



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Research Commons

<https://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.

**The Athleticism of Drag Queen Practices and Performance:
A mixed-methods study of injury, prevention, and health care**

A thesis
submitted in partial fulfilment
of the requirements for the degree

of

Master of Health, Sport and Human Performance
In Te Huataki Waiora Faculty of Health, Sport and Human Performance

at

The University of Waikato

by

MARISA DIAMOND



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

2024

Abstract

Most research on drag performance has focused on gender and sexuality and/or performing arts. To date, very little has examined drag queens' experiences of athleticism, injury, and injury care. This research provides insights into the physical experiences of professional drag queens, and the relationship of drag queens to health care, in Aotearoa New Zealand and the United States. Specific areas of inquiry include: how drag queen performers of diverse gender identities, ages, experience levels, and athletic backgrounds experience the use of their bodies in their practice of drag; injury occurrence related to drag queen performance; and how drag queens perceive, access, and experience health care in direct connection to their drag practice.

A mixed-methods approach was employed, combining a survey (96 participants) and interviews with six drag queens from Aotearoa New Zealand the U.S. This research draws on Queer and feminist theory, as well as public health models, to inform data collection and analysis techniques. The findings reveal drag to be a physically demanding discipline: the majority of drag queens have experienced drag-related injuries, despite practicing personally developed body maintenance behaviours. Participants also expressed a lack of, and necessity for, widely available, fully accessible, and visible LGBTQ+ and drag culturally safe and resonant healthcare. These insights contribute to a broader understanding of the physical body in drag queen performance, as well as the health care needs of drag queens in Aotearoa New Zealand and the United States. Utilization of research findings, along with cross-sector discussions, could inform community health best practices and policy development, to improve health care for this historically marginalized population.

Acknowledgements

I would like to thank my supervisor Dr. Holly Thorpe, and her generous sharing of wisdom and guidance throughout the thesis process. I was not sure how my idea of studying drag queens would be received in school with the word “sport” in its name, but you never once thought twice about my unconventional vision. Even when I hit bumps in the road, we were able to make it through. It has been a privilege and honour to have such a renowned feminist sport scholar as a mentor.

To Mama Circus Marci Diamond, M.P.A., this thesis would not have been finished without your support, whether it was a reminder as to why this work matters so much to me and our family and friends, a Facetime with Ghost, or you sharing your expertise in public health research, theory, and policy. You taught me to prioritize and lift up voices who are not always heard, and I have carried that with me through this research. As you reminded, me and still do, ¡sí, se puede! J.T., studying in Aotearoa NZ would not have been possible without your support. Uncoco, I cannot thank you enough for playing me “drag queen music” in the first place, and then playing it again every time I requested your “drag queen music”! To Walnut, Tuna, MPJ, LePookie, Potato, and Mama Cat, I know you can’t read, but your presence got me through my head injury when I wasn’t sure I would ever finish this thesis.

Finally, to all of the participants, thank you for your generosity and wisdom! To the interview participants, Denali, Chamilla, S.B., Kellie, Prada, and Rita, I have so much respect and gratitude for you and what you do. It was an honour to speak with all of you, and I cannot wait until the next time I get to see you perform! Thank you, thank you, thank you.

Table of Contents

Abstract

Acknowledgements

Chapter One: Introduction

- 1.1 Research Questions
- 1.2 Research Contexts
- 1.3 Researcher Positionality
- 1.4 Thesis Structure

Chapter Two: Literature Review

- 2.1 Drag is intersectional, but what is drag?
- 2.2 Precedent for discipline-specific care in sports medicine
 - 2.2.1 Physicality and injury in dance
 - 2.2.2 Dance medicine
 - 2.2.3 Circus culture & circus medicine
- 2.3 Injury and identity: athlete as a personal identity
- 2.4 Harm reduction models

Chapter Three: Methodology

- 3.1 Surveys
 - 3.1.1 Survey Design
 - 3.1.2 Survey Participant Recruitment
 - 3.1.3 Survey Sample Population
 - 3.1.4 Survey Analysis
- 3.2 Interviews
 - 3.2.1 Interview Design
 - 3.2.2 Interview Participant Recruitment
 - 3.2.3 Interview Participants
 - 3.2.4 Interview Analysis
- 3.3 Ethical Considerations
 - 3.3.1 Informed consent
 - 3.3.2 Confidentiality
 - 3.3.3 Considerations for the LGBTQ+ community
- 3.4 Limitations
 - 3.4.1 Geographical Constraints
 - 3.4.2 Self Selection Bias

Chapter Four: Survey Findings and Discussion

- 4.1 Demographic profile of respondents
- 4.2 Injury occurrence
- 4.3 Injury prevention/body maintenance strategies
- 4.4 Injury management and recovery

- 4.5 Barriers to effective injury prevention and management
- 4.6 Summary of findings

Chapter Five: Interview Analysis - Physical Experiences and Practices

- 5.1 Drag as a Physical Discipline
 - 5.1.1 Physicality of drag performance
 - 5.1.2 Athletic background and training
 - 5.1.3 Comparisons of drag to sport, drag queens to athletes
- 5.2 Personal practices and self-care
 - 5.2.1 Body maintenance practices
 - 5.2.2 Drag day practices
- 5.3 Summary of Findings

Chapter Six: Interview Analysis – Experiences with and Barriers to Healthcare

- 6.1 Experienced and Shared Barriers to Healthcare
- 6.2 Experiences with healthcare providers
- 6.4 Injury Occurrence and Management
- 6.5 Desires for Ideal Healthcare
- 6.6 Summary of Findings

Chapter Seven: Conclusion

- 7.1 Key Findings
- 7.2 Limitations
- 7.3 Recommendations

Appendices

- Appendix A: University of Waikato Ethics Approval
- Appendix B: Survey Design
- Appendix C: Interview Guide
- Appendix D: Drag Queen-recommended Health Providers

CHAPTER ONE: INTRODUCTION

Drag queens are everywhere right now: on Broadway, on TV, the opening acts for chart topping musical artist, Chappell Roan, even in the 2024 Olympic Opening Ceremony. Drag is an international phenomenon. In the United States, *RuPaul's Drag Race*, *We're Here*, and *Dragula* are award-winning and popular TV shows featuring and reliant on drag performers. In Aotearoa New Zealand, television shows like *House of Drag*, *The Boy, the Queen and Everything in Between*, and *Drag Race Down Under* attract local and international audiences. The drag performances popularised by these kind of television shows feature lip syncing drag queens, adorned in glamorous costumes and the highest of heels, claiming their stage in the most exaggerated of ways. This is no easy feat for a drag queen. The style of performance often seen on these shows and in live drag shows requires a high level of physical labour.

To date, there is a considerable amount of existing literature about drag performance in the context of gender and sexuality, notably by Esther Newton and Judith Butler, but very little research exists about the physicality and athleticism of drag. In contrast, there have been decades of research of the physical demands placed on athletes, as well as athlete injury recovery and prevention. There is also a growing body of literature that acknowledges the health care needs of dancers and other performers. This research project sits at the intersection of these fields of scholarship and practice.

The purpose of this research was to explore the physical experiences of drag queens in Aotearoa New Zealand and the United States, uncharted territory in both the field of sport and LGBTQ+ research. In doing so, hopefully the research will provide a rich foundation for drag queens and health professionals alike to better support the physical needs of this unique and often overlooked group of performers.

1.1 Research questions

The research questions of this thesis explored drag queens' experiences of physicality in their performance, what can and needs to be done to support the physical demand of drag to prevent injury, and the relationships drag queens have with healthcare. Three questions directly related to those concepts guided and informed this research. The primary research question was, what are the physical experiences of drag queens? The secondary research questions were: What supports do drag queens need to prevent and recover from injuries? What are drag queens' experiences with sports medicine? The primary research question focuses on the actual physical actions and labour performed by drag queens, as well as experiences of injury and physical practices drag queens partake in to maintain the physical demands of drag. The secondary research questions both relate to the supports, possible techniques, and healthcare services that could benefit drag queens' physical demands and needs. The final secondary question specifically explores drag queen experiences, concerns, and needs from health professionals.

1.2 Research contexts

Drag is a multi-faceted performance form. In this thesis, I am studying only drag queens. There are other classifications of drag performers, but in this study, only drag queens were participants. While individuals who perform as drag queens identify across the gender spectrum out of drag, those who perform as drag *queens* (as opposed to other drag performers) are portraying the feminine in drag. In this study, all named participants are acknowledged only by their drag names, with she/her pronouns (as preferred).

Additionally, in this thesis I use the "LGBTQ+ community" as key terminology. I acknowledge that Aotearoa New Zealand sometimes refers to this community as the "Rainbow

community,” and some North Americans, specifically in some Native American communities, use the term “2STLGBQ+” These terms, however, are generally not used cross-nationally, whereas LGBTQ+ is understood and used in both Aotearoa New Zealand and the United States of America.

There is an emphasis on and responsibility to biculturalism in Aotearoa New Zealand, established by the Tiriti o Waitangi. As such, I use the term “Aotearoa New Zealand” or “Aotearoa NZ” in this thesis to acknowledge Māori (Indigenous Peoples of Aotearoa) as Tangata Whenua, the Indigenous people of the land.

This study is a cross-national study between the United States of America and Aotearoa NZ. I chose to include datasets from both countries to focus this research in the two contexts most relevant to my experiences of drag, and my connections and relationships with the drag community. As a photographer and co-performer, the American, specifically Chicagoan, drag community welcomed me so overwhelmingly. Equally, I was welcomed by the Kirikiriroa Hamilton drag community. While drag is an international phenomenon, for this Masters thesis (with tight time and resource constraints), I chose to work with the drag communities that I have pre-existing connections and relationships. While this thesis is not a comparison between the two countries, the analysis does reveal some key distinctions (e.g., access to healthcare) between the two countries, highlighting the importance of considering the local context for understanding drag queens experiences.

1.3 Researcher Positionality

I am a cis-gender, able-bodied woman with Maya Q’eqchi’ and Ashkenazi heritage from the United States. My positionality has certainly shaped this project, and particularly my life-long background in movement. From before I could walk, I was performing extreme physical feats – I

climbed up to the top shelf of the refrigerator while my mother had her back turned for less than a minute. I was a competitive gymnast, basketball player, and track and field athlete. Then, I found my way to circus, the field in which I still participate and coach. It was because of my strong background in circus that I was initially invited to perform in drag shows.

Prior to this invitation, my mother and I were longtime drag fans and allies of the drag community and the greater LGBTQ+ communities, including international Queer advocacy work. One of my earliest memories is watching the Boston Pride Parade and waving to the drag queens in the parade. *Hairspray* and *Hedwig and the Angry Inch* were some of our favourite movies. When I had shoulder surgery (for a circus-related injury), we binge watched *RuPaul's Drag Race* while I was restricted to a recliner in the early stages of recovery.

As a fan of drag, I began to build friendships with some of the local drag queens in Chicago through attending their weekly shows and offering my support and help in the forms of stage management or photography. This is how I became involved in the drag community as more than just as fan. When I received my first offer to perform in a drag show in Chicago in 2021, I jumped at the opportunity. When I moved to Aotearoa New Zealand, I actively sought out opportunities to connect with and support local drag performances. This is something I continue to this day in Kirikiriroa: performing with drag queens and photographing drag shows.

Through my experiences of working with drag queens and watching live drag shows and drag television show, it became evident how intensely drag queens use their bodies and the frequency of injury among drag queens. As an athlete and performer, I could relate to the physicality of my drag friends, but I was surprised that the physicality of their experiences was rarely considered in high performance, sport or health settings. As previously mentioned, as circus performer, I injured my shoulder and had to get surgery. The single most important piece of my recovery was working with a physiotherapist who was a competitive gymnast, specialised

in treating gymnasts, and had prior experience treating circus performers and their specific needs. As I witnessed more and more injuries from drag queens, it became clear that there was no option for injury rehabilitation for them like the provider and service I was able to access as an athlete. This sparked my interest, and I started to ask my drag queen friends how they relate or not to athletes, especially in terms of physical demand and injury.

As the child of a public health professional specialising in injury prevention, I grew up with an astute sense of the importance of injury prevention and response. From a young age, these were my interests, which led to an opportunity to present at the Massachusetts Department of Public Health and a national CDC conference. Alternatively, I chose to pursue the arts in my higher education (BFA), which has supported this research by providing me with an understanding of many of the aspects that go into drag performance, like costuming and dance elements.

While I have never performed as a drag queen (or drag king), I have formed friendships and connected with drag queens in both the United States and Aotearoa New Zealand. These relationships and our shared experiences of physicality and injury drove me to develop this thesis and the research questions.

1.4 Thesis Structure

This thesis is divided into seven chapters, beginning with this Introduction chapter. The next chapter presents a review of literature further explaining what being a drag queen entails, providing context for niche discipline-specific medicine practices, discussing how athletic identity can be related to injury recovery, and explaining the harm reduction model. The third chapter delves into methodology, discussing theoretical frameworks, methods of inquiry, and introducing the participants of this mixed-methods study. In chapter four, the results of the

survey are discussed. The fifth and sixth chapters presents themes derived from the interviews, which were developed through reflexive thematic analysis. The final concluding chapter discusses key findings from and limitations of the study, as well as important future considerations for research in this field.

CHAPTER TWO: LITERATURE REVIEW

In this chapter I locate my study at the intersection of three key bodies of literature. Firstly, I provide an overview of research on drag performers, most of which has focused on the gendered performativity of drag, and the importance of intersectional approaches. I then discuss the existing literature and research in the niche athletic fields of dance and circus, specifically exploring the histories of discipline-specific sport medicine in each area. Following, there is a brief section exploring research on the athlete identity and its relevance to injury. Finally, I provide an overview of the public health model of harm reduction.

2.1 Drag is Intersectional, but What is Drag?

Research has consistently shown that for many drag performers, gender and sexuality are intersecting identities (Hagemaster, 2017). Indeed, Kimberlé Crenshaw's (2017) theory of intersectionality can be a useful template for research on drag performance. Intersectionality is used to describe how "intersecting" identities, such as race, gender, class, etc., overlap and affect individual's lived experiences (Crenshaw, 1989). Such approaches are important when seeking to understand the experiences of drag performers.

Historically, drag queens have most commonly been perceived as men who dress and perform as women (Hopkins, 2004a). However, drag queens have always held varying gender identities, including transgender women, men, and cisgender women, and this diversity of drag queen performers has become increasingly visible within the drag community (Dougherty, 2017; Farrier, 2020; Greaf, 2016; Lawrence, 1989). In a 2016 study of drag performers that utilized both ethnographic and interview methods, findings showed that the participants had varying gender identities; specifically, one of the six drag queens interviewed was a transgender woman, while

the other five were cisgender men (Egner & Maloney, 2016). Additionally, there is an entire chapter in edited book, *Contemporary Drag Practices and Performers: Drag in a Changing Scene*, that is a critical engagement on the topic of “bio queens,” otherwise known as cisgender women who perform as drag queens (Edward et al., 2020b). In the same study by Egner and Maloney (2016) mentioned above, 33% of the six drag queens interviewed did not identify as gay, including one cisgender heterosexual man. The majority of drag queens identify as members of the LGBTQ+, or Rainbow, community, often gay men, but there are also a very small number of cisgender heterosexual drag queens (Greaf, 2016).

Importantly, the history of drag and queer liberation must also be understood to include racial and class identities (Lawrence, 1989; Moncrieff & Lienard, 2017). The literature on drag indicates that the intersection of marginalized identities is especially significant in the United States, where drag proliferated predominantly as the result of ball culture, a movement led by the Black and Latine LGBTQ+ community (Lawrence, 1989). While there is little demographic information about drag performers in Aotearoa, personal participation and anecdotal observations suggest that local drag performers are of diverse ethnic, cultural and national identities.

Drag is often regarded as an expression and/or performance of gender identity (Amant, 2022; Dougherty, 2017; Farrier, 2020; Greaf, 2016; Keenan & Hot Mess, 2020; Sopitarchasak, 2023), but rarely recognized for the high level of demanding and skilled physical activity required to perform drag. While there is very little existing academic research on drag in the context of sport or physicality, there are popular media and news sources that do examine drag performance through the lens of movement and physicality. For example, an article in *Forbes* magazine interviewed two employees of Carbon Health, a US-based healthcare corporation, one of whom is an M.D., who are working to “advocate for better health resources for drag performers” (Brooks, 2021). Other articles in popular media outlets likes *Vice*, *GAY TIMES*, and

Metro highlight the physical toll of performing as a drag queen, describing injuries incurred while in drag from broken toes to severe allergic reactions to tape used for “tucking” to “snapped” hamstrings (de la Cretaz, 2021; Robledo, 2023; Willix, 2023). Drag queens undergo a heavy physical and mental toll, just as dancers and athletes do (Amant, 2022). This toll is made especially evident on the popular television series, *RuPaul’s Drag Race* (Amant, 2022). However, both popular and academic literature indicate that this experience extends well beyond *Drag Race*.

Lip syncing is a core element of drag performance (Cover et al., 2022). These lip syncs are choreographed, and often include dance or gymnastics elements and routines (Daems, 2014). Dance moves that create high impact on joints, such as “death drops” (also known as a “dip” in vogue femme dance), jump splits, and duckwalking, are commonly displayed in drag queen’s lip sync choreography (Borba, 2022). Drag queens who perform these commonly demonstrated skills as part of their lip sync numbers are at risk for injury, as demonstrated by the major knee injuries suffered during lip syncs by Eureka O’Hara on Season 9 of *RuPaul’s Drag Race* (Amant, 2022) and by Victoria Scone on Season 3 of *RuPaul’s Drag Race UK* (McCoy et al., 2019present). In interviews with drag queens in a *Vice* article, drag queens outside of the context of *Drag Race* further described the physical impact that drag performance has on them, including various orthopaedic injuries (de la Cretaz, 2021).

While it may seem like an unskilled activity to those who may mistakenly associate it with recreational karaoke, lip syncing takes practice to master; and it is a learned skill (Farrier, 2016). Martin Boyce, a member of the LGBTQ community and participant in the Stonewall Riots of NYC, states that “creative choreography and movement [are] really the whole point” of a drag lip sync (Pasulka, 2019). The facial expressions and foundational movements to a drag lip sync to heighten the emotional stakes of the performance are one aspect of lip syncing that needs

to be learned and practiced (Farrier, 2016). The larger physical choreographic elements, such as dance, are additional key aspects of a drag lip sync performance (Lawrence, 1989). Drag performers devote large amounts of time to preparing for their lip sync performances, practising to develop their expertise and skills.

Amant (2022) writes about the set of “equipment” that drag queens use bringing its own set of risk. As accounted by Esther Newton’s (1979) ethnographic research, this can include makeup, costume, undergarments, headpieces, and wigs. For example, one study among ballroom dancers “showed that joint angle increased with the increase of Latin shoes' heel heights. The result of this situation is joint injuries of the lower limbs, especially the knee” (Li et al., 2015, p. 301). In her discourse analysis article, Amant (2022) describes that elements of drag queens’ costumes are often hot glued together, and sometimes glued directly to their bodies, which can also result in injury. Costume elements may be extremely restrictive, such as corsets, and/or extremely heavy and hot, such as beaded gowns, chest plates, massive wigs, and headpieces. In dance literature, Liederbach and Richardson (2007) state that costuming can have an effect on dancer’s health and wellbeing. Additionally, in Squitiere’s (2010) thesis regarding her personal experience as a costume designer, she details the importance of safe costuming to ensure performer safety. In a quantitative single cohort study of revue dancers, who may be considered close in performance style to drag queens, costuming was cited at one of the extrinsic factors contributing to injury of the studied dancers (Wanke et al., 2014).

Altering one’s physical appearance is one of the major aspects of performance in drag, and it brings its own set of risks (Amant, 2022; Cretaz, 2021; Newton, 1979). Amant (2022) recalls how drag performers with external genitalia typically tightly “tuck” sensitive body parts with tape, often for many hours at a time, limiting their ability to go to the bathroom, and may also restrict necessary hydration, nutrition, and urination to accommodate this. A commonly used

makeup technique in drag queens' makeup application includes gluing down their eyebrows (Keenan & Hot Mess, 2020) and placing tape around their faces. We see here just a few examples of drag queens making physical sacrifices for their craft.

The world of drag would not exist without competition. In the U.S., drag rose to prominence through the drag ball culture of the 1920s, and grew to more widespread fame and popularity in the 1970s and 80s, indicating that there is a long history of judged drag competitions (Daems, 2014; Lawrence, 1989; Sopitarchasak, 2023). Drag balls had a variety of judged categories, including ones that rewarded performers who presented the most realistic or hyperfeminine portrayals (Lawrence, 1989). Drag competition is prevalent amongst both professional and amateur drag communities, and those who participate in drag competitions use them as a way to achieve legitimacy and recognition with their community (Parslow, 2020). Formal drag competitions usually include judges from within the drag community, but also sometimes rely on the audience as the judge (NULL, 2021). Many competitions, such as *RuPaul's Drag Race*, *Dragula*, and local and national live shows reward winners with cash prizes (Hopkins, 2004b; NULL, 2021).

While competing in formal drag competitions is not a requirement of being a drag queen, there is an inescapable element of competition that comes with being a drag queen (Amant, 2022). Drag shows predominately exist as a 'gig economy' so most queens need to continually compete for paying jobs (Edelman, 2020; LeBlanc, 2024). Regardless of queens' personal relationships, they are often competing against each other to make it further in the industry by gaining recognition, and often, to earn income, even if it is not their only job (Moncrieff & Lienard, 2017).

2.2 Precedent for Discipline-Specific Care in Sports Medicine

In drag-adjacent fields, such as circus and dance, there have been significant advances in the sports-dance-performance medicine fields in recent years (Ryan, 1997). This shift was precipitated by a lack of providers that understood and respected the needs and practices of these artist-athletes. The impetus was artist-athletes themselves going into sports medicine fields (Ho, 2018; Ryan, 1997). These vanguard practitioners have created new specializations in physiotherapy, sport psychology, and sport nutrition, among other areas. These specializations include dance medicine, and circus arts psychology and physical therapy.

2.2.1 Physicality and injury in dance

While some drag queens are known to have formal dance training, such as Victoria Scone, Marcia Marcia Marcia, Denali, Jan, Shea Coulee, Alyssa Edwards, Brooklyn Heights, and Elektra Shock (Productions, 2009-present, 2021a, 2021b), choreographed and/or rehearsed dance is a very common and popular component of drag queen performance, whether or not queens have formal dance training. Many widely displayed drag queen dance moves such as jump turns and splits are derived from the world of formal dance (Kassing, 2013). Therefore, the literature on physicality and injury in dance is relevant to drag queens.

Discipline-specific prevention, assessment, treatment and rehabilitation for high performance athletes has had positive impacts in other athletic disciplines (Hootman et al., 2007). Some scholars have suggested in their medical, injury-related, and physical performance research that dancers be considered athletes (Bird, 2009; Hootman et al., 2007; Koutedakis & Jamurtas, 2004; Tacuri et al., 2023).

Dance has long been debated as a sport (Guarino, 2015), with some arguing that dancers are athletes (Koutedakis & Jamurtas, 2004; Sheppard, 2019); others reject the association between

dance and sport (Guarino, 2015). In an autoethnographic study, Sheppard (2019) presents the typical daily routine of a dancer in professional training as including seven hours of dance class and rehearsal, compared to an American university football player's six and a half hour training schedule, to highlight the immense amounts of time and work into their crafts to achieve any success in their field.

A sociological study conducted in the U.S. from interviews with 15 professional Black American ballerinas, highlighted a common theme among those dancers of feeling that they must balance the psychological and physical stress that comes with the demands of dance, while performing for their coaches, teachers, choreographers, and audiences (Robinson, 2021). In a study done by Koutedakis and Jamurtas (2004), they found that around 50% of professional dancers reported injury resulting in time off from dance and other exercise. This may underestimate the extent of injuries, as working through injury or pain has been reported as a valued sign of commitment and toughness in many cases in dance (Sheppard, 2019).

Further, research by Koutedakis et al. (1999) suggests that the propensity to injury may be caused in part by the complex act and elements of the body and mind that dancers execute. On a deeper physiological level, one study that monitored ballet dancers through classes and rehearsals showed that professional dancers, when performing choreographed solos, can reach lactic acid blood levels as high as 10 mmol/L, matching professional athletes' lactic acid blood levels during their matches (Schantz & Åstrand, 1984).

Dance places high physical and mental demands on participants' bodies. While training and performance are major aspects of these demands, injury and response (or lack of response) to injury is just as impactful (Liederbach, 2000). In a case study of university level dancers, out of the 97% of dancers that were injured during the study, only 20% of the dancers reported seeking medical care for their injuries (Kerr et al., 1992; Krasnow et al., 1994). Dancers reported an

underlying expectation to work through pain to a certain extent, as well as challenges such as time and money, as barriers to seeking medical care (Krasnow et al., 1994).

Scholars who have studied dance as sport highlight competitiveness as quality of dance that redefines dance as a sport (Guarino, 2015; Holt, 2017; Koutedakis & Jamurtas, 2004; Sheppard, 2019). Just as with drag, there are dance competitions for multiple genres (Guarino, 2015; Holt, 2017; Lawrence, 1989; Markula, 2018). Additionally, street dance (i.e., hip hop), a genre often utilized in drag queen performances, has a long history of structured competition (Guarino, 2015), with breaking even recently featured in the Paris 2024 Olympic Games.

Although not all dancers compete in formal or structured competitions, several scholars have argued that dance is inherently competitive in its nature (Guarino, 2015; Holt, 2017; Robinson, 2021). As Guarino (2015) describes in an article engaging in the discourse on the state of dance as sport, “dancers compete for jobs, for lead roles, and for the respect and admiration of teachers, choreographers and audiences” (p. 78), which all contribute to the reputation and status of a dancer. As with other athletic artforms, of course, this position may still be considered controversial depending on one’s relationship with, and approach to, dance (Gunn & Marie, 2023).

2.2.2 Dance Medicine

Many outside of dance culture do not often appreciate the level of athleticism and physical sacrifice required (Sheppard, 2019). While the specialisation and practice of sports medicine has existed for centuries, dance medicine did not emerge formally until 1979 (Ryan, 1997). A presentation at an international orthopaedic medicine symposium, spurred by an orthopaedic surgeon who was himself a dancer, was the beginning of a formal dance medicine field. The first

time that injury in dance was reported in medical literature was in 1935, and it took nearly half a century before a specialization began to emerge in research and practice (Ryan, 1997;

Waddington, 1996):

The key distinction emerged as health care providers realized that the dancers selfidentified much more as artists than athletes, yet their needs were more similar to athletes than musicians and vocalists, thus could neither group them in sports medicine or performing arts medicine. Dance medicine, unlike any other medical specialty, became a distinct subspeciality driven by patients and not the medical profession. (Ho, 2018, p. 1)

The field of dance medicine includes physiatry, neurology, orthopaedics, rheumatology, psychiatry, internal medicine, family medicine, occupational medicine, and physiotherapy (Miller, 2006). It is a wide reaching, constantly evolving medical field that is of direct benefit to the dance community because of its intentional understanding of dance (Ho, 2018; Miller, 2006). Some of the main focuses in dance medicine are injury (treatment, prevention, rehabilitation, risk factors) and mental health (Miller, 2006).

A common quality of dance medicine providers is that they themselves were (or are) dancers (Miller, 2006). It is this background of providers that has ushered in specific knowledge of dance and dancers to the medical field. Alternatively, interviews with pioneers of the dance medicine field such as Dr. Lyle Micheli and Dr. William Hamilton revealed that physicians that did not have a dance background decided to take a personal investment in their treatment of dancers, specifically seeking out opportunities to observe dancers in their typical environments and practices and performances (Ho, 2018).

According to a clinical study of ballet dancers, 9.7% of the dancer participants were found to be hypermobile, measured by the Beighton mobility test (Klemp et al., 1984). In another study that compared a group of ballet students to nursing students, there was a significant difference of occurrence of hypermobility among the dance students compared to the nursing

students (Grahame & Jenkins, 1972). The specific demands of dance, as well as these “unique physical and anatomical qualities” of dancers must be understood in order to treat dancers competently (Miller, 2006, p. 805). In a review of dance injury literature, Liederbach (2000) offers potential guidelines for rehabilitating dancers that highlight the importance of strength, flexibility, and endurance to maintain a level of safety when performing the dance movements. These elements can be monitored by a group of “functional tests for dance” that measure balance, agility, concentration, proprioception, trunk strength and endurance, trunk power, lower extremity strength, and lower extremity power, developed by Liederbach (1997; 2000).

Further, providers attending to dancers who do not have a personal dance background are recommended to supplement their medical education and practice to learn specific aspects of dance medicine by working with those who are knowledgeable about the demands of dance and common unique anatomies of dancers, as was demonstrated by some of the pioneers of dance medicine (Ho, 2018; Miller, 2006). In a study based in the United States, Shah et al. (2012) conducted a survey of professional dancers that showed that 54% of dancers did not consult a physician when injured due to a variety of negative perceptions relating to receiving medical care. In doing so, they showed that providers’ understanding of the world of dance is an important aspect of dance medicine. Some of the reasons provided by dancers in the study included “I did not think a physician would be helpful,” “I did not think a physician would understand me as a dancer,” and “I had a bad experience with a physician in the past” (Shah et al., 2012, p. 24). This study found that a majority of dancers distrusted physicians to the point of avoiding medical care when injured (Shah et al., 2012). While distrust of physicians may not be the only reason that dancers do not seek medical care when injured, it is one of the leading reasons behind not seeking care (Evans et al., 1996; Shah et al., 2012).

2.2.3 *Circus Culture & Circus Medicine*

Circus has long been a field considered on the fringe of society, a safe place for those who are othered by the mainstream (Fricker & Malouin, 2018). Where the above discipline of dance is widely accepted by society, circus performers are commonly misunderstood as “freaks,” despite the high level of athleticism and artistry required of circus performers (Fricker & Malouin, 2018). Circus is similar in this sense to drag performance as a field of study.

The breadth of research in circus medicine is lacking, as it is a new field of interest, primarily being studied by those who have a personal relationship to circus (Cayrol et al., 2019; Faltus & Richard, 2022; Hamilton et al., 2012; Stubbe et al., 2018; Wolfenden & Angioi, 2017). However, academic interest in the medical needs of circus performers dates back to the 1980s (DeBenedette, 1987). Injury and mental health are the primary focuses of the existing research in circus medicine, however, there is a wide sociological breadth of work regarding circus that dates as far back 1872 (Alden, 1896; Cayrol et al., 2019; Faltus & Richard, 2022; Hamilton et al., 2012; Stubbe et al., 2018; Wolfenden & Angioi, 2017). For the purpose of this thesis, the focus of this section will mainly be the existing literature centred on circus medicine.

Circus artists¹ usually specialize in one or more disciplines (acrobatics, juggling, clown, aerial hoop, etc.) under the umbrella term of the circus arts, as seen in a study conducted among circus students at Codarts Rotterdam who “choose a specialisation in their first year,” with each discipline requiring a different set of skills and movement qualities (Stubbe et al., 2018, p. 2). However, overall, circus requires a high level of athleticism and artistry (Shrier et al., 2009;

¹ While the use of the word “artist” is used here to describe a person who practices and performs circus disciplines, the existing literature studying this population switches between “artist,” “athlete,” and “performer” interchangeably (Cayrol et al., 2019; DeBenedette, 1987; Faltus & Richard, 2022; Hamilton et al., 2012; Stubbe et al., 2018; Wolfenden & Angioi, 2017). These terms will be used interchangeably in this section. As this author can attest from personal experience as a professional circus performer, use of these terms largely relies on personal preference of the individual.

Stubbe et al., 2018; Wolfenden & Angioi, 2017). Each of these sub-disciplines carries a different risk-factor toward injury. Multiple studies that followed pre-professional circus students and professional circus artists resulted in higher risk for injury associated with sudden load disciplines, such as tumbling and other forms of acrobatics (Faltus & Richard, 2022; Hamilton et al., 2012; Shrier et al., 2009; Stubbe et al., 2018; Wolfenden & Angioi, 2017). Two of these studies, one among students, one among professionals, showed that injuries most commonly occurred to the lower limb (34.6%), the shoulder (27.7%), the ankle (9.2%), and the back (15.8%, 21.2%), which can likely be explained by high load landings by acrobats and extreme range of motion movements of the trunk by contortionists, aerialists, and other acrobats (Shrier & Hallé, 2011; Stubbe et al., 2018).

Other risk factors for circus artists reported in interviews and surveys include the various aspects of “circus life” (Cayrol et al., 2019; Faltus & Richard, 2022). Interviews with circus performers revealed a common issue among touring circus performers: that they may not have consistent access to healthcare providers when they are frequently changing location, sometimes country (and language) (Cayrol et al., 2019; DeBenedette, 1987; Faltus & Richard, 2022). Performers reported that this makes an initial consultation for injury a potential option but may prevent them from being able to schedule follow-up appointments if they have already moved on to a new location for their show (Cayrol et al., 2019; Faltus & Richard, 2022). Interviewed performers also expressed that a touring circus performer’s schedule is also incredibly demanding; show days occur 4-5 days a week, and non-performance “off days” might be travel days (Cayrol et al., 2019; Faltus & Richard, 2022; Shrier et al., 2009; Wolfenden & Angioi, 2017). This demanding schedule that may not allow for any true rest days, as travel can be quite physically and mentally draining, can result in fatigue, an injury risk factor (Cayrol et al., 2019; Faltus & Richard, 2022).

In Cayrol et al.,'s (2019) study of circus performers, participants who were interviewed highlighted the emotional aspects of being a circus performer. Many participants described that, while circus performance is a career arena, being part of the circus is more than just a job; it is a community, a family (sometimes biologically even), and a way of life (Cayrol et al., 2019). Participants in Cayrol et al.'s (2019) study, as well as performers interviewed by DeBenedette (1987), stressed that injury affects one's ability to work and train, which means that injury can put this sense of belonging at risk, which may lead to an underreporting of injury. Circus performers further explained how this potential loss of community as a result of injury can be psychologically damaging, potentially leading to mental health issues as a result of an initial physical injury (Cayrol et al., 2019).

A common theme reported among circus performers regarding underreporting injury is the normalisation of pain and injury in circus (Cayrol et al., 2019). While this is not a unique quality to circus (also seen in dance and sporting cultures), it is a factor that circus performers consider when injured. Performers describe "playing through pain" as a sign of commitment to your discipline and physical and mental toughness in the circus community, which is a common narrative in the larger sporting community as well (Cayrol et al., 2019; Deroche et al., 2011). As explained in a clinical commentary about the medical management of circus artists, pain, which is sometimes independent of injury, but cannot always be distinguished from injury, "may be perceived as a 'badge of honor,'" a mark of commitment and a rite of passage (Faltus & Richard, 2022, p. p. 309). In interviews with DeBenedette (1987), circus artists also described a sense of duty to your company, or team, when performing, and that sitting out due to injury can affect how your colleagues are able to perform (DeBenedette, 1987; Faltus & Richard, 2022). Other performers expressed that that sense of duty can be a heavy burden to carry as a performer (Cayrol et al., 2019). Interviews from two studies and one article that included interviews with

circus performers revealed an experience common occurrence of perceived pressure from peers to push through pain as well as other external factors, such as pressure from employers to perform and a sense of duty to the audience to provide entertainment (Cayrol et al., 2019; DeBenedette, 1987; Stubbe et al., 2018).

Other common themes performers reported more than two decades apart were selftreating injury or pain and consulting with peers when injured (Cayrol et al., 2019; DeBenedette, 1987). When pain is perceived as minor and injury seems low risk, rather than seeking help from a healthcare provider, circus performers sometimes self-medicate, turn to orthopaedic knowledge from previous injuries, or ask other veteran performers who may be familiar with injury and pain management (Cayrol et al., 2019; DeBenedette, 1987). This may result in an underreporting of injury, and/or recurring and chronic pain/injuries (Hamilton et al., 2012; Shrier et al., 2009; Wolfenden & Angioi, 2017).

With these circus-specific elements combined, when approaching healthcare for circus performers, physical, mental, and social health must all be considered, as well as an understanding and respect of circus culture (Cayrol et al., 2019; Faltus & Richard, 2022; Stubbe et al., 2018). Cayrol et al.'s (2019) study highlights the need for healthcare providers to be better educated on circus performers' specific needs, both physically and culturally as a common theme among the participants.

2.3 Injury and Identity: Athlete as a Personal Identity

Athletic identity is a complex concept in sport psychology and has been argued as both a positive and negative part of an athlete's experience (Brewer & Cornelius, 2010; Brewer et al., 1993; Ronkainen et al., 2016; Sparkes, 1998). In a meta-analysis of studies that used the AIMS

(Athletic Identity Measurement Scale) to study athletes from varying sports and sport levels, found that common positive qualities of a strong athletic identity are intrinsic motivation, commitment, worth, and competence (Lochbaum et al., 2022). Additionally, one study among children that used a self-reported survey to measure self-concept, combined with physical fitness testing, found that a strong athletic identity and strong positive self-concept can be associated with good health and physical fitness, which might suggest a lower predisposition to injury (Marsh, 1993; Martin & Fogarty, 2008). In a study done by Hagiwara and Isogai (2014), they found a link between athletic identity, sport commitment, and actual athletic behaviour, where athletic behaviour was measured by a FIT (frequency, intensity, time) model. Those who identify strongly as athletes treat their bodies as athletic bodies (Brewer et al., 1993; Hagiwara & Isogai, 2014), which often involves the normalization of the 'sport ethic', an expectation that one will do anything for their sport and/or team, including enduring pain and injury (Loland et al., 2006). Multiple studies that followed injured athletes through their recovery period found that athletic identity also plays a major role in athlete injury recovery and, inversely, that injury can affect athletic identity (Brewer & Cornelius, 2010; Ohji et al., 2021; Veroneau et al., 2020). Some of the participants, who scored high on the AIMS, in the cross-sectional questionnairebased study conducted by Ohji et al. (2021), also seemed to be the athletes who were most motivated to return from their injuries. Results from this study showed that drive to maintain athletic identity can push athletes to adhere strictly to their rehabilitation programs (Ohji et al., 2021). However, with increased time away from sport or decreased performance after injury and rehabilitation, AIMS scores were reduced in this study, which is reflected in additional similar studies done among NCAA athletes who suffered overuse injuries and individuals who underwent ACL reconstructive surgery (Brewer & Cornelius, 2010; Ohji et al., 2021; Veroneau et al., 2020).

Though not always the case (Heather et al., 2021), high performance athletes in Germany have reported that they consider sports medicine professionals as “the most important source for [...] health-related information (Gerbing & Thiel, 2016, p. 146). In that same study results from the questionnaire showed that athletes rely on these sports medicine providers “for individualised and sport-specific medical care” (Gerbing & Thiel, 2016, p. 146).

2.4 Harm Reduction Models

The purpose of this thesis’ inquiry is to identify feasible and culturally safe (O’Brien et al., 2017; PAPPS & RAMSDEN, 1996) opportunities to reduce injury/re-injury risk and increase protective factors, in order to support drag queens’ wellbeing. Therefore, the harm reduction model is highly relevant to this inquiry. Harm reduction is a public health model that originated in the 1980s, originally around drug use and the HIV/AIDS epidemic (O’Hare, 2007a). The harm reduction model aims to “minimise negative health [...] impacts by acknowledging that potentially dangerous behaviours will always exist” (Hellard et al., 2023, p. 2).

Harm reduction puts a focus on community action, which can be especially successful with controversial issues that do not include completely eliminating sources of harm (Hellard et al., 2023; O’Hare, 2007b; Tallman, 2020). It relies on community members, both those at-risk and not, working towards the common goal of harm reduction (Single, 1995). Harm reduction resources must be made available to those who may need them in their local and regular communities, as there may be aversion to attend more formal healthcare settings from past negative experiences (Hellard et al., 2023; O’Hare, 2007b; Semp & Madgeskind, 2000).

Where eliminating risk may not be an option, the harm reduction model offers resources and methods of reducing harm and risks if one chooses to continue participating in said potentially harmful activity (O’Hare, 2007a). Within this non-abstinence model, a key element is

the absence of judgement in those providing resources and help (Hellard et al., 2023; O’Hare, 2007a). While an individual healthcare provider, public health worker, or volunteer may have personal bias towards a potentially harmful activity, when working in a harm reduction model, those biases must be reduced and not interfere with those seeking help and care (Hellard et al., 2023; Single, 1995).

Harm reduction is a model that can be translated to many activities with potential harm risk (Barrette & Harman, 2020; Elliot & Goldberg, 2007; Hellard et al., 2023; Tallman, 2020).

Harm reduction has specifically been used in sports settings where a sport may be deemed a high-risk activity for its physical, psychological, and social pressures (Elliot & Goldberg, 2007; Tallman, 2020). Some practical examples of harm reduction in the existing literature in sport include nutrition and sleep habits of adolescent female athletes (Elliot & Goldberg, 2007), concussion (injury) reporting in high school football players (Tallman, 2020), mitigating COVID-19 risks (Hellard et al., 2023), and “potential injury prevention and management in sport” (Barrette & Harman, 2020, p. 645). Common themes among the harm reduction in sport literature include affordability, accessibility, respect, and understanding of personal goals (Barrette & Harman, 2020; Elliot & Goldberg, 2007; Hellard et al., 2023; Tallman, 2020).

Harm reduction in sport includes trust building between a healthcare provider and patient; accepting that a patient’s commitment to a potentially risky athletic goal may be greater than their commitment to their health and finding a way to respect that perspective can help build a trusting relationship that may lead a patient to report injury rather than conceal. Reporting injury sooner rather than later could help prevent longer term negative consequences (Barrette & Harman, 2020; Tallman, 2020).

While there is currently a paucity of research on “evidence-based approaches for harm reduction through improved injury prevention and management in sport,” it is being considered

as a potential valuable tool for athletes and physical performers (Barrette & Harman, 2020, p. 645). Using some of the principles of harm reduction, like individualised care plans, education, community action (coach/healthcare provider/athlete), and behaviour modification without elimination of the risk activity, could lead to better body health maintenance for athletes (Barrette & Harman, 2020; O'Hare, 2007a; Single, 1995).

This thesis draws upon these three key bodies of literature to explore how drag queens, particularly those engaged in physically demanding performances navigate their physical wellbeing, while maintaining an awareness of how drag queens' intersecting identities may affect their behaviours. By integrating insights from the literature discussed in this chapter, this study explores the unique challenges faced by drag queens, specifically regarding physical demand, injury, and healthcare. This interdisciplinary approach not only fills a gap in the existing research but also contributes to a broader understanding of the athleticism, injury occurrence, and experiences of healthcare of drag queens within the context of human performance and public health.

CHAPTER THREE: METHODOLOGY

With the aim of understanding drag queen experiences of injury and health care support, this study utilized a mixed-methods approach, consisting of surveys and interviews. The research was conducted with ethical approval from the University of Waikato Human Research Ethics Committee (see Appendix A). A combination of quantitative and qualitative research methods was employed to support more comprehensive data collection and analysis, enabling a broader range and depth of voices and experiences to be included in the data (Östlund et al., 2011; Rossman & Wilson, 1985; Sandelowski, 2000).

The use of surveys, a quantitative *and* qualitative data collection method, *and* interviews, a qualitative collection method, allowed for analysis of broader trends, as well as the inclusion of many voices from across two countries. This also supported an in-depth exploration of individual experiences and perspectives within the drag queen community (Östlund et al., 2011; Sandelowski, 2000).

This mixed-methods research combined both quantitative and qualitative instruments. The strength of a mixed-method study is that quantitative data offers a broader insight into the population, while qualitative data provides in-depth insights into specific phenomena (Plano Clark, 2017). This combination helps to provide a more complete understanding of the population and research questions. The implementation of a mixed-methods approach also presented challenges: designing two data collection instruments, recruiting two participant pools, and analysing two datasets required expanded time and resources from that of a single-method study (Bryman, 2007). As this research is a generative study, using a mixed-methods approach was important for the research to be as informative for future research as possible.

3.1 Survey

A mostly quantitative, but mixed with some qualitative questions, survey was utilized (Östlund et al., 2011; Sandelowski, 2000) in this study. Surveys provide an opportunity for breadth in the data (KELLEY et al., 2003). The survey was designed to be accessible to a wider population of drag queens would be able to take the survey in their own time, more anonymously, whenever and wherever it was convenient for them, and it would only take about 10 minutes, a relatively short time commitment.

Surveys as an instrument also present some limitations, such as potential biases in self-reporting and limitations in the depth of responses. Despite these limitations, a survey was chosen as one of the methods for this study due to its ability to reach a large and diverse population of drag queens.

3.1.1 Survey Design

The surveys in the study were cross-sectional online surveys designed for drag queens from the United States and Aotearoa NZ (Lavrakas, 2008). The survey consisted of structured, quantitative, and open-ended questions covering demographics, self-care routines (i.e., injury prevention behaviours), drag injury experiences, and experiences of healthcare care related to drag injury. The survey utilised a mixed-method approach of both open-ended text answer questions and more traditional quantitative multiple-choice and matrix questions. This mixed method survey approach allowed for both richness in responses and data, as suggested by Rossman and Wilson (1985), and by quantity in number of responses collected.

In the development of the survey, I consulted with representatives of the intended study population (working drag queens in Aotearoa NZ and the U.S.) to pilot the survey, as well as representatives of the broader LGBTQ+ communities and academic researchers with

specialization in gender-related public health research (Singh et al., 2013). My prior and ongoing participation in the Aotearoa NZ and American drag community as a performer and photographer, as well active accomplice/ally with the LGBTQ+, enabled a supportive pilot cohort. Their input and suggestions about survey structure, introduction, questions and response options were incorporated prior to the survey's wide distribution. I could not have designed the survey without their generous sharing of crucial expertise. Understanding, mutual respect, trust, and listening were vital in this research (Doucet & Mauthner, 2008).

Participants who consented to commence the survey and have their answers recorded, proceeded to the survey questions. Questions were designed to encompass a diversity of identities and experiences. The demographics questions of the survey were inclusive of many gender identities, ages, and experience levels.

The survey was focused on the experiences of working drag queens specifically. Recognizing that many different gender identities exist within the drag queen community, the survey included a question asking participants about their gender identity, and included response options, like “cis[gender] man/woman,” “transgender man/woman,” “non-binary,” as well as an option to self-describe other gender identities and an option not to specify any gender identity. The language detailed here that was used for the gender identity options were based on the recommendations for gender-inclusive data collection by (Colaço & Watson-Grant, 2021). As the target population for this study was highly likely to include members of the LGBTQ+ community, awareness and implementation of gender-inclusive language was especially important. I concur with Colaço and Watson-Grant (2021) that all data collection should use gender-inclusive language.

Because race and ethnicity constructs, identities and language are significantly different in the U.S. and Aotearoa (Jones, 2017; Stats, 2024), two different race/ethnicity survey blocks

were designed, based on each country's national census questions regarding race/ethnicity. Once respondents self-identified their national location, they were directed to the corresponding survey question block for race and/or ethnicity. Once this block was completed, respondents were returned to the unified survey.

Most survey questions were multiple choice, and where appropriate, allowed for an option to select all answers that apply, as well as an option to select "other" and fill in their own answer to the questions. Many questions allowed for participants to indicate that they may not have a clear answer with response options included such as "I don't know" and "Maybe."

3.1.2 Survey Participant Recruitment

For participant recruitment for the surveys, I heavily relied on both social media and personal contacts in the drag community to reach the intended population. There are numerous Facebook groups dedicated to local, national, and international drag communities. Due to my status within the drag community, I was allowed to join those private and public Facebook groups. I then posted a link and QR code to the survey with a short description about the survey, detailing that the survey was aimed at drag queens of all kinds (all gender identities, all ages, all performance types), would take approximately 10 minutes to complete, and that the survey was part of a master's thesis at the University of Waikato. I posted in local Auckland and Wellington drag groups, which is where the two major drag hubs of New Zealand are located. I also posted in Chicago, New York, and New England-specific drag Facebook groups, as well as broader national American and international groups. Additionally, I sent the link to all the interview participants asking them if they would be willing to also complete the survey and pass it on to their local networks, only if they were comfortable doing so. As the resident drag photographer of the local Kirikiriroa Hamilton drag scene, I was able to ask drag queens who regularly

perform here in Hamilton, via in-person contacts and through the Kirikiriroa drag queen group chat, if they would be interested and willing to take the survey and share it with others (snowball sampling). As a result of all these distribution methods, I was able to reach a wide array of drag queens, from diverse geographical locations, ethnicities and races, experience levels, gender identities, athletic or movement backgrounds, and ages.

Building relationships within the drag queen community was one of the most important aspects of reaching the target population (Hamilton, 2020). As previously mentioned, I reached out to the target population largely through my own personal and professional network. These networks were developed through the aforementioned (photography, performance, etc.), but equally important was just showing up for the community. As a drag fan, I attended numerous shows, specifically travelling to the Palmy Drag Fest, the largest drag event in Aotearoa NZ. As an ally to the Rainbow community, I showed up to Pride Month events to show my support and solidarity for the community. Through doing so, my potential participants were able to see how dedicated I was to their rights, identities, and communities; this built trust and showed my commitment to respectfully and accurately sharing their experiences through my academic work.

Geographical communities in which I was able to physically attend events and shows tended to better receive my research and had higher response rates. This is a testament to the importance of building trust with participants.

3.1.3 Survey Sample Population

The research population includes drag queens aged 18 and older, from diverse backgrounds, in both Aotearoa New Zealand and the United States. For the purposes of this study, participants must identify as working drag queens. As an interview participant described, drag queens are only one segment of performers in the larger “nightclub” performer community (Chamilla Foxx

interview). This study was limited to participants who self-identified as drag queens, excluding other “nightclub” performers such as other drag performers (drag artists, drag kings, etc.), cabaret performers, and burlesque performers.

While the study was limited to participants who self-identify as a “drag queens,” the study did not limit the sexual or gender identities of participants, as drag queens are not held to one gender or sexual identity (Edward et al., 2020b; Farrier, 2020).

Prior to any data collection, the decision to limit the target population to drag queens had been taken into consideration. This decision was made as a result of several specific practices widely common among drag queens, such as corseting, tucking, padding, stunting, high heels, and heavy wig use in performance, that may sometimes be practiced by other performers but are not the industry standard (Baker & Kelly, 2016; Edward et al., 2020a; Williams, 2020). Additionally, time and resource constraints of a Master’s level thesis require a clearly defined, limited study population.

Following the piloting, indicated revisions, and launch of the initial survey, the study focus on drag queens was met with a single expression of concern from two individuals from Wellington, Aotearoa, a location where I had not previously worked, and had not yet cultivated prior relationships of trust. These community members expressed concern that performers who identify outside of the drag queen identity, such as drag kings, drag artists, or drag performers, were not included in the study population.

When contacted by the two individuals about their concerns with the survey and the participation criteria (particularly the limit to drag queens), Professor Holly Thorpe (supervisor) and I (researcher) had open conversations, firstly via phone (supervisor with one of the concerned individuals), and then I emailed the individuals. As a result of this conversation, neither the survey design nor the population criteria were changed. However, a second version of

the survey was developed and distributed that included several edits to the introduction page of the survey, intended to address the concerns that had been expressed. These changes included clarification that this study and survey was specifically focused on the population of drag queens, adding an open response option for other populations of performers to share their perspectives to support future research considerations. A personal video introduction was added to welcome participants to the study and the survey, providing additional context, and my relationship with the drag community (Hamilton, 2020). This was an insightful experience and further reiterated the importance of trust and relationships in the drag community.

Overwhelmingly, however, the survey resulted in expressions of support, enthusiasm, and gratitude throughout the drag communities in New Zealand and the U.S., particularly, but not only, where I was already known as an ally, performer, and photographer within the communities. The following are examples of comments about the survey, and project overall: “O def a cool idea! Drag queens def need help with hamstring ankle and wrist recovery so would love to see some work into that!” was shared early in the process by an American drag queen. Another queen commented, “Happy to help ❤️!” on the Facebook post recruiting survey participants. One of the queens who is an interviewee also expressed early interest in the thesis topic during in person conversations as well, stating how important and helpful a project like this could be to the drag community.

While there are two versions of the survey introduction, the survey design beyond the introduction page remained the same between both versions. Therefore, responses collected in both distributions of the survey were used for analysis because the questions, response options, and order remained the same. It was extremely important to me that the survey design be maintained and the responses to the first distribution stay usable in the analysis, if it was at all

possible, while also carefully considering the feedback from the two individuals. Completely redesigning the survey and disregarding the original version and its responses, would have resulted in having to ask dozens of drag queens to retake the survey. It takes courage and valuable intellectual and emotional time and labour to fill the survey out at all, so to ask the queens to retake the same survey would have been disrespectful and unethical, especially considering their status as a marginalised community.

The initial survey sample started at 96 respondents, but as the survey progressed, not all participants were eligible to complete the survey. Specifically, 11.5% (n=11) of respondents were identified as ineligible due to not identifying as working drag queens. Some respondents also dropped out before completing the survey. The final sample consisted of 74 respondents who met the eligibility criteria, and 53 respondents completed all the relevant sections through survey completion. It is important to note that not all questions required answers from all participants, and some questions included response options that led to automatic skipping of irrelevant sections.

The demographic data revealed interesting trends. Of the 52 respondents who completed the age question, the majority were aged 18-25, followed closely by those in the 26-30 age group, with the mean age being 32.1 years and the median age at 29.5 years. The youngest participant was 21, and the oldest was 58 years old. The relatively young age of participants could be attributed to the electronic distribution of the survey and the increasing popularity of drag among younger individuals. The geographic distribution showed that 73% (n=54) of participants primarily worked as drag queens in Aotearoa New Zealand, while 26% (n=19) worked in the United States. One participant was excluded from the study for working outside the focus countries.

In terms of gender identity, the survey captured a diverse range of responses. The majority of participants identified as cisgender men, but every gender identity option provided in the survey was represented. This included transgender men, cisgender women, transgender women, non-binary individuals, and those who preferred not to say. This diversity challenges the traditional definition of drag queens as “gay men who dress and perform as women” (Taylor & Rupp, 2004) and highlights the inclusivity within the drag community.

Experience in drag varied significantly among participants. Of the 71 respondents who answered the question on drag tenure, the largest group (41%, n=37) reported having 1-5 years of experience. A smaller percentage (3%, n=2) had less than a year of experience, while 20% (n=28) had been performing for 6-10 years. Notably, four participants had over 25 years of experience in drag, with one reporting an impressive 38 years in the field. This range of experience provided a rich context for understanding the different stages of a drag career and how these stages intersect with the physical demands of the performance.

3.1.4 Survey Analysis

In this study, the purpose of the primarily quantitative survey data collection and analysis from a larger sample size is intended to support the smaller sample of purely qualitative interview data. The analysis of survey data involved rigorous application of quantitative methods to derive meaningful insights.

Initially, I exported the data from Qualtrics into IBM SPSS Statistics. From there, I isolated specific datasets and transferred them into Microsoft Excel to clean it for the descriptive analysis. Cleaning the data included identifying and correcting errors in the data, adding zeros to blank binary answers (where a “1” already existed for those who selected a given response), and removing invalid responses, such as those who were determined ineligible for the study. This

cleaning phase is essential to ensure that analysis moving forward is accurate and reliable (Hair et al., 2019).

Once the data was cleaned, descriptive analysis was completed in Excel. Regression tests were conducted to identify potential statistically significant correlations of interest. This will be discussed further in the Survey Findings chapter.

3.2 Interviews

In-depth individual interviews are an important and much-used method by feminist and queer researchers seeking to create space for the voices of marginalized communities (Brim & Ghaziani, 2016; Browne & Nash, 2010; Das, 2020; 2008; Fotopoulou, 2012). Generalisations about marginalised communities that do not provide opportunity for autonomous self-expression poses a threat to actual lived experience and progress for these communities, so it was incredibly important to include qualitative data collected through semi-structured interviews in this study (Das, 2020; Doucet & Mauthner, 2008; Fotopoulou, 2012). Six interviews were completed among drag queens working in Aotearoa New Zealand or the United States of America. While this may seem like a small number, the focus of the interviews was on the quality, richness and complexity of the data, rather than quantity. Interviews also have limitations, such as the time required to conduct and analyse them. Due to these limitations, sample sizes tend to be smaller when conducting interviews compared to quantitative methods, therefore they may not be as representative of a broader population. In this study, interviews were used to providing a deeper understanding of the physical and health care experiences of drag queens.

3.2.1 Interview Design

Semi-structured interviews were designed to support a nuanced exploration of the physicality and athleticism of drag queen-ing and drag injury prevention, occurrence, and rehabilitation, with greater opportunity for participants' self-expression, power to define their own experiences, and make their own connections between their own responses (Ross, 2017; Singh et al., 2013). A semi-structured interview guide (Appendix C) was used across all interviews. While a scripted list of questions guided each interview, language was adapted based on participants' expressed language particularly regarding how they identified themselves and their community (Novotny et al., 2021). The semi-structured format also provided for non-scripted follow-up questions based on individual responses to scripted questions. For example, expanding upon the very basic information on athletic background in the surveys, interview format intentionally provided space for queens who had that background to connect this to their drag practices and how they approach health care and injury.

Interviews were carried out via video calls. Information and consent were sent and returned in advance of scheduled Zoom video interviews with the three drag queen participants from Aotearoa and three from the U.S. Due to my participation in the drag community, participants and I generally were already familiar with each other. Therefore, interview introductions were less formal than is typical with researchers from outside the community.

However, I was clear as to my multiple roles, and when I was acting in a researcher capacity (during the interview) and when I was not (taking photos at a drag show). Introductions and review of consent were not recorded. Once consent for interview, recording and use of data was re-confirmed verbally, recorded interviews commenced.

3.2.2 Interview Participant Recruitment

For the interviews, I was able to use my personal network to reach out to drag queens. My drag show background as both a cabaret-style acrobatic performer within drag shows, a stage manager of drag shows, and a professional drag photographer has allowed me to hold space in the drag community in Chicago, Boston, Kirikiriroa Hamilton, and Tamaki Makaurau. Building on these existing relationships formed through my professional work, I was able to intentionally reach out to drag queens who would encompass a diverse range of drag styles, experience levels, movement/athletic backgrounds, and ethnicities. I reached out to these queens in a variety of methods, including in-person conversations, direct messages on social media, and emailing those I had contacts for. This recruitment strategy is supported by feminist perspectives on collaborative, relationship- and trust-based research (Hamilton, 2020).

3.2.3 Interview Participants

The sample of interviewees included six drag queens. Three drag queens living and working in Kirikiriroa Hamilton, NZ, and three drag queens from the United States, two living in Chicago and one living and working primarily Las Vegas were interviewed in this study. The drag queens interviewed represented diverse backgrounds, both ethnically and culturally, including Latinx, Māori, White/European, and a diversity of drag performance experience, ranging from less than 2 years to 15 years. Four of the drag queens interviewed are cisgender men, one is nonbinary, and one is a transgender woman.

3.2.4 Interview Analysis

Reflexive thematic analysis was used for the qualitative data obtained from interviews.

Transcriptions were coded using NVivo. Recurring themes and narratives were identified through

reflexive thematic analysis to understand the nuanced perspectives and experiences of drag queens (Braun, et al., 2019).

Reflexive thematic analysis (reflexive TA) is a process developed by Braun, Clarke, Hayfield, and Terry (2019). As defined by Braun and Clarke, reflexive TA is a method to interpret data using the information in the data itself through observing and defining patterns within the dataset (2021). This decision to use thematic TA allowed me to both rely on and extract ideas from the data, as well as acknowledge and use my own personal understanding and experience of the subject matter in the analysis process. This was especially important to this project because of my own pre-existing place within the drag community, including my experience performing with drag queens and my relationship to some queens as colleague. Reflexive TA does not require the researcher to be unbiased. This should not be confused with researcher bias affecting data results, but rather that the researcher's positioning possibly informing the analysis of data. Reflexive TA values a researcher's positioning as a tool in the research process (Braun & Clarke, 2021). As the participant population for this study is a marginalized community, I recognized the significance and importance of reflexivity and researcher positioning while conducting research.

In my analysis of the interview data, I followed the six phases of reflexive TA outlined by Braun and Clarke (2021): familiarization, code generation, initial theme construction, revision and definition of themes, and writing the final analytical report.

The first phase of reflexive TA is familiarization (Braun & Clarke, 2021). This is where my analysis process began for the interviews I conducted. This phase primarily included familiarization through transcription to immerse myself in the dataset. The transcription process required me to watch and rewatch, listen and relisten to, the interview recordings. I personally carried out the transcribing of the interviews, which is suggested to be vital to the analysis

process by Braun and Clarke (2021). I used Adobe Premiere's transcription tool to assist the transcription process, and, ultimately, all transcriptions were done in Microsoft Word by myself.

I was able to make notes where there were relevant points in the interviews during the transcription process. Because I had audiovisual recordings of the interviews, I was able to observe specific body language, as well as spoken language during the transcription process, which provided rich context for some of the spoken language.

Phase two of thematic analysis is generating initial codes (Braun & Clarke, 2021). I started this phase working physically on paper with my written transcripts then moved to NVivo. The decision to switch to NVivo was because I would be able to more easily see the groups of text in each code once I finished coding. The coding process started by recalling some of the recurring or interesting points from phase one. I began by searching for segments of text that related to each other, specifically around descriptions of what kinds of physical activities go into drag practice, instances of healthcare provider experiences, and athletic backgrounds (if any) of the queens and how that related to their current drag practice. Equally important in generating codes was paying attention to segments of text that were outliers or didn't relate to anything else in the dataset.

While there has been significant research focusing on gender and sexuality around drag, my specific topic focused on the physical experiences of drag queens is relatively uncharted territory in academia. This newness drove me toward using an inductive approach to my coding process, as it felt especially necessary to let the data lead the process in this case.

The first stage of coding relied primarily on semantic codes, frequently using participants' exact phrasing, for example, "cardio is part of my warmup." As I refined those initial codes, some of my codes leaned more toward latent meanings, such as "assumptions of providers made

by queens” or “necessity of community.” The majority of my final 57 codes remained semantic, but there was a mix of both approaches in the final code list that was used for the next phase.

After the code list was finalized, I moved onto Braun and Clarke’s third phase of analysis: constructing themes (2021). To begin this phase, I revisited my research questions for this thesis. Reflecting on those questions, I began to visually cluster certain codes in ways that offered possible answers to those questions. Initial themes included, but not limited to, “athletic training supports fulfillment of physical drag goals” and “perceptions and experiences of competition in drag.”

Phases four and five of reflexive TA are revision and definition of themes. In my process, these phases were combined, as I was able to develop more clearly defined themes through the revision of the initial themes. The final themes developed were “physical experiences of drag and how that relates to sport and athletes,” “personal practices of self-care and health to maintain one’s drag,” “barriers and access to care for drag queens,” and “community and individual reliance for health-related behaviours.” Phase six, writing the analysis, is demonstrated through the interview analysis chapters.

3.3 Ethical Considerations

3.3.1 Informed Consent

Participants were provided with clearly written information about the research objectives and their rights as voluntary participants before consenting to participate in the survey or interviews. They were also asked to consent or not before proceeding in the data collection. If they chose not to grant consent, their data was not collected.

Consent attainment was achieved differently in each method of data collection. For the survey, informed consent was given by participants at the end of the information page of the

survey. The information page included all details about participant rights and survey/data uses, as well as contact information for myself and my supervisor in a written format. Additionally, a video introduction was provided on the information page in the second version. Participants were then presented with a question asking if they consented to proceed with the survey.

For the interviews, all participants were sent an information and consent sheet prior to the interview meeting. All details were included: a description of the study, participant rights, an option for full or partial confidentiality, and information about what each of those options would mean for participants. Finally, a space for participants to indicate if they would like to receive research outputs was included. Participants signed written consent was received prior to scheduled Zoom interviews. At the beginning of each interview, I verbally reviewed study information and participant rights and asked if participants had any questions or concerns before reconfirming consent.

In both surveys and interviews, participants were asked if they had positive experiences with specific health providers who they would recommend for other drag queens seeking care. To provide an informed consent opportunity for these providers prior to including their names in the appendix to this thesis, an email with contextual information was sent to each provider, giving them the choice to opt out and remain anonymous.

3.3.2 Confidentiality

Confidentiality measures were implemented to safeguard privacy of participants, and their personal information shared during interviews or in survey responses. Anonymity and confidentiality among survey participants was ensured, as the only identifying information collected was location by country, age, and gender. All data for the survey was collected through a University of Waikato Qualtrics account. Once the survey closed, all data was stored in a

password protected folder on the researcher's local hard drive, and a copy was stored on a private encrypted external hard drive.

As part of the information on the initial page of the survey, participants were welcomed to contact the researcher or supervisor with concerns or questions. Additionally, at the end of the survey, participants were once again provided with an email to reach the researcher should they desire to receive any results of the study. Because of the anonymity measures taken in the survey data collection, even those who contacted the researcher could not be connected to any specific dataset.

Anonymity and confidentiality were supported among interview participants to the degree each participant indicated in their consent forms. Interview participants could freely choose one of the following options:

- Pseudonyms, such as "Queen A"
- Initials of drag queen name
- Full drag queen performer name

Using their legal name was not an option to protect privacy and safety of participants. All interview data was stored on a password protected computer and encrypted external hard drive, including recordings, transcripts, and complete consent forms.

3.3.3 Considerations for LGBTQ+ Community

As many drag queens are members of the LGBTQ+ community, there were intentional cultural and gender considerations factored into the design of the survey, specifically in the demographic sections, and language used in the interviews. Relevant and local resources and referrals were available for interview participants if they felt they needed support during or after the interview.

These included resources specific to each queen's national and local location, such as Chicago Therapy Collective, USA and Rainbow Place, Aotearoa NZ.

3.4 Limitations

3.4.1. Geographical Constraints

The study's scope was limited to drag queens from New Zealand and the United States, potentially excluding perspectives from other regions. This decision was made due to the time and resource limitations of a Masters-level thesis, such as the impracticality of a more heterogenous population, larger sample size, translation/interpretation services for surveys and interviews, etc.

3.4.2 Self-Selection Bias

As participants self-selected to take part in the surveys and interviews, there could have been self-selection biases (Elston, 2021; Heckman, 1990). There can be hesitance among marginalized communities to participate in academic studies due to distrust rooted in past harms committed by academic and clinical researchers (Katz et al., 2006; Scharff et al., 2010). Prior to beginning this study, I had a history of participation in and support for drag and LGBTQ+ communities in locations such as Chicago and Kirikiriroa Hamilton, so it is possible that these established trust relationships may have mitigated self-selection bias in the areas I had previously worked. Snowball sampling may have mitigated this in other areas, as personal drag queen contacts shared the study participation opportunity with their own networks beyond the geographic areas I had worked in, and generously introduced me to some of their personal contacts to broaden the "circle of trust" for this study. For example, esteemed members of the Kirikiriroa drag community who also participate in the Auckland drag community supported survey outreach by

expressing enthusiastic support in the Auckland drag FB group and at the national drag festival in Palmerston North. There is also potential that drag queens who have experienced injuries saw more value in the project, and thus more likely to participate.

Chapter Summary

The mixed-method approach, which includes data from 96 survey respondents and six interviewees, aims to capture the nuanced experiences and perspectives within the drag queen community in Aotearoa NZ and the United States. The combination of quantitative and qualitative data provides both a broad and specific view of the study population. Throughout this study, from the research design through the data collection and analysis, it was essential to establish and maintain relationships based on trust and mutual respect with the population as a whole and research participants. For this generative study, methodological diversity was incredibly important to capture as many experiences as possible in varying depths. Ethical consideration for working with the drag queen community, which includes many individuals from (sometimes multiple) marginalised communities, was also crucial in the entire research process.

CHAPTER FOUR: SURVEY OF DRAG QUEENS IN AOTEAROA NZ AND THE U.S: INJURY OCCURRENCE, PREVENTION, AND MANAGEMENT

This chapter details the analysis and findings of the quantitative data from the Qualtrics survey for this research. As detailed in the previous chapter (methodology), this survey included 96 participants from the US and NZ drag queen community, and asked participants about their experiences with injury from drag, healthcare, and health habits related to injury prevention. In this chapter I present the key findings from the survey. In section 4.1, drag queens' injury occurrences and details of injuries are discussed. In section 4.2, the data regarding participants' injury prevention and regular body maintenance strategies are explored. Section 4.3 details the findings in injury management and recovery. Barriers to healthcare for drag queens are discussed in section 4.4. The key findings from this chapter are summarised in the conclusion section (4.5).

4.1 Injury Occurrence

Survey participants were asked about their drag-related injury history. This included questions about injury that they personally sustained, as well as injuries sustained by peers that they witnessed or had knowledge of. The majority (65%, 36 respondents) of the 55 participants (n=55) who responded to the question, "have you been injured while performing or rehearsing in drag," reported that they had been injured while performing or rehearsing in drag, while 27% (15 respondents) reported that they had never been injured while performing or rehearsing in drag. Although the "maybe/I don't know" group were in the minority (7%, 4 respondents), that group is of interest because prompts consideration as to how or why individuals might not know with certainty if they have sustained injury. For example, is there a lack of education, knowledge, or awareness around injury? Would an individual be unsure whether their injury is severe enough to qualify as an injury in the context of an academic study? These are not questions that this

research aimed, or was able, to explore, but are important to consider for future research among the drag queen community.

Two statistical regression tests were run to explore whether gender or years of experience in drag had any significance in injury occurrence. There was no statistical significance and minimal explanatory power between gender identities on injury occurrence. Similarly, there was no statistical significance and minimal explanatory power for drag experience by years on injury occurrence.

Participants who reported that they had been injured (n=36) while performing or rehearsing in drag were asked to describe their injuries, including multiple injuries, if applicable. One participant chose not to disclose any information about their injury, but the other 35 participants that had reported injury all described single instances of injury. Among 35 participants, 63 single injuries were reported. This indicates that there was an average 1.8 injuries per injured participant. While 63 individual injuries were distinguished from this data, it should be noted that six participants use the plural form of a word, for example “ankle sprains,” which indicates multiple injuries. Some offered multiple injuries in the open-text box (e.g., “Ankle sprains, wrist sprains, shoulder dislocation, knee pain/hyperextension, lower back pain”), whereas others offered detail of how those injuries occurred (e.g., “After rehearsing for a performance, i think because i forgot to stretch, my back was burning”). Additionally, some respondents indicated that they have preexisting conditions that may affect their propensity for injury, such as, “im hyper mobile, so i’ve had knees pop out of place, general strains and chronic pains that are related, which can either arise or get worse when performing” and “I have hypermobility, makes it easy to roll ones ankle in heels.” One participant wrote “Nothing serious, twisted ankle, sore back, sore

everything.” This is of interest because it suggests that the participant considers the injuries that they have sustained minor, where a “sore back” could potentially be a quite serious issue. Exact counts of repeat injuries were not always reported by participants. This suggests that the number 63 is an underestimation of the true injury occurrence counts, and therefore, that 1.8 is an underestimation of injury occurrence rate among injured individuals.

Table 1 shows frequency of what kind of injury was sustained by injured participants. Responses from the 63 participants (n=63) who responded to this question were cleaned and reinterpreted into medical terminology where applicable for this analysis. Sprains were the most common type of injury with 35% of participants (22/63 individuals) reporting a sprain of some kind. The next highest frequencies of reported injuries, in descending order were: unspecified pain (14%, 9/63 individuals), dislocations (14%, 8/63 individuals), strains (10%, 6/63 individuals).

Table 1 Injury by Type – Personal injury

Injury type	Frequency count	Percent %
Sprain	22	35
Unspecified pain	9	14
Dislocation	8	13
Strain	6	10
Contusion	4	6
Bone bruise	2	3
Muscle strain/pull	1	2
Fracture	1	2
Nerve damage	1	2
Haematoma	1	2
Unspecified pull	1	2
Hyperextension	1	2
Whiplash	1	2
Ligament tear	1	2
Laceration	1	2
Ingrown toenail	1	2
Slipped disc	1	2
Total	63	100

Tables 2 show frequencies of location of the body injuries occurred by injured participants. 53 participants of the 63 who reported a specific type of injury also reported the specific location of their injury. Table 2 shows that knees were the most commonly injured body part (30% of injuries with location specified), followed closely by ankles (28%).

Table 2 Injury by location – Personal injury

Injury location by body part	Frequency count	Percent %
Knee	16	30
Ankle	15	28
Back	6	11
Shoulder	3	6
Wrist	3	6
Foot	3	6
Neck	2	4
Hip flexor	1	2
Elbow	1	2
Gluteal muscles	1	2
Pelvis	1	2
Ribs	1	2
Total	53	100

Reported injuries were analysed by body region where the injury occurred. The body regions used for this analysis are the trunk, lower limb, and upper limb, as defined by Koudelková and Kosová (2008). Of the 53 reported injuries that could be categorized in this way, 36 (68%) were to lower limb, 10 (19%) to trunk, and 7 (13%) to upper limb.

Participants were also asked about common injuries their peers had sustained. This was asked to understand drag queens' observations of the prevalence of injuries within their community. For this question, participants were able to select as many answers as applied to their experience with 120 injuries reported. Similarly to the data based on drag queens' personal injury experiences, sprains were the most commonly reported injury (35%). The next most common peer injuries reported were strains (28%), fractures (13%), dislocations (11%), Tendonitis (9%), concussion (5%), and other (5%). The most common peer injury location also mirrored personal drag injury experience, with ankles the most commonly named injured body

part to peers (20%), followed by knee (17%), foot (16%), back/spine (9%), neck (9%), hip (7%), wrist (7%), shoulder (6%), hand (4%), ribs (3%), and elbow (1%).

4.2 Injury Prevention/Body Maintenance Strategies

As discussed in the previous section, injury is a common experience among drag queens. With such high injury rate, it is also important to understand what, if anything, is being done among this community to prevent injury (Pizzarro et al., 2024). Note, workplace and broader societal conditions are powerful determinants of health and individual health behaviours (Braveman & Gottlieb, 2014). This is explored later in the next chapter (interview analysis) of this thesis.

Participants in the Qualtrics survey were asked about injury prevention and body maintenance behaviours. They were initially asked if they do anything to look after their body to prevent injury. The majority of individuals (36/57) who responded to this question indicated they do so (63%), while 25% (14/57) of participants answered “no” to the question “as a professional drag queen, do you do anything to look after your body and prevent injury.” When presented with specific behaviours affiliated with injury prevention (i.e., regular rehearsal, warmup or cool down routines, regular exercise, regular proper nutrition and hydration) in the following question, 9 of those participants reported that they did partake in injury prevention behaviours. Only 7/57 (12%) participants reported that they did not partake in any injury prevention behaviours, when presented with specific behaviours, 5 who reported previously that they did not and 2 who were initially unsure.

One possible explanation for this discrepancy is that there may be a lack of education and awareness around self-care and injury prevention behaviours. Drag queens may not be aware that

their usual routines around drag already include injury prevention behaviours because injury prevention is not the priority, or they may not have the knowledge that a behaviour is, in fact, considered injury prevention. As discussed later in the interview analysis chapters, there is not a culture of injury prevention or physical self-care in the drag community.

Table 3 shows the distribution of specific injury prevention behaviours (n=57).

Participants were able to select as many response choices as applied to them and selected a total of 218 behaviours or an average of 3.82 behaviours per respondent who practices injury prevention behaviour(s). Two of the three participants who reported “other” indicated that they seek out and wear comfortable footwear for performances. Drag queens generally perform in high heels, so footwear is a common source of pain among queens (Cretaz, 2021; Daems, 2014; Dougherty, 2017; Edward et al., 2020a; Farrier, 2016; Khubchandani, 2015; Moncrieff & Lienard, 2017; Pasulka, 2019; Willix, 2023). Regular rehearsal or practice of drag was the most reported behaviour among the population with 56% of respondents (32/57) reporting this behaviour. A third (33%, 19/57) reported practicing independent exercise, such as going to the gym or practicing yoga, to prevent drag injuries

Fifty-four percent (54%, 31/57) of respondents reported that they perform sober, indicating that nearly half of the respondents are not sober when they perform. This is a departure from athlete practices, where the expectation is sobriety when competing. This is likely a risk factor for injury among drag performers. Additionally, over half (54%, 31/57) of respondents reported that they do not have a pre-performance warmup practice, illustrating the possible lack of physical preparedness for drag performance, another demonstration of a possible injury risk factor.

Far fewer (18% or less) noted contact with a health care provider or movement instructor/trainer (12% or less) as an injury prevention practice they engaged in.

Table 3 Injury prevention behaviours

Injury prevention behaviour	Frequency count	Percent %
Regular rehearsal/practice of drag	32	56
Perform sober	31	54
Warm up pre-performance	26	46
Independent exercise (going to the gym, practicing pilates or yoga without an instructor)	19	33
Drink at least 2 litres of water/day	19	33
Prioritise 6-8 hours of sleep/night	17	30
Cool down post-performance	10	18
Annual checkup physical appointment with a GP or PCP	10	18
Physiotherapy/physical therapy	9	16
Massage therapy	7	12
Maintain a balanced nutrition	7	12
Attend instructor-led exercise or dance classes	7	12
Work with a personal trainer	6	11
Visit with a mental health provider, such a sports psychologist or performance coach	6	11
Acupuncture	2	4
Other	3	6
None of the above	7	12
Total	218 (n=57)	382

Statistical regression tests were employed to examine potential effectiveness of the injury prevention methods named, as correlated with actual injuries reported. Statistical regression tests were run in Microsoft Excel to find out if any of these regular injury prevention behaviours individually were correlated to injury rates. Then, to further analyse, statistical regression tests in

Microsoft Excel to find out if any of these regular injury prevention behaviours in different volumes were correlated to injury rates. Finally, to find out if any categories of these regular injury prevention behaviours in different volumes were correlated to injury rates, a third statistical regression test was run. For the purpose of this final test, injury prevention behaviours were split into 4 categories:

- Independent physical practices (regular rehearsal or practice of drag, independent exercise, warmup, cool down)
- Taught physical activity (attend instructor-led exercise or dance classes, work with a personal trainer)
- Nourishment/self-care (maintain balanced nutrition, drink at least 2 liters water/day, prioritise 6-8 hours of sleep/night, perform sober)
- Healthcare visits (acupuncture, massage therapy, annual check-up physical appointments with a GP or PCP, doctor's appointments, mental health provider)

None of these tests showed strong r^2 values ($\geq .15$), suggesting that there is not a statistically significant correlation between any of the injury prevention behaviours listed in the survey and the occurrence of injury in drag. One possible explanation for this lack of statistically significant correlation is that those who have already experienced injury are more likely to practice injury prevention behaviours, which is described later in this thesis by interview participants who express time, age, and injury as motivators to take better care of their bodies.

However, of the respondents who answered both the question about whether they had a prior athletic background and the question about specific injury prevention behaviours, 100% (29/29) of those with a prior athletic background indicated that they engaged in at least one

injury prevention behaviour. The majority of respondents (75%, 21/28) who did not indicate a prior athletic background also reported engagement with at least one injury prevention behaviour, but this was not a unanimous response like with the subgroup of former athletes. This may suggest that athletes are more informed on what injury prevention behaviours entail, as well as the importance of incorporating them into their drag queen practices.

4.3 Injury Management and Recovery

Participants of the Qualtrics survey were also asked about how they respond to an injury. This data helps to gain insight into the culture of injury within the drag queens community. Questions in this section covered injury management including whether participants have pushed through injury to perform, what injury management techniques have been used, and what kind of healthcare providers participants have seen for injury.

The majority (80%, 44/55 respondents) of participants reported that they have performed in drag while they were injured; the remaining 20% of participants (11/55 respondents) reported that they had not performed in drag while injured. This indicates that there may an expectation, or normalization, within the drag queen community, to push through pain or injury to continue working and performing.

When asking about injury management behaviours, only participants who selected “yes” (36/55 respondents) to “have you been injured while performing or rehearsing in drag” were directed to questions asking about injury management. The majority (57%, 20/35 respondents) of participants who reported that they had been injured in drag and responded to this follow up question did seek professional health care for their drag injury. However, there is a relatively

slim margin between the participants who did and did not seek healthcare (43%, 15/35 respondents). Half of the American respondents (3/6) indicated that they sought professional care for injuries sustained while in drag, while 59% (17/29) of New Zealand respondents reported seeking professional care for drag injuries. Note, the number of respondents is quite small here, so this data may not be generalisable. However, with more New Zealand respondents seeking professional injury care, it is important to discuss that the no-fault ACC (Accident Compensation Corporation) coverage in New Zealand may provide motivation for drag queens in Aotearoa NZ to seek care when injured, whereas the US medical insurance model may discourage American based queens from seeking care.

The 20 respondents that reported that they sought professional healthcare were asked to specify what kind of provider they sought care from. Participants were able to select as many of the options as applied to their experiences. If they selected the “other” option, they were asked to specify. Primary Care Providers/General Practitioners were the most commonly visited providers for injury (70%, 14/20), followed by physio/physical therapist (35%, 7/20 respondents). Other responses (massage therapist, acupuncturist, sports medicine specialist, orthopaedic doctor) were only indicated by 10% or less (1 or 2/20 respondents). The response rate was 1.5, which indicates that each participant visited, on average, 1.5 providers. Providers that were not listed as options but were specified by participants were emergency department doctors (2, 10%) and osteopath (1, 5%).

Table 4 shows the distribution of injury management behaviours among participants who reported injury and chose to answer the question (n=29). Participants were able to select all choices that applied. Taking OTC (over the counter) painkillers was the most commonly (79%) reported injury management behaviour, followed by taking time off from drag and other physical

activity (55%), medication prescribed for the injury (31%), alcohol and other drugs (24%) continued physio/physical therapy (17%), massage therapy (7%), and acupuncture (7%). Other forms of injury management reported were applying ice to the injury site, as instructed by the doctor, and Māori rongoa and mirimiri. The latter are traditional Māori healing practices in Aotearoa (Mark et al., 2017).

Table 4

Injury management behaviour	Frequency count	Percent %
Medication - OTC painkillers	23	79
Time off from drag and other physical activity	16	55
Medication – prescribed medication for the injury	9	31
Medication – AOD (alcohol and other drugs)	7	24
Continued ongoing physiotherapy/physical therapy	5	17
Continued ongoing massage therapy	2	7
Continued ongoing acupuncture	1	3
Other, please specify	2	7
Total	65	224

4.4 Barriers to Effective Injury Prevention and Management

Participants were asked to report whether they had experienced any barriers to receiving care pre-injury, at the time of an injury, or post-injury. About half of participants (53%, 28/53 respondents) did not feel that they had experienced barriers to receiving healthcare, while 21% (11/53 respondents) reported that they had experienced barriers. The response rate for “maybe/I don’t know” (26%) is compelling, in that it presents the question of why participants would be unsure if they had experienced barriers to receiving healthcare for drag injury prevention or rehabilitation.

The 47% that selected “yes” or “maybe/I don’t know” regarding barriers to care were guided to the next question that presented participants 13 predetermined options, as well as a

textbox for “other” possible barriers to receiving care. Among the 23 respondents (6 American, 17 NZ) that reported barriers to receiving care, 87 specific barriers were reported. This indicates that participants who faced any barriers to care faced an average of 3.78 barriers each. This indicates that drag queens may face multiple barriers to receiving care on an individual level. Table 5 shows that the most common barrier to receiving care for participants was cost (65%). Although Aotearoa New Zealand has ACC (Accident Compensation Corporation), 65% of NZ respondents (11/17) for this question reported cost as a barrier to care; meanwhile, 66% of American respondents (4/6) reported cost as a barrier to care (Goodyear-Smith & Ashton, 2019; Jatrana & Crampton, 2009; Schoen et al., 2013; Sood & Sood, 2015). This discrepancy would likely have been greater with more respondents, specifically from American drag queens.

Cost as a barrier was followed by fear of negative healthcare/medical experience (52%) and fear of identity being misunderstood or disrespected (39%). Of the survey sample, 35% did not know what medical and/or health care options were available to them, 26% had a history of health care providers misunderstanding or disrespecting identity, and 22% had negative healthcare/medical experience, did not have a GP or PCP, could not get appropriate referrals, could not take time off work, transportation difficulties and/or insurance barriers. Even though Aotearoa NZ provides ACC to coverage for all New Zealanders, 17.7% of NZ respondents (3/17) reported that insurance was still a barrier to receiving care for injury. This is in contrast with the U.S. insurance system that is mostly privatized, and 33% of American respondents (3/6) indicated insurance as a barrier (Himmelstein & Woolhandler, 2008).

Table 5

Barrier	Frequency count	Percent %
Cost	15	65
Fear of negative healthcare/medical experience	12	52
Fear of identity being misunderstood or disrespected	9	39
Did not know what options were	8	35
History of experienced misunderstanding or disrespect of identity	6	26
Transportations difficulties	5	22
Insurance	5	22
History of negative healthcare/medical experience	5	22
Did not have a GP or PCP	5	22
Could not take time off of work	5	22
Could not get appropriate referrals	5	22
Distrust of medicine	1	4
Other, please specify	1	4
Total	87 (n=23)	378

These barriers can be broken down into two larger categories: systemic barriers, and personal and community-level barriers.

Systemic barriers may be due to coalescing factors such as socioeconomic status and geographic location affecting access to care. These barriers include cost, insurance, inability to take time of off work, transportation difficulties, inability to get appropriate referrals, not having a GP/PCP, not knowing what healthcare options are, history of negative healthcare/medical experience, and history of experienced misunderstanding or disrespect of identity.

Personal and community-level obstacles are also closely related, data as some personal barriers may be a result of community input. Without more in-depth and qualitative data, which could not be collected in this specific survey, it is difficult to separate these personal barriers from community-level barriers, as many of the barriers indicated in the survey could be personal

obstacles based on one's own experiences and beliefs and/or based on their peers' experiences or beliefs. These barriers include distrust of medicine, fear of negative healthcare/medical experience, fear of identity being misunderstood or disrespected, feelings of shame, embarrassment, or discomfort. Fear of negative healthcare experience was the second most reported barrier to care at 12% of participants who experienced some kind of barrier (n=23). This barrier may be based on personal judgements and perceptions, prior negative experiences shared by peers, prior personal experience, or any combination of these.

4.5 Discussion and Summary of Findings

According to the data from this survey, drag queens in the United States and Aotearoa are a fairly high-risk population for injury, with 65% of respondents (36/55) reporting drag-related injury. Compared to athletes, this most closely resembles the injury rate of football (63%) and soccer players (36.5 injuries per 10,000 hours of gameplay), the most frequently injured group of athletes in two different studies (DeHaven & Lintner, 1986; Weightman & Browne, 1975). Lower limb injuries are the most prominent kinds of injuries among this sample of drag queens. This reflects much of the research discussed about dance and circus medicine in the literature review chapter.

While some drag queens (63% of respondents) are aware of and do participate in some injury prevention/harm reduction behaviours, the effectiveness of these behaviours was not strongly correlated with lower injury rates in this study. 52% of the respondents reported some kind of athletic or movement background, which could suggest that that group may use their prior knowledge of movement to inform their injury prevention behaviours. However, the group

that does not have an athletic background may not have the education to maintain appropriate application of injury prevention behaviours like warmups, cool downs, or regular workouts. There may also be a reverse causation between injury occurrence and injury prevention behaviours, in that those who have been injured may be more incentivised to practice injury prevention behaviours to prevent further injury.

When injured, a slight majority of the respondents who reported they had an injury from drag did seek professional healthcare from a variety of providers. Over the counter pain medicine and time off from drag were the most commonly reported injury management behaviours among the participants in this study. As almost half of respondents did not report going to seek professional care for injury and the majority of respondents reporting that they have performed in drag while injured, there is an indication of sacrificing one's wellbeing for the sake of drag, which aligns with 'sport ethic' documented as a set of values that shape athletes approaches to pain and injury (Hughes & Coakley, 1991; Luzum, 2012).

Almost half of respondents reported that they had experienced barriers to receiving healthcare, and these respondents reported an average of 3.78 barriers experienced per respondent. This indicates that those who struggle to find and receive appropriate care are experiencing compound barriers and may need support from a variety of systems, including healthcare, government, workplace. Notably, 26% of respondents reported a history of health care providers misunderstanding or disrespecting their identity, which emphasizes the importance of and need for culturally safe care for drag queens (O'Brien et al., 2017; PAPPS & RAMSDEN, 1996). This, combined with fears of a negative healthcare experience and concerns about identity being misunderstood or disrespected, highlights how much social stigma and discrimination leads to barriers to healthcare access. The intersection of these challenges suggests that more

inclusive and informed healthcare systems, in addition to affordable healthcare, are crucial to ensuring that drag queens and LGBTQ+ individuals can access the care they need without fear of prejudice. The next two chapters draw upon interview data to build upon and extend the findings presented in this survey analysis.

CHAPTER FIVE: INTERVIEW ANALYSIS - PHYSICAL EXPERIENCES AND PRACTICES

This chapter explores the responses from semi-structured interviews conducted with three American and three NZ drag queens. Identified through reflexive thematic analysis, two themes will be discussed in this chapter (Braun & Clarke, 2021). The first theme and section of this chapter, 'Drag as a Physical Discipline,' discusses physical experiences of drag, and how those experiences relate to sport and the athlete identity. The second theme, 'Personal Practices,' explores behaviours and ideas like the prevalence of regular body maintenance and self-care, personal responses to injury, and the influences on these practices. In chapter six, the additional theme of 'Barriers and Access to Healthcare' will be discussed.

All participants identify their drag personas as women and use she/her pronouns in those personas. For this chapter and the next, all participants will be identified using she/her pronouns, as they are identified by their drag queen personas only.

5.1 Drag as a Physical Discipline

Drag includes artistic, athletic, and social commentary elements, as explored in the literature review. This thesis aimed to explore the physical and athletic aspects of drag, while also acknowledging the effects the social and gendered aspects of drag may have on the physical aspects. Interview participants described their physical actions while performing in drag, physical challenges they face around their drag performance, and working conditions that affect their physical experience. The participants shared their perspectives on drag as a competitive practice, and how their experiences of competition and physicality in drag parallel or differ from sport, athletic activities, and being an athlete.

Section 5.1.2 Physicality of Drag Performance

Drag is a visual discipline. To fully understand what goes into the physical activity of drag, one would need to attend drag shows or watch a visual recording of a performance. It is important to note that not all drag queens perform physically. Some drag queens are strictly social media performers that do not include physical performances in their practice: “there’s so many subcategories of drag now and what can do; a lot focus on social media and makeup and things like that” (Denali). Each of the interview participants was invited to describe their own performance style, detailing how they physically use their bodies in performance. All the interview participants described their performance as very corporeal and high energy:

So, depending on the day, I do have some [...] tricks or stunts that I do. It's usually very rhythmic. I like to dance. I do a lot of Latin-based movements. [...] There's like a trick that I do, I spin around and I lower to the ground in a swoop. Maybe I'll do a backbend. What else? I like to do floor work so like being on the floor, crawling around and stretching my limbs like from [makes arm motions to demonstrate limbs reaching opposite each other, from one side of the room to the other] the room like that. ... I just, I give, like, high energy performances, I would say are my thing. (Chamilla Foxx, USA)
[...] most of the time, for me, I perform at club gigs, so I always like to do high energy performances, which means I am sweating a lot in drag, like kind of technically what you do when you're like, running around, like I'm running around the whole stage, jumping up on things and it's a lot [...] very physical (Rita Menu, NZ)

So like I would say in general, drag has a physically demanding aspect to it [... My drag is] dynamic (S.B., USA)

I put my body through a lot. (Kellie Kelly, NZ)

I would say dynamic, feminine, acrobatic and stunt like I really love to, to do a lot of acrobatic tricks and things like that. (Denali, USA)

I am moving around, spinning, getting down on my knees, and, you know, rapid movements and stuff like that. (Prada Jae, NZ)

Each of these drag queens has different backgrounds that support and inform their performance styles (which will be explored in the next subsection), yet they all express how physically demanding drag performance is on their bodies. These physical demands can be seen as an example of the athleticism required of drag queens who perform. Each of the drag queens further

described their use of dance elements in their drag performance, and some even described their use of acrobatic and gymnastics skills. For example:

Yeah, [I do] splits, drops, kicks. (Kellie Kelly, NZ)

I was very interested in trying to get my body to a point of being able to do like the splits and backbends and stuff like that. (Prada Jae, NZ)

I use flexibility to demonstrate shapes and engaging styles of movement to augment my lip sync and performance [...] So hand balancing, contortion, and dynamic styles of tumbling. (S.B., USA)

Many of the participants described using floorwork elements of dance, which have been found to require a high level of physical demand and support (Henderson, 2023). Examples of floorwork described by participants include splits, jumps to landing on knees, rolls and kicks while lying on the ground, and “drops.”

All but one identified themselves as some version of a dancing queen. The one queen who did not explicitly identify as a dancing queen did not identify strongly with any one genre of drag performance. Rather, she said, “I’d say I have a pretty broad range in terms of like performance style,” which she qualified by explaining that she will commonly perform “slower park and bark style numbers where [she’s] doing not that much” as well as high energy dancetype performances (Prada Jae, NZ). Despite not identifying as a dancing queen, this queen expressed that she does sometimes perform in ways that require high levels of physical energy.

In addition to specific elements of dance and gymnastics in their performance, like splits, tumbling, and acrobatic stunts, participants also described less specific athletic activities that are part of their drag performance, like jumping and running. The descriptions of drag performance provided by participants indicate that their practice of drag is a form of athletic activity.

Drag performance includes many styles: some queens identify primarily as comedy queens, others as park and bark queens, look queens, or, in the case of the majority in this study,

dancing queens (Productions, 2009-present). Some of these other genres of drag may not be as athletic in nature, but interviewees reiterated that drag performance will be physically demanding of its participants. For example, Rita Menu (NZ) describes, “a drag queen who sings is not an athlete, but also, it's physically demanding. So, I would say in general, drag has a physically demanding aspect to it.”

In addition to highly physical actions on stage that the participants described, they also overwhelmingly expressed how physically demanding the aesthetic aspect of drag can be. All the drag queens interviewed detailed the physical discomfort and demands of being in drag costume, makeup and hair, whether performing or solely existing in their drag personas. Some of these issues included restricted movement pathways caused by wearing layers of tights or corsets, injury caused by tucking (a common costuming practice among drag queens), skin irritation from excessive shaving and applying heavy makeup, and pain suffered from unsupportive high heeled footwear. For example, American drag queen Chamilla Foxx describes her saga to find footwear that would both match her drag aesthetic and not result in physical injury, and NZ queen Rita Menu explains modifications to her footwear she's made to accommodate pain:

I used to think about like, oh, yeah, I want like the highest, sharpest heel. I wanna do this and do that or like. Then I got like, I don't wanna do that anymore. I wanna wear a chunky heel with a rubbery sole, so my feet are cushioned. But I realized if your feet are not sliding and gliding smoothly, you're like causing all this pressure on your knee, and you're like kind of like tearing it. So I switched to wearing more dance shoes, like ballroom dance shoes. And I've noticed that the pain in my knee is gone, because now I'm like able to glide easier, and I'm not like pushing against a rubber sole to turn. (Chamilla Foxx, USA)

[..] your feet literally burn after 2 hours of just standing in them. So I've now had to change that, to change my shoes to like one and a half inch [...] (Rita Menu, NZ) Ice skaters, ice hockey players, and speed skaters share this experience of their mandated footwear causing pain or injury, as do ballroom dancers, who wear heels as part of their uniforms or costumes, and ballet dancers, who train and perform in pointe shoes constructed of silk and wood (Li et al.,

2022; Mao, 2024; Tlougan et al., 2011). Bodily discomfort, pain, and injury are common experiences of performing as a drag queen, according to the interview participants. They all share experiences of physical stress on their bodies as drag queens.

A commonly cited experience of costuming demands creating physical stress described was the layering of padding and tights. Queens shared the following examples:

I think about the fact that I sweat a lot when I'm up on stage, especially after I've finished a performance. Because we're kind of like a miniature Sauna, you know, in terms of again all the layers of tights and all the shape where that goes on underneath in order to give off the figure. (Prada Jae)

I feel somewhat claustrophobic when I'm in drag. [...] the drag that is needed in terms of transforming a very male form into a more feminine form, it's really painful. (Denali Foxx)

These layers of materials have the effect of restricting movement pathways and creating extreme heat. Risks may include hyperthermia or even slipping in sweat drips; research has not been conducted specifically with drag queens on physiological responses when they overheat from the combination of the layers of fabric and the physical exertion of their performances. However, American football players, who also wear layers of padding and clothing while physically active, have been studied and found to suffer from medical emergencies attributed to their exercise while in heavy padding (Armstrong et al., 2010; Mathews et al., 1969).

Often concealed beneath the layers of padding and/or tights, many drag queens tuck. For drag queens with external genitalia, "Tucking [...] is a process of arranging the penis and testicles to present a flat pelvic area (a popular process involves pushing the testicles into a body cavity known as the inguinal canal and taping the penis between the legs)" (Farrier, 2017). Tucking can pose several challenges for those who choose to do so. Applying adhesive to skin can cause skin irritation. Tucking can also limit toilet use, as described by two queens here:

It's the worst thing when you're in full drag and in that much constriction and then you're needing to go to the bathroom or something like that. (Denali, USA) Going to the toilet is not fun when you're in drag. (Prada Jae, NZ)

The only way to urinate while tucked is to untuck and have to repeat the whole tucking process.

During a drag show, queens do not have time for this. Prada Jae of Aotearoa NZ shared her experience of a drag show night. It illustrates performing queens' lack of time for bathroom breaks, especially breaks that include the time-consuming process of untucking and re-tucking:

The night of, there's a lot of like just making sure that everything's running smoothly, the audience is still engaging, as well as keeping in mind that I have probably 5 minutes from this point in time to this point in time that I have to get my ass upstairs, get into a fully different outfit, fully different wig, and get my ass back downstairs and trying not to be sweaty about it at the same time. (Prada Jae, NZ)

Although less common among those with external genitalia, holding urine has been shown to increase risk of UTIs (urinary tract infections) (Henneberg, 2015). UTIs are medical conditions that often require prescription antibiotics to resolve (Henneberg, 2015). While none of these interviewees reported UTIs caused by tucking, S.B. shared her tucking-induced medical experience:

At some point, I was having issues with my hips because of tucking. There's one time I was like tucked and I was just going out and drag, and I like had a weird step on my left foot. And it kind of like created a weird nerve line pain that shot up the inside of my leg. And it was because of like my testicle being in like a compromised position that it threw off my hip. (S.B., USA)

While it is unknown if tucking can cause any long-term problems like chronic nerve entrapment syndromes or erectile dysfunction, due to a lack of research among drag queens who tuck, a study of cycling athletes, who face similar pressure on their genitals for extended periods of time, showed high rates of urogenital disorders (Leibovitch & Mor, 2005).

The majority of drag queens also wear wigs when performing (Newton, 1979). Wigs can be heavy and large, which adds pressure to queens' necks. Kellie Kelly explained that even

simple, natural-style wigs that may not appear to add a major burden to the body can affect movement pathways in choreography and still impact the body:

[Performing in a wig] it hurts. Even whipping it around...the amount of times the next morning will be like, ahhh [grabs back of neck to indicate pain]. (Kellie Kelly, NZ)

Another common issue reported among many of the participants was pain and discomfort caused by corset wearing. As indicated in the earlier literature review, corseting is a common practice among drag queens. This practice is used to assist in the transformation of a person's body into a hyperfeminine body, creating or accentuating curves that show an hourglass figure. Interviewed queens' described experiences of wearing corsets and changes some of them have made to their corseting practice to alleviate the corset pain:

I was having a bit of some back problems as well in drag just because when I would stunt, or I would flip, I would be in a corset. And so you're trying to move your body while your spine is compressed... and it just amplifies the pressure [on your body]. (Denali, USA)

I think it is just that physical demand of like being in it, doing it all night, performing. Then it's also things like, you're carrying like 15 kilo suitcase up flights of stairs in heels and a corset. (Kellie Kelly, NZ)

[I've had] cuts on my side from like wearing a corset that's too tight, and the boning kind of sticks out and just like digs in there. (Chamilla Foxx)

[...] corsetry, of course, very tight. I get like severely bad bruising around my hips side (Rita Menu, NZ)

Even though this is an uncomfortable practice for many queens, they are unlikely to eliminate corseting from their drag practice. Some of the queens in this study have already reported harm reduction behaviours around corseting, such as not tightening their corsets to the maximum tightness or not wearing corsets every time they are in drag. As mentioned in the literature review, costume designer Squitiere (2010) emphasizes the impact and importance of safe costuming on performer safety. Further harm reduction recommendations for corset wearing, in

line with the general harm reduction model described in the literature review, could be incredibly beneficial to the drag community.

What Kelly Kellie describes above about having to lift a heavy suitcase “up flights of stairs in heels and a corset” backstage is not only the discomfort of wearing a corset, but also the added strains that working conditions can add to drag queens’ performance experiences. The working conditions that drag queens are subjected to involve long hours, late night schedules, and inappropriate performance surfaces, that may have an influence on the health and wellbeing of drag queen performers.

The demanding schedule of drag mirrors that of an in season professional or collegiate athlete that competes every week, sometimes multiple times a week (Shkedy et al., 2016). However, the difference for drag queens can be that, as S.B. elucidates, “I don't have an off season;” they are always working and performing, unless they choose and have the financial security to take time off. Denali shared her experience of her busy drag work schedule contributing to physical pain:

There was a time during the 2020 year when I was, when we were, or 2021, when we were touring after I'd gotten off the show, and it was just such a busy schedule and I was doing back to back show days almost every single day, especially on tour, I would have like minor injuries, like my neck or my hip and I would have to modify certain performances. (Denali, USA)

The toll of constant work schedules and long working hours is especially evident in the filming of *Drag Race*. Two of the drag queens in this study are *Drag Race* alumni, one appeared on *RuPaul's Drag Race* and the other was a contestant on *RuPaul's Drag Race Down Under*. They both shared their appreciation for the platform and opportunity they were given by appearing on the global media broadcast. However, they both offered insight into the physically demanding environment of *Drag Race*:

And then you're filming like 12 hours a day and every single day. They really exhaust you. [...] Sometimes it can really affect you physically [...] You'll see a lot of rolled ankles because of, you know, whatever physical challenges they're demanding from the girls. (Denali, USA)

Yeah. It's very physical. Like as much as it is a mental thing, there's a lot of physicality involved that I don't think they understand. And like, I wasn't the only one that was struggling with cuts and bruises. We had to go ourself [to find treatment ...] It was the day that we had a day off, and we weren't really allowed to, but we did anyway. (Rita Menu, NZ)

Rita Menu describes here that drag is not only physically demanding, but also mentally taxing.

While the focus of this section and overall thesis is the physical experience of drag performance, mental and emotional labour and stress can contribute to the physical wellbeing of an athlete, performer, or any person (Robinson, 2021). As emotional and mental duress have been determined to be risk factors for injury in athletes, this kind of stress is also likely a risk factor for drag queens (Mainwaring & Finney, 2017; Taimela et al., 1990). In addition to Rita Menu, other queens shared their experiences of their drag requiring mental and emotional labour:

In my experience as an artist, I invest a lot of my emotion in my career. So I've had a lot of blockages [...] on that side of things (S.B., USA)

From a performance point of view, there are times where a certain song that you're chosen to do can make you very vulnerable, mentally. There's one [number] in particular that I used to do that really required me to go to a really dark place in my mind that I don't like to visit it all that often if I can help it [...] So that can be very mentally taxing, especially the lead up to it, because you're constantly having to go back to that place and drudge up those emotions again and put yourself back in that place mentally. (Prada Jae, NZ)

Participants described a range of risk factors for injury in drag: the kinds of physical activity they perform onstage, costuming, working conditions, and mental emotional labour. Some of the accounts shared in this section detail experiences of injury or pain. These can each act as independent factors, but some queens have also experienced compounding of these risk factors.

For example:

I feel like falling on the stairs going to the dressing room because I had heels on. I couldn't see the floor like something like that, you know. (Chamilla Foxx, USA). This situation

was a combination of costuming, footwear, and working conditions at a performance venue where the dressing room and the performance area were on different floors of the venue; the latter mirrors Kelly Kellie's earlier comment about having to navigate flights of stairs backstage while in drag. Venues may not consider the needs of their performers from a physical safety or harm reduction perspective, beyond what is required by local fire departments and governments (i.e. maximum capacity limits, fire safety). Another example of working conditions, combined with an additional factor, in this case the physical actions of the drag performance, is recounted:

When I used to do it kind of a lot, like when I did splits— because I didn't do like a proper split I always, I guess you call it like a half ass one— but like I always got bruising around the inside of my knee [...] It just, you know, over time, it hurt because it was just bruising. (Rita Menu, NZ)

In this example, Rita Menu's choreographic choice to include splits may seem to be the most apparent cause for the bruising she describes. However, the working conditions in this situation may have also contributed to the injury. As S.B. describes, "the floor in the bar is concrete," a not uncommon experience, as drag queens most often perform on hard surfaces. The effect of surface material on athletes has already been studied in depth, and it is clear that different surfaces affect injury rates (Dragoo & Braun, 2010). It could benefit drag queens for venue owners and show producers to incorporate some of these insights in providing safer surfaces for drag performances. Research conducted specifically with drag queens performing on different surfaces also has the potential to support drag queens' wellbeing. It is important to also note that higher risk choreography choices themselves may be influenced by working condition pressures to perform certain moves perceived to be more highly rewarded. As S.B. explains, acrobatic and high-energy styles of drag are what is currently "commercially viable."

The final combination of risk factors is physical actions and costuming challenges. The overall message from queens regarding this combination is that the actions that they incorporated

into their drag performances always had the potential to injure them, but it was the costuming that increased the severity of the injury. The examples provided by the participants were:

It was my left knee. it was the wrong movement at the wrong moment, and it could have happened at any time. But it happened when I was in [heels, in] drag. (Kellie Kelly, NZ)

Definitely rolled my ankle before in like had minor ankle sprains in heels. There was one time I used to do a split leap in heels in one of my numbers, and it was actually on the take off. It wasn't on the landing. On the take off, I somehow buckled, and that was just like a little weak thing, like a little ankle sprain. (S.B., USA)

These injuries likely would have occurred regardless of footwear, but both were exacerbated by the fact that they occurred while the injured body was wearing high heels.

Section 5.1.2 Athletic Background and Training

This section explores responses from the participants when invited to discuss their foundations in sport, and how that background supports their performances as drag queens. Four of the participants shared that they had formal athletic training at varying levels for extended periods of time, at least one year. For example:

I grew up in figure skating and being an athlete [...] And then I moved on to professional figure skating [...] I actually worked with Cirque du Soleil before I was a drag queen on one of their shows called Crystal. It was their first ever ice skating show. (Denali, USA)
And like I have background as a dancer [...] and I played a few different sports as well. (Kellie Kelly, NZ)

I started as a competitive gymnast. So like I grew up in an athletic background [...] I'm a [...] professional circus artist. I was having to do teeterboard and powertrack professionally. (S.B., USA)

I was a competitive swimmer in my younger days. I represented New Zealand a few times for competitive swimming. (Rita Menu, NZ)

Both S.B. and Denali shared that they still practice their respective “sports,” both in drag and out.

Not every drag performance incorporates elements of their sport, but their sport background helped them achieve the success in drag that they've experienced. Denali was labelled the “ice queen” during her tenure on *RuPaul's Drag Race* and has used that as a starting platform for her

popular “On Ice” web series, where she invites other *Drag Race* alumni, including a recent winner, to learn figure skating routines with her while in drag (Foxx, 2024; Productions, 2009present).

S.B. and Denali also shared that their sport background contributed to rapid success early in their drag careers. They used elements or knowledge from their sports to make their drag unique and exciting, which led to performance opportunities they may not have otherwise been presented with at all or as early in their drag careers:

And then, as people started to know me [and my circus background] and knew that I wanted to perform [in drag], I got opportunities. The first time I really performed at the big home bars in Montreal [...] I was crowd choice, I was runner up, which was really great. I like won some prizes and did really really well. (S.B., USA)

When I came onto the scene, I made sure to implement a lot of my figure skating elements and what I had learned from the skating world, like dancing and just overall stage presence. And it really helped me stand out. And I ended up kind of getting a lot of bookings and learning a lot quickly because I was one of the few that could fill that kind of like “dancer girl” role in a lot of the shows. (Denali, USA)

An athletic background, and the ability to incorporate that background into one’s drag, does not necessarily guarantee (quick) success in drag, but it can help. This suggests that drag queens may benefit from sport training in general, whether early in life or after embarking on a drag career, especially if that sport training can be incorporated into drag performance. The idea of crosstraining between sports is a widely supported practice among athletes to improve their performance, and it seems that it could apply to drag queens as well (Apostolos, 2018; Loy et al., 1995).

All the interviewees reported that their past athletic experience and/or current athletic training, whether training as a professional athlete or physical education classes in school,

supports their drag practice. Rita Menu, who was a national level swimmer for Aotearoa NZ, explained how her athletic background supports her drag:

I kind of learned my stretching skills or abilities before that from swimming, and that kind of helps focus on specific points that I need to use in my drag days. my competitiveness and my strength around my mental well-being [in drag] is based on swimming as well. (Rita Menu, NZ)

Meanwhile, Kellie Kelly described how her athletic background of dance supports her drag by affecting her posture in drag, contributing to the female illusion in her drag. She shared how that same dance background physically supports the choreography she chooses to perform, knowing that she has the strength and mobility for the movement pathways she performs in drag:

As a dancer [...] I think always being in first position is important. And then, even, it doesn't matter where you're going, like all of your body should be held in a certain place. And yeah, I guess I never really thought of it like that. But yeah, posture is actually really important and just even positioning of the feet and stuff like that. And even how far apart my legs will be. It all matters how it's going to look as well as perform. (Kelly Kellie, NZ)

Chamilla Foxx elaborates on the beneficial integration of sport background into drag:

I think there's definitely performers in drag that have, you know, athletic training, that obviously have a background in sports that are able to do things with their body [that others can't]. (Chamila Foxx, USA)

Incorporating sport background into choreography is not a requirement, but higher-level dance or acrobatic skills in drag performance can lend itself to commercial success. S.B. explains:

I have the flashier style of drag, which once again, I don't think it makes me better than anyone else. But that's how a lot of other drag queens— Because, like what the type of drag that I do is commercially very viable, because I can do the big tricks... (S.B., USA)
The two participants who did not have a long history of sport or athletic background also expressed how even their limited athletic backgrounds support their drag. For example:
[I learned stretches I use to support my drag] back in primary school, we'd have things called like fun runs and athletics. (Prada Jae, NZ)

So in performance, I've taken classes, which actually we love. So if there's a dance style, or there's a performer who I really like their like physicality, I'll take their class if it's available. (Chamilla Foxx, USA)

Denali suggests that all drag is athletic in its nature, regardless of a queen's athletic background:

Even the ones that aren't doing what you would expect to be like, you know an acrobatic or dance performance, even those ones are still doing some sort of athletic performance, just because of the drag, because it's so difficult, you know. You have to find your center of balance and gravity when you're on heels or when you're even just standing in drag.
(Denali, USA)

The idea that all drag performance is an athletic activity, therefore, implies that all drag queens who perform must have some kind of athletic competency. Whether they already identify as athletes, drag queens could consider their drag performances athletic activities and themselves athletes. As discussed in the literature review, there is evidence that taking on an "athlete" identity can have performance health benefits.

These cases emphasize the benefits of general and drag-specific athletic training to reduce risk and support sustainability of drag practices. No cross-training model exists for drag queens, likely due to the fact that they are not widely regarded as athletes who could benefit from cross-training. However, the development of a cross-training regimen specifically for drag queens could enhance their physical performance and support injury prevention.

Section 5.1.3 Comparisons of Drag to Sport, Drag Queens to Athletes

The participants were invited to share how drag differs and compares to sport or athletic activity. Many of the queens expanded on the original question to also elucidate how and why drag queens could be considered athletes. Recurring themes were the high level of physical demand mirroring athletes', competition, and schedules for and around drag performance.

The most common comparison to sport and/or athlete identity was the similarity in intensity levels of physical demand in drag performance and in sport. This ranged from experiences of the training required to maintain healthy and aesthetically pleasing drag

performances to the endurance and strength involved in drag performances to the “play through pain” mentality often exhibited by athletes (Deroche et al., 2011). Because all these variables can apply to drag and drag queens, they could be considered athletes. Participants shared:

You are so rough on your body when you're doing drag. Everything hurts, you know? And you just have to take care of your body [be]cause your body is your vessel. I think that's true for a lot of things, but when you're doing drag your body is what you're showing to the world: the way it moves, the way it's dressed, the way it smells. There's just a lot that your body is doing for you while you're in drag, and I feel like that's the same for sports. (Chamilla Foxx, USA)

I think like the fact that there is like a bit of a training aspect to it beforehand with keeping up your cardio and your fitness levels. And for some of us making sure that your diet is still really good, and that you're in fit, healthy working condition. Yeah. I suppose in like those sorts of terms, I would correlate it towards being quite a sports sort of thing. (Prada Jae, NZ)

Most of the time, for me, I perform at club gigs, so I always like to do high energy performances, which means I am sweating a lot in drag, like kind of technically what you do when you're like, running around, like I'm running around the whole stage, jumping up on things and it's a lot. It's, it's definitely a lot. So yeah, I guess that's how I see it and similarities, [...]. Sport wise, it's more for me, very physical. (Rita Menu, NZ)

Perhaps the most telling indication that sport and drag may be related is the shared experience of pushing through pain or injury to continue in a physical performance. In sport, this is part of the “sport ethic” – a framework that “emphasizes sacrifice for The Game, seeking distinction, taking risks, and challenging limits” (Hughes & Coakley, 1991). If “The Game,” is replaced by ‘The Show’ or ‘The Performance,’ then this definition of the “sport ethic” can be directly applied to drag, as the participants have described it. Sacrifices of comfort or health are part of the drag queen experiences:

Unless I'm like paralyzed or whatever from my injury, I'm just gonna soldier on with it. (Prada Jae, NZ)

Sometimes I could be like dead tired, but I just get so carried away and so full of adrenaline while performing, that I just start doing crazy shit. (Chamilla Fox, USA) [...] as a drag performer because it is such a— You're in pain for such a short amount of, like to me it still feels like a long amount of time (Rita Menu, NZ)

There was one queen, I remember there was one queen, and she totally broke her foot. Like, she did something at home, and broke her foot, and she kept performing on it for so long (S.B., USA)

It requires a lot from your body, even just postural and for like men going into wearing heels, all those type of things. There's stuff that your body is just not naturally used to or hasn't been able to acclimatize there. And so it wears you down. If you're not prepared for it, it's gonna wear you out very quickly, and it's that kind of thing where you can't just keep pushing through it. Like, if you don't have the backup, you're gonna burn. (Kellie Kelly, NZ)

The “burn” Kellie describes is also seen in athletes, with examples like stress fractures and chronic injuries caused from not taking recovery or rest breaks for injuries (Madrigal et al., 2015). Sport ethic, which has been shown to be related to athletic identity, normalises pushing through pain (Hagiwara & Isogai, 2014; Lochbaum et al., 2022; Luzum, 2012). According to the responses from the participants, a version of the ‘sport ethic’ is evident within the drag queen community.

Participants also shared how competition plays a part in their drag experience. They shared experiences of participating in competition format drag shows, competition they feel against themselves, and competition they have experienced with others. According to Jim Parry, who developed his criteria based on Bernard Suits’ work in sport theory, one of the core elements of sport is “contest” (Parry, 2019). The competition the participants detail, whether in show format, internal, or external, all fits this idea of “contest.” The queens all expressed different feelings toward competition, some viewing it as a positive or motivational driving force for their drag, others experiencing it as a negative or stressful force in their drag. Most participants shared that both sides of competition have contributed to their drag experience.

All but one of the drag queens who participated in the interviews had experience participating in a competition format drag show. For some, competition format shows gave them

a starting platform as drag queens, and for others, competition shows are a tool they used later in their drag careers to develop their drag. Examples of early competition:

For me, starting out in the local scene here in Chicago, I had to enter amateur competitions just to be seen and [...] to expose myself to other people. And I won a few of those competitions and that helped me gain the notoriety here and gain a small amount of local fame. And I was really happy and excited about that. (Denali, USA) I have been on competition shows. And actually, [that was] the first way that I really secured gigs (S.B., USA)

Rita Menu, of Aotearoa NZ, also shared that she found success early in her drag career through competition format drag shows, winning a local competition series. That local success led to her being cast on the next season *Drag Race Down Under*, though that is likely not the only factor in casting. This appearance on *Drag Race* was also quite early in Rita Menu's career. While she did not win *Drag Race*, her appearance on the show has led to further success in her drag career.

These three queens, who found immediate and continued success through competition format shows early in their drag careers, are the three participants who also indicated that they had high performance sport backgrounds. No overt correlations between these two variables were made by the participants, but it is possible that they are related.

S.B. was also among the participants who shared their experiences of participating in drag competition shows later in their drag careers. For these participants, competition format drag shows offer an opportunity to grow and develop their drag. Competition shows have more rules and guidelines, some occur over weeks, and as a result, drag queens have to create new numbers and sometimes even expand their skillset:

If I ever enter a competition in drag, it's really to push myself because the competitions are demanding, right? It's like a new concept every week. And it gives you like, a kind of different context to grow your drag in (S.B., USA)

Recently I competed in something, and it awakened. awoken, awakened something inside me that I'm just like, oh. I like the feeling of like preparing for something with an end goal and having a finish line. And in doing so it also makes you, you know, more

physical. Now, now you're learning routine. Now you're taking classes, or for at least for me, now I'm taking classes. Now, I'm like, you know, figuring out how to best polish whatever it is that I want to present. (Chamilla, USA)

...the most recent [competition], Drag Derby up in Auckland, which was just last month. Yeah. But, that one wasn't one that I went in with the idea of, "this is a competition." It was just more like, I just wanted to make sure that I was going up there and doing something that I was happy with, and that I felt the audience would enjoy. (Prada Jae, NZ)

Early drag career competition success and competition format drag shows as a tool for growth, competition is considered a positive force for the participants. However, not all experience of competition has the same energy. Prada Jae describes the pressure of competition as a stressor:

I suppose I just don't like going at info with the idea of, "this is a competition," because that just sort of stresses me out unnecessarily. (Prada Jae, NZ)

Outside of competition shows, participants expressed experiencing competition to secure drag performance jobs. Not every athlete makes it to the "big leagues," and it is the same with drag queens who often have to prove themselves to secure and maintain a place on the stage. For example:

I started out with there was me and one other person who was in the same age bracket and size bracket doing drag, and so it was between the two of us to get a spot. So my thing, was always like I just had to be like enough—tighter on the belt than her. So that was the element I always had, where it was like I just had look better than that person to get booked. (Kellie Kelly, NZ)

I guess my first experience, like coming into the Auckland scene when I first started, is kind of like a pecking order. But then once you've had that experience or exposure, that changes your position. (Rita Menu, NZ)

S.B. shared an experience where she was made to replace another drag queen by their manager.

While she did not feel competitive toward her drag queen coworker, the situation generated jealousy and competition between the two drag queens. This led to S.B. receiving the competitive energy from the other drag queen. She explains:

She was like, 'yeah, I was once that girl. I was the girl walking away with the big with the big bucket tips. I was the one making thousands of dollars in tips. And now, if you're

here, I'm making less.' [...] Yeah, it's weird. I'm getting all of the— I'm reaping some of the negative benefits of being a competitive person when I'm not being competitive. (S.B., USA)

This is a common experience among athletes as well. Jealousy in sport, which can lead to competition between athletes, has been studied by Kamphoff et al. (2005), who stated that that comparison between peers is “inherent in competition” (p. 291). They further developed the concept of jealousy in sport by defining it “as feelings, thoughts and behaviors that occur when one person enjoys more success, attention and/or rewards than another in sport (modified from Bers & Rodin, 1984)” (Kamphoff et al., 2005, p. 293). In such a tight knit community, both on a sports team and in the drag community, competition can have a negative impact on the community, as well as individuals.

Some of the participants who have been performing in their local communities for years expressed that they no longer feel as much competitive pressure to secure gigs, but that outside of those communities they still are not guaranteed jobs:

There's always a competition. If you're a performer, you're always gonna, there's always gonna be, Do we want this one or this one? And you have to stand out, no matter what. I feel like I stand out. I've created a name for myself, for people that know who I am, and people want me in their shows, they want me in their shows. (Chamilla Foxx, USA)
[Even after *Drag Race*,] I still find myself fighting for jobs and spots and things like that in the real world. (Denali, USA)

There is an inevitable element of competition in drag performance, whether that is from the format of a show or the pressure to secure jobs. Competition is not inherently good or bad, and it can be either or both. Competition, the ability to win or lose, is paramount to both drag and sport (Parry, 2019). Even if winning is just securing the opportunity to perform in a show or making a team, there is competition and pressure to “win.” By nature of their practices, drag queens and athletes alike are required to use their bodies to stand out and establish themselves within their respective disciplines.

The final comparison between sport/athletes and drag queens expressed by the participants was the schedule each group follows specifically for their discipline. This sentiment was primarily expressed by those who had prior experience as a high-level athlete. It is possible these connections were only made by participants with prior athletic experience because they had prior experience and knowledge of an athlete's schedules:

I think there's kind of like a training schedule. There's definitely like a competition schedule. I remember from my competition days, I used to have like just have a schedule for the day. And that's exactly the same when I have to perform. I kind of mirror those. (Denali, USA)

So normally, I honestly try to just get as much sleep as possible, because for the type of acrobatic prowess that I'm doing, the only reason why I can scrape by with like in between, like a Saturday night I get home at 2am, and I'd have to wake up at 8am and like for me, 6 hour is not enough. I'm like an 8 to 10 [hours of sleep] athlete. (S.B., USA) These two former elite athletes describe how their schedules for drag reflect their schedules as in their non-drag sports. Denali details how her schedule for drag performance days is similar to her competition days as a competitive figure skater. Meanwhile, S.B. describes how her sleep schedule for drag is just as important and similar to her sleep schedule for being a professional acrobat outside of drag.

Prada Jae (NZ), though not a former or current athlete, also recognized the potential for drag to mirror sport in terms of the schedule demand of each, explaining:

I'm not doing it often enough for me to consider it being more than just [...] athletic performance [...] There are definitely aspects of it where, like you could consider it like a sport, you know. Drag Race, for example, where you're doing it every damn day. (Prada Jae, NZ)

While all participants identify drag as physically demanding, some nuances and differences between sport and drag in some contexts were expressed by several participants. Some indicate that the correlation between drag and sport is limited to particular styles of drag performances:

SB💖: Not all drag is sport, but a lot of what we see in commercially viable drag is. A drag queen who sings is not an athlete, but also it's physically demanding. So like I would say in general, drag has a physically demanding aspect to it.

Chamilla: I mean, I think there's definitely performers in drag that have, you know, athletic training, that obviously have a background in sports that are able to do things with their body. But I don't think that all of drag is as encompassing of that. I think there's performances that are very athletic, and you can—you know who those girls are, but like not every performance is that.

Several participants discuss that drag, while sharing many of the same demands as sport, is lacking some of the structures of sport (e.g., formal training, governance systems):

Chamilla: ...Oh, you are so rough on your body when you're doing drag. Everything hurts, you know? And you just have to take care of your body [be]cause your body is your vessel. I think that's true for a lot of things, but when you're doing drag your body is what you're showing to the world: the way it moves, the way it's dressed, the way it smells. There's just a lot that your body is doing for you while you're in drag, and I feel like that's the same for sports. In sports, I think it's like your body is more trained to take a hit, like being in football, basketball, soccer, whatever. I mean, there's also like gymnastics and things like that, but you still have to learn how to land properly. You still have to learn how to do things like that, and I feel like in drag it's kind of the same, but like everyone's more self-taught. There's no class for learning how to do a dip or learning how to do a jump split. You know?

KELLIE: [...]it very much could fall under athletic. I think more so than sport, cause there's not like parameters and all that type of thing, but the physical demand, I would say, it falls under athletic.

The most direct, blunt response regarding the comparisons to athletes came from former professional athlete, Denali (USA):

Interviewer: Do people recognize drag performers as athletes? Denali:
No. They don't. But they should.

Considering this, along with the athleticism described by all participants, drag queens and others, such as healthcare professionals, there is a compelling rationale for considering drag queens as athletes, or at least, highly athletic performers.

5.2 Personal Practices and Self-care

Section 5.2.1 Body Maintenance Practices

This section will explore the personal practices that participants engage in to support their drag performance. These practices include individual behaviours, as well as use of health services as tools for regular body maintenance, such as massage and physiotherapy. These practices greatly vary from participant to participant, which emphasizes the theme of healthcare and body maintenance as an individual or insular responsibility within the drag community, whereas effective health care access and regular behaviours to promote health and wellbeing need to involve provider, health care system and governmental support and responsibility (Phillips et al., 1998).

The participants described their self-care and personal practices that support their physical ability to perform in drag. Outside of drag performance days, these practices encompass a range of behaviours from strength training to flexibility maintenance and building to attending dance classes for drag. For example:

I like to regularly work out. It doesn't have to be intense, but I like to get something in there at least 5 days a week. And then I like to always incorporate stretching [...] And then I love Yoga. I will do yoga separate from my workout. I will try to get some of that in every day, and like, preferably in the morning. (Kellie Kelly, NZ)

I really just like to do what makes me feel good. And things like cardio and things like weightlifting and figure skating are still very much in my repertoire of physical maintenance. And I feel like it's really helped me maintain a sense of longevity when it comes to performing and just, you know, not having those aches and pains when you're performing. (Denali, USA)

I know that every now and then, like at least 2 or 3 times a week, depending on what I'm getting ready for and stuff like that, like, I will do quite a lot of stretching. (Prada Jae, NZ)

I'll do yoga like 2 to 3 times a week, something that really stretches my body and helps me maintain limberness. (Chamilla Foxx, USA)

So in terms of career scope, while I'm in drag, I don't have to pay a lot of attention to do more than what I'm [already] doing. Because since I'm maintaining a circus career on the side, I'm training [anyway]. [I'll do] some little basic pilates and ab videos a couple of times a week. I have to stretch a couple of times a week as well. Otherwise [the tricks are] not happening later [in drag]. So yeah, handstand training. Sometimes dance class [too]. (S.B., USA)

Both participants who said that they go to the gym and lift weights also mentioned that it is not a common practice among other drag queens. They explained that many drag queens fear weightlifting and strength building will hinder their drag, rather than enhance or support it. These concerns have to do with the aesthetic side of drag performance. They shared:

I go to the gym about five times a week...or try to. ...A lot of weights and, you know, and oftentimes that's not something that a lot of drag queens do because they want to keep like a slender shape. But I, I don't really care. (Denali, USA)

I think a lot of the girls don't, or will avoid it, because they think it'll make them bulky or something like that [...] But you could still use weights for strength training, and it's not gonna make you chunky. (Kellie Kelly, NZ)

Additionally, S.B. shared her weight training was limited to her own bodyweight primarily, but that regular bodyweight training was important to the maintenance of her body and ability to perform her drag choreography in performance.

It is important to recognise here that not all drag queens are attempting to achieve small or thin figures in their drag. “Big girls” are an important part of the drag community, and many are popular and highly athletic dancing queens, such as Eureka and Kornbread (Pomerantz, 2017; Productions, 2009-present). However, it is unlikely that Denali and Kellie Kelly are referring to ‘big girls’ when they discuss the hesitation that some drag queens have towards adding weightlifting to their physical maintenance regimens. Because the aesthetic component of drag is so important to the practice, it is understandable that queens might be concerned with how certain activities and behaviours could affect their bodies. This has been shown to be a concern among women generally: that weightlifting will lead to an “unfeminine” (as stereotypically

defined) physique. As Salvatore and Marecek (2010) put it, “the cultural ideal of feminine bodies discourages women from weight lifting” (p. 565). This mindset has even been observed in both male and female athletes (Barisik, 2019; Ford et al., 2023). However, “very few [athletes] ever reach this point” of bulking solely from weightlifting (Barisik, 2019, para. 4). This misconception about strength training - and about what a “feminine body” can look like - could be preventing some drag queens from strength training that could support their drag performance and prevent injury.

In addition to strength training, many of the participants expressed the importance of consistent flexibility training. Above, Chamilla Foxx (USA) and Kellie Kelly (NZ) describe their routine practice of Yoga, which has been shown to build strength and flexibility (Gothe & McAuley, 2015). Kellie Kelly also shared that she has a separated stretching routine that she incorporates into her everyday life:

And then I like to always incorporate stretching. Even if it's [while] watching TV, I think I can stretch and watch TV because it's “two birds, one stone.” Like, put a podcast on, you know, whatever. And I just kind of have those routine stretches. (Kellie Kelly, NZ) The participants commonly described their drag as containing splits, kicks, and floorwork, as detailed in the previous section of this chapter. They explain that these skills require flexibility. It is important that drag queens who perform these types of skills maintain the required flexibility to safely perform them. In the cases of the drag queens who participated in these interviews, the majority recognise this necessity and do stretch regularly or semi-regularly to prepare their bodies for drag performances.

S.B., who performs contortion, an extreme form of flexibility, as part of her drag, shared that additional to being “naturally flexible,” she has “to stretch a couple of times a week” to maintain her high level of flexibility. Denali, who reported regular gym workouts, also shared

that part of her workout regimen at the gym is “stretching at the gym” because “if you're not actually working the blood into the muscles and working those muscles, then they'll kind of deteriorate after a while.” Both of these participants, S.B. and Denali, also shared that their high level sport background inform the importance of and the actual development of their regular training practices for drag.

Most individual behaviours, or behaviours that did not include a health professional, shared by the participants revolved around physical training of some kind, whether that be weightbearing workouts, flexibility and stretching routines, or a combination of the two. Regular training, both in-season and off-, is an essential part of being an athlete (Starosta, 2006). This concept of regular training is reflected by the majority participants in this study. The main difference here between regular training for athletes and drag queens is that not all of the participants reported regular “off-season” training, which for drag queens would be considered the period when they are not directly preparing for their next performance. Because there is no existing research studying the efficacy of regular training for drag queens, it is not known if “offseason” training for drag queens would be beneficial to their overall performance in drag. There has, however, been significant research in sport demonstrating the benefits of appropriate offseason training (Brumitt et al., 2014; Redman et al., 2022; Requena et al., 2017). It is possible that the same concept could be relevant to drag queens, especially those who perform physically demanding skills, such as the aforementioned splits, jumps, kicks, etc.

Apart from regular training, some of the participants indicated that they regularly seek professional services to support their bodies and manage the physical stress they experience from drag. To clarify, this section will only be covering the use of health professionals for general/regular body maintenance. The following section will cover experiences with healthcare

providers for injury sustained while in drag, as well as further detail of participants' experiences with providers for body maintenance.

Massage was the most common form of treatment sought regularly by the participants for general body maintenance. The participants also expressed the value of regular physiotherapy visits. Both physiotherapy and massage are useful in improving mobility, which would support the flexibility that drag queens are trying to achieve and use in their performances (Leivadi et al., 1999; Wiktorsson-Moller et al., 1983). Denali explains her reasoning on getting regular massages:

I get massage therapy probably once a month, just for maintenance, and blood flow and things like that. I really love massage work. My mom's a PT and I kind of grew up in that as well, so that was just something that I was always like, just something that I feel like I've always had to do. (Denali, USA)

Of distinct interest is the influence of family background on Denali's choice to pursue regular massages. Kellie Kelly also shared this sentiment, but rather as a motivation and influence for her stretching practice: "Like, we'd be watching by the TV, and Mum and Dad would be like, 'have you [stretched]?' And you're like, 'Okay.'" Kellie Kelly was also the other participant who reported that she gets regular massage therapy. Growing up with familial support of regular body maintenance influenced both these drag queens to continue appropriate and healthy body maintenance behaviours.

Two of the other participants also reported that massage therapy is a tool they use for body maintenance. Although these two do also see massage therapists, their use of massage is more tied to the emotional labour that goes into their work. For example:

I also see a massage therapist who does some emotional style of healing. In my experience as an artist, I invest a lot of my emotion in my career. So I've had a lot of blockages and help on that side of things. (S.B., USA)

One of the things that I quite often recommend, because I absolutely love getting them, is mirimiri, which is basically like a deep tissue massage. But it has a lot of like Māori spirituality tied in with it as well like it begins with the prayer and karakia and finishes as well with prayer karakia. And it even goes to sort of the extent of like certain things being done whilst you're getting the deep tissue massage like, if you've got problems in your shoulder, for example, they would drag it all the way down to the fingertips, and then sort of take it and chuck it out an open window, out an open door and stuff, like that like really just kind of getting rid of that negative energy. (Prada Jae, NZ)

While this thesis is largely emphasizing the physicality of drag, emotional and/or spiritual stress and energy can contribute to the physical health of a performer or athlete (Robinson, 2021; Shrier & Hallé, 2011). Therefore, the participants who sought massage as a form of emotional and/or spiritual health maintenance are also indirectly supporting their physical selves.

Prada Jae describes mirimiri here, a form of Māori healing. What is unique and important here is that mirimiri, along with all Māori healing, embraces health as a multi-faceted issue. The Māori health model can be understood through the concept of te whare tapa whā, the four walls/sides of a whare (house), and integrates physical, mental, spiritual, and family health (*Māori health models – Te Whare Tapa Whā*). This model of health and wellbeing (Hauora) reiterates the significance that mental and spiritual health can have on a person, athlete, drag queen, or otherwise. It is the added risks that athletes or drag queens take in each of their disciplines that increase the need to maintain good health.

In addition to massage therapy, some of the participants talked about the importance of regularly working with physiotherapists and getting dry needling treatment. Physiotherapy can be used to build both strength and mobility, again, abilities in line with the needs of the participants' drag performance styles. As Kellie Kelly explained, "I'm a big proponent of physical therapy." Finding the right style of physiotherapy is also important to the participants.

For example:

I see more of an Osteopathic style of Physio, who's like in between massage and chiro [...] he kinda helps make sure that you know my vertebrae aren't rotated, or that my hips are in line. All that kind of stuff [...] Dry needling is a really big part of my physio as well. (S.B., USA)

Not all physiotherapists offer the same services, for example, dry needling or spinal alignments.

Listening to and understanding one's own body to develop what works to maintain a healthy body can be equally as important as visiting a health professional or participating in an individual training regimen. Unfortunately, this concept in isolation puts much of the responsibility to maintain good health back onto the individual. Participants often expressed ideas of personal healthcare being an individual responsibility, in an environment where there can be a lack of support, encouragement, and/or resources to maintain healthy bodies. This greatly differs from the culture of sport, where physical maintenance is not only encouraged, but also viewed as essential. Denali shared how involved her coaches were when she was a competitive figure skater in her medical care, "my coaches were researching really like who would be the best." This juxtaposes her experience as a drag queen, in which she described, "you have to kind of find [healthcare] on your own." Rita Menu also shares how individual body maintenance can be for drag queens:

I guess [body maintenance is] more just a personal thing for me because I know what I do as a performer, So I need to make [sure] I look after myself. (Rita Menu, NZ)

Denali and S.B. offer further insight into the individualistic nature of personal practices for body maintenance within the drag community. They explain that there is no culture of self-care around physical body maintenance. For example:

How do I put this? The scope is smaller, and the intensity is dampened compared to the side of acrobatic profession that I come from, so they're not used to having to do like preventative or 100% effort work when it comes to like their injuries, or like a little ache or pain. They don't come from that culture. (S.B., USA)

Unfortunately, you know, drag comes from [...] underground, and escapes from normality. And so they lend itself more to the drinking and partying and being free and

just kind of enjoying yourself. So those don't always align with taking care of your body.
(Denali, USA)

While body maintenance practices may not currently be culturally encouraged within the world of drag, some of the participants incorporating such practices. Creating opportunities to expand such practices within the field could be beneficial to drag queens, supporting their bodies' capacity for skills they already perform or would like to be able to perform. There is evidence that the most effective way to improve physical performance in athletes is to partake in multiple forms of personal practices, combining regular training with massage or physiotherapy (Wiktorsson-Moller et al., 1983). As many of the participants described their drag as athletic in the previous section, it is possible that research conducted among athletes and/or dancers regarding personal practices and self-care for body maintenance can also be applied to drag queens.

2.2 Drag Day Routines

Thus far, this section has focused on ongoing, regular body maintenance behaviours of the participants. The drag queens who were interviewed also described their routines around selfcare and physical maintenance on drag performance days. For the several that engaged in such routines, the routines are considered essential to their performance readiness and safety, as well as for their overall physical well-being. Participants highlighted several key aspects of their preparation and recovery process that are unique to the days they perform. These include common warm-ups that help them prepare for the physical demands of their drag performances, as well as limited cool-down practices that support physical recovery and relaxation postperformance. Additionally, there are practices that, while not part of the warm-up or cool-down directly before and after performing, are still important to their performance day body

maintenance. These routines have been influenced by various factors, including past athletic experiences and advice from other drag queens and performers.

Warm-up routines are identified as physical practices that immediately precede performance, meaning physical rituals implemented backstage or in a green room. Four of the participants shared that they have warm-up routines that they regularly implement prior to performing. All the warm-up routines shared included some kind of stretching, while some participants included additional exercises, as well. For example:

When I do like splits and stuff, I want to make sure that I'm not doing it where my muscles aren't like stretched or relaxed. Like I try and make sure that I work on more like stretches around like my leg area. So I usually do like some kicks and like, I don't really call it when you like, lean down and like, stretch your muscles underneath your leg. (Rita Menu, NZ)

Right before my act, I'll step outside [...] onto the concrete and warm up a bit more, like warm up some handstands, do some bridges. Do some basic back exercises up against the wall, and then I'll work up from handstands to walkovers to depending on the number, sometimes I do back handspring is the most dynamic force that I put on my wrists. So I warm it up slowly on the concrete before I'm in there, because the floor in the bar is concrete. (S.B., USA)

Right before I go on stage, I usually do stretches. So, I'm usually doing like hamstring stretches. I'm usually doing, I don't know, the leg—the thigh stretches, like the inner thigh. I'm doing my arm stretches. I'm doing torso, waist, like, I'm just really just loosening up my body just so it's able to move more freely. Because I feel like if I don't, then I'm gonna be very stiff, and, like my body is not going to do what I want it to do. (Chamilla Foxx, USA)

Once I'm at the venue, I'll always do some stretching backstage before I go out. (Kellie Kelly, NZ)

These descriptions of pre-performance exercises discuss the importance and specifics of warmup routines for each of the drag queens. For athletes, dancers and these drag queens, warmup routines are essential for ensuring safer, peak performance (Fradkin et al., 2010; WiktorssonMoller et al., 1983). The theme of physical health care being expressed as an individual responsibility is accentuated by these examples, as each participant has quite a different warmup routine. While this may be a reflection of what each drag queen feels they need

for their specific body and specific performance, it could also indicate a need for further identification of and education (for employers and healthcare providers as well as queens) on what the essential components of effective, activity-specific, adaptable warmup routines may be to support optimal performance and reduced injury risk in drag queen performance,

Less common than warmups among the participants were immediate cool-down routines after their drag performances. Drag shows are social events as much as they are performance spaces (Kaminski & Taylor, 2008). Because of this, many of drag queens do not immediately “de-drag,” or get out of their costume and makeup, but rather the participants reported that they remain in drag at the venue post-performance to greet fans and/or socialize with their fellow drag queens or other friends. As Chamilla Foxx (USA) shared, “You know, I perform, I hang out. I get something to eat.” This often does not leave time for a cool-down immediately following a drag performance. S.B. was the only participant who reported any cool-down that occurred at her performance venue immediately following performances:

Honestly cool down. I don't go crazy. I'm not doing like 10 min of abs, and honestly, in drag shows you don't really have a lot of time to cool down. So I do more of just like the opposite [antagonist muscle group stretching]. So like if I did, if it was a more contortionheavy number, yeah, I'll spend some time in like a squat or a pike, or even while I'm just like changing makeup or costumes, like kind of focusing on engaging the core a little bit more, just to go [...]To be honest, normally, I am not doing tricks on a regular basis in drag that like require a big cooldown. But on nights, sometimes I will do my canes act. And yeah, like, then I'm on the yoga mat in the background. But just like basic passive flexibility. It's nothing crazy. Or if I really use my back, I'll do a few ab exercises, dead bugs, crunches, planks, that kind of stuff, but really nothing super specific or intense. (S.B., USA)

Even for S.B., this is not an extensive cool-down that would be enough for her workouts and performances as a professional athlete. As the only participant with an immediate cool-down practice for drag, cool-downs are not a priority of the other drag queen participants. This could be due to the lack of education around the benefits of a cool-down for athletic activities, or

simply, the common drag show culture of socialising after performances. Cool-downs have been shown to be beneficial to athletes, after a workout or competition, as well as other performers like dancers and singers (Gottliebson, 2011; Karvonen, 1992; Malliou et al., 2007; Mukhopadhyay, 2022). From the harm reduction perspective discussed in the literature review, it may be worth exploring whether simple aspects of cool-downs could be appropriately incorporated into post-performance socialization. For example, “basic passive flexibility” like removing high heels while socializing to allow for calf stretching.

While S.B. was the only participant who expressed an immediate cool-down for drag, other participants shared that they do have post-drag routines that are important for taking care of their bodies. Most of these routines and behaviours were limited to the time after returning home from drag performances rather than at the venue. Some participants described post drag routines that involve stretching. Stretching routines ranged from very casual stretching to more elaborate, intentional stretches. For example, Denali (USA) shared that she considers her post-drag stretches quite informal by explaining, “maybe I'll stretch out my back or something like that from my corset or things like that, but nothing too major.” This can be contrasted by Kelly Kellie’s (NZ) post-drag stretching routine that are “very similar ones [to before drag],” which she described “basic stretches [...] focus[ing] on a lot of loosening up the hammies [hamstrings] and loosening up the hips. I like to always stretch out the hip flexors.” She also shared that while she tries to do these stretches when she arrives at her home on the same night that she performs drag, the time of day (2am) often presents a barrier to executing her stretching routine. However, when the timing becomes too much of a difficulty, she said, “when I wake up, [stretching will] be like the first thing I like do.”

Kelly Kellie describes an important aspect of drag performance here that may offer further insight into why drag queens are not consistently engaging in cool-down routines for their drag performance. Drag shows are often evening performances that can go quite late into the night. With the combination of a work environment lacking in encouragement of physical maintenance behaviours onsite at drag shows, as well as performers not arriving home until the early hours of the morning, it can become difficult for drag queens to cool-down after their drag performances unless they are highly self-motivated to engage in such a routine.

Food intake and hydration were also commonly discussed among the participants. Some of the participants expressed that they tend to eat less food and drink less water on drag performance days. For example, Rita Menu (NZ) shared, “I think I eat less [on drag days]. And of course, it's not my usual pattern when I am normally eating.” Once they are done with their performances, it is incredibly important for drag queens to refuel their bodies, especially those who present “high energy” performances, like all of the participants in this study. Examples of nourishment behaviours following drag performances were:

We do tend to go across the road from our venue [to a club/bar] to sort of maybe have a drink or have a bit of a breakdown on how the night went, and just celebrating with everyone. Sometimes that will incorporate a big feed of pizza or whatever. Otherwise, it's just grabbing something from McDonald's or whatever on the way home [...] And yeah again, just making sure that I have a lot of water, especially post show, because I don't really have the time during [a show] to stop and remind myself to drink water and stuff like that. And if I'm drinking [anything during a show], it's usually a wine. So that's good to have something to sort of balance it out before I do. (Prada Jae, NZ)

I definitely make sure I eat before I start getting ready. Well, cause like, during my makeup, it's gonna take a a solid hour and a half to 2 hours, so I usually make sure I eat before [getting into drag and performing... After drag,] I get something to eat. (Chamilla Foxx, USA)

For the participants that expressed food and refuelling as part of their post-drag routines, this was the first step in their post-drag rituals. Once home, after their performances and food intake, the

majority of participants also described using hot showers and/or hot tubs to help relax their muscles and help with muscle recovery from the demanding activity they undergo in drag:

Oh, yeah. I definitely make sure that I eat something, obviously. It's like the first thing on my mind. And then one thing in terms of like physical maintenance is I make sure I take a shower and then, I just really make sure that I wash my face almost three times. Sometimes I like triple cleanse just because not only have I let this really, really full coverage makeup sit on my face for a really long time, but I sweat and I've been exposed to like other elements and I just really make sure that—I have really sensitive skin, so I have to make sure that I cleanse my face really well. (Denali, NZ)

Usually the night or two afterwards, I will have like a hot soak in the bath. If I have them, I usually will have, like Epsom salts and stuff like that as well, to sort of help out, and a couple drops of lavender oil, just to help me relax. (Prada Jae, NZ)

Hot tub, cold plunge. I'm literally staring at my cold plunge right now. My roommates have an ice bath with a chiller, and that has made a huge difference for me, just like in my life. In general, I love ice, and we also have a hot tub in our community, so in general, also, just because I'm training outside the show. Yes, hot tub, yes, cold plunge. (S.B., USA)

There is conflicting scientific evidence if the use of heat therapy and hot water is beneficial (Fechtelkotter, 2017; McGorm et al., 2018; Mondal et al., 2014). However, some of this research does suggest that post-workout hot water use can aid in muscle recovery and reduce soreness (Fechtelkotter, 2017; McGorm et al., 2018). This research has only been conducted among formal sport athletes, but considering that the drag performances described by the participants required a high level of physical exertion, it is likely that the research can also be applied to drag queens as well. Active recovery, like a physical cool-down, has also been shown to be beneficial in muscle recovery post-workout (Getto & Golden, 2013; Karvonen, 1992).

While research in sport and among athletes focuses on the importance and impact of proper warm-up and cool-down on physical performance, the participants emphasized how their whole day is shaped by drag on performance days. Not only are they concerned about what occurs when they arrive at the performance venue, but also how they prepare prior to that. The

participants shared that, for many, their physical preparation for performances starts in the morning, even for evening shows:

And then for warm up, unfortunately, I don't have a lot of space at this bar, so it's a lot of like standing exercises. So I start off with splits, like I make the other bitches move because I'm like, "bitch. I have to do oversplits." Because what a lot of queens don't know or don't apply is that dynamic flexibility is the most demanding, so usually we start with small dynamic to engage or passive before moving onto kicks. So usually I'll bring a little lacrosse ball or a roller, if my body's feeling really tight and kind of address some trigger points that are bothering me, but that's not all the time is kind of as needed, or outside of the show.

[...]I have to make sure that my wrists are warm. Usually I have a Theraband on me, but I also have external rotator, like rotator cuff exercises, just to get ready for some basic handstands. Before, just like 2 or 3 [exercises], you know, like CARs [Controlled Articular Rotations...]

Then I definitely warm up handstands. I do take the time, like I won't, although my body is capable of it, I usually don't just like whip out one arms. I'll make sure that I have a couple of like static holds, do some shoulder leans. Usually, I do a plank or 2 just to like kind of make sure that things [motions to shoulders] are generally ready.

And then I'll move like up to the wall, do some like basic kicks, but like really small in the back to get my back chain working, bridges. Obviously, I'm a contortionist, so like there are back contortion exercises like seal stretches, active seal stretches kicks on the floor, kicks on my back. [...] just really a basic warm up to kind of get everything warm. I do that before I get dressed and tucked, because it's a lot easier to lay on my stomach when I'm not tucked to get my back chain ready. (S.B., USA)

For S.B., who has a professional background in movement and as an athlete, and also utilizes her acrobatic skillset in her drag performance, physical preparation throughout the day of a drag performance is extremely informed, important and intricate. S.B. is the only participant who shared such a technical and intricate drag day physical routine. She is also the only participant who maintains her professional athletic work both outside and within her drag performance. She uniquely has the ongoing athletic experience and education on how to properly maintain a physical career, which Denali, Rita Menu, and Kellie Kelly share to varying degrees from past athletic sport participation. It is only S.B.'s drag performance style that most evidently requires

such a degree of extensive show-day preparation though, because she consistently incorporates extremely high-level acrobatic skills into her performance.

While the other participants are not performing choreography that is as physically complicated, they have all indicated that their performances are physically demanding. There has been no evidence of benefit or consequence to any drag queen using the same level of physical preparation described by S.B. The intensity of physical preparation that S.B. describes may not be necessary for the level of physical performance that the other participants shared, but components of it could possibly offer benefits to other drag queens.

Other participants also indicated that they also participate in physical preparation for drag performance, albeit less intense preparations. These routines are described here:

And in terms of performance, before I start getting in my makeup and everything, I do the whole shaving and showering ritual. And then I like to do some stretching, and I like to workout before I start getting into everything. (Kellie Kelly, NZ)

it will be sort of wake up, get myself motivated to actually get started on it. Then usually, I'll have a nice hot shower. I'll shave everywhere that I need to shave. And then, after a hot shower is when I usually do my stretches. And then I usually chuck on hip pads and the tights because I don't like doing it after I've done my makeup, because it's way too hot and sweaty for me. And then I sort of spend, depending on how much time I have, I'll spend a good couple of hours on my makeup. I'll usually have that accompanied with a glass of wine or 2. (Prada Jae, NZ)

The morning of I would have done yoga [...] Usually drinking water throughout the day and while I'm getting ready. I don't drink as much when I'm in drag. (Chamilla Foxx, USA)

The emphasis of these physical preparations is around physical hygiene and preparing the joints and muscles in the body for the physical demands of drag performance. Two of the participants shared their shaving habits as part of their physical preparation, an aesthetic aspect of drag to help create the feminine illusion portrayed by drag queens. Earlier, S.B., shared how frequently she has to shave to maintain the female illusion, sometimes drawing blood from the frequency. Showering in hot water is a combination of hygiene and musculoskeletal preparation, using heat

as a tactic to warm muscles up for ideal lengthening that will be used later in performance. All three of the participants here indicated that they stretch as part of their drag day routines to prepare their bodies for drag performance, and Kellie Kelly also includes a strength workout to prepare.

Chamilla Foxx (USA) emphasizes the importance of drinking water pre-performance, despite the challenges involved with hydration in drag described previously. She tries to limit alcohol consumption to post-performance for safety and quality of her performance:

Have you ever ridden a bike when you were drunk? It's the most awful experience. I just feel like that's what's happening when I'm drinking and I'm in drag and I have to perform. It's like, I have to perform drunk, it's not fun. So I try not to drink as much unless I'm done performing.

Based on research, alcohol is linked to negative effects on athletic performance, while maintaining proper hydration is positively associated with physical performance (Burke & Maughan, 2000; Gutgesell & Canterbury, 1999; Murray, 2007; Shirreffs, 2005; Shirreffs & Maughan, 2006). The harm reduction model discussed in the review of literature (chapter 2) also supports Chamilla Foxx's practice of limiting alcohol consumption to after performance.

The physical preparation and recovery routines of drag queens were described as essential to the participants' maintenance of their bodies in drag performance, longevity of their drag careers, and their overall well-being. Athletes similarly require an aspect of consistent physical routine to maintain their level of sport. The warm-up practices shared by participants emphasize the importance of stretching and strengthening to support the physical demands of their drag performances. While cool-down routines were less frequently reported by the participants, and even if performed informally at home, these routines are likely important to body recovery from drag performance. The participants' descriptions of their routines show an individual approach influenced by individuals' needs and experiences, suggesting a potential need for more

understanding of and education on effective warm-up and cool-down techniques specific to drag performance. The findings from the interviews in this section further highlight the parallels between the physical demands of athletic training/sport and drag queen performance, indicating that significant body maintenance is essential for ideal performance and potential injury prevention in both fields.

5.3 Summary of Findings

The participants described their experiences of drag performance and expressed that the physical demands of drag performance share many similarities with those of athletes. The physical demands of drag performance create the necessity of physical maintenance routines to prevent injury, ensure performance readiness, and increase drag career long-term sustainability. These physical maintenance routines include both self-sustainable behaviours, as well as health professional-guided techniques.

The participants all identified their drag performance styles as high-energy and physically strenuous, even if this is not the case for all of their performances. This style of high-energy drag produces a high level of demand on their bodies, sometimes resulting injury. To sustain this drag performance style, participant indicated that they maintain some kind of physical maintenance routines, both regularly and in direct preparation for performances. These physical maintenance routines include stretching, weight-based strengthening, use of heat therapy for muscle preparation and recovery, and hydration and food intake. With health professionals, some of the participants also reported regular massage therapy and physiotherapy appointments, and one shared her regular use of personal trainers. These maintenance behaviours occur both before and after drag performances in different combinations for each participant. Another important

behaviour to note demonstrated by some of the participants as part of their drag performance day routines is the consumption of alcohol. Some participants reported consumption prior to performance and some after performing. In summary, the participants communicated how drag queens experience physical demand as part of their practice. They also connected the physical demands of drag to the physical demands faced by athletes, in both the actual actions performed in a drag show, as well as the necessity of injury prevention and performance readiness behaviours. While some of the participants indicated that their physical maintenance routines incorporate health professionals, this was not the majority of participants.

CHAPTER SIX: INTERVIEW ANALYSIS – DRAG QUEENS EXPERIENCES WITH AND BARRIERS TO HEALTHCARE

In the previous chapter, I discussed the physical demand and requirements of drag performance, injuries incurred, and regular physical preparation, maintenance and recovery routines of drag queens, including drag queens' visits to health professionals for regular body maintenance. In this chapter, I focus on drag queens' utilization of and experiences with health professionals specifically in response to drag-related injuries

Drawing again upon the interviews with six drag queens, this chapter begins with a discussion of the occurrence and self-management of injuries. I then turn to examine the barriers to healthcare the participants have experienced. The participants' perceptions, personal past experiences, and shared community experiences of using healthcare, all contribute to how and why drag queens engage with particular healthcare services. Participants encountered structural and systemic barriers, as well as personal and community-level barriers. These barriers are first explored as isolated incidents, then through past experiences with healthcare, injury occurrence and management, and finally linked to desires for improved health care access and treatment.

6.1 Injury Occurrence and Management

While most of the participants did not feel that they had been injured in drag when first asked, and therefore, did not visit providers for injury sustained in drag, later in the interviews, most participants indicated that they had, in fact, suffered injury in drag. Injury in sport is common and is an inevitable risk of being an athlete (Fuller, 2007; Taimela et al., 1990), just as it seemingly is for drag performers according to the participants' experiences. This subsection aims to more deeply explore acute injuries sustained while in drag by the participants, as well as those

observed by the participants. These injuries can be classified as either acute new injuries or exacerbations of old injuries. Methods used for managing these injuries, including but not limited to provider visits, will also be discussed.

Prada Jae's (NZ) described an acute injury of falling off her performance stage in a drag show. She did not seek care but suffered an injury great enough to sideline her for months, and said she was in quite a bit of pain from that incident. While she did not seek professional care, she did take time off from drag post-injury, which can be considered a form of injury management. Another fall in drag that led to injury was described by Chamilla Foxx (USA) Because Chamilla viewed the injury as minor, she did not report any injury management behaviors, and was not assessed for objective severity of injury.

Denali (USA) shared that she sustained multiple "minor injuries" when touring as a drag queen, specifically in her neck and hip. She also did not seek any professional healthcare for these self-assessed minor injuries. However, she described having the "physical awareness" learned from "from being an athlete" and "something [her] parents taught [her]," including her physical therapist mother, to recognize injury severity. Denali did engage in injury management behaviour, such as "modify[ing] certain performances." Whatever body part was aching or injury, she would "stretch it or not do a certain high kick or something like that during a certain number, and it would be fine." She further explained that she learned to manage her hip pain as an athlete because she had a history of hip flexor issues as a competitive figure skater.

Rita Menu (NZ) also self-assessed her injuries in drag as minor, mostly bruises and abrasions, including repetitive knee bruising from splits. While Rita did not view this as a major injury, repeated bruising to the same location can result in serious issues, like myositis ossificans ("encountered often in the active sporting population"), nerve damage, or blood clots (Devlbiss

et al., 2018, p. 1; Hilberg et al., 2021; Hirasawa & Sakakida, 1983). Repeated trauma, including bruising, to the same location has been studied in athletes, and shown that there are long-term risks associated with this kind of repetitive “minor” injury (Devilbiss et al., 2018, p. 1; Hilberg et al., 2021; Hirasawa & Sakakida, 1983).

Kellie Kelly described a major knee injury sustained while performing drag, and did seek health care, describing her process: “it was a Physio that I went to because I knew he could get me referred to the surgeon a lot quicker, and the specialists and go to radiology and all of that.”

S.B. was the only other participant who chose to seek medical care for a drag injury:

But what really messed me up one time was, I don't know how. I don't know when or how it happened. I had a really big show week. I did 6 or 7 shows in one week. I had a Tuesday, Wednesday, and then I did like a Friday, Saturday, Sunday, and I ended up bruising my sesamoids super bad, like in the ball of my foot. Presumably, I probably broke one, and they were super inflamed, and that was the injury that I was talking about. My foot was black and blue, and like I couldn't be in heels for like 6 months after. (S.B., USA)

S.B. exhibited multiple injury management behaviours, including taking time off from performing, modifying performance elements, seeking professional health care, and working with a trusted care provider to develop an appropriate rehabilitation plan. For a different injury that she described as “minor ankle sprain” sustained while leaping in heels, she did not seek care, but did use home cold and heat therapy. Use of both heat and cold therapy have been shown to aid healing of sprains (Malanga et al., 2015).

To summarize the occurrence of injuries among the drag queens in this study: there was a variation in severity and location of injuries sustained in drag. Four of the six participants reported lower limb injuries (knee, hip, ankle), and two reported trunk (neck and ribs) injuries. Responses indicated a pattern of underreporting and informal or no management of the injuries reported among most participants. The hesitation to seek professional care, whether due to prior

negative experiences, a cultural norm of “play through pain” toughness, or misrecognition of injury severity, emphasizes the need for further research into the healthcare experiences and injury management strategies of drag performers prioritizing members of the drag community as stakeholders in the research.

6.2 Experienced and Shared Barriers to Healthcare

In the first empirical chapter, the survey participants reported various barriers to receiving healthcare. The interview participants also voiced their own and/or their drag queen peers’ experiences facing barriers to healthcare. The barriers described by participants fell largely into two categories: 1) personal barriers, which included assumptions or past experiences, that stopped queens from seeking care, and 2) structural and systemic barriers, such as systemic ignorance or bias and the cost of healthcare visits and insurance or lack thereof.

The words of a NZ drag queen are insightful here: “[Queer] bodies that are not, oftentimes, common within the medical world and just making sure that they aren’t going to be treated in any sort of like discriminatory way” (Denali, NZ). Here Denali is describing both systemic and personal barriers. Not seeking healthcare because one fears being misunderstood or discriminated against by their provider is a personal barrier, but the foundation of that fear is a systemic issue of LGBTQ+ individuals historically being mistreated in healthcare, including but not limited to homosexuality being classified as a mental disorder (Baughey-Gill, 2011). This is an important example because all the personal barriers shared by the participants were underpinned by larger social and systemic issues, like homophobia, transphobia, and societal biases about drag.

Participants also shared how prior medical knowledge can give them access to quality healthcare and higher likelihood of positive provider experience. Not all drag queens have this level of education about medicine and the healthcare system. One participant shared that she has this level of knowledge because of her family background in a health profession, another took special interest in anatomy as a subject, and others learned about medicine and healthcare through their prior experiences as athletes. For example, Kellie Kelly, who shared that she has “always had a natural fascination with human biology [...] so that has been an easy catalyst for me to spin these things into further interest” as a drag queen, shared that she was able to have a decent healthcare experience when seeking care for her knee injury:

I have found that when I have [told doctors about my drag], they have been receptive. As long as you explain it from a sports science element. If you try and veer it towards that angle, they're always a little more receptive. And I can do that; not everyone has the same background that I do, so... It's that thing of: just because I can, doesn't mean everyone can. Doesn't mean that should be how it is. (Kellie Kelly, NZ)

As Kellie Kelly states, not everyone would know how to communicate effectively with their providers. And further, why should it be the responsibility of the patient to have to educate their provider? Knowing the mental labour that may be asked of them when trying to seek care, it is not inconceivable that drag queens would avoid such situations.

Among the participants who are or were athletes in other settings, a common barrier to healthcare described was not having the same kind of access to providers and care that they did when they participated in competitive sports. Rita Menu (NZ), a former competitive swimmer, shared that “going to physio, getting acupuncture” were accessible and encouraged by her sport community. However, she does not have the same kind of access or support from the community as a drag queen. Denali shared the same sentiment about a lack of support from her community

in finding proper healthcare specifically for her drag performance needs. She explains that “You have to kind of find that on your own” as a drag queen, whereas, when she was “needing to be an Olympic athlete, [... her] coaches were researching really who would be the best [doctors].”

This is both a community and systemic barrier. As a community, in drag, there is no norm or formal support for seeking healthcare for injury or pain sustained while in drag (or outside of drag) that can affect drag performance. Systemically, there are no doctors that specifically are trained to understand the needs of and treat drag queens, whereas there are sports medicine specialists who do specifically treat athletes, often specializing in working with specific types of athletes (e.g., professional sports teams’ physicians).

S.B. shared a comparable perspective in observing the difference in access from being a professional acrobat and a drag queen. As a Cirque du Soleil artist-athlete she had “mandatory conditioning or physical therapy.” Today she is able to use much of that knowledge, but access to regular conditioning and therapy is not as built into her work as a drag queen. Because physical health maintenance is a priority, she still visits physiotherapy as needed, and “because [she] was with Cirque for a really long time, [she still has] access to these physio therapists,” but the cost is now her responsibility for those visits.

S.B. is confident in managing her finances in a way that allows her to afford medical visits. In the past, she has “had the support of family and [her] godfather, who are all like, ‘we will do what it takes to get you back to healthy,’ which, like a lot of people, don't have.” However, she is aware this is atypical and knows that money and cost associated with healthcare is a major issue in the drag community, explaining:

I think that there's also a financial illiteracy that comes from some of the queer community, and just like the drag community and their access to like livable booking fees

that also plays into it. It's like, "Oh, I'm not going to go see the doctor. I don't have the money for that. I don't have insurance." "Oh, I'm not going to go pay \$120 and see a physiotherapist, that's food for the week. [...] they're not saving for a rainy day, because they don't assume that it's [injury] a possibility." (S.B., USA)

Cost and insurance are both major barriers to healthcare, not only for drag queens, but for much of the United States population and even some of the Aotearoa NZ population ((Douthit et al., 2015; Goodyear-Smith & Ashton, 2019; Jatrana & Crampton, 2009; Lazar & Davenport, 2018; Rivers & Patino, 2006; Schoen et al., 2013; Stevens & Keigher, 2009). For many artists, particularly those without familial financial support, "saving for rainy day" may not be a financial option, thus limiting their access to affordable health care.

Denali (USA) shared that "the medical field has so much to do with insurance and their providers that are recommended, you never really know." This highlights another potential barrier to quality care for drag queens caused by insurance. Denali highlights that providers within insurance networks may or may not be LGBTQ-friendly, nor understanding of professional performing artists' needs. Further, those providers may also not have an understanding of mechanisms of injury in drag performance. Regardless, policy-holders are required to go to in-network providers, whether or not they are culturally competent, in order to receive insurance-covered care.

Prada Jae (NZ) shared her own personal experience with avoiding healthcare due to insurance-adjacent issues, as well as "the time and money aspect", as a barrier. ACC (Accident Compensation Corporation) is the no-fault universal accident and injury healthcare model in Aotearoa New Zealand (Goodyear-Smith & Ashton, 2019; Jatrana & Crampton, 2009; Schoen et al., 2013; Sood & Sood, 2015). While Prada Jae did not personally have prior negative experiences dealing with ACC, peers' experiences deterred her from even trying to seek care that involved ACC. She explains:

And I've heard a lot of unpleasant experiences that a lot of people that are close to me, and not even people that are close to me, have had with dealing with places like ACC and stuff like that. [...] They [ACC] get quite specific about a lot of things, and it's a lot of back and forth. And I just can't be bothered with the back end for it all [...] And it just gives me too much stress to think about even trying to go through that process and stuff. So that's partially why didn't [seek care]. (Prada Jae, NZ)

Kellie Kelly also shared ACC as a barrier to care for recovering for her knee injury, specifically in comparison to how an athlete would be treated by ACC in their recovery. She explained that she had very limited access to physiotherapy visits for her injury sustained while in drag:

I would say the ACC coverage was poor [for my recovery from injury]! Compared to a football or rugby injury; they get, like, 50 sessions [covered by ACC]. And for this [my injury], you got six that were subsidized. Whereas, if it were a more mainstream [sport], you'd at least get 20 sessions. (Kellie Kelly, NZ)

According to a physiotherapy practice in Aotearoa NZ, ACC currently claims that “only 16 treatments are allocated per claim in total (regardless of where or with whom these treatments are received)” (*Working With ACC*, 2024, para. 3). While Kellie Kelly describes only receiving approval for 6 sessions, it is not standard for individuals to receive approval for more than 16 treatment sessions. However, ACC will approve additional treatment “in some cases,” if a “physiotherapist complet[es] a lengthy report, including collating and attaching all your medical information (including clinical notes, radiology reports, specialist reports etc)” (*Working With ACC*, 2024 para. 4). Physiotherapists may feel pressure from athletes or their coaches to follow this procedure, but there is currently no firm evidence of this.

Even in a country where there is no-cost coverage for accidents, there are barriers to receiving care through these channels, as described by Kellie Kelly and Prada Jae. In Aotearoa, the alternative to ACC is to purchase high-cost private insurance, which presents a significant financial barrier (Sood & Sood, 2015).

Prada Jae further experienced geographical inaccessibility as a barrier to healthcare. She does not drive or have access to a car, so getting to a doctor's appointment is either a major time or financial commitment for her, in addition to any direct costs associated with an appointment.

She explains:

I can't drive myself to places and stuff like that due to having no car and whatnot so like, I also don't like feeling like I'm being a burden on other people in, you know, having to take me to the appointments and bring me back. Because I'm not gonna fork out like 30 or so dollars for an Uber just to go there, and then another 30 to come back and stuff like that. If I lived in town it might be a bit different, like if it was conveniently close to me, or something like that. Then there would be a little bit more of a likelihood that I would go [to the doctor] and be bothered to do it. But because it's so out of my way, I'm just like [shrugs]... (Prada Jae, NZ)

Although Prada Jae was the only participant to indicate that location and proximity to healthcare was a barrier for her, geographic barriers to healthcare are a concern for many (Douthit et al., 2015; Lazar & Davenport, 2018).

Many of the participants that shared barriers to health care expressed not having access to LGBTQ+ or LGBTQ+-friendly providers. Cultural competence in healthcare has been proven incredibly important in patient experience, and therefore, could be beneficial for drag queens (Cartwright & Shingles, 2011). Conversely, not having culturally competent care options is a barrier for drag queens:

I think if medical can also advertise that they are very LGBTQ friendly, that can help drag queens and LGBTQ people in general just kind of feel safer and even approaching that process. (Denali, USA)

If a café can get a rainbow tick, then a physio should be able to [advertise that they are LGBTQ+ friendly]. I know a lot of people that don't seek any medical because of that. (Kellie Kelly, NZ)

There's like the respect side of it. There's the opinionated side of [providers]. (Prada Jae, NZ)

The reality of seeking healthcare can be a complicated decision to make for drag queens (and other LGBTQ+ individuals), especially for those with intersecting identities, and the lack of

available and recognizable drag and LGBTQ+-friendly providers does not make the decision any easier for queens (Charles et al., 2015; Matsuzaka et al., 2021). When provided with available and accessible LGBTQ-specific care, individuals have indicated they experienced generally positive experiences with their providers and healthcare, citing “provider empathy and affirmation” (p.1) as a major benefit to specified care (Matsuzaka et al., 2021).

Barriers to receiving healthcare for drag queens are complex and deeply rooted personal experiences, such as fear of discrimination or lack of the healthcare systems, which often stem from broader societal and systemic failures. Financial burden was the most common systemic barrier cited, specifically in U.S., while insurance and insurance-adjacent issues were prevalent among both the U.S. and NZ queens. The lack of specialized medical care available to drag queens, which could parallel the specialization of sports medicine for athletes, further intensifies these challenges. Additionally, the absence of culturally competent LGBTQ+-friendly providers remains an obstacle that discourages many from seeking care. While individual participants, like Kellie Kelly and S.B., were able to navigate the healthcare system, they were clear that not all drag queens have the background or education to support this kind of experience. Participants’ experiences indicate a significant need for both systemic change and increased encouragement for seeking care within the drag community. Without these changes, drag queens will continue to face barriers when seeking quality care.

6.3 Experiences with Healthcare Providers

Most of the participants shared at least one experience with a healthcare providers related to an injury or physical concern caused by drag. These experiences range from positive to neutral to negative. Many of the most positive experiences shared by participants were not with medical

providers, but rather with other kinds of health providers, like massage therapists. Denali (USA) shared that she is “picky” when finding a massage therapist to ensure that the therapist will be able to support her physical health specifically for drag performance, which includes respecting and supporting her drag queen identity and practice. Therefore, she is able to share what kind of massage she needs because of drag with her massage therapist:

We'll do like a little bit extra work on my shins or my calves because of the heels or my lower back because of the corset or, you know, things like that, that just that are kind of like target to drag experience. (Denali, USA)

Other positive experiences occurred with physiotherapists, as well as with various providers who are themselves part of the LGBTQ+ or other culturally relevant communities to the participants:

Now it's more like, actually I prefer more practitioners and people on my team that are part of the LGBTQ+ community, and I think that that just makes me feel more comfortable, you know? So like, I can explain to them like, yes, I was at a drag show, I was wearing heels, and I was doing these things, and there are things that they might understand more than like a straight doctor or something like that, you know? (Denali, USA)

S.B. (USA) also describes the importance of culturally relevant health providers who are part of the performing arts community and already understand what drag performance entails:

But like I said, I've been really lucky to have providers that do understand what I do, that respect what I do, that like will come to my drag shows. I have physical therapists that will come to my drag shows because they love drag. But usually they're working for Cirque or working with circus performers, so they like the arts. They like edgy stuff, they like out of the norm [...] I mean also in Vegas and Montreal, they're examples of where of where Queer people are around because the entertainment industries are thriving. There's a lot of dancers. There's a lot of singers. There's a lot of circus artists. And, so, yeah, [medical providers] understand the nature of like the Queer art form. (S.B., USA) As both a professional acrobat and drag queen, S.B. describes having access, when injured in drag, to culturally safe providers who understand an aesthetic, artistic, and athletic discipline, and are LGBTQ+ friendly, and this access is attributed to her professional artistic-athletic background beyond drag.

Beyond shared artistic and LGBTQ+ backgrounds, a participant described a shared ethnic background and cultural resonance with their health provider as contributing to a positive experience:

I think there might be a sort of a cultural aspect to it. You know the fact that they were Māori and mirmirmi is a Māori practice so that within itself, I was like, Okay, they know what they're doing [...] They were very understanding of a lot of things. The last time that they— Or during the times that I had gone for them for their services, they knew about what line of work I was doing and stuff like that. I think having that openness with them really helped them to know and understand what it is that they need to do for me in order for me to get the most out of the experience. So yeah [...] Yeah, so I think there was like a bit of a cultural understanding and stuff like that that made me feel a little bit better with that. (Prada Jae, NZ)

The providers in this scenario were not members of the LGBTQ+ community, but their shared cultural understanding with the participant, as well as their openness, lack of judgement, and knowledge of their practice, led to a positive experience for Prada Jae. The importance and impact of culturally competent care for athletes has been shown to promote confidence in and comfort with providers that can lead to experiences of higher quality care for patients (Cartwright & Shingles, 2011; Lopez et al., 2021).

Denali, the participant who appeared on the American-produced *RuPaul's Drag Race*, shared a unique drag workplace experience among the participants: having access to a health provider specifically available to and for drag queens. She explained that, on that production of *RuPaul's Drag Race*, “there is a medical person on duty just in case anything happens.” She then shared that she did have to visit the medic during her run on *RPDR*, and that they were not only helpful but also understood the mechanisms of common drag injuries and physical health needs of drag queens. This is a rare opportunity – the opportunity to visit a medical provider who is knowledgeable specifically about drag performance. This opportunity is not available on all of the productions of *Drag Race*; Rita Menu shared her very different experience of having to leave

set to receive any kind of medical care while filming *RuPaul's Drag Race Down Under*. She did specify that “queen care” is available and mandatory for contestants, but that care was limited to mental health. Further, she shared that when a fellow contestant had a major health issue, “one of the producers [...] was calling people who had trained in first aid but not an actual first aider that's just on the side ready to go.” This filming experience varies greatly from Denali's, where there was a qualified, designated medic on set. Rita Menu's experience relates again to the theme of drag queens' healthcare being perceived as individual responsibility, while Denali's experience showed what could be possible in the realm of community care for drag queens.

Transitioning to more neutrally received experiences with healthcare providers, most of these experiences could be classified as meeting basic physical needs but failing to offer any support around the participants' identities as LGBTQ+ or drag queens. Kellie Kelly shares that she had mostly neutral experiences with her providers for her knee injury sustained in drag:

I very much fell through the cracks of bad experiences. But I also think that was because of the physio that I went to. I went to a very established physio, who had a very good referral rate. And like anything, there is “the boys' club,” so when you play into that, it helps. And yeah, I was able to go from physio directly to specialists directly to surgeon. And it was a long process, there was still a long wait in between. [...] I've been fortunate that I've either just neutral or positive [experiences with providers]. (Kellie Kelly, NZ)

Kellie Kelly had to know how to “talk the talk” within the masculine-identified “boys' club” of physio, as she described it, indicating that this was necessary to receive adequate medical care. Other participants shared similar experiences. They received medical care that adequately treated whatever issue they were experiencing, but they either did not share their identity as a drag queen because they did not feel it was important to their treatment experience or they did not feel comfortable sharing that part of their identity with their health care providers. Therefore, the providers they visited did not offer cultural competency around drag culture,

which may impact understanding of their patient's actual mechanism of injury and ongoing physical occupational demands.

Similarly, many of the negative experiences that the participants shared have to do with being misunderstood by providers. If and when participants chose or needed to disclose their participation in drag performance with providers, they reported that they had to spend time in their appointments explaining their drag backgrounds to providers, which prolonged the amount of time before receiving actual care or treatment, and the amount of mental and emotional labour required in seeking treatment. For example:

I ever go to the doctor, and I have to explain things, I have to start from the beginning. you know? And first of all, they're just like, "Okay...?", and they just usually don't know where to where to start. (Chamilla Foxx, USA)

The labour Chamilla Foxx has to put into her provider visits is a barrier that not all drag queens would be willing to face. She explains that even after she clarifies she is a drag queen and what that means, providers still are unable to grasp that concept and how it might affect her physical health. Kellie Kelly (NZ) shared a similar experience:

INTERVIEWER: Yeah. Did you tell any of those providers that your injury happened while you were in drag? And if you did—

KELLIE: Every single one of them.

INTERVIEWER: —did they understand that?

KELLIE: At first they kind of just looked at you weirdly.

Kellie Kelly had a major knee injury from performing in drag that resulted in seeing multiple providers, and she was upfront with all providers. The "surgeon couldn't have given a shit. Like, probably didn't even hear who I was;" clearly Kellie Kelly did not receive culturally competent care from that provider. "And the other one, it was a little awkward at first, with the specialist, like, it was a little weird at first. But then he was all good." Despite dismissive and "weird"

experiences with her surgeon and specialist respectively, Kellie Kelly identified her experience with these providers as neutral.

Participant experiences with a range of health providers illustrate a spectrum of quality of care from positive and physically and culturally competent, to neutral and physically but not necessarily culturally competent, to negative. While the negative experiences shared were not described as physically harmful, the cultural ignorance described may have negative effects. While some participants benefited from LGBTQ+-friendly or otherwise culturally relevant providers, others did not. The NZ drag queens interviewed expressed greater difficulty finding providers who identified as LGBTQ+ or were outwardly LGBTQ+-friendly than the US queens in this study. The insights offered by the participants' experiences emphasize the need for healthcare providers to understand and respect the unique physical and emotional needs of drag queens.

6.4 Desires for Ideal Healthcare

As the participants described their experiences with injury and healthcare, they expressed an overwhelming desire and call for improvements in the healthcare system. The participants shared concerns that drag queens and the greater LGBTQ+ community have when seeking care, personal and community-wide needs for more competent healthcare, and recommendations they have for healthcare providers when treating drag queens. Some participants also shared their visions for ideal injury-related healthcare for drag queens.

Most participants emphasized the concern of facing confusion and/or judgement from health care providers. There was a lack of understanding from providers about what drag queens are and what they physically do: "I guess [providers] would just need a bit more understanding

of what we do” (Rita Menu, NZ). Kelly Kellie (NZ) and S.B. (USA) described having to compare themselves to dancers, or sometimes even only identify themselves as dancers, to give their providers a frame of reference for the demands placed on their bodies from drag that would be respected and understood. Chamilla Foxx (USA) shared her experience of visiting a provider who did not have any idea what a drag queen does, and the burden of educating the provider on her identity as a drag queen fell heavily onto her, the patient. And even after she has explained what drag performance entails, providers still “usually don't know where to where to start” when treating drag queens. S.B. (USA) also shared judgments faced by drag queens from providers:

In a lot of cases the physical needs will always be understood, because there are educated people in terms of anatomy and rehabilitation everywhere. But in terms of the queer aspects of the experience or the specificities of the art form being described in their entirety to best create the context for the healthcare provider as to what exactly happened, it's not always going to [be a good experience for drag queens]. (S.B., USA)

As a response to these experiences with providers, there is a call from the participants for more education for providers about the physical demands of drag performance. Crucially, this education should not be the responsibility of drag queen patients when they are actively in a provider’s office seeking care. Chamilla Foxx (USA) shared her thoughts on the responsibilities that providers have to be competent professionals:

I think that there just need more knowledge, and there needs to be—people have to care enough to look into entertainers’ [including drag queens] health. I feel like it's just not there yet, cause it's not as prevalent. We’re getting a lot of attention, but like not everything has caught up. (Chamilla Foxx, USA)

As discussed in the literature review, this specific, competent care models have been developed in the fields of dance and circus medicine. However, the development of these fields has been led by health professionals who are also heavily involved in their specialized field, for example, dancers led development of dance medicine and circus performers did the same for circus medicine (Cayrol et al., 2019; Faltus & Richard, 2022; Hamilton et al., 2012; Ho, 2018; Miller,

2006; Stubbe et al., 2018; Wolfenden & Angioi, 2017). This offers the question, can culturally and professionally competent care for a specific community be developed in healthcare without those from within the community having to become healthcare professionals themselves? This is not to say that drag queens should not be part of the process in developing culturally competent care for drag queens, but they should not be required to become healthcare professionals to do so.

One simple solution offered by the participants was for healthcare providers to be free of judgement and unafraid to respectfully ask questions. While, according to the participants, providers would ideally already bring understanding of the culture, demands, and physical mechanisms of drag, judgment-free questioning was offered as a practical alternative by the participants. For example:

I think, like most things like, if they don't actually know anything about it, ask what it requires. Just. you know, use 5 min of the consultation to be like, 'Cool, what do you actually do? What do you put yourself through?' Just basics like, 'do you wear corsets, do you wear heels?' And yeah, they don't have to go watch every season of drag race or some shit, but they do have to— It's that's the kind of thing where I'm sure there's plenty of other niches that it happens to where it's if that's an unfamiliar territory. Just be like, 'cool, what does it entail?' And 'cause I think you know that would also help the drag queen trust them more, if they took down that [initial] wall, and then the queen could be like, 'okay, cool. So we can meet in the middle somewhere.' It would be a little easier for them than when there's this wall. (Kellie Kelly, NZ)

Kellie Kelly describes here the importance of providers developing a relationship with their patient to offer an experience of “patient-centered care” (Drossman & Ruddy, 2020). A positive provider experience is essential in future behaviour around seeking care, as well as recovery from whatever issue the patient is initially being seen for (Dean, 2016; Drossman & Ruddy, 2020). As indicated by the participant in their desire for judgement-free assessment, communication is key in developing positive provider experiences (Dean, 2016; Tabler MS et al., 2014).

S.B. further explains how judgement-free questioning by providers can benefit both the provider and the drag queen patient. She offers a structure that would allow a provider who may be personally uncomfortable or unfamiliar with drag queens to still provide a positive, respectful, physically adequate medical experience for drag queen patients:

I think what healthcare providers can do easily if they're if they're maybe made uncomfortable or less familiar is to ask questions to get down to the technicalities of like, 'what is it exactly about this art form that got you injured? And what is it that we need to be able to maintain and prevent in the future?' Because at the end of the day, like the athleticism is technical. It's like, technically, I need to be able to flip, or I need to be able to take this kind of impact on this side of my body, or I need to have this type of endurance in this compromising position. Because my feet weren't made for me to be on my tippy toes and these stilettos for 4 or 5 hours at a time, but I need to find a way to be able to make it work long term, because it's how I make money. I think having a healthcare provider really ask the questions and pull the pieces apart, to then sink into the ones that they have expertise in. They're not going to be an expert in drag, but they are an expert in anatomy, and surely can understand the compromising things that we do to our bodies in order to perform. I think every healthcare provider really has that capability. So if they can do that, and just be open and humanizing. (S.B., USA)

Here, S.B. offers the valuable foundations of a potential model for providers to be able to treat drag queens in a way that recognizes both a provider's beliefs and a drag queen's identities.

Prada Jae (NZ) expands this concept of providers prioritising their knowledge of medicine in assessments by saying, "stop being judgmental pricks. And just do the job that you learnt to do."

The potential limit of this model is that the drag queen patient needs to have the knowledge and language to express themselves and their injury or issue to a provider in anatomically correct manner that will be respected and understood by the provider.

Alternatively, S.B. explains how important it can be to be able to share the full identity of being a drag queen with your provider in an injury recovery process:

You need to have specific exercises to be able to guide yourself towards that. If my, the ball, my foot is injured and I need to be able to be overusing the ball of my foot, then the physio is going to make you do different stuff than, if the goal is just to be able to do your office job and walk comfortably in a tennis shoe. Then let a timeline kind of like lead you

back into the more intense side of your activity, where it's like, no, to get back to work and to maintain my lifestyle and put food on the plate, I need to be able to be in high heels, then for sure, they're gonna react differently.

Also, from an emotional perspective. It's super interesting to feel safe and understood by the person who's taking care of your body. If you don't feel safe and understood, your body's gonna lock up. In terms of Queer people, you'll probably run into some attitudes and maybe some potentially triggering phrases or words that will make your body lock up and make you more protective towards the person who's trying to help you. If they can really understand what you're doing, and if they're encouraging the of you as a person and have a desire also on a more personal level to get you back to where you came from or back to the level that you need to be able to perform, it does make a really big difference to be able to like, unlock that layer. (S.B., USA)

S.B. speaks here about the importance and benefits of specificity in injury recovery. Specific care for an injury is a hallmark of sports medicine. The focus of making sure athletes recover to be able to produce the specific actions of their sport is part of the sports medicine model (Cartwright & Shingles, 2011; Faltus & Richard, 2022; Waddington, 1996; Waddington & Brissonneau, 2023). This is certainly a commonly missing piece in injury recovery for drag queens and leaves great opportunity for learning from the sports medicine model to better develop rehabilitation treatments for drag queens.

A major recurring theme from the participants was the desire for LGBTQ+ providers and LGBTQ+-friendly providers. Some participants had prior positive experiences with these types of providers, while others were hopeful that they existed in their communities. Denali shares that she has built her healthcare team around finding LGBTQ+ providers:

I prefer more practitioners and people on my team that are part of the LGBTQ+ community, and I think that that just makes me feel more comfortable, you know? So like, I can explain to them like, yes, I was at a drag show, I was wearing heels, and I was doing these things, and there are things that they might understand more than like a straight doctor or something like that, you know? (Denali, USA)

The shared cultural background provides a foundation for understanding and respect in the patient-provider relationship. Again, this relates to the fields of dance and circus medicine being pioneered by dancers and circus artists (Cayrol et al., 2019; Faltus & Richard, 2022; Hamilton et

al., 2012; Ho, 2018; Miller, 2006; Ryan, 1997; Stubbe et al., 2018; Wolfenden & Angioi, 2017).

Those from within a community are the ones who tend to have an in-depth understand of what community needs are. This does not suggest that providers from outside the LGBTQ+ community cannot provide culturally competent care. It does imply that further education and an openness in beliefs is necessary for providing a positive healthcare experience for LGBTQ+ individuals.

The American drag queens who participated in the interviews are all located in centers of entertainment: Chicago and Las Vegas, where LGBTQ+ and LGBTQ+-friendly providers are readily available (though not always financially viable). For the New Zealand queens, however, this was not a shared experience. Kellie Kelly described the challenges of identifying providers who are LGBTQ+-friendly. She shared that it can be difficult to find providers that outwardly advertise themselves as LGBTQ+-friendly, and that there is a need for providers to advertise as such, if they are open and enthusiastic about working with the LGBTQ+ community. The need for visible LGBTQ+-friendly providers is illustrated here:

I think it would be [helpful], from a queen's perspective, knowing that there were specific places that were LGBTQIA+ friendly. Like, [knowing] that they were pro [LGBTQIA+], then people would be more willing to talk about being a drag queen, as well, and not be so elusive on what they're telling [their provider...] I know a lot of people that don't seek any medical because of that. (Kellie Kelly, NZ)

To combat this issue, she suggests that LGBTQ+-friendly practices hang a Pride flag decal in their windows to show their support of the community. In doing so, drag queens would know for sure that their LGBTQ+ identities will be respected by that practice, removing a barrier drag queens face when seeking care. Denali (USA) confirms this idea by suggesting providers display “a rainbow flag outside or [... making sure] on Google [providers are] saying ‘hey we’re

LGBTQ friendly.” Kellie further elaborated that showing up at community events is a great way to build relationships and trust within the community:

If they could be at a Pride event. Like, when they have the Pride in the Park or those type of shit, like, if there was any type of physio that was willing to just put their hat in the ring or like personal trainer and stuff like that. (Kellie Kelly, NZ)

Kellie further explains that building trust with a provider is essential for a “holistic approach” to one’s health. She said, “if you're gonna trust the person with your body, you should be able to trust them with like telling them why you need your body, or want your body, [to be a certain way].” Denali (USA) adds, “I think if medical can also advertise that they are very LGBTQ friendly, that can help drag queens and LGBTQ people in general just kind of feel safer and even approaching that process.”

Ideally, there would be providers who specialize in treating drag queens, like there are other sport-specific specialists (Malcolm, 2006; Sweeney, 2019). Rita Menu describes the possible benefits of having a provider who specializes in drag queen patients. She and Denali explain how it could be beneficial to drag queens to have providers available to them who understand the physical mechanisms of drag and can assist drag queens in their drag-specific needs and wants:

Yeah, it'd be nice, would be nice if there was like, I don't know, someone that kind of, like a specific role that someone could look after drag queens in that sort of sense, like going for training with stretching and whatnot. Like, I don't know, I feel like I haven't really seen that and I don't know other experiences through Queens, if we're talking about like even American queens who are doing it so regularly, like, I don't know what their experiences are, if they do it, but like, that'd be cool if there was, I don't know, like almost like a specific job role for like that. (Rita Menu, NZ)

A specialized kind of doctor or person or any medical professional that understands drag and drag bodies, I think that that's so major. I think that that would be important. (Denali, USA)

Participants indicated that the current state of treatment that drag queens are receiving is generally not culturally competent to their identities as drag queens, and while desired drag-specific provider specializations may take longer to develop, in the short-term, as Kellie Kelly (NZ) poignantly states, “it doesn’t take much to make it better.” Drag queens are calling for health care providers to be “open and willing to be vulnerable about asking questions and learning more from a standpoint of them wanting to be a better caretaker and a better provider” for drag queens (S.B., USA). The participants also expressed the need for LGBTQ+-friendly providers to be more visible, as they are a valuable and necessary asset to the drag community.

6.5 Summary of Findings

The interview data shows personal and systemic barriers to healthcare drag queens face and their desires for improved healthcare experiences. As injury is common among the participants and their drag queen peers, access to healthcare is incredibly important for this population.

Participants shared their desire for a shift in healthcare culture to better understand and respect drag queens and their physical needs, as well as the greater LGBTQ+ community.

Many participants did not seek medical care when injured in drag, due to barriers. Personal barriers included fear of discrimination and self-assessment of injury severity. Meanwhile, systemic barriers included deeply rooted and historical social and medical homophobia and transphobia, as well as the cost of healthcare and geographical access to care. There is also a cultural norm of not seeking care and/or performing through pain. Some of the participants reported their knowledge of medicine and the healthcare system as a technique to avoid some of the challenges faced when visiting providers to improve their healthcare experiences, but this is not a universally shared knowledge within the drag queen population.

Without this background, many drag queens may have difficulty effectively communicating with their providers, which does not lend itself to an overall positive experience.

Finally, the participants expressed a strong need for improvements in the healthcare system, starting with providers. While participants desired for providers to educate themselves on drag queens and the physical demands of drag performance, many offered to be the educators as patients. This is not an ideal model but offers an opportunity for providers to ask non judgemental questions when visited by drag queens. For providers who already understand and respect drag queens and LGBTQ+ identities, the participants asked for more visibility from these providers in their LGBTQ+-friendly services. Long-term and ideally, participants called for more cultural competence among all healthcare providers, emphasizing that the education on care for LGBTQ+ and drag queen patients should not be the responsibility of the drag queens. There was also a desire for a drag-specific model of care, akin to that of sports medicine or dance medicine.

The findings from these interviews with three drag queens from the United States of America and three from Aotearoa New Zealand stress the need for more culturally competent healthcare access for drag queens to support their unique needs.

CHAPTER SEVEN: CONCLUSION

Drag has existed in some form for hundreds of years, and formally, since 1870, when “the UK’s *Reynolds Newspaper* printed a fabulous-sounding event invitation: ‘We shall come in drag, which means men dress in women’s costumes’” (Hall et al., 2020). The drag shown on popular television programs and in live drag shows in both Aotearoa New Zealand and the United States of America feature high energy, physical and mentally demanding performances by drag queens (Amant, 2022; Borba, 2022; de la Cretaz, 2021; Hopkins, 2004a; Lawrence, 1989; Pasulka, 2019; Reed, 2019; Robledo, 2023; Sopitarchasak, 2023; Willix, 2023). While it has been discussed that drag can be a high energy physical activity, the majority of the research concerning drag queens and drag performance focuses on gender and sexuality and/or the performing arts (Berkowitz et al., 2007; Dougherty, 2017; Egner & Maloney, 2016; Gamson & Grindstaf, 2019; Greaf, 2016; Kaminski & Taylor, 2008; Keenan & Hot Mess, 2020; Lawrence, 1989; Moncrieff & Lienard, 2017).

This research has focused on the physical experiences of drag queens in the context of physicality and athleticism, a unique perspective on drag research. Through narratives shared by queens from the US and Aotearoa NZ, supported by survey data from a larger population of the same geographical distribution, physical experiences of drag queens were explored. These experiences encompassed drag queens’ physical preparations for drag, experiences of injury sustained from drag, experiences with health professionals, and what drag performance physical entails while onstage performing. This research did not search for specific answers to a predetermined hypothesis, but it did aim to make sense of drag queens’ experiences of the physicality of drag, and their experiences of health care.

The mixed method approach of utilizing a survey and interviews was useful for providing both the breadth and depth of drag queens’ experiences of the physicality and athleticism of their

practices and performances, and their varied experiences with healthcare provisions. An intersectional lens (Crenshaw, 1989; Crenshaw, 2017), as described in the literature review, was employed in research design, recruitment and analysis. For example, recruitment of interview participants within the marginalized community of drag queens specifically focused on inclusion of diverse gender and ethnic/racial identities, among others. Survey design was intentionally designed to collect data that could be analysed through an intersectional lens. Analysis to examine possible differences in injury occurrence, prevention, healthcare seeking and access by gender and nationality, among others was conducted.

The inclusion of qualitative interview methods, with data analysed through Braun and Clarke's (2021) reflexive thematic analysis process, reflects this study's feminist lens. A reflexive thematic analysis approach recognizes that the researcher is integral to the questions asked, and to overall findings (Braun & Clarke, 2021; Braun et al., 2019). My own experiences in sport, circus and within the wider drag community have shaped my relationships of trust within the community, and as well as my passion to delve into questions of interest to and identify findings of use to the drag and community and particularly their access to culturally safe and responsive health care options.

Within a queer research framework (Brim & Ghaziani, 2016; Browne & Nash, 2010; Butler, 2006; Das, 2020; Fotopoulou, 2012), this inquiry examined and revealed how specific social structures (e.g., health care, workplaces) may be impacting the lives of drag queens, a population that explicitly subverts gender norms.

6.1 Key findings

There is a dearth of research on and understanding of the physicality and injury-related needs of drag queens. This study's foundational findings, from both interview and survey data, indicate

that the majority of drag queens have experienced drag-related injuries, despite practicing personally developed body maintenance behaviours. From the survey of 96 drag queens, 65% (36/55) have experienced injuries from their drag training and/or performances. The most common injuries include sprains (35%), and injuries most commonly occur in the lower limb, specifically knee (30%) and ankle (28%). Drag specific injuries related to the practice of “tucking” and performing in high heels. Interview participants expressed the necessity for available, fully accessible, and visible LGBTQ+ and drag culturally safe and resonant healthcare (O’Brien et al., 2017; PAPPS & RAMSDEN, 1996). This was supported by survey data that indicated that cost and fear of mistreatment in healthcare were the most commonly reported barriers to receiving care.

All interview participants reported engaging in physically demanding drag (splits, jumps, spins), regardless of performance style. The subset who had a prior athletic background described utilizing their knowledge of sport-related body maintenance practices and athleticism to support their drag practices and felt more confident in assessing their own injury severity and corresponding need for health care. The interviews also revealed varied experiences of drag queens with different health providers, but almost all wished for more culturally responsive and safe options that recognize the physicality of drag, and their gendered identities.

The findings from this research and these participants are not assumed to be generalizable to all drag queens in the United States and Aotearoa New Zealand. However, the voices and experiences shared by the participants illustrate common physical experiences demonstrating the importance of research in this field, which suggests that further research in this area would be valuable and important in intersecting fields, such as sport, gender and sexuality, and medicine. This study contributes to literature on drag queens’ experiences, as well as research on sport and dance injuries and health care provisions.

6.2 Limitations

This thesis is a Master's research project, and as such, resources and time were limited.

Therefore, this research was limited in several ways. The decision to limit the study to Aotearoa NZ and the United States was resource-related, but it was also an intentional decision based on working with the drag community and my personal drag connections informed by feminist ethic of care (Hamilton, 2020; Maeckelberghe, 2004), which asserts the importance of building trust and relationships with participants.

For the survey, the main restrictions were time the survey could be “live” for and the resources available to recruit survey participants. With more time for the survey to be up and running, it may have drawn more responses. Additionally, the recruitment of participants was limited to my own personal network and a snowball recruitment method. The survey was distributed through social media, where I could only reach groups and individuals that I was personally connected to through social media. The survey was shared within the drag community as well, which worked well in Aotearoa NZ due to the smaller drag community. However, the survey had fewer participants from the U.S. because it was more difficult to reach a larger community where I was not living or actively part of the community at the time of the research.

For the interviews conducted, the primary restrictions were the number of participants able to be included and the amount of time and resources available in recruiting participants. The six interview participants represent a small sample size of drag queens from the United States and Aotearoa NZ. I strived to select participants that would represent a diversity of identities: race/ethnicity, gender, body type, geographical location, age, duration of drag experience, and athletic background. The interview participants in this study represented diversity in as many of these as possible with the limitation of a six-person sample size. However, with a larger

participant group, more identities and experiences could be represented. Particularly within the U.S., broader diversity in geographical location would be beneficial in exploring the healthcare access and experiences of drag queens, given the varying laws around drag, anti-discrimination protections in healthcare, and state-by-state variation in insurance policies and healthcare access (Clark et al., 2022; Satta, 2023; Timmer, 2023; Truszczynski et al., 2022). This may also be something to examine in Aotearoa NZ even though they have universal ACC, unlike the United States. In both countries, with a larger sample size of interview participants, it would be beneficial to investigate the experiences of drag queens with a broader diversity of body type. While this study did include participants with a range of body types, no self-identified “big girls” participated in the study, although there were several recruitment attempts through social media and personalised emails to include “big girls” (Pomerantz, 2017).

Due to the restraints of this thesis and the lack of prior published research on the topic, this study can be described as a foundational exploration in drag queens’ physical experiences related to their drag performances in the United States and Aotearoa New Zealand.

6.3 Recommendations

As a foundational study, this research points to several areas for further investigation regarding physicality and injury prevention among drag performers. Future research indicated includes, and is not limited to, the inclusion of a broader diversity of drag performer identities (i.e., drag kings, drag artists), as well as expanded biomechanic analysis of specific physical elements of drag performance (Borba, 2022).

Larger sample sizes both within the focus countries of this study, as well as other countries, with intentionally expanded participant diversity, would be beneficial to our understanding of drag queens’ experiences and needs.

Further studies in this field should also consider heterogenous populations inclusive of both health professionals and drag performers. Health professionals may include physiotherapists, sports medicine specialists, athletic trainers, orthopaedic surgeons, primary care, and culturally-specific, holistic and alternative medicine providers. I was unable to find any research of this kind in the academic, scientific, or even conference literature. Research in this field should not rely solely on drag performer and LGBTQ+ researchers' labour. However, LGBTQ+ individuals and those with drag experience should be consulted with, compensated, included, and prioritized in future research and policy development.

Utilization of research findings, along with cross-sector discussions, could inform community health best practices and policy development to improve both health care for this historically marginalized population. Investigation and development of effective drag-specific injury prevention and rehabilitation programs for healthcare providers, employers, and drag performers themselves is also indicated, along with training to enhance accessibility, visibility and availability of culturally safe and resonant health care environments for drag performers and LGBTQ+ individuals.

References

- Alden, W. L. (1896). *Among the Freaks*. Longmans, Green, and Company.
- Amant, N. S. (2022). A Queer Cooptation of Sport: RuPaul's Drag Race Contestants as Athletes in a Culture of Risk and Injury. *Sociology of Sport Journal*, 1(aop), 1-8.
<https://doi.org/https://doi.org/10.1123/ssj.2021-0187>
- Apostolos, M. K. (2018). *Dance for Sports: A Practical Guide*. Oxford University Press.
- Armstrong, L. E., Johnson, E. C., Casa, D. J., Ganio, M. S., McDermott, B. P., Yamamoto, L. M., Lopez, R. M., & Emmanuel, H. (2010). The American football uniform: uncompensable heat stress and hyperthermic exhaustion. *J Athl Train*, 45(2), 117-127.
<https://doi.org/10.4085/1062-6050-45.2.117>
- Baker, A. A., & Kelly, K. (2016). Live like a king, y'all: Gender negotiation and the performance of masculinity among Southern drag kings. *Sexualities*, 19(1-2), 46-63.
<https://doi.org/10.1177/1363460715583606>
- Barisik, Y. (2019). Why Not Wanting to 'Get Bulky' Is a Dumb Reason to Avoid Weight Training.
- Barrette, A., & Harman, K. (2020). Athletes play through pain—What does that mean for rehabilitation specialists? *Journal of sport rehabilitation*, 29(5), 640-649.
<https://doi.org/10.1123/JSR.2018-0426>
- Baughey-Gill, S. (2011). When gay was not okay with the APA: A historical overview of homosexuality and its status as mental disorder. *Occam's Razor*, 1(1), 2.
- Berkowitz, D., Belgrave, L., & Halberstein, R. A. (2007). The Interaction of Drag Queens and Gay Men in Public and Private Spaces. *Journal of Homosexuality*, 52(3-4), 11-32.
https://doi.org/10.1300/J082v52n03_02
- Bird, H. A. (2009). The performing artist as an elite athlete. *Rheumatology*, 48(12), 1469-1470.
<https://doi.org/10.1093/rheumatology/kep257>
- Borba, B. L. (2022). A dança vogue femme: análise cinesiológica do elemento dip na articulação do joelho.
- Braun, V., & Clarke, V. (2021). *Thematic Analysis*.
- Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic Analysis. In P. Liamputtong (Ed.), *Handbook of Research Methods in Health Social Sciences* (pp. 843-860). Springer Singapore. https://doi.org/10.1007/978-981-10-5251-4_103
- Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public Health Rep*, 129 Suppl 2(Suppl 2), 19-31.
<https://doi.org/10.1177/00333549141291s206>
- Brewer, B. W., & Cornelius, A. E. (2010). Self-Protective Changes in Athletic Identity Following Anterior Cruciate Ligament Reconstruction. *Psychol Sport Exerc*, 11(1), 1-5.
<https://doi.org/10.1016/j.psychsport.2009.09.005>
- Brewer, B. W., Van Raalte, J. L., & Linder, D. E. (1993). Athletic identity: Hercules' muscles or Achilles heel? *International journal of sport psychology*.
- Brim, M., & Ghaziani, A. (2016). Introduction: Queer Methods. *Women's Studies Quarterly*, 44(3/4), 14-27. <http://www.jstor.org/stable/44474060>
- Brooks, L. (2021). From Pulled Hamstrings To Broken High Heels, Drag Can Be a Dangerous Sport. Here's How To Strut Safely. *Forbes*. Retrieved November 29, 2023, from <https://www.forbes.com/sites/lakenbrooks/2021/07/11/from-pulled-hamstrings-to-brokenhigh->

- [heels-drag-can-be-a-dangerous-sport-heres-how-to-strut-safely/?sh=2cf8af664af9](#) Browne, K., & Nash, C. J. (2010). *Queer methods and methodologies*. Routledge London.
- Brumitt, J., Heiderscheid, B. C., Manske, R. C., Niemuth, P. E., & Rauh, M. J. (2014). Off-season training habits and preseason functional test measures of division iii collegiate athletes: a descriptive report. *Int J Sports Phys Ther*, 9(4), 447-455.
- Bryman, A. (2007). Barriers to integrating quantitative and qualitative research. *Journal of mixed methods research*, 1(1), 8-22.
- Burke, L. M., & Maughan, R. J. (2000). Alcohol in sport. *Nutrition in sport*, 406-414.
- Butler, J. (2006). *Gender trouble feminism and the subversion of identity*. Routledge.
- Cartwright, L., & Shingles, R. R. (2011). *Cultural competence in sports medicine*. Human Kinetics.
- Cayrol, T., Godfrey, E., Draper-Rodi, J., & Bearne, L. (2019). Exploring professional circus artists' experience of performance-related injury and management: a qualitative study. *Medical Problems of Performing Artists*, 34(1), 14-24.
- Charles, C., Haaland, M., Kulkarni, A., & Webber, J. (2015). Improving healthcare for LGBTQ populations. *Ottawa: Canadian Federation of Medical Students*.
- Clark, K. D., Luong, S., Lunn, M. R., Flowers, E., Bahalkeh, E., Lubensky, M. E., Capriotti, M. R., Obedin-Maliver, J., & Flentje, A. (2022). Healthcare mistreatment, state-level policy protections, and healthcare avoidance among gender minority people. *Sexuality Research and Social Policy*, 19(4), 1717-1730.
- Colaço, R., & Watson-Grant, S. (2021). *A global call to action for gender-inclusive data collection and use*. RTI Press. <https://books.google.co.nz/books?id=tt9aEAAAQBAJ>
- Cover, R., Prosser, R., & Dau, D. (2022). The corporeality of sound: drag performance, lipsynching and the popular critique of gendered theatrics in Australian film and television. *Media International Australia*, 182(1), 81-94. <https://doi.org/10.1177/1329878x2111031582>
- Crenshaw, K. W. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. *University of Chicago Legal Forum*(1989), 139-167
- Crenshaw, K. W. (2017). *On intersectionality: Essential writings*. The New Press.
- Cretaz, B. d. l. (2021). The Physical Toll of Drag Is a Brutal—But Constant—Reality for Performers. *Vice*. Retrieved 19 April 2023, from
- Daems, J. (2014). *The makeup of RuPaul's Drag Race: Essays on the queen of reality shows*. McFarland.
- Das, S. (2020). Queer Methodologies and Social Science. In *Companion to Sexuality Studies* (pp. 95-121). <https://doi.org/https://doi.org/10.1002/9781119315049.ch6> de la Cretaz, B. (2021). The Physical Toll of Drag Is a Brutal—But Constant—Reality for Performers. *Vice*. Retrieved 29 November 2021, from <https://www.vice.com/en/article/v7ebpb/the-physical-toll-injuries-of-drag-queen-kingperformances>
- Dean, M. (2016). Communicating in patient-provider relationships. *Storied health and illness: Communicating personal, cultural, and political complexities*, 53.
- DeBenedette, V. (1987). Circus Medicine: Health Care Under the Big Top. *The Physician and Sportsmedicine*, 15(3), 192-198. <https://doi.org/10.1080/00913847.1987.11709313>

- DeHaven, K. E., & Lintner, D. M. (1986). Athletic injuries: Comparison by age, sport, and gender. *The American journal of sports medicine*, 14(3), 218-224. <https://doi.org/10.1177/036354658601400307>
- Deroche, T., Woodman, T., Stephan, Y., Brewer, B. W., & Le Scanff, C. (2011). Athletes' inclination to play through pain: a coping perspective. *Anxiety, Stress, & Coping*, 24(5), 579-587. <https://doi.org/10.1080/10615806.2011.552717>
- Devilbiss, Z., Hess, M., & Ho, G. W. K. (2018). Myositis Ossificans in Sport: A Review. *Current Sports Medicine Reports*, 17(9), 290-295. <https://doi.org/10.1249/jsr.0000000000000515>
- Doucet, A., & Mauthner, N. (2008). Qualitative interviewing and feminist research. *The SAGE handbook of social research methods*, 328-343.
- Dougherty, C. (2017). Drag performance and femininity: Redefining drag culture through identity performance of transgender women drag queens.
- Douthit, N., Kiv, S., Dwolatzky, T., & Biswas, S. (2015). Exposing some important barriers to health care access in the rural USA. *Public Health*, 129(6), 611-620. <https://doi.org/https://doi.org/10.1016/j.puhe.2015.04.001>
- Dragoo, J. L., & Braun, H. J. (2010). The Effect of Playing Surface on Injury Rate. *Sports Medicine*, 40(11), 981-990. <https://doi.org/10.2165/11535910-000000000-00000>
- Drossman, D. A., & Ruddy, J. (2020). Improving Patient-Provider Relationships to Improve Health Care. *Clinical Gastroenterology and Hepatology*, 18(7), 1417-1426. <https://doi.org/https://doi.org/10.1016/j.cgh.2019.12.007>
- Edelman, A. M. (2020). "Opulence! You Owe Everything!" *Drag in Debt at the End of the World* [Wesleyan University].
- Edward, M., Farrier, S., Brater, E., & Taylor-Batty, M. (2020a). *Contemporary Drag Practices and Performers: Drag in a Changing Scene Volume 1* (1 ed.). Bloomsbury Publishing Plc. <https://doi.org/10.5040/9781350082977>
- Edward, M., Farrier, S., Brater, E., & Taylor-Batty, M. (2020b). Not a Cock in a Frock, but a Hole Story: Drag and the Mark of the 'Bioqueens'. In. Bloomsbury Publishing Plc.
- Egner, J., & Maloney, P. (2016). "It Has No Color, It Has No Gender, It's Gender Bending": Gender and Sexuality Fluidity and Subversiveness in Drag Performance. *Journal of Homosexuality*, 63(7), 875-903. <https://doi.org/10.1080/00918369.2015.1116345>
- Elliot, D. L., & Goldberg, L. (2007). Athletes Targeting Healthy Exercise and Nutrition Alternatives: Harm Reduction/Health Promotion Program for Female High School Athletes. In (pp. 206-239). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118269848.ch7>
- Elston, D. M. (2021). Participation bias, self-selection bias, and response bias. *Journal of the American Academy of Dermatology*.
- Evans, R. W., Evans, R. I., Carvajal, S., & Perry, S. (1996). A survey of injuries among Broadway performers. *Am J Public Health*, 86(1), 77-80. <https://doi.org/10.2105/ajph.86.1.77>
- Faltus, J., & Richard, V. (2022). Considerations for the Medical Management of the Circus Performance Artist and Acrobat. *Int J Sports Phys Ther*, 17(2), 307-316. <https://doi.org/10.26603/001c.31645>
- Farrier, S. (2016). That Lip-Synching Feeling: Drag Performance as Digging the Past. *Queer Dramaturgies: International Perspectives on Where Performance Leads Queer*, 192-209.

- Farrier, S. (2017). International influences and drag: just a case of tucking or binding? *Theatre, Dance and Performance Training*, 8(2), 171-187.
<https://doi.org/10.1080/19443927.2017.1317657>
- Farrier, S. (2020). Not a Cock in a Frock, but a Hole Story: Drag and the Mark of the 'Bioqueens'. In (pp. 103-115). Bloomsbury Publishing Plc.
<https://doi.org/10.5040/9781350082977.ch-008>
- Fechtelkötter, K. W. (2017). Post-Exercise Treatments to Reduce Delayed-onset Muscle Soreness of Collegiate Student Athletes.
- Ford, C., Kercher, V. M., & Kercher, K. A. (2023). The 3Es: Keys to Empowering Women in the Weight Room. *ACSM's Health & Fitness Journal*, 27(3), 14-19.
<https://doi.org/10.1249/fit.0000000000000862>
- Fotopoulou, A. (2012). Intersectionality queer studies and hybridity: Methodological frameworks for social research. *Journal of International Women's Studies*, 13(2), 19-32.
- Foxx, D. (2024). *Denali ON ICE ft. Nymphia Wind*.
<https://www.youtube.com/watch?v=K5JiGL8o8v4>
- Fradkin, A. J., Zazryn, T. R., & Smoliga, J. M. (2010). Effects of Warming-up on Physical Performance: A Systematic Review With Meta-analysis. *The Journal of Strength & Conditioning Research*, 24(1), 140-148. <https://doi.org/10.1519/JSC.0b013e3181c643a0>
- Fricker, K., & Malouin, H. (2018). Introduction: Circus and Its Others. *Performance Matters*, 4(1-2), 1-18.
- Fuller, C. W. (2007). Managing the Risk of Injury in Sport. *Clinical Journal of Sport Medicine*, 17(3), 182-187. <https://doi.org/10.1097/JSM.0b013e31805930b0>
- Gamson, J., & Grindstaf, L. (2019). Gender performance: Cheerleaders, drag kings, and the rest of us. In (1 ed., pp. 292-301). Routledge. <https://doi.org/10.4324/9781315267784-32>
- Gerbing, K.-K., & Thiel, A. (2016). Handling of medical knowledge in sport: Athletes' medical opinions, information seeking behaviours and knowledge sources. *European Journal of Sport Science*, 16(1), 141-148. <https://doi.org/10.1080/17461391.2014.989278>
- Getto, C. N., & Golden, G. (2013). Comparison of Active Recovery in Water and Cold-Water Immersion After Exhaustive Exercise. *Athletic Training & Sports Health Care*, 5(4), 169-176. <https://doi.org/doi:10.3928/19425864-20130702-03>
- Goodyear-Smith, F., & Ashton, T. (2019). New Zealand health system: universalism struggles with persisting inequities. *The Lancet*, 394(10196), 432-442.
[https://doi.org/10.1016/S0140-6736\(19\)31238-3](https://doi.org/10.1016/S0140-6736(19)31238-3)
- Gothe, N. P., & McAuley, E. (2015). Yoga Is as Good as Stretching–Strengthening Exercises in Improving Functional Fitness Outcomes: Results From a Randomized Controlled Trial. *The Journals of Gerontology: Series A*, 71(3), 406-411.
<https://doi.org/10.1093/gerona/glv127>
- Gottliebson, R. O. (2011). *Efficacy of Cool-Down Exercises In the Practice Regimen of Elite Singers* (Publication Number 3469815) [Ph.D., University of Cincinnati]. ProQuest One Academic. United States -- Ohio.
<http://ezproxy.waikato.ac.nz/login?url=https://www.proquest.com/dissertationstheses/efficacy-cool-down-exercises-practice-regimen/docview/894086360/se-2?accountid=17287>
https://waikato.primo.exlibrisgroup.com/openurl/64WAIKATO_INST/64WAIKATO?url_ver=Z3

- 9.88-
[2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&atitle=&title=Efficacy+of+CoolDown+Exercises+In+the+Practice+Regimen+of+Elite+Singers&issn=&date=2011-0101&volume=&issue=&spage=&au=Gottliebson%2C+Renee+O.&isbn=978-1-124-86198-2&jtitle=&bttitle=&rft_id=info:eric/&rft_id=info:doi/](https://doi.org/10.1136/ard.31.2.109)
- Grahame, R., & Jenkins, J. M. (1972). Joint hypermobility--asset or liability? A study of joint mobility in ballet dancers. *Ann Rheum Dis*, 31(2), 109-111.
<https://doi.org/10.1136/ard.31.2.109>
- Graef, C. (2016). Drag queens and gender identity. *Journal of gender studies*, 25(6), 655-665.
<https://doi.org/10.1080/09589236.2015.1087308>
- Guarino, L. (2015). Is Dance a Sport?: A Twenty-First-Century Debate. *Journal of Dance Education*, 15(2), 77-80. <https://doi.org/10.1080/15290824.2015.978334>
- Gunn, R., & Marie, L. (2023). The Australian breaking scene and the Olympic Games: The possibilities and politics of sportification. *Global Hip Hop Studies*, 4(Breaking and the Olympics), 39-56. https://doi.org/https://doi.org/10.1386/ghhs_00078_1
- Gutgesell, M., & Canterbury, R. (1999). Alcohol usage in sport and exercise. *Addiction Biology*, 4(4), 373-383. <https://doi.org/https://doi.org/10.1080/13556219971353>
- Hagemaster, N. (2017). Queening the Intersection: Using Drag Rhetoric and Intersectional Theory in Critical Composition Pedagogy.
- Hagiwara, G., & Isogai, H. (2014). Relationships between Athletic Identity and Sport Commitment linked to Sport Involvement. *ICSSPE Bulletin (17285909)*(67), 91-99.
<https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,sso&db=sph&AN=110494975&site=ehost-live&custid=s4804380>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (Eighth edition. ed.). Cengage.
- Hall, J., Birkin, S., Li, H., & Hans, J. S. (2020). *The art of drag*. Nobrow Press.
- Hamilton, G. M., Meeuwisse, W. H., Emery, C. A., & Shrier, I. (2012). Examining the effect of the injury definition on risk factor analysis in circus artists. *Scandinavian Journal of Medicine & Science in Sports*, 22(3), 330-334.
<https://doi.org/https://doi.org/10.1111/j.1600-0838.2010.01245.x>
- Hamilton, P. (2020). 'Now that I know what you're about': black feminist reflections on power in the research relationship. *Qualitative Research*, 20(5), 519-533.
<https://doi.org/10.1177/1468794119891583>
- Heather, A. K., Thorpe, H., Ogilvie, M., Sims, S. T., Beable, S., Milsom, S., Schofield, K. L., Coleman, L., & Hamilton, B. (2021). Biological and Socio-Cultural Factors Have the Potential to Influence the Health and Performance of Elite Female Athletes: A Cross Sectional Survey of 219 Elite Female Athletes in Aotearoa New Zealand [Original Research]. *Frontiers in Sports and Active Living*, 3.
<https://doi.org/10.3389/fspor.2021.601420>
- Heckman, J. J. (1990). Selection bias and self-selection. In *Econometrics* (pp. 201-224). Springer.
- Hellard, M., Motorniak, D., Tse, W. C., Saich, F., & Stoové, M. (2023). Engaging with communities to encourage adoption of a harm reduction approach to COVID-19.

- Australian and New Zealand journal of public health*, 47(2), 100022-100022.
<https://doi.org/10.1016/j.anzjph.2023.100022>
- Henderson, F. (2023). *A Functional Cross-training Approach to Enhance Strength, Cardiovascular Function, and Movement Execution of Contemporary Floorwork in Collegiate Dancers* (Publication Number 30525966) [M.A., University of California, Irvine]. ProQuest One Academic. United States -- California.
<http://ezproxy.waikato.ac.nz/login?url=https://www.proquest.com/dissertationstheses/functional-cross-training-approach-enhance/docview/2854302962/se-2?accountid=17287>
https://waikato.primo.exlibrisgroup.com/openurl/64WAIKATO_INST/64WAIKATO?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&atitle=&title=A+Functional+Crosstraining+Approach+to+Enhance+Strength%2C+Cardiovascular+Function%2C+and+Movement+Execution+of+Contemporary+Floorwork+in+Collegiate+Dancers&issn=&date=2023-01-01&volume=&issue=&spage=&au=Henderson%2C+Frankie&isbn=9798380131261&jtit le=&bttitle=&rft_id=info:eric/&rft_id=info:doi/
- Henneberg, S. (2015). *Urinary Tract Infections*. The Rosen Publishing Group, Inc.
- Hilberg, T., Ransmann, P., & Hagedorn, T. (2021). Sport and Venous Thromboembolism—Site, Accompanying Features, Symptoms, and Diagnosis. *Dtsch Arztebl Int*, 118(11), 181-187.
<https://doi.org/10.3238/arztebl.m2021.0021>
- Himmelstein, D. U., & Woolhandler, S. (2008). Privatization in a Publicly Funded Health Care System: The U.S. Experience. *International Journal of Health Services*, 38(3), 407-419.
<https://doi.org/10.2190/HS.38.3.a>
- Hirasawa, Y., & Sakakida, K. (1983). Sports and peripheral nerve injury. *The American journal of sports medicine*, 11(6), 420-426. <https://doi.org/10.1177/036354658301100607> Ho, M. (2018). *History of Dance Medicine* Harvard University].
- Holt, J. (2017). Sport as art, dance as sport. *Auc Kinanthropologica*, 53(2), 138-145.
- Hootman, J. M., Dick, R., & Agel, J. (2007). Epidemiology of collegiate injuries for 15 sports: summary and recommendations for injury prevention initiatives. *J Athl Train*, 42(2), 311-319.
- Hopkins, S. J. (2004a). "Let the Drag Race Begin". *Journal of Homosexuality*, 46(3-4), 135-149.
https://doi.org/10.1300/J082v46n03_08
- Hopkins, S. J. (2004b). "Let the Drag Race Begin": The Rewards of Becoming a Queen. *Journal of Homosexuality*, 46(3-4), 135-149. https://doi.org/10.1300/J082v46n03_08
- Hughes, R., & Coakley, J. (1991). Positive Deviance among Athletes: The Implications of Overconformity to the Sport Ethic. *Sociology of Sport Journal*, 8(4), 307-325.
<https://doi.org/10.1123/ssj.8.4.307>
- Jatrana, S., & Crampton, P. (2009). Primary health care in New Zealand: Who has access? *Health Policy*, 93(1), 1-10. <https://doi.org/https://doi.org/10.1016/j.healthpol.2009.05.006>
- Jones, N. A. (2017). Update on the US Census Bureau's race and ethnic research for the 2020 Census. *Survey News*, 3(5).
- Kaminski, E., & Taylor, V. (2008). 'We're not just lip-synching up here': Music and Collective Identity in Drag Performances. *Identity work in social movements*, 47-76.

- Kamphoff, C. S., Gill, D. L., & Huddleston, S. (2005). Jealousy in Sport: Exploring Jealousy's Relationship to Cohesion. *Journal of Applied Sport Psychology*, 17(4), 290-305. <https://doi.org/10.1080/10413200500313578>
- Karvonen, J. (1992). Importance of warm-up and cool down on exercise performance. In *Medicine in sports training and coaching* (Vol. 35, pp. 189-214). Karger Publishers.
- Kassing, G. (2013). *Beginning ballet*. Human Kinetics.
- Katz, R. V., Kegeles, S. S., Kressin, N. R., Green, B. L., Wang, M. Q., James, S. A., Russell, S. L., & Claudio, C. (2006). The Tuskegee Legacy Project: willingness of minorities to participate in biomedical research. *Journal of health care for the poor and underserved*, 17(4), 698-715.
- Keenan, H., & Hot Mess, L. M. (2020). Drag pedagogy: The playful practice of queer imagination in early childhood. *Curriculum Inquiry*, 50(5), 440-461. <https://doi.org/10.1080/03626784.2020.1864621>
- KELLEY, K., CLARK, B., BROWN, V., & SITZIA, J. (2003). Good practice in the conduct and reporting of survey research. *International Journal for Quality in Health Care*, 15(3), 261-266. <https://doi.org/10.1093/intqhc/mzg031>
- Kerr, G., Krasnow, D., & Mainwaring, L. (1992). The nature of dance injuries. *Medical Problems of Performing Artists*, 7(1), 25-29.
- Khubchandani, K. (2015). Lessons in Drag: An Interview with LaWhore Vagistan. *Theatre Topics*, 25(3), 9. <https://doi.org/10.1353/tt.2015.0040>
- Klemp, P., Stevens, J. E., & Isaacs, S. (1984). A hypermobility study in ballet dancers. *The Journal of rheumatology*, 11(5), 692-696. <http://europepmc.org/abstract/MED/6334748>
- Koudelková, A., & Kosová, J. (2008). Sport studies: Fundamental terminology in English,(electronic publication). *Praha: Univerzita Karlova*.
- Koutedakis, Y., & Jamurtas, A. (2004). The Dancer as a Performing Athlete. *Sports Medicine*, 34(10), 651-661. <https://doi.org/10.2165/00007256-200434100-00003>
- Koutedakis, Y., Sharp, N. C. C., & Boreham, C. (1999). *The Fit and Healthy Dancer*. Wiley. <https://books.google.co.nz/books?id=0QJtAAAAMAAJ>
- Krasnow, D., Kerr, G., & Mainwaring, L. (1994). Psychology of dealing with the injured dancer. *Medical Problems of Performing Artists*, 9(1), 7-9.
- Lavrakas, P. (2008). Encyclopedia of Survey Research Methods. In. SAGE Publications, Inc. <https://doi.org/10.4135/9781412963947>
- Lawrence, T. (1989). A history of drag balls, houses and the culture of voguing. *Voguing and the house ballroom scene of New York City*, 92, 20-25.
- Lazar, M., & Davenport, L. (2018). Barriers to Health Care Access for Low Income Families: A Review of Literature. *Journal of Community Health Nursing*, 35(1), 28-37. <https://doi.org/10.1080/07370016.2018.1404832>
- LeBlanc, R. (2024). *Work It: An Ethnography of Drag Performance in Washington, DC* [George Mason University].
- Leibovitch, I., & Mor, Y. (2005). The Vicious Cycling: Bicycling Related Urogenital Disorders. *European Urology*, 47(3), 277-287. <https://doi.org/https://doi.org/10.1016/j.eururo.2004.10.024>
- Leivadi, S., Hernandez-Reif, M., Field, T., O'Rourke, M., D'Arienzo, S., Lewis, D., del Pino, N., Schanberg, S., & Kuhn, C. (1999). Massage Therapy and Relaxation Effects on

- University Dance Students. *Journal of Dance Medicine & Science*, 3(3), 108-112.
<https://doi.org/10.1177/1089313x9900300303>
- Li, C., Mei, Q., Gu, Y., & Baker, J. S. (2015). Lower limb kinematics study on female Latin shoes of different heel heights. *International Journal of Biomedical Engineering and Technology*, 18(4), 301-309.
- Li, F., Adrien, N., & He, Y. (2022). Biomechanical Risks Associated with Foot and Ankle Injuries in Ballet Dancers: A Systematic Review. *International Journal of Environmental Research and Public Health*, 19(8), 4916. <https://www.mdpi.com/1660-4601/19/8/4916>
- Liederbach, M. (1997). Movement and function in dance. *Functional Evaluation and Outcomes in Sports and Orthopaedic Physical Therapy*. New York: Churchill Livingstone.
- Liederbach, M. (2000). General considerations for guiding dance injury rehabilitation. *Journal of Dance Medicine & Science*, 4(2), 54-65.
- Liederbach, M., & Richardson, M. (2007). The importance of standardized injury reporting in dance. *Journal of Dance Medicine & Science*, 11(2), 45-48.
- Lochbaum, M., Cooper, S., & Limp, S. (2022). The Athletic Identity Measurement Scale: A Systematic Review with Meta-Analysis from 1993 to 2021. *Eur J Investig Health Psychol Educ*, 12(9), 1391-1414. <https://doi.org/10.3390/ejihpe12090097>
- Loland, S., Skirstad, B., & Waddington, I. (2006). *Pain and injury in sport: Social and ethical analysis*. Routledge.
- Lopez, R., Long, S., Moffit, D., & Ashley Crossway, D. (2021). Intersectionality: the role of the athletic trainer in providing culturally competent patient-centered care. *Clinical Practice in Athletic Training*, 4(1).
- Loy, S. F., Hoffmann, J. J., & Holland, G. J. (1995). Benefits and Practical Use of Cross-Training in Sports. *Sports medicine (Auckland)*, 19(1), 1-8.
<https://doi.org/10.2165/00007256199519010-00001>
- Luzum, K. L. (2012). Perceptions of the Motivational Climate, Athletic Identity, and Sport Ethic in Relation to Athletic Injury.
- Madrigal, L., Robbins, J., Gill, D. L., & Wurst, K. (2015). A pilot study investigating the reasons for playing through pain and injury: Emerging themes in men's and women's collegiate rugby. *The Sport Psychologist*, 29(4), 310-318.
- Maeckelberghe, E. (2004). Feminist Ethic of Care: A Third Alternative Approach. *Health Care Analysis*, 12(4), 317-327. <https://doi.org/10.1007/s10728-004-6639-6>
- Mainwaring, L. M., & Finney, C. (2017). Psychological risk factors and outcomes of dance injury: A systematic review [Report]. *Journal of Dance Medicine & Science*, 21, 87+.
<http://dx.doi.org.ezproxy.waikato.ac.nz/10.12678/1089-313X.21.3.87>
- Malanga, G. A., Yan, N., & Stark, J. (2015). Mechanisms and efficacy of heat and cold therapies for musculoskeletal injury. *Postgraduate Medicine*, 127(1), 57-65.
<https://doi.org/10.1080/00325481.2015.992719>
- Malcolm, D. (2006). Sports Medicine: A Very Peculiar Practice?: Doctors and Physiotherapists in Elite English Rugby Union 1. In *Pain and injury in sport* (pp. 165-180). Routledge.
- Malliou, P., Rokka, S., Beneka, A., Mavridis, G., & Godolias, G. (2007). Reducing risk of injury due to warm up and cool down in dance aerobic instructors. *Journal of Back and Musculoskeletal Rehabilitation*, 20, 29-35. <https://doi.org/10.3233/BMR-2007-20105>
- Mao, H. (2024). The Relationship between High Heels and Ankle Injury in Latin Dance. *Journal of Human Movement Science*.

- Māori health models – Te Whare Tapa Whā*. (01 December 2023). Ministry of Health NZ. <https://www.health.govt.nz/our-work/populations/maori-health/maori-health-models/maori-health-models-te-whare-tapa-wha>
- Mark, G., Chamberlain, K., & Boulton, A. (2017). Acknowledging the Māori cultural values and beliefs embedded in rongoā Māori healing. *International Journal of Indigenous Health*, 12(1), 75-92. <https://doi.org/10.18357/ijih121201716902>
- Markula, P. (2018). The intersections of dance and sport. *Sociology of Sport Journal*, 35(2), 159-167.
- Marsh, H. W. (1993). Physical Fitness Self-Concept: Relations of Physical Fitness to Field and Technical Indicators for Boys and Girls Aged 9-15. *Journal of Sport and Exercise Psychology*, 15(2), 184-206. <https://doi.org/10.1123/jsep.15.2.184>
- Martin, L., & Fogarty, G. (2008). Is there a basis for the notion of athletic identity? , 164-168.
- Mathews, D. K., Fox, E. L., & Tanzi, D. (1969). Physiological responses during exercise and recovery in a football uniform. *Journal of Applied Physiology*, 26(5), 611-615. <https://doi.org/10.1152/jappl.1969.26.5.611>
- Matsuzaka, S., Romanelli, M., & Hudson, K. D. (2021). “Render a service worthy of me”: A qualitative study of factors influencing access to LGBTQ-specific health services. *SSM - Qualitative Research in Health*, 1, 100019. <https://doi.org/https://doi.org/10.1016/j.ssmqr.2021.100019>
- McCoy, B., Sanders, S., Charles, R., Bailey, F., Barbato, R., & Campbell, T. (2019-present). *RuPaul’s Drag Race UK*.
- McGorm, H., Roberts, L. A., Coombes, J. S., & Peake, J. M. (2018). Turning Up the Heat: An Evaluation of the Evidence for Heating to Promote Exercise Recovery, Muscle Rehabilitation and Adaptation. *Sports Medicine*, 48(6), 1311-1328. <https://doi.org/10.1007/s40279-018-0876-6>
- Miller, C. (2006). Dance medicine: current concepts. *Phys Med Rehabil Clin N Am*, 17(4), 803-811, vii. <https://doi.org/10.1016/j.pmr.2006.06.005>
- Moncrieff, M., & Lienard, P. (2017). A Natural History of the Drag Queen Phenomenon. *Evolutionary Psychology*, 15(2), 1474704917707591. <https://doi.org/10.1177/1474704917707591>
- Mondal, S., Yadav, A. K., & Ghosh, C. (2014). USE OF JACUZZI BATH FOR LOWER LIMBS TIREDNESS RECOVERY AFTER STRENUOUS WORKOUT: A Controversial FINDING. Proceedings of National Seminar on Fitness and Wellness,
- Mukhopadhyay, K. (2022). Modern scientific innovations in warming up and cool-down in sports. *J Adv Sport Phys Edu*, 5(7), 166-175.
- Murray, B. (2007). Hydration and Physical Performance. *Journal of the American College of Nutrition*, 26(sup5), 542S-548S. <https://doi.org/10.1080/07315724.2007.10719656>
- Newton, E. (1979). *Mother camp: Female impersonators in America*. University of Chicago Press.
- Novotny, E., Frank, M. G., & Grizzard, M. (2021). A Laboratory Study Comparing the Effectiveness of Verbal and Nonverbal Rapport-Building Techniques in Interviews. *Communication Studies*, 72(5), 819-833. <https://doi.org/10.1080/10510974.2021.1975141>
- NULL, R. (2021). DECOMPOSING REALNESS: COMPETITION AND JUDGEMENT, DRAG QUEEN IDENTITY PERFORMANCES AND THE FUTURE OF DRAG.

- O'Brien, A. J., Desouza, R., & Baker, M. (2017). Providing culturally safe care. In *Psychiatric and Mental Health Nursing* (pp. 419-430). Routledge.
- O'Hare, P. (2007a). Merseyside, the first harm reduction conferences, and the early history of harm reduction. *The International journal of drug policy*, *18*(2), 141-144.
<https://doi.org/10.1016/j.drugpo.2007.01.003>
- O'Hare, P. (2007b). Merseyside, the first harm reduction conferences, and the early history of harm reduction. *International Journal of Drug Policy*, *18*(2), 141-144.
<https://doi.org/https://doi.org/10.1016/j.drugpo.2007.01.003>
- Ohji, S., Aizawa, J., Hirohata, K., Mitomo, S., Ohmi, T., Jinno, T., Koga, H., & Yagishita, K. (2021). Athletic identity and sport commitment in athletes after anterior cruciate ligament reconstruction who have returned to sports at their pre-injury level of competition. *BMC Sports Science, Medicine and Rehabilitation*, *13*(1). <https://doi.org/10.1186/s13102-02100264-6>
- Östlund, U., Kidd, L., Wengström, Y., & Rowa-Dewar, N. (2011). Combining qualitative and quantitative research within mixed method research designs: a methodological review. *Int J Nurs Stud*, *48*(3), 369-383. <https://doi.org/10.1016/j.ijnurstu.2010.10.005>
- PAPPS, E., & RAMSDEN, I. (1996). Cultural Safety in Nursing: the New Zealand Experience. *International Journal for Quality in Health Care*, *8*(5), 491-497.
<https://doi.org/10.1093/intqhc/8.5.491>
- Parry, J. (2019). E-sports are Not Sports. *Sport, Ethics and Philosophy*, *13*(1), 3-18.
<https://doi.org/10.1080/17511321.2018.1489419>
- Parslow, J. (2020). Not Another Drag Competition: From amateur to professional drag performance. *Performance research*, *25*(1), 18-24.
<https://doi.org/10.1080/13528165.2020.1738108>
- Pasulka, N. (2019). Read My Lips. *SLATE*. Retrieved 19 April 2023, from <https://slate.com/human-interest/2019/06/drag-lip-sync-history-queen-kingperformance.html>
- Phillips, K. A., Morrison, K. R., Andersen, R., & Aday, L. A. (1998). Understanding the context of healthcare utilization: assessing environmental and provider-related variables in the behavioral model of utilization. *Health services research*, *33*(3 Pt 1), 571.
- Pizzarro, J., Chiang, B., Malyavko, A., Monroig, C., Mehran, N., Ahmed, S. I., & Tabaie, S. (2024). Epidemiology of Sports Injuries Among High School Athletes in the United States: Data From 2015 to 2019. *Orthopaedic Journal of Sports Medicine*, *12*(5), 23259671241252637. <https://doi.org/10.1177/23259671241252637>
- Plano Clark, V. L. (2017). Mixed methods research. *The Journal of Positive Psychology*, *12*(3), 305-306.
- Pomerantz, A. (2017). Big-Girls Don't Cry: Portrayals of the Fat Body in RuPaul's Drag Race. In N. Brennan & D. Gudelunas (Eds.), *RuPaul's Drag Race and the Shifting Visibility of Drag Culture: The Boundaries of Reality TV* (pp. 103-120). Springer International Publishing. https://doi.org/10.1007/978-3-319-50618-0_8 Productions,
- W. o. W. (2009-present). *RuPaul's Drag Race*.
- Productions, W. o. W. (2021a). *RuPaul's Drag Race Down Under*.
- Productions, W. o. W. (2021b). *RuPaul's Drag Race UK*.

- Redman, K. J., Wade, L., Kelly, V. G., Connick, M. J., & Beckman, E. M. (2022). Effects of the Off-Season on Muscular Power in Professional Rugby League. *International Journal of Sports Physiology and Performance*, 17(5), 733-738.
<https://doi.org/10.1123/ijsp.20210238>
- Reed, B. (2019). 'Finally! A sport for us gay people!': how drag went mainstream. *The Guardian*. <https://www.theguardian.com/culture/2019/aug/10/how-drag-went-mainstream-rupaul-karen-from-finance-drag-sos>
- Requena, B., García, I., Suárez-Arrones, L., Sáez de Villarreal, E., Naranjo Orellana, J., & Santalla, A. (2017). Off-Season Effects on Functional Performance, Body Composition, and Blood Parameters in Top-Level Professional Soccer Players. *The Journal of Strength & Conditioning Research*, 31(4), 939-946.
<https://doi.org/10.1519/jsc.0000000000001568>
- Rivers, P. A., & Patino, F. G. (2006). Barriers to health care access for Latino immigrants in the USA. *International Journal of Social Economics*, 33(3), 207-220.
<https://doi.org/10.1108/03068290610646234>
- Robinson, S. (2021). Black Ballerinas: The Management of Emotional and Aesthetic Labor*. *Sociological Forum*, 36(2), 491-508. <https://doi.org/10.1111/socf.12689>
- Robledo, J. (2023). Drag Race star Trinity the Tuck opens up about her graphic season 9 injury: "It was bad". *GAY TIMES*. <https://www.gaytimes.co.uk/drag/drag-race-star-trinity-the-tuck-opens-up-about-her-graphic-season-9-injury-it-was-bad/>
- Ronkainen, N. J., Kavoura, A., & Ryba, T. V. (2016). Narrative and discursive perspectives on athletic identity: Past, present, and future. *Psychology of Sport and Exercise*, 27, 128-137.
<https://doi.org/https://doi.org/10.1016/j.psychsport.2016.08.010>
- Ross, K. (2017). Making empowering choices: How methodology matters for empowering research participants. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*,
- Rossmann, G. B., & Wilson, B. L. (1985). Numbers and Words: Combining Quantitative and Qualitative Methods in a Single Large-Scale Evaluation Study. *Evaluation Review*, 9(5), 627-643. <https://doi.org/10.1177/0193841x8500900505>
- Ryan, A. J. (1997). Early history of dance medicine. *Journal of Dance Medicine & Science*, 1(1), 30-34.
- Salvatore, J., & Marecek, J. (2010). Gender in the Gym: Evaluation Concerns as Barriers to Women's Weight Lifting. *Sex Roles*, 63(7-8), 556-567.
<https://doi.org/https://doi.org/10.1007/s11199-010-9800-8>
- Sandelowski, M. (2000). Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Res Nurs Health*, 23(3), 246-255.
[https://doi.org/10.1002/1098-240x\(200006\)23:3<246::aid-nur9>3.0.co;2-h](https://doi.org/10.1002/1098-240x(200006)23:3<246::aid-nur9>3.0.co;2-h)
- Satta, M. (2023). Shantay Drag Stays: Anti-Drag Laws Violate the First Amendment. *Geo. J. Gender & L.*, 25, 95.
- Schantz, P., & Åstrand, P.-O. (1984). Physiological characteristics of classical ballet. *Medicine and science in sports and exercise*, 16(5), 472-476.
- Scharff, D. P., Mathews, K. J., Jackson, P., Hoffsuemmer, J., Martin, E., & Edwards, D. (2010). More than Tuskegee: understanding mistrust about research participation. *Journal of health care for the poor and underserved*, 21(3), 879-897.

- Schoen, C., Osborn, R., Squires, D., & Doty, M. M. (2013). Access, Affordability, And Insurance Complexity Are Often Worse In The United States Compared To Ten Other Countries. *Health Affairs*, 32(12), 2205-2215. <https://doi.org/10.1377/hlthaff.2013.0879>
- Semp, D., & Madgeskind, S. (2000). Gay practices for harm reduction: inviting lesbians, gay men, and takataapui to be part of alcohol and drug harm reduction. *Journal of substance use*, 5(2), 92-98. <https://doi.org/10.3109/14659890009053071>
- Shah, S., Weiss, D. S., & Burchette, R. J. (2012). Injuries in professional modern dancers: incidence, risk factors, and management. *J Dance Med Sci*, 16(1), 17-25.
- Sheppard, A. (2019). *Dancers Are Athletes, But Why Aren't They Treated As One On Campus* (Publication Number 13903906) [M.F.A., Saint Mary's College of California]. ProQuest One Academic. United States -- California. <http://ezproxy.waikato.ac.nz/login?url=https://www.proquest.com/dissertationtheses/dancers-are-athletes-why-arent-they-treated-as/docview/2276076592/se-2?accountid=17287>
- https://waikato.primo.exlibrisgroup.com/openurl/64WAIKATO_INST/64WAIKATO?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&atitle=&title=Dancers+Are+Athletes%2C+But+Why+Aren%27t+They+Treated+As+One+On+Campus&issn=&date=2019-0101&volume=&issue=&spage=&au=Sheppard%2C+Alexandra&isbn=9781085687317&jt itle=&btile=&rft_id=info:eric/&rft_id=info:doi/
- Shirreffs, S. M. (2005). The Importance of Good Hydration for Work and Exercise Performance. *Nutrition Reviews*, 63(suppl_1), S14-S21. <https://doi.org/10.1111/j.17534887.2005.tb00149.x>
- Shirreffs, S. M., & Maughan, R. J. (2006). The Effect of Alcohol on Athletic Performance. *Current Sports Medicine Reports*, 5(4), 192-196. <https://doi.org/10.1097/01.CSMR.0000306506.55858.e5>
- Shkedy, Z., Sengupta, R., & Perualila, N. J. (2016). Identification of Local Patterns in the NBA Performance In-dicators. In *Applied Biclustering Methods for Big and High-Dimensional Data Using R* (pp. 323-344). Chapman and Hall/CRC.
- Shrier, I., & Hallé, M. (2011). Psychological predictors of injuries in circus artists: an exploratory study. *British Journal of Sports Medicine*, 45(5), 433-436. <https://doi.org/10.1136/bjism.2009.067751>
- Shrier, I., Meeuwisse, W. H., Matheson, G. O., Wingfield, K., Steele, R. J., Prince, F., Hanley, J., & Montanaro, M. (2009). Injury patterns and injury rates in the circus arts: an analysis of 5 years of data from Cirque du Soleil. *The American journal of sports medicine*, 37(6), 1143-1149.
- Singh, A. A., Richmond, K., & Burnes, T. R. (2013). Feminist Participatory Action Research with Transgender Communities: Fostering the Practice of Ethical and Empowering Research Designs. *International Journal of Transgenderism*, 14(3), 93-104. <https://doi.org/10.1080/15532739.2013.818516>
- Single, E. (1995). Defining harm reduction. *Drug and Alcohol Review*, 14(3), 287-290.
- Sood, R., & Sood, J. (2015). Primary Health Care in New Zealand-Lessons That Can Be Learned. *Indian Journal of Community & Family Medicine*, 1(02).

- Sopitarchasak, S. (2023). What It Means to be a Drag Queen in Thailand: A Qualitative Study. *Asia-Pacific Social Science Review*, 23(1).
- Sparkes, A. C. (1998). Athletic identity: An Achilles' heel to the survival of self. *Qualitative health research*, 8(5), 644-664.
- Squitiere, R. N. (2010). *Costume design for "Rent"* (Publication Number 1479038) [M.F.A., Temple University]. ProQuest One Academic. United States -- Pennsylvania.
<http://ezproxy.waikato.ac.nz/login?url=https://www.proquest.com/dissertationstheses/costume-design-rent/docview/743816157/se-2?accountid=17287>
https://waikato.primo.exlibrisgroup.com/openurl/64WAIKATO_INST/64WAIKATO?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations&sid=ProQ:ProQuest+Dissertations+%26+Theses+Global&atitle=&title=Costume+design+for+%E2%80%9CRent%E2%80%9D&issn=&date=2010-01-01&volume=&issue=&spage=&au=Squitiere%2C+Rita+Noelle&isbn=978-1-124-10500-0&jtitle=&bttitle=&rft_id=info:eric/&rft_id=info:doi/
- Starosta, W. (2006). The concept of modern training in sport. *Studies in Physical Culture & Tourism*, 13(2).
- Stats, N. (2024). Linking 2023 Census responses to the Integrated Data Infrastructure. In: in May 2024 by Stats NZ Tauranga Aotearoa Wellington, New Zealand.
- Stevens, P. E., & Keigher, S. M. (2009). Systemic Barriers to Health Care Access for U.S. Women with HIV: The Role of Cost and insurance. *International Journal of Health Services*, 39(2), 225-243. <https://doi.org/10.2190/HS.39.2.a>
- Stubbe, J. H., Richardson, A., & Rijn, R. M. v. (2018). Prospective cohort study on injuries and health problems among circus arts students. *BMJ Open Sport & Exercise Medicine*, 4(1), e000327. <https://doi.org/10.1136/bmjsem-2017-000327>
- Sweeney, E. (2019). *Gymnastics medicine: evaluation, management and rehabilitation*. Springer Nature.
- Tabler MS, J., Scammon, M., Debra, L., Kim PhD, J., Farrell MD, T., Tomoiaia-Cotisel, M., & Magill MD, M. K. (2014). Patient care experiences and perceptions of the patient-provider relationship: A mixed method study. *Patient Experience Journal*, 1(1), 75-87.
- Tacuri, N., Zinga, D., & Molnar, D. (2023). Sport, Art, or Both? Analyzing Perceptions of Competitive Dancers as Interuniversity Artists and Athletes. *International Journal of Sport & Society*, 14(2).
- Taimela, S., Kujala, U. M., & Osterman, K. (1990). Intrinsic Risk Factors and Athletic Injuries. *Sports Medicine*, 9(4), 205-215. <https://doi.org/10.2165/00007256-199009040-00002>
- Tallman, R. (2020). The Compromising Interpretive Model as a Harm Reduction Strategy for Families that Have Chosen High School Football. *The Journal of Clinical Ethics*, 31(4), 338-339. <https://doi.org/10.1086/jce2020314338>
- Timmer, J. (2023). Anti-Drag Laws and Free Speech: The First Amendment Case for Protecting Drag. *Fordham Intell. Prop. Media & Ent. LJ*, 34, 949.
- Tlougan, B. E., Mancini, A. J., Mandell, J. A., Cohen, D. E., & Sanchez, M. R. (2011). Skin Conditions in Figure Skaters, Ice-Hockey Players and Speed Skaters. *Sports Medicine*, 41(9), 709-719. <https://doi.org/10.2165/11590540-000000000-00000>
- Truszczynski, M., Truszczynski, N., Estevez, R. I., & Elliott, A. E. (2022). Does policy matter? The impact of state and city anti-discrimination policy on the discrimination experiences of trans and nonbinary people. *Sexuality Research and Social Policy*, 19(4), 1786-1794.

- Veroneau, B., Tadlock, B., Christopher, S., Vallabhajosula, S., Knab, A., Harnish, C., & Bullock, G. (2020). The Effect Of Injuries And Pain On Athletic Identity Across NCAA Divisions: 3523 Board #344 May 29 2:30 PM - 4:00 PM. *Medicine & Science in Sports & Exercise*, 52(7S), 978. <https://doi.org/10.1249/01.mss.0000686204.00908.e8>
- Waddington, I. (1996). The Development of Sports Medicine. *Sociology of Sport Journal*, 13(2), 176-196. <https://doi.org/10.1123/ssj.13.2.176>
- Waddington, I., & Brissonneau, C. (2023). The ‘physician-athlete’ and the development of sports medicine as a ‘very peculiar practice’. *Sport in Society*, 26(5), 820-836. <https://doi.org/10.1080/17430437.2022.2069012>
- Wanke, E. M., Arendt, M., Mill, H., Koch, F., Wanke, A., & Groneberg, D. A. (2014). Traumatic Injuries in Revue Dancers. *Journal of Dance Medicine & Science*, 18(1), 22-28. <https://doi.org/10.12678/1089-313x.18.1.22>
- Weightman, D., & Browne, R. C. (1975). Injuries in Eleven Selected Sports. *British Journal of Sports Medicine*, 9(3), 136. <https://doi.org/10.1136/bjism.9.3.136>
- Wiktorsson-Moller, M., Öberg, B., Ekstrand, J., & Gillquist, J. (1983). Effects of warming up, massage, and stretching on range of motion and muscle strength in the lower extremity. *The American journal of sports medicine*, 11(4), 249-252. <https://doi.org/10.1177/036354658301100412>
- Williams, M. (2020). Wellington's 'Drag Kings': Comedy, cabaret and community. *Women's Studies Journal*, 34(1/2), 68-75. <http://ezproxy.waikato.ac.nz/login?url=https://www.proquest.com/scholarlyjournals/wellingtons-drag-kings-comedy-cabaret-community/docview/2465808079/se-2?accountid=17287>
- https://waikato.primo.exlibrisgroup.com/openurl/64WAIKATO_INST/64WAIKATO?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Aanz&atitle=Wellington%27s+%27Drag+Kings%27%3A+Comedy%2C+cabaret+and+community&title=Women%27s+Studies+Journal&issn=01124099&date=2020-1201&volume=34&issue=1%2F2&spage=68&au=Williams%2C+Meghan&isbn=&jtitle=Women%27s+Studies+Journal&bttitle=&rft_id=info:eric/&rft_id=info:doi/
- Willix, P. A., Meghna; Akinwumi, Stella (2023). The dangers of being a drag queen: ‘I snapped my hamstring doing jump splits’. *Metro*. Retrieved 29 November 2023, from
- Wolfenden, H. E., & Angioi, M. (2017). Musculoskeletal Injury Profile of Circus Artists: A Systematic Review of the Literature. *Med Probl Perform Art*, 32(1), 51-59. <https://doi.org/10.21091/mppa.2017.1008>
- Working With ACC. (2024). Advance Physiotherapy. <https://www.advancephysiotherapy.co.nz/working-with-acc.html>

APPENDIX A: UNIVERSITY OF WAIKATO ETHICS APPROVAL

The University of Waikato
Private Bag 3105
Gate 1, Knighton Road
Hamilton, New Zealand

Human Research Ethics Committee
Roger Moltzen
Telephone: +64021658119
Email: humanethics@waikato.ac.nz



THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

2 October 2023

Marisa Diamond
Te Huataki Waiaora School of Health
DHECS
By email: marisadiamond128@gmail.com

Dear Marisa

HREC(Health)2023#27 : The Physicality of Drag Performance – training, injury, and sports medicine support

Thank you for your responses to the Committee feedback.

We are now pleased to provide formal approval for your project.

Please contact the Committee by email (humanethics@waikato.ac.nz) if you wish to make changes to your project as it unfolds, quoting your application number with your future correspondence. Any minor changes or additions to the approved research activities can be handled outside the monthly application cycle.

We wish you all the best with your research.

Regards,

A handwritten signature in black ink, appearing to read 'RM', enclosed in a rectangular box.

Emeritus Professor Roger Moltzen MNZM
Chairperson
University of Waikato Human Research Ethics Committee

APPENDIX B: SURVEY DESIGN

Welcome to the Physicality of Drag study!

We are interested in understanding how drag queens experience injury and healthcare. You will be asked questions about your previous athletic experience, your drag queen experience, injury prevention, occurrence, and rehabilitation, and healthcare experiences. Please be assured that your responses will be kept completely confidential. Data from this survey will be used for a University of Waikato Master of Health, Sport, and Human Performance thesis. Other possible future outputs for survey data include: academic journal articles, pop culture articles, documentaries, media releases, conference presentations and papers.

The study should take you approximately 15 minutes to complete. Your participation in this research is voluntary. You have the right to withdraw at any point during the survey, for any reason, and without any prejudice. If you choose not to complete this survey for any reason, this will be considered a withdrawal of consent, and all recorded answers will be disregarded in data collection. Once the survey is complete, you may not withdraw your answers, as this is an anonymous survey. If you have any questions or concerns, you may contact the primary researcher at md237@students.waikato.ac.nz or the research supervisor, Holly Thorpe at holly.thorpe@waikato.ac.nz

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time during the survey duration and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device”

Survey Questions

Are you a working drag queen?

While this thesis acknowledges the significance of *all* drag royalty, this study is limited to only drag queens.

Yes

No

A “No” answer will end the survey and thank the participant for their time. This data will not be recorded.

What country do you primarily work in as a drag queen?

Aotearoa New Zealand

United States of America

Other

An “Other” answer will end the survey and thank the participant for their time. This data will not be recorded.

An “Aotearoa New Zealand” answer will direct the participant to Q. 3B

A “United States of America” answer will direct the participant to Q. 3A.1 & 3A.2

3A.1 What is your ethnicity?

- Hispanic or Latino
- Not Hispanic or Latino
- Prefer not to say

3A.2 Choose one or more races that you consider yourself to be

- White or Caucasian
- Black or African American
- American Indian/Native American or Alaska Native
- Asian
- Native Hawaiian or Other Pacific Islander
- Other
- Prefer not to say

3B. What ethnic group do you belong to?

Select all that apply

- Māori
- New Zealand European
- Other European
- Asian
- Pacific Peoples
- Middle Eastern
- Latin American
- African
- Prefer not to say
- Other, please specify (text box)

4. What is your gender identity?

- Cis Man
- Transgender Man
- Cis Woman
- Transgender Woman
- Non-Binary
- Other
- Prefer not to say

5. Age

Options for 18-99+

6. Have you received, or have you ever, any form of hormone treatment, including HRT, hormonal birth control, hormone blockers, etc.?

- Yes, currently
- Yes, I have in the past but no longer do

No
Prefer not to say

7. How many years have you been performing in drag? Options for >1-40+
8. Prior to performing in drag, which of the following have you participated in for over a year regularly (2 or more times/week):

Select all that apply.

- Organised Competitive Sports
- Formal Dance Training
- Circus Arts
- Martial Arts
- Other Organised Athletic Activity, please specify (text box)
- None of the above

If any of the above responses are selected other than “None of the above,” then the participant will be directed to Q.8.

If “None of the above” is selected, then participant will skip to Q.9.

9. How many years did you participate in the above activity? Organised Competitive Sports (text box for numerical entry)
- Formal Dance Training (text box for numerical entry)
 - Circus Arts (text box for numerical entry)
 - Martial Arts (text box for numerical entry)
 - Other Organised Athletic Activity, please specify (text box for numerical entry)

10. Do you have experience seeking sports medicine care (i.e., orthopedic doctors, physiotherapy/physical therapy, sports psychology, sports nutritionists) *prior* to starting drag?

Yes
Maybe
No

If any of the above responses are selected other than “No” then the participant will be directed to Q.11.

If “No” is selected, then participant will skip to Q.12

11. Rate the quality of care you received.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	⊙ N/A
Did your provider effectively manage your physical body?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did your provider understand the physical requirements of your sport or other physical activity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If injured, did your provider understand the actions that led to injury?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. As a professional drag queen, do you do anything to look after your body and prevent injury?

Yes

No

Maybe/I don't know

If any of the above responses are selected other than "No" then the participant will be directed to Q.13.

If "No" is selected, then participant will skip to Q.15

13. If you engage in injury prevention, which of the following do you do?

Independent exercise (going to the gym, practicing pilates or yoga without an instructor)

Warm up pre-performance

Cool down post-performance

Perform sober

Maintain balanced nutrition

Drink at least 2 litres of water/day

Prioritise 6-8 hours of sleep/night

Regular rehearsal/practice of drag

Annual checkup/physical appointments with a GP or PCP

Massage therapy

Physiotherapy/physical therapy

Acupuncture

Work with a personal trainer

Attend instructor-led exercise or dance classes

Visit with a mental health provider, such as a sports psychologist or performance coach

Other, please specify (text box)

None of the above

If any of the following responses are selected, then the participant will be directed to Q.14.

- Annual checkup/physical appointments with a GP or PCP
- Massage therapy
- Physiotherapy/physical therapy
- Acupuncture
- Work with a personal trainer
- Visit with a mental health provider, such as a sports psychologist or performance coach
- Other, please specify (text box)

If any of the following responses are selected, then participant will skip to Q.15.

- Independent exercise (going to the gym, practicing pilates or yoga without an instructor)
- Warm up pre-performance
- Cool down post-performance
- Perform sober
- Maintain balanced nutrition
- Drink at least 2 litres of water/day
- Prioritise 6-8 hours of sleep/night
- Regular rehearsal/practice of drag
- Attend instructor-led exercise or dance classes

14. If you have sought out preventative medical or healthcare, please rate your provider

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Was your physical body well taken care of by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Were the physical requirements of being a drag queen understood by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If known to your provider, was your identity as a drag queen respected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was your identity respected by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. What are the most common injuries for drag queens you have seen or heard of?

Fractures

Sprains
Strains
Concussions
Tendonitis
Dislocations
Minor injuries, please specify (text box)
Other, please specify (text box) Location
Foot
Ankle
Knee
Hip
Leg
Spine/Back
Ribs
Hand
Wrist
Elbow
Shoulder
Neck
Other (text box)

16. Have you been injured while performing or rehearsing in drag?

Yes
Maybe/I don't know
No

If any of the above responses are selected other than "No" then the participant will be directed to Q.17.

If "No" is selected, then participant will skip to Q.18

17. If yes, what was your injury? Please report multiple, if applicable. (Text box)

18. Have you performed in drag while injured?

Yes
No

19. Have you ever sought professional healthcare for an injury sustained while performing or rehearsing in drag?

Yes
No

If "Yes" is selected, then the participant will be directed to Q.20-21. If "No" is selected, then participant will skip to Q.22

20. If yes, what kind of provider did you see? General Practitioner/Primary Care Provider

Orthopedic Doctor
 Sports Medicine Specialist
 Physiotherapist/Physical Therapist
 Massage Therapist
 Acupuncturist
 Athletic Trainer
 Other provider, please specify (text box)

21. If you saw a provider, rate your provider experience

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Was your physical body well taken care of by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Were the physical mechanisms of injury considering drag were understood by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If known to your provider, was your identity as a drag queen respected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was your identity respected by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. If you have sustained injury while performing or rehearsing in drag, have you sought any of the following post-injury care:

- Medication – over the counter painkillers
- Medication – prescribed medication for your injury
- Medication – AOD (alcohol and other drug)
- Time off from drag and other physical activity
- Continued ongoing physiotherapy/physical therapy
- Continued ongoing massage therapy
- Continued ongoing acupuncture
- Other, please specify (text box)

23. If you saw a provider, please rate your provider experience

	Strongly disagree	Somewhat disagree	agree nor disagree	Somewhat agree	Strongly agree
Was your physical body taken care of by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Were the physical requirements of return-to-work as a drag queen understood by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If known to your provider, was your identity as a drag queen respected?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was your identity respected by your provider?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. At any of these junctures (pre-injury, injury, post-injury), have you experienced barriers to receiving care?

Yes

Maybe/I don't know

No

If any of the above responses are selected other than "No" then the participant will be directed to Q.25.

If "No" is selected, then participant will skip to Q.26

25. What barriers have you faced to receiving care?

Select all that apply.

History of negative healthcare/medical experience

History of experienced misunderstanding or disrespect of identity

Cost

Insurance

Fear of identity being misunderstood or disrespected

Did not know what options were

Feelings of shame, embarrassment, or discomfort

Did not have a GP or PCP

Could not get appropriate referrals

Transportation difficulties

Distrust of medicine

Other, please specify (text box)

26. If you have had an experience with any outstanding healthcare providers that you would recommend to other drag queens, please provide a short description of what made their care so high quality.

If you would like to name the provider, so a list of competent drag queen healthcare providers can be compiled and distributed, please do so here.

(Text box)

APPENDIX C: INTERVIEW GUIDE

1. How long have you been doing drag?
2. Do you classify yourself as a specific type of queen?
3. Describe your drag performance, in terms of physicality.
4. What do you do to look after your body (i.e., warm-up, cool down, other types of training, physio, massage)?
5. Could you tell more a bit more about your pre-drag performance routine, if any? What past experiences (i.e., sport, dance, theatre) have shaped your approach to your pre-drag routine?
6. What is your post-drag performance routine, if any?
7. What role does “competition” play in your drag experience?
8. Have you been injured in drag? If so, what, if any (did you choose to seek), care have you received post-injury? Did your provider understand your injury in the context of drag? Did you receive culturally and gender responsive care?
9. Have you received medical care (physiotherapy, sports medicine) from a provider who you would recommend to other drag performers?
10. Do you consider drag performance a form of sport or athletic performance? Please explain what you consider the similarities and differences between drag and sport.
11. Do you think you would have received a different quality of medical care if you were a football player, dancer, gymnast, basketball player, etc.?
12. Do you have a sport/performance background? If so, what is it?
13. What makes someone an athlete?

APPENDIX D: DRAG QUEEN-RECOMMENDED PROVIDERS AND PRACTICES

Capital Care, Wellington

35 Tennyson Street
Te Aro, Wellington 6011
New Zealand Tel: 04 801
8935
admin@capitalcare.org.nz

Evolve Youth Service (Under 25 only)

Level 2 James Smith Building
Corner Cuba & Manners Streets
Wellington
New Zealand
Tel: 04 473 6204 or 0800 380 583
reception@evolveyouth.org.nz

Dr. Paula Weadon, Ponsonby Medical Centre

1 Vermont Street
Ponsonby, Auckland 1011 Tel:
09 378 7916
reception@ponsonbymedical.co.nz

Sara Chatwin, Psychologist

Auckland, New Zealand
shrink@mindworks.co.nz
Tel: 021 276 6845

Habit Health

Multiple locations, Wellington and Upper Hutt
New Zealand info@habit.health

Dr. Leslie Harding, White Cross Lunn Ave.

110 Lunn Ave.
Remuera, Auckland
New Zealand
Tel: 09 570 8899
lunnave@whitecross.co.nz

Taylorred Health & Technologies

Hamilton
New Zealand hello@tayloredtech.io

Tony ter Ellen, Massage Rx

143 Maui Street

Pukete, Hamilton 3200

New Zealand Tel:

021 269 4543

carey@massagerx.co.nz

Athletic HealthCare

6425 South Jones Boulevard, Suite 102

Las Vegas, NV 89118

United States of America Tel: 702

350 0994

jeremy.rice@athletichealthcare.net

Action Sport Physio

4150 Ste-Catherine West, Suite 400

Westmount, QC H3Z 2Y5

Canada

Tel: 514 939 1444