenting building and evolving" skills, knowledge and abilities baselines. Interviewee 26 explained:

"You need the basic drills, but fundamentally, you have to be flexible, adaptable, ready to break drills apart, to reconfigure and to build them up again. Learning continuously so you can find alternative solutions faster is key to resilience, and you cannot do these without being curious."

In summary, curiosity enabled resilience by challenging us to seek rather than avoid novelty and by stimulating positive, reward anticipation from learning, no matter the situation. This fundamental learning orientation in curiosity supported resilience through engagement in the moment and cumulatively over time. Indeed, through learning, curiosity was seen to enable resilience in the longer term through increased confidence, richer and broader baseline of skills, knowledge and abilities.

Seeking: The Mentality of an Explorer

Building on the above, 'seeking' was a label selected to reflect curiosity's capacity to sponsor a fundamentally different disposition to challenge, adversity and overall- to life. This sub-theme included comments highlighting that by sponsoring a 'seeking'

rather than avoiding' challenge disposition, curiosity supports greater thought-action repertoire, helps reframe challenges and supports faster recovery, amongst others. The 'seeking' sub-theme reflected a series of comments under the umbrella of what SAS members called- 'the mentality of an explorer'.

The mentality of the explorer-another key resilience enabler SAS members associated with curiosity was related but distinct from the hunger for knowledge. Whereas seeking new knowledge implied learning through others' experiences, SAS members referred to the mentality of the explorer as the appetite to "go beyond where others have been". Indeed, starting with the desire to be a part of the Unit and see "what lies behind those fences", all SAS interviewees ascribed to an innate desire to be in the unknown and to grow through the opportunities it may offer. Comments explained that the mentality of the explorer formed and sustained this innate desire to uncover new terrains, experiences and opportunities, and SAS members considered curiosity as a driver for testing oneself past "perceived personal boundaries". Interviewee number 7 explained:

"Maybe initially, curiosity drives a naïve want for exploration, but this then evolves into a deliberate drive to discover. I find the more you discover, the more you want to know and see. Wanting to see and live through what is next, that is the curiosity that sustains you."

He also added:

"Curiosity means that you are always on the lookout for the next goal, for the next hill to climb. It is the pleasure of discovering what is next."

Another SAS member, interviewee 32, explained that curiosity creates a unique orientation towards life and self through the mentality of the explorer. He explained that this mindset is about:

"Seeking challenges rather than avoiding them, exploring opportunities rather than shying away from them."

Amongst other comments, SAS interviewees shared that curiosity has enabled for them "the 'all in' attitude needed to firm up possibilities", "openness to everything the situation has to offer" and the "zeal for concurring new summits, even if these may be ones' own fears". Viewed as vital for effective engagement, harnessing curiosity was found to free up personal resources that may not be accessible "if minds were set on expecting the familiar or the predictable". In the context of exploration, curiosity enabled resilience by stimulating an appetite and the ability to explore alternatives. Interviewee 11 explained:

"To explore alternatives, you must be curious. When you are ready and facing the door, you are about to charge through, curiosity is what allows you to be prepared for the reality you are about to confront, leaving room for unexpected variances, and to look at those variances with hunger and readiness to work through them."

Comments also outlined that through the mentality of the explorer, curiosity was seen to lead to "better outcomes in novel scenarios", "transference of existing skills to new scenarios", and a "greater range of experiential feedback" in the long term. These, in turn, were seen to support greater confidence and "meaningful opportunity seeking", whereby "the more you discover, the more you want to know and see."

In summary, curiosity enabled resilience by stimulating an exploratory mindset.

Through deliberate seeking to discover, curiosity stimulated openness, ability to

consider and construct alternatives. In this way, the 'seeking' curiosity mindset stimulated greater experiential feedback and efficacy again, stimulating in turn greater engagement with the opportunities at hand.

Adapting: Creative Problem Solving

'Adapting' was the label chosen for the third and final sub-theme under Engagement.

It reflected on how curiosity supports resilience, by sponsoring 'out of the box' thinking, by sustaining cognitive flexibility, and by stimulating improvisation.

The capacity to employ creative problem solving was consistently seen as essential for SAS members' resilience and fundamentally reliant on curiosity. Explaining that in the SAS, success is "seldom met by following a linear way of thinking", SAS interviewees consistently highlighted that the ability to employ creative thought or "think outside the box" is often a matter of survival in their environment. Similarly, interviewees consistently commented that "commitment to finding workarounds" is a deeply bedded and essential part of the SAS culture as well as an expectation of all SAS members. Further, in unpacking responses, it was also evident that SAS members viewed creative problem solving and the ability to find 'workarounds' as reflective of characteristics such as "conscientiousness", "mental agility", as well as "determination".

In this context, SAS members commented that curiosity builds and sustains vital cognitive flexibility. In the words of two SAS member, "instead of viewing challenges as closed off loops of finite options and limited fix solutions, curiosity was seen to "elevate thinking", "help explore ideas and reconfigure existing resources", and "dream up a multitude of possibilities".

SAS members recounted examples where lack of creative problem solving might have had dire consequences, elevating it as a critical attribute in environments where the threat is high, and the resources are limited. Comments provided examples of times when, by fuelling creative problem solving, curiosity became key to survival.

In the words of interviewee 12, the impact of curiosity on resilience was seen in enabling SAS members to shape opportunities that "may not have been accessible to a closed-off mind". For example, in the words of interviewee 16:

"Curiosity took the black and white out of the situation and freed up space to wargame, to adapt and evolve with the enemy. Curiosity invited us to take a second look, to find the workaround in a seemingly unresolvable situation."

Echoing this, many interviewees' comments demonstrated that curiosity sponsors readiness to look for "better ways ahead", be it in planning and executing operations, engaging with the challenge at hand or in looking to improve the lot of those who follow in their footsteps. Interviewee 35 explained:

"Curiosity comes with readiness to look for yet another solution, a different way of doing things. It is about maintaining a flexible mind so that you can go over, around and past an obstacle and towards your goal."

Comparing the readiness to problem-solve creatively to the Number 8 wire approach, SAS members commented, "success in the SAS often hinges on your capacity for ingenuity", the ability to "dream up the missing bits" and the "commitment to the idea that there is always a better way of doing things". Highlighted in comments was the need to continuously evolve one's thinking and maintain readiness to adapt to everchanging demands in the SAS operational context. Comments consistently indicated that in this context, curiosity stimulates improvisation, adaptation and 'make-do'

attitudes-essential for sustaining resilience, particularly when resources are scarce, and change is omnipresent. Here, interviewee 16 commented:

"When you attune your curiosity to support creative problem solving, you focus the mind on looking for solutions, in ways that cannot be accessed with straight-line thinking."

In summary, curiosity was found to stimulate vital cognitive flexibility and seen as an essential component of creative problem-solving. As a resilience enabler, Adapting was found to support mental agility, elevated and exploratory thinking and the capacity to re-composition existing resources to meet the demands of novel situations.

Persistence

The final broad theme- Persistence, focused on curiosity's contribution to sustaining SAS members' determination towards their personal goals and towards helping them maintain a stable sense of identity in conditions of significant demands, threat or ongoing strain.

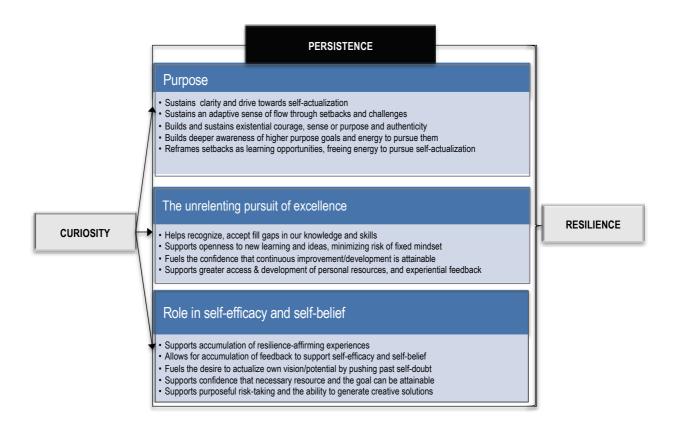
Many SAS members positioned curiosity beyond a way to an outcome and rather, as an outcome in itself. For example, interviewee 14 saw curiosity not only as a state of mind but also as:

"A way of being that reframes how you view life and your role in it."

Arguing that in the absence of curiosity, "you give-in along the way" or "stop seeking", interviewees attributed their "existential courage to pursue self-actualisation goals" to their curiosity. Comments from interviews, specifically centring on how SAS members manage to sustain their commitment to complex goals, consistently echoed

this sentiment. SAS members overwhelmingly credited curiosity with the "confidence in the attainability of one's goals". This function was labelled here "Persistence".

Figure 7: Curiosity in Endurance of personal goals & identity



Responses around the role curiosity serves in supporting resilience, which clustered under the umbrella of Persistence, were underpinned by the importance of Endurance of Identity & Personal Goals. Here, SAS interviewees' responses centred around three sub-themes. These were labelled Purpose, the Unrelenting Growth Mindset and Belief.

Purpose: Curiosity and Existentialism

The label 'purpose' captured SAS members' experiences of curiosity's contributions from an existential perspective. They saw curiosity as a vehicle for self-actualisation, existential courage and toward achieving higher purpose goals, amongst others.

SAS members described curiosity as "an existential challenge" of life as well as "an opportunity in life" to be nurtured. The view of curiosity as a life-defining disposition, rather than a mere enabler in times of significant demands, was consistent. This was captured well in the words of SAS interviewee 1, who commented:

"You cannot seek a higher purpose without being curious. Life gives you a licence and an obligation to go out there and to push yourself. Curiosity is your opportunity. You get handed this opportunity, and you choose each day if you are to nurture it."

In this context, interviewees argued that curiosity "offers resilience-affirming pathways" for responding to the challenge of life. Interviewee 14 added:

"Curiosity is asking questions with a purpose. If there is to be a challenge in life, it is through curiosity that you deliver your best response."

Importantly, SAS members argued that they are more capable of deliberately shaping life around their own self-actualisation goals through curiosity. Many interviewees shared that they view curiosity as a key determinant in achieving "higher purpose goals" and "one's own best". Conversely, SAS interviewee 6 commented:

"Without curiosity, rather than deliberately shaping your circumstances, you just respond."

Comments offered further context for viewing curiosity as a self-actualisation vehicle and one of existential importance. Interviewee 11 argued, for example:

"The aim is to do new things, to be challenged, to discover. Nothing is more frightening than the thought that I could have done more, achieved more, failed to spot and accomplish more goals. Life is too short not to want to learn more. So yes, fear goes by the wayside when you think you have a finite time to develop and achieve. I am

only focused when I am challenged. So it is the learning and challenging bit, I guess; appetite for growth through curiosity overrides any other concerns or fear."

This was echoed by other SAS members, with interviewee 35 commenting:

"Curiosity drives you to find your next challenge and the best way to work with it. Challenges give meaning to your day. If you do not have a challenge, you are not really fulfilling your potential. It is incredibly rewarding to see yourself succeeding in your goal. Being challenged makes me feel like my life has a purpose, a meaning."

Interviewee 31 added:

"Fear of stagnation and a life deprived of challenges is a fear I allow. This is my worst fear! I want to be on the spinning edge of life continuously, and curiosity aids me and my resilience in this."

Looking into the idea of self-actualisation and the pursuit of complex goals, interviewee 24 remarked:

"Curiosity keeps you focused on your challenge by allowing you to view it as an opportunity; it sustains your desire to continue and to persevere with complex goals."

Others suggested that curiosity can "feed your stubbornness and your perseverance" when pursuing life goals. Interviewee 12 reflected on the possibility that curiosity supported his perseverance by saying:

"When things did not work out at first, it motivated me to keep going until I found a solution and until I exhausted all options."

Linking it to the drive for self-development, his colleague- interviewee 1, commented:

"Without curiosity and drive, nothing changes, nothing evolves."

Crucially, the view of curiosity as an aim in itself, a gift to be nurtured and an existential call to respond to, was found to support a more stable and positive view of oneself in trialling conditions and more effective responses to the environment. In reframing setbacks as learning opportunities and sustaining vital energy for exploration of ideas, interviewees also reported that curiosity builds and sustains "existential courage" and the "freedom to be more authentic and purposeful in the way you lead your life". They argued that one of the key resilience-enabling functions of curiosity is in that "it stops you from stopping" in the pursuit of self-actualisation. Interviewee 33 shared:

"I do not want to leave unanswered questions in my mind. Curiosity sustained my perseverance and helped me push to realise my own potential."

Conversely, interviewees shared examples of how the absence of curiosity can lead to "unhealthy fixation" on temporary or surmountable problems, "lack of clarity and perseverance" and more vulnerable sense of identity. Examples included times when the absence of curiosity had "allowed a single setback to erode their goal", "ceased to seek new ways to achieving their vision" or "allowed negative feedback to shape their view of themselves, rather than grow from it".

In summary, SAS members described curiosity as a life-defining disposition and a vehicle for self-actualisation. They saw curiosity as a resilience enabler because it helped SAS members deliberately shape how they oriented towards their purpose and motivated the essential capacity for persistence. Curiosity aided SAS members in elevating their goals in a way that made them less susceptible to setbacks and challenges and ultimately sponsored a more stable and positive view of oneself.

Growth Mindset: The Unrelenting Pursuit of Excellence

'Growth mindset' was the second sub-theme under Persistence. It included reflections on curiosity's contributions through openness to self-improvement, and ultimately through richer experiential feedback.

The SAS tenet "The Unrelenting Pursuit of Excellence" was used by all interviewees in defining some of the ways in which curiosity plays a part in their ability to recover and bounce forward following setbacks or during demanding times. For example, as a part of the reference to this SAS tenet, the prevailing comments around "hunger for knowledge" and "pursuit of self-development" seen to drive and sustain SAS members resilience, were also accompanied by a distinct realisation that "to be adaptable and to grow, you have to be humble". When referring to the Unrelenting Pursuit of Excellence tenet, SAS members were quick to indicate that curiosity serves to achieve both of these resilience-enabling functions: "fuels appetite for growth" and "ensures humility, by helping you realise you will never know enough".

One SAS member, interviewee 28, explained the important role curiosity plays in the pursuit of excellence by commenting:

"Pride alone is ugly. If you hold onto pride for things past for too long, you stop yourself from doing new things and being better. You must re-evaluate life continuously. Where I am today may be OK, but if I do life well, I am likely to outgrow it tomorrow."

The latter recognised the importance of life-long learning and "constantly seeking to do a little better" to remain resilient in the SAS context. In their comments, SAS member also advised that "to do well in ambiguity, you have to evolve" and demonstrated through examples how curiosity helps us recognise gaps in our knowledge and abilities whilst making ways for these gaps to be filled. Interviewee

28 shared that curiosity helps us recognise there are always gaps in one's knowledge to be filled:

"If you need certainty and closure, then you will quickly fall apart out here. To do well in our space, you have to be the one who realises he never knows enough. You must always strive to be better and evolve, always."

NZSAS members were quick to identify that growth typically occurs in the space of complex challenges. In the words of interviewee number 1:

"Your best test for resilience and your growth is in the conquering of the subjective unknown".

Recognising the primary motivation for their life choices in "the want to be the best I can be", 1NZSAS members argued that one could not achieve their best without curiosity. This was reflected in the words of interviewee 7, who commented:

"I do not think I am unique in finding the unknown so appealing. I actually think that this is a part of every human's nature if we let it: to find out what you can do, to show yourself you can do anything."

Interviewee 11 supported this by commenting:

"Pushing a little past your limit each day and each chance you get is about curiosity. It helps you find ways to do anything you set your mind to."

As noted, comments also outlined that curiosity supports growth mindset disposition. SAS members explained that growth mindset combats the desire to prove (rather than improve) oneself, minimises defensiveness, negative competition and fixed solution modes. It elevated instead the importance of life-long learning and the awareness that individuals and the team can "always go a little further". Emphasising

that ultimately, it is not about success or failure but about "giving it your all, every

chance you get", the pursuit of excellence was described as intimately intertwined

with resilience and "neutrality about challenges and setbacks". Interviewee 12

supported this by sharing his belief that:

"Where there is a want or a need, things are either achievable or not

achievable right now".

Many commented that in the SAS, curiosity's support for resilience provided answers

to the vital questions of "Why not now?" and "How do I get there sooner or better?"

These and similar questions demonstrated a unique, curiosity-sponsored response

to setbacks, whereby encouraging perseverance and the accumulation of 'lessons

learned' in the pursuit of "always being better than yourself yesterday".

In summary, curiosity enabled resilience by sponsoring a growth mindset. Growth

mindset stimulated and sustained persistence, whereby SAS members were oriented

towards improving, learning and evolving in every situation. In this way, curiosity

helped framed setbacks or challenges as opportunities to learn or improve rather

than overwhelm or deplete sources.

Belief: 'Who Dares Wins'

'Belief' was the label selected for the third and final sub-theme under Persistence.

Whilst the nuances in this sub-theme were many, they could be seen to exemplify the

role of curiosity in supporting self-efficacy.

The resilience enabling effects of curiosity were also described through references to

the defining SAS motto-Who Dares Wins. The motto entails the "can do" and "never

give in" attitudes and in the words of SAS interviewee 13:

142

"The encouragement to take steps on the road less travelled, mindfully and with confidence".

As noted, SAS interviewees commented that they found the Who Dares Wins mindset helped them reframe situations of risk and threat as situations that promise rewards. Here, interviewee 12 described the function of curiosity as one of "vital sustenance on a trialling journey", and interviewee 1 defined it as "an absolute 'must' in mapping out the road less travelled".

Comments further identified how the need to be humble did not exclude the need for holding the utmost belief in one's own abilities and the probability of success. On the contrary, comments indicated that the essence of the pursuit of excellence was inevitably reliant on "innate self-belief" and "faith in the achievability of difficult goals". Looking back on his experiences of the SAS selection, interviewee 11 commented:

"Each day (on selection), I was seeing people dwindling, but I felt myself getting stronger and stronger and being even more determined. I knew that step-by-step, you get there in the end. You take your reference from others but sometimes, only as of the goal post you will go past. Curiosity and wanting to see how far you can go made me overcome my self-doubt and helped me surpass my expectations by tempting me to challenge myself to see how much further I could get."

Looking more broadly at the challenges of his SAS career and his life more generally, interviewee 7 commented:

"You absolutely must have faith and self-belief! You must maintain your commitment that there is always something you can do about your situation. There is a way out or through! Constantly attacking the problem- that is what is fed by curiosity."

In asking the question-What am I made of?' curiosity was found to support resilience by feeding "the courage to carry on" and the desire to "test the mettle". Interviewee 1 also echoed this by sharing an example, demonstrating that curiosity was the fuel for the Who Dares Wins mindset, as it charged his commitment to the idea that:

"Until the very last moment, there is something you can do about your situation".

Under this umbrella, another interviewee contributed "the readiness to push past perceived personal boundaries and resources" to curiosity. This SAS interviewee 13 explained that curiosity supported his resilience by "re-engaging the mind in different ways of wargaming" to overcome the challenges ahead. He highlighted this by explaining what the curiosity sponsored, Who Dares Wins mindset means for him:

"If I do not know the way, I will learn it. If it is not there, I will create it."

Similarly, looking into the functions of curiosity in supporting resilience through this principle, interviewee 24 commented:

"Who Dares Wins is about being a little sneaky...About being crafty, creative, thinking beyond the boundaries you thought were there."

The Who Dares Wins reference principle was seen to entail the view that "if you do not dare, you do not succeed", and this, in turn, was seen as dependent on curiosity. Additional comments outlined that curiosity encourages SAS members "to demand from themselves to be outside the box, to re-imagine and then overcome the boundaries they may initially perceive". Similarly, under the 'Who Dares Wins' umbrella, curiosity was seen to support resilience through "purposeful risk-taking".

Crucially, examples shared in the interviews demonstrated that in espousing 'Who Dares Wins', curiosity sponsored the accumulation of resilience-affirming experiences. It incrementally increased SAS members' self-belief, grounded and broadened their self-efficacy, and allows them to overcome doubts and surpass their own expectations. Ultimately, comments also highlighted that curiosity, maintained confidence that "my goals are attainable" and sustain "perseverance towards the vision and potential we hold as individuals". In the words of interviewee 35:

"'Who Dares Wins' is about not being bound by what others see as difficult or impossible, by what others say or the boundaries they set for you or see for themselves!"

Importantly, interviewees highlighted the risk associated with their environment, with what was seen as 'aimless' curiosity. For example, though interviewees referred to curiosity as a key resilience enabler throughout, they also warned against "unbridled curiosity"; one that was seen as "pointless", "destructive", or "ill-informed" and stressed the importance of eliminating associated risk-laden tendencies in their context. Whilst there was a tangible awareness of the need to nurture curiosity, interviewees argued that discerning "when to be more cautious than curious" is key. They suggested that curiosity is "a skill to be conditioned". They contrasted curiosity that enables us against curiosity that may be aimless or even harmful. Comments by interviewee 13 cautioned:

"In order to discover and grow, you have to be hungry for the unknown, but you also have to know contentment and acceptance and have a solid foundation and patience."

Interviewee number 9 explained:

"Curiosity is about being hungry to build on what you know to be true, equipped with an open mind about where it could lead you to, and not about uninformed, wishful thinking or about blindly diving into the unknown."

Other comments highlighted that "productive curiosity" rests on the balance between "the relentless hunger for knowledge and the acceptance of fact"; "the awareness of what to question and what to accept." Comments in this context highlighted that functional curiosity in the SAS context is about "deliberate, constructive, quantifiable approach to novelty", "focused seeking and absorbing of relevant information", and "looking to add to what matters, as opposed to lack of planning or taking on ill-considered shortcuts". Comments also echoed the importance of nurturing 'disciplined' curiosity that informs explorations; that is "framed by purposeful questions and directed towards positive outcomes".

In summary, curiosity was found to stimulate self-belief and faith and broaden self-efficacy. SAS members saw curiosity as the backbone to their defining "Who dares Wins" motto, which sponsored commitment to 'never giving in'. Through curiosity, SAS members were better able to re-imagine and overcome challenges and take on purposeful risk-taking. In this way, curiosity enabled resilience through the accumulation of resilience-affirming experiences.

Curiosity and Resiliency: By Virtue of Design

Before concluding this chapter, it is important to reflect on and contextualise the study of resilience and curiosity in the context of the 1NZSAS tenets (Chapter 4). As noted, references to the SAS tenets were implicit and actively referred to in the lives

and work of Unit members. All interviewees made references to these tenets consistently and across the varied sections of their interviews.

For example, the tenet, 'Unrelenting Pursuit of Excellence', was referred to in the context of "the drive for knowledge and improvement which is likened to a pilgrimage", the ability "to imagine the unconventional" and "the desire to go always a little further". These align with resilience factors such as the capacity to broaden and build, exploratory behaviour and the seeking of opportunities, and interviewees referred to them as innately reliant on persistence and conscientiousness. In anticipation of "the possibility of things to come", these elements of the tenet are linked to the growth orientation, openness to uncertainty, novelty and complexity, and the tolerance for ambiguity, all of which are components of curiosity and resilience. The tenet also refers to the commitment to "look for potential, and not their position or their pedigree", to engendering and supporting a "free-spirited team" when referring to its members. As such, the Unrelenting Pursuit of Excellence tenet elevates the critical importance of humility-a factor that appear congruent with the resilience component of 'relatedness and valuing diverse others'. This element may also be seen as innately reliant on capacity for interpersonal curiosity.

Building on this, under the tenet 'Humour and Humility', humility is seen as a critical enabler that supports openness to new ideas, offers the opportunity to gain "confidence through knowledge", enlightenment, understanding, as well as "perceptive and unconventional mindset". Together with "the powerful possibilities that come from being able to see yourself and life from a different perspective", this tenet appears to also be intimately linked to the essence of interpersonal curiosity and with many of the positive effect associated with resilience, amongst others.

The tenet of Ririte or 'Brook no sense of class' appears to build on what is innate to the ability to develop and maintain a sense of openness and respect for different others-factors deemed as outcomes and as sponsors of curiosity and resilience. "Grounded on equality and teamwork" key to the tenet was the recognition of all team members, however different they may be, as members of one "team and a family", where "neither has ascendancy over the other".

The role of resiliency is explicitly referred to under the tenet the 'Highest Standard of Discipline', which is represented with a taiaha for "strength, fortitude, resiliency and direction". Further elements of 'persistence and conscientiousness', this tenet also aims to support "agility and freedom to innovate" that appear to build on adaptability and flexibility. These references to the tenants are relevant to each of the data chapters.

Summary

Curiosity was seen as a vital enabler for resilience in the SAS context. Curiosity was an essential characteristic that needs to be nurtured and developed for SAS members to thrive in ambiguity and uncertainty. Indeed, its importance for resilience was such that SAS members described curiosity as an 'aim in itself', an existentially important vehicle for self-actualisation as well as the most important tool for tackling the challenge in the moment. Curiosity's roles as resilience enable clustered into three core themes: Awareness, Engagement and Persistence. These depicted a rich picture of 'what goes right' when curiosity is employed as a resilience enabler.

For instance, 'what goes right' under the umbrella of Awareness was that through curiosity, SAS members were better positioned to respond effectively to the shifts in their context and intentionally select, construct and sustain meaningful and positive responses. Curiosity enabled resilience by sponsoring the ability to maintain an even keel longer and explore rather than react to the (perceived or actual) threat and ambiguity (Equanimity). It sustained clarity around the possibilities in every situation (Clarity) and fuelled the adaptive challenge disposition required to sustain drive (Drive).

Equally, important insights in seeking to find 'what goes right' for resilience when curiosity is at play emerged under the umbrella of Engagement. These signalled that curiosity sustains cognitive capacity and learning orientation in situations where we may otherwise find ourselves depleted or overwhelmed. It sponsors a fundamental learning orientation whereby driving one to seek rather than avoid novelty and challenges, and stimulates positive, reward anticipation from learning (Learning). This supported resilience through engagement in the moment and increased confidence, skills, knowledge, and abilities in the longer term. Curiosity also enabled resilience by sustaining engagement in stimulating openness, the ability to consider and construct alternatives, and the development of greater experiential feedback (Seeking). Through curiosity, SAS members were further able to sustain greater cognitive flexibility, capacity for creative problem solving, mental agility, and exploratory thinking, amongst others (Adapting).

The final cluster of themes showed that curiosity enables resilience by fuelling and sustaining Persistence. Under this umbrella, 'what goes right' signalled that through curiosity, SAS members are better prepared to construct and sustain enduring goals and to persevere constructively towards these, despite or even because of setbacks and challenges. Further, through curiosity, SAS members could shape enduring and meaningful goals that are less susceptible to setbacks and challenges and were more

deliberate in how they orient towards their purpose (Purpose). Curiosity was also seen as essential for resilience as it helped frame challenges as opportunities to grow and supported appetite for improvement, learning and evolving (Growth Mindset). Through curiosity, SAS members also benefited from greater self-belief and faith and broader self-efficacy (Belief).

Ultimately each of these functions was seen to support richer and broader resilience baselines by accumulating resilience-affirming experiences, including enriched emotional, cognitive, behavioural and interpersonal range, amongst others. The positive effect of curiosity as an enabler sponsored resilience in the moment and in the longer term by strengthening, amongst others, individual self-efficacy.

CHAPTER SIX: 'WHO DARES WINS' AND THE SAS RESILIENCE HEURISTICS

The past three weeks have been unrelenting. The insurgents have begun to focus their aggression on local NGOs. NGO workers are 'soft targets' for the insurgents; easy to get to. NGOs are also a vital and often the only lifeline for the local population. The team is deployed as news of an attack on the NGO's accommodation area break out. There were no warnings for this attack either- just reports of insurgents loaded with explosives, breaking into the compound's dining area at breakfast. As the team makes their way through the ground floor, the sight and sounds of merciless destruction engulf all senses. The team knows that they are outnumbered by insurgents. They also know that waiting for backup will be futile. Many NGO workers remain trapped in fear throughout the building. This is no time for briefings but for instincts, for conviction and for trust. Each of the team know the actions to take- apart and as one. Every step they take now is peppered with acute risks. But they can pre-empt each other's movements, thoughts and decisions. As they extract the living back to safety, the team moves apart but in synchronicity. This is now as innate as the trust they feel in one another. Words can wait till later.

Overview

This chapter examines the second theoretical construct of the research, "Resilience Heuristics". It explores reflections around the core principles that support SAS members' resilience and the principles that sustain them in effectively navigating challenges and setbacks. Interviewees' responses were clustered into four themes, highlighting a dominant heuristic, SAS members found to have supported or enhanced their resilience. These clusters were labelled: Mindful Attention (capturing the phrase "Mind Where Your Mind Goes"), Pursuit of Excellence (reflecting the SAS tenet The Unrelenting Pursuit of Excellence), Belonging & Control (capturing the phrase "Belong and Make Better") and Clarity of Purpose (reflecting the SAS question-"How Healthy is Your Forest of Reasons?").

Heuristics are commonly described as a rule of thumb, a method to aid problem-solving or learning. SAS members frequently referred to the term 'heuristics' in their interviews when exploring resilience. They referred to heuristics as their guiding principles or default rules

in situations of ambiguity and unpredictability. Notably, the relationship between resilience and curiosity continued as a consistent theme within each resilience-enabling heuristic in this chapter. In some cases, reflection highlighted that SAS members' capacity to tap into respective resilience heuristic was increased through curiosity. In others that components of these heuristics served as a fuel for curiosity, driving more resilient outcomes. As noted, the capacity to engender curiosity was seen as key for resilience in the SAS environment. However, comments indicated that unless one can maintain focus on positive outcomes as well as maintain the cognitive discipline, to let go of distractions and self-defeating thought patterns (Mind Where Your Mind Goes), their ability to tap into that vital curiosity diminishes. Equally, in the absence of capacity to direct one's attention to the possibilities, curiosity could lead to self-destructive tendencies and spiral one down into what interviewees referred to as 'the dark side'. Similarly, the capacity to Belong & Make Better (Belonging and Control) was described as intimately reliant on the individual's ability to maintain interpersonal curiosity, "even if this may be genuine curiosity about the views, needs and expectations of your adversary". Importantly, whilst subsets of these resilience heuristics were recognised as innate in most SAS members, interviewees consistently commented that the SAS context, culture, and values harness and enhance these innate capabilities.

The present chapter explores SAS members' reflections on how the resilience heuristics work and their strategies to navigate complexity through these heuristics.

"Mind Where Your Mind Goes" "The Pursuit of Excellence" "Healthy Forest of Reasons" "Belong and Make Better" Mindful Attention Clarity of Purpose GrowthMindset Belonging and Sense of Control Self-improvement Self-awareness Belonging Authenticity Acceptance & Readiness Adaptive Coping Permeation & Articulation Trust Sense of Control Focus Perseverance Elevation

Figure 8: SAS Resilience Heuristics

"Mind Where Your Mind Goes": Mindful Attention

"Mind where Your Mind Goes" was the most commonly referenced phrase when SAS members described the principles or heuristics supporting their resilience. Three themes emerged under this heuristic. Interviewees explained that the Mind Where Your Mind Goes heuristic supports resilience through self-awareness and focus and adaptive coping. The order in which these sub-themes are presented in this chapter reflects interviewees' narrative around how Mindful Attention functions in support of their resilience. Though each sub-theme was distinct, comments under this heuristic highlighted that each build onto the next and sustains resilience cumulatively. For example, self-awareness was seen as an essential foundation for resilience, enabling the capacity to focus on what matters and then-to employ adaptive coping strategies appropriately in orienting towards one's goals. In the words of interviewee 11, Mind Where Your Mind Goes emphasises:

"The importance of committing to the desired outcome, to the exclusion of thoughts that may be irrelevant or detrimental to that outcome."

This phrase and the reflections accompanying it frame the first cluster of resilience-enabling principles highlighted by SAS members. Overall, reflections signalled that this principle pertains to the ability and commitment to choosing and maintaining awareness of "where one's focus lands in demanding times" and, indeed, in deliberately directing thoughts and attention towards the desired outcome. This was captured well in the words of interviewee 16, who commented:

"Resilience is all about your ability to maintain a disciplined mind, focus on what matters and maintain a connection to what fuels you."

Interviewees consistently recognised the Mind Where Your Mind Goes heuristic in the individual's ability to "deliberately manage and direct" their thoughts and emotions towards positive outcomes and "maintain focus and clarity of thought" in demanding conditions. In the words of interviewee 2, this heuristic recognises that:

"Resilience is about being choiceful and aware of what you allow to occupy the contents of your working memory."

Another SAS member, interviewee 4, explained:

"You have to mind your thoughts. You are not able to explore alternatives when your mind has gone into Fight-Flight-Freeze mode; when you excessively worry about what is ahead or ruminate on what has been".

Crucially, in the context of this heuristic, interviewees referred to the individual's capacity for curiosity as the vehicle that allows them "to explore alternatives, even when it may initially seem their faith is sealed".

Chapter Six: 'Who Dares Wins' and the SAS Resilience Heuristic

Self-Awareness

Consistently, interviewees commented that self-awareness plays a critical role in

sustaining resilience. Indeed, in the words of interviewee 21:

"Resilience starts with self-awareness".

Notably, SAS members consistently referred to the selection cycle as the most significant

test for their resilience, even though operational deployments presented greater physical

risks. They recognised their selection experience as one that sponsored greater awareness

of negative default thinking and how to use their strengths to sustain them. The selection

course had broadened and strengthened self-awareness for all, and by extension-their

resilience. Interviewee 23 described the SAS selection as:

"The last bastion where the outcome is entirely up to the person that

picks up the challenge".

He added:

"You get no encouragement, direction or criticism from others to drive

you. You only have yourself to keep you moving forward".

Another SAS member, interviewee 7, added:

"It is a key event; a crucible moment for self-awareness".

SAS members reported that they develop their self-awareness by consciously working to

understand what enables, drives and derails them. In the words of interviewee 16, these

demands "understanding your shadows as well as your strengths and drivers". Interviewee

22 labelled these "strengths, anchor points, Achilles's heel and motivators", adding that

to be resilience, one needs to know "what to rest on and what to watch out for when the

mettle is tested".

155

Chapter Six: 'Who Dares Wins' and the SAS Resilience Heuristic

In unpacking this theme, SAS members consistently commented that the individual's awareness of their feelings could be vital for sustaining resilience in the immediate and long-term. For example, they argued that the Mind Where your Mind Goes heuristic was fundamentally about understanding one's emotions and working on using them as "a guide and an enabler" in "better engaging with the challenge at hand". SAS interviewee 28 also defined the self-awareness required for resilience in the role as:

"The understandings of how you respond to different triggers, what thoughts to rely on and watch out for in different situations."

Interviewee 14 elaborated:

"To be resilient, you first need to recognise that you can carry your strengths and vulnerabilities along with you from one situation to the next. Knowing yourself and your de-railers means you learn how to mitigate the risk of them affecting you negatively."

Interviewees' comments emphasised that self-awareness supports a greater capacity to attune to what matters, to maintain focus on the goal and a greater capacity to "rest on strengths and manage self-limiting tendencies".

More broadly, interviewees consistently argued that knowing their strengths and vulnerabilities, and recognising individual triggers and responses, assists them in disambiguating challenges and shaping better outcomes for themselves and their teams. Other comments demonstrated how through self-awareness, SAS members could view what they are experiencing -including fear, exhaustion and sadness, and "observe it as a temporary state" rather than let it "overwhelm or allow the experience to become allengulfing". Interviewee 13 framed this by commenting that self-awareness sponsors:

"Greater objectivity, control and capacity for influence in testing situations".

Interviewees attributed their ability to successfully overcome setbacks and challenges to self-awareness, recognising that in highly ambiguous and demanding situations, "you may only have control over yourself". Other comments highlighted that without self-awareness and the will to select "where your mind goes", the ability to sustain resilience diminishes.

The emphasis on self-awareness and, in particular, the individual's ability to understand, select and effectively direct their attention towards their goal was a key part of SAS members' narrative for ways to resilience. They referred to examples of self-curiosity consistently in highlighting how it aids them in understanding "personal daemons", as well as drivers, strengths and intent. Examples of self-curiosity included openness and readiness to examine alternative ways of perceiving, engaging and responding (rather than reacting) to what may otherwise be instinctive or in-built thought and emotional patterns. In the words of interviewee 18:

"In trials, you can see when someone knows themselves and when they do, how they choice-fully shape their outcomes by managing their thinking and responses."

SAS members argued that observing and understanding one's emotions and thoughts without becoming fully engulfed by them is essential for resilience. Interviewee 3 commented:

"You become so familiar with the little voices in your head like: 'you will not make it', 'you are not good enough', 'maybe next time'. If you go ahead anyway, with each step you take, these voices become smaller until they become irrelevant. You learn how to manage yourself and drive yourself towards your goal, no matter how depleted you may feel."

SAS members also argued greater self-awareness meant they were more effectively attuned to relevant shifts in their environment, better able to manage their resources

effectively, and engage with the threats, challenges, or opportunities in that environment. Self-awareness allowed them to step into testing situations, with the readiness to shape or reframe their ways of thinking or approach. In the words of interviewee 7:

"Many of these emotions that may otherwise paralyse or deplete your resources-like fear, shame and frustration, they cease to be all-engulfing when you know yourself. You recognise that these emotions can serve as a trigger that focuses your attention more deliberately on what matters, where your opportunities are, and where your risks are, rather than just a trigger to react to or be lost in a basic reflex. When you know yourself, you also learn to draw the line between perceived and real; past, possible and present."

He added that self-awareness allows him to use his emotions by design, "to focus you rather than get you unstuck". The above was one of many comments demonstrating how the Mind Where Your Mind Goes heuristic supports intentional engagement with the present moment. The levels of risk and complexity of demands in the SAS operational environment had conditioned a sense of discipline and awareness to recognise when worrying about future possibilities or ruminating over the past may be defeating. In the words of interviewee 9:

"Could-a, would-a, should-a are so depleting! You learn to take your lessons and move on with the added insights. Rumination eats away at your resilience, and you just cannot afford that."

Further, SAS members argued that to support resilience, self-awareness must be developed continuously. Interviewees consistently commented that seeking feedback and self-reflection is key to developing and evolving self-awareness, and therefore resilience. Many interviewees suggested that their greatest wins and gains have been in creating a mindset shift for themselves or others through setbacks. In this context, the Mind Where your Mind Goes heuristic supported an adaptive sense of certainty and confidence in

coping ("if not in what is to occur, then in that I have what it takes to respond effectively") as well as controllability ("if all else fails, I know I can control my mind"). Interviewees argued that self-awareness and the ability to regulate their emotions "through framing, understanding and utilising one's resources effectively" also fuelled their confidence further, leading to greater self-efficacy.

Similarly, interviewees emphasised that acknowledging small wins may be all that it takes to "give you back a sense of confidence and control and unlock you from fear of failure" when demands seem unrelenting. Where one mind goes in the moment could unlock or block capabilities. For example, interviewee 5 emphasised that the ability to inject moments to "boost confidence, gratitude and cohesion", no matter the trials or the length of the challenge, is key to sustaining resilience. Similarly, most interviewees commented that key to resilience is taking the time to reflect on learning, growth and positive outcomes rather than only focus on setbacks. One SAS member, interviewee 22, explained that this ability supports resilience as it shifts mindsets to "remembering capabilities and strengths rather than anticipating failure or threat". This was supported by another SAS member, interviewee 8, who commented:

"Celebrating small wins is key. Your win may be all about the lessons you have gained from your failure. If you have made it through, your win is in stepping forward, better prepared for the next challenge."

Adaptive Coping

As signalled above, starting with self-awareness, the importance of managing and regulating one's emotions to sustain resilience was seen as key. Unpacking comments further, SAS members highlighted that emotional regulation and adaptive coping play a critical role in resilience. The Mind Where Your Mind Goes heuristic here signalled the

importance of being deliberate and selective towards adaptive and constructive responses. As interviewee 20 explained:

"Knowing where your head is at is a good starting point. However, knowing how to get it to where it needs to be is non-negotiable."

Interviewees insisted that the individual's ability to manage their perception and responses effectively could mark the difference between failure and effective, resilient response in testing situations. One SAS member commented:

"You get to learn that some of what you feel and think is really just white noise that does not belong to in the here and now. It may be a response to past events or pessimistic future-thinking. Some of that may be useful, but most of it can be detrimental. To be resilient, you need to learn how to cut out the white noise-at least long enough to see yourself past the obstacle".

Interviewees described the ability to manage one's perception as a key to selecting the most adaptive response. Many explained that SAS members' capacity to use stress "as a driver rather than de-railer" was pivotal to success and survival in the operational environment. In the words of one SAS interviewee 12:

"Stress and worry can actually feel physically heavy after a while. The more you know yourself, the easier it gets to realise that all situations, however novel they may seem, are a little like something else you have experienced in the past. You learn to rest on what will aid you and silence what distracts you. To get there, you need to manage your emotions and redirect them towards your intent constructively."

The need to maintain a sense of neutrality about failure, stressors and ambiguity was also a common reference under the umbrella of emotional regulation. SAS interviewees described this as "resilient neutrality" and saw it as a key mindset for resilience. Interviewees argued that by maintaining resilient neutrality, they were more likely to

engage in testing scenarios "with reason and objectivity rather than reactivity". In choosing where their 'mind goes', SAS members also acknowledged the importance of engaging with failure as a great learning opportunity and nurturing a commitment to working through limitations with an "unwavering focus on positive outcomes".

SAS members explained that this heuristic supported their ability to maintain adaptive coping whilst effectively managing the impact of different stressors by "knowing how to regulate their emotions". SAS members were quick to articulate their respective sources of self-doubt, as well as tendencies towards less-functional responses. However, the strategies they had developed to manage these were seen as rich sources of choice, granting them the opportunity to stretch the gap between event and response and be deliberate in their engagement with their environment. In the words of interviewee 24:

"We all have gremlins, self-doubt and self-sabotaging tendencies of one kind or another. Knowing how and when these may present means you can choose to have a conversation with your gremlin and disarm doubt, rather than get submerged in self-defeating thoughts or tendencies."

SAS members also explained that in their context, resilience demands knowing the difference between adaptive and maladaptive interpretations of stressful events and responses, as well as adaptive and maladaptive coping. Interviewee 8 words were:

"At no point are you promised that you would have it easy. On the contrary, from the first step you take in this place, you realise that this will be challenging each day and, in every way -physically, mentally, spiritually... for you and those you love. Thus, you quickly build the habit of being choiceful with what and how you engage your mind and attention. You can focus on all those strains you and how life demands from you or on the positive outcome you can create if you take one step forward. You can give yourself an excuse to pull back, take action that's

Chapter Six: 'Who Dares Wins' and the SAS Resilience Heuristic

ultimately destructive, or you can choose to stay committed to the bigger picture, your goal and your vision."

Interviewee 3 added:

"Where your mind goes, the rest of you follows! Here, you have to learn to be deliberate and the more you choose well, the more confident you get in your ability to adapt your approach towards your mission's success."

Focus

Similar comments emphasised the third component of the mindful attention or Mind Where Your Mind Goes heuristic-the importance of maintaining "focus on the intended outcomes and the possibilities" rather than the risks, setbacks or limitations. In the words of interviewee 17:

"Everyone hears the same voices in their heads. The difference is those who make it-they just do not act on those excuses or fear. They keep on going. To get to the end, I had to count to 10 1000 times!"

The capacity to maintain focus on "the bigger goal" and "on the opportunities" was consistently acknowledged as key to resilience amongst SAS members. In the words of one interviewee, this is "especially because the route to your goal is often peppered with so many setbacks". Mind Where Your Mind Goes recognised the critical importance of maintaining a clear and unwavering focus on one's goal whilst resisting being drawn into a tunnel vision. In the words of interviewee 2:

"It is normal for our minds to drift, but success here requires unwavering focus on intent. Focus allows you to orient yourself back towards your intent; curiosity-to think of the best ways to achieve your intent when your circumstances change."

Another SAS member, interviewee 6 explained:

"To achieve complex goals or overcome significant obstacles, you need to learn to exclude factors that are irrelevant or detrimental to your mission from your thinking and to think broadly, whilst being unwaveringly focused on your mission's success."

Furthermore, SAS members highlighted that self-awareness allowed them to recognise when their resources may be depleting and seek opportunities to replenish their resources authentically. In the words of one SAS interviewee 2:

"When you know yourself, you pay really close attention to what is left in your tank. You can't survive for long on empty."

Here, Mind Where Your Mind Goes also highlighted a commitment to the unique anchors SAS members relied on to maintain their equilibrium and on the importance of staying mindful and connected with those. Hence, resilience demanded not only focus on intent but also focus on the source of authentic wealth to carry us to that intent. Interviewee 28 commented:

"The things we work with, the intensity; you can sometimes lose yourself in it, you can lose perspective, become completely engulfed in it. This might help in the short run, but you cannot see the forest from the trees after a while, and you stop being useful. You may think you are too busy, but you can always steal time to focus on what grounds you, what fuels you. When the pressure is on, it reminds you that 'this too shall pass' and gives you the impetus to push ahead."

As with self-awareness, interviewees emphasised that focus on present possibilities and the positives (rather than ruminating or worrying), be it in the pursuit of short or longer-term goals, is key to maintaining resilience. Interviewee 15 shared:

"I spend eight months preparing (for the selection course) by myself-every hour of every day, without any certainty I will get there or any support. To get there, I had to clear the decks from everything and everyone that distracted from the mission. This discipline has stayed with me and has served me in the operational environment. To be resilient, you need to learn to be single-minded and completely focused on your aim or vision, to the exclusion of everything else."

SAS members also commented that unless they had the discipline to focus on the challenge at hand and their end goal, their resilience and capacity to persevere might have given-in along the way. One SAS interviewee emphasised that "the most significant challenges are often those that demand physical, emotional and spiritual endurance and offer little respite". Others acknowledged this to be the case in the context of the gruelling selection course, the year-long training cycle and the intense operational deployments. As a part of the Mind Where your Mind Goes heuristic, SAS members emphasised that to sustain their focus and therefore resilience in their context, it is crucial that operators learn to not only keep the big picture in mind but also to "break things down into timely and manageable bites". SAS members also argued that their resilience is sustained when they reframe the challenge in a way that focuses them on manageable chunks. Referring to this practice as 'compartmentalising' SAS members highlighted that to support resilience, your focus needs to "fuel your confidence, guiding you to take one step at the time". Hence, the capacity to elevate thinking to a broad intent level and re-compartmentalise resources to adapt to the smaller demands were seen as key for achieving a "whole of mind engagement, rather than fight-flight-freeze reaction". In the words of interviewee 1:

"When you are confronted with significant challenges, you can sometimes forget that you need to keep your mind on the steppingstones in front of you as well as your ultimate destination. If you do not break things down, you run the risk of becoming overwhelmed, missing an opportunity or failing to navigate each obstacle effectively."

In summary, the heuristic Mind Where Your Mind Goes supported resilience through Self-Awareness, Adaptive Coping and Focus. Broadly, this heuristic enabled SAS members to be mindful of and deliberate about how and where they deploy their attention and capabilities. The heuristic was built on and enhanced self-awareness by challenging the individual to pay attention to their thoughts and by directing their focus towards their goal. Through self-awareness, SAS members were better prepared to rest on their strengths, watch out for and manage de-railers, and engage more deliberately with their context. A subset of this, self-curiosity, was seen to stimulate readiness to examine alternatives in how SAS members perceived their context. It also stimulated greater situational awareness by affording more space for mindful engagement in the present and a greater ability to observe and study their predicament more objectively. The Mind Where Your Mind Goes heuristic also supported resilience through "resilient neutrality" about setbacks and failure.

Further to managing their perceptions and responses more effectively, the heuristic stimulated commitment to learning, be this following setbacks or successes. In this way, the heuristic was seen to aid self-efficacy. Ultimately, this heuristic supported resilience by enabling SAS members to sustain a commitment to positive outcomes, their authentic purpose and sources of strength, and focus on the pursuit of possibilities.

"Pursuit of Excellence": Growth Mindset

The second heuristic highlighted as key to resilience, related closely to growth mindset. Underlining this heuristic was the SAS tenet-"the Unrelenting Pursuit of Excellence", which SAS members consistently quoted as one of the principles they rely on to support their resilience. In the words of interviewee 7, this heuristic is essential as its underpinning principles:

"Help tilt challenges and setbacks to the balance of growth and success".

Comments under this heuristic clustered into three resilience-enabling sub-themes, including self-improvement, acceptance & readiness and perseverance. Crucially, within each of these sub-themes, comments highlighted that the Pursuit of Excellence relies on and stimulates curiosity in the SAS environment, as it underpins an expectation "to always look for ways to do better".

Self-Improvement

As a principle, the Unrelenting Pursuit of Excellence was consistently referred to as a prevailing disposition amongst interviewees and as a "shared existential value" or "a way of life within the team". SAS members described themselves and their teammates as "eager and restless to realise their greatest potential", "unwaveringly focused on the pursuit of higher goals and life of meaning", and as the type of people who "constantly seek to be challenged and to grow". Such characteristics were seen as key to SAS members' resilience and their ability to operate effectively in the role. This heuristic significance was evidenced across interviewees. The Pursuit of Excellence tenet consistently prefaced broader reflections around SAS members' characteristics and mindset to navigate the complexities of their role successfully. Comments demonstrated that as a heuristic, the Pursuit of Excellence supports SAS members resilience in two ways. One SAS member captured these by describing them as "redirecting behaviour towards one's goal following setbacks" and "reframing setbacks as opportunities to enhance personal capabilities for the journey ahead".

SAS members consistently reported examples of growth mindset and commitment to selfimprovement as key to their resilience. For example, interviewees described themselves and their colleagues as "people who are always eager to improve" (rather than to prove themselves) and who embody a life-long commitment to self-development. The importance of truly embracing the pursuit of excellence through self-improvement was highlighted by interviewee 17, who commented:

"Focus on self-improvement is key to resilience, but for it to hold in demanding times, you need to build it through experience rather than think of it as a 'nice to have' when things are easy. The more you challenge yourself to be better in every way, the more you grow to have this mindset. It leaves you with no room to wallow or bask in past glory-but only to grow."

As a part of this mindset, SAS members were quick to highlight that they seek to grow from every exposure and experience, "be they positive or negative", and saw this disposition as fundamental to resilience. Interviewee 2 explained that in the SAS context:

"The difference between success and failure could be as acute as the difference between life and death".

They argued that there is no room for error in their context. They highlighted strong appreciation amongst individual operators of the impact their actions can have on the broader team and beyond. They also described the environment as "ever-changing", "intensely dynamic", and "unpredictable and fluid", with interviewee 31 adding:

"It is a context in which the only way to maintain the required readiness is by always striving, learning and putting in the effort".

In the words of another SAS member, interviewee 4:

"Wanting things and being willing is not enough. You need to be equipped with the skills and information required for you to meet your challenge head-on. No learning is redundant, and you need to constantly be sharpening your toolkit to be truly resilient out here."

Similar views were shared widely amongst the team. Crucially, it was clear that in the SAS environment, the Pursuit of Excellence heuristic and the curiosity it stimulates and relies upon was seen as a matter of survival rather than an aspirational disposition. In the rapidly shifting and unpredictable SAS environment, the interdependencies between SAS members also meant that focus on self-improvement was ultimately seen as a measure of commitment to the broader team. SAS members commented that in order for the team to "pre-empt, prepare and adept effectively", every operator needs to be transparent and open with their successes or failings and "share the learnings they have accumulated through their exposures". Arguing that "choosing pride or ego over self-improvement can have disastrous consequences," one operator, interviewee 9 commented:

"My failure can be another's platform for success, and you can never judge how your exposures can become useful to another."

As such, growth mindset and specifically commitment to self-improvements were seen as key not only to the individual but also team and organisational resilience in the SAS.

Acceptance and Readiness

Linked to self-improvement was another consistent theme under this heuristicacceptance and readiness. In the words of one SAS interviewee 1:

"So that you can recover and grow, you first have to have the capacity to accept and understand your points of failure, the source of your setbacks; to accept what has taken place...and to turn this into a vehicle for growth and better performance."

Resilience meant moving forward better prepared than when your setback found you.

Acceptance was the key to growth and movement in the direction of resilience, and it ultimately underpinned broader readiness for taking on the journey ahead. Acceptance

and readiness intertwined in comments consistently and were seen as critical for resilience in the SAS context. Interviewee 8 explained:

"Unrelenting Pursuit of Excellence means that you need to accept setbacks as possible and to have the readiness to confront the challenge at hand with realism."

Interviewees explained that to survive in this environment, SAS members are expected to maintain "an open, flexible and agile mind and a readiness to explore alternatives". SAS members also recognised that fear, worry, disappointment and, more broadly, the impact of events around them is unavoidable, "a part of the equation when pursuing tricky goals". However, they emphasised there is no substitute for the ability "to be logical through a crisis", which can only be developed through "openness to learning and willingness to always grow". Linking readiness and self-development, SAS interviewees consistently explained that the capacity to evolve, learn, and be prepared continuously is key in their context. Interviewee 10 explained:

"The approach that serves you well today may be your undoing tomorrow unless you pay attention and keep a hungry mind".

Interviewee 4 commented that the Pursuit of Excellence means "you do your utmost in everything you engage with". On the back of this, as noted, interviewees were quick to explain they view successes with the same neutrality as they view failure. This signalled, again, the importance of acceptance and readiness for growth and ultimately-for resilience. SAS members explained that the levels of risks, change and ambiguity in the SAS context demand capacity to anticipate and be able to "accept and step up quickly" to adapt to their demands and re-orient towards their goal successfully. This was captured well by one SAS member, interviewee 5, who explained how his exposures in the SAS

supported his resilience by broadening his acceptance and readiness capacity. He commented:

"You begin to see the habit of staying too long with the feeling of loss, pain or failure as indulgent. You move from a mindset fixed on fear, and you learn instead to look up, around, and within so that you make new ways for the outcomes you aim for. And then you go forward with an open heart and in the fullness of your mind."

Acceptance through "resilient neutrality about failure" was also seen to support individuals' and teams' capacity to learn from setbacks and failure without delay. In the words of one SAS member-" we grow by being unobstructed by ego". Another SAS member, interviewee 4, explained:

"When you are dealing with this level of risk and unpredictability, you learn quickly that failure 'just is'; that if you engage meaningfully, the only thing that matters is what you do with failure. Risk is the price you pay when you pursue complex goals, and there is no point staying with failure any longer than it takes you to learn from it".

'Excellence' as a mindset was described by interviewee 6 as a principle that SAS members were expected to uphold in every aspect of their lives:

"From the complex and tactical skills, through to the manner in which you carry yourself, including basics such as the standard of your kit and uniform. Every bit matters."

Importantly, this focus on excellence and readiness was seen as critical in supporting individuals' and teams' confidence in tackling complex demands and as a strategy that enables their ability to broaden and sustain their resilience in times of trials. Interviewee 12 commented:

"To be resilient and capable in dealing with the big challenges, you have to come prepared with all the basics and to feel prepared to the best of your abilities."

Another SAS member, interviewee 8 commented:

"There are no shortcuts in life, but in our context, this can be more obvious. The most intricately planned operation can collapse due to a temporary lapse of attention or minor detail left unattended."

One SAS member commented that in his environment, "you learn to accept the highest probability of risk", and another added-"your resourcefulness is only limited by the space you condition for it". However, SAS members also argued that "unless you are prepared to your best; unless you are squared away, it is negligent to step into the unknown."

Further, SAS members also explained that however innate resilience might seem, their ever-changing context means that it will always be tested unless it is conditioned through exposure, exploration and feedback from their environment. In the words of interviewee 7:

"You just cannot grow resilience in a jar. To know it, you need the resistance and challenge that life gives you when you really engage with it".

As such, SAS members praised the training and conditioning the Unit provided as key to resilience, arguing they found themselves prepared to take on the challenge, no matter how ambiguous or demanding their exposure, because of both technical skills and the mindset conditioned through continuous training.

For example, reflections around self-improvement and readiness were also captured in another commonly used reference for the Unrelenting Pursuit of Excellence-commitment to "testing your mettle" or "to know what you are made of". From comments around what fuelled and sustained their desire to join the Unit, through to performance on operations,

SAS members consistently referred to the desire to 'know what they are made of' as a driving force. Again, this reference highlighted readiness and openness for self-discovery and self-curiosity that appeared to shape different orientation towards change and novelty. One SAS member explained that the concepts of challenge and setbacks gain new meanings when one is committed to "improving, contributing or at the very least-testing" their capabilities. He described this mindset as a "springboard" that shifts the mind away from fear and towards full-hearted engagement. Whereas for most people, the concept of seeking to be tested and the expectation of moving away from the familiar may be daunting, the Pursuit of Excellence supported resilience by shifting mindsets from fearful or passive observers of life to willing participants and active influencers of life. In the words of interviewee 17:

"The more you test yourself, the more comfortable you become with yourself and with the unknown."

Perseverance

The final sub-theme under this heuristic highlighted how the mindset it triggers enables resilience through perseverance. SAS members referred to perseverance as a "practised attitude to be developed" rather than just an innate trait. Comments emphasised the distinct benefits of this attitude across the entire spectrum of SAS members' careers.

Insisting that resilience is a quality to be continuously nurtured and conditioned, SAS members commented that perseverance is in the willingness to step forward into new challenges. In the words of interviewee 3:

"Even in the darkest of moments, there is always something more to be done or at least, something new to be learned. No matter your Chapter Six: 'Who Dares Wins' and the SAS Resilience Heuristic

predicament, this mindset triggers you to ask: 'What if?' once more. Your win could be in that extra second; in that extra step you take."

This was also supported by interviewee 9, who commented:

"At first, building the appetite to push past setbacks and to always improve can feel like practising going through concrete wall-it sucks. You want to pause, to stop completely. But when you make learning and improvement your aim, you understand that most obstacles are self-imposed, at least in the attitude you take. You chose to persevere."

Among the many references to perseverance, one SAS member commented that Pursuit of Excellence supports "quick recovery, re-calibration and focus"-factors he saw as vital for survival and resilience. Another SAS member, interviewee 9 explained that the Pursuit of Excellence supports resilience through perseverance because:

"It conditions you to drive through disappointment and charges you up for the next step."

He also added:

"When you condition perseverance, curiosity and the pursuit of your best replace fear."

Perseverance was seen as the essence of the Pursuit of Excellence heuristic. It was described as the mindset of "always going a little further". In the words of one SAS interviewee 11:

"The Unrelenting Pursuit of Excellence means you expect it of yourself to push, to be better with every new step you take. It is a mindset and a reminder that you get the chance to have a positive impact with every moment you live. We condition our resilience by persevering. It does not matter whether it is on the back of success or failure; this mindset means constant striving for better. It is an obligation you accept to give whatever

Chapter Six: 'Who Dares Wins' and the SAS Resilience Heuristic

it is you are engaged with your all; to push long enough to see it past the obstacle."

This was echoed by another interviewee 2 who stressed that the Pursuit of Excellence guides you to:

"Relish in the possibilities that emerge from persevering past your perceived breaking point".

Crucially, SAS members consistently argued that their resilience is underpinned by the desire to "pursue challenges rather than avoid them". Their comments suggested that this creates a fundamentally different threshold and disposition towards life. This theme was unpacked further by interviewee 4 who commented:

"When you develop the habit to push a little past your comfort zone each day and to ask one more question-one more 'what if?', you are much better prepared. Ultimately, these habits give you the freedom to adapt and to shape your outcome, no matter your circumstances."

This distinct mindset was seen as crucial to success for SAS members, not only in the controlled environments of the SAS selection and training cycle but also across operational functions. Interviewee 15 explained:

"In training, pushing yourself to the point of failure so that you can learn can be a worthy cause. With every barrier you break, you get closer to accepting that you have an immense capacity to do better. The habit of seeking ways to overcoming setbacks becomes the thing that drives you."

Another SAS member, interviewee 27 described the Unrelenting Pursuit of Excellence as the recognition that when you fail or experience setbacks:

"There are two ways of doing things: the right way and again".

Others reiterated that the Pursuit of Excellence is in the commitment that "things are either achievable or not achievable right now" and that, in the words of interviewee 14, this commitment requires:

"Dogged determination to make it through and to seek the best outcome you can picture".

Finally, many interviewees reflected that they see themselves at once privileged and responsible because of the opportunities granted to them by their roles. For example, one shared that as a mindset, the Unrelenting Pursuit of Excellence signalled to him "duty and commitment to live a life of meaning truly", and another explained it encouraged him to be "restless in persevering towards achieving positive outcomes". Summarising this subtheme, interviewee 8 reported that:

"The pursuit of excellence is underpinned by perseverance, capacity and willingness to adapt, readiness, and the motivation always to be better and to develop."

In summary, the Pursuit of Excellence heuristic captured nuances of the essential mindset for resilience in the SAS. Broadly, it sponsored the habit of seeking ways to overcome setbacks. It expanded their resources through learning, finding them better prepared with every new challenge they faced. The heuristic influenced resilience through three components: Self-Improvement, Acceptance & Readiness and Perseverance. SAS members argued that resilience demands the disposition of 'always wanting to improve and grow', through every exposure. This ultimately sponsored and broadened a deeper and cumulative sense of readiness. The commitment to self-improvement was seen as vital not only for individual resilience but also for the team and for collective learning. SAS members were better prepared to accept setbacks as a normal experience and to broaden their resourcefulness through commitment to improvement, openness and learning. The

heuristic was seen as a springboard to a mind shift away from fear and towards engagement. As such, it stimulated deeper and more enduring perseverance. By stimulating growth-mindset disposition, the heuristic sponsored quicker recovery, recalibration towards the goal and more sustained focus. It sustained and broadened self-efficacy, too, by encouraging the individual to pursue challenges rather than avoid them.

"Belong and Make Better": Belonging & Sense of Control

The third overarching theme emerging through interviewees' responses emphasised the importance of belonging and a sense of control for individual resilience. These two elements clustered in comments together. They were often marked by the phrase 'Belong and Make Better', adopted by SAS members to describe one of the principles they rely on to sustain and enhance their resilience in trialling circumstances. Responses highlighted three sub-themes within this heuristic: belonging (including perceived social support), trust (including feeling trusted), and the commitment to fuelling one's sense of control.

Overall, SAS members' comments highlighted that the 'Belong and Make Better' heuristic serves several key functions in supporting their resilience, including sustaining a stable sense of self in testing conditions, aiding recovery following setback and supporting SAS members' motivation to persevere in trialling conditions. Interviewees also explained that as a resilience enabler, the Belong and Make Better heuristic created a "positive expectation of SAS members to be at their best", even when confidence in their personal capabilities and resources may have been tested or depleted. To exemplify this, interviewee 22 described this as "a responsibility to be your best for others." He added:

"You pick yourself up for others, even if you feel like you can no longer persevere for yourself."

Belonging

Among many others, the above comment marked the importance of a sense of belonging, including perceived social support for resilience in the SAS context. The importance of this theme was amplified in the unique operational context of SAS members. Due to the nature of their work, SAS members often face challenges and experience long-term separation from their loved ones. Nevertheless, they consistently explained that vital to their resilience is their sense of belonging and the commitment, focus and faith in their ability to shape better outcomes. One SAS member, interviewee 29 recounted the first time he developed his awareness of the importance of belonging and specifically how he could "feel motivation on behalf of others" as a function of it. He added:

"When I look back, I can clearly recall the time when I contemplated giving in. Then I realised I was not there just for and as myself. My commitment to my family pushed me through the most difficult stages. I needed to make it through this, not just for myself but for those I loved most dearly. It was a deep sense of belonging that allowed me to recover and push on through".

Interviewees often described the most challenging times in their lives as times when their resources were depleted. Whether their source of a personal sense of belonging was grounded in family, community or faith, they consistently referred to 'sense of belonging' as a key enabler in sustaining or rebuilding their confidence and self-belief in times when they felt particularly depleted. Another SAS member, interviewee 12, described belonging as:

"The driving force that sustains perseverance and engagement, even when self-doubt was felt acutely."

Interviewee 16 described the role of belonging in resilience as "a well of faith in the drought". Interviewee 24 explained that unless one feels supported in the SAS operational context, the levels of intensity and severity of demands might leave people feeling "insignificant, powerless, overwhelmed and hopeless". This was supported by his colleague, interviewee 16, who commented:

"When you have been under an onslaught of pressure for too long, you can begin to wonder 'Am I a worthy human?', Can I deal with this?' In that time, just the memory of what you mean to trusted others, their perception of you; their expectations and hopes of you can drive you and sustains your resilience."

Crucially, SAS members acknowledged that to enable resilience in demanding conditions, "the who and the what" you attribute your sense of belonging to need to be such that they unequivocally support capacity to do better and see themselves as capable and worthy. Interviewee 8 cautioned-"not all wells are created equal" and emphasised the importance of being choiceful around where "you commit your trust". For example, several SAS members commented that the most challenging choices they have had to make were around how to build boundaries or even severe relationships that felt toxic or negative, acknowledging that such relationships can have a debilitating effect on resilience. Interviewee 29 elaborated:

"However tough and disciplined you may think you are when your personal baseline is eroded by poor, abrasive or unpredictable relationships, your mind is scattered. You may perform ok in short spurs, but the negativity in your life drains your capabilities if your journey is arduous. Time and distance do not matter-doubt and hurt from others can haunt you anywhere."

Similarly, SAS members explained that whether these were grounded in family, community or faith, the relationships they recognised as resilience-enabling had the capacity to frame and sustain positive expectations of them as individuals. More specifically, SAS member recognised such relationships as positive and enabling. They had the capacity to strengthen, recover or broaden "your faith in your capabilities" and sustain and strengthen one's sense of competence and worthiness. Equally, resilience-enabling relationships were seen as the kinds of relationships that offer unconditional support. In the words of interviewee 4:

"The physical demands in our context, though at times extreme, are seldom the most challenging. To do well, you have to have the clarity of mind and heart to navigate complex moral and ethical dilemmas with the confidence that you can do good. If your sense of faith in your own abilities or worth is eroded, so is your capacity to do good. To do your best, you need to think of yourself as a 'worthy human'. When the pressure is intense, those around you are key to reminding you what you are capable of."

Crucially, 'Belong and Make Better', as a resilience enabling heuristic, was focused not only on the critical importance of belonging in personal relationships but also in professional relationships. Indeed, the importance of the heuristic was highlighted as critical in the SAS operational and training environment, where interviewee 3 commented:

"I do not think any human would be able to sustain this level of demands if they did not feel an integral part of their team, not just through the tasks but also, through their personal relationships and interactions with others."

Trust

The above comments also highlight the second element of this heuristic-trust, a factor interviewee consistently described as critical to their own resilience and their colleagues' resilience. Referring to it as 'Trust and be Trusted' one SAS member commented he saw this principle as "the essence of belonging". When exploring this function of trust, one SAS member commented that to enable resilience, personal relationships needed to be based on "consistency, integrity, predictably and benevolence".

Whereas they saw trust as pivotal in any relationship, SAS members argued that without "infallible trust" in the SAS environment "resilience falls by the wayside" and that they could not see themselves perform in their roles or as a Unit without trust. The emphasis on 'trust and be trusted' presented a different nuance to belonging by framing and lifting each individual and the team's expectations. In this way, belonging was seen not just as a sense of alignment and acceptance. It was also seen as "shared commitment to outcomes" and as faith that "the capabilities and commitment needed to achieve complex outcomes will be in place" so that SAS members can accomplish their task.

Reflections around the influence of team and the wider organisational environment on individual resilience were also explored in detail with SAS interviewees. These are outlined in Chapter 7 of this work- "What It Needs". Whilst comments consistently highlighted sense of belonging as key to individual resilience, in this present chapter, selected reflections centred on what it takes to be accepted and granted belonging in the team and how this ultimately supports individual resilience. In this case, examples outlined by interviewees included "unwavering commitment to shared outcomes", "transparency with one's strengths as well as gaps", "openness to feedback from others", "the courage and integrity

to give feedback to others, no matter their rank", "displaying a commitment to our tenets and values in every action" and "giving it your all, always".

Sense of Control

Finally, comments around the Belong and Make Better heuristic highlighted the importance of a sense of control. Focusing on just this segment of the heuristic, SAS members consistently reported that some of the most notable demonstrations of resilience amongst the team were seen when they acted for the benefit of others-whether this may be to support an injured colleague, a stranger in peril or to persevere for the betterment of their families. In the SAS context, these demonstrated how a sense of responsibility and commitment to 'make better' enabled resilience by lifting expectations and motivating behaviour, commitment, and perseverance to pursue better outcomes. Many operational and training examples of trialling situations highlighted this unique function of the resilience heuristic 'Belong and Make Better'. In particular, how when a strong sense of belonging is in place, individual resilience can be sustained because "you are motivated to improve outcomes for the betterment of others."

Hence, the third sub-theme under the Belong and Make Better heuristic related to a sense of control-another commonly used reference to resilience in the SAS context. SAS members argued that in times of significant or ongoing demands, even when their personal capabilities or confidence may have been eroded, "the discipline to maintain or improve what little may be within your control" had served to recover their sense of confidence and made ways for them to access or strengthen their resilience. Examples showed that commitment to 'make better' as a part of this resilience heuristic supported SAS members' resilience by sustaining their engagement, focus and perseverance in trialling circumstances. Across a spectrum of scenarios and a range of different

experiences, comments highlighted the importance of regaining or maintaining a sense of control to build or fuel resilience. SAS members argued that a sense of control is largely a trained and conditioned attitude. In the words of interviewee 9, focus on 'making better' demands:

"Committing to actions, however small, to maintain or regain your sense of control."

This sub-theme was most consistent in reflections around sticking to core disciplines, in actions as simple as the rituals SAS members committed to in maintaining their kit and even appearance in good order during testing times. Whereas these practices served a basic yet fundamental requirement for combat readiness, they were also seen to serve a much less obvious but powerful psychological purpose. In the words of interviewee 10, by maintaining these practices and rituals, SAS members felt that:

"Even if we may be in what may seem a chaotic or uncontrollable situation, we are in control of ourselves".

Reflecting on his time during the selection course, for example, another experienced SAS member, interviewee 1 commented that he realised the benefit of these rituals when:

"Feeling fully depleted, starved and exhausted, I found myself sitting down at a checkpoint. All I wanted to do is lay down on the ground and fall asleep right there; pull out, go home and feed myself. My boots were ruined; I had lost a ton of weight and probably looked an absolute mess. For some reason, I pulled out my mirror and shaving kit and shaved my face. I then cleaned up my boots. But this seemed pointless. The next task was walking through a swamp! However, just those small actions reminded me that I am not a mess, I was just messy, and I had control over myself as well as the bigger outcome if I just took small actions".

In the words of interviewee 11, a sense of control for resilience could be seen in the commitment maintaining "personal discipline, essential practices rituals" and "engaging in whatever small opportunities you may have to maintain confidence" in your capacity to have a positive impact. This was consistent across all interviewees. One operator reflected on a time when he was deployed to a highly complex and ambiguous Mission, in relative isolation and with very little, if any, support. He was not clear on whether this was a conscious strategy or an accidental discovery. However, as the demands and ambiguity increased, he found himself tending to a small patch of plants near his accommodation space. He explained that this commitment demanded "mare minutes but paid off in spades" as it provided a daily reference for his capacity to nurture and shape outcomes and to have a positive impact. This SAS member, interviewee 6, commented further:

"Sense of control-however little reminds you there is always something you can do about your situation, and you can always find something to have a positive impact on. Each day! However small, these actions can heal faith and re-kindle optimism."

In summary, the "Belong and Make Better" heuristic served the vital role of supporting a positive and more stable sense of self for SAS members, aiding performance, recovery and growth following setbacks. It enabled resilience by framing and delivering the benefits of what SAS members referred to as "enabling belonging" and by sustaining motivation 'on behalf of others'. As such, the heuristic was comprised of three core elements: Belonging, Trust and Sense of Control. Enabling belonging was key for resilience, and SAS members found this to unequivocally support their capacity to do better, to see themselves as capable and worthy. It supported resilience by framing and sustaining positive expectations of the individual in times of trial, sustaining faith in their capabilities, competence and capacity to positively influence outcomes. As a part of this, SAS members

also found that trust plays a critical role in resilience. Trusting unquestionably, as well as feeling trusted, served as a foundation for personal resilience. When at play, these framed and lifted expectations of each individual and the team, cumulatively building a more enduring and broader foundation for resilience. Belonging and trust also stimulated commitment and a sense of control 'on behalf of others', broadening and sustained perseverance and a sense of purpose. The heuristic sponsored a mindset whereby one feels "stronger as one and better as a whole" when enabling belonging and trust are at play. As such, the heuristic stimulated commitment to maintaining, regaining or improving whatever is in one's control, even if it may be one's mindset. Similarly, the feeling of being trusted, relied upon or committed to improving the experience of others created broader and deeper access to one's individual resilience.

"How Healthy is Your Forest of Reasons?": Clarity of Purpose

Clarity of Purpose, often referred to by SAS members as 'knowing your why' was the fourth resilience heuristic identified in the present research. Three sub-themes emerged as resilience enablers within this Clarity of Purpose heuristic. These included purpose authenticity (for example, "how aligned and meaningful your goal is with your personal values and believes system"), purpose permeation and articulation (for example "how well do you understand your own goal or purpose" and "how well integrated your purpose is within your repertoire of life"), and purpose elevation ("how broad and enduring is your 'why' and does it make your purpose enduring" and "the extent to which your purpose/goal is positioned beyond other competing priorities or goals").

Comments highlighted that clarity of purpose serves as a strong starting point on the journey to sustaining and enhancing SAS members' resilience. Several SAS members used the phrase "healthy forest of reasons" in an attempt to explain how and why their resilience

prevailed and endured, through some of the most testing experiences they had encountered, as well as what supported their recovery following setbacks or testing exposures. For example, reflecting on the most demanding exposure he had encountered in his career, interviewee 17 explained:

"When you are pursuing tricky goals, you have to ask yourself this question: How healthy is my forest of reasons?"

In unpacking this question-"How healthy is my forest of reasons?", interviewees identified two elements as key to enabling and sustaining resilience. On the one hand, this question reflected the importance of being careful and thought through in "planting the right reasons" or motivations behind why you do what you do. On the other, it reflected the need to "nurture one's motivations effectively" so that they can "endure no matter my conditions". This reference, amongst other reflections, framed clarity of purpose as a vehicle that allows the individual to effectively direct, adapt, recover and sustain motivation towards an outcome or a goal.

The importance of Clarity of Purpose was highlighted in reflections stretching from the deeply personal and even spiritual to the pragmatic and transactional. Interviewees' comments on the importance of clarity of purpose broadly sat across two sets of reflections. On the one hand, these concerned the importance of clarity of purpose 'from within'-on a personal level. Specifically, how the individual's awareness of and commitment to their "personal motivations and drivers" supports their resilience when persevering with complex and demanding goals and in the face of challenges and setbacks. On the other, they highlighted reflections around how clarity of purpose and, thereby, resilience "can be supported through transparency and informed buy-in at the team and the broader organisational levels. The later is explored in Chapter 7 of this work. Nevertheless, to understand its function on a personal level, it is worth quoting one SAS member,

interviewee 8 who described the impact of Clarity of Purpose from an organisational perspective. He argued that:

"The SAS environment, where there may be significant demands for personal initiative and adaptation, necessitates clarity of purpose. This allows for intricate comprehension and buy-in. The highest levels of commitment are required here to sustain performance, and you can only have that through unquestionable clarity of purpose".

On an individual resilience level, the significance of Clarity of Purpose was most commonly highlighted in reflections around the SAS selection cycle. One SAS members explained that the SAS selection cycle served as a "condensed yet controlled version of the physical and mental challenges" the role might entail and as an opportunity to "really reflect on and strengthen the principles that support your personal resilience".

Authenticity

One of the components most commonly referred to as Clarity of Purpose was purpose or goal authenticity. In the words of interviewee 18, this is the extent to which:

"What you commit or engage yourself with is meaningful and aligned with your personal values, motivations, vision for self and beliefs".

SAS members provided multiple examples, consistently highlighting that they find themselves better prepared to persevere towards a goal or recover from setbacks if that goal is authentically meaningful to them. Similarly, many interviewees recalled the motivations of otherwise competent SAS candidates who had attempted and failed the SAS selection. For example, SAS interviewees commented on a pattern whereby those who voluntarily withdrew from the selection course would highlight "weak reasons" or motivations at the start of the selection course, such as "wanting to prove themselves to others", "demonstrating that they are better than the rest" or "moving away from a job they

disliked". Consistently, SAS members argued that this type of negative or extrinsic motivation fails to sustain commitment at the levels of demands involved in the SAS selection cycle and role. Interviewee 12 elaborated:

"It is the push-pull thing. We find whilst being pushed toward a goal might be helpful to start with, unless you are driven from within or pulled towards your goal is set, you are less likely to make it."

An experienced SAS instructor, this SAS interviewee, explained that on the one hand, in the absence of 'pull towards' motivation, the clarity and appeal of the desired future state might be lacking. He suggested that these types of motivations were fundamentally fuelled by self-doubt rather than self-belief or self-awareness and thereby flawed. Another SAS member, interviewee 11, who had attempted and failed his first selection course supported this. He added:

"Proving others wrong may start you, but it will always eat away at you, and you will fail yourself in the end. If you try to tackle this type of challenge from a negative starting point, you have allowed the voices of your doubters, your critiques, to become your own. You may be physically away from these people, but there is no escaping their impact unless your goal is deeply aligned with you and you can sustain a clear view of what it is you are moving towards, for yourself."

Similarly, other SAS member argued for the need for authentic alignment by emphasising clarity of the desired state ahead with phrases such as "personally meaningful", "well envisaged", or clearly articulated and conceptualised by the individual, "so that it holds through trials and setbacks." Their colleague, interviewee 11, further commented:

"If your goal is murky, your resilience will give in along the way as you continue to face new obstacles."

Interviewees shared many examples of times when their resilience was sustained or enhanced in otherwise overwhelming or trialling times because their goal or a sense of purpose was clear and authentically aligned with them as individuals. One emphasised that in the pursuit of complex goals, motivation must be intrinsic and "deeply aligned with your sense of self". In the words of another SAS member, interviewee 9:

"Vanity and wishful thinking take you nowhere. It is far easier to push on through when the thing you pursue is intimately aligned with your values. Then you are 'all in'. Setbacks become steppingstones towards your goal rather than de-railers."

Another SAS member highlighted that we often underestimate the demands of participating "in goals we do not clearly align with". Many SAS members emphasised that the times when their resilience was most tested were those when they felt either "under-utilised", "under-stimulated", "detached or disengaged" from the goal or personal values. Emphasising the demands and risks in the SAS training and operational environment, interviewee 2 argued:

"It is dangerous and even impossible to sustain performance or motivation without clarity of purpose here".

Another SAS member, interviewee 14 commented:

"When you are fully aligned with your goals, you accept that failure is not an outcome; stopping is just not an option. When you are aligned, it is much easier to get to where you want to be".

Permeation & Articulation

The second sub-theme emerging under the Clarity of Purpose resilience heuristic was purpose permeation and articulation. As noted, SAS interviewees argued that many candidates who attempt the SAS selection with (as one interviewee put it) "murky

dreams" quickly find that "the gap between reality and expectations makes it impossible to persevere" through the challenges of the course. For example, one SAS member, interviewee 6, recalled the experiences of a colleague who was widely expected to complete the selection course and seen as a good fit for the Unit: "he was strong, intelligent, tough and determined, and he had been preparing for the course for years". At the start of the selection course, the stated motivation for this promising candidate was "to show his girl her father was a hero". However, he withdrew from the course three days later, saying, "I realised that my girl does not need a hero for a father, she just needs her father to be present." The interviewee commented that no further information on the role had been provided during the first three days of selection course, however, the impact of "unresolved dilemmas" was seen to have ended a life-long dream and turned the immense personal sacrifices leading up to it — "a fruitless endeavour and a pointless sacrifice". Another SAS member, interviewee 23, who described the personal demands of the SAS selection cycle as a litmus test for resilience, echoed this view by saying:

"The selection gives you nothing more than the space to walk hand-inhand with your deepest personal doubts and daemons. To make it, you have to come prepared for what may be your greatest-ever personal battle."

This and many similar examples resonated strongly with SAS members as the risks of taking on challenges with motivations that were not clearly articulated, thought-through or conceptualised by the individual. The risks associated with these, though clearly evident on the SAS selection cycle, were seen as far greater and daunting in the context of SAS operations, where, as interviewee 14 explained:

"Moral ambiguity, intensity, lack of clarity or lack of buy-in could have disastrous consequences."

Interviewees argued that in the absence of purpose permeation and articulation, resilience and the capacity to engage with threats effectively could be dangerously undermined. In the words of SAS interviewee 9:

"Unless you know and truly own your 'why', the challenges out there will surpass your capabilities".

Notably, clarity of purpose was seen to serve resilience in responses to setbacks as well as relative successes on the journey to complex goals. For example, SAS members recognised times when their 'forests of reasons' were "more wishful than stable", acknowledging how the successes they hoped for but had not accepted as possible can be as challenging to deal with for ones' resilience as a failure. In the words of interviewee 2:

"I made it to the next phase, and I began to feel anxious and intimidated by my own goal and my success thus far. My self-doubt was telling me, 'I am kidding myself here', and every negative past feedback or setback was brought back to mind; self-doubt hijacking me. My success made me feel like I was free-falling without a parachute. Moving forward with success seemed far more frightening than considering or accepting failing. I had not prepared myself for success, just for how to handle failure."

This and other examples demonstrated how Clarity of Purpose was found to support SAS members' resilience, when the goals they set for themselves or were entrusted with on behalf of the Unit had, as one interviewee put it-"permeated through the beholder" and another-"understood and clear in their details". As a part of this, SAS members demonstrated how the extent to which one has understood, absorbed and allowed the goal, vision or purpose to permeate their thinking is key to resilience in their context and saw this as essential for the individual's ability to "maintain an unwavering commitment to

the goal". After years of contemplation, doubt and holding back, another SAS member-interviewee 11 reflected:

"Having the vision or intent clearly set in your mind... that is what allows you to cut out the white noise and to crack on towards your own 'big picture' no matter the disturbances along the way. We say, "Failure is not an outcome", and to be resilient, you must allow yourself to accept that. It was clear that I could not stay happy with my life if I did not pursue this goal. Once I set that goal, I spent time visualising myself on the other side; then this image became a daydream in which I found myself constantly... it became my 100%. To me, one mark of resilience is your ability to take one step at a time, all along having the big picture at the forefront of your mind. Following the steppingstones to complete your mission, one little bit at a time."

Another SAS member, interviewee 27, shared that having "really thought through and assimilated" the goal he aimed for, made it possible for him "to dream up alternate routes towards it, even though it seemed impossible at first". SAS members elevated Clarity of Purpose beyond goals. For example, interviewee 22 argued instead that:

"To fulfil your purpose, you have to be prepared to set, adept and change goals without swaying away from your big WHYs, your Vision and Mission that define you".

The question, "How Healthy is your Forrest of Reasons?" similarly highlighted this as an opportunity to build and strengthen resilience. Comments in this space signalled that to be resilient, one might need many strings that support their personal mission. For example, one SAS member highlighted that when he is truly challenged, he needs to "draw on strengths from different sources or adept approach to the mission" by framing a new or different goal towards the broader mission. In the words of interviewee 8:

"It is like trying to balance yourself on a chair. The more legs, the easier to keep your balance."

Crucially, purpose permeation and articulation and specifically, "How well the goal was understood and espoused" by the individual was also found to aid recovery following potentially traumatic events. One SAS member, interviewee 24, explained this ensures that the potential for negative impact, risks and range of exposures were considered and accepted by members before committing to the mission. Another SAS member, interviewee 3, explained:

"If you willingly step forward with clarity and clearly understood risks, you are better at navigating and faster at recovering."

Elevation

The third cluster emerging under the Clarity of Purpose heuristic was purpose elevation. Describing this as your ability to lift your goal or purpose "beyond the 'white noise' of the day" and to "make it broad enough that it is infallible", SAS members argued that this is a critical component to resilience.

In their interviews, Unit members commented that the reflections and insights they had gained around the importance of Clarity of Purpose resonated as powerful enablers throughout their life's journeys, in their professional and personal lives. For example, looking back to a deeply confronting personal challenge that affected his family, interviewee 12 commented:

"I did exactly what I had done on the SAS selection some 15 years prior. I had to quiet down my brain, consciously cut out the white noise from all the things that did not matter, or we could do nothing about. It would have been easier to let go or let things distance us from the pain. Giving up in this way could have had devastating consequences. What helped us was

focusing on our own big picture, with clarity and making ways for that vision."

This comment pertained to purpose elevation and how the individual's capability to maintain their resilience can be supported by elevating their purpose beyond distractions, setbacks or interfering factors. In the words of another SAS member, interviewee 6:

"This takes you asking yourself the question of "why?" over and over until you have reached a personal purpose statement that no one or nothing can take away from you."

Comments indicated consistently that in the SAS environment, this was seen to support SAS members' ability "to find a workaround in change" and "maintain faith in the attainability of their mission", especially when change or demands may be significant. Consistently, SAS members argued for the importance of a goal and personal mission elevation as a key pillar for resilience. They stressed that what had supported their resilience and ability to push past obstacles was comprehending and embracing their purpose and elevating it so that it became "infallible to the challenges and demands of the environment". For example, interviewee 12 commented:

"Unless your 'why' is elevated, setbacks may take away your confidence, faith or ability to see yourself as capable of achieving your goal."

Further, some interviewees warned that we might let our resilience give-in along the way by focusing on the 'what', to the detriment of our broader mission or our 'why'. In the words of interviewee 25:

"Life has a way to stir and question the vision you have created for yourself, the ideas you hold around who you are or what you want to be. You learn quickly; it is not the WHAT that matters. It is your WHY that matters. There are many ways of making your WHY happen if you are clear on it and own it. If you want to do better for your community, you

could do so by being a charity worker, a soldier, a nurse or simply a good neighbour. When you know your WHY you can change your vessel to get there without getting attached to that vessel. That is what resilience is all about."

This SAS member and many of his colleagues emphasised the important role Clarity of Purpose plays in sustaining individual resilience. They highlight how, in personal or professional challenges, we can maintain a more stable sense of self and our confidence in dealing with the challenge through purpose elevation.

In summary, SAS members identified Clarity of Purpose as the fourth resilience heuristic. Broadly, this was based on their experience that "purpose proceeds drive". Hence, they held that resilience persists or broadens when one is clear and aligned with their Why or their purpose. The heuristic was comprised of three elements: Authenticity, Permeation and Elevation. SAS members recognised that they are better equipped and prepared to persevere towards a goal or recover following setbacks when their goal is authentically meaningful to them; authentically aligned with them as individuals. When this condition was met, SAS members observed that it sponsored an 'all in' attitude, finding the individual more willing and able to commit and evolve their capabilities in the direction of their intent. SAS members warned against poorly defined goals or wishful thinking. For Clarity of Purpose to support resilience, one's goal and vision needed to be well thought through and assimilated, understood and clear in its detail. SAS members also argued that resilience falls by the wayside when our focus becomes too narrow or specific, whereby limiting our agility and ability to maintain a commitment to the 'bigger picture'. When sufficiently elevated, Clarity of Purpose stimulated the ability to find workarounds, recalibrate resources, push past obstacles and redefine expectations in the direction of one's purpose.

Summary

This chapter explored the principles and mindset practices that help SAS members shape and sustain resilience for thriving in ambiguity. The chapter was framed under the umbrella title of 'the SAS resilience heuristics'. This was in recognition that SAS members frequently referred to 'heuristics', or rules of thumb, in exploring how they engage with their experiences through resilience. Four resilience heuristics were extracted to shape the SAS resilience mindset. These included Mind Where your Mind Goes (or Mindful Attention), Pursuit of Excellence (or Growth Mindset), Belong and Make Better (or Belonging and Control), and Forrest of Reasons (or Clarity of Purpose).

The Mind Where Your Mind Goes heuristic framed and sustained SAS members resilience by challenging them to be deliberate, selective and intentional around where they deploy their focus, as well as their emotional and cognitive capabilities. The heuristic was found to be underpinned as well as to enhance self-awareness. It supported learning and selfefficacy through 'resilient neutrality' and enabled SAS members to remain focused on pursuing possibilities towards their goal, despite and even because of setbacks or challenges. The Pursuit of Excellence heuristic supported SAS members' resilience by encouraging and sustaining growth-mindset. Thereby, SAS members found themselves better prepared to tackle complex challenges and setbacks with the view of improving themselves and seeking to always be better (rather than worrying, ruminating or seeking to prove themselves to others). The Belong and Make Better heuristic supported SAS members through what they described as 'enabling belonging'. This emphasised how important it is for resilience to trust others and feel trusted by others. It also outlined how sustaining the motivation to improve 'whatever little may be under your control' can sustain and grow resilience. Equally, it underlined the power of feeling accepted by and motivated to improve others' experience in creating broader and deeper access to one's resilience.

Finally, the Clarity of Purpose heuristic highlighted the need for drive and perseverance for resilience. The important nuances this heuristic added to our understanding of resilience were around the crucial importance of authentic alignment and the meaningfulness of our purpose. Under the phrase 'purpose proceeds drive', this SAS heuristic demonstrated how resilience could only be sustained and grown when we feel authentically motivated to pursue the goal, we have accepted for ourselves.

Each of these heuristics supported the view that resilience is a mindset that needs to be nurtured deliberately and intentionally. SAS members recognised that resilience might be an innate and shared mindset across the team. More importantly, though, they supported the view that resilience is a developable mindset and that it can be strengthened or eroded by our attitudes, as well as our context and experiences. Thereby, SAS members emphasised that as a mindset, resilience demands continuous attention and commitment. Each of the resilience heuristics highlighted the view that resilience means 'moving forward better prepared than your experience found you', irrespective of one's resilience baseline and whether the experience was one of success or failure.

Crucially each of the resilience heuristics signalled that curiosity plays a key role in shaping, sustaining and growing resilience through them. For example, the Mindful Attention heuristic demanded self-awareness. SAS members highlighted this to be fundamentally underpinned by self-curiosity, or in their context-the ability and will to study, reflect on and direct one's perception and responses to achieve resilient engagements and outcomes. Under this heuristic, too, the emphasis on learning and gaining new experiences sponsored 'resilient neutrality'. In another example, core to the Pursuit of Excellence resilience heuristic was SAS members' commitment to 'always wanting to improve and grow', which was fundamentally sponsored by curiosity and growth-mindset. The Belong and Make Better heuristic proposed important nuances to understanding

belonging by emphasising our opportunity to select 'to whom and why' we belong. SAS members also framed the importance of 'enabling belonging' for resilience. The examples they provided signalled the need for curiosity in examining how our values and purpose fit within our belonging context. Finally, and from a more existential perspective, the Forrest of Reasons heuristic invited curiosity again. SAS members argued that to sustain and grow resilience, we need to be open to explore, understand and evolve our purpose in a way that is authentically aligned with us.

CHAPTER SEVEN: A CONTEXT TO THRIVE IN

"Resilience is like gardening. You cannot just plant the seed in the soil and on the same day bring your garden chair and basket hoping to pick the fruits. You have to give it time, remembering all along that it needs the right environment, conditions and support to thrive."

The Anzac formalities are over, and we get to connect over some much-needed coffee. Soldier Z has been retired for some time. Yet, like the few remaining soldiers of his generation, he too is affectionately referred to as "a legend". Whilst legends are usually crowded by overenthusiastic fans, others approach the space around Z slowly and mindfully. His frame, more fragile now, oozes mana, depth and warmth. Nothing appears accidental with the space Z takes. Least of all-his words. They say he was always a person of few words. Yet, when he speaks, the room around him goes quieter. Somehow, without even knowing the details of his legend, everyone senses Z's words deserve the space he selects to share them in. He is also known as "the oracle". He always seems to know exactly what goes where in the order of life. He had made peace with a highly venomous snake some decades ago in his primitive shack, somewhere in the jungle. And whilst his logic at that time was a pragmatic commitment to not succumbing to the ferocity of oversized rats, his ability to find and build a common ground with the adversary was notorious. Amongst his reported honours were countless rescue missions of innocent civilians across continents, hostage negotiation at the highest levels and his ability to nurture generations of benevolent soldiers. He-the legend would be heard saying "the most effective way to make it through enemy lines is not with bullets but with kindness". As he approaches the couch, there is always a shuffle. People move to make space for him. And yet, this year, like the ones preceding, he chooses to stand. His knees and hips, damaged by decades of carrying weight over half his own and from parachute landing in precarious environments, may not allow him to stand up with dignity. His ANZAC coat is heavy. This is fitting for the crisp dawn parade. But now we are inside the warmth, he hesitates to take it off. His shoulders and his elbows have been shattered by bullets and his movement is very limited. He fears the fuss more than his pain thought. His body is trained to handle all extremes. He shows no discomfort! Other than when words are uttered that indicate entitlement or judgment of others. For all that he has done, he frowns at the thought of recognition for himself. His belief in our capacity to do good is so unwavering, he feels nothing other than privileged to have been a guardian of legacy. He'll be heard saying "the Unit is like a vast bucket of pure water. My role is to protect its capacity to nurture others. Like a hand that dips in and out, without taking any of its content, mindful only of the good that it can do for those that follow."

Context

Chapter 5 explored how curiosity plays a part in sustaining and enhancing resilience in some of the most trialling conditions. Chapter 6 focused on the SAS heuristics that sustain and develop personal resilience. This present chapter explores the third research question of this work- 'what does resilience need'? It outlines team and organisational factors that

sustain and support as well as factors that may detract from personal resilience. It reflects on the conditions within which curiosity and resilience can thrive, to the effect that SAS members can achieve strong positive outcomes and perform at the highest levels of demand and complexity.

Notably, most of these factors were identified as key drivers and motivations in pursuing and maintaining a commitment to a career with the SAS. As such, the organisational and team factors attributed to supporting individual resilience also highlighted clear indicators around how organisations such as the 1NZSAS create and nurture an irresistible talent proposition. Indeed, the team and organisational factors identified as supporting individual resilience were also "the non-negotiables for retaining top performers" in some of the most demanding conditions. Hence, this chapter also explores expectations of the SAS organisation, how it engenders the degree of commitment required and, crucially, how it supports and enable the resilience demanded by the role.

The reasons why SAS members were motivated and driven towards Unit membership appeared important in understanding resilience in the context of 1NZSAS. Whereas we may typically explore the role and functions of resilience in challenging or adverse circumstances that have been bestowed upon us, all SAS members volunteer to serve with the Unit. The question of 'why' pursue this complex and uncertain goal was put to interviewees. It offered insights to understand better how resilience and curiosity may play a part in driving and sustaining positive outcomes in the demanding and ambiguous SAS environment. Importantly, their successes and ultimately survival is reliant on being able to harness, display and sustain the highest levels of personal resilience in conditions that are complex, arduous and acutely demanding and, on the face of it, and in pursuit of a future that is rife with uncertainty and unpredictability. Framing this current chapter on

what resilience needs from its context is interviewee's 4 comment on what motivated and sustained his commitment to service with the Unit. He shared:

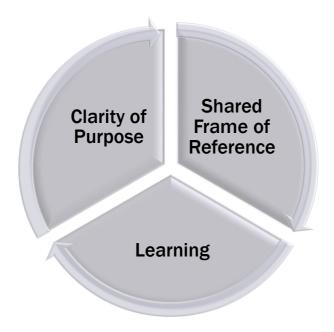
"It was in seeking to find the context to thrive in."

In this chapter, examining the organisational and team factors that support, develop and sustain SAS members' resilience, responses clustered into three distinct themes:

- · Learning.
- · Shared Frame of Reference, and
- · Clarity of Purpose.

This present chapter examined each of these themes and the comments supporting them.

Figure 9: Context for Resilience



Learning

To understand what resilience needs in the SAS context, it is important to highlight the characteristics and preferences of the individuals who select to be a part of the SAS environment. One of the most common responses to the question 'why pursue a career with the SAS' was simply "for the challenge". The significance of this response was captured in the words of interviewee 7 who added:

"Challenge is the measure of life worth living. Challenges give meaning to your life."

Appetite for a challenge as a disposition and as a reason to pursue complex goals was consistent amongst all interviewees. For example, comments highlighted that SAS members were strongly motivated by the opportunity to carve a "life filled with new experiences" for themselves and truly "test and know themselves". Comments also highlighted that SAS members found a life of challenge, where one's environment offers a "continuous opportunity for discovery and novelty" to be the most appealing. Similarly, questions around reasons for pursuing the challenging selection course were often met with the response "to test the mettle" or "to know what I am made of". When asked to reflect on what appealed the most about the SAS context, many other SAS interviewees responded simply by saying "the sense of adventure". SAS members consistently outlined that before joining the Unit, the image they held of the SAS soldier's life was deeply appealing. In the words of interviewee 5, they were captivated by "the constant variety of work" and the expectation of "never having a dull day". They also commented that other work environments appeared "bleak" and even "frightening" in comparison. In the words of interviewee 31:

"The unknown is what excited me. When I was a builder, I dreaded the morning because I knew what that day might entail. I seek out uncertainty- in my challenges lies my growth."

This was echoed by interviewee 1 who commented:

"I wanted the mental challenge, the sense of achievement that comes from conquering the unknown, the space for new learning and exposures and the discoveries that come together with this kind of life. The alternative of being stuck in a safe office somewhere held no appeal. It frightened me."

This sentiment resonated with interviewee 19 who emphasised the appeal of what the role promised to offer by saying:

"New learning is what matters the most in life. The feeling of always being slightly on edge in anticipation of what may be next, the hunger to know what is on the other side of that hill-these are the things that make life worth living."

Some interviewees labelled this shared disposition as an "existential value", and one interviewee described it as "a sense of restlessness" and an expectation of self and life, that "the hunger for challenge and discoveries is fulfilled". Interviewee 27 commented:

"You never know what's around the corner. Service with the SAS promised a challenging and meaningful career where you could grow. I wanted to be a part of it rather than read about it."

Whilst implied in comments about the need for learning, new exposures and excitement, interviewees also explicitly recognised that the source of their drive to pursuing the complex goal of SAS service was one of "pure curiosity". Interviewee 22 explained:

"Curiosity means that you are always on the lookout for the next goal, for the next hill to climb. It's the pleasure of discovering what's next. And so, at its core, I wanted to join the Unit so I can see what's behind those walls."

The reference to wanting to see "what's behind those walls" was common amongst interviewees, and it bears special significance in the SAS context. In light of operational security, this reference reflects the fact that very little is known about the Unit's inner workings. Information around training and operational demands is a heavily guarded secret. This was echoed by other SAS members who commented that for them, stepping into the unknown was "the greatest thrill there is" and described their colleagues as "bright-eyed and bushy-tailed" or "made of curiosity". Again, comments indicated that the willingness of many to commit to this arduous and highly demanding journey and do so in the context of significant uncertainty signalled a strong presence of innate curiosity. Comments highlighted that interviewees saw the SAS environment as one that can truly captivate and fuel their curiosity. Interviewee 4 shared:

"I wanted to know what it's like to be a part of this. "What would it be like?" is a huge question that drives all of us. I know that if I am not challenged and do new things, then I will not be satisfied. I knew that if I didn't step outside my comfort zone, I would never know what I could do, learn or experience."

Many SAS members referred to the basic question of-"What would it be if?" to explain how curiosity framed and fuelled their pursuit of goals. Nevertheless, as highlighted by interviewee 5, their pursuit of a career with the Unit was:

"Far more than just a frivolous curiosity or simply, an appetite for the varied and the different". As noted, fears of leading a meaningless life or facing regret from avoiding challenges were shared. The question of 'why pursue a life rife with challenges and significant demands' was often met by the view that "if you don't have a challenge, you are not really living your life". In the words of interviewee 2:

"Fear goes by the wayside when you accept and realise that you have a finite time to live. I aimed to do new things, to be challenged, to discover. Nothing is more frightening than the thought that I could have done more; discovered more. The promise of learning and growth through overcoming challenges overrides any other concern."

Interviewees consistently referred to the demands and strains on their journey towards and within the Unit and the level of awareness they had about the significance and scope of demands service with the Unit may present to them and their loved ones. Notably, they consistently referred to these demands as key opportunities for growth. For example, in reflecting on the SAS selection cycle, interviewees often addressed the most demanding phases of their journey as "defining exposures". As exposures, they have stepped into, with positive anticipation of rewards. When asked to elaborate on the feeling of anticipation they recognised, addressing the challenges and trials of service, SAS members attributed these to the anticipation of growth. For example, SAS interviewee 15 explained that amongst his cohort, this anticipation "transforms the experiences of fear and strain into a feeling of rewards" when one can maintain "perseverance towards the higher goal of self-development and learning". Interviewee 18 explained:

"Innate curiosity comes with an appetite for discovery and adventure and helps you build a new threshold for the life-the goal of wanting to be good at doing hard things, to know you can take on the bigger challenges."

Many reflected that they had developed the most invaluable capabilities and mindset through similar experiences of overcoming strain and challenge. Interviewee 9 acknowledged, for example, that a "life focused on conquering the unknown" has created a sense of "confidence that you can thrive in meeting your challenge, no matter the conditions".

In this context, the SAS environment was seen as highly desirable. It was perceived to offer opportunities to develop greater personal capabilities, including broadening and building one's resilience. For example, reflecting on the perceptions he had of SAS service personnel prior to joining, interviewee 6 commented that he pursued service with the Unit in the belief that "the context enhances the hunger for growth and discoveries as well as the capabilities to deal with the unknown effectively". Interviewee 3 commented:

"Doing something that seems unachievable; stepping into the unknown with the confidence that you can deal with whatever comes your way. This is the reason why you join."

Interviewee 32 stressed, "it is in recognising the cumulative benefits of well-traversed exposures to the unknown" that SAS members condition "an insatiable appetite for personal growth". Many referred to this shared mindset as the 'mentality of the explorer' where the pursuit of a life of challenge was the greatest motivation, rather than any specific end-goal. Interviewee 20 explained:

"I pursued SAS service knowing that the greatest reward is in the micro-moments where you find yourself on the other side of a significant challenge for just long enough before you notice the next new frontier to conquer".

This view was consistently shared amongst the group, with interviewee 29 commenting simply:

"The kind of life, marked by a continuous string of micro-moments of discoveries and challenges, is the kind of life we all desire for ourselves."

Similar personal factors were highlighted as key to success in the pursuit of Unit membership and the role by all interviewees. Crucially, as comments outlined later emphasise, they also framed expectations from the team and the SAS organisation around what SAS members need so that they feel their resilience is sustained and strengthened in the environment.

The most consistently shared need or expectation of the SAS as an environment was that it would further sponsor, support and strengthen the individual's appetite for development. This expectation was reflected against both-the need for professional development and the fulfilment of insatiable curiosity they each hold so that their resilience is sustained and thrives. Hence, interview comments demonstrated that the Unit's appeal was in that the environment allows them to grow, continuously develop and strengthen their professional capabilities. All interviewees saw this to align with their personal goals and expectations of life as professional soldiers. As an example, interviewee 8 shared:

"I didn't want just to be comfortable with what I was doing. I wanted to be the best I can be, and I knew this takes an environment that continuously challenges you and fuels your appetite for self-improvement."

The appeal of the context, as one that is by design, focused on "developing and not limiting" personal capabilities was evident in comments and consistently highlighted as both-a pull factor towards service with the Unit and a push factor away from

existing career paths. The opposite experience of organisational or team context was highlighted as one that has negatively impacted SAS members' resilience in the past. For example, interviewee 23 commented:

"I learned that nothing angers me more than people or systems that knowingly or negligently prevent others from doing their best. I could not perform in these environments. I am in the SAS, knowing I will be encouraged and expected to do and be my best all of the time."

Equally, interviewees emphasised that to be resilient and capable in their environment, SAS members need to feel authentically supported in living and displaying the values and goals they uphold as individuals. For example, in reflecting on what resilience needs and outlining what sustained his commitment to the Unit, interviewee 7 highlighted that key to his sense of resilience was his confidence that:

"The organisation will harness and respect the things that got me here".

Crucially, many commented that the professional skills and capabilities anticipated by SAS candidates were only appealing because they were accompanied by an expectation that individuals will be supported to perform in their full capabilities as experts and valued team members. Hence, though seen as a challenging environment, the Unit's reputation was that it was an environment that vested a great deal of trust in the individual and that it did not obstruct or limit their growth. In the words of one SAS member, interviewee 14:

"It was about my want to be the one that dictates my own goals and own fortune in my training and development so that I could serve to the best of my abilities." This was echoed in the words of another SAS member, who emphasised that to be truly resilient, SAS members need to "have full confidence that the organisation will support me in achieving my goal". Whereas many commented their growth was limited and restricted in some ways before joining the SAS, the Unit's reputation and expectations suggested it is a place where the "only limitations are those you set for yourself". Similarly, SAS interviewee 30 commented:

"The biggest fear for us is not being challenged! If we are in a state of rust-out, this can eat away at our resilience. Before the SAS, I was losing faith and focus, my attitude was becoming poor, and all I wanted to do was be in an environment where I was challenged and developed. I realised to be resilient, I needed to surround myself with capable and open people."

This was echoed by all other interviewees, who similarly described their drive and motivation to serve with the Unit as underpinned by the expectation that the environment will support them to be at their personal best. At the core of this motivation to develop was focus on the tangible, practical skills and capabilities that membership with the Unit promised to deliver. Comments consistently indicated that the quality of training and the exposures offered by the Unit presented an appeal that many considered impossible to ignore. In the words of interviewee 25:

"I knew that if I want to be at the peak of what I do as a professional soldier, there was simply no other route for me."

The SAS environment was considered one where everyone is expected to be their best, but equally, where the context supported and encouraged individuals to develop towards "being even better continuously". As noted, SAS members also identified growth mindset characteristics within themselves and their colleagues. They

highlighted that the Unit was seen as an environment where one can be "in a constant state of self-improvement". Interviewee 2 shared:

"Though we may all be different from each other, those that cross the finish line [of the selection course] and stick around are invariably the ones who had realised they would never know enough."

Whilst "being at one's best" and the need to "always develop" were identified as common motivations for pursuing and sustaining a career with the SAS, developing and maintaining the highest skillset and capabilities was a matter of necessity and survival in the SAS context. Crucially, the expectation that the organisation "has done all it can do to set me up for success" was seen by interviewees as vital for their resilience. Specifically, in the words of interviewee 21, members' resilience rests on:

"The expectation that our organisation will offer the tools and knowledge and build our capabilities to perform to the fullness of our potential in the greatest of challenges."

Interviewee 22 explained how this expectation from the organisation supports his personal resilience by saying:

"I will meet whatever my next challenge with the best readiness I could have summoned".

This sentiment was echoed by all interviewees, who emphasised the importance of deliberate and rigorous preparation, and the vital role this expectation served for ones' resilience. In the words of interviewee 1, resilience in the SAS thrives because "each new exposure and tool is building onto solid readiness". Interviewee 28 similarly emphasised that in this way, the SAS context:

"Cumulatively reinforces operators' sense of control, no matter the challenge they confront."

As noted, whilst broad spectrum development was key to motivation and seen as essential for resilience, interviewees comments consistently emphasised the importance of having pragmatic and practical developmental needs met, as necessitated by the demands of the operational environment. Interviewee 11 captured this sentiment by saying:

"The levels of risks and unpredictability in this environment are so high you never want to be left wanting! To feel resilient, you need to be able to step into each situation, knowing you've been prepared to survive."

Similarly, interviewee 4 stressed that to be resilient, one must have "unwavering trust and confidence that you have been given what you need". He added that without this sense of confidence:

"The moral ambiguity, intensity, lack of clarity or lack of buy-in could have disastrous consequences."

The level of confidence that as an organisation, the Unit will guide and help develop the capabilities needed for SAS members to survive and thrive in their environment was used to address every aspect of work, including training, access to equipment and access to information. Similarly, SAS members' resilience was seen as reliant upon the expectation that as an organisation, the Unit will select and train others in the team to be trusted and relied upon in the most demanding circumstances. Innate growth mindset and the desire "to be amongst the best" also meant that the ability to benchmark themselves against a strong cohort made the Unit a meaningful and highly appealing career goal, as well as a strong springboard for enhancing resilience. Whilst a component of this expectation was fuelled by innate growth-mindset, it also

highlighted the critical role commitment to readiness plays in supporting team trust and, ultimately, resilience. SAS interviewee 21 explained:

"I knew that here I will always be striving to be the first amongst equals. Everything in this organisation reminds you that you must be in a continuous development cycle, and you never rest on your laurels. You know you will not stop developing because you are a part of a group that values development and pursuit of excellence equally."

As a part of this, SAS interviewees identified a strong point of appeal for Unit membership in the "disposition, mentality and values" they saw displayed by SAS members before joining the Unit. Interviewee 3 shared:

"As a new soldier, I met a bunch of SAS guys on a task. When I looked at them, I remember thinking: "I really admire what they have learned"! They had brilliant problem-solving skills and the ability to work through challenges in new ways. They were humble, calm, and so capable. I wanted to develop so that I can be like them."

Many interviewees' comments highlighted that service with the SAS was seen as "the pinnacle" for professional soldiers. All interviewees commented that on a professional level, being a member of the Unit served as recognition of being at the peak of their soldiering careers, irrespective of one's rank or speciality. Crucially, all interviewees highlighted that the appeal of developing strong technical skills and capabilities was in place, chiefly because these meant they could perform and genuinely contribute in the operational environment. They recognised that to serve with the impact they hoped to achieve, the skillsets required could only be built within the SAS. Consistently, interviewees identified their expectation that the organisation will serve as a vehicle to have a greater impact and to be a worthy human, as core resilience need for them. To emphasise this, whilst some SAS members reported that

they joined the NZDF only so that they can pursue a career with the Unit, for others, joining the Unit became the only way to retain their commitment to service with the military. In the words of interviewee 15:

"I realised that I wasn't going to learn at the pace I wanted to if I did not go down the path of an SAS career. My only way of staying engaged with the NZDF was to serve with the SAS because of the opportunity to serve with impact in that environment."

Beyond the development of technical skills and capabilities, SAS members consistently highlighted the specific need and expectation that the organisation will help develop an even more resilient mindset within them as individuals. Summing up the reflections of his colleagues in describing the mindset they need for the organisation to support and sponsor, interviewee 2 commented that his colleagues:

"Craved being trained to be logical through a crisis".

Equally, comments highlighted the value SAS members placed on the exposures offered by the environment and the anticipation that these exposures will help frame their thinking and personal resources to sustain effectiveness, no matter the trials. This craving for growth exposures was associated with an opportunity to build even greater hardiness, perseverance, focus and determination. Interviewee 6 described what resilience needs from its context by saying:

"To condition and develop the habit of pushing a little past your line each day, to adapt and overcome, and the huge sense of satisfaction at the end of the day, if you keep driving. To condition the confidence to go into any space and see the unknown as an opportunity-to embrace it."

In summary, resilience in the SAS demanded the feeling of being consistently developed and supported through learning. SAS members identified curiosity as a

core shared value amongst them and a core resilience enabler in articulating this need. Resilience in the SAS context demanded an utmost commitment from the organisation to the development of an individual's technical skills and knowledge to fulfil and fuel their curiosity ahead. Hence, resilience demanded a challenging and meaningful career, a sense of adventure, variety of work and a sense of achievement. This demanded the conditions to perform to the fullness of one's potential and develop the best states of readiness.

More importantly, resilience demanded a commitment to developing the mindset for seeing challenges as key opportunities for growth and the capabilities to deal with the unknown effectively. The conditions for learning, and thereby resilience here, also needed to ensure SAS members felt developed and supported in their goals. Hence, SAS members emphasised the importance of feeling authentically supported in living and displaying the values and goals they uphold as individuals.

Shared Frame of Reference

The term 'Shared Frame of Reference' was the overarching heading, selected to represent another cluster of organisational and team factors, identified by SAS interviewees as key to sustaining their resilience. The term was extracted from the comments of SAS interviewee 6 who remarked:

"Shared frame of reference is the spine that holds it all together."

The core component of 'Shared Frame of Reference', as a resilience need, centred on the requisite for alignment between SAS members' personal values and beliefs and the values and tenets upheld by the Unit as an organisation. Comments focused explicitly on the expectations of how the SAS organisation and team "will behave" (or

the 'How') towards the individual SAS member and how these behaviours support individual and team resilience. Emphasis on such expectations was placed in discussions around motivations for a career with the Unit and what supported resilience whilst in service. Interviewee 30 explained the importance of a Shared Frame of Reference for resilience in the SAS context by commenting:

"For us, it is a matter of survival that we all understand what good looks like, that we all live by the same values and tenets we uphold. When these are in place, we can trust without question in those around us."

Describing the SAS Shared Frame of Reference as the "bedrock of team resilience", interviewee 4 explained the importance of shared values and tenets by saying:

"We respect that each of us is different, but we are made of the same cloth."

This current chapter explores specific examples of how the SAS tenets and values, the team's shared identity, and the ensuing organisational culture and behaviours support individual resilience. In defining what 'resilience needs', interviewees articulated clear and consistent expectations of the manner in which the context they operate in will relate to them and the opportunities these create for resilience to thrive in some of the most demanding conditions.

As mentioned, interviewees consistently commented that a strong sense of belonging serves as a powerful pillar for resilience in times of significant setbacks and trials, even when SAS members are physically removed from their respective source of belonging or support. Though the sense of belonging was a factor consistently identified as key to resilience, it played out differently for different SAS members. For some, resilience was linked to a sense of belonging to their organic family; for others,

it stretched beyond family to a sense of cultural or community belonging or shared faith. Nevertheless, all interviewees made references to their belonging to the SAS values and tenets as resilience enabling, and crucially-to the expectations these framed around the nature and patterns of the relationship between individuals SAS members and the organisation. Put to context, SAS members explained that such clarity of expectations was essential for resilience in the SAS role, chiefly because, in difference to other military units, SAS members and teams often operate in relative isolation. The overwhelming references to belonging through the organisational tenets and values and the vital role these were seen to play in supporting resilience was captured well in the words of interviewee 2, who commented:

"It's being clear and confident on exactly how the organisation has your back and what the team will do to support you."

In this context, a Shared Frame of Reference supported resilience by creating and sustaining a positive and enabling sense of belonging. Chapter 6 outlined several examples, highlighting how individual SAS members are expected to demonstrate their commitment and belonging to the team. Amongst others, these included "unwavering commitment to shared outcomes", "transparency with one's strengths as well as gaps", "openness to feedback from others", "the courage and integrity to give feedback to others, no matter their rank", "displaying a commitment to our tenets and values in every action" and "giving it your all, always". The sense of being trusted and trusting in others around them, "even when your colleagues are far removed", was consistently seen as pivotal for resilience in the SAS context. Interviewee 3 comments read:

"No matter what and whatever the trial, you know the code, you know the rules, you know what you are committed to and are never led to question whether your trust is in vain."

Interviewee 7 highlighted the vital role that adherence to the tenets and values play in the SAS environment by commenting:

"All SAS members, no matter their rank or experience, are expected to understand, espouse and uphold the tenets and values for themselves and others, in every action that they take".

As enabling for resilience, the SAS organisational tenets and values were described to offer "a strong and positive gravitational pool" and serve to sustain "clarity and direction" in times of significant trials. SAS members argued that accepting this shared and clear Frame of Reference fuelled a sense of trust in others and the broader organisation-vital for resilience in the SAS operational context. The shared frame of reference offered by the SAS tenets and team values were also seen to enable resilience by defining positive behaviours. Critically, in the words of SAS interviewee 21, these were seen to frame expectations of individual members and the team, whereby, they could feel:

"Bigger than just themselves, stronger than they would be on their own and committed to protecting a legacy that may otherwise seem to demand superhuman capabilities".

The need for a Shared Frame of Reference in resilience, outlined an unequivocal expectation that the Unit tenets and values, and the behaviours and attitudes sponsored by them, will be displayed consistently and in every aspect of how the organisation conducts itself. One of the common references in this context was "Who Dares Wins"-the motto upheld globally by SAS Units to highlight the mindset sought from its members and the organisation as a whole. This, along with the Unit's tenets,

presented values and principles that interviewees described as "appealing, captivating and aligned" with how they wanted to "relate to life and its challenges". In the words of interviewee 7:

"What drew me and kept me on this path was the Who Dares Wins mentality. It is the commitment to finding a workaround, the personification of the idea that failure is not an outcome. This principle needs to be clear in every aspect of the organisation, where people are encouraged to look for solutions and explore new frontiers with hunger and determination; it is the commitment to making ways for better with every action".

Another SAS member, interviewee 23 supported this by commenting:

"Your resilience can withstand a great deal when you are a part of an environment that demonstrates, with every action, that there is always a way around and a way ahead".

Notably, interviewee 34 responded almost entirely by referencing the SAS tenets. Whilst he shared rich operational experiences (that could not be shared in this work due to operational security), interviewee 34 exemplified the power the tenets deliver to individuals and the team.

This sentiment was consistent amongst interviewees, who argued that the demonstration of a shared, prevailing system of beliefs was essential for their resilience and ability to trust in the organisation with their life. Exploring the impact of a shared frame of reference on resilience, one interviewee emphasised that the "sense of belonging and comradely" ensuing from it is a "sacred thing" that is "nurtured with every action and jealously guarded by all". SAS interviewee 15 commented:

"Though in times of trial, I have questioned my ability to overcome the threat, I could not question I will ultimately give it my all, realising the values I am entrusted to protect and serve; the trust that is vested in me by colleagues."

The emphasis on the SAS tenets and the culture they sponsored signalled the importance of relevant, meaningful and captivating values espoused by all in supporting resilience. SAS members explained that though the SAS tenets served as a reference point for the individual's thinking and behaviour in testing times, the culture they support is intimately aligned with the SAS operational context's demands. One SAS member commented that "in the heat of the moment, the tenets broaden your sense or resilience", explaining they serve as a reminder of the legacy you are there to preserve and perpetuate. Crucially, SAS members argued that the "simplicity, pragmatism and applied necessity" of these tenets and values meant they aligned with individuals' value systems, whilst also demanding a stretch from each person, daily. In the words of interviewee 12:

"The NZSAS Ethos and Values support resilience because they create an expectation of each person, encouraging them to always strive towards their best and to maintain the highest order of conduct, humility and respect for others."

This was echoed by interviewee 2, who commented that his resilience and the resilience of his colleagues is enabled by the Unit's tenets and values, as they offered at once:

"Support, a respite from self-doubt and reminder of one's own best."

Another SAS member, interviewee 3, added:

Chapter Seven: A Context to Thrive In

"Your capacity expands or shrinks with the expectations that others display of you."

Interviewee 1 explained that a sense of belonging through the SAS tenets supports resilience directly, as in his words, the frame:

"The hope that in every situation, no matter how grim, there is always a workaround".

He added that the tenets are a reminder that:

"Each challenge is only a part of a journey, and nothing is insurmountable".

Exploring this further, several SAS members quoted a poem by James Elroy Flecker and specifically its opening lines:

"We are the Pilgrims, master; we shall go

Always a little further."

They used this phrase to highlight how belonging to the SAS through the heritage of the Unit supports resilience, as a reminder that the expectation of SAS members is:

"To never give in, and that all setbacks or trials, however big or small, are only temporary".

Further, SAS members argued the importance of how the organisation helps form and nurture positives membership to fuel resilience. Interviewee 8 explained that when done well:

"This allows you to see yourself not just as a part of something greater than yourself, but also as a part of something that is better as a whole".

Whereas they saw trust as pivotal in any relationship, SAS members argued that without "infallible trust" in the SAS environment ", resilience falls by the wayside" and that they could not see themselves perform in their roles or as a Unit without trust in the organisation. The emphasis on 'trust and be trusted' presented a different nuance to belonging by framing and lifting expectations of each individual and the team. In that way, belonging was seen not just as the sense of alignment and acceptance but also as a "shared commitment to outcomes". Interviewee 12 added this supported sense of faith that:

"The capabilities and commitment needed to achieve complex outcomes will be in place".

As noted, the unique SAS operational demands are such that team members often face challenges alone and experience long-term separation from their loved ones. Equally, the nature of operations demands the highest degree of mutual reliance and interdependencies between team members. This is further compounded by the levels of secrecy required in the role. The unique ways in which belonging needed to be demonstrated and supported within the team and with the organisation were outlined as critical for individual resilience. Interviewee 1 commented:

"I don't think any human would be able to sustain this level of demands if they did not feel an integral part of their team, not just through the tasks but also, through their relationships and interactions with others at work."

Several reflections demonstrated that no matter where each SAS member served at the time of the most significant challenge they confronted, the SAS values, tenets and culture "fuels trust", ensuring each team member "feels ultimately supported". Interviewee 4:

"So that we succeed as one team, we each need to be transparent with our greatest weaknesses and humble with our strengths, remembering how each of these plays a part in this space we share. This takes trust, and to perform and stay resilient here, you must feel accepted and encouraged to be the first amongst equals."

To emphasise trust's scope and importance, specific references to the SAS values and tenets and the shared commitment to positive outcomes these created were rife in the interviews. For example, the 'Unrelenting Pursuit of Excellence', which was also adopted as a personal resilience heuristic by interviewees, equally played a crucial role in defining what resilience needs from an organisational perspective. Interviewee 22 reflected on this tenet and the vital role it serves at an organisational level. He commented:

"I am like all of my colleagues in that amongst us, the fear of mediocrity is greater than the fear of injury or even death. As an organisational value, the Pursuit of Excellence meant that I would be given the space to be my best and not be obstructed here. Most of us step into this space with the expectations that the environment will seek our best of us and not create obstacles for us to reach the 'best' in us."

Similarly, another one of the SAS tenets-'The Highest Standard of Discipline', was highlighted as an organisational principle that supported SAS members resilience. This tenet was seen to create anticipation that SAS members are a part of a cohort that holds the highest standard of themselves and others. In the words of interviewee 12:

"My resilience is strengthened by being a part of a great brotherhood. The tenets you see in action and the actions you hear about demonstrate I am surrounded by dedicated, committed, capable and curious people. When you are a part of a group like

Chapter Seven: A Context to Thrive In

that, you find yourself more resilient. You learn, see, and sense make what is needed to do well, by association."

The SAS cohort's perception as one that holds the highest capabilities, commitment, and dedication was consistently reported to have created strong appeal and desire for belonging amongst SAS candidates. Ultimately, in the works of interviewee 14, the demonstration of this tenet was also seen to support resilience as it meant:

"You will not be obstructed by minor white noise."

And,

"No-one will drop the ball on you."

By virtue of these qualities, interviewees described the SAS environment as more "organised, effective and efficient"; and as shaped in a way that ensured "proactivity, expediency and the greatest impact". For example, interviewee 31 commented that the tenet supported his resilience because it:

"Prescribed and conditioned an expectation, that actions will be purposeful, meaningful and of the highest standards."

The expectation that "everything here has a purpose" was consistently described as a critical resilience need that the organisation fulfils, as well as a vital motivating factor for pursuing a career with the Unit. The tenet-The Highest Standard of Discipline was further referred to, as it specifically calls out:

"In maintaining the highest order of discipline, we reduce the need for bureaucracy and unnecessary rules".

The tenant goes on to prescribe:

"In the Regiment, we rely upon each individual to do what is right and to the right standard. We take the right road, not the easy road. The result is agility and freedom to innovate."

"Freedom to innovate" and "not be obstructed by the unnecessary" were organisation-sponsored factors seen as essential by many interviewees for SAS members' ability to tap into their curiosity as well as their resilience. Interviewees consistently described these factors as key to enabling performance in some of the most demanding conditions. Equally, whilst reflecting on his experiences in a previous work environment where he felt "bureaucracy and unnecessary rules" significantly detracted from his resilience, SAS interviewee 12 commented:

"I felt removed from the Mission by layers of administration and command. As a young soldier, I felt frustrated by this-things were so convoluted. The distance between my drive and my opportunity to contribute was too great; I didn't feel I had a purpose or use being there.

Perceived bureaucracy and unnecessary rules, including "inflated and redundant emphasis on rank," were seen to have negatively impacted several SAS members' resilience. The expectation that these elements will not be a part of the daily experience of work in the SAS environment was consistently seen as a key motivator for joining and remaining with the SAS and essential for maintaining resilience on operations. For example, interviewee 2 commented that "what sometimes felt like greater emphasis on rank rather than on merit" limited exposure to information he had in previous work environments in a way that made him feel "disengaged" and made him question his commitment to service. He further commented:

"When you are siloed by virtue of rank, and you get limited information, you are left thinking-'ls this worth my time? Is this worth

my life'? I couldn't trust as much as I needed to and I didn't feel trusted enough. I was doubt-ridden and busy 'reading the game'. This made it difficult for me to persevere."

Hence, along with meaning and purpose, another organisational factor commonly attributed to the resilience of SAS members was the experience of greater equality between members of the team. Here, SAS members quoted the tenet 'Brook no Sense of Class'. Comments emphasised that the behaviours and attitudes ensuing from this principle support resilience, as they signalled the organisation will support the "individual to contribute by virtue of their innate capabilities and talents, rather than their rank or origin". Combined with the tenet Humour and Humility, the ensuing behaviours and attitudes were seen to support resilience as they meant, team members feel "respected, trusted and accepted". Interviewee 23 shared:

"To be resilient, as an individual and as a team in the SAS, you need an environment that values different perspectives. Different perspectives mean more possibilities. When everyone can play an equal part in shaping the outcome ahead, you move and grow as one; you move better and faster. I wanted to be a part of an environment where you are valued for the differences you bring and where those differences lead to greater outcomes."

The importance of value alignment, equality and space for authenticity were consistently raised as key factors that supported and sustained resilience in the Unit. Reflecting on the diverse make-up of the team, interviewee 1 commented:

"So that you are at your best, you have to be you. In our previous roles, many of us had tried to fold ourselves into pretzel to fit in. But when you cannot be yourself, the cracks begin to show. We leak the truth and so when you are not free to be you or are in a context that you feel misaligned with, you cannot feel happy, resilient or useful."

The behavioural norms and cultural expectations ensuring from the 'No Sense of Class' and 'Humour and Humility' tenets, were seen to serve resilience in a number of ways. However, key to these were examples that highlighted the importance of mutual "commitment and acceptance". Interviewee 22 put it:

"Team members can share the impact of their complex work-life with others in the team, without fear of being judged and with the expectation of being supported."

The expectation of comradely amongst operators was seen to support resilience in that it "acknowledged kinship and commitment to ongoing support", whether this was amongst currently serving members or with and amongst veterans who have once been a member of the team. As they reflected on the immense demands of their professional life's, including the heavy expectations of personal sacrifice and of degrees of secrecy and confidentiality in the role, SAS members spoke candidly of the sense of comradely and support they felt amongst current badged members as well as with retired badged mentors. It was an expectation that "as you will be demanded of, the environment will provide with equal readiness". Interviewee 10 commented:

"We can never be as resilient as we need to be here and thrive if our environment takes away from us more than we are willing to give, questions our foundation or fails to lift you up when you are down. You cannot be expected to operate without utmost trust or commit to what we need to achieve in our context, without trusting and being trusted. But that goes beyond skills and task-based deeds. You prove and earn trust equally in the moments of respite, recovery and reflection, as well as on operations. To be effective, you have to be the whole of you to be one of us, and that also means, you have to wholly accept your brothers and feel accepted."

In summary, Shared Frame of Reference captured the importance of clarity around 'how things are done around here' or 'rules of engagement' interpersonally as well as between the individual and the organisation. This emphacised the importance of clear, aligned and consistent expectations of the ways in which every member of the team relates with others, the Mission and the wider organisation, as well as how the team and organisation will relate to the individual. SAS members demanded confidence in knowing how and what the organisation and the team will do to support them, arguing that without infallible trust, resilience falls by the wayside. Resilience in their context demanded unwavering confidence in this regard. To support resilience, these 'rules of engagement' needed to be consistent and aligned with the unique needs and demands of the context. They also emphacised on the importance that these need to be relevant, meaningful, captivating and displayed consistently, in action and by all.

The importance of Shared Frame of Reference for SAS members' resilience was in creating the effect of feeling "bigger than just themselves, stronger than they would be on their own" and "better as a whole". To achieve this effect, SAS members sought alignment between personal values and beliefs and the values and tenets upheld by the Unit, as an organisation. As an example, the shared frame of reference in this context supported resilience by engendering the feeling of being an integral part of the team as well as being authentically supported in living and displaying the values and goals upheld by individuals.

Clarity of Purpose

Whereas Chapter 6 focused on the role personal Clarity of Purpose plays in supporting resilience, this current chapter outlines reflections around how shared

Clarity of Purpose contributes to resilience. It focuses specifically on the SAS members' needs and expectations in terms of organisational actions and indicators to be displayed for individual resilience to thrive in the SAS context. Further, whereas 'Shared Frame of Reference' explored the need for alignment between SAS members personal values and beliefs and the values and tenets upheld by the Unit as an organisation or the 'How,' this current cluster of responses focuses on the 'Why' and the ways in which context and organisation support and enhance resilience through Clarity of Purpose.

Access to and alignment with the 'Why' or in the words of one interviewee, "how well the goal was understood and espoused" by the individual was found to support resilience directly and to aid recovery following potentially traumatic events.

Interviewees consistently emphasised the vital importance of Clarity of Purpose for sustaining SAS members' resilience in the face of operational challenges, as well as during the highly demanding SAS selection and training cycles. In the words of interviewee 1:

"Unless you truly believe in the mission, I don't think you can expect your whole of brain to be engaged with the challenges on route; your doubt will creep in. Rather than thinking of a workaround, you'd be thinking of ways out."

In describing the broader function of this resilience need, interviewee 16 argued that:

"The SAS environment, where there may be limited support as well as significant demands for personal initiative and adaptation, necessitates clarity of purpose. This allows intricate comprehension. The highest levels of commitment are required

here to sustaining performance, and you can only have that through solid clarity of purpose."

Interviewee 20 supported this by explaining that in the multifaceted SAS operational context:

"Success is achieved through transparency and informed buy-in at the team and the broader organisational levels."

Interviewees explained that in difference to other roles, where less personal threat may be involved, the significant levels of risk associated with the SAS role, meant greater clarity is needed, so that SAS members can "engage the whole of self". SAS members explained that in their operational context, this was evidenced "in the risks associated with poorly understood mission objectives, operational context or the individual's own role", but chiefly and most impactfully, "in the risks associated with low or misguided buy-in, lack of proportionate readiness and thorough comprehension around the 'why' you are here to do what you do".

Again, indications around this resilience need and the manner in which the context and the organisation support and enhance resilience, also emerged from comments focused on what sustains and drives motivation for service with the SAS. One of the most dominant comments around reasons to pursue and sustain a career with the SAS centred on the expectation that being a part of the Unit will support one's need for a "purposeful life". This theme was consistent amongst most interviewees and comments highlighted that "the opportunities to contribute", and to "positively influence outcomes through the role" presented as strong points of appeal, driving and sustaining the desire to pursue and maintain a career with the Unit. Crucially, multiple comments emphasised that the capacity of the organisation to support individuals' drive for purposeful life, enabled their personal sense of resilience. For

example, one SAS member commented that the goal to develop technical or expert skills was only relevant in that it offered greater opportunities to "serve and to do good as a soldier". Equally, SAS members commented that the impressions and expectations they had developed of service with the SAS presented a strong comparison point against the experiences they had accumulated in their roles prior to joining the Unit. Many reported that prior to joining the Unit, they felt a sense of being limited in some way. In the words of interviewee 2:

"No matter how well my needs appeared to be met and how tidy the layers of life seemed, I felt increasingly on edge. I felt that my life was passing me by, and I had taken on the road of least resistance. There were times when I felt guilty as well as restless-I felt I was taking more than I was giving and that I was hiding. No matter how hard I worked, I felt removed or unclear on outcomes I could influence."

As noted in this chapter, many SAS members reported that, the experience of being disconnected from or unclear of the purpose they served, led them to feel "under-utilised", "under-stimulated", "detached or disengaged" in previous work environments. Equally, they reported these experiences as being detrimental to their personal resilience. And whilst outside of the SAS environment sense of disconnect or lack of clarity around the organisation's 'Why' or Clarity of Purpose led to dissatisfaction, many commented that in the SAS environment, the impact of this experience is amplified. Interviewee 23 commented:

"It is impossible and even dangerous to try and sustain performance or motivation without clarity of purpose here". SAS members consistently commented that they were motivated to serve with the SAS because they believed the Unit could support them in fulfilling their own "personal sense of purpose". Interviewee 12 explained:

"The capacity of individuals to contribute seems greater in the SAS context by virtue of the training and skills SAS members gain, as well as the greater freedoms to question and seek to understand, as compared to traditional military units."

Equally, interviewees commented that they expected their capabilities as soldiers and individuals will be further developed by greater access to information-often limited by rank in the broader NZDF, and opportunities for broad exposures and engagement as equal team members. Looking back into their preferences and characteristics prior to joining the Unit, SAS members often described themselves as curious, restless and "eager to be involved". The SAS environment's appeal was that it offered to develop innate capabilities and engage through broader exposures and richer awareness around the intricacies of the challenges they were committing totransparency and awareness they felt may have been less accessible in their services with the mainstream NZDF. In the words of interviewee 31:

"In the general Army, I felt restricted and limited by my rank. All I know of the SAS is that there you are trained to keep striving for solutions with an exposure to the bigger picture, no matter what your rank."

As a part of this motivation, SAS members consistently commented that the SAS environment was appealing because they saw it as one where they could be "free to voice their opinions, unobstructed by rank and bureaucracy" and could "have a greater impact by virtue of being more trusted and engaged". The freedom to question, shape outcomes, and grow so that one can "respond to and influence their

environment" were vital in sustaining drive and ongoing commitment to service with the SAS. In the words of interviewee 2:

"I believe in committing my life to the greater good. As soldiers and service people, we all join because we want to help and feel useful. I think this is increasingly more the case for our generation. We get greater exposure to the complexities of human life. To be resilient, I need to feel useful and trust in my abilities to impact what I believe in. The freedom to voice your opinion and the opportunity to really contribute made it impossible not to want to be a part of the Unit."

Looking back into what inspired them to pursue service with the Unit, SAS members explained consistently that they saw Unit members as more "capable, self-reliant and effective". Also, the emphasis on "equality" and the "greater freedom to question and influence" was consistent amongst interviewees, and they saw these as indications that they could be freer to fulfil their "own sense of purpose through the role".

Elaborating on the importance of the SAS values and tenets in the context of Clarity of Purpose, interviewee 12 commented these served as a source of confidence that "the Unit will meet individual needs for meaningful involvement and purpose, trust and equality". Commenting, "I expected this role would give me a sense of having a full existence", another SAS member, interviewee 30, disclosed how the values and tenets of the Unit, combined with the quality of training and the calibre of Unit members, made him feel confident that he could "really make a difference".

Finally, comments highlighted that for many, joining the SAS was in continuation of a longstanding family legacy or the desire to follow in the footsteps of others they admired as individuals. Many recalled the impact of past encounters with Unit members or impressions of the SAS on their value systems and personal goals. In the words of interviewee 19:

"I had a family history with the Unit-my granddad. I wanted to experience for myself stories like the ones he shared with me, to get the chance to implement the skills he had taught me and to one day have inspirational stories of my own for my grandchildren. His were stories of great adventures, but what mattered the most was how my granddad and his colleagues had contributed and helped; how they lived a life of values, purpose and meaning. They lived their lives to help others."

Interviewee 15 commented that his knowledge of SAS veterans and, in particular, "the sense of pride they felt in how they had used their life's, the integrity of their actions and their values" made service with the SAS the only career path he could see for himself. This was consistent with most other SAS members' comments, highlighting that a crucial component to pursuing a career with the Unit and sustaining their resilience whilst in the organisation was the role's perceived meaningfulness. Consistently, SAS members reflected that they pursued a career with the Unit to ensure that they could make a positive impact on their environment, contribute, and feel that they have really made a difference with their lives. For example, interviewee 11 recalled:

"The selection course and the training that followed were agonisingly hard. There were times when a part of me would crave the comfort and simplicity of the life that I was moving away from. But then you get to think of all the spaces you may find yourself contributing in-it puts your temporary discomfort into perspective. I knew that if I made it through this, I could be a vehicle for others to live longer, better, freer life's."

Similarly, SAS members felt their resilience was reliant on the organisation, maintaining transparency with goals and vision. This offered the opportunity to

engage more meaningfully with the Mission at hand and be fully involved. Interviewee 2 commented:

"When the pressure is on, you need to be equipped with all the information you may need to make the right decision. The SAS is at the sharp end of the spear, and to operate effectively, you are never left to wonder 'why' you do what you do. When the organisation keeps you informed and involved and allows you to take control, to have a voice when it matters and no matter what your rank, this is invaluable! You are aware that you are still just a cog in the SAS, but you feel far more functional and useful. You get a much clearer sense of how you contribute and the space to contribute directly; to make choices."

In summary, access to and alignment with the 'Why' or the purpose was vital to resilience. The degree to which the goal or Mission is understood and espoused was found to significantly affect individual resilience in the demanding SAS context.

For this to be achieved, SAS members underlined the importance of utmost transparency from the team and organisation around the goals and Mission they are pursuing. This supported informed buy-in, which served the intricate comprehension and commitment levels required to sustain resilience in their context. In this way, focus and energy were invested in exploring how to achieve the goal rather than disambiguating mixed messages or poorly articulated missions. This supported clarity and conviction in committing and pursuing the goal, which fuelled perseverance and access to curiosity in exploring alternatives.

Beyond access to information, resilience under this umbrella was also supported by the freedom to voice opinions and engage with purpose, irrespective of one's rank. In this way, the emphasis on 'purpose and not rank' sponsored engagement, trust, and the sense of being trusted, in turn enabling greater access to and strengthening resilience.

Summary

The SAS team and organisational context had a vital role to play in supporting and developing individual resilience. The expectations SAS members had of their context were consistent and explicit and were seen as an integral component of the reputation and innate value of service with the SAS. 'Context to thrive in' as a response to the question "What does resilience needs from its context?" outlined three overarching and crucial expectations: Learning, Shared Frame of Reference and Clarity of Purpose.

SAS members argued that resilience demands learning, and hence, they expected that their context offers this so that they fulfil and grow and fuel their curiosity ahead. This was unquestionably underpinned by the belief that curiosity is critical for resilience in ambiguous and highly demanding conditions. Under this umbrella, the context contributed to SAS members' resilience by developing and supporting them in the direction of their goal and the overall team mission. Reflections stressed that the SAS role is demanding and all-engulfing. For resilience to thrive, SAS members outlined that their context should never permit doubt that this is the best place for them to commit their potential. SAS members acknowledged it is essential for them that their team and organisational context do not obstruct them from pursuing a challenge or a vision but instead encourages them to achieve and surpass it. Learning was linked to the expectation that the context will support them to grow, develop and contribute most impactfully by virtue of their membership with the team. This resilience need was fulfilled explicitly and formally through role-specific and

personal development but also nurtured and fulfilled informally through the interactions between and across the team.

This leads us to the second layer of expectations- Shared Frame of Reference. This resilience need was framed by an expectation of explicit and unwavering clarity around how the organisation and the team will relate with each individual and how the individual will relate to their context. In other words, this need demanded that to be resilient, every team member needed to be clear on how they will be enabled and supported and how others will expect them to enable and support those around them. The need for this level of clarity was seen as proportionate to the challenge and sacrifice entailed in the role.

Implicit in the Unit's tenets and this expectation was that patterns of engagement and the values upheld by every member of the team would be such that they strengthen and fortify individual resilience for the betterment of the Mission and the individual. This emphasised the by-directional relationship between individual and team/organisational resilience. It also demonstrated how by stimulating shared commitment, enabling values, trust, and belonging, the SAS context creates conditions in which shared setbacks have a strengthening effect on resilience.

Finally, resilience in the SAS context framed the need for utmost Clarity of Purpose. Access to and alignment with the purpose or the 'Why' was seen as vital not only for individual resilience but also for their team's resilience. SAS members argued that it is dangerous and even impossible to sustain commitment in the absence of Clarity of Purpose. Their experiences signalled that no matter how innately resilient, individual resilience goes by the wayside when there is doubt, lack of clarity or buy-in. They stressed that to sustain their resilience, SAS members need to feel free to

ask questions, voice their opinions and explore, irrespective of rank. In this way, resilience was supported by the context, as they were free to invest energy in exploring ways to achieve the purpose or goal they have embraced, rather than working on disambiguating information or fighting doubts.

CHAPTER EIGHT: INTEGRATION OF FINDINGS AND FRAMEWORK

Overview

This research was in search of a framework to aid recovery and build and fortify resilience following significant demands, exposure to ambiguity and setbacks. It aimed to identify 'what goes right' in resilience by studying individuals who thrive in ambiguity in some of the most demanding conditions. Key to this research was the realisation that a better understanding of how to develop and enhance resilience demands the construct could be viewed through the prisms of curiosity. The aim of the research narrowed to define how curiosity serves as a resilience enabler. This chapter further outlines the core principles or heuristics shaping the playbook of resilient individuals and depicts the effects of context on resilience. This chapter is committed to exploring this elevated and reconstructed view of resilience through curiosity. It offers an integrated model of resilience by weaving together key findings from each data chapter. The model unfolds and builds in consecutive segments of this chapter, mirroring key insights from the data and demonstrating a stage-wise approach to building and sustaining resilience.

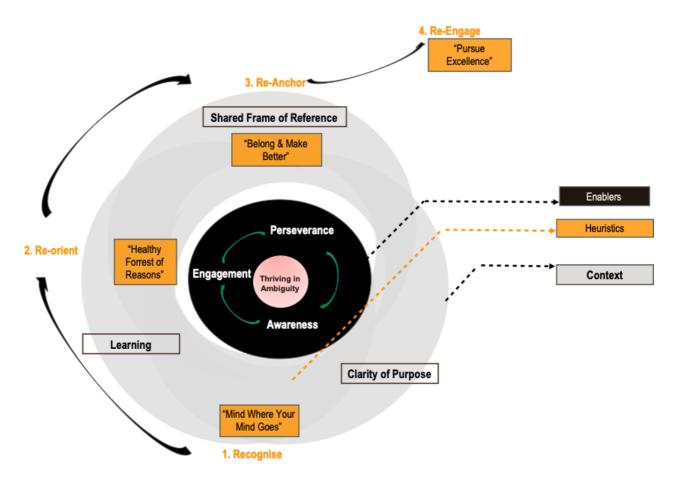
Chapter 5 explored SAS members' reflections on how curiosity plays a part in supporting their resilience. Chapter 6 explored the core principles SAS members rely upon to build and sustain their personal resilience in times of significant demands and trials, framing and outlining the patterns of thinking and engagement required to sustain capacity for thriving in ambiguity. Chapter 7 focused on what SAS members

described they need from their context in order to build and sustain capacity for resilience and meet the expectation of thriving in ambiguity.

True to the principles of constructivism- the paradigm framing this research, Chapter 8 presents an interpretation of the data depicted across chapters 5, 6 and 7. It connects the findings across the three data chapters by employing curiosity as the frame that holds these together and against which the impact of context and the resilience heuristics are explored.

It is in this way that Chapter 8 present a view of resilience reconstructed through curiosity. It delivers an integrated model that links the effects of curiosity on resilience with the effects of context, aligning these together with the SAS resilience heuristics (Figure 10, next page). Crucially, Chapter 8 presents the extracted cadence of the SAS Process to Resilience in a model and reviews the data through curiosity and resilience as the axis.

Figure 10: The Integrated Model of the relationship between curiosity, resilience & context



The layers to this model are presented progressively in subsequent sections of this current chapter. Each segment of this chapter integrates existing literature with key findings of this present research and cumulatively builds on the previous segment to present an even richer perspective of the relationship between curiosity and resilience. The models introduced in this chapter and its structure are intended to further support understanding of the role curiosity plays in building, sustaining and developing resilience. Equally, this model demonstrates how contexts geared towards resilience support and sustain capacity for resilient outcomes (Ducheck, 2020), in turn enabling or skewing our capacity to thrive.

This present research contributes by responding to the need to show what resilient outcomes may be and how these may emerge or, in other words, "What goes right" for resilience in some of the most demanding conditions. To better frame the context for this chapter, the following section (Defining Resilience in the SAS) extrapolates and summarises key SAS reflections, specifically focused on the ways in which resilience is viewed and understood in the SAS. This section also outlines the Process to Resilience- a model built out of SAS members' reflections on how they orient towards strain, ambiguity and unpredictability. The present chapter then builds the next layer to the Integrated Model of Resilience (Figure 8) by reflecting on the reconstruction of resilience through the prism of curiosity (Chapter 6), integrating the SAS Resilience Heuristics (Chapter 7) and then extracting key reflections on the role of context and building these into the model. This present chapter then concludes with an iterated version of the findings by depicting 'What goes right' in resilience through the axis of resilience and curiosity.

Resilience in the SAS Context

Redefining Resilience

In weaving the chapters of this research together and, specifically, the interplay between curiosity, resilience, and context, it is important to first underline SAS members' unique perspectives around the construct of resilience itself. This next section outlines SAS reflections, specific to their conceptualisation of resilience and as extracted from the three data Chapters.

Interviewees placed keen emphasis on the view that resilience is indeed a multifaceted construct and, importantly, that it may unfold differently for different

people and in different contexts, phases, and stages of our lives. When reflecting on what resilience looks like and how it operates in some of the most demanding conditions, SAS members outlined various individual, situational and contextual prerequisites for resilience. Amongst their individual references to resilience were the capacity to resist the negative effect of stress and anxiety and maintain equilibrium, the effectiveness of change responses, the ability to adapt to stressful events healthily and constructively, and the capacity to thrive in ambiguity. SAS members also conceptualised resilience as the capacity to find workarounds, where these may not appear to be readily available; the readiness to evolve or shift existing schemas or conceptual frameworks when they no longer prove fit and the propensity for growth and even for contribution, following setbacks. This present research mirrors and practically extends a wide range of existing literature, arguing resilience should be viewed as an active, even pro-active, purposeful and intentional process that drives our capacity to reconfigure, anticipate and thrive in the unexpected, as well as an umbrella construct, that marks the cadence to authentic thriving (Duchek, 2020, Walker et al., 2019).

Each chapter of the present research contributed to the long-standing quest for understanding 'what goes right' for people who negotiate potentially traumatic events with equanimity (Hamby et al., 2018). However, SAS interviewees appeared to display less interest in exploring resilience simply as a measure of surviving trials or even on navigating challenges with equanimity. Indeed, their reflections were quick to attribute innate survival instincts and their technical training with such outcomes. This SAS view of resilience, informed by experiences in contexts of significant ambiguity and evolving demands, supports the call to redirect focus towards the capacity for development, growth and bouncing forward, rather than a recovery or

bouncing back following adversity (Walker et al., 2019). The above SAS reflections on resilience also echoed and supported references offered by a long line of scholars, including Hart et al. (2005) and their focus on resilience as the capacity to thrive in ambiguity; Pickering et al., (2010) and their commitment to resilience indicators such as adaptability, positive and constructive responses, and growth, as well as Friborg et al., (2009) and Wu et al., (2013), who argued resilience should be seen in our capacity to resist the negative effects of significant demands and our ability to maintain equilibrium, amongst others.

SAS interviewees further highlighted that in their context, where the need to operate effectively in ambiguity is a vital necessity, they never go back to where they once were in the same way, or more importantly, to what they once were. They bounce forward through new learning, growth and experiences and 'build better ahead' through a broadened resilience baseline and equilibrium, following every encounter. Indeed, the measure of resilience arising out of interviewees' comments was less about whether one can make it through the trials of life and more around how they choose to gain and grow from these intentionally so that they can fulfil and even surpass their best potential. With these reflections, SAS members build on Hamby et al. (2018) views that resilience is about poli-strengths and the diversity of the individual's overall portfolio of such resilience strengths. Importantly, SAS interviewees argued that in many instances, the most resilient response might be in absorbing and sitting with the impact of events, allowing this impact to shift and change us for the better. This builds on the view that challenge and adversity are essential for resilience (Goodman et al., 2017; Richardson, 2002; Walker et al., 2019). Not surprisingly, in unpacking what they perceive resilience to be, SAS interviewees shifted our attention away from the absence of impact and insteadtowards the individual's capacity to grow and thrive, despite or even because of impact.

Amongst the most powerful examples of resilience revisited in interviews were equal measures of times when impact was felt and when impact was skilfully buffered against. On the one hand, the present research adds pragmatic and tangible layers to the differentiation between recovery and resilience by adding to the outcome trajectories' nuances expected from a resilient journey (vs a journey of recovery) (Bonnano, 2004). On the other, SAS members' reflections intimately outline the role of curiosity, particularly appetite for growth and development and the capacity to absorb and grow with exposures, as key to resilience. This further contributes to research in both resilience and curiosity, including references around curiosity's function in 'stretching' with and 'embracing' the unknown (Kashdan et al., 2009).

Beyond these references, the present research redirected the focus on resilience, towards the capacity for engagement and even contribution, following potentially traumatic exposure or significant trials. Rather than simply survival or recovery, the SAS's resilience was more about the ability to broaden and maintain influence over ones' environment and experience of life and to sustain a commitment to ones' defining values during and following trials. These SAS references to resilience build on and add to a long line of research, demanding that resilience be viewed as a level of plasticity that affords growth, positive transformation and learning, and crucially as the commitment to self-actualisation (Almedon, 2005; Connor & Davidson, 2003; Friborg et al., 2009). They also confirm and broaden references to resilience as the capacity to "transmute the energy of change to benefit self and others" (Walker, 2019, p. 216). This is explored in further detail later in this chapter, in reference to

the resilience heuristics and, specifically- Belong & Make Better and interpersonal curiosity.

Anecdotally, some SAS interviewees intentionally used an analogy of "potatoes" and "orchids", when trying to simplify their construct of resilience by placing it on a continuum between. Whilst the analogy of potatoes and orchids may have appeared too simplistic of a reference at first glance, this mirrors paradigms from the differential-susceptibility framework and the phenotypes of resilience and individual differences (Belsky & Pluess, 2013). On the face of it, the arising assumption may be that one side of the continuum, the potato may be more resilient than the orchid. However, discussions unfolded towards the view that ones' processes of responses may only be judged as resilient, in the full light of their unique context.

Crucially, discussions directed us towards the view that different capabilities and characteristics can lead to equally resilient outcomes, albeit in different ways. Whilst some of the existing research focuses on the concept of equifinality as a personal capability from which to build and sustain resilience (Walker et al., 2019), the present research adds a unique perspective to this equifinality reference. Specifically, SAS interviewees' continuum of 'potatoes to orchids' stresses the importance of seeking, respecting and nurturing different pathways to resilience, especially within tight and diverse teams, where interdependencies are a crucial component of survival. This SAS continuum and the plethora of associated references offered by this research demands we direct more energy towards studying the effects of individual strengths rather than vulnerabilities (Liu, Reed & Girard, 2017). The applied references to SAS members' views on resilience further add to and extend the works of Goodman et al.

(2017) and, specifically, their commitment to studying the effects of resilience strengths robustly and as a multi-dimensional construct.

Building on these, SAS reflection firmly framed resilience as a holistic and dynamic process of choices and deliberate interactions (rather than an isolated trait or a set of traits) (Chmitorz et al., 2018; Goodman et al., 2017). As noted, references to resilience as a 'process' are important to the present research because they explored resilience in the interactions between the individual and their context. These are also important because the present research was interested in resilience as a mindset that can be deliberately developed and nurtured through replicable steps and actions (or processes) that are informed by and that inform mindset for resilience. The SAS references also build on the works of Walker et al. (2019) and Coughlin (2018) and their commitment to shining a light on how context shapes and influences capacity for resilient outcomes. In this same spirit, SAS members argued that resilience relies not only on the capabilities of the individual and the mindset or worldview they hold but also on an enabling relationship between the individual and their context.

The present research further builds on the calls for an integrated and holistic view of resilience (Liu et al., 2017). It supports and strengthens research in the direction of developing long-term resilience through cumulative effects of learning and positive life trajectories, as framed by successful coping and multiple protective factors (Sattler & Font, 2018; Walker et al., 2019).

Exploring this further, interviewees consistently reflected that the capabilities required for resilient engagement in their context are the culmination of multiple individual, team and contextual factors and argued that these are often built

cumulatively and progressively. Hence, in many cases, SAS members used references to resilient traits, outcomes and strategies interchangeably. While some researchers have shared historic reservations with this approach to resilience (in Sonuga-Barke, 2017), SAS members' applied resilience experiences suggested it is impossible and even unreasonable to segment resilience. Their resilience experience challenged us instead to focus on and appreciate the interdependencies between traits, context and outcomes, and to view these as an evolving relationship rather than isolated areas.

Evidently, amongst many of the references shared during the interviews, resilience was viewed as a state to pursue and continuously develop towards, far more than a fixed trait or a set of traits. Discussions with SAS interviewees also focused attention on the questions-"resilience for what?" and "resilience according to whom?" SAS members agreed that resilient outcomes might be indicative of some resilient traits and strategies. However, they also felt that what mattered more was the process and sequence of choices and decisions and whether and how these inform ones' lifelong journey, rather than narrowly measured outcomes of a specific event. Many agreed that in order to thrive in the SAS context, individuals might benefit from certain traits and capabilities. SAS references mirrored the clusters of personality traits offered by Skodol (2010) and Compass et al. (2017). However as noted, interviewees' overwhelming focused on the pursuit and ongoing development of resilience as a state to be nurtured and grown, irrespective of one's starting point. Hence, the views captured in the present research provide empirical support and further enhance a long line of research, demanding resilience can be developed throughout our lifespan and should be viewed as a dynamic process rather than a stable trait (Chmitorz et al., 2018; Jensen, 1995; Corner, Singh & Pavlovich, 2017).

Building further on references to context and traits, discussions with SAS members were fuelled by a tangible sense of unease. That resilience is often assessed entirely against the outcomes of isolated events and inspected retrospectively, often in the absence of deep, contextual awareness. This sense of unease was born out of their applied experiences of resilience in unfolding situations of acute ambiguity and unpredictability, where SAS members emphasised again that you cannot separate the individual from their context. This unease echoes concerns raised by a myriad of researchers, including Cornwall, who reflected:

"Resilience is not an unproblematic good if it means having to draw solely on internal resources in order to cope with an objectively disordered world" (2018, p. 111).

It also echoed and added applied context to concerns reported by Duchek, who criticised existing research for often assessing resilience against the outcomes rather than the processes underpinning it, judging resilience retrospectively and valuing it predominantly in the absence of 'failure' (Duchek, 2020). The significance of this reference to resilience is amplified in the SAS context, where failure can spell disastrous consequences.

Hence, SAS members' experiences provide further support for research that challenges us to examine the interactions between the individual and their context or environment (Liu et al., 2017; Sandler et al., 2008), as well as the strength and direction of the relationships that influence the individual's experience of life, access to strengthening effect and capabilities (Marriot et al., 2013; Bartone et al., 2013; Britt et al., 2013). SAS members' insistence on viewing resilience in context also supports the work of Boermans et al. (2012) and Aude et al. (2014), who considered

internal resilience capacity from the individual as equally important in achieving resilient outcomes as resources that are external to the individual.

Furthermore, the above SAS references build on the work of Goodman et al., who saw resilience as a "series of mechanisms", an interaction between "an individual's unique resources and the events he or she experiences" and a dynamic process that "depends on the context of life events and responses to them" (2017, p. 424). In connecting these references with this work's Process to Resilience model, it can be argued that whilst curiosity's enablers (Chapter 6) and the SAS resilience heuristics (Chapter 7) fuel the essence of resilient orientation and responses, the SAS team and organisational context (Chapter 7) are just as powerful. They fortify and frame access to these functions by shaping the SAS members' context of life.

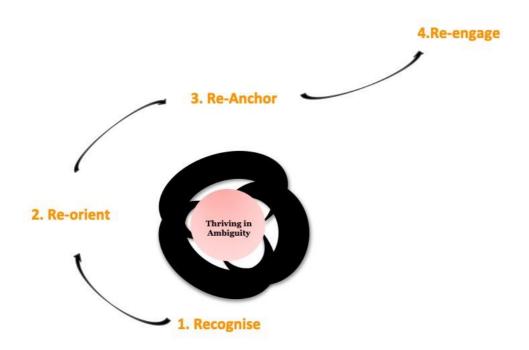
The SAS Process to Resilience: Steps on an Evolving Journey

The following section unpacks SAS members' reflections on resilience by placing the limelight on the process rather than the outcome of their resilience journeys. The proposed Process to Resilience outlines the specific steps SAS members selected and trained to thrive in stress, ambiguity and unpredictability, traverse on their evolving journey to resilience.

Notably, whilst all SAS interviewees contributed with unique perspectives and diverse experiences, their reflections indicated that they all appear to take on a consistent approach to thriving with resilience. Indeed, in their debriefs, they identified a stagewise and a gradual process that emerged against four stages. These were labelled here as the 4Rs- Recognise, Re-Orient, Re-Anchor and Re-Engage (Figure 11).

Chapter Eight: Integration of Findings and framework

Figure 11: The 4R model of the approach to resilience



Likely, the highlights of this Process to Resilience and the consistent cadence with which interviewees debriefed their experiences are influenced by their shared military training. For example, the OODA (Observe-Orient-Decide-Act) loop model was developed by the military strategist Colonel John Boyd in the late 20th century and used to frame the concept of combat operations, which appears to follow a similar cadence (Clarke, 2019). The OODA loop model was developed to sponsor agility in engaging with the enemy on the battlefields tactically. The 4R model presented in this research (Figure 8) is framed against our broader need to thrive in ambiguity, and hence is specifically tailored to resilience.

The sequencing of steps in this 4R Process to Resilience was evident in many narratives shared by interviewees. The value of extracting and reflecting on this process was underlined by the emphasis SAS members placed on what they considered essential for resilience-not just a reaction or response, but rather an

intentional engagement with the changes in one's context (Duchek, 2020; Kay and Goldspink, 2012).

Recognise

SAS members outlined that some of the most testing experience they have confronted were less about one-off, acute experiences and exposures and more about sustained and enduring demands in highly ambiguous conditions. Whether they recalled a one-off event of acute stress or reflected on their strategies for managing long-term ambiguity, the first step in the process was labelled as Recognise.

Comments outlined that the most important starting point in engaging with significant change was in employing the discipline to pause long enough and acknowledge the shifts that have taken place within the person or in their environment. Here, SAS members' narratives stressed that it is first critical to pay attention to such shifts to build and sustain resilience. As noted, SAS members distinguished focused and narrowed attention. Step 1- 'Recognise' demanded focused attention and the associated readiness to broaden one's perspective with the shifts that have taken place, employ engagement, and stimulate comprehension, connection, and crucially-curiosity.

Step 1 - 'Recognise', demanded, looking out as well as looking in. Hence, it also pertained to the practice of intentionally tuning in to one's self-awareness and strengths awareness. For example, when it comes to being impacted by an unexpected turn of events, SAS members would recognise the vulnerabilities these shifts have exposed and the strengths they have illuminated as essential to moving forward with. Indeed, SAS members insisted that regardless of the chaos unfolding

around us or the nature of the triggers threatening to throw us off balance, to engage effectively, we need to first be firmly aware of the resources that we have at our disposal. This may mean physical equipment and external resources or intrinsic onesour own bucket of authentic and accessible 'wealth'. Ultimately, step 1 (Recognise) spells out three questions:

- What has changed in my environment?
- How have these changes found me? and
- What do I have within my range or disposal to effectively engage?

No matter the source, this pause for recognition demanded an awareness of the strengths that can carry us forward and drive drivers for action ahead. Interviewees comments evidenced that adding to that bucket of accessible wealth may be recollections of past periods of adversity, and chiefly-what we have learned from these exposures, as well as the range of resources we have developed and are at our disposal, as a consequence. This SAS reference provides an additional layer of support for the importance of self-efficacy in resilience (Karwowski, 2012; Lee et al., 2013; Wang & Tsai, 2018). It also underlines the importance of resilient neutrality and, more specifically, SAS members' insistence that we must aim for development and growth, following every exposure — whether this is a situation of success or a setback.

Exploring their narratives further as a part of the Recognise stage, SAS members challenge themselves to be fully and intentionally engaged in reading their changed context. In this process, they engage curiosity in respecting that "no two situations are the same, and you must pay close attention to the unique proposition that you have been given". But equally, they engage through their self-efficacy in recognising

that everything you encounter is "little like something else you have experienced in the past".

These two references alone position curiosity at the core of the 4R Process to Resilience. First, this is to maintain openness, adaptability, perceptiveness and readiness for exploratory thinking in duress and under significant demands. These insights support and enhance the works of Litman (2005), Litman & Jimerson (2004) and Litman and Silvia (2006) around capacity for exploration of ideas as well as the works of Loewenstein (1994) and Voss & Jeller (1983) around the critical importance of curiosity in maintaining adaptability and flexibility in changing environmental demands. Second, this is in recognition of the cumulative benefits "of well-traversed exposures" and in employing curiosity to find similarities as well as differences; in building powerful platforms for engagement ahead, fuelled by lessons learned, as well as in the readiness to adapt to new inputs. Research is abundant on the importance of self-efficacy for resilience (Marriott, Hamilton-Giachritsis & Harrop, 2013; Wang & Tsai, 2018). Indeed, self-efficacy has been found to serve as the most robust protective factor for individual resilience (Lee et al., 2013). Further to these, the current research also adds to existing literature, stressing the importance of selfesteem, personal control and optimism (Walker et al., 2019) and realism (Boermans et al., 2012). Crucially, the present research contributes by stressing the importance of curiosity in sustaining such predictive resilience factors.

Re-orient

The second stage of the Process to Resilience was labelled 'Re-orient' and was seen to evoke curiosity again. SAS members emphasised that change, challenges and crises "take us as they find us". Evident in their reflections was the awareness that

how we orient towards new experiences opens up different pathways of thought, reasoning, opportunities and resources for us. This clearly builds on a plethora of research exploring how our thinking, current resources, dispositions and responses to the challenges we face frames access to our resilience and ultimately our outcomes and life experience (Wu & Miao, 2013).

Fundamentally, the discipline highlighted by SAS interviewees around the Re-orient stage demands us to orient towards the opportunities in our context, launch into these opportunities in the fullness of our capabilities and available strengths, and most importantly – to select best-fit mindset (Gollwitzer & Keller 2016).

Emphasising that resilience relies on readiness to evolve and shift existing schemas or conceptual frameworks when they no longer prove fit (Kashdan et al., 2013; Reio et al., 2006), interviewees' narratives challenged us to re-orient with intent, through curiosity and with openness to adapt. SAS members' reflection also challenged us to employ the initial response- even if it is a surge of fear we may experience as they domerely as a powerful guide, an indication that something with which we need to connect is shifting and changing. The process of re-orienting reminds us again of SAS members' emphasis that fear is "never a solution to anything" but rather a signal that whatever is happening matters and deserves our attention. Rather than being triggered into a fight-flight-freeze mode, SAS members commitment to resilience meant that they shift into an "exploring, thinking and connecting" mode so that they re-orient effectively towards the opportunities presented by the changes in their context.

Re-anchor

This research also made it evident why resilience in the SAS demands taking on new challenges with "firm feet on the ground" and "eyes and hearts wide open" prior to stepping forward. This brings us to the next step, which is Re-anchor. SAS narratives signalled that intentional re-anchoring aims to consciously ground in and connect with 'where' one feels an innate sense of enabling belonging. It required the individual to draw on the areas that ground them, the memory of what defines them as capable and the tools or references to strength they have readily within their access. This for SAS members was seen as vital for resilience in recognising that to engage effectively with and thrive in ambiguity, soldiers must spring forward from a place of strength rather than a place of fear, perceived deprive or scarcity. Interviewee 13 commented:

"When you have been under an onslaught of pressure for too long, you can begin to wonder 'Am I a worthy human?', Can I deal with this?' In that time, just the memory of what you mean to trusted others, their perception of you; their expectations and hopes of you can drive you and sustains your resilience."

In the SAS, the most proximate source of shared belonging included the SAS shared values and tenets. Indeed, in calling these out, SAS members stipulated that the goal of re-anchoring is to focus the mind on how as well as why you re-engage with your environment, the legacy you are there to preserve and perpetuate, and the emotional tone you wish to evoke in the process of re-engagement-be that for yourself or your team. This is where the consistent references to the SAS tenets and values spelt out the importance of the "Who Dares Wins" motto and the four SAS tenets (Chapter 2). Importantly, each of these tenets was seen to dictate a specific cadence for the team and individual SAS members, in a way that was responsive to their context- from employing Humour and Humility, and No Sense of Class in building and sustaining

connections, to the Unrelenting Pursuit of Excellence and The Highest Standard of Discipline in framing the 'why' and the 'how' of the journey.

The depth of shared awareness around the nuances of commitment, method of engagement and actions each tenet called for ensured consistency of action. Importantly, these were also found to strengthen and focus SAS members' resolve and self-belief, ultimately fortifying access to their resilience in times of trial. As noted in Chapter 7, re-anchoring through the SAS tenets and values ensured SAS members feel:

"Bigger than just themselves, stronger than they would be on their own and committed to protecting a legacy that may otherwise demand superhuman capabilities".

Another interviewee reminded us of the importance of re-anchoring in what SAS members referred to as 'enabling' belonging. In Chapter 7, his comments were:

"Though in times of trial, I have questioned my ability to overcome the threat, I couldn't question I will ultimately give it my all, realising the values I am entrusted to protect and serve; the trust that is vested in me."

SAS members' comments also highlighted that positive or enabling belonging predicts the degree to which individuals and teams display willingness and capacity to access their innate capabilities and how effectively or willingly they make access to their full potential. As noted in Chapter 7, such a feeling of belonging fuelled the best in them. It enabled purposeful action (as opposed to fear) because it provided them with an innate sense of psychological safety. In the same way, such positive and enabling belonging was found to draw out the best of innate traits and capabilities and sponsor creativity within the SAS. The importance of re-anchoring,

during or following significant trials, also reminded us that positive belonging secures access to the fullest, most authentic version of ourselves. In the SAS context, this was amplified by the awareness that this allows them to effectively orient towards opportunity and not fear and be better prepared to thrive in ambiguity.

These mirror reflections from several scholars who have argued for the importance of collective cognitive capacity (Lengnick-Hall et al., 2011), increased commonality of shared accountability, and belonging to a positive shared identity (Youssef & Luthans, 2007), enabling processes of interactions, culture and values that hold teams together (Lim & Nakazato, 2018), as well as cohesion (Britt & Oliver, 2013; Meredith et al., 2011), in shaping resilient outcomes for the team and the individuals comprising it.

Re-engage

The last phase of the SAS Process to Resilience calls on us to Re-engage. Whilst the moment and type of re-engagement may vary depending on the source and nature of threat or demand, what mattered most in the SAS was that this moment of reengagement occurred intentionally. Again, SAS members highlighted that resilience is about deliberately driving and shaping one's experiences and environment, rather than falling victim to or 'indulging' in an unfiltered response or a reaction. Equally, the timing and nature of re-engagement signalled that they re-emerged with greater capacity to learn and in their readiness to add new experiences to the existing scripts of life in going through this process. Within the SAS context, being ready to engage more intentionally, effectively and positively with the environment signalled a commitment to a continuous process of evolving ones' resilience baseline, secure in the knowledge that however it changes thereafter, one can invoke awareness and

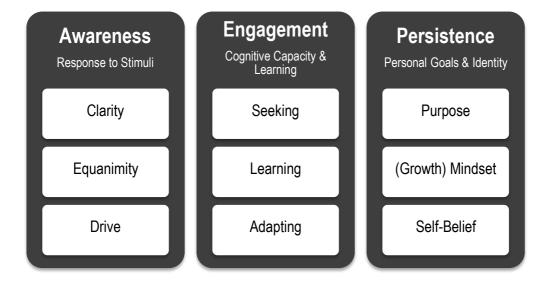
curiosity, and arrive at a better place. The SAS reflections framing this Re-engage phase in the Process to Resilience deliver further depth to the work of Duchek (2020), who argued for the importance of intentional engagement in building and sustaining resilience and the work of Walker et al. (2019).

In summarising reflections on the Process to Resilience then, this work's key contribution was in framing the view that resilience is about our capacity to evolve continuously and that this demanded the ability to pause, learn, connect, develop, grow and ultimately to re-emerge better. To do so demanded not only capability for equanimity in strain but also curiosity, clarity, purpose, growth mindset and a sense of enabling belonging. Therefore, resilience in the SAS was fundamentally about the execution of a process to authentic thriving, the manifestation of where we have arrived, through purposeful curiosity and enabling belonging.

Reconstructing Resilience through Curiosity

This section revisits curiosity's contributions to resilience through its functions in enabling effective selection of adaptive engagement (Awareness), strengthening platforms for success through enriched cognitive capacity & learning orientation (Engagement) and in framing and sustaining one's Mission and Vision (Perseverance) in conditions of change and ambiguity.

Figure 12: Curiosity's resilience enabling functions



The resilience-enabling functions of curiosity, as outlined in Chapter 5 and are positioned below against the four-stage process to resilience in more detail (Figure 11).

The Curiosity Effects

Arguably, the primary contribution of this research is in highlighting that how curiosity contributes to resilience are as numerous as they are multi-dimensional. Whilst curiosity was seen to serve resilience differently, across different levels of role complexity, as well as from the routine and tactical, through to the operational and strategic, its contributions to resilience in the SAS were undeniable. Importantly, curiosity's contributions to resilience were not restricted to the individual but played a crucial role in how the SAS team and organisation operate.

References to curiosity were rife when SAS members were asked to explore how they build, develop and sustain resilience in some of the most demanding conditions. Specifically, curiosity was referred to as an essential "state of restlessness" in the pursuit of learning and exploration, and ultimately- as the 'right attitude' required for

resilient outcomes to be reached. Among others, curiosity was seen to sponsor and support cognitive, emotional and intrapersonal and the interpersonal capacity for resilient outcomes, shape an adaptive engagement with shifts in ones' context and sustain the capacity to persevere towards their goals in some of the most demanding conditions.

It is worth revisiting SAS members' emphasis that it is critical to effectively buffer against the negative effects of stress and anxiety. Their comments amplified the observations of Robinson & Bridges (2011), who argued that increased or unmanaged stress and anxiety under perceived threat conditions could lead to situations where "people fail to take actions that could improve their chances of survival", produce cognitive failure and limit processing and working memory capacity (p. 30). They also echoed the recent work of researchers such as Walker et al. (2019), who argued that the key to resilience is the ability to see challenges as windows for growth rather than threats. Importantly, the present research also supported existing military research, which demonstrated that decreased ability to manage the strains of significant exposures could paralyse us (Watson, 2006). Indeed, Watson (2006) argued that the ability of "troops to exhibit curiosity, indicative of an attempt to gather information about their environment and to respond to it" is pivotal for sustaining purposeful engagement and ultimately- for survival (p. 251). Ultimately, SAS members consistently referred to curiosity as the antidote to such negative effects. Indeed interviewees' comments demonstrated that resilience-in-action reveals our ability to sustain interest and engagement, to think through and effectively explore options in conditions of duress, rapid change, deprive or stress. Amongst others, these pointed to the fact that resilience demanded a fundamentally different mindset (Gollwitzer & Keller, 2016).

As with resilience, SAS members referred to curiosity as a state to be developed, nurtured and conditioned more than a fixed trait. Whilst SAS members saw curiosity as an essential but crucially- a developable trait, they also appeared to acknowledge that curiosity is innate in all SAS members. Indeed, interviewees identified curiosity as the most common characteristic shared across all SAS members. For example, interviewee 16 commented:

"However different we may be from each other, we are all 'bright eyed bushy tail type people; we are all made of curiosity".

The positioning of curiosity as an innate as well as a developable disposition, and one that is intimately dependent on contextual nuances, mirrors broader research views of curiosity as a relatively stable trait disposition as well as a state "closely related to easily changing affects and influenced by emotions" (Karwowski, 2012, p. 547). Whilst consistent, the present research contributes further to the literature by stressing the applied importance of curiosity to thriving in ambiguity. It challenges us to focus attention beyond reference to state vs trait and instead towards the required strategies and contextual nuances that create access to curiosity's resilience-enabling functions.

Curiosity in the SAS was seen to underpin an essential baseline for the mind-shift that significant challenges demand from operators. Indeed, in the SAS, curiosity was found to sponsor a fundamentally different mindset in orienting towards change and ambiguity, which was seen as vital for their survival in conditions of deprive, unpredictability or significant demands. Through this mindset, SAS members engaged their capacity to seek and enjoy challenges rather than avoid them, explore opportunities rather than dwell on the loss, learn from rather than ruminate on exposures, and anticipate positive outcomes rather than only worry about risks. SAS

members saw the above contributions to resilience as aided by curiosity's ability to reframe challenges, trials and setbacks as valuable windows for development - a view of curiosity that is widely accepted in the literature (Goodman et al., 2017; Litman, 2009; Litman, 2010) but not commonly applied to resilience. Further, SAS members attributed these resilience-enabling functions to curiosity's ability to condition an "enduring and ubiquitous appetite for challenges", help see challenges as surmountable and essential for growth and accept change and ambiguity as the norm.

Among others, these references to curiosity's function evoke links to curiosity as the psychological manifestation of the 'novelty bonus' in the reinforcement of learning (Kakade & Dayan, 2002) and an appetite for drive-like learning (Loewestein, 1994). Indeed, research in optimal arousal has demonstrated that when directed and nurtured effectively, curiosity can become "a positive, emotional-motivational system that energises and directs behaviour" (Litman & Silva, 2006, p.319). Hence, research showing that by triggering reward prediction and anticipation, curiosity sustains interest, arousal, attention and cognitive effort (Kang et al., 2013) was consistently supported by SAS members' references to thriving in change ambiguity. While previous research typically focuses on the pursuit of learning and sustaining interest in an educational context, the present research demonstrates how these same curiosity functions are vital for broadening and building resilience in acute conditions of threat and endured demands. Building on the comments of interviewee 33 and his colleagues then:

"Curiosity serves resilience by being the opportunity we give ourselves to be resilient".

The present research also stressed that whilst these capabilities aid us towards a resilient engagement in the moment through hope and optimism, they broaden and build capacity for recovery and growth following exposures. SAS members argued that these strengthened resilience moving ahead, by enriching individual and team capabilities through growth-mindset. This is consistent with existing research demonstrating that curiosity is an antecedent of intellectual enrichment, as well as development and sustenance of interest and that it ultimately fuels adaptability and flexibility (Loewenstein, 1994; Litman & Silvia, 2006; Voss & Jeller, 1983). Again, the contribution of this present research is in making an explicit and tangible link between these curiosity functions and resilience.

Another related set of reflection from SAS members was that curiosity ultimately sponsors richer and more adaptive responses to uncertainty and ambiguity. As a part of this resilience-enabling function, curiosity was attributed to helping SAS members seek to find, recognise, accept and fill gaps in their knowledge and skills. This served to sponsor a broader and richer resilience baseline for individuals and their team. It also fuelled the confidence that continuous improvement, evolution and development are essential as well as attainable. SAS members also outlined that in the pursuit of growth and knowledge, curiosity supported them in building greater thought-action repertoire. In this way, SAS members argued they had gained a deeper and broader range of experiential feedback, skills and capabilities. It was this function of curiosity, combined with the associated desire for development, that was found to support the aforementioned sense of adaptive neutrality and to sponsor positive anticipation of challenges for the benefit of learning. These findings support and extend a long line of research calling out curiosity as a critical step towards enhanced learning and recall capabilities specifically (Kang et al., 2013). More

broadly- to the development of richer thought-action repertoire, the broadening of our behavioural range and cognitive context, the development and sustainment of interpersonal relationships, and overall, enhanced our cognitive, social and psychological resources (Denneson, Smolenski, Bush & Dobscha, 2017; Gallagher & Lopez, 2007; Kashdan et al., 2013; Reio et al., 2006).

Exploring these insights further, SAS interviewees found that curiosity contributes to their resilience directly by sustaining perseverance and appetite to pursue positive outcomes, maintaining openness to opportunities, sustaining the ability to re-position available resources to fit changing demands, and fuelling continuous learning orientation across levels of complexity. Whilst these factors have been researched independently as key indicators of resilience (Hamby et al., 2017; 2018; Liu et al., 2017) as well as curiosity functions (Goodman et al., 2017; Litman 2009), this present research draws an empirical link between curiosity and resilience directly.

SAS members consistently referred to the most testing exposures or experiences in their context as being highly ambiguous situations, or long-term, unfolding and evolving challenges, rather than short bursts of acute demands or one-off events. Because of its functions, curiosity was seen as essential for resilience in the context of such long-term, complex demands and the "unrelenting grind" of change or ambiguity. Rather than giving in under the grind, it meant that through curiosity, SAS members were more likely to take on new challenges with "eyes and hearts wide open" and "better equipped, every new step of the way". These SAS references bring further depth to research on ambiguity tolerance (vs need for closure), including valuing diverse others, liking of and tolerance for change, dealing with unfamiliar situations, as well as readiness to challenge one's perspectives and to manage conflicting perspectives (Herman et al., 2010; Littman, 2010). It contributes

specifically by linking this research to resilient outcomes and demonstrating how it serves pragmatically.

Further, interviewees outlined that the SAS operational context is shaped by exposures within which operators may be uncertain about the outcome of their choice as well as about their probabilities of success. Whilst these comments may have been in reference to the demands of modern asymmetric warfare, they ultimately spell out the definition of ambiguity more broadly (Gluckman, 2016). Importantly, the nature of the challenges SAS members confront and ultimately- mission success for them demand that they engage in their predicament in the fullness of their capabilities at all times. In this context, interviewees' responses amplified the importance of curiosity, highlighting that resilient outcomes demand we are innately focused on disambiguating and purposefully re-engaging with our context, rather than simply reacting or responding to threat. Equally, they highlighted that survival in these conditions demands the capacity to sustain engagement. Furthermore, curiosity was found to sponsor what SAS members described as an "adaptive challenge disposition"- their fuel for thriving in ambiguity. This applied to resilient neutrality about failure and even an anticipatory attitude towards change, ambiguity and challenge-factors underlined as dispositions of critical importance to SAS members' resilience and widely attributed to curiosity (Goodnam et al., 2017). As one interviewee put it, a fixed mindset or indulging in fear simply won't suffice, and resilience in the SAS requires the readiness to be steady:

"On the spinning edge of possibilities."

These references to its contribution amplify the importance of curiosity's role in sustain interest and engagement (Friborg et al., 2009; Jensen, 1995; Meredith et al., 2011; Staal et al., 2008) in conditions where fear of failure or loss, fatigue, sense of

overwhelm, or reduced engagement can spell disastrous consequences. Building on this further, the applied understanding of the stress response in the SAS offered an invaluable contribution to understanding resilience and, crucially, how curiosity plays a part in supporting it. Indeed, SAS members identified the most dominant contribution of curiosity to resilience in its capacity to transform fear, doubt and anxiety into fuel for purposeful action. SAS members highlighted that curiosity helps them view fear as a trigger for 'intention-full' engagement rather than an allencompassing emotion of helplessness or overwhelm. As noted, interviewees also drew a distinction between focused and narrowed attention and argued that through curiosity, they found themselves better prepared to direct their attention to possibilities rather than only threats. The present research contributed by showing that in this way, curiosity shifted the mind away from mental blocks and sustained an appetite for solution-seeking and exploration. These contributions of curiosity to resilience will be explored in further detail in the following section, yet it is worth noting that they again provide empirical support for existing research on two core functions of curiosity- stretching (or actively seeking) and embracing through the willingness to accept the new and the unpredictable (Kashdan et al., 2009). Again, these also add to references around curiosity's capacity to build and sustain what researchers referred to as - the optimal level of arousal and to decrease the risk of overwhelm (or rust out) in sustained challenges (Litman & Silvia, 2006).

Intimately linked to this, SAS members also explicitly outlined the role of curiosity in supporting their self-efficacy and self-belief in some of the most demanding conditions. For example, through curiosity, SAS members found themselves better prepared to experiment and explore, to give things a go, even if the situation may seem dire, and to anticipate that in return, they will (at least) be rewarded with

renewed or deeper awareness, skills and experiences. These observations on the role of curiosity support existing research (albeit research carried out in more benign conditions), showing that there may be a bi-directional relationship between curiosity and self-efficacy. Specifically, that curiosity supports positive appraisal of one's coping potential (Silvia, 2008) whilst fuelling a greater sense of personal competence, optimism and propensity to persevere (Kashdan et al., 2013; Reio et al., 2006), as well as a sense of flow, intrinsic motivation, creativity self-efficacy, selfconcept and personal identity (Karwowski, 2012). These functions of curiosity were ultimately seen to support SAS members' ability to step into the unknown with greater confidence in and deeper access to their capabilities, as well as to recover and grow faster following setbacks. Multiple reflections from this present research support the view that the capacity to effectively engender curiosity strengthens and fortifies selfefficacy, and in turn, resilience. Whilst research has held for some time that selfefficacy serves as the most robust protective factor for resilience (Lee et al., 2013), the present research contributes to the literature by showing a self-efficacy- resilience pathway that is fundamentally carved by curiosity.

Before exploring the models proposed in this chapter in more detail, it is important to reflect further on the bidirectional relationship between the SAS resilience heuristics and curiosity. Specifically, whilst curiosity was seen to ease and strengthen access to the resilience heuristics, the application of these heuristics was, in turn, recognised as curiosity enhancing. For example, whilst the capacity to engender curiosity was seen as key for resilience in the SAS environment, comments indicated that unless one is able to maintain focus on positive outcomes and the cognitive discipline to let go of distractions and self-defeating thought patterns (Mind Where Your Mind Goes), their ability to tap into that vital curiosity diminishes.

Equally, comments highlighted that in the absence of capacity to direct one's attention towards the possibilities in change and trials (rather than just the perceived threats) and ground oneself into their authentic strengths and drivers (Forrest of Reasons), curiosity can lead to self-destructive tendencies and spiral attention down towards what interviewees referred to as 'the dark side' of doubt and fear.

Similarly, capacity for resilience through the Belong & Make Better heuristic was described as intimately reliant on the individual's ability to maintain interpersonal curiosity, even if this may be genuine curiosity about the views, needs and expectations of your adversary. This proposition is explored in further detail in subsequent sections of this chapter. However, it is important to note that whilst previous research has linked curiosity to greater tolerance for interpersonal differences (Kashdan et al., 2013) and valuing diverse others (Herman et al., 2010), there is little existing research linking these contributions directly to resilience. These references from the applied context of 1NZSAS are important. They signal not only that curiosity enables resilience but also how resilience in-turn creates a more fruitful soil for enabling curiosity and, ultimately- thriving in ambiguity. The bi-directional relationship between curiosity and resilience explored in this research is framed by the specific nuances of the SAS context, their resilience heuristics and the contextspecific references to enabling curiosity. Nevertheless, they invite further and more in-depth research specific to the bi-directional relationship between curiosity and resilience and the ways in which it may be fostered to enable capacity for thriving in ambiguity.

SAS members argued that a further contribution of curiosity effects was that they aided SAS members in distinguishing between haphazard and calculated risk, that it supported informed risk-taking and ultimately-that it secured the accumulation of

resilience-affirming experiences. The above SAS references further sponsor reflections on another key area of research around curiosity and, specifically, around the heritage of curiosity research viewing the construct as ultimately good or ultimately bad; helpful or dangerous, damnable or ennobling; a vice or the essential human virtue (Harrison 2009; Kang et al., 2009; Reinhart, 2008; Reio et al., 2006).

This present research then presents a perspective to the debate of curiosity being ultimately good or ultimately bad (Harrison 2009; Kang et al., 2009; Reinhart, 2008; Reio et al., 2006). SAS members added to the appeal of curiosity by depicting it as a vital necessity for thriving in ambiguity. However, they also qualified the type of curiosity they nurture for resilience, using terms such as "functional", "purposeful", and "informed". SAS members contrasted this type of curiosity against "pointless", "ill-informed" and unbridled" curiosity, arguing that in their context, you need to know "when to be more cautious than curious" is key, and they suggested that curiosity is "a skill to be conditioned". Comments by interviewee 13, for example, cautioned:

"In order to discover and grow, you have to be hungry for the unknown, but you also have to know contentment and acceptance and have a solid foundation and patience."

Another SAS member, interviewee 12, echoed this by commenting:

"Curiosity has to be in place. But for it to support resilience, it has to be a purposeful, directional kind of curiosity. So, to move ahead, you have to envision, imagine that future, to map your way towards that desirable state. You have to set your mind to what you intent will follow."

These references stressed the importance of ongoing development for both-curiosity and resilience again, and these are explored in further detail in the following segments of this work.

Curiosity in the Process to Resilience

The following segment positions the three resilience-enabling functions of curiosity (Awareness, Engagement and Perseverance) against the phases of the 4R Process to Resilience (Figure 13).

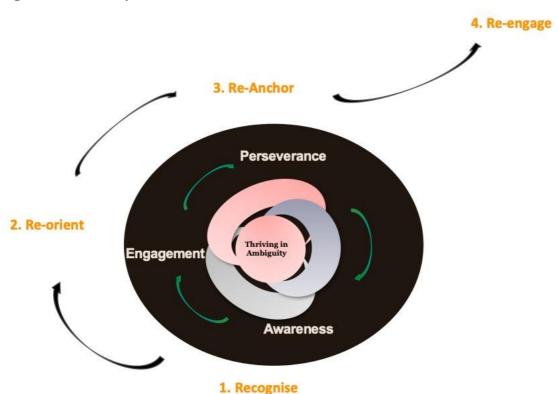


Figure 13: Curiosity's in the Process to Resilience

Arguably, the most important contribution of curiosity to resilience identified in this research was directing and sustaining focus (rather than narrowed attention) and nuancing an adaptive and optimal orientation towards change, threat, or ambiguity. These functions were underpinned by curiosity's capacity to sustain clarity in ambiguity, support equanimity in situations of significant demand and fuel drive through adaptive challenge disposition. These were positioned under the Awareness label (Chapter 5). Whilst this curiosity function can serve across every phase of the Process to Resilience, it is mapped here appropriately against the Recognise phase. As noted, SAS members demonstrated that this resilience-enabling function supports our capacity to engage with the shifts in our environment constructively (rather than through a fight-flight-freeze response). It also allowed for broader access to our existing capabilities and for engagement driven by our intent rather than narrow response reaction. Key in this Awareness contribution was that it supported SAS

members' resilience by inviting them to explore (rather than simply endure) ambiguity, enabling them to do so with anticipation of reward and ultimately creating openings for richer solutions.

Relevant references to the effects of curiosity are abundant in the existing literature. For example, curiosity is found to aid us in seeing challenges as opportunities rather than threats, whilst perceiving ambiguity as desirable (Herman et al., 2010); to support our capacity for mindful emersion (Karwowski, 2012), and to sponsor greater distress tolerance (Denneson et al., 2017). This present research demonstrates how the capacity of curiosity to sponsor awareness and receptiveness challenges us to investigate and immerse ourselves in our context (Kashdan & Silvia, 2009). Each of these has been argued to support our ability to orient intentionally rather than reactively towards shifts in our context. The present research confirms these curiosity functions. It further contributes to the existing literature by outlining how curiosity influences our thinking and behaviours in some of the most demanding conditions and how it ultimately sponsors resilient responses and broader resilience baseline development.

Further, SAS members consistently acknowledged that their challenges are seldom about the known or the familiar. Indeed, the role explicitly demanded the ability to thrive in the unknown, and this is enshrined in the tenets and in the history of the Unit (Chapter 4: Context). The most related curiosity function in supporting SAS members' resilience was is in strengthening, broadening and sustaining ones' effective Engagement through broader access to cognitive capacity and learning orientation. Underpinning this function were references to curiosity's ability to support seeking rather than avoiding challenges (through what SAS members referred to as the Mentality of the Explorer); to sustaining openness to learning (through the Hunger

for Knowledge), and to sustain capacity for adaptation (under what SAS members referred to as Creative Problem Solving). These curiosity functions were seen to sustain the desire to discover new frontiers, seek new opportunities and ways to achieve one's mission, and thrive in ambiguity. Fundamental to this function of curiosity was that instead of "viewing challenges as closed off loops of finite options and limited fixed solutions", curiosity was seen to elevate thinking towards the exploration of possibilities. Ensuing from this was also an awareness and commitment to the cumulative benefits of well-traversed challenges, thereby curiosity's contribution to broadening and building resilience (Walker et al., 2019). Through this function, curiosity was seen to support resilience in times of trials and after the event. This function ultimately served to build a broader repertoire of knowledge, skills and self-efficacy and, thereby, a broader resilience baseline for the SAS.

Ultimately, through these functions, curiosity was seen as instrumental for resilience in the SAS, as it enhanced and sustained cognitive flexibility, stimulated improvisation, capacity for adaptation and exploration of ideas. Whilst this mirrors references to what resilience may need in times of significant demands or acute change (Meredith et al., 2011; Robinson & Bridges, 2011), the present research demonstrated how curiosity aids these resilience functions directly. The present research further extended the scope of existing literature on curiosity by showing the benefits of the intrinsic desire to seek out new information and gain new experiences (Goodman et al., 2017; Litman, 2009; Litman, 2010) and the benefits of exploratory states accompanying the desire to learn what is unknown (Kang et al., 2009; Kashdan et al., 2013) to building and sustaining resilience. The present research also supported and extended existing literature by demonstrating how curiosity's

ability to sponsor deeper problem comprehension, broader linking to existing knowledge and a broader range to map alternative causes of action (Meredith et al., 2011; Robinson & Bridges, 2011) sustains and builds resilience in some of the most demanding conditions.

Like with Awareness, Engagement's curiosity function could also be seen as fuelling resilience across every phase of the Process to Resilience. However, it maps most proximately against the effective recognition of change, threat and opportunity (Recognise), and the Re-Orientation phase in the Process to Resilience (Figure 10). This is in directing capabilities towards pursuing positive outcomes with a broader scope of available resources.

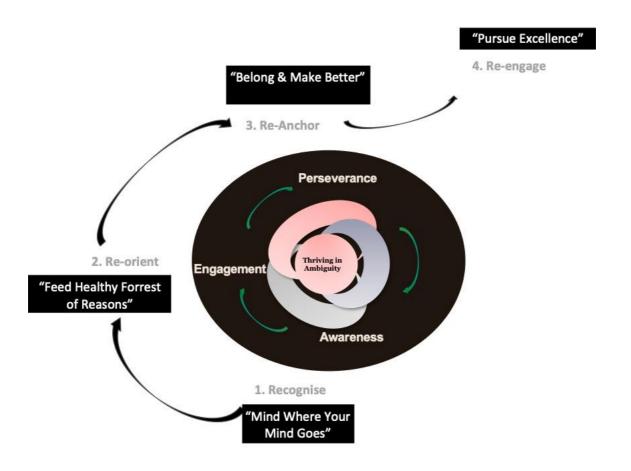
Further insights from Chapter 5 clustered under the umbrella of Persistence- the third cluster of curiosity's resilience-enabling functions. References under this Persistence cluster pertained chiefly to curiosity's ability to sustain resilience by supporting the endurance of personal goals and sense of identity, under duress or in significant demands. The themes outlined under the Persistence cluster were purpose, growth mindset and self-belief. Here, an important contribution of this present research was identifying that curiosity is positioned beyond a way to an outcome and rather, as an outcome in itself. In the SAS context, interviewees' comments attributed "existential courage" and access to "authentic purpose" to curiosity. Curiosity was seen as "a way of being", an "existential challenge", a "life-defining disposition", and "an opportunity we give ourselves" that allows us to deliver our best responses to the challenges of life. Ultimately, interviewees found curiosity sustains their drive towards self-actualisation and their commitment to being their best in pursuit of their mission, no matter the predicament or challenge they are facing. SAS members' reflections extended research on the importance of self-efficacy and self-belief for resilience

(Kashdan, 2013; Sandri & Robertson, 1993) by outlining how curiosity supports these key resilience predictors. They also extended existing research around the crucial importance of the capacity to explore alternative courses of action and persevere in the direction of one's goals (Galagher & Lopez, 2007) amid imminent trial and in the longer term. SAS members' reflections also extended research demonstrating how curiosity helps sustain commitment, the pursuit of the goal and the ability to follow one's interest (Blunt et al., 2018) by showing that these are key to sustaining resilience in the SAS. Ultimately, it was in sustaining access to personal goals and identity (as well as to broader and richer capabilities gained through every exposure) that SAS members found themselves better prepared to intentionally reengage with their environment rather than simply react or respond to changes. The present research also contributed to the literature in demonstrating that curiosity supported resilience by enabling SAS members to maintain focus on their higher purpose goals during times of change, uncertainty and ambiguity. Like its two other functions, these curiosity contributions may be seen to serve across the different phases of the process to resilience. Nevertheless, the Persistence function can be seen as most proximately positioned within the Re-Anchor and Re-Engage phases.

Heuristics in the Process to Resilience

This section highlights how the SAS heuristics sponsor the cadence in the Process to Resilience and links the three resilience-enabling functions of curiosity to the resilience heuristics (Figure 14). The heuristics, including Mind Where Your Mind Goes (or Mindful Attention), Forrest of Reasons, Belonging & Make Better, and Pursuit of Excellence, were unpacked in detail in Chapter 6.

Figure 14: SAS Heuristics in the Process to Resilience



Reflections under the Mindful Attention (or Mind Where your Mind Goes) heuristic supported the view that what we pay attention to, in both-our internal thoughts as well as our external environment and interactions, may have a strengthening or 'stealing' effects on our resilience (Blunt, Mullarkey & Lathren, 2018; Gollwitzer & Keller, 2016).

Framed as a call to action, Mind Where Your Mind Goes offered us two reference points to resilient engagement. On the one hand, it challenges us to commit our focus towards our predicament's openings and opportunities. SAS members spoke to the critical discipline of focusing on the present and seeking or constructing opportunities to the exclusion of factor that may be irrelevant or detrimental to our Mission. On the other hand, it directs us to also pay close attention to how we relate to our thoughts when confronted with challenges- the "gremlins on our shoulders". This demands we

engage predicaments through references that sustain and broaden access to our Mission rather than references that detract from us. In other words, the findings of this research challenged us to be selective about where our focus goes so that we use our moments of engagement and thought in a way that fortifies rather than depletes our capabilities and our opportunities.

Mind Where Your Mind Goes was, therefore, fundamentally reliant on awareness-situational awareness as well as self-awareness and optimism. Whilst this premise has been a subject of interest for some time (Sharma et al., 2014), SAS interviewees' experiences demand that the unique role of curiosity in this interaction is explored further. SAS members also extended literature on the importance of situational awareness in sustaining resilience through outcomes such as the capacity for contingency strategies, efficiencies and reduced vulnerabilities (Burnard & Bharma, 2011; Sutcliffe & Vogus, 2003).

As noted, SAS members underlined curiosity's ability to suspend the impact of instinctive and/or conditioned but potentially detrimental responses, at least long enough to construct or explore solutions or seek out possibilities. Echoing Victor Frankl's challenge to stretch the gap between stimuli and response, these functions of curiosity were seen to be invaluable in sponsoring richer and broader outcomes. Put simply in the words of SAS interviewees, it allows you to "switch your whole brain on" rather than be fully engulfed in a Fight, Flight or Freeze response. Here, the present research's contribution is in pointing out that curiosity may help us better frame, manage and allocate our resources in times of significant demands. As SAS members pointed out that, through curiosity, we build the awareness needed to be selective around the contents of our working memory and to broaden and select from appropriate adaptive strategies actively. This also extended research on the

importance of mindset for sustaining the commitment to pursuing complex goals (Gollwitzer & Keller, 2016).

As noted, the importance of this curiosity contribution was elevated in the SAS context, especially in references to times when the lack of or diminished capacity for curiosity may have had paralysing or overwhelming effects, including failure to identify solutions that may otherwise be within our reach. The Mindful Attention heuristic may be seen as underpinned by these curiosity-enriched capabilities and chiefly in the individual's capacity to generate and select adaptive responses. Indeed, curiosity's capacity to suspend self-defeating or less adaptive tendencies and to pause fear, so we can better construct possibilities, was found to sponsor SAS members' "zeal for concurring new summits, even if these may be ones' fears". It was also found to help SAS members refocus quickly and more clearly on the desired outcomes or their vision, following setbacks and employ Mindful Attention in the direction of their goals.

SAS interviewees' comments aligned Mind Where Your Mind Goes most strongly with the initial experience of changes or setback. Since the Mindful Attention heuristic also relies heavily on situational and self-awareness, it can be appropriately positioned as an enabling function to the Recognise stage of the process to resilience.

The reframing of the construct of resilience and, specifically, the view that resilience is the capacity to persevere towards and evolve ones' goals elevates the importance of curiosity further. As noted, through curiosity, resilience was seen to serve SAS members beyond survival and capacity to bounce back and towards the ability to

reconstruct and elevate their Mission, to thrive and to self-actualise. In this context and echoing the words of interviewee 20, curiosity is essential to resilience as:

"You cannot envision your desired state or map your path forward in the absence of curiosity."

Curiosity was also seen as vital for resilience as it was found to support goal setting and perseverance towards goal attainment, to maintain optimism in orienting towards challenges, and to drive the desire to improve actively. Importantly, in this way, curiosity was seen to sponsor and sustain goal clarity, access to authenticity, a sense of purpose and drive for perseverance. It also sustained the capacity to manage deliberately and direct thoughts towards the desired goal, sustain faith in the attainability of one's vision or Mission, draw strength from different sources, and sustain a commitment to overcoming the context's demands or constraints. These curiosity contributions were key to the workings of the second SAS resilience heuristic-Forrest of Reasons. SAS members' reflections on the Forrest of Reasons heuristic positioned it as core to the resilience process's Re-Orient phase. They stipulated that resilient re-orientation is fundamentally an act of shifting away from fear, detrimental reactions or initial shock and turning focus in the direction of the opportunities that change makes available to us.

SAS members' reflections on resilience signalled it is helpful to ground in the fullness of our capabilities and available strengths to have the readiness to explore, think and connect with the possibilities in change, and re-orient effectively. To effectively engage with the opportunities in our environment, it is helpful to start with utmost clarity about what drives, shapes and fuels us. Hence, the Re-Orient phase to resilience demands that our personal clarity of purpose and our motivations be the foundation on which we build ahead. These served to see us firm on our feet and

steadied onto what is authentically ours. SAS members' comments under this heuristic demonstrated that clarity regarding our drivers and motivations, and access to the fullness of our intent, render greater scope for resilience through authenticity, agility and flexibility. Rather than simply responding to the events that unfold, reference through this heuristic reminds us that we must engage intentionally through our authentic drivers.

Crucially, these resilience-enabling functions of curiosity were also found to underpin SAS members' capacity to maintain respect and openness to different views and support them in connecting with others, "mindfully and with respect", including in seeking to find "genuine and common grounds" with others. These were instrumental to the resilience heuristic - Belong & Make Better. Here the capacity for interpersonal curiosity was evidenced to serve a unique and powerful function in SAS members' ability to pursue mission focus. Indeed, the ensuing capacity to suspend assumptions and be intentional with ones' responses was seen to sponsor SAS members' ability to perceive and process challenges from different perspectives, to gain insights from others, to co-create ways ahead and build openings for possibilities, "even if this may be with the adversary". These insights from the SAS support research on the benefits of interpersonal curiosity (Littman & Pezzo, 2007); belonging and openness to others (Kashdan et al., 2013; Walker et al., 2019, p. 216) in supporting resilience and extend these insights to support resilience, in endured strain and long-term demands. Fundamental to the Belong & Make Better heuristic, however, was the emphasis on the importance of a sense of enabling belonging for resilience - the sense SAS members described as 'finding a well in the desert'. The power of belonging has been widely researched in the literature, with one of the many links related to this research being the power of psychosocial resources in shaping and supporting resilient outcomes (Gruber et al., 2010)

Belong & Make Better was positioned at the Re-Anchor stage of the resilience process. It emphasised the discipline to focus on what grounds and sustains ones' best and on the tools or references to strength one has readily within one's access. Notably, the Belong & Make Better heuristic served to support SAS members in Re-Anchoring by finding points of similarities and parallels in what may initially seem novel and different, thereby engaging with their context more fully. Similarly- "be where your feet are" was another simple yet powerful reference to the Belong & Make Better resilience heuristic. This reference challenges us to re-calibrate towards a broader resilience baseline quickly. It did so by triggering SAS members to take actions and influence their predicament or experiences, to choose to engage in what they have control over, if only so that they regain self-belief and efficacy. This present research further supported and extended the work of Aude et al. (2014), Boerman et al. (2012) and Gollwitzer & Keller (2016) and specifically, the importance of fuelling control and perseverance through influence.

Equally, the aforementioned curiosity functions can be seen as fundamental for reorienting effectively in ambiguity and change and conditioning what interviewees
referred to as a "fundamentally higher threshold and disposition towards life" under
the Pursuit of Excellence heuristic. This present research advanced existing literature
by shining a light on how by maintaining appetite for exploration (Kashdan et al.,
2013), curiosity can serve as an essential component to maintaining
conscientiousness (Karwowski, 2012), perseverance (Pickering et al., 2010; Walker
et al., 2019) and the commitment to 'always doing better'.

The Pursuit of Excellence heuristic placement responds clearly to the distinction between intentional engagement and simply-a reaction. SAS members' reflections emphasised that in the absence of this heuristic, how we engage with change and ambiguity may not drive growth and development, but instead territoriality, desire to prove rather than improve oneself, do better than someone else rather than better than we did yesterday. Positioned against the Re-Engage phase to resilience, the Pursuit of Excellence resilience heuristic shapes and directs behaviour, calling for the mindset of "aiming to be better, in every way". A key component to it was that it challenged SAS members to grow from every exposure and experience, "be they positive or negative". This reminds us too that SAS members saw this heuristic as vital for not only individual but also team and organisational resilience. Chiefly, it placed an expectation for them to be transparent, "to share the learning's they have accumulated through their exposures", chose improvement over "pride and ego", and maintain a commitment to the idea that one's "failure can be another's platform for success". Through this mindset, SAS members strengthen, broaden and build resilience by broadening their broader resources and capabilities, following every exposure.

Context to Curiosity and Resilience

Finally, in threading together reflections across data chapters, it is important to examine the influence of context on resilience directly and through curiosity. The following section weaves together reflections around how context and specifically team and organisational context, can have stealing or strengthening effect on individual resilience and ultimately- how enhanced individual resilience can lead to enhanced organisational and team outcomes. This section focuses on the three contextual requirements for resilience in the SAS, namely- Learning, Clarity of

Purpose and Shared Frame of Reference. It positions these against the phases of the integrated Process to Resilience model through the prism of curiosity. Insights around the role of context are weaved in this section to inform the need to better frame and nurture the conditions within which curiosity and resilience can thrive.

Each of the resilience heuristics and the insights gained from examining the role of curiosity supported the view that resilience is fundamentally within ones' influence and control. Nevertheless, the conclusion that our context has a significant impact on our capacity for and ease of access to resilience and curiosity was just as powerful. Whilst subsets of the resilience heuristics were recognised as somewhat innate in SAS members, interviewees consistently commented that the SAS context, including culture and values, harness and enhance these innate capabilities. Indeed, the SAS team and organisational context were seen as the scaffolding, the context for life, that intimately influenced the extent and nature of innate capabilities SAS members were willing and able to access.

References to what we need from our context to build and sustain resilient outcomes highlighted critical interdependencies between the individual, the team and the organisation, the likes of which are often seen in closed systems (Chapman et al., 2020). Thereby, the quality of outcomes is predicated on the capabilities of the context to shape, nurture and sustain individual strengths (Kennedy et al., 2012). The quality of individual strengths is predicated on the capabilities of context to tap into them (Kennedy et al., 2012). This mirrors a plethora of research findings, suggesting that resilience is the result not only of innate capabilities but also the outcome of interactions between the individual and their context and the patterns and processes that have shaped these interactions (Liu, Reed & Girard, 2017; Luthans, 2016; Pickering et al., 2010)

As noted, Chapter 7: A Context to Thrive In captured SAS members' conviction that ones' capabilities may be strengthened or eroded by their team or organisational context. SAS members' narratives placed the individual at the helm of resilience and curiosity as vehicles to success. However, their comments made it clear that context is instrumental in making it easier or otherwise for SAS members to operate this vehicle-in turn enabling or detracting from resilient outcomes. Here, whilst interviewees were committed to the view that "the only limitations are those you set for yourself", their comments also framed the expectation that their context would support and enable "the best in themselves". Indeed, the SAS 'journey to thriving in ambiguity' unequivocally demanded expectation of ones' environment. These included the expectation:

"The expectations that the environment will seek out the best of us and not create obstacles for us to reach the 'best' in us."

And,

"To be in an environment where the only limitations are those you set for yourself",

Context in the Approach to Resilience

Through these reflections, the Process to Resilience model was further strengthened by outlining how context influences curiosity as a core component to resilience and how it may shape and influence access to the resilience heuristics, ultimately spelling out success in the interaction between the individual and the challenge proposition ahead of them.

Here, respective contextual requirements are positioned where comments signalled the strongest degree of influence on resilience and curiosity.

For example, the contextual expectation to Learning framed the resilience need for broadening and strengthening richer and more effective responses to the demands and challenges experienced by the individual and richer capacity to reason, explore and grow amid trials or following setbacks.

As noted, the SAS training and conditioning, designed to see team members build their capacity for thriving in ambiguity, supported access to the Mind Where Your Mind Goes resilience heuristic. This was echoed by contextual expectations such as the most common reasons for joining and remaining with the SAS- the expectations SAS members will be "trained to be logical through a crisis". The expectation of context on the capacity to Mind Where Your Mind Goes was also reflected in comments such as:

"That the organisation will offer the tools and knowledge and build our capabilities to perform to the fullness of our potential, in the greatest of challenges."

This was so that SAS members could "step into the unknown with the confidence that they can deal with whatever comes their way" and that their organisational context will be such that it "reinforces operators' sense of control, no matter the challenge they confront."

To contrast these positive expectations, SAS members also shared the impact of environments where they felt their resilience was depleted by not feeling developed and supported (Learning). For example, one interviewee commented:

"Nothing angers me more than people or systems that knowingly or negligently prevent others from doing their best. I could not perform in these environments. I am in the SAS, knowing I will be encouraged and expected to do and be my best all of the time."

One of the core requirements of the contextual expectations of Learning was towards broader and deeper personal capabilities through Unit membership and the expectation to be developed in the direction of your goals. Under this expectation, the other core requirement was the element of feeling authentically accepted, "in the fullness of your history". Hence the key to the expectation of Learning was the importance of feeling accepted in a way that respects and values the authentic wealth that each SAS member comes with. This was reflected in comments such as:

"That the organisation will harness and respect the things that got me here."

The SAS references to the contextual requirements for resilience, support and extends existing literature specific to the military context. For example, Boerman et al. (2012) and Meredith et al. (2011), studied individual and organisational resilience and concluded that whilst resilience depends on the individual's capacity, it also relies heavily on external resources the individual. Similarly, Aude et al. (2014) commented that resilient outcomes are supported by appraisal and coping processes that are usually personal and organisational, whilst Britt, Sinclair & McFadden (2013) outlined that military resilience is reliant on frequent and proportionate training. Beyond the military context, the present research builds on the work of Lengnick-Hall et al. (2011) and Youssef & Luthans (2007), who challenged organisations to deliberately focus on developing individual resilience in employees such that they continue to foster and support an organisation's capacity for resilience. The present research further supports the work of Duchek and her emphasis on the importance of preparation and organisation's commitment to "develop capabilities and functions that are necessary to deal with any kind of unexpected events" (p. 219).

Building on the above, the Mindful Attention heuristic may be seen as sponsored by this resilience-enabling function of curiosity and, crucially, self-curiosity. As such, it suggests that in recognising the inferences they may be drawing in trialling circumstances, SAS members are better prepared to redirect their attention towards more resilient perceptions and responses. The role of self-awareness in supporting and building resilience has been an area of interest for some time, chiefly in the areas of survival and recovery strategies, following significant setbacks and demands (Beardslee, 1989). Adding to the layers of reflections from this present research, however, it is crucial to emphasise the context's role and, in this instance, the SAS organisation in sustaining resilience through the resilience-enabling medium of self-awareness.

Furthermore, Gaddy, Gonzalez, Lathan & Graham (2017) pointed out that broadening self-awareness in leaders and developing them accordingly enhances their resilience and the resilience of their subordinates.

Similarly, the contextual requirements around Shared Frame of Reference, which were seen to serve as "the bedrock of team resilience", supported SAS members' capacity to Re-Orient effectively, as well as to Re-Anchor. For example, Shared Frame of Reference and the expectation that no matter the differences between them, SAS members live the same values and tenets enabled resilience by aiding access to the Belong & Make Better heuristic. Shared Frame of Reference centred on the requirement for alignment between SAS members' values and beliefs and the values and tenets upheld by the Unit. In the alignment between individual and team values, this contextual requirement afforded broader access to Personal Goals and Identity (Persistence). This sense of values alignment and the experience of being a part of something "bigger than just yourself" and "stronger than you would be on your own",

and the specific behavioural expectations of the Values and tenets of the Unit, were seen to make space for curiosity. It also explicitly fuels resilience through Cognitive Capacity and Learning Orientation (Engagement). This is mirrored in the conviction that:

"Your resilience can withstand a great deal when you are a part of an environment that demonstrates, with every action, that there is always a way around and a way ahead".

The aforementioned references to resilience extend the existing literature on the importance of cultures of strong social support, trust and belonging, shared mindset and enabling shared values (Lim & Nakazato, 2018; Walker et al., 2019). Equally, the present research supports and extends the existing literature on outcomes such as decisiveness, expertise, creativity and ultimately-capacity to change and influence ones' environment, as borne out by collective cognitive capacity nurtured through belonging and development (Kay & Goldspink, 2012; Lengnick-Hall et al., 2011).

Weaving in further the SAS resilience heuristic of Belong & Make Better and the contextual expectations of Shared Frame of Reference, it is evident that in the SAS, trust is an undeniable prerequisite for enabling curiosity and, ultimately- for sustaining resilience. In the SAS context, evidence pointing to how trust underpins access to resilience and curiosity was unmistakable and unquestionable when exploring the impact of context on resilience. From upholding all members of the team to the same standards and celebrating the commitment of being "first amongst equals" in the pursuit of resilience and improvement (Chapter 7: "Shared Frame of Reference"), through to the confidence that one is being authentically supported, and that the organisation will not only "expect the best of what I could give", but also "harness and respect the things that got me here" (Chapter 7: "Learning"). Echoing

the words of one interviewee, it was evident that the related curiosity functions and the power of the resilience heuristics made available when one sees themselves as:

"An integral part of their team, not just through the tasks but also, through their relationships and interactions with others at work".

Reflections highlighted that in order for one to have ease of access to the fullness of their capabilities, trust is simply a non-negotiable necessity. The degree of trust one feels in their team and the broader organisation was seen to predict readiness to share information and lessons learned "whether these be through successes or failure" and openness to exchanging ideas for the betterment of others in the team (Chapter 6- Belong & Make Better, and Chapter 7- Shared Frame of Reference). These and related examples of how trust underpins capacity for curiosity and resilience were shared as references to what SAS members considered essential team dynamics for survival in their context and outlined as underpinning capacity for innovation, creative thought, perseverance, connection and ingenuity.

The literature is rife with references around how trust, perceptions of fairness and equality (amongst others) affect performance in teams and organisations (Dresche; .2014; Goronduse & Hilman, 2019). The effects of culture and trust have been examined not only in terms of individual and team effects on performance and well-being but also on communities and societies as a whole (Kalen-Sukra, 2019). The present research builds on these by demonstrating how trust can also be built by and fuel curiosity.

Finally, Clarity of Purpose influenced every component of the phases to resilience because it fundamentally responded to the question of "Why?"- Why pursue this Mission? Why persevere? Why sustain effort? In Chapter 7, Clarity of Purpose

predicted how well the individual espoused the team' or organisational goals; it sponsored the "intricate comprehension" and the buy-in and commitment demanded by the SAS operational environment and served to amplify scope and propensity for positive action. SAS members recognised that unless they feel fully engaged in their Mission, "with their whole of self", their propensity to seek workarounds or persevere towards a goal is compromised. Access to Clarity of Purpose served not only the task and the team but, chiefly, the individual in that they felt better able to fulfil their sense of purpose through the role.

Notably, SAS members argued that Clarity of Purpose is pursued and achieved intentionally in the SAS. It demanded that each SAS member has "exposure to the 'bigger picture' no matter their rank" and feels confident in "the freedom to question and seek to understand" the Mission they are committing to. This, in turn, secured "greater propensity for impact by being more trusting and engaged".

Further to the preceding references, the present research supports and extends existing research on the critical importance of Mission and buy-in into the vision broadly, to individual's ability to sustain focus, perseverance, and ultimately resilience in some of the most trialling conditions (Bartone et al., 2013; Britt et al., 2013; Gruber et al., 2010; Meredith et al., 2011; Siebold, 2007). These are explored in more detail in the following section of this chapter.

'What Goes Right' through the Axis of Curiosity and Resilience

Further to showing us that we can benefit from examining how curiosity enables individual resilience, the present research invites us to reflect more broadly on the team and organisational outcomes achieved through curiosity-enabled resilience. This was not specifically in the aims of this present research. However, unfolding this

work's findings in the three data chapters allows us to glance at the team and organisational outcomes pursued in environments where resilience and curiosity are crucial for thriving in ambiguity. The following section briefly explores the data from this different angle and renewed perspective, inviting further research into the team and organisational outcomes.

The motivation to explore the data from the perspective of team and organisational outcomes emerged as a response to SAS members' insistence that the dynamic process of resilience is intimately reliant on its context. That there is an essential and bidirectional relationship between team and individual resilience, which underpins the capacity for thriving in ambiguity. These reflections mirror and practically extend Duchek (2020) work and, specifically, her insistence that the study of team and organisational resilience is shifting away from a focus on defensive responses (such as resistance and recovery) and towards adaptation as well as the capacity for anticipation. It was also motivated by researchers' insistence that focus on team resilience is vitally important for both- preventing disastrous outcomes and gaining competitive advantage, and the emphasis on positive interdependency between team members (Chapman et al., 2020).

In this depiction of SAS members' reflections (figure 13 below), an important note is that curiosity and resilience are positioned as two axes holding and framing performance. Curiosity is positioned at the horizontal axis to illustrate its influence on broadening capabilities for positive outcomes. Resilience is positioned at the vertical axis to illustrate the deepening and elevation of capabilities for positive outcomes. This depiction of the relationship between curiosity and resilience is also inspired and framed by Fredrickson's Broaden and Build theory Fredrickson, 2004) and the

functional contributions of curiosity in that respect (Kakade & Dayan, 2002; Kang et al., 2013; Kashdan et al., 2013).

In this SAS depiction of peak performance, embracing the core of performance are Chapter 7's contextual prerequisites for resilience, including Learning, Shared Frame of Reference and Clarity of Purpose. The second layer - the circle embracing these, includes the reported individual experiences as the impact of the contextual requirements being delivered. SAS members indicated these across chapters, including in their definition of resilience and curiosity. This second layer reflects the experiences of Vision, Intrinsic Motivation, Psychological Safety and Value Alignment, each of which was seen as essential for sustaining resilience in ambiguity. The third circle reflects on the behaviours displayed and observed by resilient individuals in relation to their team and, as such, mirrors the team engagement patterns that enable thriving in the SAS. These include Connection and Exploration (as the outcome of shared Vision), Openness and Humility (in alignment with Intrinsic Motivation), Trust and Authenticity (emerging through Value Alignment) and Grit and Optimism (sponsored by Psychological Safety).

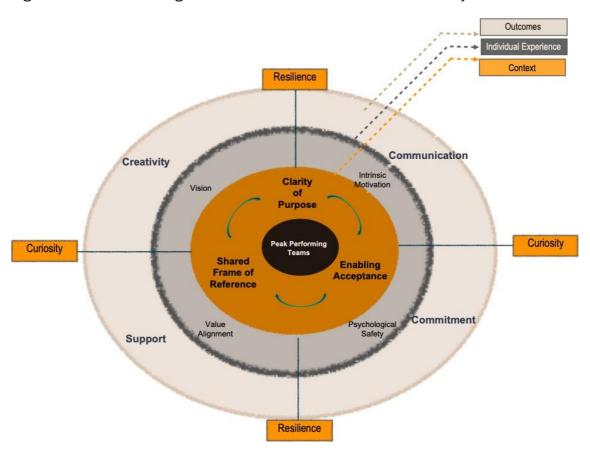


Figure 15: What Goes Right' as a function of resilience and curiosity

The above model is built against the SAS references to how context can stimulate individual processes, interpersonal and team interactions and ultimately- resilient outcomes.

As noted in the literature review, research has differentiated team and organisational resilience from flexibility, robustness and agility, chiefly on the premise that resilience is critical in dealing with the unexpected, that it demands adaptation and allows teams to generate and engage with opportunities in trials, ultimately emerging stronger (Ducheck, 2020). The outcomes of Creativity, Communication, Support and Commitment in Figure 13 above afford for just that- capacity to adapt, connect and persevere towards better outcomes. Comments and references illustrating these are listed below and include:

- "Though in times of trial, I have questioned my ability to overcome the threat, I could not question I will ultimately give it my all, realising the values I am entrusted to protect and serve; the trust that is vested in me by colleagues." – as an example of an effectively nurtured outcome of Commitment.
- "Curiosity comes with readiness to look for yet another solution, a different way of doing things. It is about maintaining a flexible mind so that you can go over, around and past an obstacle and towards your goal."- as a reference to the outcome of Creativity, along with references to the 'Number 8 wire', the "make do attitude" and the commitment to "finding workabouts".
- "My failure can be another's platform for success, and you can never judge how your exposures can become useful to another."- amongst the many outcomes of Communication.
- "You cannot be expected to operate without utmost trust or commit to what we need to achieve in our context, without trusting and being trusted. However, that goes beyond skills and task-based deeds. You prove and earn trust equally in the moments of respite, recovery and reflection, as well as on operations. To be effective, you have to be the whole of you to be one of us, and that also means you have to wholly accept your brothers and feel accepted" as a reference to the outcome of Support.

The SAS Peak Performance model and the insights gained across the three data chapters of this work ultimately depict organisations such as the SAS as curious organisations. The emphasis on continuous learning and development in the Pursuit of Excellence and the SAS motto 'Who Dares Wins' is born out of the practical necessities for thriving in ambiguity. Nevertheless, they support and extend existing

references to the definition of learning organisations, including a focus on continuous learning and development, personal mastery, teamwork and shared vision, and team learning (Mello, 2005; Senge, 2006). This present research further contributes to this field by presenting applied and practical references to the importance of nurturing a positive bi-directional relationship between organisations and their members through trust, information sharing and active promotion of organisational learning, amongst others (Chan & Scott-Ladd, 2004; Cree, 2005; Senge, 206). The present research further contributes to the literature by demonstrating that team's and organisations' ability to anticipate, adapt to and influence their outcomes are fundamentally linked to their capacity to make space for curiosity and hence, nurture the resilience of the talent that comprises them (Ates & Butitci, 2011).

Whereas the benefits of these functions were evident in the SAS context where the threat is often imminent, direct and significant, the implications of SAS members' reflections are just as powerful in the non-military context (Thompson et al., 2018). Again, deeper awareness needs to be developed around the unique role our capacity for curiosity can serve for our resilience and, specifically, how curiosity may enhance access to decision-making capabilities and sustain focus towards positive outcomes in demanding conditions or under duress.

CHAPTER NINE: CONCLUSION

The primary aim of this study was to understand the phenomenon of resilience from the perspective of SAS members, who must perform and thrive in conditions of significant demands, prolonged stress and ambiguity. The second, and equally important aim, was to explore how curiosity contributes to building and sustaining resilience. The third aim was to explore and map the cadence or 'process' to resilience, hence contributing with a model for building and sustaining resilience in ambiguity. The overarching research question for this study was: "What goes right for resilience?" Three sub-questions elaborated on the above research questions. These, therefore, asked:

- "In what ways does curiosity support resilience?"
- "What are the core heuristics that sustain and broaden the resilience of SAS members?"
- "What are the contextual conditions that broaden and build resilience for thriving in ambiguity?

Chapter 1 framed the context for this research, by presenting the background, objectives, research questions and structure of this work. Chapter 2 presented a review of three main strands of literature related to the research question: individual resilience, team and organisational resilience (or context) and curiosity. Chapter 3 described the methodology and methods used to obtain data for the purpose of analysis. The Methods chapter (Chapter 3) reviewed research paradigms, explored the philosophical position shaping this research and outlined the steps taken in

collecting and analysing the data. Chapter 4 introduced the unique 1NZSAS context in which the research questions were explored. Chapters 5, 6 and 7 presented the findings to the three sub questions. Chapter 5: "Know it by the Company it Keeps: How Curiosity Enables Resilience" addressed the first sub question, by exploring the links between curiosity and resilience. Chapter 6 "Who Dares Wins and the SAS Resilience Heuristics", explored the second sub question and the core heuristics SAS members rely upon, to build and sustain their resilience in times of significant demands and trials. Chapter 7- "A Context to Thrive In" focused on what SAS members described they need from their context, to build and sustain resilience. Chapter 7 built on the relationship between the individual and their context and addressed the third sub-question of this research. Chapter 8: "Integration of Findings and Proposed Framework" connected the findings across the three data chapters reconstructing resilience through curiosity and delivering an integrated model including the effects of context. Chapter 8 outlined the SAS Process to Resilience model and reviewed the data through the prism of teams. This current Chapter 9 aims to clarify the contribution of this thesis, by underlining specific contributions to theory and implications for practice.

Implications for Theory

Broadening and Building Resilience through Curiosity

The first major theoretical contribution of this research is in highlighting how curiosity enables resilience. Whilst possible parallels between resilience and curiosity have been explored in the literature, there is little research linking the constructs directly (Denneson et al. 2017; Goodman et al., 2017). This present research extends

existing theory by demonstrating the numerous and multi-dimensional contributions of curiosity to resilience. It outlines how curiosity serves as an essential capability for resilience in ambiguity, change and unpredictability. Specifically, the present research contributes by outlining how curiosity influences our cognition, emotions and behaviors. It illustrates how curiosity may shape an adaptive engagement with the shifts in our context and sustain our capacity to persevere towards our goals. Amongst others, these demonstrates how these curiosity-sponsored responses support resilience in the moment as well as in the longer term. It challenges us to focus our attention beyond reference to state vs. trait. Instead, it invites us to focus on developing the strategies and shaping the context for resilience through curiosity.

The present research contributes by highlighting that curiosity aids resilience directly, by sustaining perseverance and maintaining openness for and capacity to engage with opportunities. Whilst some of these factors have been researched independently as key indicators of resilience (Hamby et al., 2017; 2018; Liu et al., 2017) as well as curiosity functions (Goodman et al., 2017; Litman 2009), this present research draws empirical links between curiosity and resilience directly. In this case, the present research brings depth to research on ambiguity tolerance (Gluckman, 2016; Herman et al., 2010; Littman, 2010), in demonstrating how curiosity serves resilience by sustaining constructive exploration of the unknown. Further, the present research confirms that curiosity sponsors greater distress tolerance (Denneson et al., 2017) and illustrates how the capacity to sponsor openness and awareness may allow us to immerse ourselves in our experiences more constructively and positively (Kashdan & Silvia, 2009; Karwowski, 2012). Each of these curiosity functions was shown in this research to support our ability to orient intentionally (rather than reactively) towards shifts in our context, in turn influencing resilient engagement and better outcomes.

The present research builds on Robinson & Bridges (2011) and Watson (2006) observations on the critical importance of sustained access to cognitive and emotional capabilities for resilience, by linking these to curiosity. This thesis demonstrates the applied importance and processes through which curiosity sustains resilience through arousal, attention, interest, cognitive effort and engagement (Friborg, et al., 2009; Jensen, 1995; Kang et al., 2013; Meredith et al., 2011; Staal et al., 2008), thus enabling us to think through and effectively explore options in conditions of duress, rapid change, deprive or stress. The present research also shows us how curiosity supports capacity for adaptation and exploration of ideas, stimulates improvisation and enhances cognitive flexibility. Whilst this is mirroring references to what resilience may need in times of significant demands or acute change (Meredith et al., 2011; Robinson & Bridges, 2011), the present research demonstrates that curiosity aids these resilience functions directly. The present research further extends the scope of existing literature on curiosity, by showing the benefits of the intrinsic desire to seek out new information and gain new experiences (Goodman et al., 2017; Litman, 2009; Litman, 2010) and the benefits curiosity's exploratory states (Kang, et al., 2009; Kashdan, et al., 2013) to building and sustaining resilience. The present research also supports and extends existing literature, by demonstrating how curiosity's ability to sponsor deeper problem comprehension, knowledge and exploration (Meredith et al., 2011; Robinson & Bridges, 2011) sustains and builds resilience in some of the most demanding conditions.

By presenting empirical evidence, the present research extends existing research on curiosity as an antecedent of intellectual enrichment, and ultimately- as a factor that fuels adaptability and flexibility (Loewenstein, 1994; Litman & Silvia, 2006; Voss &

Jeller, 1983). Again, the primary contribution of this present research is in mapping an explicit link between these curiosity contributions and resilience. Amongst others, the present research confirms that resilience for thriving demands a fundamentally different mindset (Gollwitzer & Keller, 2016) and that curiosity is the bases for this mindset, an antidote to the negative effects of change, stress and anxiety.

The present research showcases curiosity as the psychological manifestation of the 'novelty bonus' in the pursuit of learning (Kakade & Dayan, 2002). It also positions curiosity's drive-like functions (Loewestein, 1994; Litman & Silva, 2006) into a framework for building and sustaining resilience. Whilst the awareness that curiosity may help reframe challenges, trials and setbacks as valuable windows for development has been an accepted view of curiosity in the literature (Goodman et al., 2017; Litman, 2009; Litman, 2010; Walker, 2019), this understanding has not been commonly applied to resilience. This link between curiosity and resilience is a key contribution of the present research. It demonstrates not only immediate but also long-term positive effects of curiosity on resilience. The present research also showcases the positive effects of curiosity on resilience by demonstrating how we can engage capacity to seek and enjoy challenges rather than avoid them, explore opportunities rather than dwell on loss, learn from rather than ruminate on exposures, and anticipate positive outcomes rather than only worry about risks.

The present research further demonstrates curiosity's contribution to broadening and building resilience through accumulated learning and growth (Walker et al., 2019) and specifically, the cumulative benefits of well-traversed challenges. Here, the present research extends existing literature by highlighting that curiosity sponsors richer and more adaptive responses to uncertainty and ambiguity through greater thought-action repertoire, deeper and broader range of experiential feedback,

enhanced learning and recall capabilities, broader behavioral range and cognitive context, and enhanced cognitive, social and psychological resources (Denneson, Smolenski, Bush & Dobscha, 2017; Gallagher & Lopez, 2007; Kang et al., 2013 Kashdan et al., 2013; Reio et al., 2006).

Related to the above, the present research demonstrates how curiosity may help develop and sustain self-belief. It extends current research on the bi-directional relationship between curiosity and self-efficacy, including that curiosity supports positive appraisal of one's coping potential (Silvia, 2008); greater sense of personal competence, optimism and perseverance (Kashdan et al., 2013; Reio et al., 2006); commitment to self-improvement (Kashdan, 2013; Sandri & Robertson, 1993); sense of flow, intrinsic motivation, self-concept and personal identity (Karwowski, 2012). Whilst these curiosity contributions have been studied independently, the present research explores them collectively in the context of the relationship between curiosity and resilience.

This present research further supports and extends the work of Aude et al. (2014), Boerman et al. (2012) and Gollwitzer & Keller (2016) and specifically, the importance of sustaining control and perseverance through influence. It demonstrates that curiosity supports resilience, by maintaining focus on goals during times of change, uncertainty and ambiguity. Hence, this work also extends research demonstrating how curiosity helps sustain commitment, exploration, pursuit of goal and ability to follow one's interest (Blunt et al., 2018; Galagher & Lopez, 2007).

The added layers of depth through the SAS resilience heuristics and their integration into the 4R model presented in this work, further extend existing research on curiosity. For example, whilst previous research has linked curiosity to greater

tolerance for interpersonal differences (Kashdan et al., 2013) and valuing diverse others (Herman et al., 2010), there is little existing research linking these contributions directly to resilience. SAS members' reflection support research on the benefits of interpersonal curiosity (Littman & Pezzo, 2007); openness and belonging (Kashdan et al., 2013; Walker et al., 2019), and the power of psychosocial resources in shaping and supporting resilient outcomes (Gruber et al., 2010).

Insights from this research also extend literature on the importance of self-awareness and optimism (Sharma et al., 2014) in sustaining resilience, through outcomes such as capacity for contingency strategies, efficiencies and reduced vulnerabilities (Burnard & Bharma, 2011; Sutcliffe & Vogus, 2003). Here, the contribution of the present research is in pointing out that curiosity may aid us to better frame, manage and allocate our resources in times of significant demands. This also extends research on the importance of mindset for sustaining the commitment to pursuing complex goals (Gollwitzer & Keller, 2016).

The present research invites further and more in-depth research, specific to the bidirectional relationship between curiosity and resilience, and the ways in which this may be fostered to enable capacity for thriving in ambiguity. It presents new perspectives to the debate of curiosity being ultimately good or ultimately bad and challenges us to build towards "purposeful", and "informed" rather than destructive or "ill-informed" curiosity (Harrison 2009; Kang et al., 2009; Reinhart, 2008; Reio et al., 2006).

Redefining Resilience for Ambiguity

The present work contributes to research by unpacking the question 'what goes right' in resilience (Hamby et al., 2018) from a holistic perspective (Liu et all, 2017). In

studying resilience as a series of mechanisms and interactions, the findings build on the work of Goodman et al., (2017) and respond to the call for resilience to be studied and developed as a process of interactions rather than an isolated trait or a set of traits (Belsky & Pluess, 2013; Duchek 2020; Chmitorz et al., 2018). Indeed, the present research clearly positions resilience in a process of choices and decisions, and in whether and how these inform ones' lifelong journey, rather than narrowly measured outcomes of specific events. Hence, the present research provides empirical support and contribution to research studying resilience as dynamic and developable (Chmitorz et al., 2018; Jensen, 1995; Corner, Singh & Pavlovich, 2017).

This current research redefines resilience as the capacity to 'build better' following every encounter, focusing us away from the absence of impact and instead- towards the individual's capacity to grow and thrive, in spite of or even because of impact (Walker et al., 2019). It extends research by exploring 'how resilience works' and 'what it takes' to see us thriving in ambiguity (Hart, et al., 2005), and builds towards resilience as a vehicle for improvement and growth (Pickering et al., 2010). To support these, the resilience heuristics offered in this work demonstrate that challenges "take us as they find us". This extends research on how we need to shape our thinking, mindset, dispositions and responses to broaden and build access to resilience (Boermans et al., 2012; Gollwitzer & Keller 2016; Wu & Miao, 2013; Walker, et al., 2019). Further, the 4R Process to Resilience offered in this work, frames the cadence for "intention-full" engagement, which SAS members argued is essential for resilience and the capacity to thrive in unpredictability, change and ambiguity.

Hence, this present research provides empirical evidence that resilience must be viewed as a pro-active, purposeful and intentional process, that drives our capacity

to reconfigure, anticipate and thrive in the unexpected, as well as a multifaceted, umbrella construct, that marks the cadence to authentic thriving (Duchek, 2020, Walker et al., 2019). This work extends current research beyond resilience as 'the capacity to resist' the negative effects of significant demands and toward not just maintaining but also broadening our subjective equilibrium (Friborg et al., 2009; Wu et al., 2013). In adding to the nuances of the outcome trajectories expected from a resilient journey (vs. a journey of recovery) (Bonnano, 2004), this work builds pragmatic and tangible layers to the differentiation between recovery and resilience. It also extends research, by reconstructing resilience against the cumulative effects of learning, successful coping and multiple intrinsic and external protective factors (Sattler & Font, 2018; Walker et al., 2019).

By demonstrating that resilience unfolds differently at different times and for different ones of us, the present research also responds to the demands that we direct more energy towards studying the effects of unique individual strengths and pathways to resilience, rather than vulnerabilities (Liu, Reed & Girard, 2017). It challenges us to focus on resilience as a measure for authentic thriving and development (rather than absence of failure) and stresses the importance of seeking, respecting and nurturing different pathways to resilience (Walker et al., 2019), especially within tight and diverse teams, where interdependencies are a crucial component of survival.

Importantly, the present research responds to calls for greater focus on how context shapes and influences capacity for resilient outcomes (Walker et al., 2019; Coughlin, 2018). For example, this present research confirms and broadens references to resilience as the capacity to "transmute the energy of change to benefit self and others" (Walker, 2019, p. 216). However, it also highlights that access to this

capability is intimately dependent on the quality, depth and direction of the relationship between the individual and their context. Hence, a key contribution of this present research is in outlining how and why resilient outcomes are the results of multiple individual, team and contextual factors, built cumulatively, intentionally and progressively. It challenges us to focus on and study the interdependencies between capabilities, context and outcomes, and to view these as an evolving relationship rather than isolated areas (Sonuga-Barke, 2017).

The Effects of Context on Resilience

Building on the above, another major contribution of this present research is in demonstrating how context (and specifically team and organizational context) can have a stealing or strengthening effects on resilience. The present research contributes by pointing to what the context must offer for individuals to build and sustain resilient outcomes. It highlights some of the critical interdependencies between the individual, the team and the context (Chapman, et al., 2020; Kennedy et al., 2012). This supports and extends a plethora of research, suggesting that resilience is the result not only of innate capabilities, but also of the patterns and processes that shape interactions between individual and context, including appraisal and coping processes that can be both-personal and contextual (Aude et al., 2014; Britt, Boerman et al., 2012; Liu, Reed & Girard, 2017; Luthans, 2016; Pickering et al., 2010). The present research invites us to reflect more broadly on the outcomes that can be achieved through curiosity-enabled resilience in individuals and allows us to glance at outcomes and practices pursued in environments, where resilience and curiosity are equally and vitally important for thriving in ambiguity. These reflections mirror and practically extend the work of Duchek (2020) and specifically, her insistence that the study of resilience shifts away from focus on defensive responses (such as resistance and recovery) and towards adaptation and anticipation. It also responds to researchers' insistence that focus on context-for-resilience is vitally important for preventing disastrous outcomes and for gaining competitive advantage (Chapman et al., 2020).

Further to outlining the significant impact on our capacity for and ease of access to resilience and curiosity, the present research outlines that our team or organizational context, can support or erode our scaffolding for life, and that it can intimately influence the extent and nature of innate capabilities we are willing and able to access. The model presented in Figure 13 of this work outlines the supportive effects, using curiosity and resilience as the axes that sustain positive outcomes. This depiction of the relationship between curiosity, resilience and context, extends the work of Fredrickson's and his Broaden and Build theory (2004) and the functional contributions of curiosity in that respect (Kakade & Dayan, 2002; Kang et al., 2013; Kashdan, et al., 2013), delivering a model that is at once-rich and applied. The model contributes by outlining specifically how context influences the experience, access to and outcomes of resilience, by outlining individual, intra and interpersonal processes, team interactions and ultimately- how these serve as vehicles for resilient outcomes. The model contributes by mapping ways to the flexibility, robustness, trust and agility, that are seen as critical in dealing with the unexpected, and answers the question of 'what it takes' for us to frame and engage with opportunities in trials, ultimately emerging stronger (Ducheck, 2020). The model presented in Figure 13 supports and extends existing references to the benefits of continuous learning and development, personal mastery, teamwork and shared vision as well as team learning (Mello, 2005; Senge, 2006). It extends existing research aspirations, by spelling out the benefits and pathways of such interactions being fostered deliberately as well as the risks when they are neglected.

The model presented in this work stresses the importance of enabling belonging as a key component to resilience. As such, the present research practically extends existing work around the power of collective cognitive capacity (Lengnick-Hall et al., 2011), commonality of shared accountability, positive shared identity (Youssef & Luthans, 2007), enabling processes of interactions, culture and values (Lim & Nakazato, 2018), as well as cohesion (Britt & Oliver, 2013; Meredith et al., 2011). Amongst others, the present research builds on the work of Lengnick-Hall et al. (2011) and Youssef & Luthans (2007), who challenged organizations to deliberately focus on developing individual resilience in employees, such that they continue to foster and support the organisation's capacity for resilience. As noted, the present work also contributes to the literature by demonstrating the role of self-awareness in supporting and building resilience- an area that has been of interest for some time, chiefly in survival and recovery strategies, but also in some organisational research (Beardslee, 1989; Gaddy, Gonzalez, Lathan & Graham, 2017). The present research further supports the work of Duchek (2020) and her emphasis on the importance organisation's commitment to "develop capabilities and functions that are necessary to deal with any kind of unexpected events" (p. 219). The present research' references to resilience further extend existing literature on the importance of cultures of social support, trust and belonging, shared mindset and enabling shared values (Lim & Nakazato, 2018; Walker et al., 2019). Equally, the present research supports and extends existing literature on outcomes such as decisiveness, expertise, creativity and ultimately- capacity to change and influence ones' environment, as born out of collective cognitive capacity that is nurtured through enabling belonging (Kay & Goldspink, 2012; Lengnick-Hall et al., 2011). Further, the present work contributes to research in trust, perceptions of fairness and well-being (Dresche et al., 2014; Goronduse & Hilman, 2019; Kalen-Sukra, 2019), by demonstrating how these can be built by and fuel curiosity, and thereby resilience. The present research also supports and extends existing research on the critical importance of mission or purpose clarity and buy-in to the vision broadly, to individuals' ability to sustain resilience in some of the most trialing conditions (Bartone, et al., 2013; Britt, et al., 2013; Gruber et al., 2010; Meredith et al., 2011; Siebold, 2007).

Arguably, whilst framed by individuals who are selected and trained to perform in context of acute ambiguity, the implications of SAS members' reflections are just as powerful in the non-military context (Thompson, et al., 2018). They challenge and demand deeper awareness around the unique role our capacity for curiosity can serve for our resilience, and around how to sustain focus towards positive outcomes in demanding conditions or under duress.

IMPLICATIONS FOR PRACTICE

Implications for Leaders and Practitioners

Amongst others, this research stressed the importance of leaders remaining attentive to the manner in which 'ways of working', expectations and dynamics may build, erode or detract from resilience. Whilst the importance of having clarity of mind, focused attention, access to creativity and strong sense of belonging may be more readily perceived in combat operational environments or acute risk, the insights gained from this research have just as powerful of an impact, to non-military contexts. The question of 'what goes right' in people who not only negotiate but also thrive through significant trials and ambiguity (Southwick, Bonnano, Masten, Panter-Brick & Yehuda, 2014) will continue to demand our best response. Events in recent history have amplified the critical importance of not only sustaining baseline resilience, but also nurturing the conditions within which we can learn, grow, thrive and contribute, following every exposure (Giovannini et al., 2020; Inuaesiet, Okon & Akpan, 2021; Resnick & Fins, 2021; Yildirim & Solmaz, 2020; Yuan, 2021). In highlighting the pathways to resilience through curiosity, the present research offers an inescapable logic as well as practical ways to nurturing, broadening and building resilience through curiosity.

The key implication for practice is that curiosity needs to be nurtured and supported so that resilience can thrive. The findings highlight that nurturing curiosity can support resilience holistically, through richer cognitive, physiological, psychosocial and emotional, as well as spiritual resources. They also highlight that whilst cultivating and nurturing 'curiosity with a purpose' can help resilience, aimless curiosity can detract from performance and even lead to disastrous outcomes.

Hence, one implication for practice arises from the question of how to nurture and direct curiosity in supportive context and towards positive and constructive results.

Beyond the need to nurture curiosity, the present research offers invaluable insights for practitioners and leaders who are entrusted with shaping the conditions for resilient outcomes. For example, Chapter 7: "Context to Thrive In" and the model presented in Figure 13 of Chapter 8, signpost a route to framing and nurturing context for resilience. A key implication for practice arises out of the critical importance of Shared Frame of Reference, Clarity of Purpose and Learning and the ensuring importance of enabling values, culture and practices for resilience. In exploring and weaving together SAS interviewees' reflections around the factors that support or derail their resilience, this research challenges leaders and practitioners to better understand, support and broaden resilience, by nurturing and co-designing contexts conducive of supporting curiosity. As leaders and practitioners, this present research makes it vitally important for us to consider and commit to the idea of what could be gained and improved (as well as what we stand to lose) in the context of transparency and openness, born out of "jealously guarded trust", the likes of which could only emerge through enabling belonging.

Implications for individuals

The tools offered in this research can also be valuable for individuals seeking to broaden and build their own personal resilience and capacity for thriving in ambiguity. A key contribution of this research is that it delivers insights from individuals for whom resilience and thriving in ambiguity are vital for survival, and who have first-hand experience in this regard. Arguably, every component of this research can be applied to our everyday context, to enable our ability to manage change, uncertainty and

significant demands. From the SAS heuristics through to the importance of strengthening curiosity for resilience and selecting and framing a context for thriving, this research can be used to aid individuals and communities in making sense of and growing through experiences of challenges, setbacks and ambiguity.

As noted, SAS members' responses demonstrate that curiosity supports resiliency holistically, by sustaining and enhancing cognitive, physiological, psychosocial and emotional, as well as spiritual resources in times of trials. The insights gained around the ways in which SAS members engender and build resilience through curiosity, can be used to re-frame our experiences, strengthen our pool of existing and relationships of mutual reliance. For example, each of the SAS heuristics can aid us in orienting more resiliently towards the trials of life and in directing our energy towards deliberately constructing the experiences and opportunities we seek.

Limitations and Future Research

This research calls for further exploration into the link between curiosity and resilience. Accepting the importance of curiosity in supporting resilience, future research may contribute with deeper enquiries, by examining in more detail factors that may take away or limit curiosity's contribution to resilience, as well as contextual conditions that engender curiosity towards resilience. The findings of this research may shape a starting point to frameworks, through which subsequent research can explore how curiosity supports resilience. The framework of this current work presents a reconstructed view of resilience and a model for performance and thriving, that outline the relationship between individuals and their context. The purpose of the present research and each of the areas explored landed themselves well to the constructivism paradigm and more broadly- a qualitative framework of enquiry.

Moving forward, a number of areas unveiled in this research may benefit from being explored using quantitative methodology. Chapter 3 of this work and specifically- the Research Design section, explores in detail the benefit of different frameworks of enquiry. Whilst the present research was committed to gaining richness and depth through subjective insights, each research area may benefit from quantitative approach, to assess frequency and magnitude of proposed relationships, particularly when applied to broader samples (Cresswell, 2013).

Initially, it was felt that one potential limitation in this research is that it focused solely on the experiences of individual SAS members. Reflections since have minimised such concerns and instead, generated confidence in providing rich insights from a cohesive group. Nevertheless, it is worth considering that the vast majority of insights explored in this work arise out of military experiences, with the exception of a handful of interviewees who reflected on how respective strategies have also served them in their broader personal lives. In the context of studying resilience as a holistic ('wholeof-life, whole-of-person') capability, this may present a limitation for this research. Future research may benefit from building on the insights gained and from testing these against SAS members' experience of life beyond the training or operational context of work. Similarly, a more holistic exploration of the frameworks presented in this work may benefit from being examined along with SAS members' next of kin. Further, all SAS members who participate in this research were currently serving with the Unit. As noted in this work, they all reflected on their context as a 'well in the drought'; an enabling frame that holds, builds, broadens and sustains their resilience. Future research may benefit from extending this research to SAS veterans. This may explore the extent to which these principles and references to resilience continue to serve beyond time of service and outside the enabling context of the Unit.

Building on the above, this research was conducted in the hope that the proposed frameworks and references to 'what goes right' in resilience will be just as applicable to contexts outside of the SAS. Nevertheless, it is noteworthy that SAS members, however diverse, are selected and trained to deal with ambiguity and to be resilience. More to the point, they self-select to operate in a context that is by design rife with ambiguity and unpredictability. The references offered in this research will therefore benefit from being explored and tested in different context, if only so that the pathways to resilience can be strengthened through different perspectives.

By virtue of design, the insights gained through this research emerged from retrospective reflections. To test and strengthen the findings of this research, it could be beneficial to appropriately assess references to building and sustaining resilience as exposures unfold. Specific to areas such as the contributions of curiosity to resilience, for example, this may be aided through a multidisciplinary approach. For example, this area of research may be strengthened through neural and/or physiological examination on the effects of curiosity on delaying the detrimental effects of stress and anxiety. Similarly, the effects of interpersonal curiosity on strengthening capabilities beyond perceived social support (including trust, creativity and mutual reliance), may be examined through methods akin to 360-degree feedback.

Overall, it is hoped this study contributes to further evolving our views of resilience and strengthening our ability to thrive in ambiguity, through curiosity. The hope is that the frameworks and references offered in this work help not only aid recovery, but also build and fortify capacity for broadening resilience through significant demands, ambiguity and setbacks. The hope is also that this research better aids us in

understanding and committing to enhancing resilience through enabling belonging, and to co-creating the conditions within which we thrive.

APPENDICES

Appendix A: Interview Proforma

	Resilience and Curiosity:		
	Participant indicator	Location	Date
1. Introduction	briefs I send you? Do you have any que HOW this INTERVIEW will go? I am interested in your personal experie building and sustaining resilience in others in the organisation, i I may ask you about situations that pert sharing! If at any stage you feel uncomf	n and Intended Outputs of this Research' or or estions on these? ence of resilience, as well as your impression a ers and in your team/organisation. We will also	and views on the role different factors play in blook ways to develop and engender se any detail you are not comfortable ew.
		dditional points re: context and follow up as ide	
			1

	Resilience and Curiosity:
	Participant indicator Location Date
	You have been selected/asked to participate in this research on the basis of your chosen occupation and the view that it deman greater resilience than other roles and functions within the NZDF (and outside the organisation).
	How did you come to do what you do?
	People who choose to pick up challenges or do more challanging things ussually say they "want to know what they are made of to "see how far they can go"; "wanting to do something new and different" etc. Can you describe the reasons why you choose to take on challenges or do challenging things?"
	Do you think these reasons would be common/ apply to your team also?
	Why did you chose to pursue this role specifically [refer their specific role e.g. 1NZSAS, Polot, RNZA] to challenge/test yourself
2. Background	What role (if any) do you think curiosity plays in your choice to take on challenges?
	[If C plays a role] How does this [curiosity] help you push through the challanges? [probe/ assess assumption on 'stress reduction-curiosity'] Achieving a goal such as this (Selection/Cycle/Pilot Trg etc) requires some oppenness to the uncertain. "what charachteristics of you think are important for people to be open to the uncertain"
	[as well as adaptability]
	Pursuing goals such as these can be stressful for some. [e.g. they can take long time to actualise and may come with significan (perceived) setbacks if they don't come to fruition such as perceived failure!] What do you think helps people like yourself, overcome setbacks?
	What do you think helps deal with the stress/maintain possitive focus on the goal?
	Subject yourself to situations of higher risk What is the motivation to take on this? Why interested in this?

	Participant indicator	Location	Date
	I am interested in your personal experience of re push through challenges, setbacks and/or hards. Can you think of a time when you felt [most] test hardhsip/challenge or to grow from those?	ship.]	ů,
3. Individual Resilience	What aspects of this situation were most trialling your?	[risky/ambiguous/demanding]? Why	/what about this situation was 'testing' for
	Some people collapse or freeze under pressure. allowing you to maintain focus and perseverance		
	Did curiosity have a role to play in this situation a [use appropriate reference for C (e.g. 'hunger for 'confort with uncertainly'; 'oppenness to new idea	r knowledge'; the 'practice of finding v	workabouts'; application of 'what-if' scenar

	Participant indicator
	In your role/team what are the key factors that support the ability to:
	o operate in high-risk environments?
	work through highly dynamic and rapidly changing situations?
	o maintain focus under duress/challenging situations?
	o maintain commitment to positive outcome?
	o deal with the unknown?
4. The R Factor (OR)	In your role/team, there appears to be a high value placed need to find workabouts ("Making do" and "The Number 8 Wire"). do you think: The ability to find 'workabouts' supports resilience?
4. The F	In what way?
	Does curiosity play a part in this?
	In an ever-changing environment such as yours, the ability to explore different ideas appears key to resilience. Do you think curiosity plays a part the ability to explore different ideas? [elaborate]
	can you think of example
	What were the things in your immediate team/environment that you felt assisted you in your situation?

	Participant indicator Date		
important part of your role overall? Does your organisation look to develop and build these practices IOT support your effectiveness? If so HOW?			
	What were the:		
	Organizational factors you found most supported your 'curiosity/resilience'		
	Organizational factors you found were the greatest barriers to your curiosity/resilience?		
	Things' you relied on the most/focused on to maintain control of emotions/thoughts/situation?		
	What is the thing you will take away from this experience? Key learning?		
	Often people report growth, new realisation, development, new skills, views Yours?		
5. Add Ons	Add on: Critical decisions, cues and their implications, strategies, key enablers, post-incident growth, principles ascribed to?		
	What sustains the ability to maintain engagement in highly demanding and trialing situations?		
	Often when confronted with stressful situations, or situations of peril, we rely on heuristics, things we may have learned or tho about in the past that help us get through to them. These may be sayings, proverbs, and memories of past experiences where did things right		

	(TG 6 and Suport only?!): When on opperational deployment, your team has the reputation of beeing able to build and sustain		
	relationships of mutual support/respect with host nations/allie nations. What do you think motivates this?		
iosity?	What (if any) values support and underpin this ability? How is it build/trained for?		
6. Interpersonal Culriosity?			
6. Interp	[expected to deal with and maintain self control around difficult people; people they do not like and may wish to do them har What are the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts, heuristics, principles etc) that you think support the ability to work with difficult or 'different' other and the factors (thoughts) and the factors (thoughts) are the factors (thoughts) and the factors (thoughts) are the factors (thoughts) and the factors (thoughts) are the factors (thoughts) are the factors (thoughts) and the factors (thoughts) are the factors (thoughts) ar		
	THE motto "Who Dares Wins"- what is this underpinned by?		
TG 6 ONLY	What characteristics/traits/values are needed to fulfill this?		
7.			
	Additional Notes		

Appendix B: Participant Information Sheet

Taking the Road Less Travelled: Establishing the Link between Curiosity and Resilience

Participant Information Sheet

The aim of this research is to develop deeper and more applied understanding of resilience as well as to identify how curiosity can support resilience building and maintenance. It aims to offer tools that can effectively engender and build curiosity and resilience in order to support effectiveness, recovery and growth for individuals and organizations. The purpose of this research is to better explain, clarify, inform and demonstrate practices and principles in building and maintaining resilience through curiosity, by using empirical evidence and building on existing theoretical work.

You have been asked to participate in this research as an expert and are invited to take part in an interview. This is likely to take no more that 2 hours, including pre and post debrief, if needed.

Your participation is **voluntary**. You can choose to withdraw from the research at any time and can request your resposes to be removed from the research at any time, prior to the completion of the research.

How will your information be used?

	To support your organisation in resilience building and maintenance practices; To provide context and tools to implement in training, operations and ongoing service; To provide more understanding and support for individual and team resilience practices; To help shape a more responsive and adaptable organisation; To enrich the field of science, a nd The overall findings of this research may be published in reports, academic publications and employed in training.
How v	rill your information be protected?
	The research is administered in accordance with the Privacy Act (1993) and Defence Force Order 21/2002: Authority to Conduct Personnel Research in the NZDF;
	Individual responses are confidential . Your personal information will not be shared and will never be used outside of the purposes of this research, or to evaluate your performance.
	Reported responses are anonymous. Reports focus on summarised information such as summary reports and averages. No information that can identify you directly will be reported on or recorded in this research.
	Your individual responses will only be submitted to and viewed by the researcher.
	Your comments and responses will be coded, any information you offer will be stored securely and any copies of your responses will be destroyed upon completion of this research.
	You may request and view your own responses at any time.

This research is conducted under the supervision of Professor Kathryn Pavlovich (Waikato University) and Doctor Erica Seville (Canterbury University) and is supported by the New Zealand Defence Force.

The primary POC for this research is Alexandrina Bojilova. If you have any questions or concerns, please contact the researcher at alexandrina.bojilova@nzdf.mil.nz] or on 021 982 999.

Consent Form for Participants

Waikato Management School



Te Raupapa

Curiosity and Resilience

Consent Form for Participants

I have read the Information Sheet for Participants for this study and have had the details of the study explained to me. My questions about the study have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular questions in the study. I agree to provide information to the researchers under the conditions of confidentiality set out on the Information Sheet.

I agree to participate in this study under the conditions set out in the Information Sheet form.

Signed:	 _
Name:	
Date:	

Researcher's Name and contact information:

11000ai onoi o itamo ana oontaot imormationi		
	Researcher's Details	
Name:	Alexandrina Bojilova	
University:	(Student at) The University of Waikato, Hamilton, New Zealand	
Email address:	alia.bojilova@gmail.com and alexandrina.bojilova@nzdf.mil.nz	
Phone:	+64 21 982 999	

Supervisor's Name and contact information:

Capoi vicoi	oupor vicor o riamo una contact information:			
	Primary Supervisor	Secondary Supervisor		
Name:	Professor Kathryn Pavlovich	Doctor Erica Seville		
University:	The University of Waikato, Hamilton, New Zealand	Canterbury University, Christchurch, New Zealand		
Email address:	kpav@waikato.ac.nz	erica.seville@rsrc.co.nz		
Phone:	+64 21 446 745	+64 3 364 2250		

REFERENCES

- Abma, T., & Stake, R. (2014). Science of the particular: An advocacy of naturalistic case study in health research. *Qualitative Health Research*, 24(8), 1150–1161.
- Agaibi, C., & Wilson, J. (2005). Trauma, PTSD, and resilience: A review of the literature. *Trauma, Violence & Abuse*, 6(3), 195–216.
- Almedon, A. M. (2005). Resilience, hardiness, sense of coherence, and post-traumatic growth: All paths leading to the "light at the end of the tunnel"?

 Journal of Loss and Trauma, 102(3), 253-265.
- Aspinwall, K. (1996). Becoming a learning organisation: The implications for professional development. *Management in Education*, 10(4), 7-9.
- Ates, A., & Bititci, U. (2011). Change process: A key enabler for building resilient SMEs. *International Journal of Production Research*, 49(18), 5601–5618.
- Aude, S. N., Bryson, J., Keller-Glaze, H., Nicely, K., & Vowels, C. L. (2014). Preparing brigade combat team soldiers for mission readiness through research on intangible psychological constructs and their applications: Phase 1. *United States Army Research Institute for the Behavioral and Social Sciences*.

 Retrieved from http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier =ADA5 97445
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review,* 84(2), 191–215.
- Bandura, A. (1988). Self-regulation of motivation and action through goal systems. In V. Hamilton, G. H. Bower & N. H. Frijda (Eds.). Cognitive perspectives on emotion and motivation (pp. 37-61). Dordrecht, Netherlands: Kluwer Academic Publishers.

- Bartone, P. T., Kelly, D. R., & Matthews, M. D. (2013). Psychological hardiness predicts adaptability in military leaders: A prospective study. *International Journal of Selection and Assessment*, 21(2), 200–210.
- Becker, B., & Gerhart, B. (1996). The impact of human resource management on organizational performance: Progress and prospects. *Academy of Management Journal*, 39(4), 779–801.
- Belsky, J. & Pluess, M. (2013). Beyond risk, resilience, and dysregulation: Phenotypic plasticity and human development. *Development and Psychopathology*, 25, 1243-1261.
- Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375–5393.
- Boerman, S., Delahaij, R., Korteling, E. J. & Euwema, M. (2012). Training resilience for high risk environments: Towards strength-based approach within the Military. *International Handbook of Workplace Trauma Support*, 1.
- Boin, A., & van Eeten, M. (2013). The resilient organization. *Public Management Review*, 15(3), 429–445.
- Bonanno, G. (2004). Loss, the measurement of curiosity as a feeling of deprivation trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *The American Psychologist*, 59(1), 20–28.
- Bonanno, A. G., Mancini, A. D., Horton, J. L., Powell, T. M., LeardMann, C. A., Boyko, E. J., & Smith, T. C. (2012). Trajectories of trauma symptoms and resilience in deployed US military service members: Prospective cohort study. *The British Journal of Psychiatry*, 200(4), 317–323.
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual Review of Clinical Psychology*, 7(1), 511–535.

- Boxal, P. F. (1992). Strategic human resource management: Beginning of a new theoretical sophistication? *Human Resource Management Journal*, 2(3), 50-69.
- Britt, T. W., Sinclair, R. R., & McFadden, A. C. (2013). Introduction: The meaning and importance of military resilience. In R. R. Sinclair & T. W. Britt (Eds.), *Building psychological resilience in military personnel: Theory and practice* (pp. 3–17). Washington, DC: American Psychological Association. Retrieved from http://content.apa.org/books/14190-001
- Brown, S. (1996). A meta-analysis and review of organizational research on job involvement. *Psychological Bulletin*, 120(2), 235–255.
- Burnard, K., & Bhamra, R. (2011). Organisational resilience: Development of a conceptual framework for organisational responses. *International Journal of Production Research*, 49(18), 5581–5599.
- Byman, R. (2005). Curiosity and sensation seeking: A conceptual and empirical examination. *Personality and Individual Differences*, 38, 1365-1379.
- Chan, C. C., & Scott-Ladd, B. (2004) Organisational learning: Some considerations for human resource practitioners. *Asia Pacific Journal of Human Resources*, 42(3), 336–347.
- Chapman, T. M., Lines, J. L. R., Crane, M., Ducker, J. K., Ntoumanis, N., Peeling, P., Parker, K.S., Quested, E., Temby, P., Thogersen-Ntoumanis, C. & Gucciardi, F. D. (2020). Team resilience: A scoping review pf conceptual and empirical work. Work & Stress, 34 (1), 57-81.
- Charreire-Petit, S., & Huault, I. (2008). From practice-based knowledge to the practice of research: Revisiting constructivist research works on knowledge. Management Learning, 39(1), 73-91.
- Collins, R., Litman, J., & Spielberger, C. (2004) The measurement of perceptual curiosity. *Personality and individual differences*. 36(5), 1127–1141.
- Compas, B. E., Jaser, S., Bettis, A., Watson, B., Gruhn, M., Dunbar, P. J., Williams, E. & Thigpen, J. (2017). Coping, emotion regulation, and psychopathology in

- childhood and adolescence: A meta-analysis and narrative review. *Psychological Bulletin*, 143 (9), 939 991.
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82.
- Corner, P. D., Singh. S., & Pavlovich, K. (2017). Entrepreneurial resilience and venture failure. *International Small Business Journal*, 35(6) 687-708.
- Cree, V. (2005). Book Review: Social work, critical reflection and the learning organization. *Journal of Social Work*, 5(2), 248-249.
- Creswell, W. J. (2003). Research design: Qualitative, quantitative, and mixed method approaches (2nd Ed.). Thousand Oaks, CA: SAGE.
- Croft, A., Dunn, E., & Quoidbach, J. (2014). From tribulation to appreciation: Experiencing adversity in the past predicts greater savoring in the present. Social Psychological and Personality Science, 5(5), 511-516.
- Crosby, R. (2009). NZSAS: The first fifty years. New Zealand: Penguin Groups.
- Deetz, S. (1996). Describing differences in approach to organisational science: Rethinking Burrell & Morgan and their legacy. *Organisational Science*, 7(2), 191-207.
- Denneson, M. L., Smolenski, J. D., Bush, N. E. & Dobscha, K. S. (2017). Curiosity improves coping efficacy and reduces suicidal ideation severity amongst military veterans at risk for suicide. *Psychiatric Research*, 249, 125-131.
- Denscombe, M. (2008). Communities of practice: A research paradigm for Mixed Methods approach. *Journal of Mixed Methods Research*, 2(3), 270-283.
- Dirani, K. (2013). Does theory travel? Dimensions of the learning organisation culture relevant to the Lebanese culture. *Advances in Developing Human Resources*, 15(2), 177-192.
- Doe, P. J. (1994). Creating a resilient organisation. *Canadian Business Review*, 21(2), 22.

- Donaldson, L. (1995). American anti-management theories of organizations: A critique of paradigm proliferation. Cambridge, England: Cambridge University Press.
- Dowrick, C., Kokanivic, R., Hegarty, K., Griffits, F., & Gunn, G. (2008). Resilience and depressions: Perspectives from primary care. *Health*, *12*(4), 429-452.
- Duchek, S. (2020). Organisational resilience: a capability-based conceptualisation. Business Research, 13, 215-246.
- Eschleman, J. K., Bowling, A. N., & Alacon, M. G. (2010). A meta-analytic examination of hardiness. *International Journal of Stress Management*, 17(4), 277-207.
- Fergusson, D. M., & Horwood, L. J. (2003). Resilience to childhood adversity: Results of a 21-year study. In S. S. Luthar (Ed.), *Resilience and vulnerability:*Adaptation in the context of childhood adversities (pp. 130–155). New York, NY: Cambridge University Press.
- Fischer, C. T. (2005). *Qualitative research methods for psychologists: Introduction through empirical studies*. Burlington: Elsevier Science & Technology.
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in middle aged community sample. *Journal of Health and Social Behaviour*, 21(3), 219-239.
- Frankl, E. V. (2000). *Man's search for ultimate meaning*. New York: Perseus Publishing.
- Franzosi, R. (2012). The difficulty of mixed-method approaches. Sociological *Methodology*, 42(1), 79-81.
- Friborg, O., Hjemdal, O., Martinussen, M., & Rosenvinge, J. (2009). Empirical support for resilience as more than the counterpart and absence of vulnerability and symptoms of mental disorder. *Journal of Individual Differences*, 30(3), 138-151.
- Gallagher, M. W., & Lopez, S. J. (2007). Curiosity and well-being. *The Journal of Positive Psychology*, *2*(4), 236-248.

- Gibson, C. A., & Tarrant, M. (2010). A conceptual models' approach to organisational resilience. The Australian Journal of Emergency Management, 25(2), 6-12.
- Giovannini, E., Benczur, P., Campolongo, F., & Manca, R. A. (2020). Time for transformative resilience: The COVID-19 emergency. JRC Science for Policy Report.
- Gittell, H. J; Cameron, K; Lim, S. & Rivas, V. (2006). Relationships, layoffs, and organisational resilience: Airline industry responses to September 11. *The Journal of Applied Behavioral Science*, 42(3), 300–329.
- Goodman, R. F., Disabato, J. D., Kashdan, B. T. & Machell, A. K. (2017). Personality strengths as resilience: A one-year multiwave study. *Journal of Personality*, 85 (3), 423-434.
- Green, J. L. et al. (2006) *Handbook of complementary methods in education research*. Mahwah, N.J: Lawrence Erlbaum Associates.
- Gruber, K., Kilcullen, R., & Iso-Ahola, S. (2010). Effects of psychological resources on elite soldiers' completion of a demanding military selection program. *Military Psychology*, 21(4), 427-444.
- Guest, G., Namey, E. E., & Mitchell, L. M. (2013). *Collecting qualitative data: A field manual for applied research*. Thousand Oaks, CA: SAGE Publications.
- Guba, G. E. & Lincoln, S. Y. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Gupta, S., & Bonanno, A. G. (2010). Trait self-enhancement as a buffer against potentially traumatic events: A prospective study. *Psychological Trauma: Theory, Research, Practice and Policy, 2*(2), 83-92.
- Hamby, S., Grych, H. J., & Banyard, V. (2018). Resilience portfolios and poly-strengths: Identifying protective factors associated with thriving after adversity. *Psychology of Violence*, 8(2), 172-183.

- Hamel, G., & Valikangas, L. (2003). The quest for resilience. *Harvard Business Review*, 81, 52-63.
- Hannan, T. M., & Freeman, J. (1989). *Organisational ecology*. Cambridge, MA. Harvard University Press.
- Harris, L. (2000). A theory of intellectual capital: Strategic perspective on knowledge, competence and expertise. In Richard W. Hurling & Joanne Provo (Eds.), *Advances in Developing Human Resources*, Thousand Oaks, CA: Sage Publications.
- Harrison, S. (2009). *Curiosity in organizations*. A dissertation published in partial fulfillment of the requirement for the degree Doctor of Philosophy. Arizona State University.
- Hart, D., Burock, D., London, B., Atkins, R., & Bonilla-Santiago, G. (2005). The relation of personality types to psychological, behavioural, and cognitive processes. *European Journal of Personality*, 19(5), 391-407.
- Herman, J., Stevens, M., Bird, A., Mendenhall, M., & Oddou, G. (2010). The tolerance for ambiguity scale: Towards a more refined measure for international management research. *International Journal of Intercultural Relations*, 34(1), 58-65.
- Hunter, D. (2006). Leadership, resilience and tolerance for risk in crisis situations. *The Business Review*, 5(1).
- Inan, I. (2011). The philosophy of curiosity. London, England: Routledge.
- Inuaesiet, U. V, Okon, E. E., & Akpan, J. J. (2021). Effects of COVID-19 on human resource development and management for socioeconomic sustainability of organisations. *International Journal of Public Administration and Management Research*, 6(1), 88-97.
- Jackson, C. M. (2000). Systems approach to engagement. New York, NY: Kluwer Academic/Plenum.

- Jensen, B. J. (1995). *Resilience: Can the will to survive be learned?* Paper presented at the Survival 1995 Symposium, Portsmouth United Kingdom.
- Johnson, B., & Onwuegbuzie, J. A. (2004). Mixed methods research: A research paradigm whose time has come. *Education Researcher*, 33(7), 14-26.
- Jones, G., Hanton, S., & Connaughton, D. (2007). A Framework of mental toughness in the world's best performers. *The Sport Psychologist*, *21*(2), 243–264.
- Kakade, S., & Dayan, P. (2002). Dopamine: Generalization and bonuses. *Neural Networks*, 15(4), 549-559.
- Kang, M., Hsu, M., Krajbich, I., Loewenstein, G., McLure, S., Wang, J., & Camerer, C. (2009). The wick in the candle of learning: Epistemic curiosity activates reward circuitry and enhances memory. *Psychological Science*, 20(8), 963-973.
- Kantur, D., & Iseri-Say, A. (2012). Organisational resilience: A conceptual integrative framework. *Journal of Management & Organisation*, 18(6), 762-773.
- Karairmak, O. (2010). Establishing the psychometric qualities of the Connor-Davidson Resilience Scale (CD-RISC) using exploratory and confirmatory factor analysis in trauma survivor sample. *Psychiatry Research*, 179, 350-356.
- Karwowski, M. (2012). Did curiosity kill the cat? Relationship between trait curiosity, creative self-efficacy and creative personality identity. *Europe's Journal of Psychology*, 8(4), 547-558.
- Kashdan, T., DeWall, C.N., Pond, R., Jr., Silvia, P., Lambert, N., Fincham, F., Savostyanova, A., & Keller, P. (2013). Curiosity protects against interpersonal aggression: Cross-sectional, daily process, and behavioral evidence. *Journal of Personalities*, 81(1), 87-102.
- Kay, R., & Goldspink, C. (2012). CEO perspectives on organisational resilience.
 Australia: Commonwealth of Australia. Retrieved from http://www.inceptlabs.com.au/

- Kennedy, F., Carroll, B., Francoeur, J. & Jackson, B. (2012). A tale of two perspectives:

 An account of entity and social constructionist approaches to "conflict" in leadership development. *Advancing Relational Leadership Research*, 175-201.
- Keppel, G., Saufley, W., & Tokunaga, H. (1992). *Introduction to design and analysis:*A student's handbook (2nd ed.). New York, NY: W. H. Freeman and Company.
- King, D.D., Newman, A., & Luthans, F. (2016). Not if, but when we need resilience in the workplace. *Journal of Organisational Behavior*, 37(5), 782-786.
- Kitzinger, J., & Barnour, R. (1999). Developing focus group research: Politics, theory and practice. London, England: SAGE Publications.
- Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37(1), 1-11.
- Kratochwill, F., (2008). Constructivism: what it is (not) and how it matters.

 Approaches and Methodologies in the Social Sciences: A Pluralist Perspective. Cambridge University Press.
- Krueger, A. R., & Casey, A. M. (2000). Focus groups: A practical guide for applied research (3rd ed.). London, England: SAGE Publications.
- Larsson, G. (1989). Personality, appraisal and cognitive coping processes and performance during various conditions of stress. *Military Psychology*, 1(3), 167-182.
- Lazarus, R.S., & Folkman, S. (1984). Stress appraisal and coping. New York, NY: Springer.
- Lengnick-Hall, A. Q., Beck, E. T., & Lengnick-Hall, L. M. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review*, 21(3), 243–255.
- Lengnick-Hall, C. A. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management*, 31(5), 738–757.

- Litman, J. A., & Jimerson, T. L. (2004). The measurement of curiosity as a feeling of deprivation. *Journal of Personality Assessment*, 82(2), 147-157.
- Litman, J. A., & Pezzo, M. V. (2007). Dimensionality of interpersonal curiosity. *Personality and Individual Differences*, 43(6), 1448-1459.
- Litman, J. A., & Silvia, P. (2006). The latent structure of trait curiosity: Evidence for interest and deprivation curiosity dimensions. *Journal of Personality Assessment*, 86(3), 318-328.
- Litman, J. A., & Spielberger, C. D. (2003). Measuring epistemic curiosity and its diversive and specific components. *Journal of Personality Assessment*, 80(1), 75-86.
- Litman, J. A. (2005). Curiosity and the pleasures of learning: Wanting and liking new information. *Cognition and Emotion*, 19(5), 793-814.
- Litman, J. A. (2010). Relationship between measures of I- and D-type curiosity, ambiguity tolerance, and need for closure: An initial test of the Wanting-Liking model of information seeking. *Personality and Individual Differences*, 48(4), 397-402.
- Litman, J. A., Collins, R. P., & Spielberger, C. D. (2005). The nature and measurement of sensory curiosity. *Personality and Individual Differences*, 39(6), 1123-1133.
- Liu, J. W. J., Reed, M. & Girard, A. T. (2017). Advancing resilience: An integrative, multi-system model of resilience. *Personality and Individual Differences*. 111, 111-118.
- Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin, 116,* 75–98.
- Love, H., & Whittaker, W. (1997). *Practice issues for clinical and applied psychologists in New Zealand*. Wellington, New Zealand: The New Zealand Psychological Society.

- Luck, L., Jackson, D., & Usher, K. (2006). A case study: A bridge across the paradigms.

 Nursing Enquiry, 13(2), 103-109.
- Lundman, B., Alex, L., Jonsen, E., Norberg, A., Nygren, B., Fischer, R., & Strandberg,
 G. (2010). Inner strength- A theoretical analysis of salutogenic concepts.
 International Journal of Nursing Studies, 47(2), 251-260.
- Luthans, F., & Youssef, M. C. (2007). Emerging positive organizational behavior. Journal of Management, 33(3), 321-349.
- Maddi, S. R. (2004). Hardiness: An operationalization of existential courage. *Journal of Humanistic Psychology*, 44(3), 279–298.
- Mandleco, L. B., & Peery, J. C. (2000). An organisational framework for conceptualising resilience in children. *Journal of Child and Adolescence Psychiatric Nursing*, 13(3), 99-112.
- Marriott, C., Hamilton-Giachritsis, C., & Harrop, C. (2014). Factors promoting resilience following childhood abuse: A structured, narrative review of the literature. *Child Abuse Review*, 32(1), 17-34.
- McManus, S., Seville, E., Vargo, J., & Brunsdon, D. (2008). Facilitated process for improving organizational resilience. *Natural Hazards Review*, 9(2), 81-90. doi.org/10.1061/(ASCE)1527-6988(2008)9:2(81).
- Mello, Jeffrey (2006). Strategic human resource management (2nd ed.). Boston, MA: South Western Gengage Learning.
- Meredith, L., Sherbourne, C., Gaillot, S., Hansel, L., Ritschard, H., Parker, A., & Wrenn, G. (2011). *Promoting psychological resilience in the U.S. military*. Santa Monica, CA: RAND Corporation.
- Miles, M., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Newbury Park, CA: SAGE.
- Milojev, P., Osborne, D., & Sibley, C. (2014). Personality resilience following natural disaster. Social Psychology and Personality Science, 5(7), 760-768.

- Moekemeyer, G., Hoegl, M., & Weiss, M. (2012). Innovator resilience potential: A process perspective of individual resilience as influenced by innovation project termination. *Human Relations*, 65(5), 627-655.
- Morgan, G., & Smirchich, L. (1980). The case for qualitative studies. *Academy of Management Review*, 5(4)., 491-500.
- New Zealand Defence Force (n.d.). New Zealand Special Operations Forces.

 Retrieved from http://www.nzdf.mil.nz/about-us/nzsof/1nzsas-regt.htm
- NZSAS Regiment (2012). 1 New Zealand Special Air Service Regiment History. New Zealand Defence Force.
- Ollier-Malaterre, A. (2010). Contributions of work-life and resilience initiatives to the individual/organisational relationship. *Human Relations*, 63(1), 41-62.
- Pearson, P. H. (1971). Relationships between global and specified measures of novelty seeking. *Journal of Consulting and Clinical Psychology*, 34(2), 199-204.
- Peterson, C., & Seligman, P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Phillips, R. (2014). Space for curiosity. Progress in Human Geography, 38(4), 493-512.
- Pickering, A. M., Hammermeister, J., Ohlson, C., Holliday, B. & Ulmer, G. (2010). An exploratory investigation of relationships among mental skills and resilience in warrior transition unit cadre members. *Military Medicine*, 175 (4), 213-219.
- Porta, D. D. & Keating, M. (2008). How many approaches in the social sciences? An epistemological introduction. *Approaches and methodologies in social sciences*. Cambridge University Press.
- Quarrie, B. (1995). SAS and elite forces: The elite military forces of the world. Llandybie, United Kingdom: New Burlington Books.
- Rand, A. (1975). The romantic manifesto: A philosophy of literature. London, England: Signet.

- Reason, J. (2001). The dimensions of organisational resilience to operational hazard.

 British Airways Human Factors Conference: Enhancing Operational Effectiveness, University of Manchester.
- Reio, T., Petrosko, J., Wiswell, A., & Thongsukmag, J. (2006). The measurement and conceptualization of curiosity. *The Journal of Genetic Psychology*, 167(2), 117-135.
- Resnick, K., & Fins, J. (2021). Professionalism and resilience after COVID-19. *Academic Psychiatry*. Retrieved from https://doi.org/10.1007/s40596-021-01416-z
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307–321.
- Robinson, S., & Bridges, N. (2011). Survival-mind and brain. *The Psychologist*, 24(1), 30-33.
- Sahebjamnia, N., Torabi, A. S., & Mansouri, A. S. (2018). Building organizational resilience in the face of multiple disruptions. International Journal of Production Economics, 197, 63-83.
- Sandler, I., Wolchik, A. S., & Ayers, S. T. (2008). Resilence rather than recovery: A contextual framework on adaptation following bereavement. *Death Studies*, 32(1), 59-73.
- Sandry, G., & Robertson, T. I. (1993). Self-efficacy and work-related behavior: A review and meta-analysis. *Applied Psychology: An International Review*, 42(2), 139-152.m
- Schwandt, A. T., (1998). Constructivist, interpretivist approaches to human inquiry. Landscape of qualitative research: Theories and issues. Thousand Oaks, Sage Publications.
- Senge, M. P. (2006). The fifth discipline: The art and practice of learning organisations. New York, NY: Doubleday.

- Seville, E., Brunsdon, D., Dantas, A., Le Masurier, J., Wilkinson, S., & Vargo, J. (2006).

 Building organisational resilience: A summary of key research findings.

 Christchurch, New Zealand: Resilient Organisations Research Programme.
- Sheard, M., & Golby, J. (2010). Personality hardiness differentiates elite-level sport performers. *International Journal of Sport and Exercise Psychology*, 8(2), 160-169.
- Shin, J., Taylor, M. S., & Seo, M-G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727-748.
- Siebold, G. L. (2007). The essence of military group cohesion. *Armed Forces & Society*, 33(2), 286-295.
- Silverman, D. (2006). *Interpreting qualitative data: Methods for analyzing talk, text and interaction* (3rd Ed). London, England: SAGE Publications.
- Silvia, J. P. (2008). Interest- the curious emotion. *Current Direction in Psychological Science*, 17(57), 57-60.
- Sinclair, R. R., & Britt, T. W. (2013). Military resilience: Remaining questions and concluding comments. In R. R. Sinclair & T. W. Britt (Eds.), *Building psychological resilience in military personnel: Theory and practice* (pp. 237–251). Washington, DC: American Psychological Association.
- Singh, A (2012). Book review: Toby E. Huff, intellectual curiosity and the scientific revolution: A global perspective. *Indian Economic Social History Review*, 49(4),604-606.
- Singh, S., & Pavlovich, K. (2011). Being resilient when experiencing venture failure.

 Paper presented at the Australia New Zealand Academy of Management,

 Auckland, 2011.
- Southwick, S.M., Bonnano, G.A., Masten, A.S., Panter-Brick, C., & Yehuda, S. (2014).

 Resilience definitions, theory and challenges: Interdisciplinary perspectives.

 European Journal of Psychotraumatology, 5(1), 25338-14.

- Staal, M., Bolton, E. A., Yaroush, A. R., & Bourne, E. L. (2008). Cognitive performance and resilience to stress. In B.J. Lukey and V. Tepe (Eds), *Behavioural interpreting qualitative data: Methods for analyzing talk, text and interaction resilience to stress* (pp. 259-299). Boca Raton, FL: CRC Press.
- Stake, R. E. (2000). Case studies. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 435–454). Thousand Oaks, CA: Sage.
- Stake, R. E. (2006). Multiple case study analysis. New York, NY: Guilford.
- Staw, M. B., Sanderlands, E. L., & Dutton, E. J. (1981). Threat rigidity effects in organisational behaviour: A multi-level analysis. *Administrative Science Quarterly*, 26(4), 501-524.
- Stewart, J., & O'Donnell, M. (2007). Implementing change in a public agency: Leadership, learning and organisational resilience. *International Journal of Public Sector Management*, 20(3).239-251.
- Sutcliffe, K. M., & Vogus, T (2003). Organising for resilience. In K. S. Cameron. J. E. Dutton, & R.E. Quinn (Eds.), *Positive organisational scholarship: Foundations of a new discipline* (pp. 94-110). San Francisco, CA: Berrett-Koehler.
- Taylor, C., Dollard, F. M., Clark, A., Dormann, C. & Bakker. B. A. (2019). Psychosocial safety climate as a factor in organisational resilience: Implications for worker psychological health, resilience, and engagement. *Psychological Safety Climate*, 119-228.
- Tedeschi, R., & Calhoun, L. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*. 15(1), 1–18
- Tepe, V., & Lukey, J. B. (2008). Resilience: Towards the state of the possible. In B. J. Lukey and V. Tepe (Eds), *Behavioural resilience to stress* (pp. 321-331). Boca Raton, FL: CRC Press.
- Tugade, M. M., & Fredrickson, L. B. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology*. 86(2), 320-333.

- Ulrich, D. (1997). The changing nature of human resources: A model for multiple roles. Human Resource Champions. Boston, MA: Harvard Business School Press.
- Vickers, H. M., & Kouzmin, A. (2010). 'Resilience' in organisational actors and rearticulating 'voice': Towards a humanistic critique of new public management. *Public Management Review*, *3*(1), 95-119.
- Viney, L. L. & Nagy, S. (2011). Qualitative research in personal construct research: A set of possible criteria. *Personal construct methodology*.
- Vogus, T., & Sutcliffe, K. (2007) 'Organizational resilience: Towards a theory and research agenda', in 2007 IEEE International Conference on Systems, Man and Cybernetics. [Online]. 2007 IEEE. pp. 3418–3422.
- Walker, L., Luechtefeld, R., & Walker, L. A. (2019). Creating pathways to personal resilience through classroom simulations. Simulation & Gaming, 50(2), 214-242.
- Wang, L. & Tsai C. (2019). Exploring the structure of science learning self-efficacy: the role of science learning hardiness and perceived responses to capitalization attempts amongst Taiwanese junior high school students. Research in Science & Technological Education, 37(1), 54-70.
- Watson, A. (2006). Self-deception and survival: Mental coping strategies on the Western Front, 1914-18. *Journal of Contemporary History*, 41(2), 247-268.
- Willmott, H. (1993). Breaking the paradigm mentality. *Organisational Studies*, *14*(5), 681-719.
- Wright, P. M., & Snell, S. A. (1991). Towards an integrative view of strategic human resource management. *Human Resource Management Journal*, 1(3), 203-225.
- Wu, G., Feder, A., Cohen, H., Kim, J., Canderon, S., Charney, D., & Mathe, A. (2013).

 Understanding resilience. *Frontiers in Behavioural Neuroscience*. [Online] 710-10.

- Wu, Q., & Miao, C. (2013). Curiosity: From psychology to computation. *ACM Computing*Surveys, 46(2), 2-26. https://doi.org/10.1145/2543581.2543585
- Yildirim, M., & Solmaz, F. (2020). COVID-19 burnout, COVID-19 stress and resilience: Initial psychometric properties of COVID-19 burnout scale. *Death Studies*. [Online]. https://doi.org/10.1080/07481187.2020.1818885.
- Yin, K. Robert (2004). Case study methods. *Complementary methods for research in education* (3rd Ed). American Educational Research Association.
- Yin, K. Robert (2013). Case study research: Design and methods (5th Ed). Thousand Oaks, CA: SAGE Publications.
- Yossef, C. M., & Luthans, F. (2007). Positive organisational behaviour in the workplace: The impact of hope, optimism, and resilience. *Journal of Management*, 33(5), 774-800.
- Yuan, Y. (2021). Mindfulness training on the resilience of adolescents under the COVID-19 epidemic: A latent growth curve analysis. *Personality and Individual Differences*, 172, 1-9.
- Zuckerman, M. (1994). Behavioral expressions and biosocial bases of sensation seeking. New York, NY: Cambridge University Press.