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An Empirically Grounded Theory of Conscientiousness as an Aristotelian Virtue

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Abstract

This thesis is an interdisciplinary project; I develop a new philosophical theory of conscientiousness as a neo-Aristotelian virtue. I then go on to develop two psychometric measures (one general measure and one student specific measure) to investigate whether there is empirical evidence in support of the theory. In doing so, I contribute to a vastly under-researched area of virtue theory — the science of Aristotelian virtues. As discussed in Chapter Two, there are currently no validated measures of any of the Aristotelian virtues. Thus, this area of research is not only of interest to philosophers; it also contributes to the general and scientific understanding of people’s psychology, specifically, their traits, and how these traits influence important factors related to human flourishing.

In this thesis I first explore important theory and research relating to the virtues; this includes both philosophical theories of virtue and the psychological methods used to investigate them. Of particular importance, I also discuss the differences in terminology and approach taken by philosophers and psychologists in their study of traits generally. This then informs my account of the virtue of conscientiousness (or what I refer to as Virtue Conscientiousness), and the related scales of Character Conscientiousness used to measure it. Finally, the methods and results used to assess Character Conscientiousness are presented and discussed. The findings suggest that, as a character trait, conscientiousness consists of two facets: a virtue facet (Virtue Conscientiousness) and an excess facet (Excessive Conscientiousness). This factor structure was replicated between the two scales which were applied to two different samples. Each Facet (in both scales) displayed meaningful relationships with other variables, with Virtue Conscientiousness positively correlating with life satisfaction and with Excessive Conscientiousness positively correlating with depression, anxiety, and stress. Though preliminary, these findings are promising. They support my theory of Character Conscientiousness, and of the claim that conscientiousness is a virtue.

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Introduction

My central aims in this thesis are to develop an Aristotelian account of conscientiousness as a virtue and to see if any empirical evidence can support it. Virtues, in the Aristotelian view,¹ are complex and authentic traits involving a disposition to reason, feel, and behave appropriately. One of the distinguishing features of Aristotelian virtue ethics is its attention to moral psychology. Its central concern is human nature, well-being and the real psychological structure of character and virtue. Despite this, there has been little empirical work on the virtues and vices, with no currently validated measures of Aristotelian virtues. This is surprising, as there are stark differences in the ways psychologists and virtue theorists approach and define traits. For instance, in psychology, conscientiousness is one of the most well established and thoroughly researched personality traits. In virtue theory, conscientiousness has been severely neglected, and indeed, contemporary virtue theorists generally do not include conscientiousness in their list of virtues.

This is an interdisciplinary project. Unlike most previous work in virtue theory² I will draw from and expand on the most current psychological research to argue that conscientiousness, as a trait, also exists as a virtue. Moreover, unlike other psychological work, I will draw from virtue ethics to create an accurate, theory driven, and conceptually robust psychometric measure of conscientiousness as an Aristotelian virtue.

One reason for why this project is important is that there has recently been a resurgence of interest in character in moral and positive psychology (e.g., Miller et al., 2015; Peterson &

¹ From henceforth, I will refer virtues, understood by Aristotelians, as Aristotelian virtues.

² For one example of virtue theory grounded in empirical research, see Snow (2010).

Seligman, 2004). Arguably, for any scientific work on moral character to develop, there needs to be ways of adequately measuring virtues, just like there is of personality in psychology.

Another benefit of cultivating a virtue scale is that it will help counter opponents of virtue ethics who either claim that virtues do not exist, are too rare, too hard to develop, or are just not related to living well. It may also provide new insights in psychology by advancing an alternative way of investigating character. This does not only have the potential to be more conceptually precise, but it also has the potential to be more explanatory and predictive of various desirable outcome variables, like well-being and success.

Below I list five questions that I hope my work will go some way toward answering:³

1. Can psychometric evidence be found that supports a neo-Aristotelian conception of conscientiousness?
2. Can a psychometric measure of character traits help to determine whether people can possess virtues?
3. Is there a difference between the personality trait of conscientiousness and the character trait of conscientiousness?
4. What roles do motivations play in people's tendencies to behave conscientiously?
5. Can evidence be found tying practical wisdom to the character trait of conscientiousness?

³ These questions were inspired by a set of questions by Miller et al., 2015, p. 4.

Overview of Chapters:

In Chapter One, I present and explain the neo-Aristotelian account of virtue. My intention is to provide a clear overview of what a virtue is, and to provide thorough explanations of each constituent part of a virtue. A part of explaining each different component of Aristotelian virtues also involves an explanation of the different Aristotelian character dispositions (these include virtues *and* the other types of character that are non-virtuous). In this sense, the theory in this chapter will be especially useful for the delineation between:

- Character and personality
- Character traits and character types
- Personality traits and personality types
- Character and personality traits and types, on the one hand, and virtues, on the other

These distinctions will be discussed in detail in Chapter Three before putting forward my account of Virtue Conscientiousness (Chapter Four). A clear understanding of the virtues, and the theory behind them is, in my view, essential for any creation of a tool to measure them (Chapter Five).

Because I am taking a partly empirical approach in theorising about Virtue Conscientiousness, I believe it is appropriate to first review previous work relating to the measurement of virtues and character traits. This is done in Chapter Two. Here I discuss previous empirical approaches to virtue, including the situationist critique and psychometric attempts to measure the virtues. I also explain, in relation to Chapter One, why current psychometric measures do not accurately measure Aristotelian virtue.

The second part of my literature review takes place in Chapter Three, where I discuss the differences between personality traits, character traits and virtues generally. This is important because there is already a personality measure of conscientiousness. Because of this, I will

focus on how the approach taken by personality theorists in psychology differs from the way virtue theorists, or more specifically, moral philosophers, theorise about virtues. The conclusion to this is that personality measures of conscientiousness are different and unsuited to the measurement of conscientiousness as a character trait.

In Chapter Four, I put forward my new account of conscientiousness. I start by discussing the possible reasons for why Aristotelians typically don't consider conscientiousness to be a virtue. I then argue that virtue theorists have neglected the importance of real-life obligations, responsibilities and duties that attach themselves to specific roles. I conclude by defining Virtue Conscientiousness in relation to the 'target' of excellence relating to roles and by describing what this virtue would look like in students.

In Chapter Five, I build upon Chapters One, Two, Three and Four by presenting and explaining the two psychometric scales that I have developed, namely general and student-specific conscientiousness. Specifically, I explain how these scales are set up to measure each component of Aristotelian virtue.

Chapter Six follows up on Chapter Five with a presentation of the methodologies, results and discussions for two studies. The first study involves measuring general Character Conscientiousness, and the second study involves measuring student-specific Character Conscientiousness. This chapter finishes with a general discussion; here I argue that the results support my neo-Aristotelian based theory of Character Conscientiousness. In this chapter, I also address limitations, such as the generalisability of the results, and I suggest possible future avenues of research, such as investigating local vs global character traits.

1. Chapter One: Neo-Aristotelian Virtue Theory

1.1 Introduction

This thesis contributes to the debate on Virtue theory. Virtue theory (as opposed to virtue ethics) is a field of study that focuses on a variety of questions about virtue, vice, and character more generally (e.g., what are virtues? How do virtues relate to well-being, religion, and knowledge? And, are virtues reliable and consistent traits?). Virtue theorists (or the group of scholars interested in virtue theory) include scholars in Moral and Political Philosophy, Epistemology, Psychology, and Theology. Examples of virtue theorists include Situationist philosophers who argue that virtues do not exist (e.g., Harman, 1999) and Positive Psychologists who believe that virtues are natural, healthy, and beneficial components of character (e.g., Peterson & Seligman, 2004). Virtue ethics is a normative theory and an alternative to other normative theories like utilitarianism and deontology. There are different versions of virtue ethics, but they all take virtue to be a central or primary concept (e.g., neo-Aristotelian virtue ethics and stoicism). This thesis investigates virtues from neo-Aristotelian perspective; in particular, I am developing a new and empirically supported theory of Virtue Conscientiousness. In this chapter, I explain neo-Aristotelianism, specifically, its conception of the structure, not normativity, of the virtues themselves.

1.2 Behaviours, Motivations and Emotions

Virtues, according to Aristotelians, are personal, complex dispositions of character and are regarded as human excellences (Snow, 2020, p. 3; van Zyl, 2018, p. 23). Virtues are personal because they are deep features of identity; they are more than habitual behaviours or mere 'tendencies'; they constitute core attitudes, values and commitments (Hursthouse, 2001, p. 12; 2016 para. 7). Virtues encompass multiple dimensions; emotional, behavioural, and

intellectual. What primarily distinguishes virtues from other traits — even complex ones — is that they are human excellences. According to Aristotle, virtues both intrinsically and instrumentally contribute to a morally and prudentially good life (*Nicomachean Ethics*, 1097b). In what follows, I explain the various dimensions of the virtues, starting with their psychological facets, before elucidating their association with human excellence and flourishing.

Some examples of the virtues include justice, courage, temperance, and wisdom. These are Aristotle's four cardinal virtues; however, neo-Aristotelians often add others to the list, such as charity, benevolence, and honesty (Snow, 2020, p. 13; Hursthouse, 2001, p. 9). In Chapter Three, I also propose to add conscientiousness to the list. Most non-philosophers use these virtue terms in reference to behaviours. They will tell their friends and children to act honestly by expressing true opinions and by owning up to mistakes (e.g., whether they shattered the fancy vase). People also commonly attribute virtues to people generally; they will say that they trust their friends because they are honest, wise, or kind people. It seems obvious then that having virtues involves behavioural tendencies, and virtue ethicists agree (e.g., Hursthouse, 2001, p. 12). But there's more to it than that. Although people often attribute virtues to people because of their behaviour, individuals might also admit to false trait attributions. They might concede that their co-worker volunteering to collaborate on a project was not really motivated by benevolence, but rather by selfish desires, perhaps for promotion-related or romantic goals. Behaviours then can only suggest or partly constitute virtue, not encapsulate it.

A more complete account of virtue will include reference to motivation (Hursthouse, 2001, p. 12). That is to say; a person is only virtuous if they act from virtue instead of just performing acts that appear virtuous.⁴ A virtuous person is motivated to act by appropriate reasons. For

⁴ For more on the distinction between virtuous acts and acts from virtue and right action, see Swanton (2001).

instance, a benevolent care worker acts from virtue when they care for their patients because they have a deep concern about the well-being of others. A non-virtuous care worker does not act from virtue when they care for their patients only to further their own career.

When considering acts from virtue and moral motivation, a widely held Aristotelian belief is that virtuous people have appropriate emotions. According to Aristotle, acting with appropriate emotion involves more than just positive emotions; it concerns feelings of pleasure and displeasure toward the right things and in the right way (*Nicomachean Ethics*, 1117b). Virtuous people care for others — they feel concern, worry, or pleasure about people’s current or potential futures. For instance, a generous person feels upset when others are deprived of essential resources, disappointment when they cannot help, and elation when they can.⁵

Another feature of virtuous emotions is that they are based upon an individual’s beliefs and value judgements about the world; for this reason, Aristotelians support a cognitive account of the emotions, i.e., they see emotions as intelligent responses to circumstances (van Zyl, 2018, p. 22). An easy way to understand the Aristotelian view of emotions is to think of emotional and cognitive congruence. Having appropriate emotions, according to Aristotle, involves having emotional responses consistent with one’s beliefs. For example, someone who believes that animal abuse is abhorrent will feel regret, or anger about superfluous harmful animal testing. Appropriate emotions are also necessary for acting from virtue. Aristotle believes that appropriate emotions go along with and motivate you to do what’s best (*Nicomachean Ethics*, 1104b). For example, a virtuous agent’s compassion for animal welfare may motivate them to buy cruelty free cosmetics or abstain from animal tested products. Moreover, because their behaviour is sincere and motivated by belief-based emotions, they do not feel a pang of regret for not buying from a trendy but unethical make-up brand. Essentially, the emotions of virtuous

⁵ For more detail on generosity, see *The Nicomachean Ethics*, (1119b-1122a).

agents are informed and educated via their deepest values and reasons for acting. A fully virtuous person performs virtuous actions effortlessly and without internal conflict because they think that things like the well-being of others, their own personal well-being, and human excellence in general is worth caring about.

Because virtues are distinctive but interrelated dispositions of thinking, feeling, and behaving that concern people's fundamental values, Hursthouse (2001, p. 13) describes virtues as going 'all the way down'. As such, virtues manifest and consist of many psychological states, including desire, interest, and expectation (Hursthouse, 2006, p. 6). For example, virtuous people will both desire and expect honesty from their friends. The deepness of virtues means they permeate into many aspects of a person's existence, for instance, virtuous behaviours are performed in particular manners. Hursthouse, (2001, p. 12) gives the example of an honest person telling the truth unhesitatingly, immediately owning up to mistakes and being careful to avoid misinformation. These ways of behaving reflect the virtuous agent's deepest values and attitudes.

1.3 Right Action and Wisdom

Before moving on and discussing Aristotelian character dispositions. I will now further explain what is meant by appropriate reason, emotion and behaviour. According to Aristotle, virtues constitute the middle part of character traits (*Nicomachean Ethics*, 1106b). This is commonly referred to as 'the golden mean'. Contemporary virtue ethicists generally do not find the mean very helpful (e.g., Chappell, 2007, p. 146); however, I believe it has a useful application for the psychometric measurement for virtue (discussed in Chapter Five) so I will briefly explain it below.

The golden mean corresponds to the idea that virtues exist on a trait spectrum. For example, the virtue of courage consists of a mean between cowardice: fearing too much and

recklessness: having too little fear. The idea is, that with any given trait, one can either go too far or fall too short in experiencing emotion and performing behaviours (*Nicomachean Ethics*, 1106b). Being a coward, for example, is an obvious weakness. A coward is the type of person who is too afraid and lets their fear prevent them from doing the right thing, whether it be expressing their true sentiments or defending themselves from a hostile assailant. Being reckless is also disadvantageous. Reckless people do not feel enough fear and ignore fear even when it is warranted, thus reckless people are prone to rushing into dangerous situations, like perhaps taking on several armed robbers by themselves. The virtue of courage, on the other hand, falls in between cowardice and recklessness. A courageous person will feel the appropriate proportion of fear relative to the situation and know how and when to handle it. One important thing to note about Aristotle's view here is that there is no going too far or falling too short when it comes to expressing a virtue itself; similarly, he thinks that there is no good amount of being a coward or of being reckless (*Nicomachean Ethics*, 1107a).

Presumably, contemporary virtue ethicists do not find the mean to be very helpful because it is too vague of an idea to offer much practical guidance (i.e., it does not help in determining what emotions and behaviours constitute the mean in any given situation). The concept of a mean is also slightly misleading as a reference to what emotions and behaviours are appropriate (e.g., see Swanton, 2021, p. 138). It makes it sound like courageous people will never feel extreme fear, when in fact, it is sometimes inappropriate not to be terrified, for instance, if your children or parents are held at gunpoint etc. The types of emotions and behaviours that are appropriate are both complex and situation dependant; one cannot easily determine right action via general rules. This is why correct reason is an essential part of the virtues. One aspect of correct reason includes practical wisdom (*phronesis*).

Practical wisdom, sometimes referred to as 'the master virtue', is both a virtue and a constituent part of every other virtue (Russell, 2009, p. 3-4; Schwarts & Sharpe, 2006, para. 1).

According to Russell, (2009, p. 4) practical wisdom concerns two areas. First, it consists of the general ability to discern which ends are worth pursuing and preserving. For instance, this includes understanding that friendships and family relationships are meaningful or that your own well-being and the well-being of others matters.

Another aspect of practical wisdom involves excellent deliberation and decision making. Specifically, this part of practical wisdom is about specifying how each end should be reached — it is the process of determining which emotions and behaviours are appropriate in the circumstance (*Nicomachean Ethics*, 1144a). For example, the wise employer knows the best way to provide honest, but potentially upsetting, feedback to their employees. Russell (2009, p. 8) refers to this process as the ‘specification of ends’; it is the deliberative ability that informs one of what the virtues, such as generosity or courage, consist of and how these ends should be pursued in any given situation (Russell, 2009, p. 11). A part of this process also involves being able to determine what particular virtue is more or less relevant in any given situation. For instance, it concerns knowing whether to be generous or just when grading student essays. Accordingly, Snow (2020, p. 4) refers to virtues as ‘rational excellences’ as they are all informed by practical wisdom.

Contemporary virtue theorists agree that performing right actions is crucial for virtue. For example, Hursthouse (2001, p. 13) believes that it is not enough for a virtuous agent to merely intend to act benevolently; they must succeed in performing benevolent actions. For example, one might have good motivations for writing a friend's university assignment for them, but this action may actually disadvantage them. It could inhibit the friend's learning of both the course work and how to deal with difficult situations. It could also result in failure and academic censure for plagiarism. As a result, writing the assignment does not seem successfully benevolent, despite benevolent motivations. It may also conflict with other virtues, such as justice.

The complexity and nuance inherent in virtuous thinking and right action is why, for Aristotle, one of the most important features of practical wisdom is experience (*Nicomachean Ethics*, 1142a). It takes an experienced student, one that has reflected on their past mistakes and successes, to know when justice and academic authenticity outweigh the demands of loyalty and kindness they have toward a friend. Experience, according to Aristotle is necessary for wisdom, and thus, is necessary for the expression of every virtue. This may very well be why virtues are often referred to as ‘acquired virtues’ — they are developed through experience combined with reflection and are thus, rational excellences (Snow, 2020, p. 3-4). This is why virtue ethicists do not believe that young children are likely to possess virtue — they do not have the practical experience and knowledge required to specify what any given virtue consists of; or of what means to employ to successfully perform right actions across differing situations. Children may possess what Aristotle refers to as ‘natural virtue’ i.e., the disposition to feel and to attempt to act appropriately without practical wisdom (Snow, 2020, p. 4).

1.4 Types of Character Dispositions

Although the psychological elements from an Aristotelian view are closely related, it is possible for someone to meet some of the criteria for virtue (i.e., appropriate behaviours, emotions and reasons) and not others. Aristotle makes several distinctions between character dispositions: continence, incontinence, natural virtue, habit, and vice.

Full virtue refers to the condition of meeting all the different criteria for any given virtue. A person who has the full virtue of generosity thinks, feels, and behaves appropriately regarding the distribution of their resources. Virtue theorists like Aristotle take appropriateness to mean feeling, acting and thinking, at the right time, to the right degree, towards the right person for the right reasons and in the right way (*Nicomachean Ethics*, 1106b). This category of persons is generally considered to be exceptionally rare and is often referred to as an idealised standard

for people to strive for (e.g., DePaul, 2000). A person who is fully virtuous is practically wise and more likely to live a life of *eudaimonia* (i.e., flourishing).

As opposed to full virtue, continence is a character disposition that meets two of the three main criteria for virtue: they think and act appropriately, but they do not feel as they should. Continence, according to Aristotle, is a character disposition that involves having the self-control to resist the pleasures that most people find difficult to resist (*Nicomachean Ethics*, 1150a). For example, think of a student who really wants to go to an end-of-semester party, but instead, and at their own regret, they force themselves to stay home to look after their sick mother. In one sense, this is a good trait. Self-control stops one doing things one should not, allowing them to act in accordance with correct reason. However, self-control, as a trait, is not considered to be a virtue. This is because, as I stated earlier, if one really cared — truly and completely — about performing benevolent acts, they would not need to use self-control to do them — they would effortlessly perform them. Hence, needing to rely on self-control to perform right actions constitutes an internal struggle suggesting a lack of virtue.

Incontinence, on the other hand, is essentially weakness of will. Aristotle refers to incontinent people as not being able to resist the pleasures that most people can (*Nicomachean Ethics*, 1150a). Again, this character type experiences an internal struggle; like continent people, the incontinent fail to feel appropriate feelings while reasoning correctly, but differently now, they fail to act in line with their correct reasoning. For example, a continent person might feel attracted to someone other than their spouse, and, despite knowing that adultery is wrong, they commit it anyway. Aristotle notes that these people can easily be confused with the purely lecherous or gluttonous — but there is an important distinction. Someone who is just lecherous both chooses to and believes that they ought to be lecherous. However, the incontinent know that they should not be acting lecherously but often fail to resist the desire to do so (*Nicomachean Ethics*, 1152a).

Aristotle outlines two ways people can be incontinent: weakness and impulsivity (*Nicomachean Ethics*, 1150b). The weak person retains their reason; they may decide to act in a particular way, but then they are overwhelmed by emotions and cannot act appropriately. These include people who decide to stop eating when they get full but cannot resist their desire for cake. The other way of being incontinent is through impulsivity. Impulsivity refers to people who get overwhelmed by emotions and act before reasoning. Incontinence through impulsivity includes people who initially get angry at and abuse their friends for their mistakes but who later, through reasoning, realise that they, themselves, overreacted.

Virtue can also be distinguished from merely having good habits. Good habits can make people appear virtuous because their possessors perform right actions. However, people acting from mere habit do not meet the other two criteria for virtue (i.e., appropriate reasons and motivations). An example is that of a young student who remains quiet in a public library because that is just what they are used to doing. Abstinence from noisemaking is generally a good thing in libraries, but it is not an act from virtue if it is not accompanied by a general attitude of respect or concern for others. Like self-control, performing right actions because of a habit is good, especially for people learning to be virtuous. Still, most people would not describe someone acting from mere habit as having a virtuous character.

Out of all of the character dispositions discussed by Aristotle, the worst is vice. People with vice do not meet any of the criteria for virtue. They do not think, like the incontinent do, that ‘this is wrong’ or feel any shame. These are people who commit wrongdoings like adultery without regret. As mentioned earlier, for Aristotle, vice represents falling too short or going too far in feeling and acting in accordance with any given virtue. Each virtue corresponds to two vices, one of deficiency and another of excess (*Nicomachean Ethics*, 1107a). For example, a deficiency of honesty includes telling lies. People with this vice do not care about the truth and they have no remorse for lying; because of this, they might lie habitually or for self-serving

reasons. An excess of honesty involves caring too much about the truth, such people may tell the truth too often and at inappropriate times, such as telling strangers at the supermarket that they look fat. These acts, even if performed out of a preference for honesty, are still not a product of correct reason; they are neither informed by wisdom nor appropriate.

The next interesting character disposition is natural virtue. As mentioned earlier, natural virtue refers to someone who has a natural disposition towards being virtuous. In particular, they care about others and have a rough idea of what ends are worth preserving and pursuing (*Nicomachean Ethics*, 1144b). People with natural virtue, however, often lack the knowledge and life experience (i.e., practical wisdom) to be able to successfully perform virtuous behaviours. They might attempt to make their dog happy by feeding it copious amounts of chocolate. At other times, however, they might succeed in performing right actions, for instance, by checking up on their friends during hardships. The reason why these acts are not considered to be acts from virtue is because they are not informed by practical wisdom. The naturally virtuous will thus only inconsistently behave virtuously.

I will discuss the consistency and stability criteria in the next section. For now, an important thing to remember about the different types of character is that, according to Aristotle, people rarely fit nicely into any of them; people usually fall somewhere in between (*Nicomachean Ethics*, 1150a). Nevertheless, each category can help in understanding the subtle ways in which people can come closer or further from virtue, and how each component of the virtues is necessary for overall good character. These categories are summarised in Table 1.1. Note that “Yes” and “No” refer to patterns of behaviour and do not mean that these individuals *always* do or do not manifest the given virtue component.

I have also added three other categories to the Table 1.1. These last few dispositions are not discussed by Aristotle, presumably because they are less common. However, I will discuss

them here for the sake of being open to and prepared for all the possibilities regarding how the empirical data represents people's character.

The first dispositions are sometimes referred to as 'burdened virtues' (e.g., Tessman, 2005), these people may meet both the reasoning and emotional criteria for virtue (i.e., burdened full virtue) or just the emotional criteria (i.e., burdened natural virtue) without performing appropriate behaviour. Again, these are uncommon character types. If someone had the appropriate emotions, desires, motivations and perhaps the knowledge of how to perform virtuous behaviour, then one would expect them to act accordingly. The most plausible explanation for why they do not act virtuously is that these people face external constraints – from no fault of their own, they have been landed in a situation(s) that makes it impossible for them to express virtue, regardless of their motivations. People in these categories may have been imprisoned or deprived of the resources required to manifest virtuous behaviours. For instance, imagine an oppressed housewife, who, if given the opportunity, would be very generous with her money and resources. Unfortunately, however, she is forbidden by the oppressive husband.

I call the last unlikely character disposition 'lucky natural virtue.' These are people have appropriate emotions and lack practical wisdom, but, by some stroke of luck, still perform virtuous actions. The difference between this category and natural virtue is that the person with lucky virtue performs appropriate acts consistently. Moreover, the acts are not mere habits because they are accompanied by appropriate feelings. For example, imagine a child called Tom, who throughout his whole life had his meals and portion sizes controlled by his mother. He was always given precisely enough food, and because he hasn't known anything else, he never asks for more. In one sense, he is performing temperate behaviours, however, virtue theorists would still not call him virtuous — his virtuous acts are not in his own doing, but rather they are due to the circumstances he just happens to find himself in. These character

dispositions are also summarised in Table 1.1 Again, note that “Yes” and “No” refers to patterns of behaviour.⁶

Table 1.1.

Aristotelian Character Dispositions

	Appropriate Reasons	Appropriate Emotions	Appropriate Behaviours
Full Virtue	Yes	Yes	Yes
Continent	Yes	No	Yes
Incontinent	Yes	No	No
Natural virtue	No	Yes	Sometimes
Habit	No	No	Yes
Vice	No	No	No
Burdened Full Virtue	Yes	Yes	No
Burdened Natural Virtue	No	Yes	No
Lucky Natural Virtue	No	Yes	Yes

1.5 Consistency, Stability, Local and Global Virtues

Doris (2002, p. 22) breaks the reliability of virtuous action down into two conditions. These are stability and consistency. Stability refers to the manifestations of a virtue across reiterations of the same types of events (Doris, 2002, p. 25). For example, a generous person may reliably donate money to charity stalls outside of the supermarket. Consistency refers to the reliable manifestation of a virtue across different types of virtue-relevant situations (Doris, 2002, p. 22). For instance, the same person who donates to charity may also buy lunch for co-workers who have forgotten theirs, and schedule time to babysit for their relatives. Doris points out that, according to an Aristotelian conception, virtues are global traits in the sense that they meet

⁶ Also, note that lucky and burdened virtue do not necessarily constitute different dispositions than natural or full virtue e.g., the person with burdened virtue would act virtuously if given the chance.

both the stability and consistency criterion. Doris also argues that global virtues do not exist, however, he does accept that local virtues, virtues that merely meet the stability criterion, do exist (Doris, 2002, p. 60). Most virtue ethicists reject Doris' views about the non-existence of virtue (e.g., Snow, 2010) and have subsequently paid little attention to the idea of local virtues.

The primary reason why Aristotelians believe that traits must meet the consistency and stability criteria to be considered virtues (and why they haven't paid much attention to the idea of local virtues) is because virtue involves a commitment to certain values. Someone who is genuinely and deeply committed to a value is expected to express it in various situations. For example, if a person seems benevolent because they are kind at work (e.g., they help co-workers complete tasks), but then they are found out for abusing their children at home, it would call into question the sincerity of the seemingly virtuous acts at work. If a person truly cared about the good of others, then they would behave benevolently across all situations. A failure to manifest benevolent behaviour in non-work contexts could indicate non-virtuous ulterior motives for the seemingly benevolent behaviour at work, such as a desire to get a pay raise or merely to avoid getting fired.

1.6 Virtues, Excellence, and Flourishing

The connection between virtue and *eudaimonia* (i.e., flourishing) is contentious; moreover, explicating the link between virtue and flourishing is less important to my creation of a psychometric measure of character, merely because it has less to do with the components of the virtue and more to do with their ends. However, *eudaimonia* is generally considered important for determining what traits count as virtues, therefore, I will briefly explain Aristotle's conception of *eudaimonia*.

The virtues contribute to and partially constitute *eudaimonia* (Snow, 2020, p. 3). The term *eudaimonia* has been translated in different ways, but as Hursthouse (2021, p. 10) points out,

none are ideal. Flourishing, for example, implies that plants or animals can achieve it, but really, *eudaimonia* is only possible for rational beings. Happiness, on the other hand, suggests something subjective. However, people can be mistaken about having *eudaimonia*. For instance, people can confuse *eudaimonia* with pleasure or desire satisfaction. Well-being can also give off a subjective impression and does not have useful corresponding adjectives (Hursthouse 2001, p. 11). Human flourishing is sometimes thought of as a good translation for *eudaimonia*. One advantage is that it communicates Aristotle's naturalistic approach to virtue and living well as a human.

For Aristotle, flourishing relates to the function of human beings. As an analogy, Aristotle states that to be a good flute player is to perform the task of playing the flute well (*Nicomachean Ethics*, 1097b). This is how Aristotle thinks of human flourishing — being a good human means to perform the task of being human well. Aristotle's view is, in brief, as follows⁷. Human parts have functions, and human beings presumably have functions beyond these. One obvious function is staying alive, but this is not distinctively human; plants share this function too. The distinctly human function then, relates to what distinguishes humans from plants and animals — namely, our reason (*Nicomachean Ethics* 1097b-1098a). According to Aristotle, human flourishing consists of functioning well as a human being, which is understood in the context of the fact that we are rational and social beings (1097b). Functioning well as a human being involves possessing and exercising the virtues. In which case, meaning that flourishing, for humans, means living a life that expresses virtue (1098a).

Contemporary virtue theorists agree that having the virtues is one way of living a good human life (Hursthouse, 2021 p. 11). However, even though virtues are central in the neo-Aristotelian theory for living a good life, they are also not thought of as being sufficient for a

⁷ See book 1 of *The Nicomachean Ethics* for more detail.

good life; this also coheres with Aristotle's view. People still need other external goods to live well, for instance food and water; often people also need things like money to be generous and free time to be benevolent. Having the virtues does not guarantee a good life, but neo-Aristotelians believe that acquiring them gives people the best chance of living well.⁸

One reason why contemporary virtue theorists think that having the virtues gives people the best chance of living well comes back to the idea that virtues are entrenched dispositions of character (Snow, 2020, p. 4). Part of what this means is that virtues are reliable traits that can help people in different situations. Honesty, benevolence, and generosity can help one maintain healthy relationships with others, and courage can help people deal with difficult and intimidating situations (Snow, 2020, p. 4; Hursthouse, 2001, p. 11; van Zyl, 2018, p. 23).

1.7 Conclusion

In conclusion, based on Aristotelian theory, virtues are personal, complex and deep character dispositions that lead to and partly make up a good human life. Throughout this chapter, three main components of virtues have been identified. Firstly, there are right actions (i.e., appropriate behaviours). Secondly there are suitable emotions, feelings and attitudes. Thirdly, there are appropriate reasons (i.e., good motivations which have been informed by practical wisdom). These aspects of virtue discussed throughout this chapter will help to shape my new theory of Virtue Conscientiousness and the scale for its empirical investigation. Any empirical measure of virtue ought to consist of each of the three main virtue components. Before developing my new account of conscientiousness, I will first consider empirical studies of virtue, as these may be helpful when constructing a measure of Virtue Conscientiousness. As we'll see, however, two recent attempts to measure virtue are inadequate when it comes to

⁸ See Snow (2020, p.3-4) for further discussion.

measuring the different components of virtue. Moreover, situationist psychology aims to demonstrate that the virtues do not exist.

2. Chapter Two: Empirical Approaches to Virtue

2.1 Introduction

So far, we have seen that there is a rich body of conceptual work and theory about virtue. However, in this chapter, I explain that when it comes to empirical validation, Aristotelian virtue theory is lacking. Here I discuss the most relevant previous empirical approaches to Aristotelian virtue ethics. Firstly, I discuss an empirically based objection to Aristotelianism: the situationist critique, as well as two replies, all of which have empirical implications for measuring virtues. Considering the situationist critique is important to my work because, if it is right, and virtue theorist's wide-spread assumption that global traits exist is wrong, then validating a measure of Virtue Conscientiousness is pointless. Here I discuss why I think the situationist critique is flawed; however, in doing so, I explain that it also succeeds in identifying a lacuna in virtue theory, namely, a lack of empirical support. Secondly, I discuss why more recent attempts to classify and measure virtue, such as the Values in Action Inventory of Strengths (VIA-IS) and the Thrift Questionnaire, are unsatisfactory from an Aristotelian perspective. As such, I highlight why further empirical work into Aristotelian virtues is needed for developing accurate descriptive theories about virtues, including Virtue Conscientiousness.

2.2 The Situationist Critique

The situationist critique refers to a series of challenges made by Situationist philosophers against virtue ethics. Each challenge is primarily based on the plethora of social psychological studies, ranging from topics such as helping behaviour, obedience to authority, and mood enhancers. Arguably, one of the most influential situationists is Gilbert Harman (1999). Harman's argument has two main parts. Firstly, he argues that social psychological studies suggest that behaviour is predominately caused by trivial environmental factors (e.g., the

presence of an authority figure, or some bystanders) (Harman, 1999). One example of these types of studies is explained below:

The bystander effect: This study tested bystanders' effect on helping behaviour; it included college students who were asked to discuss college problems with other students via an intercom system (e.g., to preserve anonymity and prevent embarrassment). Upon entering the laboratory, the researchers took individual participants into an isolated room with a microphone; here, the participants (i.e., by themselves) were to engage in discussions with, what they believed to be, either one or two or five students, but what were just tape recordings of confederates. Each participant would hear a faked seizure involving cries for help, choking sounds and moans about dying from the recording during the discussions. The researchers found that the number of students perceived in each condition predicted both how many participants would help and how long it would take participants to initiate help. For instance, eleven out of thirteen participants, with an average response time of 52 seconds, helped from the one-confederate group. In contrast, four out of thirteen participants, with an average response rate of 116 seconds, helped from the five-confederate group (Darley & Latané, 1968).⁹

In combination with the findings from this type of psychological study, Harman also appeals to cognitive biases to explain why people are mistaken about the existence of character traits. The first bias Harman (1999) mentions is the fundamental attribution error. The fundamental attribution error refers to people's tendency to explain their own undesirable behaviour by appealing to outside causes, while explaining other people's undesirable behaviour by attributing internal characteristics to them. For example, a student may fail a university exam because they are too busy working to support their kids. The student's teacher,

⁹ For a meta-analysis on bystander studies, see (Fischer et al., 2011).

however, unaware of the external demands on the student, may falsely attribute qualities like laziness to them (while not admitting that laziness is a cause of their own missed deadlines). One explanation for this bias is that people attribute traits to explain other's behaviour because traits are the most available and easily understandable causes, for example, lazy people do lazy things and smart people do smart things (Tetlock, 1985, p. 228). One reason why trait-based explanations are more available than situational explanations regarding the explanation of other's behaviour, as opposed to personal behaviour, is that people are often aware of external demands effecting themselves, while they are unaware of the real external demands facing others. (Bar-Tal & Frieze, 1976). This bias can be used as an explanation for why people attribute traits in the first place.

The second bias Harman (1999) refers to is the confirmation bias. Confirmation bias refers to people's tendency to search out and accept evidence that supports their beliefs (Nickerson, 1998). For example, once a teacher has decided that a student is lazy, they may notice times that the student is late to class. As a result of the confirmation bias, the teacher might also interpret any tardy behaviour as a type of evidence. Specifically, evidence supporting their preconceived belief that the student is lazy — even if the 'lazy' student always submits their work on time. This bias relates to character because once someone decides that someone is lazy or generous, and so on, they will observe behaviours that support this attribution while ignoring behaviours that contradict it. This bias is one explanation for why earlier character attributions stick despite new countervailing evidence.

Based on these psychological findings, Harman (1999) observes, firstly, that there is evidence showing that some behaviours are caused primarily by trivial situational factors. And secondly, that there are other explanations for why people think that character traits exist (other than that they do exist). Based on these two observations, Harman argues that the best explanation for the results from situationist psychology is that cross-situationally consistent

personality and character traits, including virtues, *might* not exist (Harman, 1999). Moreover, Harman (2009, p. 241) notes whether or not virtue exists depends on one's conception of virtue:

Virtue or character as a fleeting feature of an act must be distinguished from virtue or character as an enduring characteristic of a person. There is more reason to believe that there are virtuous and vicious acts than to believe that people have virtuous or vicious characters.

Apart from Harman there are other proponents of the situationist critique, one of which is John Doris (2002). Like Harman, Doris (2002, p. 60) believes that the psychological evidence suggests that it is improbable that anybody possesses *global* traits (i.e., stable and consistent traits) like Aristotelian-type virtues. As discussed previously, an example of a global trait might be the Aristotelian-type virtue of benevolence. Benevolent people help others in every situation that calls for it, irrespective of whether it is at home, work, the supermarket, or whether there are bystanders or authority figures nearby. Benevolence, as a global virtue, is the type of trait that Doris thinks is unlikely to exist. Doris does, however, admit to the existence of highly fine-grained local traits (i.e., ones that stably manifest over the same situations) (Doris, 2002, p. 25). For example, some people might have a local trait of benevolence; a local trait of benevolence is a response to a specific situation, such as repetitively donating money to charity when there is an animal welfare stall outside the supermarket while not being benevolent — or reliably benevolent — in other situations.

2.3 The Rarity and Anti-Behaviourist Responses to the Situationist Critique.

Although the situationist critique may appear strong to some, many virtue theorists do not find it compelling. I will now briefly explain two popular responses that are often used together: the rarity response and the anti-behaviourist response.

The rarity response works by simply claiming that the findings from situationist psychology are unsurprising (e.g., see Kamtekar, 2004, p. 485). Essentially, proponents of this response already believed that the possession of virtue is extremely rare. In this case, studies that show that most people do not express virtuous behaviour are unsurprising, and hence, do not provide any evidence that nobody has, or can develop Aristotelian-type virtues. After all, the studies find that a small number of people do act in accordance with virtue despite situational factors that usually dictate people's behaviour (such as the number of bystanders present in an emergency).

The second response, the anti-behaviourist response, can build upon the rarity response; it is different, however, in that it critiques how Situationists identify virtues. Proponents of the anti-behaviourist response claim that Situationists pay far too much attention to observable behaviours, when in fact, different character dispositions can be delineated even when people act the same (e.g., see Swanton, 2011, p. 200; Kristjánsson, 2008 p. 68). For example, in the Bystander situation, not helping can be consistent with any of the following traits (Table 2.1):

Table 2.1.

Character Dispositions of People Who Don't Help During the Bystander Effect

Continent	Can usually summon the willpower to help in this kind of situation, but the fact that there were others around makes it easy not to
Incontinent	Knows they should help but is overcome by emotion, e.g., fear, shyness
Natural Virtue	Wants to help but just does not know what to do
Habit	Does not help because they have an established habit for letting others take charge in emergencies.
Vice	Does not help or feel guilty for not helping because they think it is a waste of time

For a similar example, see Kristjánsson, (2008).

From Table 2.1, it seems that, even when a group of people do not help, the people from that group can have character dispositions that come closer to or fall further from a particular virtue. Important components of virtue, as we have seen, involves people's inner thoughts and feelings. One implication of this is that one can hardly make justified trait attributions based on singular behavioural occurrences. Swanton (2011, p. 201) provides the example of a late student: without knowing the student, including their history and current circumstances, one cannot really determine whether they do or do not possess the trait of reliability. The student's lateness could be attributed more accurately to external circumstances (e.g., they are usually on time, but today they were held up by a family emergency). Similarly, some participants from psychological studies might usually help when they are not exposed to cognitive biases like the bystander effect or obedience to authority. As a matter of fact, Milgram found that some participants — even ones who administered electric shocks — still expressed emotional distress at the prospect of harming the confederate (Milgram 1963, p. 376). This suggests two things. Firstly, that these participants are usually more inclined to act virtuously, and secondly, that many people who act inappropriately still have the disposition to care about the well-being of others. This second point lends weight to the idea that instead of full virtue, most people

have character traits better described as continent, incontinent, natural virtue or vice. If this is the case, and while considering the rarity response, it seems like the psychological studies neither show that virtuous people likely do not exist, nor that people are not motivated by character traits.

At this point, it is worth noting the implication that the rarity and anti-behaviourist response have for the psychometric study of the virtues. Firstly, if the rarity response is correct, and almost nobody possesses Aristotelian virtues, then scales will not be able to measure Aristotelian virtues for most people in the population — you cannot measure something that is not there. This observation appears to have the implication that a quantitative study of virtue is futile. However, I believe that the anti-behaviourist response saves us from this conclusion. This is because even though people do not display successful manifestations of full virtue, this does not mean that they do not have stable and consistent character traits. That is, if people have character traits that include the same psychological elements as virtues (i.e., reasons, emotions and behaviours), then we should be able to measure and analyse data about people's character generally to determine to what extent people's character approximates virtue.

2.4 The Local Virtues Response to the Situationist Critique

Before moving on, I will now discuss one alternative response to the situationist critique — the local virtues response. The local virtues response to the situationist critique can be used alongside the rarity and anti-behaviourist responses. The local virtues response can also draw from psychological research on personality for support.

Like the rarity response, the local virtues response works even while conceding the validity of the situationist studies. It can do this by simply denying that full Aristotelian virtues require the consistency criterion. My view of local virtues also differs from other theorists' views (e.g.,

Chen, 2015; Doris, 2002) because I believe local virtues are full virtues that can concern large domains, like work and home. Below I outline an imaginary example:

Imagine a stay-at-home dad named John. John has two young children, a wife and a dog, all of whom he loves and looks after. For example, he takes his kids to school every day, attends all of their parent-teacher interviews, and makes everyone dinner in the evenings. All of John's neighbours and friends can attest to John's wise and benevolent way of looking after his family. However, one day, a week before Christmas, John and his wife run into financial hardship. Consequently, John ends up getting his first job as a produce assistant at a local supermarket. John's first week is a disaster. He had neither understood nor anticipated the demands of working at a supermarket close to Christmas. During his first week, John becomes infuriated at the hordes of people refusing to social distance. Because of this, he ends up snapping at a group of elderly ladies who could not find the tomatoes. Later, John makes a young boy cry before insulting several younger staff members who attempt to show him how to correctly pick up boxes. What's more, at the end of the week, John accidentally puts out a crate of rotten potatoes, giving at least fifty customers food poisoning. After all this, John feels a deep shame — all he wanted to do was help.

This example shows that it is possible for one person (John) to meet all of the criteria of virtue in one type of domain (family) while not in another (work). In family life, John both cares about his family while having the experience and knowledge to successfully perform benevolent actions. At work, John may have the motivation to be benevolent (e.g., by desiring to help customers), but he does not have the knowledge nor the experience to consistently perform benevolent acts. It might even take John a good while before he can learn to manage his work stress. In which case, at work, John possesses neither the practical wisdom nor the ability to perform virtuous acts.

One of two conclusions could be drawn from the John example. The first conclusion is that because John failed to act benevolently at work, he does not possess the full virtue of benevolence at all.¹⁰ The second conclusion, the one I am proposing, is that John has the full virtue of benevolence at home but not at work — he has a domain-specific virtue of benevolence. The implication of this conclusion is that it does not matter if people cannot or are unlikely to be able to develop global traits because they can still possess and learn to acquire virtues specific to domains. It also implies that just because someone does not manifest virtue in one situation (e.g., like in a psychological study), it does not mean that they are not virtuous in other situations or domains. With enough practice, people can even learn how to be virtuous in situations like the ones used in social psychology.

One reason why someone may deny that people can have local virtues is that they are sceptical of how someone who is genuinely benevolent can be benevolent in some situations and not others. For example, they may think that inconsistent behaviour suggests that the person does not actually care about the well-being of others. Rather, it could entail an ulterior motive. For instance, they may think that people who behave like John only behave benevolently at home because they enjoy praise from their spouses, and so on. Essentially, this reasoning suggests that if a trait is authentic, it must be cross-situationally consistent. However, my example shows why this reasoning is flawed. It seems just as likely that people's inconsistently virtuous behaviour can be explained by their lack of experience in some domains compared to others. In reply to this, virtue ethicists may also state that people like John merely have natural virtue because they do not have the practical wisdom to execute cross-situationally consistent virtuous acts. However, John does not lack practical wisdom at home, so it seems odd to say that he is not virtuous at home *just* because he is not virtuous at work.

¹⁰ By full virtue, I mean that John might not possess all of the components of virtue, e.g., appropriate behaviours emotions and reasons.

Another possible objection to the claim that virtues are local traits comes back to authenticity, it suggests that local virtues are not excellences and that those with local rather than global traits will have a lower well-being. This charge observes that if someone has the same motivation across two situations but cannot successfully manifest its corresponding behaviour in both, then in one of those circumstances they are not acting authentically. Authentic individuals can consistently express (or act in accordance with) their values and desires. In my example, John yells at some elderly ladies because he has not learnt to manage his workplace stress.¹¹ Consequently, it would be odd to say that John is acting authentically in this situation because his actions do not reflect his kindness. John's inability to act appropriately, relative to his motivations, might also hinder his well-being in general, for example, he might experience guilt for his actions or frustration for not being able to act his usual self. If having local virtues means feeling inauthentic, it makes them appear much less like human excellences and much more like causes of distress.¹²

To address this concern about the authenticity of local virtues, it is useful to consider a similar debate in personality psychology. Several studies in personality psychology show that people vary in how conscientious they are at home and at work (e.g., Donahue & Harary, 1998; Heller, et al., 2009; Sheldon et al., 1997). These findings cause contention about whether people who express differentiation in their personality across different situations (e.g., at work and home) experience a lower level of well-being than people who express cross-situationally consistent personality traits (e.g., see Bird et al., 2006). For some psychologists, the inconsistency in people's personality suggests a compromised well-being because of a life of

¹¹ One thing to note here is that even though John may be acting inauthentically at work, he is still being authentic at home. So, at home, he still possesses the virtue of benevolence.

¹² One thing to note about this objection is that, even though there might be potential drawbacks that come with local virtues, there are also potential drawbacks that come with possessing global virtues. For example, a rich and globally generous person might receive harassment from others wanting unnecessary handouts. Moreover, someone who is known for their wisdom might get constantly bombarded with questions from people wanting help to solve their problems.

inauthenticity — people who behave differently across different situations cannot be expressing their ‘true’ selves in both types of situations (e.g., see Maslow, 1968, p. 180). However, recent studies in personality psychology contradict this reasoning. For example, Sutton (2018) found no relationship regarding personality differentiation between work and home, and well-being.¹³ Alternatively, what the researcher found was that it is subjective feelings of authenticity that contribute to well-being (Sutton, 2018).¹⁴ In other words, people who display differentiation in their personality across situations, but who also score highly on authenticity measures (e.g., in relation to both contexts), are more likely to have higher well-being than people who express a consistent personality across situations but who score low on authenticity. Essentially, it seems like personality psychologists have been conflating authenticity with cross-situational consistency. Now, if this is the case in psychology, then it also seems probable that it is the case in philosophical virtue theory. This may partly explain why virtue theorists assume a trait must be cross-situationally consistent for it to be a virtue.

When applied to the John example, what the empirical studies suggest is that John’s inconsistent behaviour does not ensure that he is, or that he feels inauthentic. On the contrary, because he is still trying to do his best at work, and not consciously deciding to contradict his values, he may still feel authentic. If this is the case, it is not true that John’s well-being will be compromised *just* because he has a local virtue.

As a response to the situationist critique, the local virtues response could have a serious implication for the psychometric study of Virtue Conscientiousness. For example, it might be the case that most people only have virtues and character traits relative to particular domains. If this is true, measuring virtues and character traits in a global sense may not produce reliable

¹³ Personality differentiation was measured using The Big Five. Many items in this inventory, especially the Conscientiousness items, measure behaviours. This makes it particularly relevant to my example where we saw John express behavioural differentiation. See Sutton (2018) for more detail.

¹⁴ For a meta-analysis about the relationship between authenticity and well-being, see Sutton, (2020).

or consistent results. This being the case, when it comes to empirically measuring the virtues, including Virtue Conscientiousness, the local virtues thesis seems to warrant specific investigations of whether character traits and virtues are better understood as local or global.

2.5 Concluding Remarks on The Situationist Critique

So, in summary, I have presented three replies to the situationist critique: firstly, that full and cross-situationally consistent virtues are rare; secondly, that situationist studies have focused too much on people's behaviour, neglecting their inner states; and thirdly, that virtues do not have to be cross-situationally consistent to count as full virtues. However, several concerns remain, as is observed by Prinz:

It would be perfectly reasonable to say that virtue is rare if most people were driven by character traits that were not virtuous. But situationist psychology purports to show that people are not ordinarily driven by character traits at all... . If situationists are right about human psychology, the acquisition of virtuous traits is not merely the acquisition of nobler versions of the minds we currently possess, but rather the acquisition of minds of an entirely different kind... . There is absolutely no reason to think that moral education could give us new mental machinery (2009, p. 125).

Prinz seems to be saying that it is not enough for virtue ethicists to explain why so few people manifest virtue (i.e., the rarity response); this misses the point that situationists are making. The crux of the situationist critique is that it is unlikely that people's behaviour is significantly driven by character traits because psychological studies suggest that people's

behaviour is routinely influenced by trivial situational factors.¹⁵ The implication here is that Prinz and Situationist philosophers will not be convinced by replies to the situationist critique that are not empirically grounded. What the reply really calls for is new psychological evidence showing that character traits *do* exist, and that they are causally influential and structurally similar to the ones proposed by virtue theorists. This requires showing that people's behaviours are influenced by their inner states — beliefs, feeling, desires, attitudes — more than by situational factors.

As an error theory, situationism sounds rather bold (that is, most people agree that their friends and relatives have varying degrees of good and bad character) consequently, situationism is not the most credible theory (Merritt, 2000, p. 373). However, it does draw attention to the lack of empirical evidence available to counter empirical inadequacy charges. Moreover, it also seems true that, before there is a sufficient body of psychological research about the nature and structure of the virtues, virtue theorists are on shaky grounds because their theories lack grounding in empirical research. This makes it harder for virtue theorists to accurately theorise about virtues and answer questions such as: “are virtues better described as local or global?” or “what is the best way to distinguish the different components of the virtues?” and even, “what are the best ways of developing virtues?”. Each of these questions, and more, would become much more answerable with a reliable way to measure and test for the character traits that people do really have. In what follows, I will examine some of the most promising (existing) attempts to psychometrically measure character traits and virtues.

¹⁵ The anti-behaviourist response does seem to go some way in negating the claim that people don't have character traits. However, it is still not grounded in enough empirical evidence to support the claim that people's behaviour is significantly driven by Aristotelian like traits.

2.6 The VIA-IS Classification

The Values in Action Inventory of Strengths (VIA-IS) is a classification of virtues and strengths created by Martin Seligman, Christopher Peterson and 50 other scholars (Peterson & Seligman, 2004). One of the most important things to note about the VIA-IS is that although it is conceptual, it is neither driven by data nor by a rigorous theory (Peterson & Seligman, 2004, p. 6). This makes the VIA-IS different from both the Big Five model of personality (see Chapter 3) and neo-Aristotelian virtue theory, which is why it is referred to as a classification, not a taxonomy.

The particular character strengths and virtues included in the VIA-IS draw from a wide range of sources, including works in psychology, philosophy and psychiatry. Virtue inventories were also taken from sources ranging from figures such as Charlemagne and Benjamin Franklin to Hogwarts students and Pokémon characters (Peterson & Seligman, 2004). The list of virtues collected was then reduced with the help of the following ten criteria (Table 2.2):

Table 2.2.

VIA-IS Character Strength Selection Criteria

Criterion 1	A strength contributes to various fulfilments that constitute the good life, for oneself and for others. Although strengths and virtues determine how an individual copes with adversity, our focus is on how they fulfil an individual.
Criterion 2	Although strengths can and do produce desirable outcomes, each strength is morally valued in its own right, even in the absence of obvious beneficial outcomes.
Criterion 3	The display of a strength by one person does not diminish other people in the vicinity.
Criterion 4	Being able to phrase the "opposite" of a putative strength in a felicitous way counts against regarding it as a character strength.
Criterion 5	A strength needs to be manifest in the range of an individual's behaviour—thoughts, feelings, and/or actions—in such a way that it can be assessed. It should be trait like in the sense of having a degree of generality across situations and stability across time.
Criterion 6	The strength is distinct from other positive traits in the classification and cannot be decomposed into them.
Criterion 7	A character strength is embodied in consensual paragons.
Criterion 8	We do not believe this feature can be applied to all strengths, but an additional criterion where sensible is the existence of prodigies with respect to the strength.
Criterion 9	Conversely, another criterion for a character strength is the existence of people who show—selectively—the total absence of a given strength.
Criterion 10	As suggested by Erikson's (1963) discussion of psychosocial stages and the virtues that result from their satisfactory resolutions, the larger society provides institutions and associated rituals for cultivating strengths and virtues and then for sustaining their practice.

Source: (Peterson & Seligman, 2004, p. 17-27)

As a starting point, these criteria appear to be in line with the Aristotelian view of the virtues. As such, I will now move on to a more explicit explanation of the VIA-IS.

The VIA-IS classification is organised in a hierarchical structure. It consists of six virtues and twenty four character strengths (Peterson & Seligman, 2004, p. 16). According to Peterson and Seligman (2004), the virtues were selected because they are the core characteristics valued by religious thinkers and philosophers. Peterson and Seligman (2004) also define the virtues as broad and abstract categories. These virtues include justice, temperance, wisdom, humanity, courage, and transcendence (Peterson & Seligman, 2004, p. 16). Each of these virtues is made up of different character strengths. Character strengths are thought of as different ways of manifesting any given virtue. Seligman and Peterson provide the example of wisdom. The virtue of wisdom is made up of the character strengths of open-mindedness, curiosity, perspective and creativity. According to Seligman and Peterson, each of these strengths is a different path to wisdom, for example, wisdom can be expressed by the strength of creativity, or by being open-minded (Peterson & Seligman, 2004, p. 16).

As an example of how these strengths are measured, here are some of the items from the VIA -IS, used to measure the virtues of bravery, kindness and fairness (Table 2.3).

Table 2.3.

Sample VIA-IS Items

Bravery	I have taken frequent stands in the face of strong opposition. I do not always stand up for my beliefs.
Kindness	I am never too busy to help a friend. I rarely do favours for people.
Fairness	I am strongly committed to principles of justice and equality. If I do not like someone, I cannot help treating him or her differently.

Source: (Peterson & Seligman, 2004, p. 629-630)

Many studies have investigated how the VIA-IS strengths are related to desirable outcome measures. Recently, one longitudinal study involving 182 students suggests that all twenty-four-character strengths positively relate to the five components of the PERMA model of well-being (Green, 2022). The five components of the PERMA model are: positive emotions, engagement, relationships, meaning and accomplishment. Other studies have found that the VIA-IS is related to relationship quality and academic achievement. For example, one study involving 177 married couples found that VIA-IS strengths, arranged into three categories (i.e., self-control, caring and inquisitiveness), were related to marital quality (Boiman-Meshita & Littman-Ovadia, 2021). Another study found that the VIA-IS strengths of love of learning, perseverance, zest, gratitude, hope, and perspective correlated with school achievement (Wagner & Ruch, 2015).

2.7 Problems with the VIA-IS (from an Aristotelian Perspective)

From a neo-Aristotelian perspective (and, arguably, from many other perspectives), the main issue with the VIA-IS is that it was not constructed from a rigorous theory about virtues. For example, Peterson and Seligman's account does not provide a clear delineation between virtues and character traits (something I provide in Chapter Three); presumably, many or even most people behave, think and feel consistently with the character traits of generosity, benevolence and courage to some degree, yet most people are not described as possessing the virtue of generosity, and so on. For example, Swanton (2021, p. 149) explains that a rich person could act generously by purchasing an expensive gift for their relatives for Christmas. This person's act can be described as generous in some sense; however, Swanton explains that this act is not necessarily appropriate. Imagine if the relatives feel embarrassed and humiliated for receiving the gift because they are too poor to reciprocate the gift giving. Because this person's generosity is inappropriate, the act would not be described as virtuous. A plausible explanation

for this is that the man merely possesses the *character trait* of generosity and not the *virtue*. Consequently, the lack of a full explanation about whether or how virtues differ from character traits highlights that the conditions required for virtue are not clearly established in the VIA-IS classification. This is problematic because, without a well-thought-out theory about what a virtue is to begin with, it is unclear whether the scale is actually measuring the construct (construct validity). Moreover, even though the criteria presented in Table 2.2 stipulates the involvement of cognitions and emotions in virtue, there is a surprising lack of emotional and cognitive items in the VIA-IS classification. This means that recognition of the Aristotelian idea that virtues are complex, multidimensional and intelligent traits is almost completely absent.

One part of the VIA-IS scale that does cohere to the Aristotelian perspective is that virtues involve behaviour. Behaviours seem to offer a reasonably good indication of people's character; for example, generous people are presumably more likely to perform charitable acts than non-generous people. However, the scale still seems to fall short here too. This is because the interesting thing about the virtues is that they are not just supposed to be about any old types of behaviour — they are meant to be appropriate behaviours, for example, a generous person is not just someone who gives freely of their time and resources, they do so when it is called for in the situation (or when it is appropriate to do so) and in a manner that is appropriate. Moreover, the virtue of bravery does not merely involve someone who, according to Peterson and Seligman, (2004, p. 629) “takes frequent stands in the face of strong opposition”; it is someone who knows when it is appropriate to stand against opposition. After all, most people would agree that it is inappropriate to take frequent strides against expert medical advice relating to vaccines and medicine. The absence of an account of appropriateness regarding behaviour seems both odd and surprising, as the VIA-IS classification is meant to classify character strengths — being inappropriately brave or kind, and so on, towards the wrong people

at the wrong times and for the wrong reasons is clearly not a strength. One easy way (that would go at least some way in addressing this concern) is to include additional items that measure the excess of any given strength. Doing this, in addition to measuring deficiency to strength, would bring any measure much closer to capturing neo-Aristotelian virtue.¹⁶

To conclude this summary of the VIA-IS, though the measure may have some practical utility, it is too distinct from the neo-Aristotelian conception of virtue to provide much empirical relevance to a robust philosophical conception of virtue. The main shortcoming is that the researchers do not define what a virtue is in relation to any theory close to Aristotelianism. As such, the VIA-IS traits lack the structural components that virtues possess, such as appropriate reason, practical wisdom, appropriate emotions and right action.

2.8 The 'Virtue' of Thrift Scale

One more recent measure of a virtue includes the Thrift Questionnaire 21 (TQ21) (Ratchford et al., 2021a). In this study, the researchers developed and attempted to validate a five-factor model consisting of frugality/ecocentrism, spending dysregulation, investment, sharing/borrowing and sanctified thrift. The general construct of the virtue of thrift is operationalised as "the wise use and distribution of resources" (Ratchford et al., 2021a, p. 2).

From an Aristotelian perspective, the acknowledgement of wisdom as an integral part of thrift is a good contribution to the scientific study of moral character. The scale appears promising because the researchers partly ground the construction of their thrift scale in Aristotelian theory (as well as religion and economics) (Ratchford et al., 2021a, p. 4-5). More so, they believe that virtues involve "beyond-the-self motivation" (Ratchford et al., 2021a, p. 3

¹⁶ Interest in the golden mean is becoming popular in positive psychology. In fact, some researchers have already started measuring underuse, overuse, and optimal use of VIA character strengths. So far, there is evidence that optimal use is related to more flourishing, life satisfaction less depression while underuse and overuse are related to less life satisfaction, more depression, and less flourishing (e.g., see Niemiec, 2019).

& p. 4). However, even though these considerations make the Thrift Questionnaire look promising, the researcher's understanding of Aristotelianism is dubious, for example, they say, in reference to Aristotle, that "Virtuous habits stimulate *eudaimonia*, which in turn promotes the good life for the self and others" (Ratchford et al., 2021a, p. 3). Firstly, for Aristotle, expressing virtuous behaviours does not just contribute to or promote a good life, it largely constitutes it (*Nicomachean Ethics*, 1097b). Therefore, *eudaimonia* is better understood as a conception of what well-being is, rather than as an aspect of or means used to attain well-being. More importantly, however, the Questionnaire items merely reflect a severely impoverished understanding of Aristotelian theory. As an example, in Table 2.4, I present the items intended to represent beyond-the-self motivations (Ratchford et al., 2021a, p. 22).

Table 2.4.

Sample Items from the Sanctified Thrift Facet from the TQ21

I believe that God or a higher power cares about how I spend my money.

The way I spend my money has spiritual significance.

Giving away money is an important part of my religious or spiritual practice.

Budgeting has spiritual connotations.

I view myself as a manager of God's or a higher power's resources.

Source: (Ratchford et al., 2021b)

There are two major problems with these motivations. Firstly, they are the only motivation-based items in the scale, meaning the scale excludes all non-religious motives,¹⁷ such as caring for the well-being of others and oneself. Secondly, these motivations also do not directly track onto any specific behaviours themselves. For example, the general belief that "Giving away money is an important part of my religious or spiritual practice" can be completely independent of the motives that provide people with the impetus to perform their thrifty behaviours

¹⁷ Aristotle is also renowned for separating religion from virtue (e.g., with the exclusion of piety as a virtue).

(Ratchford et al., 2021b, p. 2). This is because one could know that generosity is an important religious virtue and simultaneously not be motivated by that belief.

Additionally, even though the researchers defined thrift as a virtue informed by wisdom, no measure of wisdom related to thrift (independent of behavioural questions) was incorporated into the scale. For example, the only items that directly measured cognition included: "I believe resources should not be wasted" and "I know how much money I spend on groceries weekly" (Ratchford et al., 2021b, p. 2). These items make a good start; virtuously thrifty people presumably know how much they are spending and are unlikely to waste resources. However, to get close to the Aristotelian conception of thrift, it is important to know whether people understand how much money they *should* be spending, and *what counts* as wasting resources. For instance, some people might prioritise donating a tenth of their income to the church rather than wasting it on "earthly goods" like shoes and warm clothes. These people hardly seem wise.

Another shortcoming of the TQ21 is the unsatisfactory incorporation of wisdom and appropriate motivation within the questionnaire, there are only two items relating to emotions: "I feel guilty if I waste food" and "I do not like sharing my belongings with others" (Ratchford et al., 2021b, p. 2). Again, this is a good start. But without measuring how the other behaviours relate to emotion, the questionnaire remains an ineffective tool for determining whether those other behaviours are virtuous. Emotions play an important role in Aristotelian theory, particularly in relation to vice and motivation (*Nicomachean Ethics*, 1104b). The implication is that the lack of emotion-based questions in the Thrift Questionnaire (or any virtue scale) renders it unable to measure or identify Aristotelian virtues.

The last aspect of the Thrift Questionnaire that I am going to discuss are the behaviours. As previously discussed, from an Aristotelian perspective, virtues are not just about performing

any particular type of behaviour (e.g., sharing money or resources); they actually refer to the performance of 'right actions' — virtuous people succeed in acting appropriately in the given circumstances (Hursthouse 2001, p. 13). The three items from the sharing facets include "I do not like sharing my belongings with others", "when asked, I am fine with people borrowing my things", and "I share my belongings with others" (Ratchford et al., 2021b, p. 2). The problem with these items is that they do not capture the nuance that virtuous behaviour necessarily involves. For example, sharing belongings is not a ubiquitous mark of virtue — just think of someone enabling a friend's drug addiction by giving them money, or someone who gives away possessions to their friends, leaving not enough for themselves or their family. Even when paring these items with other items, such as "I believe resources should not be wasted", it is far from clear whether the person in question still acts and feels appropriately for the right reasons (Ratchford et al., 2021b, p. 2). Capturing the nuance of virtue is something any psychometric measure will struggle to capture, however, with more appropriate items measuring, for instance, the vice of excess along with motivations, the questionnaire would have come a lot closer to measuring Aristotelian virtue.

In summary, even though both the VIA-IS and Thrift Questionnaire are allegedly inspired by Aristotelianism, each scale is still too far removed from capturing the main aspects of an Aristotelian account of virtue, namely, practical wisdom, appropriate emotions, reasons and motivations, and right action. Part of the difficulty with both of these measures may potentially stem from the researchers' attempt to merge too many different (and distinctive) approaches into the conceptual underpinning of virtues. The shortcomings of these measures demonstrate why it is important to base measures of virtue on one complete and coherent philosophical theory.

2.9 Other Possible Measures of Virtue

Before moving on to the next chapter, I will briefly mention some other measures that might be put forward as measurements of virtue.

Firstly, there is The Leadership Virtues Questionnaire (LVQ). This measure consists of four different virtues: prudence, temperance, justice and fortitude (Riggio et al., 2010). One good thing about the measure is that it includes one aspect of practical wisdom (i.e., prudence). However, the scale only measures prudence, and the other virtue components, in terms of behaviours. This essentially means that this scale also fails to measure Aristotelian virtue because it does not include items measuring each necessary component of the virtues.

Another measure of virtue involves gratitude. One unpublished measure of gratitude as a virtue even succeeds in involving emotional, behavioural and reasoning components (e.g., Morgan et al., 2017). The main shortcoming with this scale, however, is that it does not adequately tie these components together, for instance, there are no items that measure appropriate motivations for expressing gratitude (Morgan et al., 2017, p. 42).

There are many other scales that could be considered good candidates for virtue measures, for example, because they relate to desirable traits. However, I believe that none of them are adequate measures of Aristotelian virtues because, like these previous measures, they do not encompass all of the necessary components of virtue. Hence, they do not warrant further discussion here.

2.10 Conclusion

To conclude this chapter, the most dominant and researched empirical approach to virtue, Situationist psychology, supports the view that Aristotelian virtues do not exist. I have provided some strong rebuttals to the situationist critique, but it remains true that there is minimal scientific evidence to counter the empirical inadequacy charges against Aristotelian virtue theory. Other psychometric measures of virtues do not demonstrate that virtues *do* exist, but this is because they leave out important elements or components of virtue. Examining these measures is nevertheless useful insofar as it highlights the importance of avoiding these mistakes. For example, part of the inadequacy of these measures may relate to inadequate theorising about the differences between regular personality traits, character traits and virtues. Consequently, I will work to establish these differences in Chapter Three. There I will turn to the discussion to the empirical study of personality; specifically, I will be looking at why personality traits, even ones that appear to be virtues (e.g., Conscientiousness and Altruism) do not count as Aristotelian virtues.

3. Chapter Three: Virtues, Character Traits, and Personality Traits

3.1 Introduction

In this chapter I explain the difference between personality traits, character traits and virtues. As we saw in Chapter Two, being able to differentiate these classifications will provide a strong conceptual foundation, one that will more accurately measure the components of Virtue Conscientiousness. Firstly, I explain the trait approach to personality, focusing on arguably the most influential trait model — The Big Five (Maltby et al., 2017 p. 180). I then compare and contrast Big Five traits with character traits and Aristotelian virtues. This chapter has a two-fold aim: firstly, it explains how there are important differences between conscientiousness as a personality trait and conscientiousness as a character trait, and hence that the Big Five model cannot be used to measure conscientiousness as a character trait or as a virtue. Secondly, it will provide insight into how to empirically measure and validate Character Conscientiousness and Virtue Conscientiousness.

3.2 The Trait Approach to Personality

Some of the most important developments within the trait approach to personality, including the development of the Big Five model, starts with the lexical hypothesis. The lexical hypothesis entails that the most important interpersonal differences in personality will be encoded into language as single adjectives (Galton, 1884). There are two main assumptions that drive the lexical approach: firstly, the frequency of use for each word corresponds to its importance (i.e., more frequent words being more important), and secondly, the more words available to describe a trait, the more important that trait is in terms of social interaction, society

and personality (Saucier, 2001, p. 848-849). Based on the lexical hypothesis, researchers started creating lists of words to describe personality (e.g., see Allport & Odbert, 1936).

The major empirical advancements arose from the trait approach to psychology when researchers began using statistical techniques (i.e., factor analysis) to categorise pre-existing trait lists into workable clusters (e.g., see Cattell & Kline 1977; Fiske 1949; Norman 1963). Researchers recruited numerous participants, asking them to rate themselves in relation to how much the adjectives accurately described them. The first researchers to find five major personality traits are Tupes and Christal (1961). This research was later replicated (e.g., Digman & Takemoto, 1981). After reviewing all the research on the trait approach to personality, Goldberg (1981) also argues that there are five major components of personality.

The Big Five model, developed by Costa and McCrae, is arguably the most influential personality model in psychology (Maltby et al., 2017, p. 180). The Big Five model was established by asking large samples of participants to fill out standardised questionnaires about personality descriptions (Costa & McCrae, 1992). Essentially, the Big Five model is a personality taxonomy consisting of five facets: Openness, Agreeableness, Extroversion, Neuroticism and Conscientiousness. Each facet is made up of a number of sub-facets, for example, see Table 3.1.

Table 3.1.

The Big Five Facets

Conscientiousness	Agreeableness	Openness	Extroversion	Neuroticism
Competence	Trust	Fantasy	Warmth	Anxiety
Order	Straightforwardness	Aesthetics	Gregariousness	Angry hostility
Dutifulness	Altruism	Feelings	Assertiveness	Depressions
Achievement-striving	Compliance	Actions	Activity	Self-consciousness
Self-discipline	Modesty	Ideas	Excitement-seeking	Impulsivity
Deliberation	Tender-mindedness	Values	Positive emotions	Vulnerability

Source: (Maltby et al., 2017 p. 181)

One interesting thing to note at this point is that the Big Five model includes traits that also appear on standard lists of virtue (e.g., modesty, altruism, assertiveness and deliberation). Moreover, recently researchers, Lee and Ashton (2008), have proposed a new personality model called the HEXACO model of personality. This new model consists of the five original facets from the Big Five, and an additionally added Honesty-humility facet.

In what follows, I argue that there are important differences between personality traits (i.e., from the Big Five and HEXACO model) and the virtues as understood by Aristotelian virtue theorists. Indeed, I will show that personality traits are not character traits either. The implication of this is that the Big Five model of Conscientiousness cannot be used to investigate the status of conscientiousness as a virtue.

3.3 Broad Conceptual Similarities and Differences

Before getting into the specific structural differences between personality traits, character traits and virtues, I will establish some broad conceptual similarities and differences. Firstly, in psychology, there is a distinction between personality *types* and personality *traits* (Maltby,

et al., 2017 p. 165). Personality types are generally considered to be categorical variables, meaning someone either fits or does not fit into any given category. For example, if there are two personality types: extroversion and introversion, a person would be classed as either an extravert or an introvert. Examples of personality types include Adlerian personality types (e.g., the ruling, avoiding, getting and socially useful types) and Jungian personality types (e.g., the sensing, thinking, feeling and intuitive types) (Adler, 1973; Jung, 1964). By contrast, personality traits are continuous variables. This means that each individual person sits somewhere along a trait continuum. For instance, the personality trait conception of extroversion entails that everyone falls somewhere (i.e., to a greater or lesser degree) on an extroversion continuum. The trait approach is taken in Big Five research (Maltby et al., 2017 p. 180).

Philosophical virtue theorists usually refer to virtues as character traits. One reason for this might be that virtue theorists think that virtue comes in degrees (Hursthouse, 2006, para. 9). For example, out of the people who possess virtue, most fall short from perfect virtue, for example, it seems like everybody has the occasional bad day, bias or blind spot that hinders them to some degree. However, virtues are still exceptionally rare, and most people are expected to have one of the other character dispositions, (i.e., vice, habit, natural virtue, incontinence, and continence). These other character dispositions are considered to be distinct from virtue. Here, it is important to note that philosophical virtue theorists use the term ‘trait’ slightly differently than do psychologists. Below, I explain why, from a psychological perspective, terms like continence, incontinence, virtue, and so on, are better understood as categorical classifications about how people manifest character traits such as, generosity, courage and temperance, instead of being understood as different character traits relating to concepts such as generosity. As such, character dispositions such as virtue, vice, continence and incontinence can be measured together as singular traits.

Following the distinction between (personality) traits and types, I believe virtues are best conceived of as character types (or categorical classifications) rather than as character traits. This is because, as we've seen in Chapter One, Aristotelian virtue theorists claim that a trait can only be considered a virtue if it meets certain criteria (i.e., appropriate emotion, practical wisdom, motivations, and behaviour). This being the case, people are either classed as having the virtue, or, depending on what constituents of a virtue they possess, they are either categorised as vicious, habitual, naturally virtuous, incontinent or continent (*Nicomachean Ethics*, 1145a). In this sense, virtue is one classification among many that relate to character concepts like benevolence and honesty. Consequently, Aristotelian character dispositions, including the virtues, do not fit the conception of traits held in psychology. Despite this, I propose that character concepts can be measured as singular continuous traits. For this particular trait conception, I propose that virtues, and the other character trait dispositions, comprise particular areas on character trait continua — they are rough categories that people can be assigned depending on where they fall on character trait continua. Note, the extent that theoretical distinctions between the Aristotelian character types (vice, virtue and continence etc.) can be found empirically is still open to investigation. For example, someone falling extremely low on a continuum will be described as having the vice of deficiency, similarly someone falling high a continuum will be described as having the vice of excess, however, it may be harder to distinguish between the categories of continence and incontinence. Depending on how empirical data comes out, it could also be hard to distinguish virtue from the vice of excess because the two may be highly related. In this respect, it would be good to find a distinctive excess component of Character Conscientiousness. In essence, when it comes to character traits, someone could fall somewhere on the character trait continuum of generosity,

but, unless they meet each individual criterion for virtue, they do not have the virtue, for example., see Figure 1.¹⁸

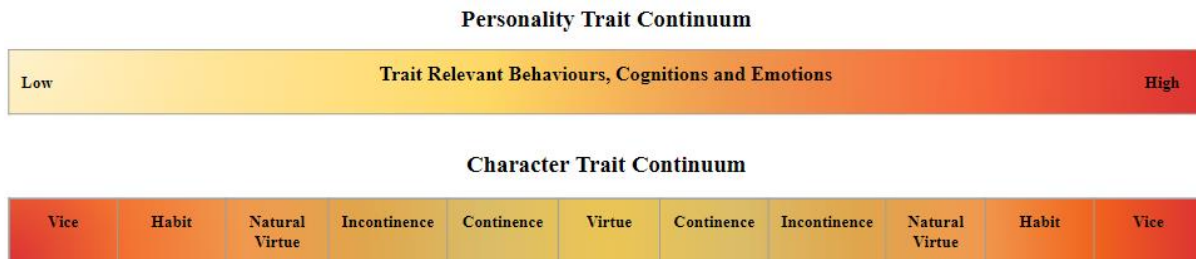


Figure 1. Representation of the difference between a personality trait continuum, displaying low and high trait expression, and a character trait continuum showing different character classifications.

For psychologists, character traits closely resemble personality traits in their broad classification — they are continuous variables that people possess to greater or lesser degrees (e.g., Jayawickreme et al., 2014, p. 3).¹⁹ ²⁰ The main distinction between personality and character traits relates to their content — character traits are often considered to concern moral standards of right and wrong (e.g., Fleeson et al., 2014, p. 181). However, there are a couple of additions I would like to add to this conception. Firstly, because there are different character types, character traits must contain the necessary features required to (in theory) delineate these different types. For example, a scale that only measures brave behaviours does not measure bravery completely; as discussed in Chapter One, people can express traits through reasoning and emotion. As such, character *traits* consist of all a person’s normatively relevant patterns of behaviours, emotions, and reasons relative to any given trait, for example, bravery, generosity

¹⁸ I have put natural virtue and habit closer to vice because these states are not refined by practical wisdom, which is arguably the key component of Aristotelian virtue.

¹⁹ Note that personality theorists will often define character traits and virtues synonymously. I believe this is inappropriate because virtues involve stricter criteria and are better described as character types.

²⁰ Miller, (2015) proposes that moral character traits, such as honesty, are threshold concepts. This means that people must meet certain criteria, such as good motives and appropriate behaviours, to have a particular character trait. This would make character traits a mix between categorical and continuous variables. However, it seems conceptually clearer to define character traits as continua from which character types can be distinguished. This approach coheres more closely with psychology, i.e., the trait of extroversion is continuous; however, this does not mean we would class everyone as an extrovert. Classifications can be made based on where people fall on the continuum.

or conscientiousness. Secondly, because virtues include prudentially desirable traits, and virtues fall on character trait continua, character traits must include traits that are morally and/or prudentially valuable. So, for example, temperance exists as a character trait as well as a virtue; the character trait lying on a broad continuum and the virtue being a particular classification within that continuum.

Besides the broad conceptual distinctions between personality types and traits, one important similarity between virtues, character traits and personality traits is that they are stable and consistent (global) (e.g., Doris 2002, p. 22; Maltby et al., 2017 p. 166). For example, people who score higher on the trait of extroversion are expected to exhibit more extroverted behaviours across a range of the same, and different, situations than someone scoring low on extroversion. Similarly, someone who is honest manifests honest actions reliably in response to the same and different honesty relevant conditions. However, although personality and character traits tend to be global traits, a greater degree of consistency and stability (globality) is required for virtue. This is because virtue involves a commitment to a given value, such as truth, justice, and the good of others. For instance, introverted people can occasionally feel more outgoing, and hence, sometimes perform extrovert-like behaviours. These behaviours may include things like leading group discussions at work, and so on. However, people who know introverts like this do not usually question whether these people really are introverted. Conversely, if for instance, a ‘seemingly’ benevolent person occasionally (i.e., once in a blue moon) decided to vandalise people’s properties and kick their cats, people would hastily say that this individual is not really benevolent at all.²¹ This would still be true if the ‘benevolent’ person merely and occasionally decided (i.e., consciously) not to perform benevolent acts, for example, if some days they did not bother to help injured bystanders (i.e., for no good reason).

²¹ The consistency criteria for virtue depend on whether virtues are defined as local or global. For local virtues, one would expect less consistency across different situations.

Essentially, when it comes to virtues, the globality requirement is much stricter than when it comes to personality traits.

As for my account of character traits, the strictness of the globality requirement depends on what part of the trait continuum people fall on. As noted above, if people fall on the virtuous area of the continuum, they will manifest virtuous behaviour consistently. However, when it comes to the areas just outside of virtue, the areas associated with continence, it is much more plausible that these people will manifest virtue more inconsistently. For example, continent people do not experience appropriate emotions and have desires prompting them to act contrary to virtue; in this case, it is much more likely that they will fail to manifest virtuous behaviours reliably. The same can be said for natural virtue, which, because of no or a lacking amount of practical wisdom, leads to inconsistently virtuous acts. Essentially, the globality requirement can be classified as medium in strength for personality traits, strong for virtues and complex (or mixed) for character traits.

3.4 Specific Structural Similarities and Differences

The main structural difference between personality traits, character traits and virtues relate to their components. In psychology, personality is commonly defined as people's tendencies to think, feel and behave in characteristic ways (e.g., Allport, 1961, p. 11). Another way of understanding personality, regarding trait theories, is to look at how traits themselves are defined (i.e., because according to the Big Five model, personality is made up of traits). According to Burger (1997, as cited by Maltby et al., 2017 p. 166), "A trait is a dimension of personality used to categorise people according to the degree to which they manifest a particular characteristic." This definition is interesting because it highlights the limited structural requirements when it comes to classifying personality traits. For example, there are

no criteria about whether singular traits or sub-traits require emotional, cognitive or behavioural components. For example, see Table 3.2.

Table 3.2.

Items Measuring Costa and McCrae's (1992) NEO-PI-R Achievement-striving Facet.

Positively Keyed

Go straight for the goal.

Work hard.

Turn plans into actions.

Plunge into tasks with all my heart.

Do more than what's expected of me.

Set high standards for myself
and others.

Demand quality.

Negatively Keyed:

Am not highly motivated to succeed.

Do just enough work to get by.

Put little time and effort into my work.

Source: International Personality Item Pool: A Scientific Collaboratory for the Development of Advanced Measures of Personality Traits and Other Individual Differences (n.d.).

As shown in Table 3.2, although the Big Five model does contain some emotion- and cognition-based items, there is no systematic relationship between emotion, cognition and behaviour. This is because there are no items that tie emotions, cognitions, and behaviours together. For example, in the achievement-striving facet, there are no cognition-based items about believing in the value of hard work. Moreover, there are no emotion-based items about satisfaction or pleasure relating to the performance of hard work or goal setting. The existence of a systematic relationship between emotion, cognition and behaviour is the first main

difference between personality traits and virtues — any given virtuous behaviour derives partly from appropriate motivations involving reasons and emotions. For instance, a virtuous person’s hard work will be partly motivated by a belief that hard work is worthwhile and by the feelings of satisfaction that come with achieving worthwhile accomplishments. Behaviours detached from emotion and cognition, from the Aristotelian view, are better described as mere tendencies or habits.

One of the most noticeable structural differences between personality traits and virtues relates to their cognitive components. Not only are there minimal cognitive items within the Big Five model, but the cognitive components themselves are also conceptually distinct from the types of cognitions that virtuous people have. For instance, virtuous people have cognitions comprising practical wisdom: the knowledge and deliberative ability to know how, when and where to exercise the virtues.²² Personality traits do not require any such knowledge. In fact, personality traits are closer to what psychologists refer to as constitutional traits, and what virtue theorists refer to as natural virtues (Cattell, 1982).

Constitutional traits are traits that are genetically derived; this makes them similar to natural virtues. Natural virtues (see Chapter One) are traits guided by good motivations, but which are not mediated by practical wisdom, hence, leading to inconsistently virtuous acts. Full virtues differ from natural virtues and personality traits, in this respect; they are closer to, but not identical with,²³ what Cattell (1982) refers to as “environmental-mold” traits (i.e., traits that are environmentally derived). Virtues are closer to environmental-mold traits because to develop a virtue, a person needs to build up experience in and across different situations (Snow,

²² For a further discussion of practical wisdom, see Russell, (2009)

²³ Though virtues develop in relation to social contexts, Aristotle describes virtues naturalistically. For Aristotle, virtues consist of performing natural and distinctively human functions excellently. In this sense, developing virtue involves the refinement of natural tendencies toward virtue in order to achieve *eudaimonia* (i.e., flourishing). See *Nicomachean Ethics*, 1097b-1098a.

2020, p. 4). Environmental experience provides the virtuous agent with the knowledge required to deliberate well about what virtuous action consists of. Practical wisdom and experience are important because what counts as a virtuous act is contingent on context, including broader cultural norms and more specific situational variables.²⁴ In this sense, virtues develop in relation to the environment in a way that personality traits do not.

When it comes to character traits, again, they are complex — sometimes there are no necessary relationships between thoughts, emotions and behaviours, other times there are. It depends on where the person falls on the trait continuum. For the character trait of generosity, for example, someone who merely exhibits generous actions independently from appropriate reasons still falls somewhere on the continuum for the character trait of generosity (note, this does not mean we would describe this person as generous; similarly, we would not describe someone scoring low on a psychopathy scale as a psychopath). For instance, imagine an emotionally void individual who buys their sons Christmas presents every year, not because they care for their children, but rather because ‘it is tradition’.²⁵ This person would not be called generous; however, I propose that people like this still fall somewhere on character trait continua because they exhibit behaviours, related to character constructs, that are cross-situationally consistent and stable across time.

One essential feature of character trait measures is that they contain items measuring the psychological variables involved in the different character type distinctions. If they do not, for example, if character trait measures do not measure all of the normatively relevant behaviours, reasons and emotions relative to any given character trait, then they do not fully measure

²⁴ This point does not imply that virtues are culturally relative. For instance, it is not the case that if inflicting torture was considered generally admirable within one culture, that sadism would be a virtue in that culture. The point merely means that, for any given virtue, for instance, benevolence, what counts as benevolent is situationally sensitive (e.g., it could be inappropriate to spontaneously buy colleges flowers, whereas this might be perfectly fine to do for a spouse).

²⁵ This type of behaviour is what an Aristotelian would refer to as Habit.

character at all. For example, someone who is incontinently benevolent (i.e., believes that the welfare of others matters, without manifesting appropriate emotion or behaviour) is still in possession of a type of character relating to benevolence, which is different from virtue or vice. Character trait measures, then, if they are to capture the full range of a person's character regarding singular trait concepts like benevolence and honesty, must systematically encompass items measuring emotional, behavioural, and reasoning components of character.

Before moving on, I'd like to note that this broad conception of character traits also offers a few pragmatic advantages. For one, it is parsimonious. We can capture the different character distinctions, such as continence, and virtue, and so on, in a single overarching and measurable construct; this means, when investigating character, we do not need different scales to measure different dispositions related to constructs like conscientiousness and generosity. Moreover, it is non-exclusionary — we can measure and apply continuum type character traits to most people in the population without excluding people who 'are not generous enough'. Of course, whether character traits are best understood in this broad way is subject to empirical investigation; we could find that, descriptively, the vice of excess relating to conscientiousness is completely unrelated to the other components of virtue. In this case, there would be added reason to think that vice is its own trait.

3.5 Descriptive vs Normative

So far, personality theory in psychology has been primarily descriptive (Maltby et al., 2017 p. 165). That is, psychologists do not prescribe what people's personality ought to be like, only what people's tendencies are actually like (e.g., see Saucier, 2001, p. 848). Part of this descriptive approach to personality involves comparing how different groups of people behave differently depending on where they sit on a trait continuum (Maltby, et al., 2017 p. 165). One example of this could be looking at how people who score low on extroversion compare to

people who score high on extroversion while performing workplace tasks, like training new staff members. One challenge that psychologists have faced when describing people's underlying personality is the large number of terms that can be used to describe people. Because of this, psychologists have resorted to using data reduction techniques such as factor analysis (Maltby et al., 2017 p. 168, 170).

Factor analysis is a statistical data reduction technique that organises the total number of variables into factors. In psychology, these are sometimes called 'clusters' (DeCoster, 1998, p. 1; Maltby, et al., 2017 p. 170). A factor is made up of a host of other variables that all correlate together. This method can be a useful way of determining what variables ought to make up a particular concept. For example, there are lots of different behaviours that could be described as extroverted, one might include a tendency to prefer to go to parties than stay at home, whereas, another behaviour might involve talking more in social situations, or being at ease in a crowd. The goal of psychologists then, is to simplify and systematically categorise these variables so that they can be used to describe how groups of people tend to behave, and what the main dimensions of personality consist of (Maltby et al., 2017 p. 170).

Aristotelian virtue ethicists share this descriptive aim with personality theorists. They seek to describe what virtues are. However, for virtue ethicists, part of the descriptive process involves value judgements. Virtues are defined in reference to normative criteria. i.e., in accordance with the *appropriateness* of emotions, thoughts and behaviours, especially in relation to human flourishing. For this reason, virtues are referred to as thick concepts — they have both descriptive and evaluative aspects) (Väyrynen, 2021). According to Aristotelians, people cultivate and exercise the virtues because they "contribute to and partly constitute human flourishing" (Snow, 2020 p. 3). Virtues, according to Aristotle, are moral, prudential, and intellectual dispositions; moreover, virtuous represent a type of excellent functioning —

this is the reason why emotions, reasons and behaviours have to be appropriate before they are considered to be manifestations of virtue (*Nicomachean Ethics*, 1097b-1098a).

The prescriptive element of Aristotelian virtue ethics works into the descriptive process of identifying the virtues for a few reasons. Firstly, it restricts which traits can be considered virtues: traits like extroversion or introversion are generally considered to be normatively neutral — neither is intrinsically superior to the other. Hence, personality traits like extroversion and introversion do not typically qualify as virtues or vices. Another way in which the normative standards restrict the classification of virtue is that, when it comes to any given trait, only a particular form of it can count as an expression of virtue. For instance, an overly generous donation to the wrong person for the wrong reasons is neither a morally nor prudentially desirable action — in fact, it seems a closer approximation of a vice of excess rather than a virtue. Essentially, what types of emotional, cognitive and behavioural manifestations count as virtuous, is quite strict, as stated earlier — not all expressions relative to any trait continuum can be classed as virtuous.

Character traits share most of the same normative features as virtues, they are also thick concepts, in that, they need to be morally and prudentially relevant. One difference is that, where virtues are necessarily desirable, character traits are normatively ambiguous — people can have a good or bad character. For example, someone can express a character trait too much or too little; people can also express character traits in the wrong circumstances for the wrong reasons (e.g., see Swanton, 2021, p. 149). This is because character traits are continuous variables and there are no criteria needed to have character traits — any psychological expression directly related to the construct of any given character trait is a manifestation of that trait. So, for example, if someone only donates to charity once every ten years, we would not say that they do not possess the character trait of generosity at all, rather we would say that they possess the trait of generosity to a very slight degree. Moreover, a burglar could be very

good at regulating their fear when they steal from people's houses; this is not an example of the virtue of courage, however, it would also be strange to say that the burglar lacks courage altogether. Rather, they merely exhibit an expression of the character trait of courage, not the virtue — as we saw in Chapter Two, virtues are rare, so character traits need to be possessed in very particular ways to count as virtues.

3.6 Data Driven vs Theoretical Approaches

Arguably, some of the main ways in which personality traits, character traits and virtues differ are grounded in the approach theorists take to defining them. Personality theorists take a data driven approach, whereas virtue theorists are driven by normative theory and conceptual analysis.

The data driven approach taken by psychologists toward personality traits is unusual in psychology. Usually, psychologists start by forming theories and hypotheses before testing them. However, personality researchers involved in the Big Five model, take the opposite approach (Maltby et al., 2017 p. 180).²⁶ They form their models almost entirely on the data, except for when it comes to naming the facets. What this means is that Big Five researchers formulate their models of personality in accordance with how people's answers on psychometric tests correlate together.

By contrast, in virtue theory, much work is put into theorising about what a virtue is. As has been previously mentioned, different conditions must be met for someone to have a full virtue, (i.e., appropriate behaviours, reasons and emotions). These assumptions are not based on any statistical correlations, and in fact, one might not even expect very strong correlations between appropriate behaviours and appropriate motivations because many people perform morally and

²⁶ As mentioned earlier, this is likely because there were too many personality terms to work with; the data driven approach reduces these terms into a more manageable amount.

prudentially valuable acts for either non-moral or non-prudential reasons. For instance, many people tell the truth because they are scared of the social consequences of lying (i.e., they have a questionable prudential motive when a moral motive is more appropriate). However, even though there might not be any empirical evidence suggesting a strong relationship between appropriate motives and appropriate behaviours, there are still strong conceptual reasons to say that both good motivations and appropriate behaviours are part of virtues.

When it comes to the descriptive element of the virtues, virtue ethicists do not use statistical methods like factor analysis to determine, classify or organise the number of virtues or their content. Instead, virtue ethicists take a theoretical approach grounded in reasoning. For example, in addition to the normative criteria, when deciding on whether behaviours, like donating money to the poor, spending time with one's grandchildren, or letting a friend stay at one's house, are part of the same or different virtues, virtue ethicists rely on conceptual analysis and abstract reasoning.

One example of conceptual analysis in virtue theory, is that some virtue theorists refer to and distinguish between the fields and targets of the virtues (e.g., Audi 1977; Swanton, 2003). Swanton (2003, p. 21) explains that the field of a virtue refers to the morally relevant items that are of concern to particular virtues. For instance, courage concerns dangerous situations, and temperance concerns bodily pleasures. Moreover, Swanton (2003) explains that the targets of the virtues refer to the underlying ends, or the reasons why a particular virtue is good.²⁷ For instance, the target of courage is to regulate fear, whereas the target of benevolence is to promote well-being (Audi, 1997, p. 180). These targets are conceptually distinct from the target of temperance: regulating bodily desires (e.g., desire for food) and the target of justice: giving people what they deserve. In this way, particular virtues can be differentiated on the basis of

²⁷ For a recent discussion of target centred virtue ethics and right action see Swanton (2021)

theoretical reasons, independently of how they are empirically correlated. As such, temperance might be positively correlated with justice because not overindulging in food and consumable resources enables other people to acquire their fair share. However, this still does not make justice and temperance part of the same trait, given that they each have a different target.

Virtue theorists make many of the same normative judgments with respect to character traits generally as they do towards virtues — character traits are descriptively defined based on evaluative judgments. However, a descriptive theory has been proposed by Miller (2015). This account is referred to as the Mixed Trait model. Miller bases this model on several assumptions. Firstly, based on psychological studies, Miller assumes that most people do not possess the traditional virtues or vices (Miller, 2015, p. 167). Nevertheless, Miller assumes that people *do* have character traits relevant to different moral domains. According to Miller, these traits are made up of various mental-state dispositions (i.e., the tendencies to manifest mental states reliably in response to relevant stimuli) (Miller, 2015, p. 167). These mental states include beliefs and desires. For instance, someone can have multiple mental-state dispositions relevant to honesty: one mental state disposition might be a tendency to *desire* to tell the truth when they *believe* that lying is harmful to others. Another mental-state disposition related to honesty (i.e., for the same person), may involve a *desire* to lie because they *believe* it will get them out of trouble. Essentially, Miller believes that there are numerous mental-state dispositions that each person has relative to any particular moral domain (Miller, 2015, p. 167-168). Moreover, as each group of mental-state dispositions give rise to varying degrees of moral or immoral mental states, Miller believes that, currently, there are no words that categorise these groups (i.e., the traits) involving the morally relevant mental-state dispositions that people have. For this reason, Miller refers to them as Mixed Traits (Miller, 2015, p. 168). Note that this model is purely descriptive apart from the labelling of the traits themselves: Mixed is an evaluative

judgment entailing that the traits that most people have are partly normatively good and partly normatively bad.

The Mixed Trait model seems to cohere to the standard concept of character traits as continuous variables (e.g., most people have character traits to varying degrees).²⁸ It also coheres nicely to the idea that most people fall into the categories of continence and incontinence because people's inconsistently desirable behaviours might relate to inner conflict and, in turn, partly cause inconsistently excellent (and deplorable) behaviours. The Mixed Trait model also calls attention to how and why behaviour can be so diverse. In this respect, it might be the case that virtues and character traits are more likely to manifest in particular domains, like work or home. This is because people might have clusters of similar mental states associated with one domain that do not apply to others, such as, desiring to be generous to one's children and spouse because of a belief that family comes first. Compare this with not desiring to be generous to co-workers because of a perception of rivalry, accompanied by the belief that it is bad to help rivals. However, because the Mixed Trait model seems to cohere with standard trait conceptions, I will continue to just use the term 'trait' and not 'Mixed Trait'.

The differences between personality traits, character traits and virtues are summarised in Table 3.3.

²⁸ The model does diverge in one sense: most traits are continuums, consisting of little trait expression on one end, and a lot of expression on the other. For example, positive affect refers to the tendency to experience positive emotions like excitement and joy etc. However, people who score low on positive affect measures do not necessarily experience more negative emotions such as anger or sadness. Negative emotions fall on a completely different continuum. However, this is not a necessary condition for traits; if positive and negative emotions *were* highly related, then, according to psychologists, they would be a part of the same construct. Likewise, some character traits, like honesty, will likely consist of the reverse of the trait e.g., if one does not tell the truth then they likely lie. So, lying and truth-telling will fall on one continuum, e.g., it is a mixed trait. However, some traits may not be related to their supposed opposite, e.g., scoring low on kindness might not imply that one is necessarily cruel. Cruelty and kindness are likely different traits.

Table 3.3.

Differences Between Virtues, Character traits and Personality Traits

Big Five Personality Traits	Character Traits	Virtues
<i>Trait Structures</i>		
<i>Continuous</i>	<i>Continuous</i>	<i>Categorical</i>
Constitutes entire trait continua	Constitutes entire trait continua	Consists of 'the golden mean' of trait continuums
Moderately consistent and reliable	Mixed strengths of consistency and reliability	Strongly consistent and reliable
Consist of mainly behaviours, with some emotions and cognitions. Behaviours, emotions and cognitions are not necessarily 'tied together'	Consist of the behaviours, emotions and cognitions necessary for distinguishing the different character types	Consists of appropriate reasons (e.g., practical wisdom), emotions, and behaviours. Behaviours are tied to emotion and reason in the form of appropriate motivation
<i>Background Approaches</i>		
Descriptive	Descriptive and Prescriptive	Descriptive and persistent
Data Driven	Theory Driven	Theory Driven

3.7 Implications

One thing to note about the difference between virtue and personality theory, is that motivations consisting of appropriate reason and emotion play a much more significant role in virtue theory. This means it would be inappropriate to create a measure of Character Conscientiousness that closely approximates the Big Five measure of Conscientiousness. Instead, careful consideration should be taken in creating measurement items and facets so that they can accurately measure Character Conscientiousness. This process will involve constructing facets that can measure all of the important aspects of character. Measuring each aspect of character will then assist in determining in which types of categories (if any) people

can be placed regarding the different character types, for example, continence, incontinence or fully virtuous, and determining how such character types affect outcomes such as well-being.

Another implication of the psychological approach to personality traits is that, even though personality and virtue theory are very different, virtue theory can benefit from using the empirical methods from psychology to inform theory. For instance, by conducting a factor analysis on items within a particular account of virtue, virtue theorists will have access to more descriptive data about which internal features of a virtue typically go or do not go together. Such information may help in shaping a virtue theorist's account of virtue. For instance, it might be the case that items strongly correlate together when participants are asked about character in a local context like work, whereas they might not when they are asked about character in a general context. Moreover, it could be the case that there is a clear division between prudential and moral forms of the virtues. Alternatively, there could be no correlation or even a negative correlation between having 'appropriate' motivations (i.e., relative to the target of conscientiousness) and behaving conscientiously. Such a result, if consistently found with a range of different measures and virtues, might either call into question the practicality of virtue theory as a field of enquiry altogether; or, at least, inspire a conceptual change to occur. This is altogether a good implication, as it stands as a type of falsifiability or testability for some claims made by virtue theorists, setting virtue theories up as a potentially scientifically supported philosophical theories.²⁹

In addition to the relationships between constituent parts of virtues, empirical testing can help inform what type of variables belong with particular facets of the virtue. For instance, it

²⁹ Some people might say that it is impossible to falsify Aristotelian virtue ethics in this way. This is because even if empirical studies found no relations between appropriate motives, virtuous behaviour, and well-being, this does not mean that nobody can possess full-virtue – it might just mean that having full-virtue is even more exceptionally rare than anticipated. However, I believe that this misses the point that virtue ethics is supposed to be modelled on a realistic picture of human psychology. Thus, I believe a virtue ethics based solely on unfalsifiable assumptions is untenable.

might be the case that one example of a virtuous and conscientious preference does not correlate with the other examples of the virtue — if seemingly conscientious people do not prefer to prioritise their work over their close friends, then it might be the case that the virtue of conscientiousness involves a preference for friends over work. In other words, items within particular facets such as, say 'conscientious behaviours' ought to have internal consistency (correlations amongst items) if they are to count as evidence for an account of a real, unified and fundamental constituent of the trait.³⁰ These last two implications mean that empirical work, similar to that in Psychology, can help virtue theorists determine two main things.³¹ Firstly, what the constituent parts of virtues really are, for example, they could more accurately be described as moral or prudential facets containing the relative behaviours, reasons and emotions, or as some other arrangement. Secondly, what these constituent parts actually consist of, for example, it might be the case that virtuously conscientious people get slightly irritated when their work falls just short of being perfect or vice versa. Such findings can help in establishing whether full virtues and character types exist, and if so, how they relate to important outcome measures. Alternatively, it may help in determining whether people have character types not yet described.

3.8 Conclusion

In conclusion to this chapter, there are many differences between personality and character traits, and virtues. One of the most important differences to note, is that to be considered virtuous, people have to meet specific criteria, making them very rare classifications. Alternatively, character traits are continuous variables that are partly defined relative to

³⁰ Note that the facets might not correlate based on the different criteria for virtue. For example, they might correlate according to the type of motivation, such as moral or prudential. Whether or not the items correlate or in what way they correlate does not necessitate an implication for virtue theory. Instead, any implication that the data has on virtue theory will be up for debate.

³¹ Again, here I am saying that the findings will guarantee any particular interpretation, but rather, that the findings will add to the data usable to theorists for their theorising.

normative standards. Big Five personality traits, on the other hand, are entirely descriptive and hence, do not count as appropriate measures for character and virtue. These differences need to be taken into consideration when empirically investigating Virtue Conscientiousness. Moreover, as Character and Virtue are theoretically based concepts, Character and Virtue measures need to be grounded in theory. For example, theoretical work, such as, identifying the target of Virtue Conscientiousness and formulating items to measure the different aspect of character and virtue is essential. After these steps, data can be collected to test particular theoretical assumptions about Virtue Conscientiousness and to form a stronger empirical foundation for virtue theory.

4. Chapter Four: Virtue Conscientiousness

In this chapter I develop an Aristotelian account of the virtue of conscientiousness. To start, I begin by explaining the personality trait Conscientiousness from the Big Five. In doing so, I draw from Chapter Three in explaining why it is not a virtue in the Aristotelian sense, as we'll see, it differs greatly. Another reason why I continue to discuss the personality trait of conscientiousness here, is because it will help inspire a conceptual starting point for a new account of the character trait and virtue of conscientiousness. As a reminder, Character Conscientiousness refers to the broad and normatively relevant but ambiguous trait of conscientiousness. Virtue Conscientiousness is a rare classification involving refined, and excellent ways of expressing Character Conscientiousness in relation to each criterion for virtue. After discussing the personality conception of conscientiousness, I move on to explain the potential reasons why virtue ethicists have not added conscientiousness to their list of virtues. In the final section I present and explain my account of conscientiousness — one that is targeted at role-performance — specifically I discuss my account of Virtue Conscientiousness in relation to the criteria discussed in Chapter One (i.e., reasons, emotions and behaviours). The strong conceptual foundation for Virtue Conscientiousness established here and in Chapter One and Three, sets me up to present the items used to measure Character Conscientiousness in Chapter Five, and discuss the results of the empirical investigation in Chapter Six.

4.1 Big Five Conscientiousness

People who score high on the Big Five scale of Conscientiousness are often described as determined, dependable, prudent, organised, and controlled, whereas people who score low on Conscientiousness are described as undependable, distracted, and careless (Costa & McCrae, 1998, p. 120; Maltby et al., 2017 p. 180). Moreover, high scores on the Big Five

Conscientiousness facet predict romantic fulfilment, occupational and educational success and reduced anti-social activity (Hampson, et al., 2013; Shiner, et al., 2003; Mammadov, 2021). This psychological conception of conscientiousness is often referred to as 'the work trait' (Table 4.1).

Table 4.1.

The Big Five Conscientiousness Facets

Competence
Order
Dutifulness
Achievement-striving
Self-discipline
Deliberation

Source: (Maltby et al., 2017 p. 181)

Just from this short list, without going into detail, it is already apparent that a virtue theorist would be sceptical about whether all these components are a part of the same trait. Moreover, virtue ethicists would be more sceptical of whether these facets could make up one conceptually distinctive virtue. The main reason virtue ethicists might be sceptical is that it is far from obvious how something like order is connected to the same concept as achievement striving, competence or any other facet on the list. For example, the target of achievement-striving, is to *reach* a particular goal or to *accomplish* a worthwhile achievement. On the other hand, the target of orderliness relates to *maintaining* structure in one's mind or physical environment. It seems there are many achievement-driven painters, chefs, scholars, and so on, not all of whom possess the trait of 'orderliness' to even a moderate degree. This is much the same for self-discipline. The target of self-discipline is to control desire; consequently, self-

disciplined people find it easy to be orderly because they are able to do things like clean the dishes even when they do not feel like it. Plainly, some people do not value orderliness, but it does not follow that they cannot be self-disciplined. Orderliness and self-discipline have different targets, in which case, these two traits are conceptually distinct.

In relation to neo-Aristotelian virtue ethics and character trait theory, there is one main shortcoming with Big Five Conscientiousness. The problem is that neither the items nor the facets were created in relation to any normative standard (see Chapter Three). This means that the Big Five is simply not an effective tool for character evaluation and measurement. For instance, Big Five Conscientiousness cannot be used to delineate the different character types, including virtue and vice. One main reason for this is that the Big Five Conscientiousness items do not include enough, or the right kinds, of reason-based and emotion-based items. Moreover, the items that do relate to cognitions and emotions are not tied to the behaviours in any appropriate way for determining motivations. This is important because virtuous agents are motivated and informed by appropriate reasons and emotions.

4.2 Implications

These conceptual issues might not be relevant or important for psychologists, but what it does show is that a conceptually and empirically robust version of Character and Virtue Conscientiousness will look very different from the version of conscientiousness found in the Big Five. This is primarily because the Big Five was derived from a data first approach: the traits were constructed around correlations instead of a robust conceptual theory. By contrast, the first step in creating a character measure of conscientiousness is to create a theoretical account of the trait; the second step is to create a measurement of this trait relative to the different types of character, including virtue. This measure can then be tested and/or updated based on the validation process.

Although constructing an account of Character Conscientiousness must be grounded in conceptual theory, the Big Five model generates a useful type of data to draw from. This is primarily because Character Conscientiousness is fundamentally about people and the Big Five describes real individual similarities and differences in people's personalities. Conscientiousness in the Big Five consists of clusters of traits — analysing these traits and their conceptual relations can thus help in identifying and understanding the structure of Character Conscientiousness and the target of Virtue Conscientiousness. For example, items from the Big Five Conscientiousness scale suggest that Character Conscientiousness could be about several things, including: fulfilling duties, having the self-control to do the right thing, having the determination to reach goals, or having enough competence to make worthwhile achievements. Character Conscientiousness and Virtue Conscientiousness could also be about success or optimal role performance.

4.3 Why Conscientiousness is Not Typically Considered a Virtue

Now that I have established some potential targets of Virtue Conscientiousness, I will explain some possible reasons why it typically is not considered a virtue, and hence, why the trait of conscientiousness has received little discussion in the philosophical literature.

Conscientiousness as a virtue is commonly understood in terms of moral duty, for instance, a conscientious person is someone who characteristically acts from a sense of duty (e.g., see Angle, 2013, p. 1). In Kantian terms, they do their duty because it is their duty. This is problematic for virtue ethicists because, as led by Anscombe (1958), neo-Aristotelians reject modern orthodoxy in normative ethics by eschewing abstract moral language, such as 'moral duty', 'morally right', 'obligatory', and so on, in favour of aretaic based language. This may well explain why conscientiousness is never among the expanding list of virtues discussed by

neo-Aristotelians — with its connotations to fulfilling one's duties, conscientiousness is conceptually too close to the rejected notion of moral duty.

A closely related reason why conscientiousness does not appeal to Aristotelians is that Aristotelian virtue ethics subscribes to a form of particularism. This means that virtue ethical action guidance is based on context and cannot generally be derived from moral rules or principles (van Zyl, 2018, p. 145). For example, Angle (2013), draws from Confucian philosophy to argue that conscientiousness is not a virtue. Angle illustrates one central point from the *Analects*: rule-following leads to superficial ways of behaving — the conscientious person cannot deal with the complexities of different situations (Angle, 2013, p. 183-184). This reasoning also coheres with the Aristotelian idea that the virtues require practical wisdom, which is acquired over time and through experience, and which enables one to recognise the relevant virtues and how to manifest them in the given situation (Russell, 2009, p. 8).

An alternative conception of conscientiousness could be that it consists of the ability to self-regulate. Conscientious people are often seen as self-disciplined. For instance, the conscientious student who can resist peer pressure and stay home to study rather than go to the pub with their friends. So, perhaps conscientiousness is a form of self-regulation involving the ability to muster up the strength to do the right thing. According to Angle (2013), this form of conscientiousness also fails to be a virtue. Now drawing from the *Mencius*, Angle (2013, p. 184-186) observes that, if one acts virtuously, drawing solely on conscientiousness, then the conscientiousness is masking inner weakness. This is because fully virtuous people do the right thing without inner conflict; they do not need to *make* themselves behave virtuously. This type of reasoning coheres with Aristotelian virtue ethics because Aristotelian virtues involve appropriate emotion. For example, someone who has to use self-discipline to make themselves feed a starving child seems better described as 'continent' rather than virtuous. Consequently, conscientiousness as self-regulation seems more appropriate for learners than the virtuous

(Angle, 2013, p. 186). However, self-regulation, and the adherence to moral duties are not the only forms of conscientiousness.

4.4 Role-Specific Conscientiousness

One thing that the previous reluctancies about recognising conscientiousness as a virtue miss is that not all duties are moral duties (i.e., derived from abstract moral principles). Annas (2015) makes this distinction, noting that, while Aristotelians reject the idea of abstract moral duties, they do accept the existence of real role-specific duties. People find themselves in numerous roles; they can be parents, team leaders, friends, employees, and students. All of these roles come with duties of some kind. To think that the traits involved in prioritising these real-life commitments are not important seems to be a mistake — human societies depend on roles, so it seems having the skills to perform them well is a distinct human excellence. Roles are integral to personal meaning, identity, and accomplishments; they are also important for maintaining excellent social relationships. Roles build interdependence, trust, and enhance productivity. Thus, the virtue of excellent role performance seems like a distinctly human excellence, which relates to *eudaimonia*.

Roles are fundamentally important to human life, yet virtues targeted at roles are not included on standard lists of virtues. However, roles are ubiquitous, and most people have multiple, so it seems there is space for a virtue to target roles collectively. I propose that this space is occupied by an under-theorised virtue — Virtue Conscientiousness. I propose that conscientiousness, as a virtue, is targeted at excellence in relation to roles.

The first thing to note about Virtue Conscientiousness, as defined as excellence related to roles, is that excellence is understood in the Aristotelian sense; this means that excellence involves the ability to correctly assess what roles are worth pursuing in the first place. Using the Aristotelian understanding of excellence, one would not consider someone who succeeds

in dedicating their life to human trafficking to be excellent at prioritising their roles. Moreover, neither would one consider someone who prioritises keeping the tennis club's books in order over looking after their family as being excellent regarding roles. These evaluative judgements are based on the assumption that certain roles are more meaningful or important than others. In this sense, I propose that one target of Virtue Conscientiousness is to correctly identify what roles to seek out, and out of these roles, what role-specific responsibilities should be prioritised over others.

There are strong reasons for believing that Virtue Conscientiousness exists. Intuitively, it seems like people are better or worse at prioritising their roles and role-specific responsibilities. People differ in how much value they place in specific roles, such as the role of parenting, and so on. This has seemingly significant consequences for how their life goes, such as whether they are successful or not in their career. Moreover, role performance is important because, currently, Western democratic societies place great emphasis on individualism and personal responsibility. People's success is supposed to partly depend on their ability to prioritise their personal commitments and perform their roles well. In this way, it is actually surprising that Virtue Conscientiousness has not received more attention, especially because virtues are also understood as reflective of admirable social values (Van Hooft, 2014, p. 2).

Virtue Conscientiousness, as I am conceptualising it, is ultimately targeted at excellence pertaining to roles. As mentioned, a part of this excellence relates to choosing what roles are worth pursuing. However, another aspect of it relates to performing and prioritising particular important roles well.³² The implication of this conception is that roles create relevant demands on the agent, an example of which is fulfilling institutional duties. To clarify this idea, I will

³² One thing to note here is that, sometimes it is reasonable to prioritise some roles more than others. For example, most people would think that a prime minister's role-specific responsibilities necessitate stronger priority than the role-specific responsibilities of a gardener.

explain Virtue Conscientiousness in relation to students. For a student to perform their role well, they must care about what duties or responsibilities one has as a student. For instance, students face many social expectations and prudential responsibilities; they are expected to do things like meet deadlines, attend classes, do their course work on time, remain quiet in lectures, and so on. Some of these duties lean more towards the interpersonal side, for example, remaining quiet in class and paying attention to the lecturer, whereas others lean more towards the prudential side, for example, completing course work. However, what is clear is that both are important for being a good student. The interpersonal duties can help in the typical sense; they enable one to maintain social relationships with other students and teachers, this in turn can also lead to more effective learning and learning opportunities. The prudential duties, like doing course work, also lead to academic success, for example, by directly contributing to the acquirement of knowledge and good grades. However, it is also important to note that students have other roles too — some have jobs or are parents, and so on. In this case, it is also important for students to know how to balance the competing demands of their different roles. In some cases, it may be necessary to skip a class to look after one's child, in other cases, it may not be. Consequently, there seems to be good reason to classify conscientiousness as a virtue because it is concerned with fulfilling duties that enable one to perform their most important roles excellently. Excellence in performing roles is a distinctly human ability that helps one to live a good life.³³

At this point, someone might object by observing that Virtue Conscientiousness, as I have defined it, is merely a collection of other virtues rather than a virtue of its own. For instance, it could be that arriving to class on time has nothing to do with someone's role as a student, but

³³ One may say that role performance is not distinctly human because animals can also have roles, e.g., gender roles. However, human roles are different. Animals do not consciously choose roles in acknowledgement with the responsibilities that come with them. Humans do — there are a range of possible roles that any human can choose to perform, therefore, the ability to choose well is distinctly human. Moreover, unlike roles of animals, human roles are directly related to culture, including cultural development.

rather, just a basic level of human respectfulness. The same might be said of other duties; not cheating on an exam could relate more to the virtue of justice than conscientiousness. Essentially, being a good student may require a combination of virtues like patience, determination, or kindness, and so on, but we would not say these are all one virtue just because they are all required for being a good student.

In response to this objection, I begin by admitting that Virtue Conscientiousness overlaps with other virtues — being a good student, for example, by remaining quiet in class, will involve being respectful. However, this does not mean that Virtue Conscientiousness collapses into them, and, in which case, the objection misses the point of Virtue Conscientiousness. Annas (2015, p. 614) writes about the difference between obligation and virtue by explaining that if one is visiting a park where there is litter on the ground, it might be thoughtful or considerate to pick up the trash; however, it is not one's obligation. Whereas, if it was the case that you, in fact, worked at the litter-strewn park, it may very well be your duty to pick it up (Annas, 2015, p. 614). In this sense, the park worker has a stronger reason to pick up the litter than the visitor because of their role. For instance, if the park worker had the opportunity to interrupt their conversation with a co-worker to pick up the litter, then it might be the virtuous thing to do because it enables them to perform their role well. The same cannot be said about a mere visitor to the park. It might be rude or disrespectful for the park visitor to interrupt a conversation with a friend to go and pick up litter, especially if there are other people or employees around that could also do it. In the case of students then, being quiet in class is not just a matter of respectfulness, but also of taking one's role as a student, with all the responsibilities that come with it, seriously. For instance, say a student brings their friend to class just to share the joy of Philosophy, for the friend, being quiet is a matter of respectfulness, not conscientiousness. And being quiet is all that is required of them. The student, by contrast, should be quiet because that is how you learn, and they are not just expected to be quiet but

also to pay attention, take notes, and so on. Therefore, it seems like exercising the virtue of conscientiousness is distinctively different from merely exercising the other virtues.

4.5 Virtue Conscientiousness and the Requirements for Virtue

Now that I have established that Virtue Conscientiousness is its own virtue, distinct from others, I will go into more detail theorising, from an Aristotelian perspective, what a person with Virtue Conscientiousness is like. Firstly, it is important to note, that as a virtue, Virtue Conscientiousness includes appropriate emotions, behaviours, and reasons, and so it fulfils the criteria for virtue discussed earlier in Chapter One. I will show how there are appropriate, behaviours, emotions, and reasons for Virtue Conscientiousness by using students as an example.

Firstly, when it comes to behaviours, virtuously conscientious people will do things like turning up to class and submitting assignments on time, studying for exams, completing course work, and respecting peers and teachers. In a general sense, these can be described as dutiful behaviours — they directly refer to meeting one's duties as a student. However, having Virtue Conscientiousness refers to more than just fulfilling role-specific duties and responsibilities. In fact, such behaviours are rather a sort of minimal standard. For example, good students submit their assignments on time, but not everyone who submits assignments on time is a good student, for instance, some students submit assignments on time, however, they also only ever do the minimal amount of work required to pass. Good students, on the other hand, have an appreciation of excellent work and strive to do their best. Because of their appreciation of excellence, good students, as well as fulfilling duties, also perform excellent behaviours. Good students do not just show up to class, they show up and do more than what is required because they understand the significance of their role and their learning. Good students engage with the lectures, course material and their fellow students. Good students try their best; they do not just

settle on doing work that is good enough to pass, their work is authentic to their true potential, skill, desire to improve, and their appreciation for the role that they are in.

An important thing to note here is that there are related ways of behaving that are similar but not identical to, behavioural characteristics of Virtue Conscientiousness. For example, if someone takes their obligation to complete course work and assignments on time seriously, they will also likely make sure to maintain some amount of organisation. Such behaviours might consist of making notes of key deadlines, making sure that one brings the right books and stationery to class, and having notes and planning what needs to be done. These behaviours, though related to being virtuously conscientious, are not *necessarily* examples of Virtue Conscientiousness. The reason for the difference between meeting one's role-specific duties and being organised, and why the former is a target of Virtue Conscientiousness, while the latter is not, is because fulfilling role-specific duties is required to perform one's role well, while being organised is not always necessary. Good students do not fail to submit most of their assignments. On the other hand, it is conceivable, and somewhat common, for some students who are not very organised, (e.g., they do not plan a schedule, or keep a tidy work environment) to still be good students because they complete their work on time and to a high standard, and learn without interfering with the education of others.³⁴ I take this to be because organisation is often instrumental to performing roles well, while fulfilling duties is required.

The next component of Virtue Conscientiousness involves emotions: students with Virtue Conscientiousness will act with sound emotions. For instance, if someone really cares about fulfilling their role as a student well, they will be eager to complete their work and maybe even become frustrated when something gets in the way of them completing their work or getting to

³⁴ Because organisation is not necessarily a desirable trait to score highly on, I think organisation is better described as a mere personality trait rather than a character trait or a virtue.

class on time. Moreover, people with Virtue Conscientiousness will find being a good student to be rewarding.

In addition to having appropriate behaviours and emotions, people with Virtue Conscientiousness also reason well. For example, students will have appropriate reasons for choosing study — they might think it will help them get a well-paying job, one that provides financial security for themselves, family, and friends. They may also want to learn how to better help society or the environment, and so on. In simple terms, people with Virtue Conscientiousness will have well-thought-out and good reasons for choosing study over alternative career paths. Moreover, people with Virtue Conscientiousness will understand what being a good student requires; they will realise that it involves personal learning, growth and respect for others. Good students also know how to perform the roles they've chosen well. For example, they will know that to get the most out of their learning, it will benefit them to collaborate with other students and engage in meaningful discussions with their teachers. Students with Virtue Conscientiousness will also know when and how to prioritise certain things over others; they will know, for instance, when it is appropriate to stop studying to spend time with their family and friends and vice versa. In essence, Students with Virtue Conscientiousness know why being a student is worthwhile, they will understand what being a good student requires, they will know how to be a good student, and they will know how to prioritise student responsibilities with the responsibilities of other roles.

Now that I have discussed what Virtue Conscientiousness looks like regarding the criteria for virtue, I will now explain what the corresponding vices of deficiency and excess of Virtue Conscientiousness looks like. Firstly, people who have a deficiency of conscientiousness will fail to fulfil the most minimal duties. For example, these will be the students who do not submit assignments, do not show up to class on time, disrespect other students' learning, and devote minimal effort towards their education. There are several reasons why someone might fail to

succeed in acting conscientiously. These include, failing to know how to be a good student, not understanding why it matters in the first place and merely not caring. One thing that is important to note however, is that, to have the *vice* of deficiency, one must fall short in their behaviours, emotions and reasons (e.g., they do not fulfil their duties, they do not know why they should fulfil their duties, and they do not feel any regret at failing to fulfil their duties).

There are other ways of being deficient in Virtue Conscientiousness without having the vice. For example, incontinent students know why they ought to fulfil their student responsibilities, however, because of their weakness of will, they are unable to fulfil them. Other students succeed in acting conscientiously but fail to have the virtue because of their inappropriate reasons and/or emotions. For example, some students meet deadlines because they are afraid their teacher will be mad if they do not. Other students might study for an exam to look smarter than their classmates. These students are best described as merely possessing good habits or as having natural virtue. Other students know why being a student is important and perform appropriate behaviours, but they still feel emotions such as dread at having to do their work and/or dissatisfaction with the work they've completed. These people are better described as continent.

Alternatively, people can possess the vice of excess regarding conscientiousness. The vice of excess involves over valuing one's role and the responsibilities that come with it. People with this vice will overvalue their role until the point that it prevents them from exercising other virtues, for instance, they might not behave benevolently by, for example, helping an injured bystander because they do not want to be late for class. These people might *believe* that being a good student is more important than being a good friend or family member. Students like this might study to the point that it prevents healthy relationships with friends and family. Students with the vice of excess might also compromise, unnecessarily, their physical and mental health for a slightly higher grade. Possessing this vice of excess also involves

inappropriate emotions. Students with inappropriate emotions may experience chronic stress about not being able to complete work perfectly, or intense anxiety and guilt about having to miss a class.

The descriptions of what Virtue Conscientiousness looks like regarding the different character dispositions and the components of virtue are summarised in Table 4.2.

Table 4.2.

Descriptions of Students with the Different Components of Virtue Conscientiousness

	Reasons	Emotions	Behaviours
Fully Virtuous	Completing work well Learning new material Concern for personal well-being Fulfilling commitments Helping others learn Appreciation of excellence	Starting work with ease Satisfaction with good grades Disappointment with lateness	Arriving on time Completes assigned work Does excellent assignments Helps other students
Continenence	Completing work well Learning new material Concern for personal well-being Fulfilling commitments Helping others learn Appreciation of excellence	Annoyance at having to work Finds work unsatisfying Does not like having to fulfil duties	Arriving on time Completes assigned work Sometimes does excellent assignments Helps other students most of the time
Incontinence	Completing work well Learning new material Concern for personal well-being Fulfilling commitments Helping others learn Appreciation of excellence	Annoyance at having to work Finds work unsatisfying Does not like having to fulfil duties	Often, but not always, arrives late Does not do all the readings Completes work to minimal standard Might not always respect other student's learning

Natural Virtue	Does not know how to be a good student Does not know why being a good student matters	Starting work with ease Satisfaction with good grades Disappointment with lateness	Arriving on time Completes assigned work Does not complete excellent assignments Inconsistently succeeds at helping other students
Vice of deficiency	Thinks hard work is a waste of time Does not know how to be a good student Wants to look better than others	Annoyance at having to work Finds work unsatisfying Does not like having to fulfil duties	Arrives late Does not do all the readings Completes work to minimal standard Does not respect other student's learning
Vice of Excess	Completing work well Learning new material Concern for personal well-being Fulfilling commitments Helping others learn Appreciation of excellence	Gets stressed about not completing work perfectly Anxious about missing class Get very distressed when they haven't fulfilled their duties	Prioritises work over family and friends Works until burning themselves out Fails to exercise other virtues
Habit	Does not know how to be a good student Does not know why being a good student matters	Just does not care (i.e., does not have strong feelings)	Arriving on time Completes some of the assigned work Does not do excellent assignments Sometimes helps other students

4.6 Conclusion

In conclusion, there are different ways of conceptualising conscientiousness. We have seen that some conceptions, such as the moral duty and self-regulation concept do not cohere with the criteria for virtue stipulated in Chapter One. Though I have argued that the conception from the Big Five is too broad to constitute one singular virtue, its reputation as ‘the work trait’ has helped inspire my role-performance theory of Virtue Conscientiousness. Roles play a central part in human life; in this chapter, I have identified the targets of Virtue Conscientiousness as

choosing appropriate roles and performing them excellently. People with Virtue Conscientiousness will fulfil their role-specific duties excellently. The types of duties and behaviours required for each role may differ, however, I explained what Virtue Conscientiousness looks like in students following the Aristotelian conception of virtue. Now that I have explained Virtue Conscientiousness in relation to neo-Aristotelian theory (Chapter One) and the distinction between Virtue Conscientiousness, Character Conscientiousness and Personality Conscientiousness (Chapter Three), I will present the items used to measure Character Conscientiousness and to investigate Virtue Conscientiousness in Chapter Five.

5. Chapter Five: Pre-Analysed Scales

In this chapter I will explain the facets and items that I have created to measure Character Conscientiousness. As a reminder, I am referring to the scale as a measure of Character Conscientiousness as opposed to Virtue Conscientiousness because it measures conscientiousness relating to character generally and regardless of whether these people are best described as virtuous, or continent and so on. In this sense, the scale can help inform us about what people's characters are like, including whether people have measurable traits that cohere with Aristotelian virtue theory. I explain my measures here. I do this by focusing on a general (i.e., global) measure; I have also created a student specific version that is much the same with slight wording changes (see Appendix 2). The process of writing these questions is very important; as we saw in Chapter Two, previous measures of virtues miss out important aspects of Aristotelian virtues; because of this, here I explain how the items measure each of these core components (i.e., appropriate emotions, reasons, and behaviours). One important thing to note about the Character Conscientiousness scales is that the items were written according to eight pre-selected facets: Concern for Others, Concern for Self, Appreciation of Excellence, Responsibility Fulfilment, Excellent Behaviour, Practical Wisdom, Emotions and Conscientiousness in Excess.

5.1 Behavioural Questions

I have written the behavioural questions according to two distinctive categories: Responsibility Fulfilment and Excellent Behaviours. This decision is due to the nature of Virtue Conscientiousness itself — it is the virtue of excellence relating to roles, and with this, a conceptual difference exists. For instance, (as discussed in Chapter Four) part of performing one's role excellently involves meeting the basic requirements, responsibilities and obligations for one's role, however, meeting these requirements does not mean one performs one's role

excellently. We can assume, for example, that many people, whether at work or at home, meet basic responsibilities such as being at work on time or feeding their kids — this does not mean that they perform those roles *excellently*. However, meeting those responsibilities is still a necessary part of performing one's role well. So, because responsibility fulfilment can come apart from excellence relating to roles, I accorded items to measure each category separately. An example of an item that measures responsibility fulfilment is: "I fulfil my duties" whereas an example of excellent role performance is: "I complete role-specific tasks to an excellent standard".

5.2 Motives Questions

One difference between my facets and the standard virtue components is that I have three categories of motivation-based items. The reason for this is that within the broad categories of appropriate motives, there are numerous types of appropriateness. For example, if we take one conscientious behaviour, like working hard, there are several distinct yet appropriate motives that could underlie it. For instance, one could work hard so that they can afford to feed their children, or perhaps because they think their hard work will pay off in the future. Others may just appreciate hard work in itself. Moreover, just because someone does not have one good motive does not mean that they are not motivated by an alternative but also appropriate motive. It is therefore necessary to have items addressing all possible motives. Of course, several motives can be at play at once, but this is not always the case, so it is also necessary to address each motive separately.

The plurality of good motives is difficult to work into a scale because there are so many; moreover, they are often situation and person specific. For example, the motive of parental love cannot apply to a non-parent or caregiver. To deal with this issue I have organised the motivation questions into three basic and broad categories: Concern for Others, Concern for

Oneself, and Appreciation of Excellence. The idea is that any particular motive can be placed into one of these categories, for example, regardless of whether someone is driving their daughter to the hospital after a skate-boarding accident, or whether someone is picking up litter in the community, they can still both be motivated by a concern for others. An example for each type of motive question is: “Consideration of others motivates me to fulfil my responsibilities”, “Concern for my future influences how I prioritise my responsibilities” and “My appreciation of a job well done motivates me to perform roles to the best of my ability”.

At this point it is worth noting that there are other potential concerns with the motivation questions. For example, it could be the case that some motives just do not fall nicely into any one of my three basic categories. It could also be the case that the questions are leading — perhaps people are also just wrong about the real reasons for their actions. These concerns are warranted, so one strategy I have implemented is to incorporate some open-ended motivation questions at the end of my survey. These open-ended questions ask participants what motivates them to perform their role. This helps to identify two things. First it counts as a validity check; for example, people who score highly on concern for others but low on appreciation of excellence and concern for self are expected to write an answer related to the concern for others. Second, it can help determine the validity of the motivation questions by providing data related to the motives people have, for example, in the sense of whether they can really be reduced to the three main categories I have identified.

The next issue of people lying or just being wrong about their motives is also concerning, but it is worth noting that this is also a problem for any self-report measure. Moreover, these concerns might not be too worrying when dealing with large samples because if a positive relationship can be found between appropriate motives and conscientious behaviour, then it seems plausible that, contrary to what situationists argue, people do actually have good motives and that these are related to good behaviours.

5.3 Practical Wisdom Questions

When it comes to the practical wisdom questions, I identified four essential questions relative to Virtue Conscientiousness: these relate to having thought about what roles are important, understanding what important roles require, knowing how to fulfil these requirements, and having the skills needed to fulfil them well. For example: “I have thought about what my important roles are”. I ask about whether the participant has thought about which roles are important, rather than if they know which roles are important, for a particular reason. The reason is that it seems likely that most people believe they know what their important roles are, while it seems rarer that people actually contemplate this question for themselves. For example, many people are likely to assume the importance of general societal values like the importance of family, and so on, without being wise — therefore *thinking* about what roles are important seems more characteristic of wisdom than does ‘*knowing*’.

One particular difficulty faced in creating the practical wisdom items concerns the writing of negatively worded statements, writing items such as, “I don’t know how to fulfil my responsibilities” sounds very strong, in that, it seems not many people would admit to this. Instead, I decided to choose a milder phrasing, for example, “I have a lot more to learn about how to perform my roles well”.

Another thing to note about the aspect of Virtue Conscientiousness relevant to knowing what roles are important is that some data about this is captured in the open-ended questions. These questions ask participants what role they think is important and why. From this, we can see how people think about their roles, for example, compare someone who says they value running the family lawn mowing business because “it is what I was expected to do” as opposed to someone who values the business because “it allows me to stay close to my family and maintain an active part in the community, which is something that I have learnt is very

rewarding”. We can see that answers closer to the second response reflect consideration of one’s personal well-being and the lives of others, and hence, demonstrates more practical wisdom than the first response.

5.4 Emotion Questions

Formulating the emotion-based questions were relatively straightforward compared to the other facets. Each item assesses whether people actually feel satisfaction with fulfilling their responsibilities and working hard. For example: “I find it rewarding to fulfil my duties” and in reverse, “I don’t enjoy working hard”. However, under more careful consideration, it is not always necessary to feel positive emotions relative to performing one’s role, I therefore used a more neutral item, “I am happy to fulfil role-specific duties”. This item relates to the idea that even though one might not feel particularly elated by fulfilling their duties, they at least do not experience inner conflict when they are performed. In this sense, their emotions are still appropriate.

5.5 Excess Questions

In addition to the standard facets that measure a deficiency to appropriateness regarding each virtue component, I have also added a facet consisting of items specifically designed to measure the vice of excess. The vice of excess is worth measuring because it is possible that someone could score highly on all of the other virtue facets, yet still possess the vice of excess. For example, if some scored highly on the vice of conscientiousness, they might do things like prioritise their roles over their health or experience anxiety when they cannot perform their roles excellently, and so on. These people do not possess virtue in the Aristotelian sense — they value their roles too much, and behave, reason and feel inappropriately. Therefore, measuring the vice of excess is a necessary part in determining whether people have

Aristotelian virtue. As we saw in Chapter Two, items measuring the vice of excess is something that previous measures of character do not include.

Included within the excess facet are questions relating to prioritising role-specific responsibilities too strongly by putting them even before one's own health, family, and friends. For instance: "I prioritise role-specific responsibilities over my health". This facet also includes questions about stress and anxiety at the prospect of not completing their work perfectly, for example: "I feel anxious when I cannot do things perfectly".

5.6 Example of the Pre-Analysed General Character Conscientiousness Scale

Below I present an example of the pre-analysed general Character Conscientiousness measure. Each item is followed by a code that represents what is being measured. The items with double codes represent that I am measuring one component of a virtue that tracks onto an alternative virtue target. For example, the Concern for Others facet is represented by an O and is followed by whatever target it motivates toward, this could be EB for excellent behaviour.

VC Targets: Responsibility (R), Excellent Behaviour (EB), Role Priorities (P).

Core Motives: Concern for Others (O), Self-Concern (S), Appreciation of Excellence (ER).

Constituents of Virtues: Appropriate Motives, Practical Wisdom (W), Virtuous Behaviour, Appropriate Emotions (EM).

Deficiency and Virtue

Motives Facets

Concern for others

Positively Keyed

Consideration of others motivates me to fulfil my responsibilities (O-R)

My concern for others motivates me to perform roles well (O-EB)

Caring about others influences how I prioritise my responsibilities (O-P)

Negatively Keyed

I don't do things just for other people's sake -(O-R)

Concern for others is not something that motivates me to work to the best of my ability -(O-EB)

Other people's needs do not influence what responsibilities I prioritise -(O-P)

Self-Concern

Positively Keyed

My concern for my own well-being motivates me to do my work (S-R)

Concern for my own well-being motivates me to complete work to a high standard (S-EB)

Concern for my future influences how I prioritise my responsibilities (S-P)

Negatively Keyed

My concern for my own well-being doesn't motivate me to fulfil my responsibilities -(S-R)

Concern for my future doesn't influence how hard I work -(S-EB)

Concern for my future doesn't affect which tasks I prioritise -(S-P)

Appreciation of Excellence

Positively Keyed

An appreciation of excellence motivates me to do my work (ER-R)

My appreciation of a job well done motivates me to perform roles to the best of my ability (ER-EB)

My desire to perform important roles to an excellent standard influences how I prioritise my responsibilities (ER-P)

Negatively keyed

Appreciation of excellence is not something that motivates me to do my work -(ER-R)

Appreciation of excellence is not something that impacts how hard I work -(ER-EB)

Appreciation of excellence is not something that influences what responsibilities I prioritise -(ER-P)

Practical Wisdom Facet

Practical Wisdom

Positively Keyed

I have thought about what my important roles are (W-P)

I understand what my important roles require of me (W-R)

I know how to fulfil my role-specific responsibilities (W-R)

I have the skills needed to perform my roles excellently (W-EB)

Negatively Keyed

I have a lot more to learn about what roles to prioritise –(W-P)

I have a lot more to learn about what my important roles require of me –(W-R)

I have a lot more to learn about how to fulfil my role-specific responsibilities –(W-R)

I have a lot more to learn about how to perform my roles well –(W-EB)

Behavioural Facets

Excellent Behaviour

Positively Keyed

I perform my roles excellently (EB)

I complete role-specific tasks to an excellent standard (EB)

I'm good at prioritising my responsibilities (EB)

Negatively Keyed

I do just enough work to get by –(EB)

I let others do my work –(EB)

I don't perform my roles very effectively –(EB)

Responsibility

Positively Keyed

I fulfil my role-specific responsibilities (R)

I finish my work on time (R)

I fulfil my commitments to others (R)

I fulfil my duties (R)

Negatively Keyed

I don't meet my deadlines –(R)

I don't fulfil my duties –(R)

I don't fulfil my commitments to others –(R)

I don't complete all of my work –(R)

Emotional Facet

Emotions

Positively Keyed

I am happy to fulfil role-specific duties (EM-R)

I enjoy completing important tasks to a high standard (EM-EB)

I find it rewarding to fulfil my duties (EM-R)

I feel good when I prioritise important responsibilities over things that are less important (EM-P)

Negatively Keyed

I find fulfilling role-specific responsibilities unpleasant (EM-R)

I don't find hard work satisfying (EM-EB)

I don't enjoy working hard (EM-EB)

I find it stressful to have to prioritise important responsibilities over other things –(EM-P)

Conscientiousness in Excess

Positively Keyed

I have a tendency to work until I burn out –(EB-S)

I work until the point of exhaustion –(EB-S)

I prioritise role-specific responsibilities over my health –(P-S)

I feel anxious when I cannot do things perfectly –(EB-S)

I feel the need to make everything perfect –(EB-S)

I prefer to prioritise work over friends –(P-O)

I prefer to prioritise work over family –(P-O)

I prioritise my responsibilities over my well-being –(P-S)

I prioritise my personal responsibilities over the needs of others –(P-O)

People tell me that I work too much –(EB-O)

Negatively Keyed

I stop working when it starts to hinder my health (EB-S)

I don't feel the need to make everything perfect (EB-S)

It doesn't bother me when my work falls just short of being perfect (EB-S)

I stop working before I burn out (EB-S)

I prioritise my health over my work (P-S)

I prefer to prioritise my family over work (P-O)

I prefer to prioritise my friends over work (P-O)

I prioritise my own wellbeing over my work (P-S)

Open ended Questions

(General Questions)

1. Please give an example of one role that you think is important to do well?
2. Explain why you think it is important?

6. Chapter Six: Method, Results and Discussion

The aim of this chapter is to provide a research report about the empirical investigation of Character Conscientiousness. As discussed in Chapter Two, there are currently no validated measures of Aristotelian virtues. Consequently, to support my theory of Virtue Conscientiousness, I have constructed two measures of Character Conscientiousness (see Chapter Five). As such, this study is not merely intended to generate empirical evidence for my own theory, it also seeks to contribute to the scientific investigation of virtue theory as a whole. In this chapter, I present the methods, results and discussions of two studies: one about Character Conscientiousness generally and the other about Character Conscientiousness in students. During this process, I relate parts of the discussion back to previous theory discussed in Chapter One through Five. Firstly, I begin by explaining the measures used for both studies. I then provide the procedure, results, and discussion for each study. Finally, I provide a general discussion involving the limitations of both studies and future avenues of research.

6.1 Method

6.1.1 Measures

Two scales were created to measure Character Conscientiousness (see Appendix 1 & 2); the first was a global measure consisting of 60 items, the second was a local student-specific measure of 66 items. Each measure consisted of positively and negatively coded items, this was to ensure each participant read the items carefully (Maltby et al., 2017, p. 633) (general measure = 32 negative and 28 positive, student measure = 33 negative and 33 positive). The items corresponded to eight facets, each facet concerned a distinctive theoretical feature of Character Conscientiousness, these include: Concern for Others, Concern for Self, Appreciation of Excellence, Responsibility Fulfilment, Excellent Behaviour, Practical Wisdom, Emotions, and Conscientiousness in Excess (see Chapter Five). To ensure the face

validity of the measures, each set of items from both the general and student versions of the scales were reviewed by an expert in Aristotelian virtue theory, Associate Professor Liezl van Zyl. Both the general and student measure contained a 5-point Likert responding scale with labels, ‘Disagree’1, ‘Very slightly agree’2, ‘Moderately agree’3, ‘Strongly agree’4, and ‘Completely agree’5. In addition to the 60 general and 66 student questions, each measure was also made into a survey (see Appendix 3 & 4) which also included two open-ended questions; these were intended to be used as a validity check and provided additional data on which roles people value and why.

To establish convergent, predictive and discriminant validity for the Character Conscientiousness measures, data was also collected using four additional scales. Each of the four scales were included in both the general and student specific surveys. These included the 10-item IPIP Conscientiousness scale from the revised NEO Personality Inventory (Big Five Conscientiousness) (Costa & McCrae, 1992), the 5-item Satisfaction with Life Scale (SWLS) (Pavot et al., 1991), the 15-item Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003) and the 21-item Depression, Anxiety, Stress Scale (DASS-21) (Lovibond & Lovibond, 1995). Both surveys also had questions pertaining to demographics to help determine possible sampling biases and limitations. The student questions asked for age, ethnicity and gender while the general version only asked about gender and age.

6.2 Study 1

6.2.1 Method

6.2.1.1 Participants

334 participants from the USA were recruited using Amazon Mechanical Turk, a crowd sourcing software. The participants were directed to complete the survey on Qualtrics, a website used for survey creation and administration. On Qualtrics, participants were first

presented with a consent form and survey instructions stating that failing an attention test, or completing the survey in under 5 minutes, would result in no payment. Each participant that successfully completed the survey was paid a living wage (based on the average completion time of the pilot). Out of the 334 participants 33 were excluded from the data analysis because they did not finish the survey, finished the survey in under the stipulated time frame, or because they failed the attention test. (The attention test asked: ‘To demonstrate your attention, select the disagree option for this question’). Out of the 301 remaining participants, 206 identified as male and 95 identified as female. The participants fell into the following age brackets; 21-30 (24%), 31-40 (48.8%), 41-50 (6.9%), 51-60 (15.3%), 61-78 (4.7%), and unspecified ages (0.3%).

6.2.1.2 Data Analysis

Using IBM SPSS 28, descriptive statistics were obtained, then a preliminary reliability analysis was conducted using an Alpha model to determine the relevance of the items to the overarching construct. Based on the corrected item-total correlations, 31 of the 60 items were removed using a cut-off criterion of .3 (Field, 2018, p. 826). Next, to investigate the relationship between the remaining 29 items, an exploratory factor analysis (EFA) using principal axis functioning was performed. An oblique rotation (direct oblimin) was used because any theoretical facets were expected to correlate (Field, 2018, p. 794). After determining the factor structure using EFA, additional reliability analyses were performed using an Omega and Alpha model on each facet. Reliability analysis was then conducted to establish the internal consistency for the Big Five Conscientiousness scale, the SWLS, MAAS and the DASS. Following the reliability analysis, a series of bivariate Pearson’s correlations were performed to determine the relationships between the different scales.

6.2.2 Results

To determine the appropriateness of a factor analysis, a Bartlett's test of sphericity and Kaiser-Meyer-Olkin (KMO) measure was conducted (Field, 2018, p. 798-799). The results showed a significant Bartlett's test, $p = < 0.001$, and sampling adequacy KMO = .926 ('marvellous' according to Kaiser and Rice, 1974). An EFA was then conducted to obtain the eigenvalues of the factors. 5 factors had eigenvalues above Kaiser's criterion of 1. However, the scree plot displayed a sharp point of inflexion at the third factor (Field, 2018, p. 811). Any extraction above 2 factors led to an uneven amount of factor loadings, with the majority of items loading onto factors 1 and 2; this led to a more difficult to interpret factor structure, therefore, two factors were ultimately retained (Table 6.1). Factor one was labelled Virtue Conscientiousness because it contained positively coded items measuring the desirable aspects of Character Conscientiousness; for instance, this factor contained items measuring responsibility fulfilment and excellent role performance, along with appropriate motivations and emotions, and practical wisdom. The second factor was labelled Excessive Conscientiousness because these items address a type of maladaptive Conscientiousness, for example, these items address prioritising work over one's health and experiencing anxiety when tasks cannot be completed perfectly. Together, the 2 factors explained 50.298% of the total variance, with the first factor explaining 33.483% of the variance and the second factor explaining 16.806% of the variance.³⁵ The two factors had a significant mild correlation, $r = .315$, 95% BCa CI [.198, .418], $p = < 0.001$. The overall scale had a sufficient internal consistency (McDonald's Omega = .911), with the subscales having internal consistencies of .928 for Virtue Conscientiousness and .911 for the Excessive Conscientiousness.

³⁵ As indicated by the scree plot, the addition of more factors would add a diminishing amount of variance explained, with a 3-factor model adding an additional 4.80% of variance explained to the 2-factor model, and a 4-factor model adding 3.64% of variance explained to the 3-factor model.

Table 6.1.

Item-to-Total Correlations on the Rotated First and Second Factor using Oblimin Rotation, Including Virtue Conscientiousness (VC) and Excessive Conscientiousness (EC)

	Items	Item mean (SD*)	VC	EC	Item- total
9	I complete role-specific tasks to an excellent standard	3.82 (0.939)	.741		.636
1	I have the skills needed to perform my roles excellently	3.91 (0.937)	.73		.550
14	I fulfil my duties	4.12 (0.895)	.719		.488
41	I perform my roles excellently	3.90 (0.898)	.709		.628
55	I find it rewarding to fulfil my duties	3.83 (0.964)	.707		.551
51	I enjoy completing important tasks to a high standard	3.93 (0.955)	.706		.489
43	I know how to fulfil my role-specific responsibilities	3.94 (0.890)	.700		.456
48	I am happy to fulfil my role-specific duties	3.90 (0.948)	.687		.565
18	I'm good at prioritising my responsibilities	3.74 (1.015)	.680		.565
45	I understand what my important roles require of me	3.91 (0.886)	.677		.437
12	I finish my work on time	4.11 (0.917)	.639		.433
3	I fulfil my role-specific responsibilities	4.02 (0.907)	.639		.44
44	I have thought about what my important roles are	3.86 (0.965)	.626		.518
20	I fulfil my commitments to others	3.83 (1.003)	.620		.408
28	My desire to perform roles to an excellent standard influences how I prioritise my responsibilities	3.44 (1.105)	.559		.614
26	An appreciation of excellence motivates me to do my work	3.60 (1.197)	.551		.637
36	My appreciation of a job well-done motivates me to perform roles to the best of my ability	3.65 (1.083)	.519		.568
33	Concern for my own well-being motivates me to complete work to a high standard	3.66 (1.022)	.456		.537
37	My concern for others motivates me to perform my roles well	3.49 (1.124)	.336		.492

15	I prioritise role-specific responsibilities over my health	2.90 (1.383)	.821	.566
16	People tell me that I work too much	2.93 (1.372)	.805	.665
21	I have a tendency to work until I burn out	2.98 (1.305)	.783	.516
22	I prioritise my responsibilities over my well-being	2.95 (1.372)	.779	.587
60	I prefer to prioritise work over family	2.71 (1.440)	.778	.507
5	I work until the point of exhaustion	2.99 (1.325)	.741	.615
59	I find it stressful having to prioritising important responsibilities over other things	2.68 (1.371)	.667	.301
57	I feel the need to make everything perfect	3.41 (1.294)	.576	.593
6	I prioritise my personal responsibilities over the needs of others	3.23 (1.260)	.552	.428
53	I feel anxious if I cannot do things perfectly	2.99 (1.260)	.519	.345

In order to assess convergent validity, Virtue Conscientiousness was compared to the conceptually similar Big Five Conscientiousness scale. As expected, a significant moderate positive correlation was found, $r = .426$, 95% BCa CI [.321, .524], $p < 0.001$. Alternatively, Virtue Conscientiousness showed discriminate validity with a non-significant correlation, $r = .001$, 95% BCa CI [-.094, .121], $p = .881$, with the conceptually distinctive mindfulness measure. As virtue theoretically both constitutes and contributes to human flourishing (see Chapter One), predictive validity was assessed by comparing the Virtue Conscientiousness facet with several scales related to well-being. Virtue Conscientiousness had non-significant relationships with depression, $r = -.089$, 95% BCa CI [-.200, .005], $p = .123$, anxiety, $r = .085$, 95% BCa CI [-.006, .168], $p = .142$, and stress, $r = -.004$, 95% BCa CI [-.114, .091], $p = .945$; however, as anticipated, the Virtue Conscientiousness facet did have a significant strong positive relationship with life satisfaction, $r = .527$, 95% BCa CI [.419, .621], $p < 0.001$. Excessive Conscientiousness also displayed predictive validity with strong positive correlations with depression, $r = .642$, 95% BCa CI [.558, .712], $p < 0.001$, anxiety, $r = .725$,

95% BCa CI [.670, .776], $p = < 0.001$, and stress, $r = .697$, 95% BCa CI [.630, .754], $p = < 0.001$. Excessive Conscientiousness also had a mild positive correlation with the SWLS, $r = .357$, 95% BCa CI [.240, .461], $p = < 0.001$ and a moderate negative correlation with Big Five Conscientiousness, $r = -.431$, 95% BCa CI [-.534, -.317] $p = < 0.001$. Additionally, there was a mild correlation between anxiety and life satisfaction, $r = .342$, 95% BCa CI [.261, .412], $p = < 0.001$ and a strong negative relationship between mindfulness and Excessive Conscientiousness, $r = -.710$, 95% BCa CI [-.770, -.638], $p = < 0.001$. Table 6.2 shows these relationships.

To further investigate the relationship between Virtue Conscientiousness and life satisfaction, a partial correlation was conducted to test the relationship between Virtue Conscientiousness and life satisfaction when controlling for age, gender, Excessive Conscientiousness and anxiety, $r = .511$, 95% BCa CI [.404, .606], $p = < 0.001$ (Table 6.2).

Table 6.2.

Correlations Between Conscientiousness, Life Satisfaction (SWLS), Mindfulness (MAAS), Depression, Anxiety and Stress (n = 301)

	Conscientiousness	Virtue	Excess	MAAS	SWLS	Depression	Anxiety
<i>Correlations</i>							
Virtue	.426**						
Excess	-.0431	.315**					
Mindfulness	.688**	.009	-.710				
SWLS	.057	.527**	.357**	-.275			
Depression	-.669**	-.089	.642**	-.787**	.032		
Anxiety	-.614**	.085	.725**	-.841**	.342**	.818**	
Stress	-.653**	-.004	.697**	-.843**	.164**	.846**	.858**
<i>Partial Correlations Controlling for Age, Gender, Anxiety and Excess</i>							
Virtue					.511**		

** Correlation is significant at the 0.01 level (2-tailed)

6.2.3 Discussion

Based on the results from Study 1, Character Conscientiousness can be effectively thought of as a bimodal construct consisting of a virtue component and an excess component. The results of this study support several assumptions made by Aristotelian virtue theorists. First off, each of the theorised components of virtue (i.e., appropriate behaviours, reasons, and emotions) are strongly related to general Character Conscientiousness. This indicates the plausibility of the idea that all three components are tied together in important ways for an overall desirable character. However, the strong correlation between these theoretically distinct items suggests that people typically do not fit into certain character categories identified by Aristotelians, namely habit, continence, incontinence and natural virtue; rather, the variables concerning appropriate reasons, behaviours and emotions vary together (although the same might not be true of other character traits). These findings suggest that (as discussed in Chapter Three) character concepts such as conscientiousness, can be more accurately understood (i.e., in a descriptive sense)³⁶ as continua instead of as a combination of separate character traits or types. This also coheres with Aristotle's claim that people rarely fit nicely into any of these character classifications (*Nicomachean Ethics*, 1150a). However, the excess items of the Character Conscientiousness scale form their own factor, meaning that this particular component of Character Conscientiousness is more easily distinguishable from the others.

An additional interesting finding is that Virtue Conscientiousness, comprising of appropriate behaviours, reasons and emotions was found to correlate strongly with life satisfaction. This supports the claim that conscientiousness can be a virtue because virtues are partly defined in reference to normative standards; they are the traits that both constitute and

³⁶ Note dispositional categories, including virtue, vice continence, incontinence, natural virtue and habit are still useful for understanding character and making evaluative judgements. For example, people who can be roughly categorised as continent or virtuous can be considered to have better characters than people described as vicious and incontinent.

contribute to human flourishing (Snow, 2021, p. 6). Moreover, the Excessive Conscientiousness facet, involving overvaluing one's roles, correlates strongly with depression, anxiety, and stress. These findings support the idea that virtue is a mean between two corresponding vices — it is desirable to possess Character Conscientiousness, but only when one scores highly on the virtue component, and not the excess component. These results cohere to previous findings in psychology; for example, research on happiness has found that scoring slightly below the highest score on happiness positively correlates more strongly with higher income and educational and political participation compared to the highest scores on happiness (Oishi et al., 2009). Other studies about overuse and underuse of VIA-IS traits have linked overuse and underuse to lower life-satisfaction scores and higher scores on depression (e.g., see Niemiec, 2019). However, this study indicates that vices of excess may exist, not just as overuse or as a really high score on a scale, but as distinctive components of people's character. As discussed in Chapter Two, this conception of vice has not received much attention in the psychological research, however, this study indicates that investigating vice, relative to existing and future character and personality constructs, could produce a more complete picture of people's character and personality. Emphasis on investigating the vice components alongside virtue components of character traits could aid people's understanding of whether, when, and why traits are beneficial or detrimental to desirable outcome variables such as well-being and occupational success. As the results from this study indicate, the vice of excess appears to be a real aspect of Character Conscientiousness that has meaningful correlations with well-being outcomes. This study indicates that researching vice in relation to traits, well-being and other important life outcomes continues to be a fruitful area for future study.

Another important finding is that Excessive Conscientiousness, while positively correlated with Virtue Conscientiousness, is negatively correlated with Big Five Conscientiousness. Though this may appear surprising (because both facets measure a kind of conscientiousness),

this result is likely because Big Five Conscientiousness relates to more behavioural aspects of conscientiousness, such as, “am always prepared” and “get chores done right away” (Costa & McCrae, 1992). In contrast, Excessive Conscientiousness relates to behavioural, emotional, and valuing aspects, such as ‘I feel anxious if I cannot do things perfectly’, ‘I have a tendency to work until I burnout’ and ‘I prioritise role-specific responsibilities over my health’. Such items suggest that people with Excessive Conscientiousness may value their commitments so strongly that they might not feel prepared or capable of fulfilling them right away. Another thing to note is that Big Five Conscientiousness scales do not ask about work or role-specific responsibilities. This conceptual difference in constructs likely goes some way in explaining this divergent relationship.

One concern about the present study is that, although Virtue Conscientiousness positively correlates with life satisfaction; anxiety and Excessive Conscientiousness also both correlate with life satisfaction. These findings are unusual because anxiety typically correlates negatively with life satisfaction (e.g., Ghazwin et al., 2016), and it is generally thought of as a negative emotion, which would likely reduce well-being. One explanation for this result is that the Character Conscientiousness items (that were before the life satisfaction items) primed people who scored highly on both the Virtue Conscientiousness and Excessive Conscientiousness components of Character Conscientiousness to think about their hard work and accomplishments, (e.g., see Strack and Martin, 1987). This may have made them feel a bit more satisfied than they might otherwise have felt because people who score high on Excessive Conscientiousness may achieve a lot, and therefore judge themselves to be highly satisfied. However, as shown in the results, the vice of excess is related to anxiety, so this could explain why participants might judge that they are satisfied with their life, even though they may not be happy because anxiety correlates with depression (e.g., see Brown et al., 1997).

Another explanation for why anxiety and Excessive Conscientiousness positively correlate with life satisfaction might relate to the Covid pandemic. It could be the case that the pandemic has increased anxiety in people generally, (e.g., see Özdin & Özdin, 2021; Torales et al., 2020), and that it has had a greater effect on people who value performing their roles more. For example, parents who perform their role well and are satisfied with their life might be experiencing specific and justified anxiety about the effect of lockdowns on their children's education. Other people might be experiencing specific anxiety around how the pandemic will affect the economy and their employment, and so on. Also, because life satisfaction ratings concern judgments, people might be judging that they are satisfied with their life *considering* the current state of the world. However, because these findings relating to anxiety are anomalous, a follow up analysis was performed on the alternative student specific Character Conscientiousness measure in Study 2.

6.3 Study 2

6.3.1 Method

6.3.1.1 Participants

140 students were recruited from 3 different philosophy classes from the University of Waikato in New Zealand.³⁷ Each student was invited to complete the student survey on Qualtrics; their identity remained anonymous, but each student who completed the survey was able to receive 1% towards their paper's final grade by using an anonymous survey code.³⁸ Out of the 140 student surveys, 10 of them were excluded from the final analysis because they were incomplete. Out of the 140 students, 99 were female, 29 were male and 2 of them were

³⁷ Note that these were elective courses which attract a diverse range of majors.

³⁸ Students who didn't want to complete the survey were offered alternative opportunities to receive bonus credit.

gender variants/non-conforming. The participants fell into mostly younger age brackets: 18-25 (68.8%), 26-30 (10.9%), 31-40 (10.9%), 41-58 (9.4%).

6.3.1.2 Data Analysis

As in Study One, an initial reliability analysis was performed to measure the item-to-total correlations. This time, using the criteria of 0.3, 49 items were excluded, leaving 17 items. All 17 items corresponded to items from the Virtue Conscientious facet from Study One. Subsequently, in order to investigate the vice of excess in students, an additional reliability analysis was conducted on the student items intended to measure the vice of excess. 8 of the excess items had item-to-total correlations above .3. Following these analyses, an EFA using principal axis functioning with an oblique rotation (direct oblimin) was conducted on the total 25 items to establish their interrelations. One of the Excessive Conscientiousness items was removed for loading onto the Virtue Conscientiousness factor, 'I feel the need to make all of my student work perfect'. On a conceptual level, this item does not belong with the virtue items, and removing it from the Excessive Conscientiousness facet also increased that scale's internal consistency. This left 7 Excessive Conscientiousness items, making up 24 items in total (including the 17 Virtue Conscientiousness items). Finally, a series of correlations were performed to measure the relationship between Character Conscientiousness in students and life satisfaction, mindfulness, depression, anxiety, and stress, as well as Big Five Conscientiousness.

6.3.2 Results

Bartlett's test of Sphericity was significant $p = < 0.001$ with a KMO of 0.815 ('Meritorious', according to Kaiser & Rice, 1974). The results from the EFA displayed 6 factors with eigenvalues above Kaiser's criteria of 1, however, the scree plot showed a sharp point of inflection at 3 factors and extracting more than 2 factors led to a less clearly interpretable

solution (Table 6.3). Factor 1 was labelled Student Virtue Conscientiousness and Factor 2 was labelled Excessive Student Conscientiousness; together, both factors explained 40.883% of the total variance with Student Virtue Conscientiousness explaining 27.28% of the variance and Excessive Student Conscientiousness explaining 13.60% of the variance. Reliability analyses were performed on the two factors using an Omega model, Virtue Conscientiousness had a McDonald's Omega score of .885, while Excessive Conscientiousness had an Omega score of .805. Overall, the Omega score for both facets together was .839.

Table 6.3

Item-to-Total Correlations on the Rotated First and Second Factor using Direct Oblimin Rotation, Including Virtue Conscientiousness (VC) and Excessive Conscientiousness (EC) in the Student Survey (n = 130)

	Items	Item Mean (SD*)	VC	EC	Item-Total
35	My appreciation of good work motivates me to complete assignments to the best of my ability	3.53 (1.156)	.742		.629
12	I complete assignments to the best of my ability	3.80 (0.935)	.690		.571
53	I am happy to complete my assignments	3.05 (1.003)	.675		.546
21	I complete assigned work	4.07 (0.908)	.664		.531
11	I am an excellent student	2.78 (1.011)	.636		.544
34	Concern for my future motivates me to complete assignments to the best of my ability	3.58 (1.171)	.614		.538
30	Thinking about my future motivates me to study hard	3.77 (1.185)	.591		.490
58	I enjoy completing assigned work to a high standard	3.99 (0.952)	.586		.633
39	My desire to do well in my studies influences how I prioritise my student responsibilities	3.37 (0.993)	.578		.523
3	I submit assignments on time	4 (1.078)	.562		.401
20	I'm great at prioritising my studies	2.58 (1.2)	.531		.469

48	I know how to fulfil my responsibilities as a student	3.24 (0.938)	.53	.384
54	I find completing assigned work to be rewarding	4.30 (0.893)	.504	.517
29	I pay attention during lectures because I love to learn	3.37 (1.02)	.478	.471
47	I have thought about why being a student is important	3.11 (1.258)	.443	.332
22	I show up to class on time	3.88 (1.097)	.424	.339
44	I have the skills needed to be an excellent student	3.44 (1.049)	.397	.308
15	I have a tendency to study until I burn out	2.65 (1.286)	.85	.452
16	I prioritise studying over my health	2.17 (1.115)	.812	.360
8	I study to the point of exhaustion	2.49 (1.289)	.786	.405
1	I prioritise my studies over my well-being	2.55 (1.079)	.584	.309
56	I experience stress when prioritising studies	3.62 (1.228)	.424	.106
64	I feel anxious when I cannot complete assignments perfectly	3.70 (1.243)	.411	.298
6	I prioritise my studies over family	1.95 (1.077)	.363	.163

Student Virtue Conscientiousness displayed strong convergent validity with the Big Five Conscientiousness scale with a significant positive correlation of, $r = .552$, 95% BCa CI [.400, .671], $p = < 0.001$. Student Virtue Conscientiousness also displayed predictive validity, with a significant positive correlation with life-satisfaction, $r = .380$, 95% BCa CI [.219, .518], $p = < 0.001$ and significant negative correlations with depression, $r = -.399$, 95% BCa CI [-.554, -.229], $p = < 0.001$, and stress, $r = -.189$, 95% BCa CI [-.369, .039], $p = 0.34$. Student Virtue Conscientiousness also did not significantly correlate with Excessive Student Conscientiousness, $r = .156$, 95% BCa CI [-.003, .320], $p = 0.079$. Excessive Student Conscientiousness displayed predictive validity with a significant negative correlation with life satisfaction, $r = -.252$, 95% BCa CI [-.380, -.071], $p = 0.010$ and significant positive

correlations with anxiety, $r = .275$, 95% BCa CI [.125, .444], $p = 0.002$, depression, $r = .247$, 95% BCa CI [.117, .423], $p = 0.005$, and stress, $r = .418$, 95% BCa CI [.319, .596], $p = < 0.001$. Excessive Student Conscientiousness also had a non-significant relationship with Big Five Conscientiousness, $r = .078$, 95% BCa CI [-.072, .271], $p = 0.376$. Anxiety had a significant negative correlation with life satisfaction, $r = -3.26$, 95% BCa CI [-.476, -.117], $p = < 0.001$. Table 6.4 shows these relationships.

Table 6.4.

Correlations Between Conscientiousness, Virtue, Excess, Mindfulness (MAAS) Life Satisfaction (SWLS), Depression, Anxiety and Stress for the Student Survey (n = 130)

	Conscientiousness	Virtue	Excess	MAAS	SWLS	Depression	Anxiety
Virtue	.552**						
Excess	.095	.160					
MAAS	.079	.116	.266**				
SWLS	.302**	.380**	-.197*	-.119*			
Depression	-.437**	-.399**	.244**	.130	-.588**		
Anxiety	-.327**	-.170	.270**	.206*	-.326**	.609**	
Stress	-.211*	-.189*	.410**	.204	-.435**	.678**	.678**

* Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

6.3.3 Discussion

This study investigated Character Conscientiousness in students. The overall evidence suggests that a two-factor solution represents the best model. One factor represented the virtuous elements of Character Conscientiousness (i.e., Student Virtue Conscientiousness) and the other represented the vice of excess of Character Conscientiousness (Excessive Student Conscientiousness). Omega scores above 0.7 suggest that each factor, as well as the scale overall is internally consistent, however, there were several low item-to-total correlations (below .3) in the scale overall, suggesting that in the student sample, Excessive Conscientiousness may be a distinctive construct. The positive correlations between Student Virtue Conscientiousness with Big Five Conscientiousness and life satisfaction, taken

alongside the negative correlations between Student Virtue Conscientiousness with depression and stress, suggests that acquiring Virtue Conscientiousness is important for students' well-being. The evidence also suggests that Excessive Student Conscientiousness is positively related to depression, anxiety and stress. Overall, this study suggests that, for students, it is desirable to score high on Student Virtue Conscientiousness and low on Student Excessive Conscientiousness. This finding supports the theory that there is a virtue of conscientiousness, and that this virtue is a mean between an excess and a deficit.

Study 2 has several limitations. Firstly, the limited sample size ($n = 130$) means the student sample is an inappropriate size for factor analysis (Comrey & Lee, 1992). Moreover, based on the item-to-total correlations, items relating to concern for others were removed for low correlations to the overall construct (this was not the case in Study 1). Concern for others might not have related to the other items due to the small sample-size,³⁹ but it could also be because the particular role of being a student does not typically involve concern for others. It also might be the case, that concern for others motivates people in a general way, for example, it might be part of their underlying reason to study, or even why they picked a particular subject. However, reasons concerning distant aims and underlying reasons, like wanting to make a positive impact on society, might not motivate students to fulfil specific and imminent student responsibilities, like submitting assignments on time, and so on. The results from the open-ended questions displayed that 24 out of the 130 people (18%) provided reasons for studying that related to concern for others, for example, one participant wrote, "To make a positive impact to the lives of individuals and their Whanau, to achieve a greater good for society and to help reduce the mental health issues in New Zealand." Regardless of whether students are typically and often motivated by their concern for others, concern for others can still be an aspect of the virtue

³⁹ This might also explain the lack of correlation between Excessive Student Conscientiousness and Student Virtue Conscientiousness

relative to students. It is still true that some people are motivated to study because of their concern for others — and this is still an appropriate reason, and hence, it counts as an aspect of those people’s virtue or character. Furthermore, even if it is true that concerns for others do not typically motivate students in a descriptive sense, this does not mean that the prescriptive claim that virtuous students are motivated by their concern for others is untrue. It could be the case that students with more moral motivation do experience prudential benefits.

6.4 General Discussion

Overall, similar factor structures were found between both the general and the student specific measure of Character Conscientiousness. Each construct appears to consist of one virtue component and one excess component. Taken together, the results from Study 2 support the findings from Study 1 that Virtue Conscientiousness is related to life satisfaction; in addition, the results from Study 2 suggest that Student Virtue Conscientiousness is also negatively related to depression and stress. This adds additional evidence to the claim that virtues contribute to human flourishing, supporting the predictive validity of both constructs. However, it could also mean that, depending on one’s role, having the Virtue of Conscientiousness is more or less important for flourishing. Intuitively this makes sense. For example, people who occupy more demanding roles, with stricter deadlines will benefit more from being able to manage, perform, and prioritise the demands of their roles well. However, one theory that was not tested in either Study 1 or 2, is that there could be distinctive domain specific versions of Character Conscientiousness, independent from the general construct. For example, it could be the case that people’s scores on Character Conscientiousness, relative to being a student, does not correlate strongly with their scores on general Character Conscientiousness. There could also be a version of Character Conscientiousness relative to home and family life, and so on. As the results indicate in Study 2, it could be the case that

domain specific Character traits have slightly different structures and relations to important outcome variables related to well-being and success. Previous studies in psychology have already found evidence of personality differentiation regarding the Big Five personality trait of Conscientiousness (e.g., see Sutton, 2018). Essentially, people's scores on Big Five Conscientiousness can vary depending on whether they are at home or at work. However, situational differentiation in character traits may be more pronounced, especially because particular roles, such as being a student, may draw from certain motivations more than others. As such, this topic of character differentiation is an important area for future research.

The anomalous finding from Study 1, that anxiety and Excessive Conscientiousness positively correlated with life satisfaction, was not replicated in study 2. Instead, the results from Study 2 also displayed that Excessive Student Conscientiousness and anxiety negatively correlated with life satisfaction. Excessive Student Conscientiousness also positively correlated to depression, anxiety and stress. These findings from study 2, though generated by a smaller sample size ($n = 130$), cohere more closely with theoretical assumptions that vice and anxiety are undesirable. The results from Study 2 also match the results from previous research which finds that anxiety negatively correlates with life satisfaction (e.g., see Brown et al., 1997). These findings support the findings from Study 1 (that also found positive correlations between Excessive Conscientiousness and depression, anxiety and stress) that having the vice of excess is detrimental to well-being. In addition to the findings that Virtue Conscientiousness in general and in students correlates with life satisfaction, these findings also support the claim that virtue is a mean corresponding to vices of deficiency and excess.

6.4.1 Additional Limitations and Future Avenues of Research

There are several limitations to Study 1 and 2, for example, in addition to not having ideal sample sizes,⁴⁰ software limitations prevented the performance of more advanced analyses, such as Rasch analysis and confirmatory factor analysis. As such, the preliminary findings from the EFA were unable to be confirmed by investigating the goodness of fit for each factor solution (Maltby et al., 2017 p. 661). The results from Study 1 and 2, should therefore be understood as a first step to analyse the data on the virtue of conscientiousness, which can be used to guide future hypotheses and investigations. Consequently, future research into Character Conscientiousness can focus on both developing larger sample sizes and performing more advanced statistical analyses.

Another limitation and future avenue of research concerns the generalisability to other character traits. Just because preliminary evidence has been found relating to Character Conscientiousness does not mean similar findings will be obtained for the other character traits; it might be the case that a 2-factor solution is inappropriate for a model of, for example, the character trait of courage, or that, prudential motivations do not correlate with other items relating to the character trait of benevolence, and so on. Moreover, it might also be the case that the other character traits relate differently to outcome measures relating to well-being and success. In this sense, future research concerning the construction of similarly structured scales (i.e., ones intended to measure appropriate reasons, emotions and behaviours) will help confirm or deny particular theories about individual virtues and character traits. These include the theory that virtues *generally* have a similar structure, and that they are all important for human

⁴⁰ According to Comrey and Lee (1979) a sample of 1000 participants is considered ‘excellent’.

flourishing (e.g., see Chapter One). Future research should also try to assess what the important contexts are that affect character traits, including Character Conscientiousness.

One last limitation of the current study is that each scale was constructed and intended for the scientific investigation of virtue, and not for individual assessment. For example, when applied to particular individuals, more nuances may need to be taken into consideration when evaluating their character. In some particular cases, it might not be indicative of vice to prioritise role-specific responsibilities over one's health. For example, think of a single parent who only earns enough money to feed their children by working two jobs. As such, understanding the context of someone's life is necessary for accurate assessment of their character, such assessment would likely involve a qualitative and behavioural measurement in addition to the self-report scales used in the current study.

Despite all these limitations, the current study suggests that Character Conscientiousness is a real and quantifiable construct related to important life outcomes. As such, further research alongside more qualitative and behavioural measures offers a promising area of future research. For example, further work could be done relating to situational psychology and people's self-report scores on character measures. Assessing whether people's scores on virtue scales predict whether they help bystanders in trouble or not could improve the construct validity of character scales. This type of research could also provide valuable insight about what character traits, including whether they are local or global, influence people's behaviour in certain situations.

6.5 Conclusion

To conclude this chapter, several interesting findings have been obtained from the empirical investigation of Character Conscientiousness. In particular, several sources of evidence for reliability and validity have been established for both the general and student measures. For example, each scale has meaningful relationships with well-being outcome measures which supports the theory that virtue contributes to human flourishing. Additionally, as predicted, the Virtue Components of Character Conscientiousness (in general and in students) positively correlate with Big Five Conscientious (a conceptually similar construct) while going beyond Big Five Conscientiousness in their strength of correlation with life satisfaction. However, despite these results, the current studies, due to their limitations relating to advanced analysis and sample size should only be taken as preliminary data to guide future research. Therefore, though the current studies are promising, more research is needed to confirm and replicate the findings.

Final Conclusion

In this thesis I developed a theory of Virtue Conscientiousness and collected empirical evidence to support it. Unlike other conceptions of conscientiousness, I have proposed that Virtue Conscientiousness is about excellent role performance. This theory differs from other models, such as the Big Five model of Conscientiousness, because it does not merely entail descriptively related behaviours such as tidiness, cautiousness and self-regulation, and so on, (See Chapter Four). In one sense, it is more unidimensional — it is merely about excellence relating to role performance. However, in another sense, my theory of Virtue Conscientiousness involves a more careful account about the types and interrelationships of reasons, behaviours and emotions. As discussed in Chapter Four, there are a plethora of possible roles, and excellence in relation to these roles can take different forms; one does not necessarily need to be tidy to be an excellent artist. Rather, Virtue Conscientiousness concerns psychologically congruent patterns of thoughts, emotions and behaviours all converging on an Aristotelian theory of virtue (Chapter One). People with Virtue Conscientiousness perform their roles excellently; this involves fulfilling commitments and responsibility, but it also involves completing role-specific tasks to a high standard. Additionally, people with the virtue perform their roles well because they feel and think appropriately; for instance, parents with the virtue understand why being a good parent is important in the first place; this involves motivations about doing what is best for oneself, one's children and excellence generally. These motives, thoughts and behaviours involve emotions. People with Virtue Conscientiousness will feel appropriately — emotions form part of the agent's motivations, and people with Virtue Conscientiousness will also feel satisfied, rewarded, or even sometimes merely emotionally unhindered with regards to performing their roles well.

Empirical evidence involving psychometric measurement was found supporting my theoretical account of Virtue Conscientiousness (Chapter Six). Interestingly, there was an even closer association between the components of virtue than anticipated. Because of this, in a descriptive sense, it seems like people do not typically cluster into certain Character dispositions proposed by Aristotle; these include continence, incontinence, natural virtue and habit. Instead, in the case of Character Conscientiousness, reasons, behaviours, and emotions vary systematically together, meaning it is more accurate to describe people as either falling high or low on that certain character trait continuum (see Chapter Three). The one aspect of Character Conscientiousness that did cluster separately from the other components of Character was the vice of excess (i.e., Excessive Conscientiousness). As expected, empirical evidence was found linking Excessive Conscientiousness to anxiety, depression and stress, whereas the other components of Character Conscientiousness, labelled as Virtue Conscientiousness, positively correlated to life-satisfaction. This suggests that virtue is a mean, people with the virtue will score high on the virtue component and low on the excess component. As discussed in Chapter Six, although more research and advanced statistical analyses are needed, these findings support the theory proposed in this thesis — Character Conscientiousness, involving virtue and vice, consists of interrelations between appropriate behaviours, reasons and emotions that contribute to human flourishing.

To expand on the research undertaken during this project, future research can explore whether similar measures can be constructed and validated that measure other Aristotelian virtues. Research could then be performed assessing whether different virtue relate to outcome measures like well-being and educational success.

Research can also be performed to investigate whether there is a difference between local and global character traits. For example, investigations can be performed to test whether general measures of Character Conscientiousness correlate with domain specific measures of

Character Conscientiousness, like Character Conscientiousness at home or at work. This could help determine whether people can possess local virtues (i.e., virtues specific to particular domains) and what impacts this has on people's well-being.

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Appendix 1: Pre-analysed Character Conscientiousness Measure (General Version)

Deficiency and Virtue

Motives Facets

Concern for others

Positively Keyed

Consideration of others motivates me to fulfil my responsibilities (O-R)

My concern for others motivates me to perform roles well (O-EB)

Caring about others influences how I prioritise my responsibilities (O-P)

Negatively Keyed

I don't do things just for other people's sake -(O-R)

Concern for others is not something that motivates me to work to the best of my ability -(O-EB)

Other people's needs do not influence what responsibilities I prioritise -(O-P)

Self-Concern

Positively Keyed

My concern for my own well-being motivates me to do my work (S-R)

Concern for my own well-being motivates me to complete work to a high standard (S-EB)

Concern for my future influences how I prioritise my responsibilities (S-P)

Negatively Keyed

My concern for my own well-being doesn't motivate me to fulfil my responsibilities -(S-R)

Concern for my future doesn't influence how hard I work -(S-EB)

Concern for my future doesn't affect which tasks I prioritise -(S-P)

Appreciation of Excellence

Positively Keyed

An appreciation of excellence motivates me to do my work (ER-R)

My appreciation of a job well done motivates me to perform roles to the best of my ability (ER-EB)

My desire to perform important roles to an excellent standard influences how I prioritise my responsibilities (ER-P)

Negatively keyed

Appreciation of excellence is not something that motivates me to do my work –(ER-R)

Appreciation of excellence is not something that impacts how hard I work –(ER-EB)

Appreciation of excellence is not something that influences what responsibilities I prioritise – (ER-P)

Practical Wisdom Facet

Practical Wisdom

Positively Keyed

I have thought about what my important roles are (W-P)

I understand what my important roles require of me (W-R)

I know how to fulfil my role-specific responsibilities (W-R)

I have the skills needed to perform my roles excellently (W-EB)

Negatively Keyed

I have a lot more to learn about what roles to prioritise –(W-P)

I have a lot more to learn about what my important roles require of me –(W-R)

I have a lot more to learn about how to fulfil my role-specific responsibilities –(W-R)

I have a lot more to learn about how to perform my roles well –(W-EB)

Behavioural Facets

Excellent Behaviour

Positively Keyed

I perform my roles excellently (EB)

I complete role-specific tasks to an excellent standard (EB)

I'm good at prioritising my responsibilities (EB)

Negatively Keyed

I do just enough work to get by –(EB)

I let others do my work –(EB)

I don't perform my roles very effectively –(EB)

Responsibility

Positively Keyed

I fulfil my role-specific responsibilities (R)

I finish my work on time (R)

I fulfil my commitments to others (R)

I fulfil my duties (R)

Negatively Keyed

I don't meet my deadlines –(R)

I don't fulfil my duties –(R)

I don't fulfil my commitments to others –(R)

I don't complete all of my work –(R)

Emotional Facet

Emotions

Positively Keyed

I am happy to fulfil role-specific duties (EM-R)

I enjoy completing important tasks to a high standard (EM-EB)

I find it rewarding to fulfil my duties (EM-R)

I feel good when I prioritise important responsibilities over things that are less important (EM-P)

Negatively Keyed

I find fulfilling role-specific responsibilities unpleasant (EM-R)

I don't find hard work satisfying (EM-EB)

I don't enjoy working hard (EM-EB)

I find it stressful to have to prioritise important responsibilities over other things –(EM-P)

Conscientiousness in Excess

Positively Keyed

I have a tendency to work until I burn out –(EB-S)
I work until the point of exhaustion –(EB-S)
I prioritise role-specific responsibilities over my health –(P-S)
I feel anxious when I cannot do things perfectly –(EB-S)
I feel the need to make everything perfect –(EB-S)
I prefer to prioritise work over friends –(P-O)
I prefer to prioritise work over family –(P-O)
I prioritise my responsibilities over my well-being –(P-S)
I prioritise my personal responsibilities over the needs of others –(P-O)
People tell me that I work too much –(EB-O)

Negatively Keyed

I stop working when it starts to hinder my health (EB-S)
I don't feel the need to make everything perfect (EB-S)
It doesn't bother me when my work falls just short of being perfect (EB-S)
I stop working before I burn out (EB-S)
I prioritise my health over my work (P-S)
I prefer to prioritise my family over work (P-O)
I prefer to prioritise my friends over work (P-O)
I prioritise my own wellbeing over my work (P-S)

Open ended Questions

(General Questions)

1. Please give an example of one role that you think is important to do well?
2. Explain why you think it is important?

Appendix 2: Pre-analysed Character Conscientiousness Measure (Student Version)

Deficiency and Virtue

Motive Facets

Concern for Others

Positively Keyed

One good reason to come to class on time is to avoid distracting other students (O-R)

I try to be considerate of others when I'm in class (O-R)

I consider other people's needs when I have to decide which tasks to prioritise (O-P)

Contributing to other students' learning is an important part of being a good student (O-EB)

Negatively Keyed

I don't help other students with their work –(O-R)

Concern for family does not affect how I prioritise my studies –(O-P)

Concern for friends does not affect how I prioritise my studies –(O-P)

Being an excellent student does not include helping other students –(O-EB)

Self-Concern

Positively Keyed

Thinking about my future motivates me to study hard (S-R)

Concern for my own well-being influences how I balance the competing demands that come with being a student (S-P)

Concern for my future motivates me to complete assignments to the best of my ability (S-EB)

Negatively Keyed

Thinking about my future does not motivate me to put effort into my studies –(S-R)

Concerns about my well-being do not affect how I deal with the demands of my studies –(S-P)

Concerns about my future do not motivate me to study to the best of my ability –(S-EB)

Appreciation of Excellence

Positively Keyed

I pay attention during lectures because I love to learn (ER-R)

My desire to do well in my studies influences how I prioritise my student responsibilities (ER-P)

My appreciation of good work motivates me to complete assignments to the best of my ability (ER-EB)

Negatively Keyed

I don't try hard to be a good student –(ER-EB)

Desiring to be an excellent student does not influence how I prioritise my responsibilities – (ER-P)

Wanting to do well in my studies is not one of the reasons why I complete my work –(ER-R)

Practical Wisdom Facet

Practical Wisdom

Positively Keyed

I have thought about why being a student is important (W-P)

I understand what being a good student requires of me (W-R)

I know how to fulfil my responsibilities as a student (W-R)

I have the skills needed to be an excellent student (W-EB)

Negatively Keyed

I struggle to prioritise my student responsibilities –(W-P)

I have a lot more to learn about how to be a good student –(W-EB)

I have a lot more to learn about how to fulfil my student responsibilities –(W-R)

I have a lot more to learn about what my responsibilities as a student are –(W-R)

Behavioural Facets

Excellent Behaviours

Positively Keyed

I am an excellent student (EB)

I complete assignments to the best of my ability (EB)

I'm great at prioritising my studies (EB)

I excel at group projects (EB)

I try my best to help other students (EB)

Negatively Keyed

I do just enough study to pass –(EB)

I don't perform my role as a student very effectively –(EB)

I struggle to prioritise my studies –(EB)

Responsibility

Positively Keyed

I complete assigned work (R)

I submit assignments on time (R)

I fulfil my commitments to classmates (R)

I show up to class on time (R)

Negatively Keyed

I don't finish assignments on time –(R)

I don't respect other students' learning –(R)

I don't complete all of the assigned work –(R)

I let other students do most of the work for group assignments –(R)

Emotional Facet

Emotions

Positively Keyed

I am happy to complete my assignments (EM-R)

I enjoy completing assigned work to a high standard (EM-EB)

I find completing assigned work to be rewarding (EM-R)

I am happy to help my classmates (EM-EB)

I feel good when I have prioritised my studies (EM-P)

Negatively Keyed

I find completing assigned work unpleasant –(EM-R)

I find getting good grades unsatisfying –(EM-EB)

I don't enjoy helping classmates –(EM-EB)

I experience stress when prioritising my studies –(EM-P)

I don't find completing assigned work to be rewarding –(EM-R)

Conscientiousness in Excess

Positively Keyed

I have a tendency to study until I burn out –(EB-S)

I study until the point of exhaustion –(EB-S)

I feel the need to make all of my student work perfect –(EB-S)

I prioritise my studies over my well-being –(P-S)

I prioritise studying over my health –(P-S)

I prioritise my studies over friends –(P-O)

I prioritise my studies over my family –(P-O)

I believe that my student responsibilities are my most important priority –(P-O, S)

I feel anxious when I cannot complete assignments perfectly –(EM-EB)

Negatively Keyed

I stop studying when it starts to hinder my health –(EB-S)

I disregard my student responsibilities when family are in need –(P, R-O)

I disregard my student responsibilities when friends are in need –(P, R-O)

I don't feel the need to make all my student work perfect –(E-S)

When my assignments fall just short of being perfect, it doesn't bother me –(EB-S)

I stop studying before I burn out –(EB-S)

My student responsibilities are not my top priority –(R-S, O)

Open ended Questions

(Student questions)

1. What is your main goal for studying at university?

2. For the answer you wrote above, why do you think that's a valuable goal?

Appendix 3: Character Conscientiousness Survey (General Version)

This appendix includes the survey used to measure general Character Conscientiousness. Everything is presented in the same order as how the survey was presented to the participants. Note, each rating scale for the measures below:

Character Conscientiousness:

- Disagree
- Very slightly agree
- Moderately agree
- Strongly agree
- Completely agree

Big Five Conscientiousness:

- Very inaccurate
- Moderately inaccurate
- Neither accurate or inaccurate
- Moderately accurate
- Very accurate

Satisfaction with Life:

- Strongly disagree
- Disagree
- Slightly disagree
- Neither agree or disagree
- Slightly agree
- Agree
- Strongly Agree

Mindfulness:

- Almost never
- Very infrequently
- Somewhat infrequently
- Somewhat frequently
- Very frequently
- Almost always

Depression, Anxiety and Stress:

- Never
- Sometimes
- Often
- Almost always

Character Conscientiousness

Attention M-Turk participants, you will not be paid if you fail the attention check or complete the survey in under 5 minutes.

You are invited to participate in this survey study investigating the structure of the character trait of conscientiousness. There are many character traits, all of which can relate to culture and well-being in different ways. This research will improve scientists' and philosophers' understanding of character traits, how they differ from personality traits and how character relates to well-being and success. The primary researcher for this project is James McManus, a Masters student at the University of Waikato.

The study does not involve any commercial interest.

This survey is about you, and it is completely **anonymous, private, voluntary and confidential**. If at any point during the survey you wish to withdraw, you can stop answering the questions. All incomplete surveys will be discarded and not used for analysis.

The survey should take 10-20 minutes to complete.

The data from this research is a part of a Masters project, the research of which will be deposited in the University of Waikato library database upon completion.

This research project has been approved by the Human Research Ethics Committee of the Division of Arts and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee, email alpss-ethics@waikato.ac.nz, postal address, Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240

By completing this survey, you are indicating your consent to participate in this research.

If you have further questions, please email me at jamesmcmanus128@gmail.com

Thank you for participating. All your responses are valuable to the scientific and philosophical investigation of character.

Instructions: Many statements below refer to personal responsibilities and duties. When answering these questions, please focus on both duties and responsibilities in relation to the roles you have. These roles may include things like your role as a family member, friend, worker, or citizen. Some of the statements also ask about work. Work in this survey can relate to any work associated with a particular role. Please respond by clicking how much you agree with each statement.

The statements below refer to conscientious behaviours.

1. I perform my roles excellently.
2. I do just enough work to get by.
3. I fulfil my role-specific responsibilities.
4. I don't complete all of my work.
5. I work until the point of exhaustion.
6. I prioritise my personal responsibilities over the needs of others.
7. I stop working when it starts to hinder my health.
8. I prioritise my health over my work.
9. I complete role-specific tasks to an excellent standard.
10. I prefer to prioritise my friends over work.
11. I let others do my work.
12. I finish my work on time.
13. I don't meet my deadlines.
14. I fulfil my duties.
15. I prioritise role-specific responsibilities over my health.
16. People tell me that I work too much.
17. I prefer to prioritise my family over work.
18. I'm good at prioritising my responsibilities.
19. I don't perform my roles very effectively.
20. I fulfil my commitments to others.
21. I have a tendency to work until I burn out.
22. I prioritise my responsibilities over my well-being.

Instructions: Many statements below refer to personal responsibilities and duties. When answering these questions, please focus on both duties and responsibilities in relation to the roles you have. These roles may include things like your role as a family member, friend, worker, or citizen. Some of the statements also ask about work. Work in this survey can relate to any work associated with a particular role. Please respond by clicking how much you agree with each statement.

The statements below refer to conscientious motivations.

23. My concern for my own well-being motivates me to do my work.
24. Concern for my future influences how I prioritise my responsibilities.
25. Concern for my future doesn't influence how hard I work.
26. An appreciation of excellence motivates me to do my work.
27. Consideration of others motivates me to fulfil my responsibilities.
28. My desire to perform important roles to an excellent standard influences how I prioritise my responsibilities.
29. Appreciation of excellence is not something that impacts how hard I work.
30. Caring about others influences how I prioritise my responsibilities.
31. Concern for others is not something that motivates me to work to the best of my ability.
32. Other people's needs do not influence what responsibilities I prioritise.
33. Concern for my own well-being motivates me to complete work to a high standard.
34. I don't do things just for other people's sake.
35. Concern for my future doesn't affect which tasks I prioritise.
36. My appreciation of a job well done motivates me to perform roles to the best of my ability.
37. My concern for others motivates me to perform roles well.
38. Appreciation of excellence is not something that influences what responsibilities I prioritise.
39. To demonstrate your attention, select the disagree option for this question.
40. My concern for my own well-being doesn't motivate me to fulfil my responsibilities.

Instructions: Many statements below refer to personal responsibilities and duties. When answering these questions, please focus on both duties and responsibilities in relation to the roles you have. These roles may include things like your role as a family member, friend, worker, or citizen. Some of the statements also ask about work. Work in this survey can relate to any work associated with a particular role. Please respond by clicking how much you agree with each statement.

The questions below ask about conscientious self-efficacy and thinking.

41. I have a lot more to learn about what roles to prioritise.
42. I have the skills needed to perform my roles excellently.
43. I have a lot more to learn about what my important roles require of me.
44. I know how to fulfil my role-specific responsibilities.
45. I have thought about what my important roles are.
46. I understand what my important roles require of me.
47. I have a lot more to learn about how to fulfil my role-specific responsibilities.
48. I have a lot more to learn about how to perform my roles well.

Instructions: Many statements below refer to personal responsibilities and duties. When answering these questions, please focus on both duties and responsibilities in relation to the roles you have. These roles may include things like your role as a family member, friend, worker, or citizen. Some of the statements also ask about work. Work in this survey can relate to any work associated with a particular role. Please respond by clicking how much you agree with each statement.

The statements below refer to conscientious emotions and preferences.

49. I am happy to fulfil role-specific duties.
50. I don't find hard work satisfying.
51. I prefer to prioritise my friends over work.
52. I enjoy completing important tasks to a high standard.
53. I find fulfilling role-specific responsibilities unpleasant.
54. I feel anxious when I cannot do things perfectly.
55. It doesn't bother me when my work falls just short of being perfect.
56. I find it rewarding to fulfil my duties.
57. I don't enjoy working hard.
58. I feel the need to make everything perfect.
59. I feel good when I prioritise important responsibilities over things that are less important.
60. I find it stressful to have to prioritise important responsibilities over other things.
61. I prefer to prioritise work over family.

Big-Five Conscientiousness

The following questions relate to the personality trait of conscientiousness. Please click the response option that best describes you.

1. Am always prepared.
2. Pay attention to details.
3. Waste my time.
4. Find it difficult to get down to work.
5. Get chores done right away.
6. Carry out my plans.
7. Do just enough work to get by.
8. Don't see things through.
9. Make plans and stick to them.
10. Shirk my duties.

Subjective Well-Being (SWLS)

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by clicking the response options.

1. I am satisfied with my life.
2. If I could live my life over, I would change almost nothing.
3. In most ways my life is close to my ideal.
4. So far I have gotten the important things I want in life.
5. The conditions of my life are excellent.

Mindfulness Questions (MAAS)

Instructions: please read the following statements and click which response option best describes you.

1. I could be experiencing some emotion and not be conscious of it until some time later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.
3. I find it difficult to stay focused on what's happening in the present.
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. I forget a person's name almost as soon as I've been told it for the first time.
7. It seems I am "running on automatic" without much awareness of what I'm doing.
8. I rush through activities without being really attentive to them.
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.
10. I do jobs or tasks automatically, without being aware of what I'm doing.
11. I find myself listening to someone with one ear, doing something else at the same time.
12. I drive places on "automatic pilot" and then wonder why I went there.
13. I find myself preoccupied with the future or the past.
14. I find myself doing things without paying attention.
15. I snack without being aware that I'm eating.

Health-Related Well-Being Questions (DASS)

Please read the following statements and click the response options that best describes how much each statement has applied to you **over the past week.**

1. I found it hard to wind down.
2. I was aware of dryness of my mouth.
3. I couldn't seem to experience any positive feeling at all.
4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).
5. I found it difficult to work up the initiative to do things.
6. I tended to over-react to situations.
7. I felt that I was using a lot of nervous energy.
8. I was worried about situations in which I might panic and make a fool of myself.
9. I felt that I had nothing to look forward to.
10. I found myself getting agitated.
11. I found it difficult to relax.
12. I felt down-hearted and blue.
13. I was intolerant of anything that kept me from getting on with what I was doing.
14. I felt I was close to panic.
15. I was unable to become enthusiastic about anything.
16. I felt I wasn't worth much as a person.
17. I felt that I was rather touchy.
18. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).
19. I felt scared without any good reason.
20. I felt that life was meaningless.
21. I experienced trembling (eg, in the hand).

Open-ended Questions

Please answer the following open-ended questions.

1. Please give an example of one role that you think is important to do well?
2. For the answer you wrote above, why do you think that's an important role?

Demographic Questions

1. Which gender do you most identify with?
2. How old are you? (in years)

Appendix 4: Character Conscientiousness Survey (Student Version)

This appendix includes the survey used to measure Character Conscientiousness in students. Everything is presented in the same order as how the survey was presented to the participants. Note, each rating scale for the measures below:

Character Conscientiousness:

- Disagree
- Very slightly agree
- Moderately agree
- Strongly agree
- Completely agree

Big Five Conscientiousness:

- Very inaccurate
- Moderately inaccurate
- Neither accurate or inaccurate
- Moderately accurate
- Very accurate

Satisfaction with Life:

- Strongly disagree
- Disagree
- Slightly disagree
- Neither agree or disagree
- Slightly agree
- Agree
- Strongly Agree

Mindfulness:

- Almost never
- Very infrequently
- Somewhat infrequently
- Somewhat frequently
- Very frequently
- Almost always

Depression, Anxiety and Stress:

- Never
- Sometimes
- Often
- Almost always

Character Conscientiousness

You are invited to participate in this survey study investigating the structure of the character trait of conscientiousness in students. There are many character traits, all of which can relate to culture and well-being in different ways. This research will improve scientists' and philosophers' understanding of character traits, how they differ from personality traits and how character relates to well-being and success. The primary researcher for this project is James McManus, a Masters student at the University of Waikato.

The study does not involve any commercial interest.

This survey is about you, and it is completely **anonymous, private, voluntary and confidential**. If at any point during the survey you wish to withdraw, you can stop answering the questions. All incomplete surveys will be discarded and not used for analysis.

The survey should take 10-20 minutes to complete.

The data from this research is a part of a Masters project, the research of which will be deposited in the University of Waikato library database upon completion.

This research project has been approved by the Human Research Ethics Committee of the Division of Arts and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee, email alpss-ethics@waikato.ac.nz , postal address, Division of Arts, Law, Psychology and Social Sciences , University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240

By completing this survey, you are indicating your consent to participate in this research.

If you have further questions, please email me at jamesmcmanus128@gmail.com

Thank you for participating. All your responses are valuable to the scientific and philosophical investigation of character.

Instructions: The following statements relate to conscientiousness at university. Please respond to each statement and indicate how much you agree by clicking the response options below.

The statements below refer to conscientious behaviours.

1. I prioritise my studies over my well-being.
2. I excel at group projects.
3. I submit assignments on time.
4. I stop studying when it starts to hinder my health.
5. I let other students do most of the work for group assignments.
6. I prioritise my studies over my family.
7. I struggle to prioritise my studies.
8. I study until the point of exhaustion.
9. I disregard my student responsibilities when friends are in need.
10. I try my best to help other students.
11. I am an excellent student.
12. I complete assignments to the best of my ability.
13. I fulfil my commitments to classmates.
14. I don't respect other students' learning.
15. I have a tendency to study until I burn out.
16. I prioritise studying over my health.
17. I don't finish assignments on time.
18. I don't perform my role as a student very effectively.
19. I do just enough study to pass.
20. I'm great at prioritising my studies.
21. I complete assigned work.
22. I show up to class on time.
23. I don't complete all of the assigned work.

Instructions: The following statements relate to conscientiousness at university. Please respond to each statement and indicate how much you agree by clicking the response options below.

The statements below refer to conscientious motivations.

24. Being an excellent student does not include helping other students.
25. Thinking about my future does not motivate me to put effort into my studies.
26. I don't try hard to be a good student.
27. One good reason to come to class on time is to avoid distracting other students.
28. I consider other people's needs when I have to decide which tasks to prioritise.
29. I pay attention during lectures because I love to learn.
30. Thinking about my future motivates me to study hard.
31. I don't help other students with their work.
32. Concern for friends does not affect how I prioritise my studies.
33. Wanting to do well in my studies is not one of the reasons why I complete my work.
34. Concern for my future motivates me to complete assignments to the best of my ability.
35. My appreciation of good work motivates me to complete assignments to the best of my ability.
36. Desiring to be an excellent student does not influence how I prioritise my responsibilities.
37. I try to be considerate of others when I'm in class.
38. Contributing to other students' learning is an important part of being a good student.
39. My desire to do well in my studies influences how I prioritise my student responsibilities.
40. Concern for my own well-being influences how I balance the competing demands that come with being a student.
41. Concern for family does not affect how I prioritise my studies.
42. Concerns about my future do not motivate me to study to the best of my ability.

Instructions: The following statements relate to conscientiousness at university. Please respond to each statement and indicate how much you agree by clicking the response options below.

The questions below ask about conscientious self-efficacy and thinking.

43. I have a lot more to learn about how to be a good student.
44. I have the skills needed to be an excellent student.
45. I have a lot more to learn about how to fulfil my student responsibilities.
46. I believe that my student responsibilities are my most important priority.
47. I have thought about why being a student is important.
48. I know how to fulfil my responsibilities as a student.
49. I struggle to prioritise my student responsibilities.
50. I understand what being a good student requires of me.
51. I have a lot more to learn about what my responsibilities as a student are.
52. My student responsibilities are not my top priority.

Instructions: The following statements relate to conscientiousness at university. Please respond to each statement and indicate how much you agree by clicking the response options below.

The statements below refer to conscientious emotions and preferences.

53. I am happy to complete my assignments.
54. I find completing assigned work to be rewarding.
55. I feel the need to make all of my student work perfect.
56. I experience stress when prioritising my studies.
57. I don't enjoy helping classmates.
58. I enjoy completing assigned work to a high standard.
59. I find completing assigned work unpleasant.
60. I am happy to help my classmates.
61. I don't find completing assigned work to be rewarding.
62. I find getting good grades unsatisfying.
63. I feel good when I have prioritised my studies.
64. I feel anxious when I cannot complete assignments perfectly.
65. I don't feel the need to make all my student work perfect.
66. When my assignments fall just short of being perfect, it doesn't bother me.

Big-Five Conscientiousness

The following questions relate to the personality trait of conscientiousness. Please click the response option that best describes you.

1. Am always prepared.
2. Pay attention to details.
3. Waste my time.
4. Find it difficult to get down to work.
5. Get chores done right away.
6. Carry out my plans.
7. Do just enough work to get by.
8. Don't see things through.
9. Make plans and stick to them.
10. Shirk my duties.

Subjective Well-Being (SWLS)

Below are five statements that you may agree or disagree with. Using the 1 - 7 scale below, indicate your agreement with each item by clicking the response options.

1. I am satisfied with my life.
2. If I could live my life over, I would change almost nothing.
3. In most ways my life is close to my ideal.
4. So far I have gotten the important things I want in life.
5. The conditions of my life are excellent.

Mindfulness Questions (MAAS)

Instructions: please read the following statements and click which response option best describes you.

1. I could be experiencing some emotion and not be conscious of it until some time later.
2. I break or spill things because of carelessness, not paying attention, or thinking of something else.
3. I find it difficult to stay focused on what's happening in the present.
4. I tend to walk quickly to get where I'm going without paying attention to what I experience along the way.
5. I tend not to notice feelings of physical tension or discomfort until they really grab my attention.
6. I forget a person's name almost as soon as I've been told it for the first time.
7. It seems I am "running on automatic" without much awareness of what I'm doing.
8. I rush through activities without being really attentive to them.
9. I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.
10. I do jobs or tasks automatically, without being aware of what I'm doing.
11. I find myself listening to someone with one ear, doing something else at the same time.
12. I drive places on "automatic pilot" and then wonder why I went there.
13. I find myself preoccupied with the future or the past.
14. I find myself doing things without paying attention.
15. I snack without being aware that I'm eating.

Health-Related Well-Being Questions (DASS)

Please read the following statements and click the response options that best describes how much each statement has applied to you **over the past week.**

1. I found it hard to wind down.
2. I was aware of dryness of my mouth.
3. I couldn't seem to experience any positive feeling at all.
4. I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).
5. I found it difficult to work up the initiative to do things.
6. I tended to over-react to situations.
7. I felt that I was using a lot of nervous energy.
8. I was worried about situations in which I might panic and make a fool of myself.
9. I felt that I had nothing to look forward to.
10. I found myself getting agitated.
11. I found it difficult to relax.
12. I felt down-hearted and blue.
13. I was intolerant of anything that kept me from getting on with what I was doing.
14. I felt I was close to panic.
15. I was unable to become enthusiastic about anything.
16. I felt I wasn't worth much as a person.
17. I felt that I was rather touchy.
18. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat).
19. I felt scared without any good reason.
20. I felt that life was meaningless.
21. I experienced trembling (eg, in the hand).

Open-ended Questions

Please answer the following open-ended questions.

1. What is your main goal for studying at university?
2. For the answer you wrote above, why do you think that's a valuable goal?

Demographic Questions

1. Which gender do you most identify with?
2. Which ethnic group do you most identify with?
3. How old are you? (in years)

Appendix 5: Post-analysis Character Conscientiousness Measure (General Version)

Facet 1: Virtue Conscientiousness

I complete role-specific tasks to an excellent standard

I have the skills needed to perform my roles excellently

I fulfil my duties

I perform my roles excellently

I find it rewarding to fulfil my duties

I enjoy completing important tasks to a high standard

I know how to fulfil my role-specific responsibilities

I am happy to fulfil my role-specific duties

I'm good at prioritising my responsibilities

I understand what my important roles require of me

I finish my work on time

I fulfil my role-specific responsibilities

I have thought about what my important roles are

I fulfil my commitments to others

My desire to perform roles to an excellent standard influences how I prioritise my responsibilities

An appreciation of excellence motivates me to do my work

My appreciation of a job well-done motivates me to perform roles to the best of my ability

Concern for my own well-being motivates me to complete work to a high standard

My concern for others motivates me to perform my roles well

Facet 2: Excessive Conscientiousness

I prioritise role-specific responsibilities over my health

People tell me that I work too much

I have a tendency to work until I burn out

I prioritise my responsibilities over my well-being

I prefer to prioritise work over family

I work until the point of exhaustion

I find it stressful having to prioritising important responsibilities over other things

I feel the need to make everything perfect

I prioritise my personal responsibilities over the needs of others

I feel anxious if I cannot do things perfectly

Appendix 6: Post-analysis Character Conscientiousness Measure (Student Version)

Student Virtue Conscientiousness

My appreciation of good work motivates me to complete assignments to the best of my ability

I complete assignments to the best of my ability

I am happy to complete my assignments

I complete assigned work

I am an excellent student

Concern for my future motivates me to complete assignments to the best of my ability

Thinking about my future motivates me to study hard

I enjoy completing assigned work to a high standard

My desire to do well in my studies influences how I prioritise my student responsibilities

I submit assignments on time

I'm great at prioritising my studies

I know how to fulfil my responsibilities as a student

I find completing assigned work to be rewarding

I pay attention during lectures because I love to learn

I have thought about why being a student is important

I show up to class on time

I have the skills needed to be an excellent student

Excessive Student Conscientiousness

I have a tendency to study until I burn out

I prioritise studying over my health

I study to the point of exhaustion

I prioritise my studies over my well-being

I experience stress when prioritising studies

I feel anxious when I cannot complete assignments perfectly

I prioritise my studies over family