

Investigating Perfectionism using a Mixed Method  
Approach: Personal Experiences, Evaluations, and the  
Relationship of the FMPS, APS-R and PSPS to the Big  
Five Personality Dimensions



A thesis submitted for the degree of Masters by Research  
(MbR)

by

Alison Kerr

School of Social and Health Sciences,  
Abertay University.

August, 2016

## **Declaration**

Candidate's declarations:

I, Alison Kerr, hereby certify that this thesis submitted in partial fulfilment of the requirements for the award of Masters by Research (MbR), Abertay University, is wholly my own work unless otherwise referenced or acknowledged. This work has not been submitted for any other qualification at any other academic institution.

Signed .....

Date .....

Supervisor's declaration:

I, Dr. Lynn Wright, hereby certify that the candidate has fulfilled the conditions of the Resolution and Regulations appropriate for the degree of Masters by Research in Abertay University and that the candidate is qualified to submit this thesis in application for that degree.

Signed .....

Date.....

## **Certificate of Approval**

I certify that this is a true and accurate version of the thesis approved by the examiners, and that all relevant ordinance regulations have been fulfilled.

Supervisor.....

Date.....

## **Acknowledgements**

I would like to express my gratitude to my supervisors, Dr Lynn Wright and Dr Scott Hardie, for their wonderful support and encouragement throughout the year. Thank you for making this process so enjoyable and for keeping me calm and confident. I would not have made it without you both and I will always be grateful. A special thank you to Lynn for the time she has spent helping me to improve my work. Her continued support, guidance and advice has been invaluable and has enabled me to create something that I am very proud of.

I would also like to thank each of my participants for giving up their time to share their stories of perfectionism with me. I am very appreciative.

## **Abstract**

Personal experiences and evaluations of perfectionism, and the relationship between perfectionism, personality, laterality, and gender were investigated using a mixed method approach. Study 1 explored the relationship between two measurements of multidimensional perfectionism, the FMPS and the APS-R, and a measurement of self-presentational perfectionism, the PSPS. Study 1 also examined the relationships between perfectionism, the Big Five dimensions of personality (extraversion, agreeableness, conscientiousness, emotional stability, and openness) and handedness strength and direction. A total of 192 participants took part. Correlations found between the FMPS, APS-R and PSPS suggest they are measuring from an underlying construct of perfectionism. Higher multidimensional perfectionism correlated to higher self-presentational perfectionism, suggesting perfectionism is relevant within multiple domains. Higher scores of perfectionism were predicted by higher scores of conscientiousness and lower scores of emotional stability (higher neuroticism) in both males and females. These personality dispositions may mean that individuals are more prone to developing perfectionism. In females, higher perfectionism was also predicted by lower agreeableness, suggesting that a lower tendency to be agreeable may extend to a lower acceptance of errors in relation to perfectionism. In females, lower extraversion also predicted higher self-presentational perfectionism, suggesting introverted females may be more concerned with presenting an image of perfection to others. In males, higher perfectionism was predicted by stronger left-handedness (measured by the APS-R), suggesting an influence of laterality. Results are discussed in relation to the mediating role of the behavioural inhibition system (BIS). One-hundred and eighty-five of these participants also completed six open-ended questions (Study 2) exploring personal experiences and evaluations of perfectionism. A further 13 participants took part in face-to-face interviews (Study 4). The results support a multidimensional form of perfectionism. Self-defined perfectionists viewed their perfectionism positively despite expressing a desire to eliminate their maladaptive tendencies, such as high self-criticism and disregarding success. The development of perfectionism was reported to be influenced by parents and the demands of academia. Together studies 1, 2 and 4 suggest a complex combination of genetic and environmental factors in the development of perfectionism. A follow-up study (3) with 70 participants explored self-reported definitions of perfectionism. The aspects of high standards, obsessionality, and the intolerance of errors or flaws were emphasised.

## Table of Contents

Declaration .....	i
Certificate of Approval .....	i
Acknowledgements .....	ii
Abstract .....	iii
List of Tables .....	vi
<b>Chapter 1. Understanding perfectionism .....</b>	<b>1</b>
<b>1. General Introduction .....</b>	<b>1</b>
<b>Chapter 2. Examining potential predictors of perfectionism .....</b>	<b>11</b>
<b>2.1. Introduction .....</b>	<b>11</b>
<b>Study 1 - Examining perfectionism, personality and laterality .....</b>	<b>30</b>
<b>2.2. Method .....</b>	<b>30</b>
2.2.1. <i>Participants</i> .....	30
2.2.2. <i>Materials &amp; Apparatus</i> .....	30
2.2.3. <i>Procedure</i> .....	33
<b>2.3. Results .....</b>	<b>35</b>
<b>2.4. Discussion .....</b>	<b>47</b>
<b>Chapter 3. Exploring individual experiences and evaluations of perfectionism .....</b>	<b>57</b>
<b>3.1. Introduction .....</b>	<b>57</b>
<b>Study 2 - Analysis of the online questions .....</b>	<b>67</b>
<b>3.2. Method .....</b>	<b>67</b>
3.2.1. <i>Participants</i> .....	67
3.2.2. <i>Materials &amp; Apparatus</i> .....	67
3.2.3. <i>Procedure</i> .....	67
3.2.4. <i>Data analysis</i> .....	68
<b>3.3. Results .....</b>	<b>70</b>
3.3.1. <i>Defining “perfectionism”</i> .....	70
3.3.2. <i>The pursuit of perfection</i> .....	71
3.3.3. <i>Grounded theory analysis</i> .....	73
<b>3.4. Discussion .....</b>	<b>96</b>
<b>Study 3 - Examining definitions of perfectionism .....</b>	<b>101</b>
<b>3.5. Method .....</b>	<b>101</b>
3.5.1. <i>Participants</i> .....	101

3.5.2. <i>Item Development</i> .....	101
3.5.3. <i>Materials &amp; Apparatus</i> .....	102
3.5.4. <i>Procedure</i> .....	102
<b>3.6. Results</b> .....	110
<b>3.7. Discussion</b> .....	113
<b>Study 4 - Qualitative interview analysis</b> .....	115
<b>3.8. Method</b> .....	115
3.8.1. <i>Participants</i> .....	115
3.8.2. <i>Interview schedule development</i> .....	116
3.8.3. <i>Materials &amp; Apparatus</i> .....	121
3.8.4. <i>Procedure</i> .....	122
3.8.5 <i>Data analysis</i> .....	123
<b>3.9. Results</b> .....	124
Theme 1: Domain type.....	124
Theme 2: Origins of perfectionism .....	129
Theme 3: Current motivations for pursuing perfection.....	133
Theme 4: The perfectionist approach.....	135
Theme 5: Response towards success.....	136
Theme 6: Response towards failure .....	139
Theme 7: Evaluating perfectionism .....	142
<b>3.10. Discussion</b> .....	146
<b>Chapter 4. Conclusion</b> .....	154
<b>4. Conclusion</b> .....	154
<b>References</b> .....	162
<b>Appendices</b> .....	174

## List of Tables

Table 1.....	16
Table 2.....	35
Table 3.....	36
Table 4.....	36
Table 5.....	37
Table 6.....	38
Table 7.....	39
Table 8.....	40
Table 9.....	41
Table 10.....	42
Table 11.....	43
Table 12.....	44
Table 13.....	45
Table 14.....	70
Table 15.....	71
Table 16.....	73
Table 17.....	104
Table 18.....	110
Table 19.....	111
Table 20.....	116
Table 21.....	118
Table 22.....	124

## Chapter 1

### Understanding perfectionism

#### 1. General Introduction

The term 'perfect' implies something that is free from any defects (American Heritage Dictionaries, 2012), and those who strive to reach this standard are referred to as *perfectionists*. Yet currently there is no standard way to define 'perfectionism' (Ashby, Slaney, Noble, Gnilka & Rice, 2012; Hill, Witcher, Gotwals & Leyland, 2015) which means that it remains difficult to determine exactly what makes someone a perfectionist (Shafran, Cooper & Fairburn, 2002). The exact nature of perfectionism has been disputed by previous researchers. Firstly, it is debated whether perfectionism should be best understood as a trait disposition or a state. Trait perfectionism would refer to a more enduring characteristic that is stable across time, whereas state perfectionism would refer to a more changeable version that the individual has conscious control of (Eusanio, Thomson & Jaque, 2014). Secondly, it is disputed whether perfectionism is a categorical construct, meaning that there are only two versions; normal (positive) and neurotic (negative) (Hamachek, 1978), or a multidimensional construct that consists of various dimensions, both positive and negative (Hewitt, Flett, Besser, Sherry & McGee, 2003). Finally, it is disputed whether or not perfectionism truly exists in an adaptive form as well as maladaptive (Hewitt & Flett, 1991). Researchers such as Greenspon (2000) have questioned the existence of any positive form of perfectionism, instead understanding it as inherently negative. This chapter will aim to conduct an investigation of perfectionism that addresses each of these three disputes, as well as explores the development of perfectionism and how this influences subsequent behavioural patterns.

To define exactly what perfectionism is, researchers have referred to a range of terms. These include: *a tendency* (Flett, Hewitt & Dyck, 1989); *an excessive striving* (Slaney, Rice, Mobley, Trippi & Ashby, 2001); *a cognitive bias* (Randles, Flett, Nash, McGregor & Hewitt, 2010); *a construct* (Haase, Prapavessis & Owens, 2013); *a trait* (Hewitt et al., 2003); *a personality disposition* (Scott, Yap, Francis & Schuster, 2014); *a*



*personality characteristic* (Damian, Stoeber, Negru & Băban, 2013); and a *multidimensional personality characteristic* (Frost, Marten, Lahart & Rosenblate, 1990). It is understandable that perfectionism has been described as an “ill-defined and poorly understood phenomenon” (Shafran et al., 2002, p.774) when a lack of standardisation across perfectionism literature is apparent.

In a basic form, perfectionism has been understood as the desire to be perfect, with anything less than perfect considered unacceptable (Greenspon, 2008). The unrelenting nature of the behaviour associated with pursuing perfection was also described by Greenspon (2008) as being burdensome and counterproductive. Taken on its own, however, this description may be biased, as other research has found that the desire to achieve perfection in itself may not be entirely detrimental to health. Rather it can be the healthy and adaptive motivation of those who strive for excellence (Adderholdt & Goldberg, 1999). Striving for excellence is characterised as putting persistent time and effort into a performance with the ultimate goal of achieving success (Greenspon, 2014; Stoeber, Otto, Pescheck, Becker & Stoll, 2007). This is also a central goal of perfectionists, who are understood to be highly motivated at pursuing success and achieving high standards (Rice & Richardson, 2014). Striving for excellence may result in improved performance, perhaps even a perfect performance (Stoeber et al., 2007) but Greenspon (2008) argues that this is not necessarily the work of a ‘perfectionist’. Rather than seek excellence, perfectionists were described as those seeking unattainable standards and accepting nothing less than perfection. Therefore perfectionism could only ever be unhealthy and maladaptive. Those who *were* accepting of standards less than perfect were seen as fundamentally distinct from perfectionists for this reason. Although this has been disputed by researchers such as Stoeber and Otto (2006), who have argued that a positive and healthy form of perfectionism does exist, Greenspon’s (2008) argument suggests caution when conceptualising perfectionism only in relation to the pursuit of success.

Greenspon’s (2008) argument highlights one key area of difference proposed to exist between perfectionists and those striving for excellence. The goals or standards set by perfectionists tend to be unrealistically high, or perhaps even unachievable (Egan, Piek, Dyck, Rees & Hagger, 2013), and the pursuit of these goals can ultimately place the individual at risk of mental health problems. This can include feelings of incompetency,

personal inadequacy and inferiority, which in turn may lead to lower self-esteem and depressive symptoms (Hecht, 2013). Subsequently, the setting of high standards has been a key area for clinical intervention, with the aim of lowering these standards to a more realistic and manageable level (Rice & Richardson, 2014).

A second proposed difference between these two groups lies within the ways in which they respond to any apparent shortcomings or perceived failures. Those striving for excellence - although they may still experience disappointment - are able to deal with failures relatively well, whereas perfectionists are less able to. Instead they may dwell on perceived failures or mistakes and feel frustrated or guilty, which in turn may lead to self-critical ruminations or an eventual loss of self-esteem (Eusanio et al., 2014). Greenspon (2014) proposes that this means perfectionists are not just motivated by the pursuit of success, but by a fear of failure, and therefore defines perfectionism as “a desire for perfection, a fear of imperfection” (p.991). The unrealistic nature of the standards typically set by perfectionists can mean that failure in achieving them is more commonplace than for those with more realistic standards, therefore the fear of failure is more prominent.

This fear of failure was examined by Eusanio et al. (2014), who found that levels of perfectionism were high amongst professional dancers. In a discipline that demands high performance and success from its competitors, dancers were found to possess a strong fear of failure, especially considering that the majority of their performances were to be evaluated by others. In fact it was found that dancers were more motivated by a fear of failure than by a desire to succeed. Fear of failure has been conceptualised as the tendency to feel anxious and threatened by any situations that include the possibility of failure. Failure has been associated with negative consequences such as feelings of shame and embarrassment; lower self-value; and a concern for upsetting important others (Conroy, Kaye & Fifer, 2007) and as such, perfectionists may be motivated to avoid these scenarios. This suggests that the desire to succeed is only one aspect of perfectionism.

To better understand the nature of perfectionism it is beneficial to examine the possible factors that contribute to its development. Perfectionism has been thought to continuously develop across the lifespan, especially as the result of the parent-child relationship during early childhood. The authoritarian parental style in particular has

been associated with higher perfectionism in children. This parenting style is characterised by strict control, low nurturance and warmth, and the demand for unquestioning obedience (Sands, Craddock & Church, 2009). Due to the controlling nature of authoritarian parents it has been found that their children tend to do better academically than other children because there is a higher focus placed on monitoring their behaviour. The consequence of this is that they tend to be more perfectionistic as a result, mostly in a dysfunctional way (Sands et al., 2009). Sensitive or insecure children have been identified as particularly vulnerable to perfectionistic thinking when brought up in environments where acceptance was conditional (Greenspon, 2000). Children who are criticised when they fail to meet their parents' expectations of them are at risk of internalising failures and engaging in negative self-evaluation (Damian et al., 2013). Perfectionist tendencies may also develop when young children observe and attempt to emulate their parents' perfectionism, especially when they are constantly exposed to it (Damian et al., 2013).

There are also elements of environmental influences in the development of perfectionism. Within today's culture, performance excellence and high achievements are expected of employees (Ozbilir, Day & Catano, 2015), and it is particularly challenging to avoid perfectionist thinking within professional careers that demand high standards and success (Rice & Richardson, 2014). As a result, sports athletes have been found to possess extreme perfectionistic personalities and an almost exclusive focus on the attainment of perfection (Flett & Hewitt, 2005). Further predictors of perfectionism will be the focus of exploration within chapter 2 of this thesis.

So far this may suggest that perfectionism should be considered as something detrimental to wellbeing, i.e. someone is considered a perfectionist, rather than as someone striving for excellence, when their cognitions begin to negatively affect, or ultimately diminish, their mental wellbeing. Concerning the nature of the construct, Greenspon (2014) understands perfectionism as set of cognitions that are inherently negative. It was argued that if true perfection is considered unachievable (with respect to human imperfectability) then the pursuit of perfection is simply a burden that interferes with a person's success. Hecht (2013) takes a similar view, proposing that perfectionism consists of goals and motivations that have been taken to the extreme. Though striving for self-improvement or personal development in general is considered

healthy and motivational, in a perfectionist this is accompanied by constant comparisons between the self and unattainable standards. This means that finding flaws and failures in one's performance becomes almost inevitable, leading to feelings of hopelessness and self-blame (Hecht, 2013).

A large body of research has tended to examine perfectionism from this perspective, and the specifics of what makes someone a perfectionist have often been concerned with the associated negative behaviours and detrimental outcomes that feature as a consequence of perfectionism. The negative behaviours considered typical of perfectionism can include placing extreme value of self-worth on the achievement of set standards (Haase et al., 2013) which tend to be unrealistically high (Rice & Richardson, 2014); the tendency to ruminate on and generalise perceived failures, paying strong attention to errors, and the tendency to interpret any feedback as critical or negative (Randles et al., 2010); dismissing instances of success due to an attentional bias (Howell et al., 2016); and engaging in high self-criticism due to perceived deficits in self-performance (Shafran et al., 2002).

The consequences associated with perfectionism include experiencing a sense of failure, indecisiveness, procrastination, and shame (Bieling, Israeli & Antony, 2004); avoidant coping mechanisms; heightened risks for the development of depressive symptoms (Stoeber, Hoyle & Last, 2013); and the development of social anxiety (Scott et al., 2014; Shafran et al., 2002). At its most extreme, perfectionism has been associated with a heightened risk for the development of anorexia nervosa and bulimia (Shafran et al., 2002) and an increased risk of self-injury, suicidal ideations and completed suicides (Zucker, Herzog, Moskovich, Merwin & Lin, 2011). For these reasons, the negative thinking patterns associated with perfectionism have been targeted as an area for clinical intervention. Methods such as cognitive behavioural therapy have been used in order to reduce maladaptive cognitive bias, such as the tendency to be self-critical and show selective attention towards perceived failures, in order to reduce the perfectionist individual's risk of developing these adverse consequences (Riley, Lee, Cooper, Fairburn & Shafran, 2007). However, Lloyd, Schmidt, Khondoker and Tchanturia (2015) highlight that it is more difficult to reduce or eliminate these biases when they function as part of an enduring personality disposition.

Yet it is thought that perfectionism, or perfectionist thinking, does not have to feature solely as part of an enduring personality disposition, but rather it can exist in a more temporary format. Eusanio et al. (2014) suggest that there is a fundamental difference between perfectionist behaviour that results from a constant or stable personality disposition – *trait perfectionism* – and that which results from more temporary motivations – *state perfectionism*. State perfectionism has been proposed to be a state under conscious control that could be “turned on and off as desired” (Mallinger, 2009, p106), but trait perfectionism could not. Saboonchi and Lundh (1999) found some support for state perfectionism by finding that changes to perfectionistic thinking could be experimentally induced. The aversion towards making mistakes has previously been identified as an area that perfectionists are particularly concerned with. This is due to their tendency to perceive mistakes, no matter how minor, as evidence that their standards of perfection have not been met (Frost et al., 1990). However, placing perfectionists into a scenario in which they were under the observation of others lead them to feel less concerned with mistakes than they normally would. This was thought to occur due to the observation element acting as a distractor, or overriding normal perfectionist tendencies. This suggests that there are at least some areas of perfectionistic thinking that can be situationally controlled. Furthermore, Rice and Aldea (2006) found that levels of negative perfectionistic thinking were elevated during times when participants were feeling particularly depressed, in comparison to when they were not. They suggested that some aspects of perfectionism are less stable across time and may change in severity depending on current mood, especially in relation to depression. However, when individuals are depressed, perfectionistic thinking (and the dysfunctional attitudes associated with depression in general) remains stable across time and is difficult to change or overcome.

Overcoming the enduring format of trait perfectionism is more problematic, as it is thought to be maintained by biased cognitive processes that are difficult to change (Lloyd et al., 2015). These biases include paying strong attention towards errors and the tendency to assume that any ambiguous feedback must be critical or negative in nature (Randles et al., 2010). This strong selective attention to failure means that the only perceived outcomes of self-performance are either success or failure, regardless of situational factors (Eusanio et al., 2015).

Greenspon (2014), however, proposes that there is no “perfect perfectionist” (p.987), or no set way to experience perfectionism. Instead it has been proposed that perfectionism, or perfectionist tendencies, exist on a continuum ranging from healthy to dysfunctional (Adderholdt & Goldberg, 1999), and that there are in fact many dimensions of perfectionism that can include positive aspects as well as negative (Blatt, 1995).

Early research by Hamachek (1978) acknowledged the complex nature of perfectionism by proposing that two categorical forms exist: *normal perfectionism* and *neurotic perfectionism*. More recently these have been termed *adaptive perfectionism* and *maladaptive perfectionism*, but as Stoeber and Otto (2006) point out, these forms are often just presented under different labels but ultimately refer to the same concepts. Recent research still tends to retain this fundamental distinction between “healthy” (normal) and “unhealthy” (neurotic) perfectionism.

Normal perfectionism was conceptualised as the healthier, more adaptive form of perfectionism, closer in nature to striving for excellence. The goals and standards of normal perfectionists were of a more realistic and achievable nature. Though they were still highly motivated to excel and achieve success, normal perfectionists were more accepting of flaws and of limitations, both personal and environmental, and thus the fear of failure was less demanding (Blatt, 1995). In comparison, neurotic perfectionism was conceptualised as the maladaptive form associated with psychological disturbances including eating disorders; depression; obsessive-compulsive disorder; anxiety; and panic disorders (Blatt, 1995). As explored previously, Greenspon’s (2014) understanding of perfectionism is very much concerned with this neurotic form. Whereas normal perfectionists were able to experience a sense of pleasure and satisfaction from their performance, neurotic perfectionists were those who were unable to derive satisfaction and were highly driven by the fear of failure (Blatt, 1995).

The proposed differences between normal and neurotic perfectionists were examined by Stoeber et al. (2007), who measured the responses of sports athletes towards instances of failure. ‘Failure’ was deemed to be any instances where desired standards were not met during competitions, measured by the strength of agreement to statements such as “I feel extremely stressed if everything does not go perfectly”. The results were in line with Hamachek’s (1978) categorical view of perfectionism,

suggesting both a maladaptive and an adaptive group. Those who were able to control their negative reactions towards failure and retain their self-confidence were found to be those who experienced less negative consequences, such as anxiety. In comparison, those who reacted negatively towards failure experienced increased levels of anxiety and nervousness. They therefore proposed that striving for perfection itself is not maladaptive, but rather it is the accompaniment of these negative reactions, such as the concern with failures or imperfections, that defines maladaptive perfectionism. When these concerns are absent then striving for perfection is more positive in nature. This suggests that there are two distinct forms of perfectionism, at least with respect to responses towards failure.

Adaptive perfectionists are those who set high standards for themselves and strive towards high achievements, however they lack the negative self-evaluation that maladaptive perfectionists engage in. When high standards are sought after but self-worth is not contingent on achievement then perfectionism becomes healthier in nature and less pathological (Burnam, Komarraju, Hamel & Nadler, 2014), without sacrificing the drive to succeed. Adaptive perfectionism has been associated with benefits such as a reduced tendency to procrastinate. This has been thought to occur because adaptive perfectionists are more achievement-oriented, more confident, and more diligent in the goals they set for themselves, and less afraid of failure (Burnam et al., 2014). As explored previously, maladaptive perfectionists are highly motivated to avoid failure (Greenspon, 2014) and thus may be more likely to put off unpleasant or challenging tasks that may result in a negative performance outcome (Burnam et al., 2014). Rather than feel defeated by failures, adaptive perfectionists have been found to adjust their expectations after experiences of failure to accommodate their capabilities (Hewitt & Flett, 2007).

Despite this, the existence of a healthy or adaptive form of perfectionism has been challenged. Greenspon (2008) maintains that perfectionism is inherently negative and only ever maladaptive. It was suggested that those who accept less than perfection, or experience no negative consequences upon failing to achieve their desired standards, are not truly perfectionists. It was questioned that if imperfections are accepted, then is it true perfectionism? As discussed previously, it was proposed that perfectionism should be differentiated from striving for excellence on the grounds that these groups

respond towards failure in fundamentally different ways. Greenspon (2000) suggests that adaptive perfectionism is actually just striving for excellence that has been mistakenly named. This was argued because past research has never truly identified healthy or adaptive perfectionists as those actively seeking perfection. In particular, Hamachek's (1978) conceptualisation of 'normal perfectionism' was criticised for failing to provide evidence that this group even seeks perfection at all. It was highlighted that normal perfectionists were simply referred to as those who preferred to do the best that they could, rather than those who strive for perfection. Greenspon (2000) drew the conclusion that those who accept less than perfect standards and possess no real fear of failure are not truly seeking perfection. It was therefore stated that "Since perfect performance is extremely rare, healthy perfectionism is a misnomer and is oxymoronic" (p.202). Similarly, Stairs (2009) argued that trait perfectionism does not exist, and instead referred to perfectionism as an "umbrella term" (p.65) for various unidimensional traits, rather than as one multidimensional construct. Using the example of perfectionist thinking in relation to eating disorders it was highlighted that not all facets of multidimensional models of perfectionism were appropriate or relevant, and that a more focused unidimensional perspective is needed to understand how perfectionism features within such psychological disorders.

Broman-Fulks, Hill and Green (2008) proposed that, rather than categorise perfectionism into two forms, it is best to understand the individual differences of perfectionism by degrees of severity, i.e. that some forms are more extreme than others. Viewing perfectionism as either positive or negative in nature was decided as too severe a cut-off and did not account for those who may experience elements of both. Rather, a dimensional approach to measuring perfectionism was proposed, and it is this conceptualisation that is most widely accepted by current researchers today (Lloyd et al., 2015).

The multidimensional nature of perfectionism was examined in two landmark papers by Frost et al. (1990) and by Hewitt and Flett (1991), who developed the Frost Multidimensional Perfectionism Scale (FMPS) and the Hewitt Multidimensional Perfectionism Scale (HMPS) respectively. The development of these measures will be discussed in detail within chapter 2. Currently, the most commonly referenced definitions of perfectionism are those from these two papers. They proposed that



perfectionism is best understood as a multidimensional trait disposition characterised by the striving for flawlessness; the setting of excessively high standards of performance; and the overly critical evaluation of self-performance (Stoeber, Harvey, Almeida & Lyons, 2013; Stoeber et al., 2013; Stoeber & Otto, 2006). They also found evidence to suggest that the adaptive and maladaptive elements of perfectionism could occur to varying degrees across various domains of life.

Several measurements have been developed in order to examine perfectionism, however it has been suggested that this has also contributed to the problems faced by current research of how best to understand and measure perfectionism. Stairs (2009) highlights that at least 15 different measurements of perfectionism exist, and that each may actually be measuring different constructs. It may also be that the different labels used within these scale measurements are measuring the same, or very similar, concepts, such as Hewitt and Flett's (1991) *socially prescribed perfectionism* and Frost et al.'s (1990) *parental criticism* and *parental expectations* dimensions. This further contributes to, rather than solves, the problems with conceptualising perfectionism in any agreed way (Stairs, 2009); an issue which will be explored further within this research in chapter 2.

The purpose of the current thesis is to conduct an investigation of the construct of perfectionism. A series of four studies will be carried out, adopting a mixed method approach using both quantitative and qualitative analysis. This will explore some of the disputes that previous research has highlighted, including how best to define perfectionism; whether perfectionism is state or trait in nature; and whether it exists in both an adaptive and maladaptive form. The current thesis will also explore the development of perfectionism and the possible predictors of perfectionist behaviour. These areas will be the focus of study 1, detailed within chapter 2. The current thesis is also interested in exploring the role of perfectionism within an individual's life. Using a qualitative approach, studies 2, 3 and 4 will take a more detailed insight into the personal experiences of perfectionism, including how it is perceived and evaluated as a unique construct; the ways in which it influences behaviour; and the areas of life that the pursuit of perfection is relevant to. This will be explored within chapter 3.

## Chapter 2

### Examining potential predictors of perfectionism

#### 2.1. Introduction

This chapter will examine perfectionism by focusing on two key areas. Firstly, it will explore how perfectionism has typically been measured by following the development and format of several perfectionist scales. This will include references to early unidimensional models by researchers such as Hamachek (1978) and Burns (1980), and to the current multidimensional models that are more widely acknowledged and utilised today. Secondly, it will explore several factors that have been identified as possible predictors of perfectionist behaviour or tendencies, including personality, gender, and laterality.

##### **2.1.1. Measuring perfectionism**

As explored within chapter 1, understanding the nature of perfectionism, including previous attempts to define the construct, has been a conflicted area of research. Additionally, there are concerns that many of the multiple scale measurements currently in circulation today may actually be measuring and drawing conclusions about very different aspects of perfectionism (Stairs, Smith, Zapolski, Combs & Settles, 2012). In particular, Stairs et al. (2012) point out that the items of the Frost Multidimensional Perfectionism Scale (Frost et al., 1990) include both *contributing* factors of perfectionist behaviour (such as high personal standards) and *causal* factors of perfectionist behaviour (such as the exposure to higher parental criticism), and this makes it difficult to interpret what the scores of these scales mean. To address this, firstly it is useful to review and account for the aspects of perfectionism that are being measured within each scale (e.g. contributing or causal factors). Secondly, it is beneficial to examine the potential correlates of perfectionism and its associated behaviour. The current chapter will examine dimensions of personality, laterality, and the influence of gender, in order to further understand what makes someone more likely to be, or to develop into, a perfectionist.

Around 30 years ago, perfectionism was considered by some researchers to be an undesirable and maladaptive trait. This was put rather strongly by Pacht (1984), who stated that anyone who either self-defined as perfect, or strived to become perfect, had “real psychological problems” (p. p.386). The standards set by perfectionists were thought to be unreachable, and the pursuit of them debilitating. Hamachek (1978) conceded that there may be some elements of positivity within perfectionism, such as striving to reach admirable goals, but retained an overall negative perspective of the trait. The unidimensional perspective of perfectionism was the common method of approaching and measuring perfectionism at the time (Stoeber, 1998). The Burns Perfectionism Scale (Burns, 1980) is one such example of this, reflecting an understanding of perfectionism as a unidimensional and maladaptive trait (Crăciun & Dudău, 2014). Within the last 20 years, research has begun to question the nature of perfectionism, including whether it is positive or negative, and also whether it is truly a trait at all.

The lack of agreement towards these issues has been a fundamental problem for perfectionist research. Arguably this is perpetuated by the usage of multiple measurements of perfectionism that each tend to measure the construct in different ways, and therefore draw different conclusions about what the construct of perfectionism should mean. For example perfectionism is often treated as part of a trait rather than as a temporary state of thinking (Saboonchi & Lundh, 1999). Slaney and Ashby (1996) argue that the trait-versus-state argument arose from early researchers having assigned the trait status to perfectionism without reasonable grounds for doing so. It was argued that in order to measure perfectionism, early theorists and clinicians had taken samples from clients in treatment for extreme cases of perfectionism (i.e. those who were already exhibiting higher levels of perfectionist behaviour) and presuming from this that perfectionism was a problematic or pathological trait. The Burns Perfectionism Scale (Burns, 1980) based its measurement of perfectionism primarily on this understanding. Also, the items of this scale were developed from additional measurements of the self-defeating attitudes shown by patients with clinical depression and anxiety (again those whose behavioural tendencies were already extreme) (Slaney & Ashby, 1996). Subsequently the items of the Burns Scale reflected these attitudes, for example through statements such as “If I don't set the highest

standards for myself, I am likely to end up a second-rate person". There was also a heavy emphasis placed upon concern over mistakes, with perfectionists understood to be those who viewed any errors or flaws as instances of failure (Frost et al., 1990). Even later work by Frost et al. (1990) took items from the Burns Scale in the development of their own measurement, The Frost Multidimensional Perfectionism Scale. An evaluation of several perfectionist measurements is presented in table 1.

Slaney and Ashby (1996) also use the example of the Diagnostic and Statistical Manual (DSM) of Mental Disorders to highlight that it is only ever the extremes of perfectionist behaviour that are emphasised. Although interestingly at present the DSM 5 (American Psychiatric Association 5<sup>th</sup> ed., 2013) does not consider perfectionism to be a personality trait of its own, but instead proposes that it is only a facet of obsessive-compulsive disorder (OCD), on the grounds that individuals with OCD exhibit higher levels of perfectionism that tends to interfere with task completion. This decision has been criticised by Ayearst, Flett and Hewitt (2012), who argue that this fails to account for the empirical literature that *has* found perfectionism to be a personality construct of its own, independent of OCD. They state that perfectionism should be considered as a separate dimension of personality with its own range of lower order facets. To ignore such findings would mean that those experiencing specific facets of perfectionism, for example a heightened distress over the evaluations made by others, would not be accounted for under the diagnostic criteria. This subsequently means that clinicians face a difficult diagnosis decision regarding perfectionist individuals. Two of the measurement of perfectionism that this thesis will focus on (the FMPS and the APS-R) are supportive of the trait status, or at least of perfectionism as a construct separate from obsessive compulsive disorder.

### **2.1.2. The Frost Multidimensional Perfectionism Scale**

The most widely used measure of perfectionism to date (Boyle, Saklofske & Matthews, 2014) is the Frost Multidimensional Perfectionism Scale (FMPS) (Frost et al., 1990). This is one such measure that considers perfectionism to be a separate, albeit attitudinal, construct (Ayearst et al., 2012). As noted previously, this scale took some items from the Burns Scale, and others from an eating disorder and an obsessiveness scale, in order to form its measurement of perfectionism (Slaney & Ashby, 1996). Thus

it does contain an element of bias, as it is based upon measurements that treated perfectionism only as a dysfunctional trait. However, the FMPS also proposed that perfectionism was a trait with multiple dimensions, and this signalled the significant shift from the older unidimensional perspective to the newer multidimensional one. Their rationale for this was that perfectionism was not solely concerned with the pursuit of perfection, but rather with an array of worries and concerns, such as the concern for error and mistakes and the doubting of one's performance (Frost et al., 1990).

As identified by previous researchers (e.g. Burns, 1980; Pacht, 1984), a crucial component of perfectionism is the heightened concern for mistakes. Perfectionists were defined as those who set very high standards and perceived any mistakes made, no matter how minor, to be indications of failure (Frost et al., 1990). Respectively, these made up the first two subscales of the FMPS: Concern over Mistakes and Personal Standards. Items within these subscales had been taken from the Burns Perfectionism Scale, which had measured perfectionism with almost exclusive focus on these two areas. Thirdly, the uncertainty or doubting of one's performance, in the sense that nothing was ever truly completed to satisfaction, was identified as another key area of perfectionism. Frost et al. (1990) took several items from an obsessiveness scale in order to measure this component. This again may highlight another area of bias, as this views perfectionism as a form of negative obsession (Slaney & Ashby, 1996), and researchers such as Ayearst et al. (2012) have argued that perfectionism is not only obsessive in nature.

For the fourth and fifth subscales, Frost et al. (1990) placed a considerable emphasis on the role of parental influence during upbringing. Perfectionists were seen as those who may have had to work harder to achieve their parents' expectations of them, or were those for whom parental approval had been contingent on high achievements. Subsequently, Parental Expectations and Parental Criticism made up two subscales. Stairs et al. (2012) point out that these subscales are more representative of causal factors in the development of perfectionism, rather than of measurable behaviours reflective of the trait. Nevertheless they do concede that developmental factors are important considerations when measuring perfection, but it can be a confusing inclusion when presented alongside other non-causal factors, within one scale. This

highlights one example of a scale that may be measuring very different aspects of the trait as a whole.

A final category identified as particularly important to perfectionists was that of order, organisation and precision. Perfectionists were seen as those who possessed a heightened concern for neatness and placing things into order. However, the inclusion of this Organisation subscale when using the FMPS has been criticised. Frost and colleagues (1990) admit that this may be an area of concern for perfectionists, as it might feature as part of the pursuit of one's standards. Organisation was found to correlate weakly with the other subscales and as such, other researchers such as Stoeber (1998) have also advised to omit this subscale for these same reasons. However, Slaney and Ashby (1996) propose that the inclusion of Organisation is useful in relation to identifying those who do place an importance on organisation, such as those with obsessive-compulsive symptoms. Despite the argument that they are two separate constructs, there has been significant overlap found between perfectionism and obsessive compulsive disorder. Martinelli, Chasson, Wetterneck, Hart and Björgvinsson (2014) found that Organisation was a significant predictor of obsessive-compulsive disorder symptoms, particularly in relation to order. Both perfectionists and obsessive compulsive individuals were found to show a higher preference for organisation and symmetry. Considering this, the inclusion of the Organisation scale within measures of perfectionism is not unwarranted.

In terms of the FMPS's relation to other measures of perfectionism, Frost et al. (1990) found that the scale correlated highly with the Burns Perfectionism Scale, but acknowledge that this is due to the overlap of items used. They found that the FMPS did not correlate as well with two other perfectionism measures: the Self-Evaluative (SE) scale from the Irrational Beliefs Test (IBT) and the perfectionism scale from the Eating Disorders Inventory (EDI). They therefore pose a concern that each scale is perhaps measuring something different from the other, rather than the same underlying construct. This is a problem that Stairs (2009) feels is still ongoing in relation to current measures today, and features as one of the main areas of examination by this thesis.

**Table 1**

Evaluations of the pros and cons of 11 measurements of perfectionism

Scale	Author(s)	Information	Subscales	Pros	Cons
<b>Burns Perfectionism Scale (BPS)</b>	Burns, 1980	10 items measuring (negative) perfectionism from a unidimensional perspective		Good internal consistencies ranging from .74 to .88 for the subscales (Stairs et al., 2012)	Outdated method that considers perfectionism as an exclusively dysfunctional construct (Slaney & Ashby, 1996)
<b>Frost Multidimensional Perfectionism Scale (FMPS)</b>	Frost et al. (1990)	35 items measuring perfectionism from a multidimensional perspective	<ol style="list-style-type: none"> <li>1. Concern over mistakes</li> <li>2. Doubts about actions</li> <li>3. Personal standards</li> <li>4. Organisation</li> <li>5. Parental expectations</li> <li>6. Parental criticism</li> </ol>	<p>Good internal consistency of the subscales ranging from .77 to .93 (Stairs et al., 2012)</p> <p>good reliability, validity and internal consistency (Franco, Díaz, Torres, Telléz &amp; Hidalgo-Rasmussen, 2014)</p>	The subscale of Organisation has been criticised as only loosely related to the other subscales (Stoeber, 1998)

				The Parental expectations and parental criticism subscales have moderate to large correlations with socially prescribed perfectionism from the HMPS (Stairs, 2009)	
<b>Hewitt Multidimensional Perfectionism Scale (HMPS)</b>	Hewitt & Flett (1991)	45 item measurement of multidimensional perfectionism, accounting for influences of both the self and others	<ol style="list-style-type: none"> <li>1. Self-oriented perfectionism</li> <li>2. Socially prescribed perfectionism</li> <li>3. Other oriented perfectionism</li> </ol>	Good internal consistencies ranging from .74 to .88 for the subscales (Stairs et al., 2012).	Cost concerns: Scale is not free to use
<b>Almost Perfect Scale – Revised (APS-R)</b>	(Slaney et al., 2001)	23 item measurement of multidimensional perfectionism	<ol style="list-style-type: none"> <li>1. Discrepancy</li> <li>2. High Standards</li> <li>3. Order</li> </ol>	Order has large correlations with Organisation of the FMPS and self-oriented perfectionism of the HMPS	Limited use in non-European and American samples, reducing cultural validity (Park, 2009)
				High Standards correlated highly and significantly with self-	



<p><b>Perfectionism Questionnaire (PQ)</b></p>	<p>Rhéaume, Freeston, Ladouceur, Bouchard, Gallant, Talbot, et al. (2000)</p>	<p>34 item measurement of perfectionism</p>	<p>1. Perfectionistic tendencies (Healthy perfectionism) 2. Negative outcomes (Dysfunctional perfectionism)</p>	<p>oriented perfectionism (HMPS) and Personal standards (FMPS)</p> <p>Discrepancy correlates largely with Socially prescribed perfectionism (HMPS)</p> <p>The APS-R has been found to score moderate to high for reliability (Vandiver &amp; Worrell, 2002)</p> <p>Attempts to differentiate between perfectionism and obsessive-compulsive disorder</p>	<p>Previous studies have either omitted the third scale or reported an overall score, rather than investigate individual domains, making comparisons between studies difficult (Stoeber &amp; Stoeber, 2009)</p>
--	---	---	---	--	--

<b>Positive and Negative Perfectionism Scale (PANPS)</b>	Terry-Short, Glynn Owens, Slade & Dewey (1995)	40 item measurement of perfectionism		Good internal consistency for the subscales, ranging from .81 to .83 (Stairs et al., 2012)	The positive perfectionism subscale has been found to correlate with the concern over mistakes subscale of the FMPS, and depressive symptoms, raising concerns that it is not an accurate measure of positive and negative perfectionism (Egan, Piek, Dyck & Kane, 2011)
<b>Neurotic Perfectionism Questionnaire (NPQ)</b>	Mitzman, Slade & Dewey, 1994)	42 item measurement of neurotic perfectionism		Good internal consistency of .95 (Stairs et al., 2012)	Exclusive focus on neurotic perfectionism
<b>Adaptive/Maladaptive Perfectionism Scale (AMPS)</b>	Rice & Preusser (2002)	27 item measurement of perfectionism in children and adolescents		<ol style="list-style-type: none"> <li>1. Sensitivity to mistakes</li> <li>2. Contingent self-esteem</li> <li>3. Compulsiveness</li> <li>4. Need for admiration</li> </ol>	Good internal consistencies for the scales ranging from .73 to .91 (Stairs et al., 2012)

<b>Perfectionistic Self Presentation Scale (PSPS)</b>	Hewitt et al., 2003)	27 item measurement of perfectionism	1. Perfectionistic self-promotion 2. Nondisplay of imperfection 3. Nondisclosure of imperfection	Internal consistency for the subscales ranged from .78 to .86 (Stairs et al., 2012)	Accounts only for self-motivated aspects of perfectionism (as opposed to the influence of others)
<b>Perfectionism Cognitions Inventory (PCI)</b>	Flett, Hewitt, Blankstein, Gray & Diener (1998).	25 item measurement of perfectionism to assess individual differences of perfectionistic cognitions frequencies (Stairs et al., 2012)		Internal consistency of .95 (Stairs et al., 2012)	Unidimensional measurement of perfectionism
<b>HEXACO Personality Inventory-Revised Perfectionism Facet (HEXACO-PI-R)</b>	Lee & Ashton (2004)	Measures perfectionism as part of the Conscientiousness domain, measuring concern for details and the tendency for thoroughness (Stairs et al., 2012)		Internal consistency of .79 (Stairs et al., 2012)	Narrower focus (concern for details)

### **2.1.3. The Hewitt and Flett Multidimensional Scale**

A second measurement of perfectionism to take a multidimensional approach was the Multidimensional Perfectionism Scale by Hewitt and Flett (1991). The HMPS was developed in order to address some issues of bias within measurements of perfectionism. In particular they were concerned that previous research had failed to account for any social influences in the development and manifestation of perfectionist thinking. Three subscales of the HMPS were developed in order to address this gap: *self-oriented perfectionism*, *other-oriented perfectionism*, and *socially prescribed perfectionism*. These subscales aimed to identify the targets that perfectionist behaviour was directed towards or attributed to: either the self or others.

Self-oriented perfectionism was concerned with self-set standards, self-criticism, and the stringent monitoring of self-performance, which is in line with the more traditional self-focus of previous perfectionism research. It was proposed that self-oriented perfectionism contained both the motivation to achieve success and the motivation to avoid failures, but that these were not mutually exclusive dimensions. As such, higher levels of certain components, such as the perceived discrepancy between the ideal and actual self, were thought to indicate those who were at risk of maladjustments including self-blame, anxiety, and, more severely, anorexia nervosa and depression. In comparison, those who were less concerned with self-criticising were those less at risk of these consequences (Hewitt & Flett, 1991).

In a departure from a sole focus on the self, Hewitt and Flett (1991) proposed that perfectionist behaviour was also motivated by others. Perfectionism was thought to contain elements of concern over the expectations of others, in that perfectionists believed that perfection was expected and presumed of them by others, and these standards therefore had to be lived up to. The subscale of socially prescribed perfectionism was developed to reflect this aspect. It was proposed that high levels of socially prescribed perfectionism may lead to negative consequences such as anxiety, anger and depression. These were thought to arise from the perceived inability to please others or meet their standards, whilst being simultaneously motivated by an increased fear of negative evaluation or disapproval from others.

Perfectionists were also thought to hold high expectations of perfection from others, and the subscale of other-oriented perfectionism was developed to measure this. Some perfectionists were found to hold others to unrealistic standards, in a similar way that they did for themselves. It was proposed that higher levels of other-oriented perfectionism were related to the mistrust of others, and feelings of frustration, cynicism and loneliness (Hewitt & Flett, 1991).

#### ***2.1.4. The relationship between the FMPS and the HMPS***

There has been some overlap noted between the HMPS and the FMPS, in particular that the subscales of Hewitt and Flett's (1991) socially prescribed perfectionism and Frost et al.'s (1990) parental criticism/parental expectations may be measuring the same elements, only presented under different names (Stairs, 2009). As they are both concerned with the beliefs about the expectations of others, it is logical to expect some degree of correlation between the two. However, as noted previously, these subscales deal with two distinctly different aspects of perfectionism: causal factors (as with parental expectations and criticism) and indicators of perfectionist behaviour (as with socially prescribed perfectionism). Therefore Damian et al. (2013) suggest that when examining these subscales, parental expectations and parental criticism should be considered only as possible antecedents of socially prescribed perfectionism, rather than as similar measurements of the beliefs about others.

The multidimensional models of the FMPS and HMPS are also representative of the shift towards the adaptive-maladaptive perspective of perfectionism. Both support the conceptualisation that two higher order dimensions of perfectionism exist: an adaptive dimension represented by personal standards (PS), and a maladaptive dimension represented by self-criticism (SC). Personal Standards referred to the setting of high standards and goals, whereas self-criticism referred to the overly-critical evaluations of the self and a constant self-scrutiny (Dunkely, Mandel & Ma, 2014). Adaptive perfectionists were proposed to be those high in personal standards but not in self-criticism. In comparison, maladaptive perfectionists were high in both, meaning that their pursuit of high standards was generally accompanied by negative self-evaluations and criticisms. Frost et al. (1990) supported this by finding that a higher score in their Personal Standards subscale did not necessarily represent an unhealthy perfectionist.

Rather they found that a higher personal standards score was closer in nature to the *positive achievement striving* proposed by Hamachek (1978), which referred to those who set higher standards but were not overly concerned with failure. Similarly, the HMPS found that maladaptive perfectionists were those high in self-oriented perfectionism and socially prescribed perfectionism, meaning that they held themselves to high standards and also felt that others did as well, often to unachievable levels (Hewitt & Flett, 1991).

As the multidimensional models of perfectionism account for these various aspects of perfectionism, they have been useful for examining the development of perfectionism in relation to other factors, such as personality. Both the FMPS and HMPS have been used to examine the relationship between perfectionism and dimensions of personality in order to explore whether certain dispositions are more likely to develop perfectionism than others.

#### ***2.1.5. The relationship between perfectionism and personality***

To understand and measure human personality traits and the individual differences between these, the five factor model of personality was developed (Goldberg, 1992). This factorial model proposed that the main aspects of human personality could be captured within five main dimensions: extraversion (e.g. activity and sociability), agreeableness (e.g. likeability, friendliness), conscientiousness (e.g. dependability, a will to achieve), emotional stability/neuroticism (e.g. adjustment and anxiety), and intellect/openness to experience (e.g. imaginativeness, open-mindedness) (Poropat, 2009). Each of these five dimensions were thought to represent all variances of human personality, as they could potentially incorporate thousands of traits (Goldberg, 1993). The five factor model has consistently been found to have statistical stability and predictive validity across different populations, suggesting that the factors are representative of global personality (Chiorri, Marsh, Ubbiali & Donati, 2016).

The relationship between neuroticism and perfectionism has been well established. Hamachek (1978) originally identified maladaptive perfectionists as “neurotic” perfectionists (as opposed to “normal” perfectionists). Neuroticism encompasses the six dimensions: of anxiety, anger/hostility, depression, self-consciousness, impulsiveness and vulnerability (Hill, McIntire & Bacharach, 1997). Neurotic individuals have been

described in general as those with a predisposition to experience negative affect (Gunthert, Cohen & Armeli, 1999). As such, neurotic individuals are those who tend to experience higher levels of anxiety, potential depression, and a heightened negative reaction towards stressors (Dunkely et al., 2014). Dunkely et al. (2014) found that maladaptive perfectionists - determined as those high in both self-criticism (as measured by the Concern over mistakes subscale of the FMPS and socially prescribed perfectionism subscale of the HMPS) and personal standards (as measured by the personal standards subscale of the FMPS and self-oriented subscale of the HMPS) – were more neurotic, displaying more reactivity towards stress and negative social interactions. Additionally, self-oriented perfectionism (as measured by the HMPS) has been associated with the vulnerability facet of neuroticism (Bieling et al., 2004). To explain this, maladaptive perfectionists and neurotic individuals have been found to share both the fear of negative evaluations and the desire for social approval, as well as both being at risk of developing depression and anxiety (Hill et al., 1997). It may be that neurotic individuals are more likely to develop perfectionism due to this shared overlap.

A relationship between perfectionism and conscientiousness has also been found. This trait encompasses organisation, thoroughness and reliability, but also exhibits the opposites of carelessness, negligence and unreliability (Goldberg, 1993). Hill et al. (1997) found that self-oriented perfectionism was strongly associated with higher conscientiousness. This is logical, as those higher in self-oriented perfectionism are those who set higher standards for themselves and rigorously pursue them. The achievement striving element of conscientiousness represents those who are hardworking, diligent, and determined to achieve their goals, and this mentality is shared by those high in adaptive self-oriented perfectionism (Hill et al., 1997).

Similarly, Rice, Ashby and Slaney (2007) found that the High Standards and Order subscales of the Almost Perfect Scale Revised (APS-R) (Slaney et al., 2001) correlated with higher levels of conscientiousness. The APS-R is a multidimensional measure of perfectionism across three subscales: *High standards*, *Order*, and *Discrepancy*. High Standards is a similar measure to that of the FMPS' personal standards in that it deals with the positive setting of high achievement standards. The Order subscale measured the tendency to prefer order and organisation and is similar in nature to the Organisation subscale of the FMPS, which also served as the basis for its development.

Despite Frost et al.'s (1990) advice to omit the Organisation subscale from perfectionism measures, it had been found that there was a high frequency of perfectionists reporting the importance of order within their definitions of perfectionism, and so Order was considered an important inclusion within the APS-R. The Discrepancy subscale represented the maladaptive dimension of perfectionism, measuring the tendency to criticise self-performance and never feel as though desired standards had been reached (Slaney et al., 2001). Again it is logical that higher conscientiousness would correlate with high standards and order, considering the overlap between these subscales and those of the FMPS and self-oriented perfectionism of the HMPS.

The personality dimensions of extraversion and intellect are less likely to correlate with perfectionism (Rice et al., 2007). Extraversion encompasses the traits of talkativeness, assertiveness and high activity, as well as opposite traits such as quietness, passivity and reserve, which are reflective of introversion (Goldberg, 1993). Extraversion in particular seems to be an aspect of personality that may not lend itself to perfectionism. Yet extraversion is associated with warmth of personality, and warmth has been found to associate with self-oriented perfectionism in females (Hill et al., 1997). Ulu and Tezer (2010) found that extraversion negatively correlated with maladaptive perfectionism, showing that introverted individuals were more likely to be maladaptive perfectionists. They also found that high standards positively correlated with extraversion, indicating that extraverted individuals were more likely to be adaptive perfectionists. The researchers did point out that this was a slightly unusual finding, given that there had been few findings to suggest any relationship between extraversion and perfectionism. They propose that adaptive perfectionists with higher standards may be those who are also assertive and experience positive emotionality, which are both aspects of extraversion (Ulu & Tezer, 2010).

The evidence to suggest a relationship between perfectionism and intellect, or openness to experience, is similarly scarce, but Ulu and Tezer (2010) found that openness positively correlated with adaptive perfectionism. Openness encompasses the traits of imagination, curiosity and creativity, as well as those of shallowness and imperceptiveness (Goldberg, 1993). It has been suggested that adaptive perfectionists may be those who are more original and imaginative, which are aspects of intellect/openness (Ulu & Tezer, 2010). Stoeber, Otto and Dalbert (2009) report that



openness is one of the five personality traits that has shown inconsistent patterns of correlations with measures of perfectionism, the others being extraversion and agreeableness.

Agreeableness encompasses the traits of kindness and trust, as well as those of hostility, selfishness and distrust (Goldberg, 1993). As measured by the other-oriented subscale of the HMPS, maladaptive perfectionists were those who were mistrustful of others, so it may be that there is a relationship between these two areas. This was found by Hill et al. (1997), with lower agreeableness correlating with other-oriented perfectionism. Maladaptive perfectionists who score highly in other-oriented perfectionism have been associated with higher narcissism and other-blame. Similarly, low agreeableness is indicative of competitiveness, self-centredness, and asserting one's position, which would reasonably explain the association found between the two (Hill et al., 1997). Lower agreeableness has been found to associate with higher maladaptive perfectionism (e.g. Egan, Vinciguerra & Mazzucchelli, 2015). Those low in agreeableness have been described as tough-minded, antagonistic and competitive (McCrae & Costa, 2003). Similarly, perfectionists are those who are rigid about the perfect completion of tasks, which may result in the development of interpersonal difficulties (Egan et al., 2013). This would explain why consistent associations between the two have been found.

#### ***2.1.6. Gender differences in personality***

When considering the dimensions of personality it is also important to account for gender, as males and females have been found to display different patterns in the expression of personality traits. For example, females have been found to score higher for neuroticism, agreeableness, extraversion and conscientiousness (Chiorri et al., 2016). Agreeableness in particular has been established to occur to a higher degree in females (Furnham & Cheng, 2015). However, there is a lack of research that has looked at both personality and gender in relation to perfectionism. The current research aims to address this issue by examining possible gender differences in the relationship between perfectionism and the dimensions of personality. Some evidence to suggest an influence of gender on the expression of perfectionism in relation to personality has been found. For example, Sherry, Gralnick, Hewitt, Sherry and Flett (2014) proposed that

males and females may differ in their expression of other-oriented perfectionism in relation to narcissism. Narcissism refers to a need for special attention and the belief that one is more special than others (Pauletti, Menon, Menon, Tobin & Perry, 2012) and some elements of this thinking pattern has been found in other-oriented perfectionism (Sherry et al., 2014). It was found that males may directly impose their perfectionistic expectations on others, but as this behaviour is less culturally accepted for women they are more likely to demonstrate their narcissism by appearing perfect to others.

### ***2.1.7. Self-presentational perfectionism***

Elements of narcissism have also been found within self-presentational perfectionism (Sherry, Hewitt, Flett, Lee-Bagglely & Hall, 2007). This is a maladaptive form of perfectionism proposed by Hewitt et al. (2003) and is measured within the Perfectionistic Self Presentation Scale (PSPS). Self-presentational perfectionism is demonstrated within three presentational styles: perfectionistic self-promotion (the need to proclaim and display perfection); non-display of imperfection (the need to conceal imperfections); and nondisclosure of imperfection (the avoidance of any admissions of imperfection). Narcissistic individuals may be higher in perfectionistic self-promotion due to their need to display perfection towards others (Sherry et al., 2007). As such, perfectionistic self-promotion may differ in relation to personality. Jain and Sudhir (2010) found that those with higher levels of social anxiety and trait anxiety scored higher for non-display of imperfection (as measured by the PSPS) as well as higher concern over mistakes, doubts over actions, and parental criticism, as measured by the FMPS. It was proposed that this relationship reflected the desires of those with anxiety to avoid any social situations where imperfections may be revealed. The current research is interested in examining the relationship between perfectionistic self-presentation, the dimensions of personality, and how these relate to gender differences. Currently there is a lack of research into this area.

### ***2.1.8. The relationship between perfectionism and laterality***

A second area lacking in research is a possible relationship between laterality and perfectionism. Current research has identified a difference in the brain region activity of adaptive and maladaptive perfectionists. Using MRI scanning, Karimizadeh, Mahnam, Yazdchi and Besharat (2015) found that individual differences in maladaptive

perfectionism correlated with activity in the grey matter of the left temporal thalamus. This particular region is responsible for the collection and transmission of sensory information to the cerebral cortex, and is also thought to regulate consciousness aspects such as awareness and attention (Karimizadeh et al., 2015). There may be logical overlap when we consider the key role that attention plays in maladaptive perfectionism. Howell et al. (2016) found that those higher in perfectionism show a distinct attentional bias towards negative perfectionist stimuli. In comparison, Karimizadeh et al. (2015) found no correlations between any brain structure regions and adaptive perfectionism. However, the researchers suggest that this failure to find any activity may have been largely due to their small sample size of 20, and propose that at a sample size of at least 200 is needed to find any significant results. They therefore conclude that there is yet the possibility of a correlation between adaptive perfectionism and different brain structure activity.

Considering this, it is within reason to expect a possible influence of laterality on perfectionist behaviour. Laterality is the preference for using one side of the body over the other (Shaffer & Kipp, 2014) and the most observable form of laterality is handedness. In humans, around 88% of the population are right-handed, and this tendency is thought to be due to the dominance of the left-hemisphere of the brain. As the left-hemisphere controls the right side of the body, and the right hemisphere controls the left, this dominance may occur due to the predominance of language centred in the left-hemisphere of the brain, meaning that there is a dominance of the right side of the body (Wallden, 2011).

Laterality has been found to play a role in our outlook towards life, namely optimism and pessimism, which are associated with the two cerebral hemispheres. The aspects related to optimism, such as high self-esteem, cheerfulness and the optimistic belief in a bright future are associated with the left-hemisphere, whereas pessimistic aspects such as lower self-esteem, a bias towards focusing on negatives and the pessimistic view of the future are related to the right hemisphere (Hecht, 2013). There are grounds to assume that perfectionism may also be mediated by a hemispheric specialisation. The right hemisphere mediates negative thought patterns such as low self-esteem, pessimism, depression, and a higher sensitivity towards personal flaws. This also includes the realisation of limitations, flaws and failures (Hecht, 2013), which are

thought patterns highly relevant to perfectionism. In further support of this potential connection, Randles et al. (2010) found that self-oriented and socially prescribed perfectionists are those predisposed to distress and cognitive rumination, as a result of a stronger behavioural inhibition system (BIS). The Behavioural inhibition system is a motivational system that motivates avoidance behaviour, or the delay to initiate an approach (Bach, 2015). Left-handers have been found to score higher in behavioural inhibition than right handers when approaching novel situations, showing a more avoidant or inhibited approach (Wright & Hardie, 2015). Together this suggests that it is worthwhile to account for the possible influence of laterality within measures of perfectionism and personality.

### **2.1.9. The current study**

The aim of the current study is to investigate the relationship between three measures of perfectionism – the Frost Multidimensional Perfectionism Scale (FMPS) (Frost et al., 1990), the Almost Perfect Scale-Revised (APSR) (Slaney et al., 2001), and the Perfectionistic Self Presentation Scale (PSPS) (Hewitt et al., 2003) in order to examine whether or not they are measuring a similar underlying construct of perfectionism. It is hypothesised that there will be a correlation between the total scores generated from the three measurements, considering the overlap between particular subscales. Secondly, this study will examine whether the five personality dimensions of extraversion, agreeableness, conscientiousness, emotional stability, and openness, as measured by the Big Five Factor Structure (Goldberg, 1992), can predict perfectionism scores. It is hypothesised that higher scores within the dimensions of neuroticism (lower emotional stability) and conscientiousness will predict higher levels of perfectionism by showing a positive relationship. Thirdly, this study will examine the relationship between handedness strength scores on perfectionism scores, with the prediction that left-handers will score higher in perfectionism. The influence of gender on scores of perfectionism will also be explored, but with no specific direction in mind.

## Study 1 - Examining perfectionism, personality and laterality

### 2.2. Method

#### 2.2.1. Participants

One-hundred and ninety-two participants in total took part, recruited from the student and staff population of Abertay University, Dundee, and of those known to the researcher using convenience sampling. Abertay University's homepage, Facebook and Twitter pages were used to advertise for recruitment. Seventy-three were first year students who took part in exchange for course credit. Originally there were 196 participants, but the data of four participants were removed due to blank or incomplete responses. An average score was calculated for those who missed one or two items of a scale. There were 39 males and 152 females (one participant did not state their gender), with ages ranging from 17 to 69 years (mean age of 27.59 years and standard deviation of 11.86). By handedness, 151 were right handed and 40 left handed (one indicated they used either hand for writing).

#### 2.2.2. Materials & Apparatus

The study was created using the online software Google Forms, accessed via a web link (<https://tinyurl.com/perfectionismA>). For counterbalancing purposes, three versions of the online study were created, each presenting a different order of questionnaires to control for order effects. An information sheet (*appendix 1*) was provided on screen prior to initiating the study, which detailed the main purpose of the study, the content, the necessary time commitment, the right to withdraw, issues of confidentiality and anonymity, and contact details for the researcher and supervisory team. This was followed by an essential informed consent page which requested the participant's consent before the study would begin (*appendix 2*). Demographic information collected included gender, age, programme of study, year of study, and occupation, where applicable. A final debrief sheet was displayed at the end of the study to describe the main purpose of the study (*see appendix 3*).

The study used three questionnaire measurements of perfectionism.

*The Frost Multidimensional Perfectionism Scale (FMPS)* (Frost et al., 1990) (*appendix 4*) consists of 35 items measuring multidimensional perfectionism across six subscales. Concern over Mistakes (CM); Doubts about Actions (DA); Parental Expectations (PE); Parental Criticism (PC); Personal Standards (PS); and Organisation (O). The Concern over Mistakes (9 items) component measures negative responses towards mistakes, the tendency to interpret mistakes as failures, and the belief that others will lose respect if errors are made. An example statement from this subscale is “If I fail partly, it is as bad as being a complete failure”. The Doubts about Actions (4 items) component measures the tendency to feel as though things have not been completed to a satisfactory level. An example statement from this subscale is “Even when I do something very carefully, I often feel that it is not quite done right”. The Parental Expectations (5 items) component measures the belief that the standards set by parents are too high to achieve. An example statement from this subscale is “Only outstanding performance is good enough in my family”. The Parental Criticism (4 items) component measures the belief that parents are overly critical of performance. An example statement from this subscale is “As a child, I was punished for doing things less than perfectly”. The Personal Standards (7 items) component measures the tendency to set very high standards and place a high importance on the achievement of these. An example statement from this subscale is “I set higher goals for myself than most people”. The Organisation (6 items) component measured the preference for order and organisation. An example statement from this subscale is “Organisation is very important to me”. Items were rated on a five point Likert scale ranging from 1 – Strongly disagree to 5 – Strongly agree. The scores possible range from 35 to 175. The FMPS has been found to have good reliability, validity and internal consistency (Franco et al., 2014), however the inclusion of the Organisation subscale has been criticised due to a weaker relationship with the other scales (Stoeber, 1998). However, for this study it was considered important to include this subscale as a point of possible further analysis. Additionally, this study was not focusing on the individual subscales, but rather the total score across each measure combined, to serve as a comparison to that of other scales.

*The Almost Perfect Scale – Revised (APS-R)* (Slaney et al., 2001) (*appendix 5*) consists of 23 items measuring multidimensional perfectionism across three subscales: High

Standards, Order, and Discrepancy. High Standards (7 items) measures personal performance expectations. An example statement from this subscale is “I have high standards for my performance at work or at school”. Order (4 items) measures concern and preference for organisation and neatness. An example statement from this subscale is “I like to always be organized and disciplined”. Discrepancy (12 items) measures belief in the failure to achieve set standards. An example statement from this subscale is “I often feel frustrated because I can’t meet my goals”. Answers to these items were rated on a 7 point Likert scale ranging from 1 – Strongly disagree to 7 – Strongly agree. The scores possible range from 23 to 161. The APS-R has been found to score moderate to high for reliability (Vandiver & Worrell, 2002).

*The Perfectionistic Self-Presentation Scale (PSPS)* (Hewitt et al., 2003) (*appendix 6*) consists of 27 items measuring interpersonal expression of perfection and perfectionistic self-presentation. The scale consists of three subscales: Perfectionistic Self-Promotion; Non-Display of Imperfection; and Nondisclosure of Imperfection. Perfectionist self-promotion (10 items) measures the tendency to proclaim or display one’s perfection. An example item from this subscale is “I try always to present a picture of perfection”. Non-display of imperfection (10 items) measures the tendency to conceal imperfections from others or avoid demonstrating one’s imperfection. An example item from this subscale is “I hate to make errors in public”. Nondisclosure of imperfection (7 items) measures the tendency to avoid admitting imperfections to others. An example item from this subscale is “I try to keep my faults to myself”. Answers to each item are given on a 1 to 7 Likert scale ranging from 1 – Disagree strongly to 7 – Agree strongly. The scores possible range from 27 to 189. Hewitt et al. (2003) report that each of the three subscales scored highly for reliability.

*The International Personality Item Pool (IPIP) Big-Five Factor Markers* (Goldberg, 1992) (*appendix 7*) is a measures of the five main domains of personality, incorporating the traits of Extraversion (E), Agreeableness (A), Conscientiousness (C), Emotional Stability (ES), and Openness (O). The factor extraversion refers to how outgoing an individual is. An example item from this scale is “I am the life of the party”. This factor is alternatively referred to as surgency. The factor agreeableness refers to cooperation or compliancy.

An example item from this scale is “I am relaxed most of the time”. The factor conscientiousness refers to carefulness or thoroughness. An example item from this scale is “I pay attention to details”. Alternatively this factor is known as dependability. The factor emotional stability refers to an individual’s emotional state. A lower score indicates an individual who tends to experience negative moods such as anxiety and worry. An example item from this scale is “I worry about things”. Alternatively this factor is known as neuroticism. The factor openness refers to insightfulness and willingness to pursue interests. An example item from this scale is “I am quick to understand things”. Alternatively this factor is known as intellect or culture. The scale consists of 50 items. Answers to each item are given on a 1 to 5 Likert scale ranging from 1 – Very inaccurate to 5 – Very accurate. The Big Five factor model has been found to show high internal reliability but the factors of extraversion and agreeableness are sometimes subject to cultural influences, displaying less consistent patterns (Gurven et al., 2013).

A modified version of *The Edinburgh Handedness Inventory (EHI)* (Oldfield, 1971) (e.g. Beuter, Edwards & Boucher, 2000; Edlin, 2015) was used to measure handedness strength (in the form of a total score) and direction (left or right) (*appendix 8*). A negative number (from -5 to -100) indicates a left-hander, and a positive number (5 to 100) indicates a right-hander. There are 10 items to which participants must rate which hand they tend to use for the indicated activity. These items are writing, drawing, throwing, scissors, toothbrush, knife (without fork), spoon, broom (upper hand), striking a match (match), and opening box (lid). The 5 point scale ranges from left always to right always. A total handedness score was generated from this scale, ranging from strong left (-100) to strong right (+100). If a score was zero, handedness direction was inferred from the writing hand.

### 2.2.3. Procedure

Participants accessed one of the three versions of the study online. Each version contained a different order of questionnaires for counterbalancing purposes. Six open-ended questions were also presented within this study. These will be detailed, analysed and discussed separately as part of the qualitative studies of chapter 3 (*see sections 3.2 to 3.4*). Across all versions the information page was accessed initially, which provided



an outline of the topics to be addressed and the necessary time commitment. This was followed by confidentiality and ethical issues. Informed consent was then gained from the participant by clicking on the 'Yes I give my consent' button, which began the study. The 'No I do not give my consent' button prompted the user to close the webpage and end the study. Demographic information was then collected. Version 1 presented the three perfectionism questionnaires (FMPS, APSR, and PSPS), six open-ended questions, the EHI, and the IPIP. Version 2 presented the IPIP, the EHI, the three perfectionism questionnaires (PSPS, FMPS, and APSR), and the six open-ended questions. Version 3 presented the six open-ended questions, the EHI, the IPIP, and the three perfectionism questionnaires (APSR, PSPS, FMPS).

Once completed, a final debrief screen thanked participants for their time and explained the purpose of the study. Participants were also provided with contact details of the researcher and supervisory team should they require any further information. Participants were then prompted to submit their data.

## 2.3. Results

### 2.3.1. Descriptive statistics of the five main measurements

**Table 2**

Descriptive statistics for scores of the three perfectionism scales (FMPS, APS-R, and PSPS), the modified Edinburgh Handedness Inventory (EHI), and the five subscales of the Big Five Factor model of the International Personality Item Pool (IPIP).

	<u>Total (N = 192)</u>		<u>Males (N = 39)</u>		<u>Females (N = 152)</u>	
	M	SD	M	SD	M	SD
FMPS	109.02	20.14	107.23	16.55	109.57	21.02
APS-R	111.40	21.51	108.08	20.30	112.22	21.86
PSPS	112.22	31.52	104.36	32.18	114.07	31.18
EHI	48.67	60.99	59.10	45.07	45.86	64.46
Extraversion (E)	30.35	8.61	31.62	8.67	30.07	8.61
Agreeableness (A)	39.79	6.48	38.13	6.59	40.30	6.34
Conscientiousness (C)	35.89	6.84	36.67	6.74	35.76	6.84
Emotional Stability (ES)	25.98	8.71	32.41	9.56	24.34	7.73
Openness (O)	37.13	6.25	41.03	4.90	36.09	6.16

*M = Mean, SD = Standard deviation*

### 2.3.2. Main correlations between the scores of the FMPS, APS-R and PSPS

In order to test the relationships between each of the perfectionism measurements, three Spearman's rank correlations were conducted (table 3). It was found that each of the three perfectionism scales correlated strongly with the others, and the correlations were highly significant. Participants seemed to be scoring in a consistent manner across each of the three scales. The strongest correlation occurred between the FMPS and the APS-R ( $r_s(192) = .773, p < 0.001$ ).

**Table 3**

Summary statistics for correlations between the Frost Multidimensional Perfectionism Scale (FMPS), Almost Perfect Scale Revised (APS-R), and Perfectionistic Self Presentation scale (PSPS)

	APS-R	PSPS
FMPS	rs(192) = .773, p < .001*	rs(192) = .700, p < .001*
APS-R		rs(192) = .638, p < .001*

\*p < .05

### 2.3.3. Multiple linear regression analysis for the FMPS

In order to examine the relationship between the FMPS, the modified EHI and the big five personality dimensions, two multiple linear regression analyses were conducted. With the FMPS score as the criterion, the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score (table 4). As a control, a second regression (step 2) was conducted without the strongest predictor in order to examine the relationships of the FMPS to the remaining predictors (table 5).

**Table 4**

Step 1 summary statistics of the multiple linear regression analysis for the Frost Multidimensional Perfectionism Scale (FMPS) and six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
FMPS	109.021	20.144	.231				
EHI	48.672	60.988		-.029	-.089	-1.388	.167
E	30.354	8.611		.002	.001	.011	.991
A	39.787	6.482		-.358	-.115	-1.707	.090
C	35.891	6.836		.906	.307	4.537	.000*
O	37.130	6.248		.617	.191	2.866	.005*
ES	25.984	8.715		-.938	-.406	-5.713	.000*

\*p < .05

The first measure of perfectionism, the Frost Multidimensional Perfectionism Scale (FMPS) was examined. A multiple linear regression analysis was used to predict FMPS score from EHI (handedness strength) score, extraversion score, agreeableness score,

conscientiousness score, openness score, and emotional stability score. The model was found to account for a significant amount of the variance ( $F(6, 185) = 10.54, p < .001$ ). Although the model predicted 23% of the variance (adjusted R-square = .231) the prediction was highly significant. The predictor conscientiousness score had a significant impact ( $t = 4.537, P < .001$ ), with perfectionism scores increasing as conscientiousness scores increased. The predictor emotional stability score was also significant ( $t = -5.713, p < .001$ ), with perfectionism scores increasing as emotional stability scores decreased. The predictor openness score ( $t = 2.866, p = .005$ ) was also significant, with perfectionism scores increasing as openness scores increased. The strongest predictor was emotional stability score (beta =  $-.406$ ), followed by conscientiousness score (beta =  $.307$ ), followed by openness score (beta =  $.191$ ). This shows that higher perfectionism correlates with higher conscientiousness, higher openness, and lower emotional stability (higher neuroticism).

**Table 5**

Step 2 summary statistics of the multiple linear regression analysis for the Frost Multidimensional Perfectionism Scale (FMPS) with five predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
FMPS	109.021	20.144	.100				
EHI	48.672	60.988		-.029	-.087	-1.246	.214
E	30.354	8.611		-.361	-.155	-2.093	.038*
A	39.787	6.482		-.236	-.076	-1.046	.297
C	35.891	6.836		.607	.206	2.914	.004*
O	37.130	6.248		.560	.174	2.408	.017*

\* $p < .05$

Without the strongest predictor emotional stability score, a second multiple linear regression analysis was conducted to predict FMPS scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, and openness score. This model was also found to account for a significant amount of the variance ( $F(5, 186) = 5.231, p < .001$ ). The model accounted for 10% of the variance (adjusted R-square = .100) which is less than for step 1 (10% compared to 23%) but the prediction was highly significant. The predictor extraversion score had a significant impact ( $t = -2.093, p = 0.38$ ), as did the predictor conscientiousness score ( $t = 2.914, p =$

.004), and the predictor openness score ( $t = 2.408$ ,  $p = 0.017$ ). The strongest predictor was conscientiousness score ( $\beta = .206$ ), followed by openness score ( $\beta = .174$ ), followed by extraversion score ( $\beta = -.155$ ). This again shows that perfectionism scores increase as conscientiousness and openness scores increase. Without the inclusion of the strongest predictor of emotional stability score, extraversion was also found to have a significant relationship with the FMPS, with perfectionism scores increasing as extraversion scores decreased. This shows that perfectionism increases in those who are more introverted.

In order to examine whether there were any gender differences in the patterns of the FMPS and the six predictors, multiple regression analyses were conducted again with the data of male participants only (table 6) followed by female participants only (table 7). For both analyses the criterion was FMPS score, and the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score.

**2.3.4. Multiple linear regression analysis for the FMPS in males only**

A second multiple regression analysis was conducted with the data of male participants only, with the criterion and predictors remaining the same (table 6).

**Table 6**

Frost Multidimensional Perfectionism Scale (FMPS) multiple linear regression model summary for male participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
FMPS	107.231	16.547	.319				
EHI	59.103	45.071		-.099	-.270	-1.901	.066
E	31.615	8.665		.165	.086	.441	.662
A	38.128	6.590		-.048	-.019	-.104	.918
C	36.667	6.741		1.044	.425	2.552	.016*
O	41.026	4.902		.343	.102	.638	.528
ES	32.410	9.555		-1.108	-.640	-3.386	.002*

\* $p < .05$

A multiple linear regression analysis was used to predict FMPS scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score in male participants. The model was found to account for a significant amount of the variance (adjusted R-square = .319,  $F(6, 32) = 3.964$ ,  $p = .004$ ). The model predicted 32% of the variance, the prediction was highly significant. The predictor conscientiousness score was found to have a significant impact ( $t = 2.552$ ,  $p = .016$ ), as did the predictor emotional stability ( $t = -3.386$ ,  $p = .002$ ). The strongest predictor was emotional stability score (beta =  $-.640$ ), followed by conscientiousness score (beta =  $.425$ ).

### 2.3.5. Multiple linear regression analysis for the FMPS in females only

A third multiple regression analysis was conducted with the data of female participants only, with the criterion and predictors remaining the same (table 7).

**Table 7**

Frost Multidimensional Perfectionism Scale (FMPS) multiple linear regression model summary for female participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
FMPS	109.5724	21.022	.203				
EHI	45.855	64.456		-.021	-.066	-.888	.376
E	30.072	8.610		-.021	-.009	-.108	.914
A	40.296	6.337		-.425	-.128	-1.670	.097
C	35.763	6.836		.877	.285	3.627	.000*
O	36.086	6.164		.625	.183	2.381	.019*
ES	24.342	7.726		-.947	-.348	-4.445	.000*

\* $p < .05$

A multiple linear regression analysis was used to predict FMPS scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score in female participants. The model was found to account for a significant amount of the variance (adjusted R-square = .203,  $F(6, 145) = 7.421$ ,  $p < .001$ ). Although the model predicted 20% of the variance, the model was highly significant. The predictor conscientiousness score was found to have a significant impact ( $t = 3.627$ ,  $p < .001$ ), as was the predictor

openness score ( $t = 2.381$ ,  $p = .019$ ), and the predictor emotional stability score ( $t = -4.445$ ,  $p < .001$ ). The strongest predictor was emotional stability score ( $\beta = -.348$ ), followed by conscientiousness score ( $\beta = .285$ ) followed by openness score ( $\beta = .183$ ).

In both males and females, higher conscientiousness scores and lower emotional stability scores (higher neuroticism scores) predicted higher perfectionism. The main difference found here was that higher openness scores also predicted higher perfectionism in females, but not males, as measured by the FMPS.

### 2.3.6. Multiple linear regression analysis for the APS-R

A second measure of perfectionism, the Almost Perfect Scale Revised (APS-R), was examined. In order to examine the relationship between the APS-R, the EHI and the big five personality dimensions, a multiple linear regression analysis was conducted (table 8). With the APS-R score as the criterion, the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score.

**Table 8**

Almost Perfect Scale Revised (APS-R) multiple linear regression model summary statistics with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
APS-R	111.401	21.507	.200				
EHI	48.672	60.988		-.005	-.014	-.211	.833
E	30.354	8.611		-.164	-.066	-.876	.382
A	39.787	6.482		-.380	-.114	-1.664	.098
C	35.891	6.836		.798	.254	3.672	.000*
O	37.130	6.248		.416	.121	1.773	.078
ES	25.984	8.715		-.994	-.403	-5.562	.000*

\* $p < .05$

A multiple linear regression analysis was used to predict APS-R score from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score. The model was

found to account for a significant amount of the variance (adjusted R-square = .200,  $F(6, 185) = 8.945$ ,  $p < .001$ ). Although the model only predicted 20% of the variance, it was highly significant. The predictor conscientiousness score had a significant impact ( $t = 3.672$ ,  $P < .001$ ) as did the predictor emotional stability score ( $t = -5.562$ ,  $p < .001$ ). The strongest predictor was emotional stability score (beta =  $-.403$ ), followed by conscientiousness score (beta =  $.254$ ). This shows that perfectionism scores increase as emotional stability scores decrease and conscientiousness scores increase.

In order to examine whether there were any gender differences in the patterns of the APS-R and the six predictors, multiple regression analyses were conducted again with the data of male participants only (table 9) followed by female participants only (table 10). For both analyses the criterion was APS-R score, and the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score.

### **2.3.7. Multiple linear regression analysis for the APS-R in males only**

A second multiple regression analysis was conducted with the data of male participants only, with the criterion and predictors remaining the same (table 9).

**Table 9**

Almost Perfect Scale Revised (APS-R) multiple linear regression model summary for male participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
APS-R	108.077	20.297	.240				
EHI	59.103	45.071		-.138	-.307	-2.049	.049*
E	31.615	8.665		-.126	-.054	-.260	.797
A	38.128	6.590		.115	.037	.194	.848
C	36.667	6.741		.356	.118	.672	.507
O	41.026	4.902		.337	.081	.483	.632
ES	32.410	9.555		-1.096	-.516	-2.586	.014*

\* $p < .05$

A multiple linear regression analysis was used to predict APS-R scores from EHI (handedness strength) score, extraversion score, agreeableness score,



conscientiousness score, emotional stability score, and openness score in male participants. The model was found to account for a significant amount of the variance (adjusted R-square = .240,  $F(6, 32) = 3.002$ ,  $p = .019$ ). Although the model only predicted 24% of the variance, it was highly significant. The predictor EHI score was found to have a significant impact ( $t = -2.049$ ,  $p = .049$ ), as was the predictor emotional stability ( $t = -2.586$ ,  $p = .014$ ). The strongest predictor was emotional stability score (beta =  $-.516$ ), followed by EHI score (beta =  $-.307$ ). This shows that perfectionism scores are higher in those with lower emotional stability (higher neuroticism), and also in males with stronger left-handedness.

### 2.3.8. Multiple linear regression analysis for the APS-R in females only

A third multiple regression analysis was conducted with the data of female participants only, with the criterion and predictors remaining the same (table 10).

**Table 10**

Almost Perfect Scale Revised (APS-R) multiple linear regression model summary for female participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
APS-R	112.217	21.856	.191				
EHI	45.855	64.456		.008	.024	.326	.745
E	30.072	8.610		-.112	-.044	-.536	.593
A	40.296	6.337		-.533	-.155	-2.000	.047*
C	35.763	6.836		.960	.300	3.789	.000*
O	36.086	6.164		.332	.094	1.209	.229
ES	24.342	7.726		-.997	-.353	-4.469	.000*

\* $p < .05$

A multiple linear regression analysis was used to predict APS-R scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score in female participants. The model was found to account for a significant amount of the variance (adjusted R-square = .191,  $F(6, 145) = 6.945$ ,  $p < .001$ ). Although the model only predicted 19% of the variance, it was highly significant. The predictor agreeableness score was found to have a significant impact ( $t = -2.000$ ,  $p = .047$ ), as was the predictor

conscientiousness ( $t = 3.789$ ,  $p < .001$ ) and the predictor emotional stability ( $t = -4.469$ ,  $p < .001$ ). The strongest predictor was emotional stability score ( $\beta = -.353$ ), followed by conscientiousness ( $\beta = .300$ ), followed by agreeableness ( $\beta = -.155$ ). This shows that perfectionism is higher in those with lower emotional stability (higher neuroticism), higher conscientiousness, and lower agreeableness.

In both males as females, perfectionism was higher in those with lower conscientiousness. The main differences found here were that higher conscientiousness and lower emotional stability (higher neuroticism) also predicted higher perfectionism in females only. In males only, higher perfectionism was predicted by stronger left-handedness, as measured by the APS-R.

### 2.3.9. Multiple linear regression analysis for the PSPS

A third measure of perfectionism, the Perfectionistic Self Presentation Scale (PSPS) was examined. In order to examine the relationship between the PSPS, the EHI and the big five personality dimensions, a multiple linear regression analysis was conducted (table 11). With the PSPS score as the criterion, the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score.

**Table 11**

Perfectionistic Self Presentation Scale (PSPS) multiple linear regression model summary statistics with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
PSPS	112.219	31.517	.279				
EHI	48.672	60.988		.023	.045	.720	.472
E	30.354	8.611		-.856	-.234	-3.290	.001*
A	39.787	6.482		-.400	-.082	-1.260	.209
C	35.891	6.836		.336	.073	1.111	.268
O	37.130	6.248		.979	.194	3.003	.003*
ES	25.984	8.715		-1.495	-.413	-6.016	.000*

\* $p < .05$

A multiple linear regression analysis was used to predict PSPS scores from EHI (handedness strength) score, extraversion score, agreeableness score,

conscientiousness score, emotional stability score, and openness score. The model was found to account for a significant amount of the variance (adjusted R-square = .279,  $F(6, 185) = 13.342$ ,  $p < .001$ ). Although the model predicted 27% of the variance, it was highly significant. The predictor extraversion score had a significant impact ( $t = -3.290$ ,  $P = .001$ ), as did the predictor openness score ( $t = 3.003$ ,  $p = .003$ ), and the predictor emotional stability score ( $t = -6.016$ ,  $p < .001$ ). The strongest predictor was emotional stability score (beta = -4.13), followed by extraversion score (beta = -.234) followed by openness score (beta = .194). This shows that self-presentational perfectionism increases as emotional stability decreases (neuroticism increases), extraversion decreases (higher introversion), and openness increases.

In order to examine whether there were any gender differences in the patterns of the PSPS and the six predictors, multiple regression analyses were conducted again with the data of male participants only (table 12) followed by female participants only (table 13). For both analyses the criterion was PSPS score, and the six predictors were EHI score, extraversion (E) score, agreeableness (A) score, conscientiousness (C) score, openness (O) score, and emotional stability (ES) score.

### **2.3.10. Multiple linear regression analysis for the PSPS in males only**

A second multiple regression analysis was conducted with the data of male participants only (table 12).

**Table 12**

Perfectionistic Self Presentation Scale (PSPS) multiple linear regression model summary for male participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
PSPS	104.359	32.184	.256				
EHI	59.103	45.071		-.030	-.042	-.284	.778
E	31.615	8.665		.178	.048	.235	.816
A	38.128	6.590		-.628	-.129	-.674	.505
C	36.667	6.741		.574	.120	.690	.495
O	41.026	4.902		.260	.040	.238	.814
ES	32.410	9.555		-2.121	-.630	-3.188	.003*

\* $p < .05$

A multiple linear regression analysis was used to predict PSPS scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score in male participants. The model was found to account for a significant amount of the variance (adjusted R-square = .256,  $F(6, 32) = 3.180$ ,  $p = .015$ ). Although the model predicted 26% of the variance, the prediction was highly significant. Only the predictor emotional stability score was found to have a significant impact ( $t = -3.188$ ,  $p = 0.003$ ) with a beta value of -6.30. This shows that self-presentational perfectionism increases as emotional stability decreases (neuroticism increases) in males, as measured by the PSPS.

### **2.3.11. Multiple linear regression analysis for the PSPS in females only**

A third multiple regression analysis was conducted with the data of female participants only, with the criterion and predictors remaining the same (table 13).

**Table 13**

Perfectionistic Self Presentation Scale (PSPS) multiple linear regression model summary for female participants with six predictors

	Mean	SD	Adjusted R <sup>2</sup>	B	Beta	t	Sig.
PSPS	114.072	31.181	.254				
EHI	45.855	64.456		.030	.062	.871	.385
E	30.072	8.610		-1.022	-.282	-3.580	.000*
A	40.296	6.337		-.342	-.070	-.938	.350
C	35.763	6.836		.237	.052	.684	.495
O	36.086	6.164		1.164	.230	3.089	.002*
ES	24.342	7.726		-1.307	-.324	-4.272	.000*

\* $p < .05$

A multiple linear regression analysis was used to predict PSPS scores from EHI (handedness strength) score, extraversion score, agreeableness score, conscientiousness score, emotional stability score, and openness score in female participants. The model was found to account for a significant amount of the variance (adjusted R-square = .254,  $F(6, 145) = 9.553$ ,  $p < .001$ ). Although the model predicted 25% of the variance, it was highly significant. The predictor extraversion score was found to have a significant impact ( $t = -3.580$ ,  $p < .001$ ), as was the predictor openness score ( $t$

= 3.089,  $p = .002$ ), and the predictor emotional stability ( $t = -4.272$ ,  $p < .001$ ). The strongest predictor was emotional stability score (beta =  $-.324$ ), followed by extraversion score (beta =  $-.282$ ) followed by openness score (beta =  $.230$ ). This shows that self-presentational perfectionism increases as emotional stability decreases (neuroticism increases), extraversion scores decrease (introversion increases), and openness increases.

In both males and females, higher self-presentational perfectionism was predicted by lower emotional stability (higher neuroticism). In females only, higher perfectionism was also predicted by lower extraversion (higher introversion) and higher openness, as measured by the PSPS.

## 2.4. Discussion

The current study aimed to examine the relationship between the total scores of three measurements of perfectionism: the FMPS, APS-R, and the PSPS. The results found that participants scored in a consistently similar manner across all three measures of perfectionism. It was proposed that there would be a correlation between the scores of the three scales if they were measuring from a similar underlying construct and this hypothesis was supported. Multiple regression analyses were conducted for each of the three perfectionism measurements in relation to the five main dimensions of personality as measured by the Five Factor Model, and to handedness strength and direction scores as measured by the modified EHI. All six predictors were found to play a role in predicting some aspects of perfectionism.

All three perfectionism measurements detected that a higher perfectionism score was predicted by lower emotional stability score (i.e. those who scored higher for neuroticism) and this was irrespective of gender. The FMPS and APS-R found that higher perfectionism scores were predicted by higher conscientiousness scores in female participants, but only the FMPS found this in males. The PSPS found no effect of conscientiousness. The PSPS and FMPS found that higher perfectionism scores were predicted by higher openness scores, but only in female participants. Male perfectionism scores were not found to be predicted by openness across any of the measurements. The PSPS found that higher perfectionism scores were predicted by lower extraversion scores (i.e. those who were more introverted) in females only. The APS-R found that higher perfectionism scores were predicted by lower agreeableness scores in females only. An effect of handedness was found with higher perfectionism scores predicted by stronger left-handedness in male participants only, as measured by the APS-R. Each result will be considered in turn.

### ***2.4.1. The stability of perfectionism***

The current study found that the total scores of each of the three perfectionism measures correlated with each other, which suggests that they are measuring a similar underlying construct. Given that the three perfectionism scales measure different aspects of the perfectionism construct, these correlations suggest that perfectionism

appears to be a relatively stable thought pattern across various dimensions of life. This would support Beheshtifar, Mazrae-Sefidi and Moghadam (2011) who state that perfectionism is a stable pattern of thinking and that behaviour that should remain stable over time, in comparison to other states of mind that can change depending on the moment. This would suggest that perfectionism may function as a more enduring part of personality, but not necessarily as an individual trait. Whether perfectionism is a trait or not cannot be determined by the current study, but certainly this would suggest that there is a similar thought pattern at work.

Stairs (2009) proposed that rather than existing as a broad personality trait, perfectionism is better understood as an umbrella term that encompasses a range of unidimensional traits. However, perfectionism has been found to change in levels of severity over time. Herman, Wang, Trotter, Reinke, and Ialongo (2013) point out that previous measurements of the stability of perfectionism over time need to account for possible interventions, such as psychotherapy, and for the particular groups being measured, especially in relation to age. It was argued that at various points across the lifespan, such as adolescence, self-perceptions are not yet crystallised, meaning that they are not yet the result of years of experience and so may be subject to change. However, the current study does not account for any changes in perfectionist thinking over time, but this will feature as one of the focuses of chapter 3. This may be an area for future research, especially as Herman et al. (2013) argue that this has thus far been a neglected area of study. Rather at this point the current study can only show support for the suggestion that perfectionism it is at least a stable thought pattern across multiple measurements.

Regarding the current findings, a degree of correlation was to be expected from the FMPS and the APS-R, given that the subscales of order (APS-R) and organisation (FMPS) share significant overlap, and indeed the strongest correlation occurred between these two scales. However, the subscales of the FMPS and APS-R, in particular those of parental expectations and parental criticism, deal with very different aspects of perfectionism. These subscales account for possible antecedents of perfectionist behaviour, rather than perfectionist behaviour itself. Additionally, it was found that in general those who were scoring higher for perfectionism across the FMPS and APS-R were also scoring highly on the PSPS, which is a measure of maladaptive perfectionism

related to self-presentation. This suggests that those higher in multidimensional perfectionism, as measured by the FMPS and APS-R, are also those who tend to be higher in the interpersonal expression of perfectionism. That is to say they are those for whom the self-presentation of perfection is of a higher concern. Hewitt et al. (2003) conceptualised the self-presentation of perfection as the need to create an image of perfection or flawlessness to others as a form of impression management. Again this may show that perfectionist thinking tends to cover a broad range of dimensions.

#### ***2.4.2. The relationship between perfectionism and the five dimensions of personality***

Observing the relationship between the three measures of perfectionism and the five dimensions of personality provides some further insight into this construct. The relationship between each of the perfectionism measures with the five dimensions of personality was a less consistent finding, with the exception of emotional stability. This trait was found to be the strongest predictor of perfectionism, with low scores (indicating those who are more neurotic) significantly predicting higher perfectionism scores across all three of the scales for both males and females.

The relationship between neuroticism and perfectionism has been well researched. Neuroticism formed the primary basis for the early conceptualisation of maladaptive perfectionism by Hamachek (1978), which proposed that the negative form of perfectionism was concerned with dissatisfaction towards performance and negative mood. The current study consistently found that lower emotional stability scores predicted higher perfectionism across all three scales, suggesting that those who are more neurotic may be those predisposed to experience higher levels of perfectionism. Gunthert et al. (1999) described neurotic individuals as those with a predisposition to experience negative affect, and it may be that perfectionism is an example of this. The trait of neuroticism encompasses those that experience anxiousness, nervousness, sadness, and tenseness, and has been found to predict maladaptive perfectionism (Ulu & Tezer, 2010). As maladaptive perfectionists are those who are driven to achieve high performances whilst accompanied by a fear of failure, it follows that neuroticism would feature as a part of this behaviour. Enns, Cox and Clara (2005) propose that neuroticism is associated with distress in various dimensions of life, such as experiencing losses or



failures, and perfectionist individuals are those more vulnerable to perceiving failures, so it is logical to expect an overlap between this trait and perfectionist thinking.

Similar to the results of the current study, Sherry et al. (2007) also found that higher levels of self-presentation perfectionism were related to higher levels of neuroticism. They explain that individuals who are high in self-presentation perfectionism may be those more motivated to conceal imperfections from others due to a fear of negative evaluation, and as such may be more anxious or neurotic individuals. This would also explain the findings of the current study which found a similar relationship between perfectionism and higher neuroticism. Additionally, the current study found that the relationship between higher neuroticism and higher self-presentational perfectionism seems to be irrespective of gender, with both males and females reporting higher neuroticism and higher self-presentational perfectionism.

The current study also found that higher scores of conscientiousness could predict higher scores of perfectionism. The trait of conscientiousness encompasses goal-directed behaviours such as organisation and the prioritisation of tasks (Ulu & Tezer, 2010) and relates to self-discipline, the control of impulses, and the ability to show self-control when following rules or pursuing goals (Weisberg, De Young & Hirsh, 2011). These are aspects of personality that would lend themselves to perfectionism, and the results suggest that if you are more goal oriented and more disciplined then you are more likely to be a perfectionist than someone who does not share these motivations. This would follow, especially when considering that low conscientiousness is representative of carelessness, negligence and unreliability (Goldberg, 1993), which are aspects unsuited to the perfectionist mind-set. High conscientiousness is also reflective of the adaptive elements of perfection, which concerns the setting and prioritisation of high personal standards. When we consider this in conjunction with the finding that perfectionism is also predicted by higher neuroticism scores, the maladaptive and adaptive aspects of perfectionism become more apparent, as perfectionists are those who are both motivated to achieve goals and more anxious of failures.

The gender differences found concerning conscientiousness are interesting. Only the FMPS found that higher conscientiousness predicted perfectionism in males, whereas both the FMPS and APS-R found this in females. Given the correlations found between the two measures (considering the overlaps between the organisation/order and

personal standards/high standards subscales), it would be expected that the perfectionist scores of the APS-R would also be predicted by conscientiousness. It may be that the relationship between conscientiousness and females is simply stronger, which may be why higher conscientiousness and higher perfectionism in females was a more consistent finding. Indeed some facets of the conscientiousness trait, such as order, dutifulness and discipline, have been found to occur to a higher degree in females (Weisberg et al., 2011). Yet Weisberg et al. (2011) stress that gender differences at the Big Five trait level are not typically found, and similarly Chapman, Duberstein, Sørensen and Lyness (2007) report that generally males and females do not differ in conscientiousness. However, Stoeber (2012) reports that previous research has tended to either omit the examination of gender differences from studies, or provided inconsistent results, therefore it is more difficult to draw conclusions regarding gender differences here. The current study must also propose some caution when drawing conclusions about gender differences, as there was a limited number of male participants tested in comparison to females, which may have influenced the current results. Further research would be necessary to determine whether or not conscientiousness plays a stronger role in male perfectionism by testing from a larger number of males.

Conscientiousness was not found to predict perfectionism scores from the PSPS. It may be that the self-presentational aspects of perfectionism, as measured by the PSPS, have no bearing towards conscientiousness. As conscientiousness refers to the tendency to organise and prioritise tasks, the self-presentation of perfection towards others may be of little relevance to this trait. We can understand this when we consider that the subscales of the PSPS measure perfectionistic self-promotion, non-display of imperfection, and nondisclosure of imperfection, which are perhaps less relevant to dimensions of vigilance or organisation. Higher perfectionism scores in these dimensions as measured by the PSPS were predicted by higher neuroticism, higher openness and lower extraversion, which are personality traits that may hold more relevance for the presentation of perfection towards others.

There was a less consistent relationship found between perfectionism and openness. The FMPS and PSPS found that higher scores in openness predicted higher perfectionism in females, but there was no relation to openness found within the measurements of

the APS-R. Openness was also found to have no relation in males. Openness refers to traits such as imagination, curiosity and creativity (Goldberg, 1993), and a proneness to fantasy and aesthetics (Gurgová, 2011). It has been suggested that adaptive perfectionists tend to be more original and imaginative, which are aspects of openness (Ulu & Tezer, 2010). However, evidence to demonstrate a consistent relationship between perfectionism and openness has been scarce (Stoeber et al., 2009; Ulu & Tezer, 2010) and as such, no relationship between the two was predicted for the current study. However, Gurgová (2011), in line with the current study, found a similar surprising, albeit weak, relationship between perfectionism and higher openness. It was suggested that this was possibly reflective of the sampling of university students, who may be those higher in the openness trait. To explain this, Phillips, Abraham and Bond (2003) report that students tend to be higher in openness as they are more goal oriented in relation to attaining a good degree, as well as more likely to perform better due to their stronger intentions to do well. Given that the current study also primarily recruited from university students and staff, this may well be a consideration for this finding.

Regarding the gender differences found within the current study, Schmitt et al. (2016) report that males tend to score lower than females in openness, but only to a small degree. Noël, Trocchia and Lockett (2016) found that in general females tend to consistently report more openness to feelings than males, but that males report higher openness to ideas, as measured by the Big Five traits. This does suggest that the relationship between openness and gender is a somewhat inconsistent finding, and the current study may reflect this also. As females tend to be higher in openness, it may be that higher imagination and creativity associated with this personality dimension (Goldberg, 1993) may extend to self-presentation in females, but this would be an area for further research. As noted earlier, the smaller number of male participants compared to females may have played a role in the current study's findings. Future research could address this shortcoming by again targeting a higher number of males in order to examine these gender differences further.

The PSPS also found that lower levels of extraversion (those who were more introverted) predicted higher levels of perfectionism, which was a finding unique to this scale. As introverted individuals are those more silent, passive and reserved (Goldberg, 1993), there may be a logical overlap between these behavioural traits and the tendency

to avoid attracting attention to one's self in regards to imperfections. As the PSPS is a measure of the desire to present only perfection to others and hide imperfections, introverted individuals may be those more prone to these tendencies. Clinical observations have found both perfectionism and introversion to be the most common traits found amongst gifted students (Mofield & Peters, 2015). The lack of a relationship between extraversion and perfectionism within the measurements of the FMPS and APS-R may suggest that the introversion trait is more relevant to aspects of self-awareness and presenting oneself to others. As introversion is a socially-related trait in that introverted individuals prefer to avoid social scenarios (McIntyre, Wiener & Saliba, 2015), this may explain the lack of a relationship between the other two scales, which are less related to social aspects of perfectionist behaviour, such as the setting of high standards, or organisation.

Interestingly this relationship between low extraversion and perfectionism was found only to occur in females. Generally females have been found to score higher for extraversion than men, typically within the warmth, gregariousness, and positive emotions facets, however these differences are small at the domain level (Weisberg et al., 2011). However, it is more logical to expect that more introverted females would be those with a higher concern for self-presentation. Besser, Flett and Hewitt (2010) report that the presentation of self, image construction, and appearance are dimensions more relevant to females than males. They also report that in females, self-presentation has been found to correlate with higher thoughts about cosmetic surgery, which is a domain highly relevant to self-presentation in relation to perceived flaws in self-image. This relationship has not been found to occur in males. Additionally, negative self-appraisals have been found to mediate the relationship between perfectionism and depression (Besser et al., 2010), and introverted individuals have been identified as those more at risk of depression and social isolation (Janowsky, 2001). This possibly contributes to the relationship between introverted females and higher self-presentational perfectionism.

The current study also found that perfectionism was predicted by lower agreeableness in female participants, but only as measured by the APS-R. The relationship between perfectionism and lower agreeableness has been suggested to occur due to a perfectionist's tendency to experience interpersonal difficulties and conflict (Egan et al., 2015). Low agreeableness is reflective of those more likely to

express anger or frustration (Hill et al., 1997), and it may be that these individuals are those less tolerant of any performance that falls short of their standards, and may therefore be more predisposed to higher perfectionist behaviour. Regarding gender differences, women in general are usually found to score higher for agreeableness, especially in relation to traits such as empathy and kindness (Weisberg et al., 2011). However, in relation to perfectionism and the setting of high standards, kindness and empathy may be less related, as perfectionists are those more intolerant of flaws or performances lower than the desired standards. It would follow that those who are less agreeable by nature may be less agreeable about their performance, and perhaps more prone to perfectionistic thinking.

Similar to the current study, Egan et al. (2015) found no relationship between perfectionism and agreeableness within the FMPS. They suggest that the FMPS may find different correlations from other similar measures due to its inclusion of the subscales *parental criticism* and *parental expectations*, which deal with developmental aspects of perfectionist behaviour. In relation to the current study, this may be why a relationship was found between agreeableness and perfectionism in the APS-R, but not the FMPS.

#### **2.4.3. The relationship between perfectionism and laterality**

To account for a possible relationship with laterality, participant handedness was examined. As measured by the APS-R, it was found that in males, perfectionism correlated negatively with handedness strength scores, showing that perfectionism was higher in stronger left-handedness. To explain this, it is beneficial to examine the possible mediating role of the behavioural inhibition system (BIS); one of two goal regulation models (the other being the behavioural approach system). BIS motivates avoidance behaviour, or a delay in initiating approach (Bach, 2015). Randles et al. (2010) have found that anxiousness and maladaptive cognitions in perfectionists are mediated by higher BIS activation. Higher BIS activation in turn leads to a stronger tendency to ruminate about failures or criticisms. Thus maladaptive perfectionists may be those more prone to rumination due to the mediating role of a stronger BIS.

BIS also plays a role in the inhibition of approach behaviour i.e. those higher in BIS are motivated to avoid approaching situations due to higher levels of anxiousness (Bach, 2015). In terms of handedness, BIS has been found to occur to a higher degree in left-

handed participants during novel task situations (Wright & Hardie, 2015). Left-handers have also been found to take longer to initiate a move in a novel card sorting task, reflecting a more inhibited approach due to a stronger BIS activation (Wright & Hardie, 2011). The current study found that stronger left-handedness was only found to predict perfectionism in males, as measured by the APS-R. Stronger left-handedness, related to a stronger lateralisation to the right hemisphere, is more likely to occur to a higher degree in males than in females (Papadatou-Pastou, Martin, Munafo & Jones, 2008).

Due to the relationship between higher BIS and left-handedness, there may be a mediating role of the BIS here. Males with stronger left-handedness may be higher in BIS and more prone to higher anxiousness. This in turn may be reflected in the tendency to be more perfectionist, given the relationship between higher anxiousness and perfectionism (Bieling et al., 2004; Eusanio et al., 2014) reflected in the worry and concern over mistakes (e.g. Frost et al., 1990) and fear of failure (e.g. Eusanio et al., 2014; Greenspon, 2014). Though the prediction was significant, given the lower number of males tested in comparison to females, further research into this relationship could determine how robust this finding is.

#### **2.4.4. Conclusions**

The findings of the current study suggest that perfectionism is at the very least a stable thought pattern, with consistent scores found across each of the three measures. The correlation of the FMPS and APS-R to the PSPS suggest that those higher in multidimensional perfectionism also tend to be those higher in self-presentational perfectionism i.e. those also concerned with presenting perfection to, and concealing perfection from, other people. This suggests that perfectionist thinking is relevant to a number of domains of life.

Perfectionism also seems to be reflective of individual differences in personality dispositions. The most consistent finding in both males and females was the relationship between perfectionism and emotional stability, with lower emotional stability scores predicting higher perfectionism scores. This suggests that those who are more neurotic may be those more prone to perfectionist thinking, which is most likely a reflection of higher tendency to experience worry and anxiousness. The second strongest finding was the relationship between conscientiousness and perfectionism, with those higher in

perfectionism scoring higher in conscientiousness. Higher perfectionism is likely a reflection of the higher levels of discipline and organisation found in higher conscientiousness.

The relationships between perfectionism and the personality dimensions of openness, extraversion, and agreeableness were less consistent and more subject to gender influences, with relationships found to occur in females only. It may be that the relationships between perfectionism and these three personality dimensions are only relevant to females, but further research with more male participants may be needed to examine the extent of these gender differences.

Additionally, perfectionism was found to be higher in males with stronger left-handedness, which is possibly related to the mediating role of the behavioural inhibition system. Those with stronger left-handedness may be more prone to higher levels of anxiety and inhibition, which in turn may influence perfectionist thinking.

In order to gain a more detailed insight into the influence of perfectionism on the behaviour and thinking patterns of individuals, a qualitative approach was also taken. This aimed to examine the ways in which perfectionism tends to manifest within an individual's life, including the domains of life that are the most affected, and how this is reflected within behaviour. Social perceptions and evaluations of perfectionism are also explored. Chapter 3 will focus on this qualitative perspective of perfectionism.

## **Chapter 3**

### **Exploring individual experiences and evaluations of perfectionism**

#### **3.1. Introduction**

The previous two chapters have sought to understand the nature of perfectionism as a unique construct by examining the characteristics that are typically reflective of the trait, and how these have been measured. Previous research is in agreement that perfectionism refers to a striving for flawlessness encompassing the setting of high standards (e.g. Frost et al., 1990; Hewitt & Flett, 1991), the attentional bias towards errors (e.g. Howell et al., 2016), and the fear of errors or mistakes, which tend to be generalised as failures (e.g. Burnam et al., 2014; Eusanio et al., 2014; Greenspon, 2014). Chapter 2 of this thesis found further evidence to suggest that perfectionism is more likely to occur within certain personality dispositions. In particular these are higher conscientiousness and higher neuroticism (alternatively understood as a lower emotional stability) in both males and females, suggesting that perfectionism may be a facet of other personalities. Perfectionism is also understood to possess both adaptive and maladaptive elements. Though sharing the same striving for flawlessness, these forms of adaptive and maladaptive perfectionism differ in the acceptance of flaws or limitations. Adaptive perfectionists are those whose standards are more achievable, and are more accepting of their limits, whereas maladaptive perfectionists are those who set more unrealistic standards, and tend to possess a higher fear of failure and a lower tolerance for errors (Blatt, 1995; Stoeber et al., 2007).

The current chapter will expand upon these areas by investigating people's self-reports of their experiences and perceptions of perfectionism. Previous research has highlighted that perfectionism is a complex and resilient trait (Flett & Hewitt, 2014) encompassing a multitude of behaviours, thinking patterns, and outcomes (both positive and negative). This chapter will examine the personal and social evaluations of perfectionism; the nature of perfectionist domains, behaviours and thought patterns; and general evaluations of the trait.



As explored within chapter 1, there is still the lack of a formally agreed definition of perfectionism. Contributing to this issue are several ongoing disagreements between researchers. Firstly, researchers such as Shafran et al. (2002) and Hewitt et al. (2003) have disagreed on the nature of multidimensional perfectionism. Hewitt et al. (2003) propose that perfectionism should be understood as a trait with multiple dimensions ranging from the adaptive, such as achievement striving and the setting of high standards, to the maladaptive, such as the heightened concern for mistakes and a fear of failure. Shafran et al. (2002) argue instead that maladaptive perfectionism should be understood separately as *clinical* in nature, rather than as a part of a multidimensional construct. They propose that in maladaptive perfectionists, the over-dependence of self-evaluations on the pursuit of demanding and self-imposed standards can lead to adverse consequences to health. These include depression, social anxiety, social isolation, and impaired concentration, and as such are grounds for clinical concern. They argue that when there are no adverse effects to health, such as within adaptive perfectionism, then there is no clinical relevance. Adaptive perfectionism has been linked to beneficial outcomes such as higher self-esteem, and life satisfaction (Rasmussen & Troilo, 2016), but its existence has been questioned: if errors are accepted, the standards set are achievable, and the outcomes are positive, then is it truly perfectionism?

Rasmussen and Troilo (2016) propose that the construct of perfectionism is never adaptive, and can only lead to poor developmental outcomes. However, the reasoning behind Shafran et al.'s (2002) concept of clinical perfectionism has been criticised for failing to show precisely *how* the setting of high standards and maladaptive perfectionism interact within psychopathology, such as in the prediction of social anxiety (Levinson et al., 2015). Therefore researchers cannot agree on whether or not it should be understood as a separate form.

Of course, seeking help for perfectionism in a clinical sense may be largely dependent upon the evaluations made of the trait by the affected individual. Slaney and Ashby (1996) have demonstrated that participants can show ambivalence in their evaluations of perfectionism. Despite evaluating perfectionism as containing both distressing and positive elements, none of the perfectionists within their study reported that they would choose to give up their perfectionism if they could. This suggests that even when

perfectionism exists in a maladaptive form, people do not necessarily view this as a cause for concern. In some cases of maladaptive perfectionism there may be less clinical consequences than Slaney and Ashby (1996) proposed.

Secondly, researchers such as Frost et al. (1990) and Hewitt and Flett (1991) have tended to view perfectionism as a *domain-general* trait (i.e. that it should generalise across all dimensions of life). The scales of the FMPS and HMPS respectively were designed to reflect this generalisation (McArdle, 2010) by measuring general perfectionist tendencies, rather than exploring any specific affected domains. So far this thesis can provide support towards the argument that perfectionism is at least a stable measurement across various scale measurements. It cannot, however, account for the domains of life (general or specific) that perfectionists may have been thinking of when they responded to each item of the scale.

The nature of perfectionist domains has been a concern for researchers such as Shafran et al. (2002) and Slaney and Ashby (1996), who have argued that perfectionism is *domain-specific* i.e. that it only holds relevance for people within specific areas of life, and not in general (Dunn, Gotwals & Dunn, 2005). The domains for which the pursuit of perfection may hold relevance has been found to differ on an individual level, particularly in relation to personal significance. Shafran et al. (2002) use the example of a woman seeking help for a perfectionist form of anorexia nervosa to highlight that the domains of perfectionism holding significant relevance for her would be dietary in nature. As such, she is unlikely to be concerned with pursuing perfection within a sporting or gardening domain.

The *domain-general* versus *domain-specific* argument may also be of particular importance to therapists or counsellors. Slaney and Ashby (1996) argue that counsellors must avoid making assumptions about the types of perfectionism, or the perfectionist behaviours, that a client may be referring to when they use the term 'perfectionism'. In a qualitative study of self-defined perfectionists it was found that the domains of life reported to be affected by perfectionism varied on an individual level, and tended to be specific in nature. Some participants reported a concern for perfectionism within their personal relationships, whereas this domain held no relevance for others. The domain of personal appearance was relevant for some and not others. Despite this, each participant was identifying with the same label of 'perfectionist'.

Slaney and Ashby (1996) also found that participants were emphasising different aspects of perfectionist criteria when they defined themselves as perfectionists. Some emphasised that their perfectionism was about the importance of setting high standards, whereas others felt that it was about a low satisfaction with their performance. It was argued that if the treatment of perfectionism by counsellors was to be successful it needed to explore which precise elements of perfectionism were being referred to by clients, rather than make assumptions or generalise. In an example given, an individual whose perfectionism relates to order and control may be at a higher risk for developing obsessive-compulsive disorder, whereas another who is concerned with the setting of high standards may not be.

McArdle (2010) also warned that previous research had been failing to distinguish between perfectionist tendencies and their relation to relevant domains of life. The evidence for this had come from reports of domain-specific perfectionism in school-aged adolescents, who possessed perfectionist tendencies only within specific academic pursuits, and these did not generalise to their sporting performance. Similarly, Dunn et al. (2005) found that perfectionist tendencies would vary depending upon the situational context in which they were examined. When comparing a global measurement of perfection against a specific measurement, the perfectionism reported within specific domains, such as sports performance in males, were higher than when measuring perfectionism in general. In further support of this, Dunn, Craft, Dunn and Gotwals (2011) found that a domain-specific measure (the Sport Multidimensional Perfectionism Scale) of sporting perfectionism in competitive female figure skaters was better able to detect a link between perfectionism and body image acceptance than a domain-general measure (the HMPS) was. They suggest that the use of domain-specific measures of perfectionism are more beneficial than domain-general when examining perfectionist tendencies.

This suggests that perfectionist tendencies may be more specific than the measurements of domain-general scales such as the FMPS or HMPS can detect. To address this, other researchers have adopted an alternate qualitative approach in order to examine the individual differences in perfectionism that have been observed to occur. As Hill et al. (2015) point out, qualitative methods can help to avoid making the assumptions that previous quantitative measurements have tended to make about the

core features of perfectionism, including those regarding the nature of perfectionist domains. Qualitative methods also allow for the exploration of unique perceptions, including which domains are the most relevant, and which behaviours are the most problematic for the individual. Additionally, due to the complex nature of perfectionism, Hill et al. (2015) suggest that a qualitative method is beneficial for examining the lived experiences of perfectionists themselves. These findings can also serve as good comparisons to quantitative data in order to test the reliability of scale measurements.

Hill et al.'s (2015) study found that the features of perfectionism that were emphasised by self-defined perfectionists were largely in line with existing models, in that they emphasised the pursuit of high standards, meticulousness, and rigid thinking patterns. However, they also found that self-defined perfectionists tended to emphasise an element of obsessiveness in their perfectionist thoughts, which is less accounted for within existing models. Given the link between the order/control domain of perfectionism and the heightened risk for obsessive-compulsive disorder (Slaney & Ashby, 1996), this finding is important. They also found that self-defined perfectionists tended to think of their perfectionism in personal terms, reporting that they were internally driven to pursue perfection, rather than socially driven. Hill et al. (2015) propose that this differs from the existing models that emphasise interpersonal motivations, as their participants were less concerned with issues such as social pressures.

The evaluations of perfectionism given by participants were also somewhat in contrast with the concepts of adaptive and maladaptive forms of perfectionism. Neither form was thought to adequately capture the complex nature of the perfectionist experiences described by participants. Though the participants were found to share common beliefs and behavioural patterns, there tended to be differences in their degree of severity. The evaluations made of perfectionism (as either positive or negative) therefore tended to be contingent upon the severity of occurrence (Hill et al., 2015). This suggests that those with maladaptive tendencies may not always evaluate their perfectionism negatively if their beliefs and behaviours occur to a lesser or manageable degree.

In order to better understand these individual differences in perfectionism, it is beneficial to explore their possible developmental roots. The influence of family

members, particularly parents, has been identified as one of the strongest predictors of perfectionist behaviour. Children either exposed to parental perfectionism or subjected to high expectations of perfection tend to be those who develop as perfectionists themselves, displaying the same behavioural tendencies as their parents (Rasmussen & Troilo, 2016). Frost et al. (1990) emphasised the roles of parental criticism and parental expectations within their model of multidimensional perfectionism. Perfectionists are those who may have had to work hard to gain the approval of critical parents, or live up to strict perfectionist standards in order to receive recognition. A discrepancy between expected performance and actual performance has been identified as one way in which the perfectionist tendencies of the parent can develop within the child. The child's psychological distress, resulting from attempts to live up to these standards, can instil in them a desire to continuously seek perfection. These distresses can include poor self-esteem and anxiety (Rasmussen & Troilo, 2016). Items such as "As a child I was punished for doing things less than perfectly" and "I never felt like I could meet my parents' expectations" of the FMPS (Frost et al., 1990) were designed to measure these parental elements.

The children of authoritarian parents have also been found to score higher within these dimensions (Hibbard & Walton, 2014). Qualitative research has found that perfectionist children often report that their parents display a lack of warmth towards them, in addition to making demands of perfection from them (Rasmussen & Troilo, 2016). A combination of parental expectations and parental warmth may interact and contribute to the development of perfectionism in children in two different ways. When parents have high expectations of their children but display a level of warmth and acceptance towards them, a form of adaptive perfection is likely to form. In comparison, when these high expectations are paired with a lack of warmth and acceptance then a form of maladaptive perfectionism in their children is more likely to result (Hibbard & Walton, 2014). Rasmussen and Troilo (2016) highlight that very little of this type of qualitative research has been carried out to explore this area.

The role of parental influence in the development of child perfectionism does not always have to be direct. The social learning model holds that children and adolescents may develop into perfectionists through imitating the perfectionism displayed by their parents. In these cases, parents do not have to actually demand or expect perfection of

their children, but the child attempts to gain their approval through imitation nevertheless (Rasmussen & Troilo, 2016). Junior athletes have also been found to display higher levels of imitation towards their parents when progressing through their sporting careers (Appleton, Hall & Hill, 2010).

The development of perfectionism can also be internally driven. As highlighted earlier, Hill et al. (2015) found that the self-defined perfectionists tended to emphasise the role of self-motivation within the development of their own perfectionism, and rule out the influence of others. Hewitt and Flett (1991) accounted for three main influences of perfectionism within their multidimensional model (the HMPS): self-oriented, other-oriented, or socially prescribed. The socially prescribed form of perfectionism was concerned with living up to the perceived expectations of others. The desire to please critical parents fits within this type of perfectionism. However, within self-oriented perfectionism, self-set standards, self-criticism, and self-monitoring of performance were identified as the main motivators of perfectionism, and these did not necessarily require any perceived demands from others. Self-oriented perfectionists set high personal standards, and self-evaluations of performance are often highly critical. As a result, this type of perfectionism has been correlated to higher depression and anxiety (Speirs Neumeister, 2004c).

Speirs Neumeister (2004a) adopted a qualitative approach in order to examine these three types of perfectionism of the HMPS in comparison to self-reports given on the developmental roots of perfectionism. The results were largely in line with the existing model. Those who scored highly for socially prescribed perfectionism described the strong influence of their parents in the development of their perfectionism. They reported that parental influence had lead them to believe that others also held high expectations of them. In comparison, those with self-oriented perfectionism were less sure of their perfectionist origins. They reported that their tendencies may have been present for years, possibly since early childhood, but they were unable to determine exactly when these would have first occurred. This raises an important issue regarding the time of onset for perfectionism. Those with perfectionist parents may be better able to trace the origins of their perfectionism back to early childhood, but for others, especially those with parents who are not necessarily perfectionist, it may be more difficult to pinpoint an origin. The current research aims to explore this by determining

the point in life that self-defined perfectionists first identified with the label of 'perfectionist', or when they first began attributing their thinking and behaviour to perfectionism.

Speirs Neumeister (2004a) found that the elements of success and failure were important within perfectionist thinking patterns. In student perfectionists, the pursuit of perfection and the avoidance of failures was often based upon a desire to continue attaining academic success. Mistakes and errors, such as achieving lower grades than expected, were often generalised as instances of failure (Speirs Neumeister, 2004c). The elements of success and failure are crucial in understanding the motivations of perfectionists. Previous research, when taken together, reveals perfectionists to be those who are simultaneously motivated by a pursuit of success and an avoidance of failure (e.g. Greenspon, 2014). It has been proposed that perfectionists show a distinctive bias in attributions, where they tend to attribute both success and failure to personal ability. This means that they are more likely to blame mistakes on themselves as though they were indicators of personal weakness, leaving them at a higher risk of experiencing anxiety and depression (Speirs Neumeister, 2004c).

A qualitative study by Speirs Neumeister (2004c) found that perfectionists tended to minimise their successes and maximise their failures. As well as expecting perfectionism of themselves, perfection was perceived to be expected of them by others, and the implications for failing to achieve this were often exaggerated or overreacted to. Successes could even be overlooked or viewed as insignificant when compared to perceived instances of failure, meaning that perfectionist individuals were more likely to concentrate on their flaws than their strengths.

Should they feel it is required, overcoming these biases may be a difficult journey for perfectionists. Kelly (2015) reports that in order to change perfectionist thinking, therapy interventions that target negative thought patterns may be required. It was proposed that to overcome perfection, one had to accept oneself as flawed. However, Flett and Hewitt (2014) point out that perfectionism is rigid in its thought patterns and resistant to change. Furthermore, as touched upon earlier, it often begins to develop in early childhood, meaning that it is has been a consistent behavioural pattern long adopted. Therefore it is beneficial to account for how the individual evaluates their

perfection, regarding whether they think it is something negative in nature that needs to be addressed, or whether they feel it is a positive force.

This chapter will further explore the areas discussed here by examining the personal experiences of perfectionists. This will include an examination of six main areas: (1) the aspects of perfectionism that people tend to emphasise when they define perfectionism, including the criteria they use when self-defining as a perfectionist; (2) the nature of perfectionist domains, including whether perfectionism is domain-general or domain-specific. In the case of domain-specificity, this will examine the domains that tend to be the most relevant for perfectionists; (3) the perceived influences in the development of perfectionism; (4) the main motivations for pursuing perfection; (5) the ways in which perfectionism affects behaviour and thought patterns, including how perfectionists tend to respond to success and failure; (6) and the evaluations that people make of perfectionism as a trait. A qualitative approach will be adopted to accomplish this, as this method can help to build upon previous research into the nature of perfectionism and personal experiences. It is also beneficial to use both quantitative and qualitative methods to serve as comparisons to one another. From a clinical perspective, this method may also be beneficial for further examining the impact that perfectionism has on individual lives, and whether they feel the trait is positive or negative in nature.

This will take place across two studies. Both will use open-ended questions to address these issues, but the first study (study 2) will take place online with both perfectionists and non-perfectionists (*see sections 3.2 to 3.4*), and the second (study 4) will use face-to-face interviews with self-defined perfectionists (*see sections 3.8 to 3.10*). The seven research questions here are: (1) How do people define perfectionism? (2) Which domains of life are the most relevant for perfectionists? (3) What are the main influences in the development of perfectionism? (4) At which point in life does perfectionism start to develop? (5) How does perfectionism affect behaviour? (6) How do perfectionists respond to success and failure? (7) How do people evaluate perfectionism?

To serve as a possible comparison measure, the Almost Perfect Scale – Revised (APS-R) (Slaney et al., 2001) will be used to generate a perfectionism score. This will be used to group the participants into high scoring, moderate scoring, and low scoring



perfectionists to serve as a possible comparison measure to the self-definitions provided.

As discussed within chapter 2, study 1 found a relationship between perfectionism and handedness in male participants. To account for this potential influence within the self-reports given of perfectionism, the modified version of the Edinburgh Handedness Inventory (Oldfield, 1971) will be used to calculate a handedness strength score to serve as an additional source of analysis.

An additional study (study 3) was also conducted in order to further explore the definitions of perfectionism generated by participants within study 2. This study will examine which of these definitions are rated as the most and least accurate representations of perfectionism, and is detailed within sections 3.5 to 3.7.

## Study 2 - Analysis of the online questions

### 3.2. Method

#### 3.2.1. Participants

One-hundred and eighty-five participants from the previous study also completed this second phase study (seven chose not to do so). These were 37 males and 147 females (one participant did not state their gender), with an age range of 17 to 69 years (mean age of 27.59 years, standard deviation of 11.91). By self-report, 60 participants self-defined as a perfectionist, 57 as a moderate perfectionist, and 68 as a non-perfectionist. By handedness, 151 were right handed and 33 left handed (one indicated that they used either hand for writing).

#### 3.2.2. Materials & Apparatus

This study featured as the second part of study 1 and was presented within the same online googledocs form (*see section 2.2*). As such, the same information sheet (*see appendix 1*), consent sheet (*see appendix 2*), and debrief sheet (*see appendix 3*) were presented. The information sheet informed participants that they would be asked six questions regarding their personal thoughts on perfectionism. For counterbalancing purposes, three versions of the study were created, each with a different order of questionnaires and open-ended questions. This was to control for order effects. The six open-ended questions were: 1. Do you consider yourself to be a perfectionist? 2. Please provide your own definition of perfectionism. 3. Please provide a description of the situations or activities during which you would consider yourself a perfectionist. These can be across all dimensions of life – professional, academic or personal. 4. What do you feel are the main influences on your perfectionism? 5. When are you less concerned with perfectionism, or not perfectionist at all? 6. Is perfectionism a positive or negative trait? Please explain your answer (*see appendix 9*). Participants were asked to type their responses in a box which provided an unlimited amount of space.

#### 3.2.3. Procedure

The study opened with an information sheet detailing the contents of the study, followed by an informed consent sheet. This was essential and required consent before

the study would begin. The open-ended questions were presented at different stages of the study (either at the beginning of the study, in the middle, or at the end). Participants typed their responses within the boxes provided. Once completed, the debrief sheet was displayed, and participants were then prompted to submit their data.

#### *3.2.4. Data analysis*

The data were analysed using both quantitative and qualitative analysis. The responses provided by participants to the questions “Please provide your own definition of perfectionism”, and “Please provide a description of the situations or activities during which you would consider yourself a perfectionist” were examined in order to identify similar patterns of occurrence. These were then grouped together to create general categories regarding the characteristics of perfectionism emphasised within a participants definition of the term (*see table 14*), and the activities or areas of life that perfectionism is pursued within (*see table 15*). For example, responses describing the dislike experienced upon making errors or possessing perceived flaws were grouped together into the category of “the intolerance of errors or flaws”. Responses describing pursuing perfect academic grades, reports or exam results were grouped together into the category of “academic performance”. These were presented quantitatively with their frequencies of occurrence.

The qualitative analysis (*see section 3.3.3*) followed the grounded theory approach developed by Strauss and Corbin (1998). This approach allowed for the generation of several key themes from the participant’s responses in order to build a better understanding of the research question. The process began with each line of data being examined for emerging patterns. Key words and phrases that commonly occurred were made note of until the most frequent were identified and grouped into sub-themes. For example, participants frequently reported that their perfectionism had originated during their childhood and adolescence. These responses were coded and grouped together into the sub-theme of “upbringing”. Others reported that their perfectionism was the result of the goals that they set for themselves. These responses were coded and grouped together into the sub-theme of “personal goals and motivation”. Together these were decided to be features of a larger theme concerning where the participants felt their perfectionism has originated or developed from. Therefore these formed the

main theme of “Developing as a perfectionist”. The process of coding into sub-themes and main themes was repeated until it encompassed the full data set.

Four main themes were developed: self-defining as a perfectionist; developing as a perfectionist; accepting imperfections; and evaluating perfectionism.

The selected quotes from the participants are presented verbatim, however spelling errors were corrected. Each participant was assigned an individual number from 1 to 185 to ensure anonymity within the presentation of their data. The assignment of the three perfectionist categories (perfectionist, moderate perfectionist, and non-perfectionist) was based upon the self-reports given from participants themselves. As the current chapter is interested in exploring why people define themselves as perfectionists, and how they evaluate the influence of perfectionism, it was decided that these self-defined categories were important to include. These categories were determined from responses to the question “Do you consider yourself to be a perfectionist?” The category of ‘perfectionist’ was determined by absolute responses such as “yes” and “definitely”. Moderate perfectionists were determined by more conditional or uncertain responses, such as “perhaps” or “sometimes”. Non-perfectionists were those who rejected the label completely.

A measure of handedness was taken as a possible source of further analysis. However, an examination of the data revealed no significant differences between left and right handers, with both groups displaying similar patterns in their responses. As the same themes were emerging in both left and right handers it was determined there was no influence of handedness within the responses.

### 3.3. Results

#### 3.3.1. Defining “perfectionism”

Participants were asked to give their own definition of “perfectionism”. Eighteen main categories were generated from the responses provided.

**Table 14**

The aspects emphasised within participants’ definitions of the term “perfectionism”, with their number of occurrences

<b>Aspect of perfectionism emphasised</b>	<b>Number of occurrences</b>
1. All aspects of life must be perfect	95
2. Intolerance of errors or flaws	33
3. Organisation, neatness and orderliness	24
4. The setting of high standards	20
5. Performing to the best of your ability within limits	17
6. Striving to achieve perfection without limits	13
7. Never feeling satisfied or highly critical of performance	12
8. Presenting a picture of perfection to others	11
9. Setting goals or standards impossible to reach	9
10. Specific aspects of life must be perfect	8
11. Spending great lengths of time completing activities	8
12. Paying attention to fine details	6
13. The desire for control over a situation	6
14. Taking pride in your performance and a strong work ethic	6
15. Obsession with achieving perfection	5
16. Fear of failure	5
17. High concern for the opinions of others	4
18. Competing with others for higher achievements	3

From the table it can be seen that the aspect of perfectionism with the highest number of occurrences (95) is that all aspects of life must be perfect, suggesting that the majority of participants understood perfectionism from a domain-general perspective. In comparison, a domain-specific understanding of perfectionism (“specific aspects of life

must be perfect”) was reported much less frequently (8 occurrences). The second highest aspect emphasised was the intolerance of errors or flaws.

These defining aspects will be further explored within study 3 (see section 3.5 to 3.7).

### 3.3.2. The pursuit of perfection

Participants were asked to describe the activities or areas of life that they pursued perfection within. Eighteen categories were identified.

**Table 15**

Category that perfection is pursued within, with examples, and the number of occurrences

<b>Area that perfection is pursued within</b>	<b>Examples</b>	<b>Number of occurrences</b>
1. Academic performance	High grades, producing work free from errors, fear of failing coursework	74
2. Professional performance	High standard of professional performance, delivering perfect service	42
3. Impressing or performing for others	Impressing lecturers, colleagues, friends, and receiving praise	29
4. Pursuing interests	Cooking, baking, drawing, gaming, musical instruments	27
5. Planning and organising	Task preparation, time management, dislike of disorganisation	26
6. Cleaning and tidying	Creating clean and tidy environments	22
7. Neatness	Handwriting, document formatting, note-taking	21
8. Personal appearance	Body image, hair, make-up, clothing	17

9. Maintaining a household	Housework, tidy garden	13
10. Family roles	Perfect parent, spouse, or child	13
11. Always a perfectionist	Aiming for perfection across all endeavours	12
12. Responsibility	Aiming for perfection when responsible, relied upon, or depended upon for something by others	11
13. Sports performance	Sporting activities, athletics, races	11
14. Never a perfectionist	Perfection never pursued	8
15. Arranging/Categorising	Arranging in specific orders, e.g. by colour, size, theme, or genre	7
16. Competing with others	Need to compete with, outperform, or appear better than others	7
17. Health and wellbeing	Fitness and exercise	2
18. Procrastinating	Tasks e.g. coursework, artwork, put off due to a dislike of the standard produced	2

---

From the table it can be seen that pursuing perfectionism within academia was the highest reported category, with 74 occurrences, followed by professional performance, with 42 responses. This was followed by impressing or performing for others, with 29 responses, suggesting that participants are concerned with perfection during instances where they may be evaluated by others.

### 3.3.3. Grounded theory analysis

**Table 16**

Main themes and sub-themes generated from the online open-ended questions

<b>Main theme</b>	<b>Sub-themes</b>
1. Self-defining as a perfectionist	1.1. The general perfectionist 1.2. The context-specific perfectionist 1.3. The non-perfectionist
2. Developing as a perfectionist	2.1. Part of personality 2.2. Personal goals and motivations 2.3. Social motivations 2.4. Upbringing
3. Accepting imperfections	3.1. No significant consequence of imperfection 3.2. Forced to accept the limits of ability 3.3. Always a perfectionist
4. Evaluating perfectionism	4.1. Positive aspects of perfectionism 4.2. Negative aspects of perfectionism 4.3. Monitoring and controlling perfectionism



## **Theme 1: Self-defining as a perfectionist**

Self-defining as “a perfectionist” was not always a straightforward process. Some identified strongly with the label, yet others were more considerate of the specific situations that they pursued perfection within. Some rejected the label entirely. These responses could be broken down into three distinct groups: those who considered themselves a perfectionist in general across life (the general perfectionist), those who were more specific about when they considered themselves a perfectionist (the context-specific perfectionist), and those who did not relate to the perfectionist label at all (the non-perfectionist).

### ***1.1. The general perfectionist***

The category of “the general perfectionist” referred to those who considered themselves to be a perfectionist across life in general, rather than within specific areas. Their responses were absolute, using words such as “yes” or “definitely”, and did not contain any doubting words such as “sometimes”, “maybe” or “probably”. Sixty (32%) participants fell into this category.

For some participants it was very apparent whether or not they considered themselves a perfectionist, such as for P145, who reported, “I feel it all the time”. Similarly, both P84 and P134 reported that they needed to do their best in “everything”. For these participants, seeking or attaining perfection was always an issue. P78 explained, “I aim to achieve all my goals that I set out to do at all times. I am highly motivated and always want to do my best”. This was similar to P52, who felt, “I am always concerned if I have done something 100% correct”.

However, some participants acknowledged that being a perfectionist was a cause for concern. P38 expressed, “I am never happy with anything I do, I always think I could have done better”. Similarly, P22 explained, “It caused great issues when I was younger, I have since learned (and am still learning) to let things go”. P175 in particular felt, “I consider myself to be an extreme perfectionist, so much so it’s affecting my life”. Though he did not elaborate here, he later added that perfectionism “could get out of hand”.

When perfection was not attained, P61, P32 and P132 responded negatively. P61 explained, “(I) get very annoyed when things are not at a perfect standard”, and similarly P32 reported, “I am thorough and have attention to detail in all aspects of my work. For example if I send an email and I notice a spelling error after I have sent it I get very frustrated”. This negative response was kept hidden by P132, who preferred not to let their disappointment show:

“I have very high expectations for myself. I admit my mistakes to others and make mistakes in front of others as for me that's all part of the learning process. But in private I do get very disheartened if I don't meet my goals”.

In comparison, P57 dealt with this in a more positive way, “if something isn't completely perfected I don't get really stressed about it”, yet she still considered herself a perfectionist.

Interestingly, P103 self-defined as a perfectionist despite thinking that “perfection does not exist”. She explained:

“I strive to be the best version of myself that I can be to make others proud and avoid embarrassment. Others have described me as a perfectionist and I would also describe myself as a perfectionist. If I have control over something I will try my best to make it the best it can be”.

This does raise an important issue that identifying as a perfectionist, or even understanding what the term “perfectionism” truly means, is not always straightforward, even for those who experience these perfectionist strivings. This could be a potential underlying factor for why the following group of “context-specific” perfectionists do not define themselves as perfectionists in general.

### ***1.2. The context-specific perfectionist***

The “context-specific perfectionist” referred to those who were more specific about when they considered themselves a perfectionist. Often these participants felt the need to strive for perfection only within select areas of life, or for key activities, rather than for all of their pursuits. Their responses included conditional terms such as “sometimes”, “slightly”, “I can be”, “it depends”, and “mostly”. Some doubtful responses were also

given, such as “I think so”, “I guess so”, “maybe” and “probably”. Fifty-seven (31%) participants fell into this category.

As they only considered themselves to be perfectionist in select areas, some participants made it clear that for this reason they would not consider themselves a “general” perfectionist. In fact, some responses suggested that participants felt a “true” perfectionist was someone who *should* feel perfectionist in all pursuits, and therefore they were reluctant to define themselves within this category. P18 explained, “I think that I do have perfectionist tendencies but am maybe not a full perfectionist”. Both P116, P172 and P177 reported that they did not consider themselves “a complete” perfectionist. P172 further explained that he could not be a *complete* perfectionist because he often gave up on the activities he was undertaking. He reported:

“I wouldn't regard myself as a complete perfectionist because occasionally there comes a time when I've been doing a task (e.g. chore, coursework etc.) for a long time when I think ‘I just can't be bothered with this anymore’ and leave it. However, the next day I'll look back with regret and think ‘Why did I do that?’”.

Perhaps similarly P125 felt that there was an area in between a perfectionist and a non-perfectionist that she fits within, “I would say I am in-between. Sometimes I like things to be as perfect as they can be and others I'm not too bothered if I have tried”.

For P14, perfectionism was a state of mind that depended on the task being undertaken, “It depends on which task I am performing. Academically I do not consider myself a perfectionist however at work I feel I have the capability to do tasks to a higher standard so may take time to make it the best”. Similarly, feeling perfectionist was very much dependent on current mood for P120, who explained, “Depends on the task at hand and how much time it will take to make it perfect... it would depend what kind of mood I was in to determine how much time I was willing to spend of perfecting myself”. For P151, feeling perfectionist was about the importance attributed to the task. He explained:

“I consider myself to be a perfectionist in things that I regard as important. For example, my music performances at school I would only accept perfection, while things like some University work or my part-time job I would only accept whatever I was capable of doing”.

This specificity emerged as a recurring key theme, with reports of “not all areas” or “not in everything” commonly occurring. For some there was a certain element of negativity implied when thinking of perfectionism in general. P90 reported that she was only perfectionist “to a certain healthy degree”, and P100 felt that he was more relaxed when did not feel perfectionist, in comparison to when he did, “In scholarly areas I certainly see myself that way (perfectionist), and in work I try to avoid mistakes at all costs. However, in home life I’d say I’m more chilled out - mess doesn't faze me”. P153 felt that to be truly perfectionist was to be concerned with seeking the approval of others, and this was not an issue for him:

“I take great pleasure in doing a task to the best of my ability. However, I am aware that it is not always possible and my sense of satisfaction is not really based on wishing to gain the approval of others”.

Ultimately this may suggest that self-defining as a perfectionist is not always a reliable indicator of someone’s perfectionist behaviour. Those who may strive for perfection still may not necessarily define themselves as a “perfectionist” in general. When considering the responses of self-defined non-perfectionists, this becomes even more apparent.

### ***1.3. The non-perfectionist***

Sixty-eight participants (37%) did not identify as a perfectionist in any form across their lives. For some this stemmed from a belief that perfection was unattainable, or even did not exist at all. P101 explained, “If anything I can be the opposite sometimes and feel that there is no point in striving for perfectionism as I will never be perfect in anything I do”. P50 explained, “I strive for 'perfection', but don't really believe there is such a thing”. Similarly, when considering whether he was a perfectionist P156 reported, “Not at all, I have flaws just like everyone else, there's no such thing as perfect, but you can be the best version of yourself possible”.

This focus on the flawed aspect of humanity was also the reasoning behind P184’s consideration of himself as non-perfectionist, “I am a flawed human”. In a similar manner, P25 reasoned, “I allow myself to make mistakes”. Many participants felt that their ability or choice to tolerate mistakes was what set them apart from perfectionists, who were seen as those who could not accept them. P74 explained, “I can take criticism

and judgment however I do strive to have a reasonably high standard in my work and life". P85 shared this view, "I always try to do my best because I work hard to achieve my goals, but if some mistakes come on the way, I accept and try to learn from them". P92 reported, "I do not consider myself to be a perfectionist, although I am very organised and ambitious. However, I do make mistakes as well and know how to deal with these kind of situations".

P119 was resolute in her consideration of herself as a perfectionist, "Absolutely not. I try my best in my work and social life but I don't beat myself up about mistakes, it's how you learn. Mistakes can sometimes be embarrassing but it's best to own them and accept the consequences".

Comparing themselves to their perceptions of perfectionists was a common feature in self-defining as a non-perfectionist. For P27 it was felt that 'perfectionists' should be those who never gave up on seeking perfection, and she did not count herself amongst them:

"I try to do my best but it does not matter that much to me if I don't succeed at first. If possible, I will try again, and if not, I accept that I wasn't particularly good in that specific field, and I can live with that".

Often participants made a clear distinction between what was "perfectionism" and what was "trying your best". For whether she considered herself a perfectionist, P113 responded:

"Not really, I feel that I am always a bit messy, especially due to my ADHD when I don't take my medication. However, others think I am, especially my mother. I put a lot of effort into everything I do and try to be the best version of myself. According to others this makes me a perfectionist".

Similarly, P159 explained:

"I try my best at things, but I am generally understanding and forgiving of myself when I can't meet my own standards, though that doesn't stop it from being frustrating sometimes. I consider myself to be a bit neurotic (maybe very neurotic, actually). I like to keep things in order and tidy, and I typically like to have things planned out and kept organised. However, I personally don't feel that that necessarily makes me a perfectionist".

For these participants it seems that perfectionists in their eyes are those who go beyond trying their best, or those who must strive for something more, which makes the distinction between what is striving for excellence and what is perfectionism.

There were also those within this category who could be considered as “aspiring perfectionists”. These are those who acknowledge that they are not perfectionists but express a desire to be so. Often they lacked what they perceived to be the means to become a perfectionist. For P83 this was a lack of discipline, and for P59 it was a lack of neatness, “I would like to consider myself as perfectionist. I am trying to be one but I’m always to messy for that”.

Differing from those who consider themselves as context-specific perfectionists, P178 did not feel that striving for perfection in his areas of interest made him a perfectionist, “I only strive to be a perfectionist in the subjects that interest me. In other aspects I adopt a ‘That’ll do’ attitude”. Despite this the desire to achieve perfection remained intact. P183 elaborated considerably as to why he was reluctant to define himself as a perfectionist in general terms:

“Not generally although I do have traits of perfectionism in some aspects of my life. I look to achieve high standards in the things I do but I am aware that there are sometimes compromises to be made - such as time available not being sufficient to do something to as high a standard as I would like with unlimited time. The conflicting demands of life mean that it is very rare to be in a position to do everything to the highest standards. I feel I’m generally quite good at prioritising the things that need to be done well and those that just need done”.

## **Theme 2: Developing as a perfectionist**

When asked to consider what the main influences on their perfectionism had been, four main categories were identified: those who felt perfectionism was a part of themselves and their personality; those whose felt that their perfectionism was related to their pursuit of personal goals; those who were motivated by others to pursue perfection; and those who felt their perfectionism developed during their upbringing.

### **2.1. Part of personality**

For thirteen self-defined perfectionists (both general and specific) any influences in the development of their perfectionism were not easily identifiable, such as for P180 (a perfectionist) who revealed, “(I) don't really know....wish I did”. Some of these participants therefore concluded that perfectionism must form a part of their personality, but they remained largely uncertain of the reasons for this. Regarding this uncertainty, P172 (moderate perfectionist) explained, “It's something that's crept into my personality over the last few years through an unknown cause”. P162 (non-perfectionist) did not currently identify as a perfectionist, but used to in the past. He explained:

“I see my perfectionism as a personality trait I've always had, so it's hard to point out an influence per se, rather it seems it was something I was born with or started experiencing so long ago that I don't remember where it came from”.

Similarly P19 (moderate perfectionist), explained:

“I'm not sure what the main influences on my perfectionism are. I feel like I've been like this since I was a child and as I got older it became more prominent. I have quite high expectations of myself and so I think that influences my perfectionism a lot”.

In a similar manner P61 (perfectionist), explained, “I don't know if there are any influences in my personal life because no one in my family is particularly organised. I seemed to have brought it on myself”.

Other participants were more certain that the roots of their perfectionism lay within their personalities and who they were as a person. P39 (perfectionist) explained that perfectionism was the result of, “My personality - being a critical person, being hard on myself, feeling not good enough in many cases if I do not achieve the best”. P146 (moderate perfectionist) explained that her perfectionism stemmed from:

“My logical mind and the need to make sense out of things, and to understand them. The need to see things in a structured, neat, organised manner. I can handle chaos, mess and stressful situations just as long as they can be organised, solved or sorted out!”

Other participants felt that their perfectionism formed a part of personalities, perhaps in conjunction with other issues. For P52 (perfectionist), perfectionism was thought to be related to her obsessive-compulsive disorder. She explained, “Definitely my OCD for organisation and neatness, I can't settle until everything is tidy and is in its place and I have completed all the tasks I have set myself for that day”. This was also a part of P128’s (perfectionist) understanding, “I have recently been diagnosed with OCD behaviours. However, prior to this diagnosis perfectionism is something that has always been a part of who I am as a person”.

Despite identifying as a non-perfectionist, for P159 the perfectionist tendencies that he did have were more in line with his neurotic nature, “The fact that I'm just inherently quite neurotic, probably. It's really all my own self-set standards, I guess. I just want to demonstrate my best ability in things”. For P130 (perfectionist), perfectionism was highly related to her experiences with depression, “I have battled with depression most of my adult life, this has made my need to appear perfect worse”. P164 (non-perfectionist) felt that his perfectionism may have been the result of “Low self-esteem”, but he did not elaborate on this.

## ***2.2. Personal goals and motivations***

For other participants, perfectionism was related to their desire to do well for themselves, or served as the means to perform to a high standard. Perfection was seen as the result of self-motivated ambitions or goals. P107 (moderate perfectionist) explained, “I think I push for my own perfection as I'd like the best performance I can get”. P90 (moderate perfectionist) explained that perfectionism was the result of, “My own achievement seeking mind-set”, and P71 (moderate perfectionist) felt that perfectionism came from, “my own ambition to be good at everything I do”.

P167, who identified as non-perfectionist, nevertheless felt that his perfectionist tendencies came from, “mostly pressure I put on myself to make what I create to be the best it can”. For participants P177 and P182, the desire to do well was highly related to the goals they had for their futures. P177 (moderate perfectionist) explained, “Career aspirations. To climb the professional ladder, a high standard is required”. P182 (perfectionist) reported, “Wanting to be the best so I can have a wide range of



opportunities in the future. To feel in control of my life and whatever situation presents itself”.

P26 (moderate perfectionist) felt that she had become a perfectionist in order to avoid the negative feelings that she experienced when she did not perform to her desired standards. She explained:

“I feel incomplete when I don't live up to my own expectation. It's like I lose the happiness in my life and cannot enjoy myself in anything I do. That's why I try to perform well in those activities that I consider valuable”.

Similarly, P108's (moderate perfectionist) perfectionism was mostly concerned with her appearance. She reported, “I also feel beautiful when I've done my make up to my standards, if I haven't done something right then I feel ugly all day and it just ruins my mood”. The need to avoid results that were not perfect or as desired was also a concern for P72, despite identifying as a non-perfectionist in general, “My own opinion on my artwork is what influences my perfectionism, I'm critical of my end result paintings so I want them to be perfect or I feel they are a waste of time”.

Some felt that their perfectionism was independent of anything or anyone else, such as for P100 (moderate perfectionist) who explained that her main influence was, “Myself mostly as I'm on my own and rely almost entirely on my own pressure to motivate me”. Others more explicitly ruled out the influence of others in their perfectionist development. P121 (moderate perfectionist) stated that her main influence was, “Me - sounds selfish but it's not. No one in my life expects anything from me or pushes me as hard as I do myself”. Similarly P11 (perfectionist) explained:

“I feel it is part of my personality and I have always had an eye for detail and noticed things that other people don't notice... I don't remember my parents particularly instilling any beliefs around perfectionism in me, they always encouraged me to just try my best but weren't pushy for me to be the best at anything if I didn't enjoy it”.

P126 (perfectionist) felt:

“I think it's internal. My mum who was my main care provider never put any pressure on me to be academic... I am the only person in my family to have gone

to university. I give up on a lot of activities because I don't consider myself to be good at them, whilst other people sing my praises”.

P132 (perfectionist) explained, “My parents aren't pushy at all and are happy no matter what grade I get so they don't influence me. I am very grateful to be at university so I want to do well for myself I suppose”.

### **2.3. Social motivations**

For the third category of participants, other people played a central role in the development of their perfectionism. Some participants felt the need to be perfect for the benefit of others, in order to please or impress them. This need was particularly strong when family members were concerned.

P47 (moderate perfectionist) explained that she was motivated by, “Myself and my family. I want to make myself and them proud of the things I do”. Though P76 identified as a non-perfectionist in general, the perfectionist tendencies that she did have were influenced by, “My daughter and my partner. I like to feel they are happy with everything I do for them or proud with what I am doing for myself”. P90 (moderate perfectionist) explained that she was motivated by, “the prize of making my parents proud”, and similarly P80 (non-perfectionist) reported that perfectionism was influenced by, “My desire to repay my family, in particular my parents, for the life they have given me and to make them proud”. Pride can be seen to play a strong role within these motivations, with perfectionism serving as a means to make their families proud of them and their achievements.

For other participants, the need to be perfect was related to their career aspirations, or how they wished to be perceived within a professional capacity, such as for P138 (non-perfectionist) who expressed, “A wish to be seen as professional”. Performing to a high or perfect standard may help them to be seen by others the way they wish. P21 (moderate perfectionist) explained, “I want to show that I am capable of doing my work”, and P182 (perfectionist) expressed a desire, “For people to recognise me as someone competent and dependable”. P137 (perfectionist) reported, “Wanting to be successful and respected”. For P152 (non-perfectionist) the need to perform perfectly within his professional life was more reflective of his concerns over the opinions of

others. He explained, "I feel like I have something to prove to people and that I need to constantly fight to show people that I deserve the position I am currently in".

For other participants, the need to be perfect was more reflective of a desire to live up to the perceived expectations of others, or came from a fear of letting others down if they did not perform perfectly. P122 (moderate perfectionist) explained, "I don't want to let people down who have helped me get to where I am". P145 (perfectionist) explained:

"People around me always say that I'm really smart and do everything very good, I don't want to disappoint them. The same is with my family, I was always the best. My siblings were very good at class I wouldn't like to feel worse, so I'm trying to keep going but it makes me frustrated sometimes".

P107 (moderate perfectionist) explained:

"Lecturers influence me but in a good way. I hate discovering mistakes after I have submitted a piece of work. I always have the urge to email the lecturer with an explanation! I feel as though I'd let them down if they graded work of mine that wasn't a good standard. My parents want me to do well and I know they have high hopes for me during uni".

Similarly, P64 (moderate perfectionist) reported, "Fear of losing respect from an authority figure (mainly teachers) or from my peers". P94 (moderate perfectionist) acknowledged that these perceived expectations were an issue despite her awareness that they may not really exist, "feeling like I have to live up to others' expectations, even if they don't even have any".

For others, perfectionism was related to a desire to compete with others in the hopes of outperforming them. P170 (non-perfectionist) reported, "I like to perform better than my colleagues at work or my competitors at sport". For P12 and P111 this came from a dislike of seeing others perform better than them. P12 (moderate perfectionist) reported that, "seeing peers doing better than me", was a motivation for perfection, and P111 (moderate perfectionist) explained "Looking at other people's work and thinking they are better so I need to get better too to compete".

Some participants provided some insight into why these competitive urges may have developed. P45 did not identify as a perfectionist herself, but acknowledged why others might take their competitiveness to a perfectionist level. She explained:

“I think people are too competitive in life because there are too few jobs for too many people so we have to compete with others in society. At university I am obviously competing with 100+ other graduates for work. Also you cannot advance further academically without good grades so I think I aim high academically, but not to the point where I am a perfectionist about it”.

P27 (non-perfectionist) felt that the competitive nature of perfectionism may come from a tendency to compare oneself unfavourably to others, or a need to keep up with others:

“I feel like the social environment of a person is a major influence. For example, again at university, if everyone else around you finds the subject easy or gets good grades, you feel like it shouldn't be as hard as it might be for yourself, so you start doubting yourself and therefore make yourself work harder and perfect your work”.

Other participants felt that their need to be perfect came from a heightened concern over the opinions of others, particularly related to a fear of being negatively evaluated. P103 (perfectionist) explained, “I have a fear of embarrassing myself in front of others, of being mocked or teased. This comes from a background of bullying I believe”. P50 (non-perfectionist) reported her perfectionism came from, “Low self-esteem, and I care too much about what others think of me”. This was similar to P123 (moderate perfectionist), who explained, “I am very self-conscious which plays a huge part when I get obsessed over things I have done wrong”. P143 (perfectionist) reported:

“The main influences are fear of failure, getting something wrong and having an impact on other people (in particular their feelings) or being perceived as not being able to do something/being ridiculed for not being able to do something”.

## **2.4. Upbringing**

A final group of participants felt that their perfectionism had developed during their upbringing, either as the direct influence of perfectionist family members, or as a response to the performance standards demanded of them. Although these explanations are heavily related to the influence of other people, as with sub-theme 2.3, these participants more explicitly identified the role upbringing, and as such, this was determined to be a separate theme.

It was assumed by some that their perfectionism was a trait that they had inherited from their parents, such as for P17 (perfectionist), who reported, “My Father built model radio controlled boats and planes - he was also a toolmaker to trade. I assumed I inherited it all from him”. P183 (non-perfectionist) explained:

“As long as I can remember I have been critical of my own work/performance, rarely, if ever, satisfied by the outputs. I suspect that I inherited some of these traits from my father who has a similar outlook although our careers have been in very different fields. We are similar in our approach to things like gardening, DIY etc., where we find even small imperfections irritating and focus disproportionately on the defects rather than the overall output”.

Perfectionism was identified as a common trait within P106’s (perfectionist) family. She reported, “My mum is a perfectionist as well and I think I just learnt it from her. Almost the entire side of my mother’s family has been diagnosed with some kind of OCD and most commonly perfectionism”.

Like, P106, some felt that they had been taught to behave in a perfectionist way by their family members. P67 (non-perfectionist) explained that her perfectionism developed due to, “observing my mother cleaning all day twice a week and having this aim of how I should follow out this. Observing and being taught by my mother how to be organised”. Similarly, P147 (perfectionist) explained, “Neatness - I was always taught to put things back where they belong, tidy away things I'd been working with, etc. Everything has its place”.

For other participants, perfectionism was a conscious choice on their part, as growing up with perfectionist family members inspired some participants to emulate their behaviour and achievements. P44 (perfectionist) explained, “My mother is a large

influence, and she always appeared to be able to do things perfectly, so I modelled myself after her to the extreme". Similarly, P92 (non-perfectionist) reported, "My grandmother, who was an extremely hardworking and stunning woman all her life, made me become a very disciplined person". P185 (perfectionist) explained:

"the obvious one is my dad; he's also a perfectionist and it made him very unwell in later life. My Dad is the biggest man I know (I mean respect not physical size) and I realise as I get older I am getting more like him, or perhaps emulating him. This pleases and worries me considerably".

However, for P83 (non-perfectionist), the desire to emulate the perfectionism of family members was more of an attempt to live up to their high standards. She explained:

"Both my parents are very intelligent, educated people and I have three older siblings who have all been successful in different areas. I think I strive to live up to them so as to not be seen as a failure".

The development of perfectionism was identified by some to have largely negative roots. Participants here described feeling as though they had to pursue perfection in order to gain the acceptance of a critical parent. P63 (moderate perfectionist) explained that she felt, "An unsaid feeling that I was never quite good enough for my mother". Similarly, P117 (perfectionist) expressed, "not feeling that anything was good enough". P99 and P133 described a critical step parent as a main influence on their perfectionism. P99 (moderate perfectionist) told of, "Being put down by a step parent when I was a young child. Nothing I did was ever good enough. I was also bullied in high school". P133 (moderate perfectionist) explained:

"The influence of my step mother in particular has had a big part to play in my vision of perfectionism. My step mother was very critical and judgmental of me, and of others, in almost every way. The appearance of others, their homes, appropriate behaviour, mannerisms and attitude".

In a similar vein, P123 and P103 felt that perfectionism was expected of them, or that the development of perfectionism was almost demanded. P123 (moderate perfectionist) revealed, "My parents always had high standards in me and wanted me

to succeed academically and in my extra-curricular activities". Similarly, P103 (perfectionist) explained,

"My father has always had high expectations of me since I showed a lot more intellectual talent than others in my family since a young age. It has always been assumed that I will be nothing but the best, failure was never an option in his eyes".

### **Theme 3. Accepting imperfections**

For many self-defined perfectionists there were certain times or occasions where perfectionism became less of a concern. The majority of these instances took place when a perfect performance was less relevant to the situation because there was no significant consequence of being imperfect. For others, the acceptance of imperfections only occurred when they were forced to accept the limits of their ability. In these situations, perfectionists reported having to lower their standards or prioritise other more important tasks and events. For other participants, however, perfectionism was always relevant, and they reported that there was never a time when perfectionism was not a concern in their minds.

#### ***3.1. No significant consequence of imperfection***

For most participants, the desire to be perfect was only reduced during the times when there was no significant outcome to pursue, or no real consequence of displaying imperfections. These situations were relative to personal importance.

Some participants reported a reduced concern for perfection during interactions with trusted friends. P34 (perfectionist) referred to these as "very specific 'safe' people". P37 (moderate perfectionist) explained that she was less perfectionist, "with my friends and family and people I am comfortable being myself around, knowing there is no competition". P82 (moderate perfectionist) explained that, "when I am at home, I am accepted for being myself, flaws and all". Similarly, P18 (moderate perfectionist) explained, "I would say that I am less concerned with perfectionism when with my family as they have known me for so long so should know me and my flaws". Perfection seemed

to be less of a concern because it was not expected of them. Additionally, there were no real consequences for displaying imperfections, as the people concerned were trusted and free of judgement.

For other participants, perfectionism was only irrelevant when they were deliberately taking time away from the demands of life to relax, which forced thoughts of perfection from their minds. P44 (perfectionist) explained, "I am only unconcerned [with perfection] when doing something entirely for myself that won't be seen by others, such as playing video games or sketching for myself". Similarly P89 (moderate perfectionist) explained, "When I have days off from work or academic life I can have a day or two to recharge and not have to think about any of my responsibilities related to either work or uni". Allowing time for relaxing was also important for P77 (moderate perfectionist), who reported, "In my personal life being perfect is not so much of a concern. I try to relax and be myself in my own time". P103 (perfectionist) admitted that when she did relax, "It's nice to let go and not care".

### ***3.2. Forced to accept the limits of ability***

For some, a reduced concern for perfectionism only occurred when they were forced to accept the limits of their ability. For some participants this meant admitting that they were trying to accomplish too much at one time, and had to prioritise the tasks or issues that required the most attention. Those that required less attention were sacrificed.

P148 (perfectionist) explained that she had to prioritise her son over her own perfectionist strivings, "In my personal appearance (I am less of a perfectionist) since I have had a son. His needs are greater than mine and I do not mind that others know that".

P185 (perfectionist) also prioritised his family over his perfectionism, and provided some insight into this:

"When there are time pressures I can recognise that things don't have to be perfect (although I'd like them to be), particularly when this may impact on the next activity. An example may be finishing off a piece of work so that I can go home and see my wife and children. Having children has really helped me become less



of a perfectionist, although I want them to be perfect, I don't want them to be a perfectionist like me”.

Time constraints were reported to play a large part in reducing the need to complete tasks to perfectionist standards. Perfectionists may have to sacrifice their desired standards of performance in order to complete something on time. P14 (moderate perfectionist) explained, “If there is not enough time to do your work to a perfectionist standard and I must just get by through making it presentable”. Similarly, P124 (moderate perfectionist) reported, “I have laid bricks and I could have spent longer making sure they were spot on, but I would never have gotten finished”.

For other participants, pushing themselves to the limits meant that they were too exhausted to continue pursuing perfection. P68 (moderate perfectionist) reported that she would only stop, “When I am too ill to continue”, which was similar to P22 (perfectionist) who stopped, “When I am not well because my health comes first”. P26 (moderate perfectionist) also only stopped, “When I am tired and overwhelmed. When I feel I've done enough and I deserve a break”.

Some participants acknowledged that there was only so much that they could do and that sometimes they had to accept a standard below what they desired. P126 (perfectionist) explained:

“When I had depression I became a fan of ‘good enough’ and realised the value of this. Now I try to practice 'good enough' in all areas of my life but it's a battle. I am less of a perfectionist with my appearance, I make the most of what I have with the acceptance that this is the body I was given and it ain't gonna get any better...however much I want it to. Acceptance of this has bought peace”.

P17 (perfectionist) reported that, “There are odd times when I have tried and failed and for the sake of sanity just have to accept things can't always be perfect”.

### ***3.3. Always a perfectionist***

The final group of this theme were those for whom perfection was always a concern. For these participants, the need to be perfect occurred across most dimensions of life that they felt there was never a time when they were not concerned with perfection.

P30 (perfectionist) stated, "I'm never less concerned with being a perfectionist", in a similar manner to P90 (moderate perfectionist), who stated, "I think every aspect of my life reflects at least a bit of my perfectionism". P141 (perfectionist) rather jokingly responded that she was only less concerned with perfectionism, "When I'm asleep". Providing some insight, P23 (perfectionist) revealed, "I think a true perfectionist feels this throughout their entire life and so finds it hard to 'switch off'. It can come into something as simple as wrapping a present or ironing a shirt, it's always there". P52 (perfectionist) expressed that:

"In all honesty, it's pretty much a constant in my mind, and there are only very few occasions where I can switch it off, usually when I am away on holiday - where there is nothing that 'needs done', so to speak".

#### **Theme 4. Evaluating perfectionism**

This theme deals with the evaluations that participants made of perfectionism, determining whether it was a positive or negative trait. Perspectives fell in to three main categories: those who felt perfectionism was generally positive; those who felt perfectionism was generally negative; and those who felt that perfectionism contained both positive and negative aspects which needed to be strictly monitored or kept under control in order to maintain a healthy mental wellbeing.

##### ***4.1. Positive aspects of perfectionism***

Seventeen percent of participants decided that perfectionism was a positive force overall. Participants within this theme were those whose evaluations contained only positive aspects of perfectionism, with no mention of negatives. Generally the aspects of success, achievement, and pride in accomplishments were emphasised. There was agreement amongst these participants that if perfectionism could help to excel one's performance or aid with the achievement of ambitions then it was a beneficial trait to possess.

For P122 (moderate perfectionist), aiming for perfection meant that a good result would be reached even if you were to fall short of the desired standard, "it's the drive

which makes you successful in life, as you aim for the best so even if you do not get there it'll still be a good outcome". P49 and P109 also emphasised this element of reaching full potential. P49 (moderate perfectionist) explained, "It makes you do something to the best of your ability or better", and P109 (perfectionist) reported, "Perfectionism encourages me to want to be the best, to want to achieve more. Also, it makes me want to improve myself and my abilities in order to reach excellence or perfection". Similarly, P147 (perfectionist) felt that perfectionism allowed her to realise she was capable of more than she may have thought:

"For me it's a positive as I've always taken pride in my work/things I do/make, and setting myself high standards has only further pushed me to succeed and pushed me beyond limits I thought I had to get the absolute most out of every experience and opportunity".

P44 (perfectionist) explained that perfectionism was a positive trait to possess because it allowed her to meet the performance demands that modern society held, "It is a positive trait. If I was not a perfectionist I would be satisfied with mediocrity, which is never acceptable in modern day society that is so heavily focused on competition". P182 (perfectionist) could not think of any negative consequences of this mentality, "It doesn't have an adverse effect on my life. In fact it helps me become the best I can possibly be". A similar mentality was displayed by P149. Despite identifying as a non-perfectionist himself, he reported, "To me it's positive. I try never to be negative in everything I do, whatever that may be I try to be positive, even if I underperformed I only see the positive side".

#### ***4.2. Negative aspects of perfectionism***

In comparison, 15% of participants felt that perfectionism was a negative trait to possess. In the non-perfectionists there was a concern real 'perfection' did not exist. P156 (non-perfectionist) felt that, "aiming for a standard one can barely reach and be consistent with it, it just isn't feasible". Similarly P45 (non-perfectionist) explained:

"I think of perfectionism as a negative trait, or it is associated with negativity. No one can ever really achieve perfection in everything they do or else it would cause

a lot of stress and worry. When I first thought of the word I thought of someone striving for something they can never really reach”.

This reasoning lead P10 and P50 to feel as though perfectionists may therefore be wasting their time by pursuing these unattainable standards. P10 (non-perfectionist) felt that perfectionism may result in, “Spending excessive amounts of time on trivial activities”. P50 (non-perfectionist) explained, “For me it is quite negative as it can be a waste of time (re-doing things if they are not 'right') and because it is often influenced by what others might think... It is not possible to please everyone”.

Other non-perfectionists were concerned that perfectionism may be too overwhelming, and take over the lives of those concerned. P58 expressed, “I believe it is a negative trait as it can be obsessive and overwhelming for some people. It affects many people everyday life as they spend too much time doing things over and over rather than moving on”. Similarly P69 was concerned that, “Setting too high standards can make you focus purely on the end goal and you forget that you have other important things in your life, e.g. family”. P76 explained, “I think it's good to strive to be good at the important things in your personal life, but I don't think you should let being a perfectionist take over your entire way of living”.

Several non-perfectionist proposed that striving for perfection presented a higher risk for adverse effects to mental health. P35 said, “It is good to want to do your best in everything you do, but when the goals set are often not achievable, then this makes a person extremely stressed constantly and reduces their self-esteem”. P69 felt that, “It can also lead to many disappointments and anxiety when you do not achieve what you want”. As P184 expressed, “if perfectionism is not achieved then the only other outcome is failure”.

Of course, these arguments only represent the perceptions of perfectionism by those who may have no personal experience with the trait, but in fact many of these issues were also the concerns of perfectionists themselves. Many perfectionists were aware that the standards they were pursuing may not actually be achievable. P30 (perfectionist) admitted, “The standards I set for myself always set me up for failure”. P126 (perfectionist) reported, “you are forever chasing something that is unachievable,

which in turn brings dissatisfaction, a feeling of never being good enough, like you are always falling short of the mark". P64 (moderate perfectionist) warned that:

"I feel it serves only to make someone constantly feel like they are not good enough. It is not something which can be shaken off and can hold onto people for their whole life, meaning that someone could live their whole life being unhappy with themselves for not being able to live up to unattainable standards".

Perfectionists were also concerned that their pursuit of perfection could at times become overwhelming. P34 (perfectionist) felt that her perfectionism, "hinders progress 99% of the time". Similarly P88 (moderate perfectionist) felt that, "I can sometimes become obsessed with being perfect and lose myself from time to time". P172 (moderate perfectionist) explained that, "Constantly running at 100% and fretting about whether that's good enough is certain to lead to burnout sooner or later".

P134 and P180 felt that their perfectionism held them back from pursuing other interests. P134 (perfectionist) revealed, "it holds me back from just going out there and doing things as I fear I will fail". P180 (perfectionist) explained, "It's stopped me enjoying all sorts of things that I could have with half the ability!"

#### ***4.3. Monitoring and controlling perfectionism***

The majority of participants (68%) felt that perfectionism was neither wholly positive nor negative, but rather that it contained an element of both aspects. Importantly, it was proposed that perfectionism was something that needed to be carefully monitored and controlled so that the negative aspects did not begin to outweigh the positives.

P5 (non-perfectionist) expressed that, "if let to get out of hand perfectionism can become an issue causing difficulties maintaining such standards". Similarly P43 (non-perfectionist) warned that perfectionist must not be "taken to the extreme". For P61 (perfectionist) this 'extreme' was the risk that perfectionism, "could get too far and develop into a serious case of Obsessive Compulsive Disorder which could take over your life".

The majority of participants were concerned that perfectionism always posed the risk of adverse effects to mental health, and that keeping perfectionist tendencies down to a moderate level was the key to balance. P15 (moderate perfectionist) explained:

“I think perfectionism is needed up to a certain extent. When working on something, you need to have high expectations to make the most out of yourself, however, always wanting everything to be perfect (personally and professionally) I think is a mistake. It makes people stressed most of the time for things that are not worth the hassle. Knowing what matters to yourself and being a perfectionist in that specific area is the key to success”.

P11 (perfectionist) proposed:

“It can be positive so that people strive to reach goals and do the best job they can but can also lead to comparisons between themselves and other people which is when negativity can occur. There is a healthy level of perfectionism but it is perfectly acceptable to make mistakes and learn from them”.

Similarly P63 (moderate perfectionist) explained that, “It is positive only when it is not overwhelming and is under control. Good standards are a good thing, but only if you accept the happiness that being good at something should bring”.

### 3.4. Discussion

The aim of this study was to gain a more detailed insight into the personal experiences and social perceptions of perfectionism. This was carried out using online open-ended questions examining six main areas: the aspects that tend to be commonly emphasised within definitions of “perfectionism”; the criteria used when self-defining as a perfectionist; the relevant activities or areas of life that perfectionism is pursued within; the situations in which people are less concerned with seeking perfection; the main influences in the development of perfectionism; and the evaluations that people make of perfectionism as a trait.

The current study was able to explore the common understandings of perfectionism. It was found that participants referred to very different aspects of perfectionism when they defined it as a unique construct. Eighteen criteria were generated from these definitions, each emphasising a different aspect. Many of these were in line with previous research. For example, the intolerance of errors and flaws; the setting of high standards; and the tendency to be highly self-critical have each been found to be typical defining characteristics of perfectionism (e.g. Burnam et al., 2014; Frost et al., 1990; Hewitt & Flett, 1991; Stoeber et al., 2013). There were also some behavioural aspects referred to that previous research has found to be characteristic of perfectionist behaviour, but not necessarily a main defining feature. These include aspects such as the attention to fine details, and greater lengths of time spent on activities. These aspects are common in the behaviour of perfectionists, who have been found to spend excessive amounts of time completing activities to a desired standard (Stoeber, Chesterman & Tarn, 2010). The self-reports of perfectionists within the current study also made reference to engaging in these particular behaviours in order to achieve perfection within the related activity e.g. coursework, paintings. The identification of this characteristic as reflective of perfectionism therefore contains some accuracy.

Yet Greenspon (2014) proposes caution when defining perfectionism by aspects such as the heightened attention to detail due to the overlap between perfectionism and striving for excellence. It was argued that those striving for excellence also display this tendency to conscientiously put a great amount of time and effort into their pursuits,

but are not necessarily perfectionists. Perfectionists were instead proposed to be those who possessed this tendency alongside a fear of mistakes, meaning that they possess both positive and negative motivations. The results of the current study are only demonstrating the criteria that come to mind when participants define the concept, and these may contain elements of bias in that they only stress the negatives or the positives. Any aspect of perfectionism when taken on its own is not enough to capture what it means to be a perfectionist, as the behaviours and thought patterns of perfectionists interact within many different ways (Smith, Saklofske, Yan & Sherry, 2015), containing both positive and negative elements.

The variation in the characteristics used to define perfectionism within the current study may perhaps be summarised by Greenspon (2014), who states that perfectionism has “many faces: there is no perfect perfectionist” (p.987). Researchers agree that it is a complex trait with many behavioural variables and patterns (e.g. Flett & Hewitt, 2014; Hill et al., 2015), and the criteria of perfectionism relevant to any perfectionist may be very different to the next. However, there tends to be characteristics and behaviours that are more common than others (Greenspon, 2014), such as the setting of high standards and an intolerance of errors.

By far the most common way of defining perfectionism within the current research was that it was the pursuit of perfection across *all* aspects of life, reflecting a very domain-general perception of the trait. Certainly this would support the view of Greenspon (2008), who suggested that perfectionists are those who are always motivated to pursue perfection and are never accepting of anything less than perfect. This contrasts with some of the self-reports of perfectionists themselves in study 2. For 31% of participants, the criteria used to self-define as a perfectionist were domain-specific in nature, as the areas of life reported to be relevant to the pursuit of perfection were of a narrow focus. Interestingly, some of the “context-specific” perfectionists within the current study excluded themselves from the overarching category of the “general-perfectionist” because their perfectionism was of this much narrower and specific focus, such as within an academic or professional domain only. They suggested that “true” or “complete” perfectionists were those for whom the pursuit of perfection was a constant concern across all domains of life. What this finding can show is that the



most common social perception of a perfectionist is that of someone pursuing perfection within every aspect of their life, whereas the reality may be different.

The second most common understanding of perfectionism was that of an intolerance of errors or flaws. Study 1 found that lower emotional stability (indicating those who were more neurotic) was the strongest predictor of perfectionism across all three perfectionism measures (FMPS, APSR and PSPS) in both males and females. Lower emotional stability is indicative of those who are more prone to worry and anxiousness, and may be those more concerned with avoiding negative consequences (Dunkely et al., 2014). This may further support the suggestion that perfectionism, in particular the concern over mistakes, is an extension of lower emotional stability, or more likely to occur in an individual who is more neurotic.

Additionally, participants were less concerned with seeking perfection when there were no significant consequences of displaying imperfections. This included situations where there were no critical audiences, such as with family or friends. Participants described feeling less pressured to be perfect and less judged within these safer, more comfortable environments. However, with others who are less known to them there exists a potential for negative evaluation or judgement, and this can increase feelings of worry and fear. This again suggests an overlap with lower emotional stability, which can result in increased worry over negative social interactions (Dunkely et al., 2014).

The third most commonly referenced understanding of perfectionism was that of organisation, neatness and orderliness. Study 1 found that higher conscientiousness was a strong predictor of higher perfectionism, particularly in females. As conscientiousness refers to organisation and thoroughness (Goldberg, 1993), this finding would support the suggestion that perfectionism may be an extension of higher conscientiousness. Those with higher conscientiousness, who tend to show a preference for organisation and carefulness, may be those more naturally disposed towards seeking perfection and avoiding errors. Taken together, the emphasis on both the intolerance of errors and flaws, and the preference for organisation, neatness and orderliness is in line with previous understandings of perfectionism (e.g. Frost et al., 1991; Hewitt & Flett, 1991) who suggest that perfectionism contains both of these elements.

The most commonly reported area that perfection was pursued within was academia. It must be noted here that the high prevalence of academic perfectionism is not

unexpected, given that the sample consisted of 80% students. Also, Verner-Filion and Gaudreau (2010) point out that within an academic setting, perfectionism may be valued and encouraged. Given that performance levels are critical to the successful achievement of coursework and exam grades, the setting of high standards within academia may not be uncommon. Many researchers have also tended to sample from a student participant pool, so it may be that future research could measure from a non-academic sample in order to compare findings in relation to domain-specificity.

Academic perfectionism was followed by seeking perfection in a professional environment. The motivations for this are similar in nature to academic perfectionism in that high standards of performance are required in a work environment. This suggests that the majority of participants felt perfectionistic within environments where there may be a significant outcome of poor performance, such as lower academic grades, or failing to perform to the standards required of their job roles.

The third most common area of pursuing perfection within was when impressing or performing for others, suggesting that there is a social element to perfectionism. This again may be further supported by the reports that participants were less likely to feel perfectionist when the potential for social judgements or evaluations were reduced or eliminated, such as with family and friends. This suggests that some perfectionists may be motivated to present themselves in a favourable light to others in order to receive praise or recognition. The Perfectionistic Self-Presentation Scale (PSPS) deals with this element of presenting a picture of perfection to others. Study 1 found that higher scores of self-presentational perfectionism were predicted by lower emotional stability scores, suggesting that those more prone to anxiousness and worry may be those more concerned with avoiding any situation that may present them in a negative light to others.

In further support of a social element of perfectionism, participants also reported that there were social motivations for pursuing perfection. These included positive motivators, such as making others proud, and receiving recognition, but also more negative motivators, such as avoiding embarrassment or self-consciousness in relation to shortcomings or perceived failures.

The results of the current study will be discussed further within section 3.10. An additional study (study 3) was carried out in order to further explore the definitions of perfectionism provided by participants (detailed within table 14). As highlighted within the introductions of chapters 1 and 3, there is a lack of a formal definition of perfectionism. Exploring the ways in which people themselves understand and define perfectionism may help to contribute to this area. These results are presented within section 3.6. Following this, a fourth study using face-to-face interviews with self-defined perfectionists was then carried out in order to further explore the influence of perfectionism in a more detailed way (*see section 3.8 to 3.10*).

### **Study 3 - Examining definitions of perfectionism**

The analysis of the qualitative data gathered from study 2 (*see section 3.3.1*) found that people defined the term “perfectionism” in many different ways that covered a range of factors, with eighteen categories identified. It seemed appropriate to design a follow-up study which would serve the purpose of discovering which of these definitions generated the most consensus. As previous chapters have explored, the lack of an agreed definition of perfectionism is a current concern for researchers. Examining how people themselves think of the term ‘perfectionism’ can help to build upon an understanding of the uniqueness of this construct. An additional study was designed to explore this research question by collecting together the definitions generated by participants and asking other participants to choose the ones that best fit their understanding of perfectionism. No specific hypotheses were generated for this study.

### **3.5. Method**

#### *3.5.1. Participants*

Seventy participants in total took part. Participants were recruited from the student and staff population of Abertay University, Dundee, and of those known to the researcher using convenience sampling. Abertay University’s Facebook page was also used to advertise for participants. There were 22 males and 48 females, with ages ranging from 17 to 54 years (mean age of 27.54, standard deviation of 9.86).

#### *3.5.2. Item Development*

The study presented participants with a list of 18 potential definitions of perfectionism. The development of these definitions was a three-step process. Step one took the individual definitions of perfectionism provided by participants in study 1 (which were gained from responses to the question ‘Please provide your own definition of perfectionism’) and then analysed these for common themes. This involved identifying the definitions that were similar in nature, or shared common principles, and grouping them together. Step two generated an overall theme for each of these groupings. Step three generated a general definition of perfectionism from each theme. This process

occurred until all of the data set had been grouped into themes. Generally, a theme was formed from three or more similar responses. In total, 18 definitions were formed. Table 17 details this process.

### 3.5.3. Materials & Apparatus

The study was created using google docs, available in an online format accessed via a weblink. An information sheet (*see appendix 10*) was provided on screen prior to initiating the study, which detailed the main purpose of the study, the content (two multiple choice questions), and issues of consent and confidentiality.

An essential informed consent sheet requested the participants consent before the study would begin. A (*see appendix 11*). Participants were prompted to click the 'Yes I give my consent button' to take part. The 'No I do not give my consent' prevented the user from accessing the study and prompted them to close the browser.

Demographic information collected included gender, age, programme of study, year of study, and occupation, where applicable.

Question 1 presented a list of 18 definitions of perfectionism, generated from the results of study 2. Participants were instructed to select three examples that they felt were the *best* descriptions of perfectionism, according to their own understanding of the term. They were informed that there were no right or wrong answers. Question 2 presented the same list again and asked participants to choose the three examples that they felt were the *least* descriptive of perfectionism, again according to their own understanding of the term. Example items from this list of definitions include '*Perfectionism is the intolerance of any errors or flaws*', '*Perfectionism is about the fear of failure*', and '*Perfectionism is about a high concern for the opinions of others*'.

A final debrief sheet was displayed at the end of the study to describe the main purpose of the study (*see appendix 12*)

### 3.5.4. Procedure

Participants accessed the study online. The information page was accessed first which provided an outline of the topics to be addressed and the necessary time commitment. This was followed by confidentiality and ethical issues. Informed consent was then gained from the participant by clicking on the '*Yes I give my consent*' button, which was

an essential requirement before the study would begin. The '*No I do not give my consent*' button prompted the user to close the webpage and end the study. Demographic information was then collected. This was followed by the two multiple choice questions. Once completed, a final debrief screen thanked participants for their time and explained the purpose of the study. Participants were also provided with contact details for the researcher and supervisory team should they require any further information regarding the study.

**Table 17**

Three-step process for the generation of the final definitions of perfectionism from participant responses

	<b>Example evidence from participant responses (Step 1)</b>	<b>Theme generated from evidence (Step 2)</b>	<b>Definition generated from theme (Step 3)</b>
1	<p>“Perfectionism, in my view, is always striving for things to be in one particularly neat and organised manner”</p> <p>“Doing things as best as possible in an organised and orderly fashion”</p> <p>“When a person needs to have everything sitting the correct way or everything in its own place, nothing can be untidy”</p>	Organisation, Neatness and Orderliness	Perfectionism is about a high preference for organisation, neatness, and orderliness.
2	<p>“No errors or mistakes are tolerated”</p> <p>“Striving to never make mistakes and not accepting anything less than perfect in life”</p> <p>“Getting things perfect all the time leaving no room for errors”</p>	Intolerance of errors or flaws	Perfectionism is the intolerance of any errors or flaws.
3	<p>“When absolutely everything done is 100%”</p> <p>“Wanting everything to be absolutely perfect”</p> <p>“Someone who needs to have everything perfect all of the time”</p>	All aspects of life must be perfect	Perfectionism is about having everything perfect across all aspects of life.

4	<p>“an attitude to accomplish the highest possible standard you can in aspects of your life”</p> <p>“Someone who attempts to complete tasks to the higher standards”</p> <p>“Having extremely high standards in certain aspects in your life”</p>	<p>Specific aspects of life must be perfect</p>	<p>Perfectionism is about ensuring only specific aspects of life are perfect.</p>
5	<p>“Like things to be done to the highest standard”</p> <p>“you set really high standards for yourself”</p> <p>“the individual finds it very difficult not to do a task to a very high standard”</p>	<p>The setting of high standards</p>	<p>Perfectionism is about setting very high standards of performance.</p>
6	<p>“Doing everything as best as it can be done given the circumstances”</p> <p>“Doing something to the best of your ability”</p> <p>“Something that you have tried your best to do”</p>	<p>Performing to the best of ability within limits</p>	<p>Perfectionism is about performing to the best of your ability, within limits.</p>
7	<p>“ensure that something is completed to way beyond satisfactory standard”</p>	<p>Striving to achieve perfection without limits</p>	<p>Perfectionism is about striving to achieve perfection without any limits.</p>



“Perfectionism is when somebody strives to have everything exactly how it is supposed to be in their work or standard of living”

“Perfectionism is normally going beyond what's required”

- 8 “lots of time can be spent over a small task to make it perfect”  
“Spending an ample amount of time trying to complete a task to the best degree I can”  
“Trying to do everything as best as I can even if it means spending more time than others”

Spending great lengths of time completing activities

Perfectionism is about spending great lengths of time completing activities.

- 9 “Routinely striving for unattainable goals”  
“constantly strives towards those standards but can never see themselves as reaching them”  
“a person who wants to always perform in an idealist way that is not even possible”

Setting goals or standards impossible to reach

Perfectionism is about setting goals or standards that are impossible to reach.

- 10 “never be satisfied of the result by thinking that is could have been better”  
“Working on every detail to the best of your abilities but the outcome still looks wrong or incomplete”

Never feeling satisfied or highly critical of performance

Perfectionism is about never feeling satisfied and being highly critical of your own performance.

“critical of mistakes”

11	“Worrying about how people judge us” “a need to seek the approval of others” “caring about others opinions”	High concern for the opinions of others	Perfectionism is about a high concern for the opinions of others.
12	“appearing without flaw to others, at all times” “Behaving in a way which you believe will please others” “people wanted to appear at their best to others”	Presenting a picture of perfection to others	Perfectionism is about presenting a picture of perfection to others.
13	“I like to be able to control a situation. This often makes it difficult to pass control to others” “Perfectionists is someone who has control over everything” “Appears able, in control at all times or able to control”	The desire for control over a situation	Perfectionism is about the desire to have control of the situation.
14	“getting the finest detail right” “Working on every detail” “A person who tends to every little detail”	Paying attention to fine details	Perfectionism is about paying attention to fine details.

15	<p>“Someone who has an obsessive need to always do things perfectly and surround himself with perfection”</p> <p>“Perfectionism is when one is obsessed with making sure everything is perfect”</p> <p>“Obsessing over small details”</p>	Obsession with achieving perfection	Perfectionism is an obsession with achieving perfection.
16	<p>“having pride in everything you do”</p> <p>“To have a strong work ethic, and be considerate/committed about the efforts you produce”</p> <p>“To be professional in my work life by offering the best of myself to others at all times”</p>	Taking pride in your performance and a strong work ethic	Perfectionism is about taking pride in your performance and having a strong work ethic.
17	<p>“The want to be seen as not a failure”</p> <p>“Perfectionism is when you are afraid to make mistakes”</p> <p>“Will not accept the possibility of failure!”</p>	Fear of failure	Perfectionism is about the fear of failure.
18	<p>“Always trying to be the best at something or be better than someone”</p>	Competing with others for higher achievements	Perfectionism is about competing with others for higher achievements.

“Looking at other people's work and thinking they are better so I need to get better too to compete”

“Someone who really wants to compete with others”

---

### 3.6. Results

**Table 18**

Frequencies of choices for the most descriptive definitions of the term 'perfectionism'

Definition	Frequency of choice
1. Perfectionism is about a high preference for organisation, neatness, and orderliness.	20
2. Perfectionism is the intolerance of any errors or flaws.	27
3. Perfectionism is about having everything perfect across all aspects of life.	12
4. Perfectionism is about ensuring only specific aspects of life are perfect.	3
5. Perfectionism is about setting very high standards of performance.	30
6. Perfectionism is about performing to the best of your ability, within limits.	5
7. Perfectionism is about striving to achieve perfection without any limits.	10
8. Perfectionism is about spending great lengths of time completing activities.	2
9. Perfectionism is about setting goals or standards that are impossible to reach.	4
10. Perfectionism is about never feeling satisfied and being highly critical of your own performance.	12
11. Perfectionism is about a high concern for the opinions of others.	3
12. Perfectionism is about presenting a picture of perfection to others.	2
13. Perfectionism is about the desire to have control of the situation.	8
14. Perfectionism is about paying attention to fine details.	19
15. Perfectionism is an obsession with achieving perfection.	30
16. Perfectionism is about taking pride in your performance and having a strong work ethic.	12
17. Perfectionism is about the fear of failure.	10
18. Perfectionism is about competing with others for higher achievements.	1

From table 18 it can be seen that the three highest choices for the *most* descriptive definitions of perfectionism are: definition 5. "Perfectionism is about setting very high

standards of performance” with 30 selections; definition **15**. “Perfectionism is an obsession with achieving perfection” also with 30 selections; followed by definition **2**. “Perfectionism is the intolerance of any errors or flaws” with 27 selections. Together this suggests that participants best understand perfectionism as the setting of very high standards that are accompanied by the intolerance of errors or flaws, and that these desires may occur to an obsessive degree.

**Table 19**

Frequencies of choices for the least descriptive definitions of the term ‘perfectionism’

Definition	Frequency of choice
1. Perfectionism is about a high preference for organisation, neatness, and orderliness.	6
2. Perfectionism is the intolerance of any errors or flaws.	4
3. Perfectionism is about having everything perfect across all aspects of life.	12
4. Perfectionism is about ensuring only specific aspects of life are perfect.	24
5. Perfectionism is about setting very high standards of performance.	2
6. Perfectionism is about performing to the best of your ability, within limits.	15
7. Perfectionism is about striving to achieve perfection without any limits.	3
8. Perfectionism is about spending great lengths of time completing activities.	24
9. Perfectionism is about setting goals or standards that are impossible to reach.	11
10. Perfectionism is about never feeling satisfied and being highly critical of your own performance.	6
11. Perfectionism is about a high concern for the opinions of others.	23
12. Perfectionism is about presenting a picture of perfection to others.	12
13. Perfectionism is about the desire to have control of the situation.	9
14. Perfectionism is about paying attention to fine details.	5
15. Perfectionism is an obsession with achieving perfection.	3
16. Perfectionism is about taking pride in your performance and having a strong work ethic.	9

17. Perfectionism is about the fear of failure.	12
18. Perfectionism is about competing with others for higher achievements.	30

---

From table 19 it can be seen that the three highest choices for the *least* descriptive definitions of perfectionism are: definition **18**. “Perfectionism is about competing with others for higher achievements” with 30 selections; followed by definition **4**. “Perfectionism is about ensuring only specific aspects of life are perfect” with 24 selections; and definition **8**. “Perfectionism is about spending great lengths of time completing activities” also with 24 selections. This suggests that participants do not think of perfectionism as being related to a need to compete with others. They also feel that perfectionism is not specific to certain areas of life, which may suggest that instead they believe perfectionism should cover all aspects of life. Participants also believe that the lengthy amount of time spent on completing activities is not enough to capture the nature of perfectionism on its own.

### 3.7. Discussion

The current study aimed to explore the definitions of perfectionism that best fit the participants' understanding. It was found that the three most frequent choices were: perfectionism is about setting very high standards of performance; perfectionism is an obsession with achieving perfection; and perfectionism is the intolerance of any errors or flaws. The emphasis on the setting of high standards and the intolerance of errors is very much in line with previous research (e.g. Randles et al., 2010; Rice & Richardson, 2014). The aspect of obsession is not typically featured as a defining characteristic of perfectionism, although some researchers stress that it is a form of obsessional style (e.g. Mallinger, 2009). Individuals with obsessive personality styles have been found to exhibit a higher degree of perfectionism (Mallinger, 2009), and those with obsessive-compulsive disorder tend to possess elements of perfectionism, in particular a higher concern for order and control (Frost & Steketee, 1997). Perfectionists who are more concerned with order and control have been identified only as those at a higher risk of developing obsessive compulsive disorder (Slaney & Ashby, 1996). Although there is this overlap between the two, Ayearst et al. (2012) stress that it is important not to confuse them as they should be considered as two distinct constructs. It is not necessarily the case that perfectionism is always obsessive in nature.

There were self-defined perfectionists within the current research that referred to an element of obsessiveness within their own personalities, but these instances were limited. Rather, the current research can propose that viewing perfectionism as an obsession is more representative of common social perceptions, instead of common personal experiences of perfectionism. It is worthy to note that Slaney and Ashby (1996) highlight that the tendency to view perfectionism as something excessive, extreme or problematic has been common within previous literature on the topic. This stands somewhat in contrast to the positivity that perfectionists have been found to emphasise within their evaluations of the trait (Mallinger, 2009), which was also demonstrated within the current study. This point will be returned to and discussed later in relation to the evaluations that perfectionists tend to make of their own behaviour (*see section 3.10*).



Also as a point of interest, the results found that participants chose the domain-general definition of perfectionism (“Perfectionism is about having everything perfect across all aspects of life”) to be more representative of the trait than the domain-specific version (“Perfectionism is about ensuring only specific aspects of life are perfect”). This conflicts with the results of study 2, which found that perfectionism can be relevant within specific areas of life only, such as for academia, professional roles, or pursuing interests, rather than all areas. This finding can again demonstrate that there may be a discrepancy between common social perceptions of perfectionism and personal experiences of perfectionism.

## **Study 4 - Qualitative interview analysis**

To further explore the individual experience of perfectionism, face-to-face interviews were carried out with self-defined perfectionists. These interviews built upon some of the issues explored within study 2 (*see section 3.3 and 3.4*), including which domains of life perfectionism is relevant within; possible origins in the development of perfectionism; and evaluating perfectionism as a unique construct. These interviews will also explore some new areas, including current motivations for pursuing perfection; the ways in which perfectionism tends to influence behaviour; and how successes and failures are responded towards. It was thought that the face-to-face format of the interviews would allow for a more detailed insight into perfectionism to be gained, where follow up questions could be asked of the participants when required. This format would also allow the researcher to seek clarification or expansion on the responses given, which the online format of study 2 did not allow for.

### **3.8. Method**

#### *3.8.1. Participants*

Thirteen participants took part in the one-to-one interviews (*see table 20*). Participants were recruited from the student and staff population of Abertay University, Dundee, and of those known to the researcher. Recruitment was selective, with only those who self-identified as a perfectionist (either in general or regarding specific areas of their life) eligible to take part in the interview. Four were male and 9 were female, with an age range of 20 to 69 years (mean age of 30.31 years, standard deviation of 14.69). By handedness, nine were right-handed, and four left-handed.

**Table 20**

Participant demographics, EHI score and direction, APS-R total score and group

<b>Initials</b>	<b>Gender</b>	<b>Age</b>	<b>EHI score</b>	<b>EHI direction</b>	<b>APS-R total score</b>	<b>Perfectionist Group</b>
<b>CK</b>	Female	20	40	Right	130	High
<b>LS</b>	Female	21	35	Right	89	Moderate
<b>ES</b>	Female	69	-10	Left	134	High
<b>AQ</b>	Female	22	-20	Left	102	Moderate
<b>LM</b>	Female	35	100	Right	106	Moderate
<b>LC</b>	Female	22	50	Right	146	High
<b>SJ</b>	Female	26	30	Right	141	High
<b>AL</b>	Female	20	75	Right	107	Moderate
<b>CR</b>	Female	42	75	Right	139	High
<b>TS</b>	Male	24	60	Right	110	Moderate
<b>CW</b>	Male	30	-70	Left	121	High
<b>JH</b>	Male	20	50	Right	101	Moderate
<b>CC</b>	Male	43	-80	Left	126	High

**3.8.2. Interview schedule development**

A review of previous qualitative research on perfectionism was conducted in order to explore the key areas that researchers had been concerned with, and the questions they had asked to explore these. During this stage, 6 key areas for discussion were highlighted based upon previous research and their relation to the interests of the current study. These key areas were: (1) self-defining as a perfectionist; (2) defining perfectionism; (3) origins of development (of perfectionism); (4) influences of perfectionism on behaviour; (5) responses to failure; (6) evaluating perfectionism. The review and development of these key areas is detailed in Table 21. Additionally, the research questions of this current study are also interested in exploring the themes of: (7) time of onset (of perfectionism); (8) motivations for pursuing perfection; (9) satisfaction with performance; (10) responses to success. Interview questions were developed to explore

these areas, such as “Can you recall when you first began thinking of yourself as a perfectionist?” (Time of onset) and “How do you feel when you have achieved success?” (Response to success). In total, 10 key areas for exploration were identified and 10 main questions developed (*see appendix 13*). The interview schedule was pilot tested with another graduate student in order to assess the clarity of the questions, the validity of the questions, and the approximate length of time needed to answer the full question list. It was decided that one of the original questions (“Can you think about a situation where you are a perfectionist and explain your approach towards the situation and the behaviour or feelings you experience during this?”) was too lengthy and difficult to remember, and so it was changed to a shorter and clearer version (“What is your thought process when approaching the tasks or situations that you feel perfectionist about?”). It was decided that a minimum of 15 minutes would be required in order to cover all of the interview questions, verbal introduction and debrief during a single session.

**Table 21**

Summary of the topics examined and interview questions used by previous research, and the questions developed for the current study

<b>Topic</b>	<b>Interview question</b>	<b>Source</b>	<b>Question developed for current study</b>
1. Self-defining as a perfectionist	Do you consider yourself a perfectionist?	Hill et al. (2015)	Do you consider yourself to be a perfectionist?
		Slaney and Ashby (1996)	
	Do you think of yourself as a perfectionist?	Egan et al. (2013)	
	Do you see yourself as being a perfectionist and having high standards?		
2. Defining perfectionism	What would you say are the main features of being a perfectionist?	Hill et al.(2015)	How would you define 'perfectionism?'
		Slaney and Ashby (1996)	
	What is the core essence of perfectionism?	Rice, Bair, Castro, Cohen and Hood (2003)	
	How would you describe perfectionism or perfectionists?		
3. Origins of development	Where do you think your perfectionism comes from?	Slaney and Ashby (1996)	What have been the main influences that have contributed to you becoming a perfectionist?
	Where do you think your perfectionist tendencies come from?	Hibbard and Walton (2012)	

	Please describe how your perfectionistic tendencies evolved	Speirs Neumeister (2004a)	
4. Influences of perfectionism on behaviour	Think of a time when you were aware of being perfectionistic and tell me about it in as much detail as possible.	Speirs Neumeister (2004a)	Version 1: Can you think about a situation where you are a perfectionist and explain your approach towards the situation, and the behaviour or feelings you experience during this? <i>(This was the original version of the question that was later changed post-piloting)</i>
	How does being a perfectionist influence your life as an athlete/dancer/musician?	Hill et al. (2015) Slaney and Ashby (1996)	Version 2: What is your thought process when approaching tasks or situations that you feel perfectionist about? <i>(This was the final version of the question)</i>
	One line of thinking about perfectionists suggests that they are neat, orderly, and take care of tasks efficiently. Another suggests there is a tendency to procrastinate or put things off until the last minute. How do these two views fit you?		
5. Responses to failure	Choose one area where you have high standards for yourself and tell me about a recent example where you failed to meet up to the standard you set yourself	Egan et al. (2013)	How do you feel when you think you have achieved less than your desired standard of performance? - Can you think of why you feel this way? <i>(If not covered in previous answer)</i> - How do you tend to deal with this?
	Considering that situation, what does it say about you as a person that you failed to meet this standard?		

What is the worst thing about the fact that you failed to meet this standard?

Do you think of yourself as a failure for not having met this standard?

6. Evaluating perfectionism

What are the positive and negative aspects of your perfectionism? (Evaluate)

Slaney and Ashby (1996)

Overall, do you consider your own perfectionism to be positive or negative?  
- Can you explain your answer?

What are the worst things about being a perfectionist?

Rice et al. (2003)

What are the best things about being a perfectionist?

Egan et al. (2013)

What would be the advantages of continuing to be perfectionistic?

What would be the disadvantages of continuing to be perfectionistic?

What would be the advantages of not being perfectionistic anymore?

What would be the disadvantages of not being perfectionistic anymore?

### 3.8.3. Materials & Apparatus

The interview schedule consisted of 10 open-ended questions covering 10 key areas: (1) Defining perfectionism; (2) time of onset; (3) origins of development; (4) motivation for pursuing perfection; (5) areas of life affected; (6) the influence of perfectionism on behaviour; (7) satisfaction with performance; (8) response to success; (9) response to failure; (10) evaluations. Example questions include ‘*How often do you feel satisfied with your performance?*’ and ‘*How do you feel when you think you have achieved less than your desired standard of performance?*’ (see appendix 13 for full list). Interviews were semi-structured, with occasional follow up questions asked to prompt participants into elaborating on particularly short answers. For example, the follow up question “does this help?” was asked of a participant who discussed a strategy for recovering from perceived failures.

To measure perfectionism as a possible comparison, the Almost Perfect Scale – Revised (APS-R) (Slaney et al., 2001) was used to calculate a total score. This was administered online, designed using google docs and accessed via a web link. This scale consists of 23 items measuring multidimensional perfectionism across three subscales: discrepancy (11 items); high standards (7 items), and order (4 items). Answers to these items were rated on a 7 point Likert scale ranging from 1 – *Strongly disagree* to 7 – *Strongly agree*. Example items include ‘*I have high expectations of myself*’ and ‘*I am never satisfied with my accomplishments*’. The scores possible range from 23 to 161 (see appendix 5). This scale was chosen as it deals with self-motivated perfectionism and evaluations of self-performance, which were well suited to the self-focused nature of the topics for discussion.

A modified version of the Edinburgh Handedness Inventory (EHI) (e.g. Edlin et al., 2015) was used (see appendix 8). This modified inventory allows for the measurement of handedness strength (in the form of a total score ranging from -100 to 100) and direction (strong left to strong right). The inventory presents 10 items for which participants must rate the hand they tend to use for the indicated activity. These items are: writing; drawing; throwing; scissors; toothbrush; knife (without fork); spoon; broom (upper hand); striking match (match); opening box (lid).

A participant information sheet (appendix 14) detailed the purpose of the study; what the participant will be asked to do; the necessary time commitment; the right to



withdraw or omit any answers; issues of consent and anonymity; and contact details of the researcher and supervisory team for further information.

An informed consent sheet (*appendix 15*) detailed the content and focus of the study; the requirement for the use of a voice recorder; issues of confidentiality, anonymity and the right to withdraw or omit any answers without explanation; and provided space for the participant to sign their initials and date. These initials were used to identify the participant within the analysis, rather than full names, in order to preserve anonymity.

A debrief sheet (*appendix 16*) informed the participant of the purpose of the study, and how their answers will contribute to research on the personal experience of perfectionism. This sheet also provided contact details for the researcher and supervisory team, as well as contact details for Abertay's Counselling service and the Samaritans, should the participant feel they need any further support in light of the issues discussed.

A voice recorder with basic record and playback functions was used to record the interviews for later transcription purposes. Microsoft Word and Excel were used in the analysis of the interview transcripts.

#### *3.8.4. Procedure*

Participants were invited along to individual interview sessions, pre-arranged via email contact. A hard copy of the participant information sheet was read and informed consent was gained before the interview process began. Each participant was asked whether they had any questions prior to beginning. To set the scene, participants were informed that they would be asked 10 questions regarding their own personal thoughts and experiences with perfectionism. Each question was asked in the same order, but participants were free to interrupt at any time to ask questions or to add further comments to any of their previous points. Participants were informed that they could stop at any time, and could choose not to answer any question if they wished. Interviews were voice-recorded for later transcription purposes. Once all 10 questions had been asked, participants were given the opportunity to discuss any issues that had arisen during the interview, or to make any additional points that the questions did not cover. Following this, participants were given a written debrief to read to finish the study. They

were then verbally debriefed and informed that their responses would be used to help build upon existing knowledge of the personal experiences of perfectionism.

### *3.8.5 Data analysis*

Data analysis followed the grounded theory approach developed by Strauss and Corbin (1998). To begin with, each recorded interview was transcribed verbatim. The data set was read several times to allow the researcher to become familiar with the responses of each participant. Emerging patterns were established through substantive line by line coding, which analysed the participant responses for recurring themes and patterns. For example, similar responses towards failure were grouped together into sub-themes, and those differing were presented in comparison. These sub-themes were then analysed for over-arching themes. 7 main themes were formed: Domain type; origins of perfectionism; current motivations for pursuing perfection; the perfectionist approach; response towards success; response towards failure; evaluating perfectionism.

Selected quotes were presented verbatim unless slight alterations were required. This included any instances where personal names were used by the participants, which were replaced with generic identifiers. For example, an instance where a participant referred to her husband's first name was removed and referred to generically.

A measurement of perfectionism was taken using the APS-R, to serve as a comparison to the self-reports given. The range of scores, from 23 to 161, were split evenly into three groups to determine low-range scores indicating a low scoring perfectionist (from 23 to 68), mid-range scores indicating a moderate scoring perfectionist (from 69 to 115) and high-range scores indicating a high scoring perfectionist (from 116 to 161) All participants scored within the mid to high range (*see table 20*).

As with study 2, a measure of handedness was taken as a possible source of further analysis. The examination of the data again revealed no significant differences between left and right handers, with similar themes emerging in both groups. It was decided that there were no observable differences occurring between the two groups in terms of a possible influence of handedness.

### 3.9. Results

**Table 22**

Themes and sub-themes generated from participant interviews

Theme	Sub-theme
1. Domain type	1.1. Domain-specific 1.2. Domain-general
2. Origins of perfectionism	2.1. Parents 2.2. Academia
3. Current motivations for pursuing perfection	3.1. Improving prospects 3.2. Recognition 3.3. Avoiding consequences
4. The perfectionist approach	
5. Response towards success	5.1. Satisfaction with performance 5.2. Fixation on improvement
6. Response towards failure	6.1. Initial defeat 6.2. Ruminating 6.3. Putting failures into perspective
7. Evaluating perfectionism	7.1. Personal benefits of perfectionism 7.2. Personal consequences of perfectionism 7.3. Toning down perfectionism

#### Theme 1: Domain type

Of the thirteen participants interviewed, nine felt that their perfectionism was specific to certain domains of life. The most prominent domain was that of academia. In comparison, four felt that their perfectionism was general and covered the majority of domains in life. Participants here described behavioural patterns that were consistent across different domains of their life, such as continuously setting high standards, or the tendency to organise things.

### **1.1. Domain-specific**

For nine of the participants, perfectionism was only pursued within certain areas of their life, and they were quick to dismiss those areas that were irrelevant. For CK, perfectionism was only sought within her academic performance. She explained:

“Definitely more to do with my academic side of things than anything else, I would say... I will spend so much time on coursework sometimes, and I quite enjoy it. Like spending time editing what you’ve written. Like, it just takes hours out of my day sometimes, and I think that’s a very, like, perfectionist trait to sort of sit and go over everything and everything. Like every single detail”.

She dismissed other areas of life that she did not dedicate this level of attention to, “like in general, like with my appearance and stuff I’m not that bothered. I’ll just roll out of bed and just walk around like that, and that’s fine”.

Similarly, SJ felt perfectionist exclusively about her academic performance, and excluded perfectionism within her work performance, “at work just now I’m just like ‘ah it’s just sales assistant, I can do that in my sleep’. I don’t strive to be, like, better. It is more just academic, I would say, that I’m a perfectionist”. The exclusive focus on academia was also shared by JH, who explained that he had always held his academic performance to a higher standard than other areas throughout most of his life. He explained:

“Mainly academics... So it was in high school as well, but for uni... I would make sure that whatever I’ve got out of, like, coursework or exams is the best I could do. Not, like, has to be a hundred percent everything, but the best I knew I could do”.

For AQ, perfection was about ensuring certain aspects of her performance were neat and tidy:

“I think if I’m working on something like either university coursework or either at jobs, like, trying to make things tidy then I might go to perfectionism... I think it’s trying to do the best job you can, but not just, like, finish it off, but to try and make it as neat and tidy and as well done as you possibly can”.

For participants LC and CW and CC, perfectionism was the most relevant within a professional domain. For LC this meant ensuring that her performance as a teacher was kept to a high standard for the benefit of the children she taught. She described this as:

“to strive to be the best I can, everything has to be right, and because I’m doing teaching I’m in charge of these children and in my opinion they have to be given the best opportunities they can be given, so I have to perform at the highest standards I can”.

CW explained his perfectionism was relevant in, “probably mostly work, but, yeah, mostly work-related tasks, I’d say. It doesn’t necessarily generalise to everything, but any task where something is riding on it or you can, you know, gain. That sort of thing”. Similarly CC reported:

“I suppose with my work it’s definitely, yeah, areas there where I would say that I don’t like to do a sort of half-done job. I like to get things absolutely, you know, right. So, yeah I would say particularly with my work. In other areas... I don’t know so much about other areas”.

Also for CC, seeking perfection was dismissed within the areas that he regarded as unimportant:

“I know that if I’m not so bothered about things then I’ll just kind of do it. And probably be quite lazy in the way I would do something. I know that if there’s not kind of that scrutiny or something that’s not as important I will just chuck something out and, you know, if it comes back with a couple of changes or something it’s not really an issue”.

For TS, perfectionism was confined to sports, where he continuously sought to perform well and better his results:

“when I play sport I like to try and perfect everything that I do... Just because, I don’t know, I get quite addicted to doing it, and then, like, if I don’t get it right then I feel like I need to keep doing it until I do, until I’ve mastered it”.

Although CC felt that his perfectionism was the most relevant within a professional capacity, he also identified areas of his sports performance as containing elements of perfectionism, but perhaps to a lesser degree. He explained:

"I don't like playing a game and making mistakes and, you know, getting stuff wrong. So I suppose there's an element in there as well of at least what I'm trying to do, I'm trying to get it right and, you know, trying to be successful at doing that".

### **1.2. Domain-general**

In comparison, four participants considered their perfectionism to be general in nature, reporting that it was a persistent concern throughout most areas of their life. AL explained:

"In general, yeah I would say in general, just because, like, it's more just striving to- wanting to do my best in everything. So, like, be it just something, like, plain and simple, like being on time or something like that. I don't like being late... it kind of crosses quite a few things, yeah definitely. I'd have to say it's general, yeah".

For CR, her perfectionism was general in nature because the need to ensure things were exactly as she wanted them was always present. She explained:

"Probably in general, I would say... It's probably part perfectionism part OCD, I think. Things have got to be just-so, and sort of the way I approach my work and the way I approach most things. I don't know, it's like I'm never happy. 'Cause, you know, it's never- it's never quite good enough. I always think I could have done something better".

For participants ES and LM it wasn't easy to describe why their perfectionism was general, and so instead they chose to give examples of specific behaviours that could be generalised. ES reported that she was a perfectionist in, "Just about everything". She proceeded to explain that her need to appear perfect covered her personal appearance, her household, her garden, her work, and her hobbies. Throughout her descriptions she emphasised a need to be neat and organised in her pursuits. The only area that she explicitly ruled out as being perfectionist about was cleaning her windows:

"Funnily enough, about the only thing that I don't bother about is my windows. I hate cleaning windows because I feel it's a waste of time. Em, but that's about the

one area I think 'oh forget it!' Everything else has to be right. So there's one little chink in the armour. I just send [my husband] out to do them!"

For ES, perfectionism was, "just the way I am. I think it's natural". However, like CR, she questioned whether her perfectionism might contain elements of obsessive-compulsive disorder due to her meticulous nature, "It's like this obsessive-compulsive disorder. I mean to a point I think we are all verging on it a bit. It is a form of that as well". In one example she described:

"I have little stones, well, pebbles, run along the side of the back of the house, well they get full of leaves over the winter that I have to lift them all out, wash them all, clean all them out, put them all back in again".

She explained that this distressed her husband, who did not like to see her wasting her time on such activities. She responded, "That's the thing, if someone else is not a perfectionist they just don't understand, they don't get it!"

Initially LM displayed a slight uncertainty when describing her perfectionism. She reported, "My husband would probably say it's everything! Maybe it is everything, I don't know". Having considered her perfectionism throughout the interview she later decided, "I'm not sure if there's anything that I don't feel perfectionist about!" She described her perfectionism as a constant need to fix things, "for me it's got to be right, it's got to be for what I think's right". The examples she gave of her perfectionist behaviour included a desire for order and organisation. A bookshelf in the interview room caught her attention and she used this as an example:

"I'm looking at the bookcase behind you and they're not in size, colour or author, so it's like, you know, things like that. In the house, our book shelves - I've got them by author. But the difficult thing with that is they're not in size order! These things go through your mind, it's very strange!"

She also reported that things in her house, such as the design and layout of cupboards, had to be aligned, "They need to line up! They can't be different sizes and out because it's just not- it's just not pleasing to the eye". Things that she could not fix or organise were a source of discomfort, "it has to be like that to be right and- because otherwise to me it's not pleasing on the eye, and it's in a way, uncomfortable if it's not, like, in a straight line, for example".

## **Theme 2: Origins of perfectionism**

When identifying the possible origins of their perfectionism, two main areas were identified: parents; and academia. Some felt that their parents were the source of their perfectionism, either by assuming an inheritance of the trait, or that their parents had brought about their perfectionism by enforcing or expecting high standards of performance. Other participants felt their perfectionism was more self-motivated in relation to academic performance. Most of these participants had begun to pursue perfectionism at the onset of school or higher education.

### **2.1. Parents**

Some participants attributed the roots of their perfectionism to their parents. ES felt that her perfectionism was both inherited from her father and learned from observing his behaviour. She explained:

“He was a tool-maker, and his- I mean he’d put a plumb line down every strip of wallpaper... I just took it from him, ‘cause he was a model-maker. His hands, he could do anything, and I can do to a point but I’ve never reached his standards”.

ES also identified perfectionism as a trait that ran in her family, “It was my father, my mother. I have an aunt who is only a year older than I am, and she’s every bit as perfectionist as me, if not more so, if that’s possible”. She still felt that her father was the strongest influence in the development of her perfectionism. When describing her hobby of cross-stitching she attributed her meticulousness and strong dislike of mistakes to her father, “because of the way he was is the way I try to be.... that’s his influence, definitely his influence”.

After some consideration, LM also decided that her perfectionism had come from her parents, “My dad is a bit of a perfectionist as well. Kind of follows on... yeah probably, my dad is the main area.... my mum as well. Yeah, they’re- thinking about it, they are quite a pair of perfectionists!”

CC was more certain that he could trace his perfection back to his father, isolating him as the main origin, “I suppose definitely my dad, ‘cause he is also very much as- well,



in *some* ways, a perfectionist. So I know that he likes to sort of do things properly, likes to get things right, doesn't like to get things wrong".

CR decided that her perfectionism was both the influence of her parents and the surrounding environment. She explained:

"I mean your parents, how you're brought up, and what sort of household you're brought up in... So maybe part of it's come from my parents, my grandparents. But I suppose it's sort of part of nature and part nurture as well, 'cause you could get someone who grew up in a more relaxed household, but if they're like that then that's how they're gonna be".

Rather than view perfectionism as something necessarily inherited, other participants felt that the high standards or expectations set by their parents had been influential in the development of their perfectionism. For LC, her parents had set very strict expectations of her during university, which were accompanied by strict consequences for failing to adhere. She explained,

"they're very, I would say, strict. They make sure I do all my work, and they did say to me that 'you can go to uni and we will support you, but if you fail we will pull you out'. So it was that fear of failure caused by my parents. That was my drive, was to make sure I was passing everything so I could stay".

When asked what her parents were like in her earlier childhood, she explained:

"They were like that with my exams as well at school, but there was more riding on it (at uni) because I was living away from home. This was my chance to better my career, whereas at school it didn't seem like that big a deal. But they were more serious when I got to uni with it".

For TS and CW, this parental influence was more positive in nature. TS explained, "a bit of influence off of my mum, I'd say, because we used to play sport together when we were younger. She used to try and push me to be better". CW explained that his perfectionism was "partly distilled at an earlier age as well just through parental nagging to sort of, you know, keep going at certain things related to school pursuits, I think it would come from".

## **2.2. Academia**

For many of the participants, the concern for perfection only began when they first attended school. For most this was college or university, when their performance began to be measured through exams and coursework. These participants also identified this as the period of time where they began to think of themselves as perfectionists. AQ explained that she began to feel perfectionist when she was:

“getting more motivated with my studies. I think that’s probably lead to a higher degree of perfectionism than as I would with just, like, with general life. I mean if I wasn’t at uni I don’t know if I’d be as much of a perfectionist”.

CK explained:

“I wasn’t really a perfectionist probably until I was about- maybe when you actually start having to sit exams and they start to count. And, like, I grew up with, like, a really strict violin teacher, and I do think it sort of stems from this, in the sense that you’re just, like, always forced to practise and practise and practise, until you get it right”.

This pressure to perform well lead her to develop an anxious thought pattern that she has since tried to overcome:

“you have them sort of, like, little voices in your head telling you, you know, ‘you can’t do this’... I sort of go out of my way to be like ‘well actually I can! I *can* do this’... It’s sort of trying to prove yourself wrong and then sort of doubts that sort of, like, follow you around”.

This was similar to AL, who felt she became the most perfectionist during exam times, “it’s kind of like it was really in, like, examination times at school. That was something that I was, like, perfectionist really badly then”. She also added it was the grading system at university that motivated her to pursue perfection, which had been absent from her earlier primary school system:

“in primary it was very much like you were given this test and it was pass or fail, but then when they introduced, like, levels of where you are, like your grading system, like, I think that’s when you’re like ‘right I want the A’ or like stuff like that, and you’re like ‘I should get the A’, ‘cause then that’s the best grade. So then it’s

like if I don't get the A I feel like I've done something wrong, even if I couldn't do it. Like it's not in my ability to... I feel like, well, I've done something wrong and it wasn't perfect".

The need to achieve high grades was also a key element of LC's perfectionism. She explained, "it wasn't until I got to uni, maybe 2<sup>nd</sup> or 3<sup>rd</sup> year of my undergrad, I started to really- something just clicked and I really was not happy if I got below a B. I was just not happy".

For TS, JH and CC, perfectionism had been present even earlier than university. For JH this was during high school, but for TS this was as far back as primary school. He explained:

"Primary school when I used to do a lot of clubs. Just used to want to do everything, and try and be the best at everything... kind of going to school, then, like, actually being taught something and then being like 'ah, I actually quite like this'. Like, I feel like I could actually be good at this".

CC recalled:

"I remember when I was at school and it was always said that my writing was neat, as an example, and that was something. So I then kind of prided myself on the fact that I had neat writing and I remember when I was at school and sort of, you know, practice and try and get things again as accurate as possible... So yeah I think it's something that's been relatively consistent all the way through".

Both CR and CW felt that they would not necessarily have used the term 'perfectionist' to describe themselves in the past, but that there were certainly elements in their behaviour that they can now identify as perfectionist. CR explained:

"I suppose I've always been the way I am, even looking back as a child, but then maybe if you'd said to me aged 5 'are you a perfectionist?' You know? But I think I've always kind of been the way I am. I've always liked things sort of tidy and just-so and, like at school I always liked to try my best and sort of, you know, earn the teachers approval and be as sort of good girl and do everything just-so".

CW explained:

“I think I’ve always felt myself as conscientious, but I think the perfectionism element has developed probably since being a postgraduate and beyond. I think so. So I think conscientiousness has been consistent but perhaps wouldn’t associate perfectionism necessarily as a typical trait of anyone sort of- well of myself when I was younger”.

For SJ, perfectionism was only a concern of hers within academia, where she sought to perform as well as she could, but she also identified that her older sister played a strong role in this too:

“She’s naturally clever whereas I have to work at it. So I think having her I always felt like I have to live up more academically... I’m never going to be her.... I always felt it more academically than any other aspect because I had to live up to her shadow”.

### **Theme 3: Current motivations for pursuing perfection**

Three main current motivations for pursuing perfection were identified. Some participants were future-oriented, driven to pursue perfection in order to achieve the results that they wanted in order to improve their future prospects. A second motivator of pursuing perfection was the recognition received from others as a result of their performance. The final motivation was that of avoiding the consequences associated with poorer performances, such as being overlooked at work, or letting others down.

#### **3.1. Improving prospects**

A key motivator for pursuing perfection was the achievement of good results in order to improve future prospects. CK reported, “just the prospect of a better life, I think. Better career paths, stuff like that”. TS reported that he hoped to teach at some point in the future, and achieving perfection would put him in a better position to pursue this career path. Three participants felt that their focus on the future benefits of perfectionism had helped them to get to where they were now. AL reflected, “when I think back at school, I do kind of go yeah well it paid off because I got the grades to get into uni”. CW reported, “it’s probably been a key factor that’s got me to where I am now, I guess”. Similarly, JH

expressed, “I know that what I want to do in life is focused on academia, so the fact I’m perfectionist is ensuring that I can achieve that”.

### **3.2. Recognition**

The recognition received from others for their achievements and performance was identified as a second key motivation for pursuing perfection. CK explained:

“You know if you put loads of effort into something and you get a good grade, or good feedback or something, I think that I get a little bit of a high from that and I keep on, like, wanting to go back and do that, because it’s a nice feeling, it’s quite satisfying”.

When she produced results that she was happy with, LS liked receiving appreciation and praise for her effort, and was motivated to continue pursuing perfection because of this. CR was similarly motivated by the recognition she received from others. She provided some insight, “I think it’s a seeking approval thing as well, actually. You want people to sort of like you and respect you and appreciate you, and you want to be well thought of, I think”. This was very similar to CW, who explained:

“the motivation would just be the sort of reputational benefits of being associated with doing sort of high quality things, or being associated as being someone who’s very careful in how they go about this kind of work... Reputation among peers would be the motivation, I think”.

### **3.3. Avoiding consequences**

The final motivation identified was that of avoiding the negative consequences that might be brought about by performing less than perfectly. For CR this was both the worry of disappointing her parents, and a fear of being overlooked at work in favour of someone else. She explained:

“your job sort of depends on you doing it properly nowadays, you know. The current culture if you’re not performing well there’s always that risk that if there’s gonna be cuts and they’re looking at, you know, across the board, then they can

say 'oh well she's not doing very well' or whatever. So there's that in the back of your mind as well".

LC was worried that any performance below perfection may negatively impact the learning of the children she taught, and she was motivated to avoid this. She explained:

"I don't want them to be held back because I've not prepared a lesson as well as I should have, or I didn't look at the correct amount of outcomes that they have to be achieving, so I need to make sure that I'm as high as I can be for them to be able to progress".

Similarly, CC felt there was too much at stake for him to perform poorly within his job. He explained that it was very important that he produce reports that were entirely accurate:

"that stuff is going to counsellors, it's going to Scottish government, things like that, so I wouldn't want to produce something that had an error in it, or wasn't accurate... if something comes back and I've made a mistake in it then that's not a comfortable position".

#### **Theme 4: The perfectionist approach**

When approaching the tasks that participants wanted to achieve perfection within, the majority reported that they would dedicate time for planning and organisation. Most also stressed that this behaviour did not occur for the tasks they did not wish to excel within. As such, they prioritised the tasks that needed to receive this kind of time and effort.

JH explained, "Well I know that the difference is that the effort that I'll put into academia for perfectionism is excessive compared to all other aspects of my life. So everything is really focused around that". CK explained:

"I do have a plan set in my mind from what coursework is when, when I have to do it, stuff like that, but, like, I don't really care about, like, if I need to, like, iron my clothes that day or anything like that, it's just not there".

However, she also identified a downside to prioritising her coursework over other tasks, “definitely other bits are suffering, like right now with exams, like, my room is an absolute tip. And normally I like to keep it tidy, but I’m just like ‘I don’t have time for this right now’”.

Similarly, CC explained that if he was not interested in pursuing perfection within something then, “I’ll just kind of do it. And probably be quite lazy in the way I would do something”. For the tasks that he did aim for perfection within, the approach was completely different:

“I know that if it’s something that I’m really focusing on I will take my time, sit back, think about it, plan it, kind of reread it a number of times before it goes... Yeah there’s a lot more planning, a lot more deliberation, and a lot more time I would take to do things”.

AQ adopted a similar approach, explaining, “Stuff I’m not perfectionist about I’ll just jump right in and do it. Whereas something I want to take time over I’ll take time, plan it out, review it, and stuff like that”.

This planning behaviour was also carried out by CR, who reported, “Well I’m definitely a planner. So I’ll sort of approach things, I’ll be thinking about, right, in stages... I feel safer, I think, if everything is following the, you know, the order that it should”. For CW, the tasks that he felt perfectionist about were given a much higher focus than those he did not:

“I’d maybe describe it as approach those things differently in the sense that it’s a sort of conscious effort to put yourself into some kind of deep immersive state... Being in the zone, in a nutshell, is probably the way I’d approach tasks differently if I wanted to do them perfectly or pretty sort of polished”.

### **Theme 5: Response towards success**

The majority of the participants felt that real success was something rarely, if ever, achieved. Only three responded that they felt a sense of satisfaction or success fairly regularly. Other participants reported that a sense of satisfaction was contingent on the achievement of high standards, and this rarely occurred. Participants tended to feel as

though they were never successful because their expectations had not been reached. The main barrier to feeling successful was the tendency to fixate on improvement. Participants reported that they never truly felt satisfied with their performance because there was always something to improve upon, which led them to be dismissive of their achievements.

### ***5.1. Satisfaction with performance***

For some participants, feeling satisfied with themselves and their performance only occurred when they had achieved their standards. For many participants, if their standards had not been reached then they felt as though they had not been successful.

CC was aware that the standards he had set for himself were very high, and this made it difficult to achieve them and feel successful. He explained, "I probably set quite high standards... I probably don't, or very rarely, feel I've reached that kind of standard that I would want to achieve". AL reported that when her performance was consistent, in that she was regularly achieving the grades she wanted, then she felt quite satisfied with herself. However, when she achieved less than she had hoped for, her mentality was different. She explained:

"it's like when I've not- when you've not hit that kind of target that you set yourself then it is like disappointment. But then it's like people around you are saying 'that's still really good!' Like everything like that 'cause it's not, like, a fail or anything, but it's not what I wanted it to be. I'll be disappointed".

Similarly, TS explained that he felt satisfied with his performance only when he had performed really well. But when he did not, he added, "there will be times as well where I just won't, like- I feel really disheartened... I'll feel really disheartened because something has not really gone very well".

For LC, feeling satisfied or successful was dependent on how her teaching had gone that day. If she felt that the children she taught had understood her, then a sense of success was experienced. However, this was instantly cancelled out by any children who had not understood her. She therefore described these moments of success as "short-lived" and "fleeting". She then added, "I don't ever feel really good about teaching. I don't".



In comparison, JH reported that he felt satisfied with his academic performance, “about 90% of the time”. He attributed to this to the amount of time and effort he put into his academic studies, which he described as “excessive”. He reasoned that, “I feel like it’s more critical to my life than the other parts, so that’s why I put more focus on it”.

CW also felt a sense of success from his performance, reporting, “I think on balance I do get things right within work and, yeah, produce things that I can be proud of. But, yeah, it’s sort of a long journey, if that makes sense, to get to that point”.

### **5.2. Fixation on improvement**

The majority of participants rarely, or never, considered themselves to have achieved the standards they hoped for. The main barrier towards this was the tendency for participants to focus solely on areas for improvement. SJ expressed, “Oh I never. I never! I never, I always feel like I could do better, always”. She attributed this to her tendency to be highly critical of herself:

“I’m a very negative person, and I don’t think that helps. And I’m very hard on myself. And if I can’t do, like, something I’m like ‘oh for god’s sake, you could’ve done that, you should’ve been able to do that!’”

With a similar tendency to be self-critical, CR explained:

“I don’t go overboard with the self-praise. I just [think] ‘well done’ sometimes and then move on... I think I’m too hard on myself so I tend to sort of think ‘well you could have done that better’, you know, ‘why didn’t you do that?’”.

Similarly, CC reported that he rarely achieved his standards and was critical of this, explaining “I would be my own worst critic, and yeah I would always normally feel like I’d probably do a better job, or could have done something differently, or could’ve approached something in a different way”. He described his tendency to fixate on improvement regardless of the results, even dismissing aspects of his achievement as the result of luck:

“I did an MSc and got a distinction. I wasn’t very happy with that either because I could still pick through bits and pieces where I thought I didn’t really do that very well, or probably got a bit lucky to get the grade I got for that”.

ES tended to dismiss the praise she received from others about her cross stitching because of her focus on the areas she felt she should improve:

“Everybody says they are wonderful but I can look at them and say I’m not happy with that bit, I’m not happy with this wee bit, you know... One or two are great, but there’s probably one stitch in it somewhere that’s wrong. Nobody’ll know! But I will”.

LC explained that her tendency to fixate on areas of improvement was because she always felt that there were higher standards that she could achieve:

“I think, just, there’s always another level. So if I do a lot of planning and the lesson goes well I think ‘ok that’s went well but what can I do to make it even better?’ And then if another lesson goes well ‘ok what can I do to make that even better?’”

LS could not think of any time where she had felt proud of herself or her achievements. She revealed, “you always have that feeling that you could have done so much better”.

### **Theme 6: Response towards failure**

The word “failure” is used within this theme to refer to the instances where participants believed they had failed to attain the success they hoped for. Upon experiencing this, the initial reactions of most participants was to feel defeated and disappointed in themselves. Following this, some participants would ruminate on these failures and take a while to recover. Others reported that they adopted a self-talk strategy where they put their failures into perspective in order to move on.

### **6.1. Initial defeat**

LC described this initial feeling of defeat, "It hits me quite hard, and it depends, sometimes I will want to just stop and just not do any more. I just think 'that's it, I can't do it'". CK described her initial feeling of receiving poorer feedback on her performance:

"I get really down about it. I remember, like, for this counselling exam we had this morning, we had a practise one, and I just got really bad feedback from, like, my lecturer, and I was just like 'argh!' Like really upset afterwards and had a cry about it".

AQ explained that when she achieved less than she hoped for, she felt:

"quite deep down sad, like 'ah, I've not really got what I wanted' and I know I could have done better if I tried harder, and I could be hard on myself that way. So I think I could feel like really despondent if I don't achieve the success that I set out to achieve".

### **6.2. Ruminating**

In response to this sense of failure, some participants tended to ruminate afterwards and focus on what went wrong. CW revealed, "I suppose the things that maybe disappoint you in particular, yeah, occasionally those sorts of things can still be accessible within the memory banks, you know, quite a long while after". SJ shared this view. Unhappy with the undergraduate degree she had attained the year before, SJ explained that she was still unable to get over the disappointment. She also felt her attempts to rationalise the situation were not working:

"I'm just- I just get more angry at myself, and then I'm like 'right seriously, you know, this is ridiculous, like, you did the best you could'. But then it just doesn't work 'cause I'm like 'no, you could've done better'".

CR felt that she could ruminate on things that others may consider as unimportant. She explained:

"Sometimes I get really wound up about what other people would think were little things. So like a mistake at work, I could go home at night and worry and worry and worry about a silly little mistake, you know".

JH felt that he had a more difficult time overcoming disappointments when they were important to him academically. He described an incident where he had failed a test due to a technical error with his computer, and it had resulted in a lower overall grade for his module, “that one I was really bad on and I was like having a panic attack... and that’s like the one thing on my transcript that I always notice. I never notice everything else”. He explained that it had taken him a few weeks to overcome the distress it had caused, “it was like 2 weeks of constantly being like ‘oh for god’s sake!’ and being like in a rut kind of thing”. He was eventually able to calm himself and felt that he had become better at dealing with these setbacks now than his younger self had been.

### ***6.3. Putting failures into perspective***

Other participants felt that after their initial sense of defeat they would recover by putting their failures into perspective. For LM this meant reminding herself that the consequences of failing to achieve her desired standards were not as serious as she initially thought. She explained:

“If I can go home at the end of the day and say, yeah, it’s been an absolute horrid day but nobody’s died and you still live to fight another day there’s nothing more you can ask for than that. That gets me through”.

AQ was of a similar mind-set, reporting, “I will realise after a bit of time that it’s not the end of the world, but at the time it feels close enough!” She later added, “I do try and tell myself that it’s all a learning curve. If you never do something wrong then how are you going to learn?”

The strategy of viewing mistakes as part of a learning curve was also adopted by AL and CC, who reasoned that they should therefore be able to avoid making the same mistakes again. AL explained, “it’s like if something hasn’t gone my way I’m, like, I always find out what I did wrong, which kind of makes me feel like, well, I know that now, it’s a kind of lesson learned”. Similarly, CC explained:

“I would look to think ‘right so the next time I’m gonna do something, how can I avoid doing this again?’ So I’ll just try and employ this sort of, you know, ‘what went wrong? How can I make it better? How can I avoid not falling in to that trap again?’”

For CR, this wasn't easy to overcome, as she felt it was an automatic response of hers to criticise herself and focus on improvement. However, she also felt, "there's probably a little part of my brain, the sensible part, that realises I'm not being realistic and, you know, sort of tries myself to ease up on myself, as well". She added that she was still learning not to be so hard on herself.

### **Theme 7: Evaluating perfectionism**

When evaluating their own perfectionism, all thirteen participants reported that it contained both personal benefits and personal consequences. The benefits associated with perfectionism were that it enabled one to achieve their best and help them get to where they wanted to be in life. However, the consequences included heightened stress when trying to pursue unattainable goals. Given the choice, participants identified certain negative elements that they would tone down in order to convert their perfectionism into a more positive trait overall.

#### ***7.1. The personal benefits of perfectionism***

Most participants agreed that the main benefit of perfectionism was that it pushed them to achieve their best, and for this reason they felt that it was more of a positive trait to possess than a negative.

ES reported, "it gets people improving. You know it's got to be a help in life, otherwise you'd just go 'ah forget that, forget that!'" LM explained, "setting the bar that little bit-sometimes too high pushes yourself to make you work harder". Similarly, AL expressed, "I think it would be positive because it does motivate me to do things more than other people". TS felt that when his perfectionism led him to achieve his best performance in sports then it brought him a lot of confidence.

CW felt that his perfectionism had been a key factor in getting him to the career position he was in today. This view was also shared by AL, who reported, "when I think back at school, I do kind of go yeah, well, it paid off because I got the grades to get into uni". Similarly, JH felt that his perfectionism was the key to reaching where he wanted

to be. He reported, "I know that what I want to do in life is focused on academia, so the fact I'm perfectionist is ensuring that I can achieve that".

## **7.2. *The personal consequences of perfectionism***

Despite the associated benefits, the participants identified a number of consequences of their perfectionism. ES expressed concern about the amount of stress that her perfectionism had put her under. She explained that in the past her husband had encouraged her to go to meditation lessons in order to overcome the stress she was feeling. She explained, "I just got stressed about everything. 'Cause nothing would- you know, nothing was ever the way I wanted it, or the way I expected it to be". She felt that the meditation lessons had helped, but had since stopped going, although her husband was trying to rectify this, "That's how [my husband] is trying to get me back into it again, because to me I shouldn't be getting stressed. I have absolutely no reason to be stressed".

CK and AL felt that they were trying to pursue perfection within too many things at once. CK expressed, "definitely different things suffer, if that makes sense. Like I cannot be a perfectionist at everything all at once". She explained that she had been undertaking a university course, a job, and the running of a society simultaneously, and dividing her focus between the three meant that she could never achieve her best in all areas. She explained:

"If I was doing well in my job I'd be doing bad at uni, or I'd be doing bad in the society... like there seems to never be a middle ground where I can sort of just give it everything, all of my effort".

Similarly, AL reported, "the stress and just the time consuming nature of it. That can be sometimes quite detrimental to other aspects of your life". Of concern to her was the effect that her perfectionism may be having on her family. She explained, "when you're, like, stressing out or constantly going on and working on this single piece, or whatever situation that's going on, it's like it can be quite tiring for them to kind of sit about and observe".

CR was concerned that the high standards of her perfectionism were setting herself up for failure. She wondered:

“you can’t achieve perfection all of the time, even I know that. So it’s kind of- it’s unrealistic, and there’s maybe part of it you’re kind of setting yourself up for failure as well. You know if you’ve got these high standards, how often can you really meet them?”

CR also explained that her perfectionist nature had led her to stop pursuing certain hobbies that she had previously enjoyed, because she was always unhappy with the results. She explained:

“I’ve given up on things, like hobbies, in the past because, like for example drawing, I used to enjoy drawing. I wasn’t particularly good at it, but I used to enjoy it. And then I’ve kind of given up on my drawing because it wasn’t, you know, it wasn’t what I thought it was gonna be”.

Her husband had been trying to encourage her to take up drawing again, but the difficulty performing to her desired standard had stopped her from doing so.

CC reported something similar, in that he stopped himself from pursuing certain things over a fear of failure. He reported, “I suppose it can lead me to not- deliberately not care about some things to sort of protect myself from failing, if you like, and that’s not a healthy strategy, you know, to be honest”.

### ***7.3. Toning down perfectionism***

Some participants decided that if they could they would tone down the more negative aspects of their perfectionism. For AL this meant reducing the stress that she put herself under when striving to achieve perfection. She had realised that most of her endeavours turned out well and so the stress was not needed. She explained:

“I think the stress I’d quite like to get rid of. That part of it I think I’d be very much yeah that can go! Kind of doing it all quite calmly and everything, then it would plan out all ok, which it usually does”.

She felt that she would keep her organisation and preparation skills as these had helped her achieve her goals in the past.

CC felt that he would tone down the amount of pressure he put on himself to succeed, “I think I would change it in the sense that if it’s putting pressure on me and if

it's causing discomfort and so on then that's not a healthy way to be". He also added that he would like to change his perspective and instead of aiming for perfection, aim for something more realistic:

"I think it would be better to be looking to be successful and achieving, and just accept that perfectionism is out there somewhere but, yeah, fine. It shouldn't be- it shouldn't be a driver if it's gonna have negative consequences".

CR felt that she would stop being so hard on herself in relation to perceived failures. She reported:

"Like my husband says, just, you know, stop being so hard on yourself. And that- I am trying to get better. I think I've become more aware of it as I've gotten older. I know it's getting worse as I'm getting older, but I'm trying to just reign myself in a bit".

JH expressed that he would like to reduce the focus he placed on academia so that he could spend his time on other areas of his life. He reported:

"I feel like a lot of my life revolves around academia, even like academic extra-curriculars. I feel like a lot of my life focuses around that and I wish it wasn't like that... I wish that my perfectionism was lessened so that I could take time for other parts of my life".



### 3.10. Discussion

The aim of the current study was to further examine the personal experiences of self-defined perfectionists using a qualitative approach. This was carried out through the examination of the responses provided during face-to-face interviews. The main areas of focus within this study were: the influences and perceived origins in the development of perfectionism; current motivations for the pursuit of perfection; the behaviour and response patterns of perfectionists; and the evaluations made of perfectionism as a unique construct.

It was previously found within Study 2 that perfectionism existed in both domain-general and domain-specific forms. The interviews with self-defined perfectionists in study 4 provided further insight into this. There was a split between those whose perfectionism was domain-general and those domain-specific. Those who were domain-general tended to describe behavioural patterns that were more consistent in nature, in that they could be generalised across many domains of life. They reported engaging in the same kind of behaviour or thought pattern across many situations. For example a participant reported a consistent concern for order and organisation regardless of surroundings. Within the current study and within study 2 there were also those whose perfectionism was exclusively focused on certain areas, such as academia, and other domains of life were excluded.

There are many examples of domain-specific perfectionism within other disciplines such as sports (e.g. Flett & Hewitt, 2005), professional performers (e.g. Mor, Day, Flett & Hewitt, 1995) and professional dancers (e.g. Eusanio et al., 2014) but again these can be taken as instances where perfection may be desired, perhaps even warranted. Therefore it may be more difficult to determine causality i.e. whether people are perfectionist because of the situational demands, or because of their personality. An example of this was provided within the current research by an interview participant (AQ) who was unsure whether she would be a perfectionist (or class herself as one) if she was not at university completing coursework and exams.

The participants of the current study described a difference in their approach towards the tasks that they were perfectionist about and those they were not. This approach was typically characterised by higher levels of planning, organising, and prioritising. They

indicated that they did not tend to approach the tasks that they did not feel perfectionist about in the same way. The order and organisation element of perfectionism has been well documented (e.g. Sironic & Reeve, 2015; Slaney & Ashby, 1996). Study 1 previously found that higher conscientiousness was a strong predictor of higher perfectionism, suggesting that those more inclined towards organisation, planning and order may be those more likely to be perfectionist, and the current study would support this.

Considering this specific and narrow focus of perfectionist domains, and the differences in approaching tasks concerned with perfectionism, the current research can suggest that it is of importance to account for the domains of life relevant to the perfectionist. Previous research has found that the measures of perfectionism that account for domain-specificity may be more accurate in detecting perfectionism than domain-general measures (e.g. Dunn et al., 2005; Dunn et al., 2011). Accounting for domain specificity would also help to avoid making assumptions or generalisations about the domains of perfectionism that are of relevance to the individual, as Slaney and Ashby (1996) have suggested is important to consider. However, as Mallinger (2009) points out there may always be an element of domain-specificity within all perfectionism, as the types of situations that someone is likely to be the most perfectionist about may be related to the importance of the situation, or the personal meaning ascribed. Therefore perfectionist thinking and behaviour may always be higher in some situations than others.

It is therefore important to discuss the *state* versus *trait* nature of perfectionism when considering the domain types of perfectionism. Saboonchi and Lundh (1999) point out that previous research has tended to treat perfectionism as a trait; a personal disposition stable in nature. However, there are also forms of perfectionism that may change depending on the situation, such as when in the presence of observers, and this reflects a more temporary state of perfectionist thinking. Within their study it was found that perfectionism could be primed in participants when they were observed by others. Under the observation of an experimenter there was an increase in thoughts about shortcomings, and a decrease in satisfaction with performance, demonstrating a greater awareness of personal performance. This shows that during interpersonal situations, perfectionist thinking can be subject to temporary changes. In comparison, Hewitt and Flett's (1991) multidimensional model of perfectionism holds that socially prescribed

perfectionism – concerning the consistent belief that others may hold high expectations of oneself that must be met - is a form of stable *trait* perfectionism i.e. socially prescribed perfectionists are always motivated to perform to a higher standard when others are involved. However, this may be more subject to the type of social environment that the perfectionistic individual is in, rather than all social environments.

It is more difficult for the current research to account for the consistency of socially-motivated behaviour within the self-reports provided, and whether this functions as a part of state or trait perfectionism. Participants of the current study reported that they felt perfectionist when they were motivated by reputational benefits, such as promoting an image of reliability. Study 2 also found that participants reported feeling perfectionist when they were motivated to make others proud of their achievements. Mallinger (2009) states that some elements of perfectionism are not necessarily reflective of a stable trait, but of a state under conscious control that can be “turned on and off” (p.106). Perfectionist thinking may be elevated during situations with higher importance or personal meaning, such as these situations related to reputational benefits, or making others proud. It may be that the social concerns expressed by participants within the current study are reflective of a stable trait i.e. those always perfectionist around others, or a state i.e. those who tend to feel perfectionistic in certain social circumstances, but not consistently. The current research can only provide support towards a socially prescribed form of perfectionism, but not the stability of the behaviour. Further research would be needed to investigate this.

Further insight into this may be gained from the reports of when perfectionists were more accepting of imperfections. Greenspon (2008) states that for perfectionists, imperfections are necessary at times but never accepted. The results of study 2 are largely in line with this by finding that a group of self-defined perfectionists were only accepting of imperfections when they were forced to. This included when they were too ill to continue pursuing perfection, or had pushed themselves to their limits by attempting too much at one time. Although perfectionism may subsequently be “turned off” during these instances, participants emphasised that these were exceptional cases. However, a second group reported feeling less perfectionistic when they were with trusted others, or when there was no audience at all, and therefore there was no risk of negative judgements being made of them. The participants of the current study

reported feeling perfectionist in order to receive recognition. Again this may be explained by Saboonchi and Lundh's (1999) finding that perfectionist thoughts may be elevated when the under the observation of others. The perceived freedom from negative judgement during interactions with trusted others may represent an instance when perfectionist thinking is "turned off". It may be useful to account for this element of consistency alongside qualitative measures of perfectionism. Future research may benefit from accounting for the type of perfectionism (state or trait) reported by participants in terms of how stable their perfectionism is across changing situations.

Insight into the stability of perfectionism can also be gained from examining the self-reports of when perfectionism began to develop, and the possible sources of origin. Some participants reported that their perfectionism had been present since childhood and had remained more or less stable since then. For some there was a sense that it was an integral part of their personality, perhaps inherited from parents. This is very much in line with previous research which has identified the role of parents during upbringing to be crucial in the development of perfectionism. Parents have been found to instil perfectionism in their children in two main ways: either purposefully, by setting high standards or expectations for their children to perform towards; or inadvertently, by setting an example of perfectionism within their own behaviour that their children attempt to emulate or live up to (Rasmussen & Troilo, 2016). When participants could identify elements of perfectionism present within their parents they were more certain that this could explain the roots of their own perfectionism. However, study 2 found that for those whose parents were not perfectionists, identifying potential origins of perfectionism was more difficult, and it was often concluded that perfectionism must simply be a part of their personality. Study 2 can support that personality is an important factor in perfectionism, particularly with those higher in conscientiousness and lower in emotional stability more likely to be perfectionists.

Mallinger (2009) points out that the roots of personality traits and types are not yet fully understood. It is most likely that any expression of personality is the result of a complex interaction between both genetic factors and the surrounding environment, and it is difficult to separate one from the other. Hibbard and Walton (2014) explain that perfectionism may well develop in the child as the result of perfectionist parents, but that the form expressed (either adaptive or maladaptive) is more subject to type of

upbringing. This may differ in two ways: the perfectionism in children of parents displaying a warm and accepting approach towards them may differ from those of parents with less warmth and acceptance, in that the former may be adaptive and the latter maladaptive. This shows that perfectionism may be subject to type of upbringing i.e. the environment the child is raised in, and genetic influence is more difficult to account for.

Other participants within study 2 felt that their perfectionism was related more to their personal goals and ambitions. However, it is not clear whether perfectionism here is the result of a tendency to set high personal goals and motivations, or whether the tendency to set these goals is the result of perfectionism, making it difficult to determine causality. Hill et al. (2015) found that self-defined perfectionists have a tendency to emphasise their own role in their perfectionism, attributing it to self-motivations. However, this is accompanied by a tendency to also attribute failures to personality ability (Flett, Hewitt, Blankstein & Pickering, 1998). The tendency of perfectionists to set overly high standards has been found to result in a discrepancy between expected and actual performance, leading to increased self-criticism (Speirs Neumeister, 2004a, 2004b; Shafran et al., 2002). This occurrence was reported by participants within the current study, who stated that they were rarely, if ever, satisfied with their performance. Their high expectations tended to lead them to never feel as though they had reached their desired standards, and this made many of them lack a sense of success or achievement. Additionally, some participants were dismissive of instances of success, focusing instead on how they could further improve their performance. In comparison, feeling as though their desired standards had not been reached was a more frequent occurrence, and this further contributed to a fixation on improvement.

Speirs Neumeister (2004c) found very similar results in the interpretations of success by socially prescribed perfectionists. They were found to possess a tendency to minimise their successes by treating any instance of success as simply having met a normal or basic standard. This also appears to be the case for the perfectionists within the current study, who focused on how to improve their performances, no matter the standard they had attained. Considering that they reported lacking a sense of success, this may be an important area in which the more negative elements of perfectionist thinking could be converted into positives. If these participants were less fixated on improvement, and

more accommodating of the success they had attained, they may experience a heightened sense of success.

Despite this, participants identified a number of associated benefits of perfectionism with their evaluations. Regarding the social perceptions of perfectionism as a trait, positive aspects such as success, achievement, and pride in accomplishments were emphasised. Interestingly this outlook was also shared by those who reported that a sense of success was never really experienced. However, they reasoned that it was better to attempt to achieve perfection than not at all, because it meant that they were always aiming for high results.

Mallinger (2009) states that perfectionism is valued within society and regarded as a virtue, as it provides great advantages, but only “when appropriate” (p.105). Importantly this is also an aspect that the participants of the current study 2 emphasised. Within their evaluations, the majority (68%) of participants felt that perfectionism contained both positive and negative elements, and therefore it needed to be carefully monitored. The negatives associated with perfectionism included stress, lower self-esteem, dissatisfaction and disappointment with performance. This is largely in line with the consequences of perfectionism highlighted by previous research (e.g. Bieling et al., 2004; Stoeber et al., 2013). A group of participants within study 2 also expressed a concern that true perfectionism was unattainable; impossible to reach due to the fallibility of human nature. This is the criteria that Greenspon (2014) uses to distinguish perfectionism from striving for excellence, in that true perfectionists were those chasing unattainable standards, and those striving for excellence were those accommodating of errors and accepting of their limits. In this sense, adaptive (or “healthy”) perfectionism cannot exist, as it defies the criteria for pursuing “perfection”. Shafran et al. (2002) similarly dismiss the notion of a multidimensional form of perfectionism that accounts for both adaptive and maladaptive forms, preferring instead to keep the two forms separate and distinct.

When the results of study 2 and study 4 are taken together, perfectionism is seen as something positive and beneficial to possess *only* when it exists in an adaptive form. Adaptive perfectionism is characterised by the setting of high standards but with the absence of negative self-evaluations (Burnam et al., 2014). The participants within study 4 expressed a desire to convert the more maladaptive elements of their perfectionism

into a more adaptive form. This included removing or toning down negative aspects such as their tendency to stress, put pressure on themselves to succeed, and to self-criticise. Intervention programs have targeted these specific areas in order to reduce maladaptive concerns in adults (e.g. Lloyd et al., 2015), adolescents (e.g. Nehmy & Wade, 2015) and pre-adolescents (e.g. Fairweather-Schmidt & Wade, 2015) with effective results. However, it is less known whether the reduction in maladaptive concerns is a long or short term reduction, and Nehmy and Wade (2015) point out that more research is needed in this area. As Flett and Hewitt (2014) stress, perfectionism is highly resistant to change, especially when considering that it may have been a consistent pattern in thinking since childhood or early adolescence. This is an important area for clinicians to consider. The results of the study suggest that perfectionism itself is not something that perfectionists themselves view negatively and want to get rid of. Rather they express a desire to convert it more into striving for excellence, where the desire to attain high standards is kept but negative self-criticisms are removed. This does suggest that the majority of participants were aware of a distinction between perfectionism and striving for excellence, with perfectionism existing as the more negative of the two.

The results of the current chapter have been beneficial in identifying patterns in the personal experiences and perceptions of perfectionism, however there are limitations that must be addressed. The current research is limited in its use of qualitative analysis, as this methodology relies upon honest self-reports from participants. There is always an element of social desirability bias to consider in qualitative research in that the self-reports may contain answers that paint the participants in a good light. However, one main advantage of using an online format to collect participant's answers is that anonymity is guaranteed. With no researcher present, participants may have felt a sense of freedom to report their experiences and perceptions due to no risk of judgement. A disadvantage of this format is that there is no chance for the researcher to prompt further explanations from participants, or ask follow up questions. However, the use of face-to-face interviews potentially addressed this issue, but again runs the risk of encountering social desirability. It is hoped that the use of these two methods together balanced the advantages and disadvantages of the methods. The qualitative methodology is also subject to the interpretation of the researcher. However, these findings are useful in highlighting patterns of perfectionist behaviour and thinking,

including the areas that perfectionists highlight the most concern for. This is useful from a clinical perspective, given that the perfectionists of study 4 indicate a concern for their maladaptive tendencies to be reduced, and express a wish to convert these into a more positive form.



## Chapter 4

### 4. Conclusion

The purpose of the current thesis was to examine the construct of perfectionism across three main areas. Firstly, the current research aimed to investigate the consistency of scores generated by three measurements of perfectionism (the FMPS, APS-R, and PSPS). Secondly, it aimed to investigate the relationship of perfectionism to the five main dimensions of personality: extraversion, agreeableness, conscientiousness, emotional stability (neuroticism), and openness. Thirdly, it aimed to explore the personal experiences, evaluations, and social perceptions of perfectionism as a unique trait. A mixed methods approach using both quantitative and qualitative measures across four studies was taken to address these areas.

Firstly, within study 1, the relationship between the total scores of perfectionism generated by three scale measurements were examined: the FMPS (Frost et al., 1990), the APS-R (Slaney et al., 2001), and the PSPS (Hewitt et al., 2003). It was found that the total scores from each measure correlated with one another, with participants scoring consistently across each of the measures. Given that these scales are each measuring different aspects of perfectionism, the consistency in these scores suggests that they are measuring a similar underlying construct. The correlations between the three measurements also suggests that those high in multidimensional perfectionism (as measured by the FMPS and APS-R) are also those with a higher concern for self-presentational perfectionism (as measured by the PSPS). In line with previous research (e.g. Beheshtifar et al., 2011) this finding can suggest that perfectionism is at least a stable pattern of thinking that is relevant to a number of dimensions of life.

Secondly, within study 1 the current research examined the relationship between perfectionism and the big five dimensions of personality. In both males and females it was found that lower emotional stability scores (indicative of higher neuroticism) and higher conscientiousness scores predicted higher perfectionism scores. This suggests that individuals with these personality dispositions may be those more predisposed to develop perfectionist thinking patterns. This is likely when we consider that conscientiousness relates to self-discipline, self-control and organisation (Ulu & Tezer,

2010; Weisberg et al., 2011), which are elements highly relevant to the behaviours of perfectionists (Hill et al., 1997). Additionally, a proneness to experiencing negative moods (in those with higher neuroticism) may be an important consideration when accounting for the negative thinking patterns displayed in maladaptive perfectionists, such as a worry over mistakes (Frost et al., 1990) and a fear of failure (Greenspon, 2014). It may be that perfectionism is an extension of these two personality dimensions.

The relationship between higher conscientiousness and perfectionism was a stronger finding in females than males. Previous research that has looked into the relationship between gender and conscientiousness has found conflicting and inconsistent results (Stoeber, 2012). Certain facets of conscientiousness, such as order, dutifulness and discipline, seems to be higher in females but this finding has not always been replicated (Weisberg et al., 2011). As such, this would be a good area for future research to address, especially when the current research can suggest there may be a gender difference in relation to perfectionism, with conscientious females exhibiting higher levels of perfectionism.

The PSPS detected that higher perfectionism was predicted by lower extraversion (higher introversion) in females only. The reserved and passive nature of introverts (Goldberg, 1993), as well as a heightened sensitivity to the self, may contribute towards a desire to avoid attracting attention to oneself in relation to imperfections. This finding may be higher in females as previous research has found aspects of self-presentation in relation to image and appearance are more relevant for females than males (Besser et al., 2010). Introverted females may be more prone to perfectionism in relation to self-presentation as a result.

Perfectionism was also higher in females who were less agreeable, as measured by the APS-R. Lower agreeableness may mean that the individual is more likely to be less accepting of errors and imperfections, and more perfectionist as a result. The relationship between openness and perfectionism has been a less consistent finding within previous research. The current research found that higher scores of openness predicted higher perfectionism in females only. The dimension of openness encompasses those who are more imaginative and original, and these aspects have both been found to occur within perfectionism (Ulu & Tezer, 2010).

In general the relationships between perfectionism and the five personality dimensions were stronger and more consistent findings in females than males. Regarding these gender differences, the current research may be limited by the lower number of males tested in comparison to females. Future research may consider addressing this by recruiting from a larger sample of male participants in order to determine whether there is a relationship between these three dimensions of personality (intellect, extraversion, and agreeableness) and perfectionism in males.

Additionally, there may be a relationship between lateralisation and perfectionism in males, and this is an area for further investigation. In males it was found that perfectionism was higher in stronger left-handedness, as measured by the APS-R. Males are more likely than females to be strongly left-handed and more lateralised to the right hemisphere (Papadatou-Pastou et al., 2008). There may be a mediating role of the behavioural inhibition system (BIS) here, which motivates avoidance behaviour. Higher BIS activation has been linked to the maladaptive cognitions of perfectionists, such as anxiousness (Randles et al., 2010). Given that perfectionism was predicted by stronger left-handedness in males, it may be that males with higher BIS i.e. those who display a more anxious and inhibited approach (as demonstrated within novel task scenarios e.g. Wright & Hardie, 2011), may be more prone to perfectionist thinking.

Taken together these results suggest that perfectionism seems to be a stable pattern of thinking but not necessarily a trait of its own. It may be more likely to occur within certain combinations of personality dispositions, in particular higher conscientiousness and higher neuroticism (lower emotional stability). In females, self-presentational perfectionism seems to occur to a higher degree in those more introverted, which may be a reflection of the desire to avoid attracting attentions to oneself regarding imperfections. Maladaptive perfectionism seems to be reflective of a combination of higher conscientiousness and higher neuroticism, indicating those who are both disciplined, self-controlled and organised (reflected in the pursuit of perfection) and prone to worries and anxiousness (reflected in the fear of failure). The relationship of perfectionism to the dimensions of agreeableness, openness and extraversion may be more complex, however previous research (e.g. Rice et al., 2007) has identified that these dimensions may be less relevant to perfectionism than conscientiousness and neuroticism.

The current research also adopted a qualitative approach in order to explore the ways in which perfectionism influences the lives of self-defined perfectionists, and the ways in which this trait is uniquely perceived and understood. The six main areas explored were: the characteristics used to define perfectionism as unique construct; domain types (general or specific); the origins and development of perfectionism; the main motivations for pursuing perfection; the ways in which perfectionism influences behaviour and the response towards success and failure; and the evaluations of perfectionism as a unique construct. This was done by collecting the responses of self-defined perfectionists and non-perfectionists to open-ended questions administered online, and from self-defined perfectionists in face-to-face interview sessions. Analyses were carried out using a grounded theory approach to identify emerging patterns and key themes.

Participants identified multiple characteristics of perfectionism when they defined it as a unique construct. Many of these aspects were in line with those identified within previous research, such as the setting of high standards, the intolerance of errors or flaws, and the tendency to be self-critical. Participants generally viewed perfectionism as a multidimensional construct with both positive and negative elements. The aspects of perfectionism that were particularly valued were the setting of high standards, and the ability to pursue and achieve success. The negative aspects highlighted included the risk of adverse consequences to mental wellbeing, such as higher stress, lower self-esteem, and feelings of dissatisfaction and disappointment with oneself. Study 3 found that participants tended to understand the pursuit of perfection as occurring to an obsessive degree, implying an element of negativity.

The current research was also able to find support for both a domain-general and a domain-specific form of perfectionism. There was a tendency to view perfectionism as a domain-general trait that should encompass all areas of life, however there were those whose perfectionism was specific to certain domains of life only, supporting a domain-specific form of perfectionism. The most commonly reported domain relevant to the pursuit of perfectionism was academia. This was not unexpected given the nature of the current sample (consisting predominantly of students). It is important to consider that academia is a domain that may promote the pursuit of perfection, given the high performance standards required to advance. Therefore it is more difficult to determine

causality i.e. whether academic perfectionism is reflective of personality or of the demands of the environment, but it is perhaps most likely a combination of both influences. Often self-defining as a perfectionist was contingent on the number of domains relevant to the pursuit of perfection. The context-specific theme within study 4 identified those who were reluctant to identify with the general label of “perfectionist” due to their narrower focus on pursuing perfectionism within domains such as academia. This stemmed from a tendency to view perfectionism as a domain-general trait, and their more specific focus did not fit this understanding.

The interview participants of study 4 reported that they tended to approach the situations that they were perfectionist about in a different way than those they were not perfectionist about. Their perfectionist approach was characterised by higher levels of planning and organising behaviour, and they indicated that they did not engage in this type of behaviour when they were not interested in attaining perfection. This pattern of behaviour is consistent with previous research that has found perfectionism to be characterised by a higher concern for order and organisation (e.g. Frost et al., 1990; Slaney et al., 2001). Together this suggests that perfectionism does exist in both a domain-general and domain-specific form. It may be beneficial for future research to account for the domains of life relevant to the pursuit of perfectionism, rather than generalise or assume that all domains of life will be affected. Domain-general measures, such as the FMPS and APS-R do not account for the domains of perfectionism that individuals may be thinking of when they complete the measure, therefore domain-specific measures may be more beneficial.

Accounting for state or trait perfectionism within the self-reports of perfectionists was a more complex issue, as at times there was a difficulty in discerning causality. This is particularly the case for those who reported that their perfectionism was the *result* of a tendency to set high standards of performance. The setting of high standards is usually understood as occurring because of a perfectionist disposition. In general there was an element of uncertainty reported within the participants’ understandings of the developmental roots of their perfectionism. In line with previous research (e.g. Rasmussen & Troilo, 2016) the role of parents was identified as a main contributor in the development of perfectionism. This was proposed to occur either as the result of living up to the high standards of parents, or there was an assumed inheritance of the

trait. Therefore it can be proposed that there is an element of parental influence in the development of perfectionism, with those of perfectionist parents, or parents who expect higher standards, more likely to develop aspects of perfectionism themselves.

There was also evidence suggestive of state perfectionism found within study 2. A group of self-defined perfectionists reported feeling less perfectionist when they were not in the presence of others, or were in a trusted environment free from negative judgements. This suggests that some aspects of perfectionism can be primed by being observed by others, or during instances where there is the potential for negative evaluation. This does suggest that there is an element of control in perfectionist thinking, but this is a situational response with some more willing to exert this control than others. For example, others were less willing to accept imperfections, doing so only when necessary for the sake of their health. This could be an area for future research to explore as a possible source of intervention. Hewitt and Flett (1991) found that socially prescribed perfectionists were those motivated to perform to higher standards due to the belief that others hold these expectations of them. It would be of benefit to utilise this measure to identify those who are motivated by others to perform to perfectionist standards. Addressing this issue could potentially reduce some of the negative aspects associated with perfectionism by reducing a concern for the evaluations of others.

The majority of participants reported that perfectionism was only beneficial to possess when the negative elements, such as self-criticism, were controlled or kept to a minimum. Within study 2, participants expressed a concern that perfectionism may need to be carefully monitored and controlled to ensure that these negative elements did not begin to outweigh the positives. Yet the participants interviewed in study 4 indicated that they would keep their perfectionism, given the choice, due to the associated benefits of achieving high standards. Despite this they did acknowledge that they rarely experienced any sense of success, due to their tendency to fixate on areas of improvement regardless of how well they had performed. Shafran et al. (2002) proposed that maladaptive perfectionism should be understood as separate in nature to adaptive perfectionism, rather than as part of one multidimensional construct. The results of study 2 and 4 of the current study can lend support for this separation, but perhaps not to a clinical extent.

The majority of the evaluations provided by self-defined perfectionists highlighted that the pursuit of perfectionism was always accompanied by elements of negativity, in that they were more self-critical and lacked a sense of success. Those who were more accepting of imperfections, or indicated that they were willing to achieve less than perfect standards, may be more reflective of those striving for excellence. Greenspon (2014) proposes that striving for excellence and perfectionism should be differentiated by their acceptance of imperfections, in that true perfectionists were those who were never accepting. The current research can suggest that the term 'perfectionist' may be better suited to those who actively seek perfection and are unhappy when this is not attained. The responses from participants of the current study may also reflect this distinction. Their desire to convert the negative aspects of their perfectionism (such as higher self-criticism and higher feelings of failure) into positives would be more in line with striving for excellence.

It is also important to acknowledge that those who *are* accepting of imperfections (or those who do not always aim for perfection) may still think of themselves as "perfectionists", even though they may be more representative of striving for excellence. Additionally, some participants from study 2 reported that there were elements of perfectionism within their behaviour and thinking patterns, especially in regards to specific pursuits, but they did not self-identify as "a perfectionist" in general. This highlights that self-defining as a perfectionist may not always be a consistently reliable indicator of an individual's true thoughts and behaviour. A quantitative measure of perfectionism, such as from the FMPS, HMPS or APS-R, is a useful way of comparing self-reports of perfectionism to empirical measurements to test the validity of self-defining as a perfectionist.

To conclude, the current thesis can propose that perfectionism is a stable and consistent pattern of thinking that is multidimensional in nature. It is more likely that perfectionism is a reflection of a combination of personality dispositions, with some more prone to develop perfectionism than others. Perfectionism is more likely to occur in those with personality dispositions characterised by higher conscientiousness and higher neuroticism. In females this is also characterised by lower extraversion and higher openness in relation to self-presentation, and lower agreeableness. In males there may

also be a mediating influence of laterality in that stronger left-handedness is related to higher perfectionism, but this is an area requiring further investigation.

In addition, perfection may develop as a result of the surrounding environment, such as growing up with demanding or perfectionist parents. There may also be a higher prevalence of perfectionism with students due to the higher levels of performance expected and encouraged during one's academic life. Those whose careers demand high standards of them may also pursue perfection to meet performance expectations. It is therefore more likely that perfectionism develops as the result of a combination of both genetic and environmental factors.

The current research suggests that it is important to consider the domains of life that are relevant to the pursuit of perfection, as for some this may be of a narrower and more specific focus than for others. It is therefore important to avoid making assumptions about the domain-type of perfectionism. People tend to approach the tasks that they feel perfectionist about in a different way than for those they are not concerned with pursuing perfection in. This difference is marked by a higher tendency to prioritise, plan, and organise. For some, perfectionism may also occur in a more temporary form, where people display a heightened concern for perfection when in the presence of others, or within a professional capacity.

Both perfectionists and non-perfectionists value perfectionism for the benefits it provides in ensuring that people achieve higher standards. However, they also acknowledge that perfectionism is only healthy when the negative aspects such as stress and self-criticism are kept to a minimum or not present at all. As such, perfectionists express a desire to eliminate these negative areas in order to continue pursuing high standards without any negative consequences to mental health.



## References

- Adderholdt, M., & Goldberg, J. (1999). *Perfectionism: What's Bad About Being Too Good? Revised and Updated Edition*. Minneapolis, MN: Free Spirit Publishing Inc.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5*. (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Ashby, J., Slaney, R., Noble, C., Gnilka, P., & Rice, K. (2012). Differences between "normal" and "neurotic" perfectionists: Implications for mental health counsellors. *Journal of Mental Health Counselling, 34*(4), 322-340. doi:10.17744/-mehc.34.4.5-2h65w1n8l27r300
- Ayearst, L. E., Flett, G. L., & Hewitt, P. L. (2012). Where is multidimensional perfectionism in DSM-5? A question posed to the DSM-5 personality and personality disorders work group. *Personality Disorders, 3*(4), 458-469. doi:10.1037/a0026354
- Bach, D. R. (2015). Anxiety-like behavioural inhibition is normative under environmental threat-reward correlations. *PLoS Computational Biology, 11*(12), 1-20. doi:10.1371/journal.pcbi.1004646
- Beheshtifar, M., Mazrae-Sefidi, F., & Moghadam, M. N. (2011). Role of perfectionism in the work place. *European Journal of Economics, Finance and Administrative Sciences, 38*, 167-173. Retrieved from <http://www.europeanjournalofeconomicsfinanceandadministrativesciences.com/>
- Besser, A., Flett, G. L., & Hewitt, P. L. (2010). Perfectionistic self-presentation and trait perfectionism in social problem-solving ability and depressive symptoms. *Journal of Applied Social Psychology, 40*(8), 2121-2154. doi:10.1111/j.1559-1816.2010.00653.x
- Beuter, A., Edwards, R., & Boucher, A. (2000). Physiological tremor: Does handedness make a difference? *The International Journal of Neuroscience, 101*(1-4), 9-19. doi: 10.3109/00207450008986489
- Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences, 36*(6), 1373-1385. doi:10.1016/S0191-8869(03)00235-6
- Blatt, S. J. (1995). The destructiveness of perfectionism: Implications for the treatment of depression. *American Psychologist, 50*(12), 1003-1020. doi:10.1037/0003-066X.50.12.1003

- Boyle, G., Saklofske, D., & Matthews, G. (2014). *Measures of Personality and Social Psychological Constructs*. Burlington: Elsevier Science.
- Broman-Fulks, J. J., Hill, R. W., & Green, B. A. (2008). Is perfectionism categorical or dimensional? A taxometric analysis. *Journal of Personality Assessment, 90*(5), 481-490. doi:10.1080/00223890802248802
- Burnam, A., Komarraju, M., Hamel, R., & Nadler, D. R. (2014). Do adaptive perfectionism and self-determined motivation reduce academic procrastination? *Learning and Individual Differences, 36*, 165-172. doi:10.1016/j.lindif.2014.10.009
- Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today, 14*(11), 34-52. Retrieved from <https://www.psychologytoday.com/>
- Chapman, B. P., Duberstein, P. R., Sörensen, S., & Lyness, J. M. (2007). Gender differences in five factor model personality traits in an elderly cohort. *Personality and Individual Differences, 43*(6), 1594-1603. doi:10.1016/j.paid.2007.04.028
- Chiorri, C., Marsh, H. W., Ubbiali, A., & Donati, D. (2016). Testing the factor structure and measurement invariance across gender of the big five inventory through exploratory structural equation modelling. *Journal of Personality Assessment, 98*(1), 88-99. doi:10.1080/00223891.2015.1035381
- Conroy, D. E., Kaye, M. P., & Fifer, A. M. (2007). Cognitive links between fear of failure and perfectionism. *Journal of Rational-Emotive & Cognitive-Behaviour Therapy, 25*(4), 237-253. doi:10.1007/s10942-007-0052-7
- Crăciun, B., & Dudău, D. P. (2014). The relation between perfectionism, perfectionistic self-presentation and coping strategies in medical employees. *Procedia - Social and Behavioral Sciences, 127*, 509-513. doi:10.1016/j.sbspro.2014.03.300
- Damian, L. E., Stoeber, J., Negru, O., & Băban, A. (2013). On the development of perfectionism in adolescence: Perceived parental expectations predict longitudinal increases in socially prescribed perfectionism. *Personality and Individual Differences, 55*(6), 688-693. doi:10.1016/j.paid.2013.05.021
- Dunkley, D. M., Mandel, T., & Ma, D. (2014). Perfectionism, neuroticism, and daily stress reactivity and coping effectiveness 6 months and 3 years later. *Journal of Counseling Psychology, 61*(4), 616-633. doi:10.1037/cou0000036
- Dunn, J. G. H., Craft, J. M., Dunn, J. C., & Gotwals, J. K. (2011). Comparing a domain-specific and global measure of perfectionism in competitive female figure skaters. *Journal of Sport Behaviour, 34*(1), 25-46. Retrieved from <http://www.usouthal.edu/>

- Dunn, J. G. H., Gotwals, J. K., & Dunn, J. C. (2005). An examination of the domain specificity of perfectionism among intercollegiate student-athletes. *Personality and Individual Differences, 38*(6), 1439-1448. doi:10.1016/j.paid.2004.09.009
- Edlin, J. M., Leppanen, M. L., Fain, R. J., Hackländer, R. P., Hanaver-Torrez, S. D., & Lyle, K. B. (2015). On the use (and misuse?) of the Edinburgh handedness inventory. *Brain and Cognition, 94*, 44-51. doi:10.1016/j.bandc.2015.01.003
- Egan, S., Piek, J., Dyck, M., & Kane, R. (2011). The reliability and validity of the positive and negative perfectionism scale. *Clinical Psychologist, 15*(3), 121-132. doi:10.1111/j.1742-9552.2011.00029.x
- Egan, S. J., Piek, J. P., Dyck, M. J., Rees, C. S., & Hagger, M. S. (2013). A clinical investigation of motivation to change standards and cognitions about failure in perfectionism. *Behavioural and Cognitive Psychotherapy, 41*(5), 565. doi:10.1017/S135246581200063X
- Egan, S. J., Vinciguerra, T., & Mazzucchelli, T. G. (2015). The role of perfectionism, agreeableness, and neuroticism in predicting dyadic adjustment: Perfectionism and dyadic adjustment. *Australian Journal of Psychology, 67*(1), 1-9. doi:10.1111/ajpy.12038
- Enns, M. W., Cox, B. J., & Clara, I. P. (2005). Perfectionism and neuroticism: A longitudinal study of specific vulnerability and diathesis-stress models. *Cognitive Therapy and Research, 29*(4), 463-478. doi:10.1007/s10608-005-2843-04
- Eusanio, J., Thomson, P., & Jaque, S. V. (2014). Perfectionism, shame, and self-concept in dancers: A mediation analysis. *Journal of Dance Medicine & Science, 18*(3), 106-114. doi:10.12678/1089-313X.18.3.106
- Fairweather-Schmidt, A., & Wade, T. D. (2015). Piloting a perfectionism intervention for pre-adolescent children. *Behaviour Research and Therapy, 73*, 67-73. doi:10.1016/j.brat.2015.07.004
- Flett, G. L., & Hewitt, P. L. (2005). The perils of perfectionism in sports and exercise. *Current Directions in Psychological Science, 14*(1), 14-18. doi:10.1111/j.0963-7214.2005.00326.x
- Flett, G. L., & Hewitt, P. L. (2014). A proposed framework for preventing perfectionism and promoting resilience and mental health among vulnerable children and adolescents: The prevention of perfectionism. *Psychology in the Schools, 51*(9), 899-912. doi:10.1002/pits.21792

- Flett, G., Hewitt, P., Blankstein, K., Gray, L., & Diener, E. (1998). Psychological Distress and the Frequency of Perfectionistic Thinking. *Journal of Personality and Social Psychology, 75*(5), 1363-1381. doi: 10.1037/0022-3514.75.5.1363
- Flett, G., Hewitt, L., Blankstein, P., & Pickering, K. (1998). Perfectionism in relation to attributions for success or failure. *Current Psychology, 17*(2), 249-262. doi:10.1007/s12144-998-1010-y
- Flett, G. L., Hewitt, P. L., & Dyck, D. G. (1989). Self-oriented perfectionism, neuroticism and anxiety. *Personality and Individual Differences, 10*(7), 731-735. doi:10.1016/0191-8869(89)90119-0
- Franco, K., Díaz, F., Torres, P., Telléz, Y., & Hidalgo-Rasmussen, C. (2014). Internal consistency, test-retest reliability and construct validity of the Frost Multidimensional Perfectionism Scale. *Mexican Journal of Eating Disorders, 5*(2), 91-97. doi: 10.1016/S2007-1523(14)72004-X
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14*, 449-468. doi: 10.1007/BF01172967
- Frost, R. O., & Steketee, G. (1997). Perfectionism in obsessive-compulsive disorder patients. *Behaviour Research and Therapy, 35*(4), 291-296. doi:10.1016/S0005-7967(96)00108-8
- Furnham, A., & Cheng, H. (2015). Early indicators of adult trait agreeableness. *Personality and Individual Differences, 73*, 67-71. doi:10.1016/j.paid.2014.09.025
- Goldberg, L. R. (1992). The development of markers for the big-five factor structure. *Psychological Assessment, 4*(1), 26-42. doi: 10.1037//1040-3590.4.1.26
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48*(1), 26-34. doi:10.1037/0003-066X.48.1.26
- Greenspon, T. S. (2000). "Healthy perfectionism" is an oxymoron! Reflections on the psychology of perfectionism and the sociology of science. *The Journal of Secondary Gifted Education, 11*(4), 197-208. doi: 10.4219/jsge-2000-631
- Greenspon, T. S. (2008). Making sense of error: A view of the origins and treatment of perfectionism. *American Journal of Psychotherapy, 62*(3), 263- 282. Retrieved from <http://www.ajp.org/>
- Greenspon, T. S. (2014). Is there an antidote to perfectionism? Perfectionism and its antidotes. *Psychology in the Schools, 51*(9), 986-998. doi:10.1002/pits.21797

- Gunthert, K. C., Cohen, L. H., & Armeli, S. (1999). The role of neuroticism in daily stress and coping. *Journal of Personality and Social Psychology, 77*(5), 1087-1100. doi:10.1037//0022-3514.77.5.1087
- Gurgová, B. Z. (2011). Perfectionism and personality. *Grant Journal, 1*, doi:072-11-00002-09-4
- Gurven, M., Von Rueden, C., Massenkoff, M., Kaplan, H., Lero Vie, M., & King, L. (2013). How Universal Is the Big Five? Testing the Five-Factor Model of Personality Variation Among Forager–Farmers in the Bolivian Amazon. *Journal of Personality and Social Psychology, 104*(2), 354-370. doi: 10.1037/a0030841
- Haase, A. M., Prapavessis, H., & Glynn Owens, R. (2013). Domain-specificity in perfectionism: Variations across domains of life. *Personality and Individual Differences, 55*(6), 711-715. doi:10.1016/j.paid.2013.05.025
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology, 15*, 27–33.
- Hecht, D. (2013). The neural basis of optimism and pessimism. *Experimental Neurobiology, 22*(3), 173-199. doi:10.5607/en.2013.22.3.173
- Herman, K. C., Wang, K., Trotter, R., Reinke, W. M., & Jalongo, N. (2013). Developmental trajectories of maladaptive perfectionism among African American adolescents. *Child Development, 84*(5), 1633-1650. doi:10.1111/cdev.12078
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology, 60*(3), 456-470. doi:10.1037/0022-3514.60.3.456
- Hewitt, P. L., & Flett, G. L. (2007). When does conscientiousness become perfectionism? *Current Psychiatry, 6*, 49-60. Retrieved from <http://link.springer.com/journal/11920>
- Hewitt, P. L., Flett, G. L., Besser, A., Sherry, S. B., & McGee, B. (2003). Perfectionism is multidimensional: A reply to Shafran, Cooper and Fairburn (2002). *Behaviour Research and Therapy, 41*(10), 1221-1236. doi:10.1016/S0005-7967(03)00021-4
- Hewitt, P. L., Flett, G. L., Sherry, S. B., Habke, M., Parkin, M., Lam, R. W. et al. (2003). The interpersonal expression of perfection: Perfectionistic self-presentation and psychological distress. *Journal of Personality and Social Psychology, 84*(6), 1303-1325. doi:10.1037/0022-3514.84.6.1303

- Hibbard, D. R., & Walton, G. E. (2014). Exploring the development of perfectionism: The influence of parenting style and gender. *Social Behaviour and Personality: An International Journal*, 42(2), 269-278. doi:10.2224/sbp.2014.42.2.269
- Hill, R. W., McIntire, K., & Bacharach, V. R. (1997). Perfectionism and the big five factors. *Journal of Social Behaviour and Personality*, 12(1), 257-270. Retrieved from <http://www.selectpress.com/>
- Hill, A. P., Witcher, C. S. G., Gotwals, J. K., & Leyland, A. F. (2015). A qualitative study of perfectionism among self-identified perfectionists in sport and the performing arts. *Sport, Exercise, and Performance Psychology*, 4(4), 237-253. doi:10.1037/spy0000041
- Howell, J. A., McEvoy, P. M., Grafton, B., Macleod, C., Kane, R. T., Anderson, R. A. et al. (2016). Selective attention in perfectionism: Dissociating valence from perfectionism-relevance. *Journal of Behaviour Therapy and Experimental Psychiatry*, 51, 100-108. doi:10.1016/j.jbtep.2016.01.004
- Jain, M., & Sudhir, P. M. (2010). Dimensions of perfectionism and perfectionistic self-presentation in social phobia. *Asian Journal of Psychiatry*, 3(4), 216-221. doi: 10.1016/j.ajp.2010.08.006
- Janowsky, D. S. (2001). Introversion and extroversion: Implications for depression and suicidality. *Current Psychiatry Reports*, 3(6), 444-450. doi:10.1007/s11920-001-0037-7
- Karimizadeh, A., Mahnam, A., Yazdchi, M., & Besharat, M. (2015). Individual differences in personality traits perfectionism and the brain structure. *Journal of Psychophysiology*, 29(3), 107-111. doi:10.1027/0269-8803/a000141
- Kelly, J. D. (2015). Your best life: Perfectionism - The bane of happiness. *Clinical Orthopaedics and Related Research*, 473(10), 3108-3111. doi:10.1007/s11999-015-4279-9
- Lee, K., & Ashton, M. C. (2010). Psychometric properties of the HEXACO Personality Inventory. *Multivariate Behavioural Research*, 39(2), 329-358. doi: 10.1207/s15327-906mbr3902\_8
- Levinson, C. A., Rodebaugh, T. L., Shumaker, E. A., Menatti, A. R., Weeks, J. W., White, E. K. et al. (2015). Perception matters for clinical perfectionism and social anxiety. *Journal of Anxiety Disorders*, 29, 61-71. doi:10.1016/j.janxdis.2014.11.002
- Lloyd, S., Schmidt, U., Khondoker, M., & Tchanturia, K. (2015). Can psychological interventions reduce perfectionism? A systematic review and meta-analysis.

*Behavioural and Cognitive Psychotherapy*, 43(6), 705-27. doi:10.1017/S1352465814000162

- Mallinger, A. (2009). The myth of perfection: Perfectionism in the obsessive personality. *American Journal of Psychotherapy*, 63(2), 103-131. Retrieved from <http://www.ajp.org/>
- Martinelli, M., Chasson, G., Wetterneck, C., Hart, J., & Bjorgvinsson, T. (2014). Perfectionism dimensions as predictors of symptom dimensions of obsessive-compulsive disorder. *Bulletin of the Menninger Clinic*, 78(2), 140-159. doi:10.1521/bumc.2014.78.2.140
- McArdle, S. (2010). Exploring domain-specific perfectionism. *Journal of Personality*, 78(2), 493-508. doi:10.1111/j.1467-6494.2010.00624.x
- McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective* (2<sup>nd</sup> ed.). New York: Guilford Press
- McIntyre, E., Wiener, K., & Saliba, A. (2015). Compulsive internet use and relations between social connectedness, and introversion. *Computers in Human Behaviour*, 48, 569-574. doi:10.1016/j.chb.2015.02.021
- Mitzman, S., Slade, P., & Dewey, M. (1994). Preliminary development of a questionnaire designed to measure neurotic perfectionism in the eating disorders. *Journal of Clinical Psychology*, 50(4), 516-22. doi: 10.1002/1097-4679
- Mofield, E. L., & Peters, M. P. (2015). The relationship between perfectionism and overexcitabilities in gifted adolescents. *Journal for the Education of the Gifted*, 38(4), 405-427. doi:10.1177/0162353215607324
- Mor, S., Day, H., Flett, G., & Hewitt, P. (1995). Perfectionism, control, and components of performance anxiety in professional artists. *Cognitive Therapy and Research*, 19(2), 207-225 doi: 10.1007/BF02229695
- Nehmy, & Wade. (2015). Reducing the onset of negative affect in adolescents: Evaluation of a perfectionism program in a universal prevention setting. *Behaviour Research and Therapy*, 67, 55-63. doi:10.1016/j.brat.2015.02.007
- Noël, N. M., Trocchia, P., & Lockett, M. (2016). A predictive psychometric model to identify personality and gender differences of college majors. *International Journal of Management Education*, 14(3), 240-247. doi:10.1016/j.ijme.2016.05.004
- Oldfield, R. C. (1971). The assessment and analysis of handedness: The Edinburgh inventory. *Neuropsychologia*, 9, 97 – 113. doi: 10.1016/0028-3932(71)90067-4

- Ozbilir, T., Day, A., & Catano, V. M. (2015). Perfectionism at work: An investigation of adaptive and maladaptive perfectionism in the workplace among Canadian and Turkish employees: Perfectionism at work. *Applied Psychology, 64*(1), 252-280. doi:10.1111/apps.12032
- Pacht, A. R. (1984). Reflections on perfection. *American Psychologist, 39*(4), 386-390. doi:10.1037/0003-066X.39.4.386
- Papadatou-Pastou, M., Martin, M., Munafo, M. R., & Jones, G. V. (2008). Sex differences in left-handedness: A meta-analysis of 144 Studies. *Psychological Bulletin, 134*(5), 677-699. doi: 10.1037/a0012814
- Park, H. (2009). Validation of the almost perfect scale – revised. *The Korean Journal of Counselling and Psychotherapy, 21*(1), 131-149. doi:10.1037/e611802009-001
- Pauletti, R. E., Menon, M., Menon, M., Tobin, D. D., & Perry, D. G. (2012). Narcissism and adjustment in preadolescence. *Child Development, 83*(3), 831-837. doi: 10.1111/j.1467-8624.2011.01731.x
- Perfect. (2012). In *The American Heritage Dictionary of the English language*. Boston, MA: Houghton Mifflin. Retrieved from <http://search.credoreference.com/content/entry/hmdictenglang/perfect/0>
- Phillips, P., Abraham, C., & Bond, R. (2003). Personality, cognition, and university students' examination performance. *European Journal of Personality, 17*(6), 435-448. doi:10.1002/per.488
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin, 135*(2), 322-338. doi:10.1037/a0014996
- Randles, D., Flett, G. L., Nash, K. A., McGregor, I. D., & Hewitt, P. L. (2010). Dimensions of perfectionism, behavioural inhibition, and rumination. *Personality and Individual Differences, 49*(2), 83-87. doi:10.1016/j.paid.2010.03.002
- Rasmussen, K. E., & Troilo, J. (2016). "It has to be perfect!": The development of perfectionism and the family system: Perfectionism and the family system. *Journal of Family Theory & Review, 8*(2), 154-172. doi:10.1111/jftr.12140
- Rh eaume, J., Freeston, M. H., Ladouceur, R., Bouchard, C., Gallant, L., Talbot, F., et al. (2000). Functional and dysfunctional perfectionists: Are they different on compulsive-like behaviours? *Behaviour Research and Therapy, 38*, 119-128. doi: 10.1016/S0005-7967(98)00203-4.



- Rice, K. G., & Aldea, M. A. (2006). State dependence and trait stability of perfectionism: A short-term longitudinal study. *Journal of Counselling Psychology, 53*(2), 205-212. doi:10.1037/0022-0167.53.2.205
- Rice, K. G., Ashby, J. S., & Slaney, R. B. (2007). Perfectionism and the five-factor model of personality. *Assessment, 14*(4), 385-398. doi:10.1177/1073191107303217
- Rice, K., Bair, C., Castro, J., Cohen, B., & Hood, C. (2003). Meanings of Perfectionism: A Quantitative and Qualitative Analysis. *Journal of Cognitive Psychotherapy, 17*(1), 39-58. doi: 10.1891/jcop.17.1.39.58266
- Rice, K. G., & Preusser, K. J. (2002). The Adaptive/Maladaptive Perfectionism Scale. *Measurement and Evaluation in Counselling and Development, 34*(4), 210-22. Retrieved from <http://www.counseling.org/publications/journals.htm>
- Rice, K. G., & Richardson, C. M. E. (2014). Classification challenges in perfectionism. *Journal of Counseling Psychology, 61*(4), 641-648. doi:10.1037/cou0000040
- Riley, C., Lee, M., Cooper, Z., Fairburn, C. G., & Shafran, R. (2007). A randomised controlled trial of cognitive-behaviour therapy for clinical perfectionism: A preliminary study. *Behaviour Research and Therapy, 45*(9), 2221-2231. doi: 10.1016/j.brat.2006.12.003
- Saboonchi, F., & Lundh, L. (1999). State perfectionism and its relation to trait perfectionism, type of situation, priming, and being observed. *Scandinavian Journal of Behaviour Therapy, 28*(4), 154-166. doi:10.1080/028457199439900
- Sands, A., Craddock, A. E., & Church, W. (2009). Family of origin characteristics as predictors of perfectionism. *Australian Journal of Psychology, 61*(3), 136-144. doi:10.1080/00049530802239326
- Schmitt, D. P., Long, A. E., McPhearson, A., O'Brien, K., Remmert, B., & Shah, S. H. (2016). Personality and gender differences in global perspective. *International Journal of Psychology, doi:10.1002/ijop.12265*
- Scott, J. H., Yap, K., Francis, A. J. P., & Schuster, S. (2014). Perfectionism and its relationship with anticipatory processing in social anxiety: Perfectionism and anticipatory processing. *Australian Journal of Psychology, 66*(3), 187-196. doi:10.1111/ajpy.12045
- Shaffer, D. R., & Kipp, K. (2014). *Developmental Psychology: Childhood and adolescence* (9th ed.). United Kingdom: Wadsworth/Cengage Learning.
- Shafran, R., Cooper, Z., & Fairburn, C. G. (2002). Clinical perfectionism: A cognitive-behavioural analysis. *Behaviour Research and Therapy, 40*(7), 773-791. doi:10.1016/S0005-7967(01)00059-6

- Sherry, S. B., Gralnick, T. M., Hewitt, P. L., Sherry, D. L., & Flett, G. L. (2014). Perfectionism and narcissism: Testing unique relationships and gender differences. *Personality and Individual Differences, 61-62*, 52-56. doi: 10.1016/j.paid.2014.01.007
- Sherry, S. B., Hewitt, P. L., Flett, G. L., Lee-Baggley, D. L., & Hall, P. A. (2007). Trait perfectionism and perfectionistic self-presentation in personality pathology. *Personality and Individual Differences, 42(3)*, 477-490. doi:10.1016/-j.paid.2006.07.026
- Sironic, A., & Reeve, R. (2015). A Combined Analysis of the Frost Multidimensional Perfectionism Scale (FMPS), Child and Adolescent Perfectionism Scale (CAPS), and Almost Perfect Scale—Revised (APS-R): Different Perfectionist Profiles in Adolescent High School Students. *Psychological Assessment, 27(4)*, 1471-1483. doi:10.1037/pas0000137
- Slaney, R. B., & Ashby, J. S. (1996). Perfectionists: Study of a criterion group. *Journal of Counselling & Development, 74(4)*, 393-398. doi:10.1002/j.15566676.1996.-tb01885.x
- Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., & Ashby, J. S. (2001). The revised almost perfect scale. *Measurement and Evaluation in Counselling and Development, 34(3)*, 130-145. doi: 10.1037/t02161-000
- Smith, M. M., Saklofske, D. H., Yan, G., & Sherry, S. B. (2015). Perfectionistic strivings and perfectionistic concerns interact to predict negative emotionality: Support for the tripartite model of perfectionism in Canadian and Chinese university students. *Personality and Individual Differences, 81*, 141-147. doi:10.1016/j.paid.2014.09.006
- Speirs Neumeister, K. L. (2004a). Factors influencing the development of perfectionism in gifted college students. *Gifted Child Quarterly, 48(4)*, 259-274. doi:10.1177/-001698620404800402
- Speirs Neumeister, K. L. (2004c). Interpreting Successes and Failures: The Influence of Perfectionism on Perspective. *Journal for the Education of the Gifted, 27(4)*, 311-335. doi: 10.4219/jeg-2004-320
- Stairs, A. M. (2009). Examining the construct of perfectionism: A factor-analytic study. University of Kentucky Doctoral Dissertations. Paper 733. Retrieved from [http://uknowledge.-uky.edu/gradschool\\_diss/733](http://uknowledge.-uky.edu/gradschool_diss/733)
- Stairs, A. M., Smith, G. T., Zapolski, T. C. B., Combs, J. L., & Settles, R. E. (2012). Clarifying the construct of perfectionism. *Assessment, 19(2)*, 146-166. doi:10.1177/10-73191111411663

- Stoeber, J. (1998) The Frost Multidimensional Perfectionism Scale revisited: More perfect with four (instead of six) dimensions. *Personality and Individual Differences*, 24(4). pp. 481-491. doi:10.1016/S0191-8869(97)00232-8
- Stoeber, J. (2012). *Perfectionism and performance*. New York: Oxford University
- Stoeber, J., Chesterman, D., & Tarn, T. (2010). Perfectionism and task performance: Time on task mediates the perfectionistic strivings–performance relationship. *Personality and Individual Differences*, 48(4), 458-462. doi:10.1016/j.paid.-2009.11.021
- Stoeber, J., Harvey, L. N., Almeida, I., & Lyons, E. (2013). Multidimensional sexual perfectionism. *Archives of Sexual Behaviour*, 42(8), 1593-1604. doi:10.1007/s10508-013-0135-8
- Stoeber, J., Hoyle, A., & Last, F. (2013). The consequences of perfectionism scale: Factorial structure and relationships with perfectionism, performance perfectionism, affect, and depressive symptoms. *Measurement and Evaluation in Counselling and Development*, 46(3), 178-191. doi: 10.1177/0748175613481981
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and Social Psychology Review*, 10(4), 295-319. doi:10.1207/s15327957pspr1004\_2
- Stoeber, J., Otto, K., & Dalbert, C. (2009). Perfectionism and the big five: Conscientiousness predicts longitudinal increases in self-oriented perfectionism. *Personality and Individual Differences*, 47(4), 363-368. doi:10.1016/j.paid.2009.04.004
- Stoeber, J., Otto, K., Pescheck, E., Becker, C., & Stoll, O. (2007). Perfectionism and competitive anxiety in athletes: Differentiating striving for perfection and negative reactions to imperfection. *Personality and Individual Differences*, 42(6), 959-969. doi:10.1016/j.paid.2006.09.006
- Stoeber, J., & Stoeber, F. S. (2009). Domains of perfectionism: Prevalence and relationships with perfectionism, gender, age, and satisfaction with life. *Personality and Individual Differences*, 46, 530-535. doi: 10.1016/j.paid.2008.12.006
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London: Sage.

- Terry-Short, L. A., Glynn Owens, R., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and Individual Differences, 18*(5), 663-668. doi:10.1016/0191-8869(94)00192-U
- Ulu, I. P., & Tezer, E. (2010). Adaptive and maladaptive perfectionism, adult attachment, and big five personality traits. *The Journal of Psychology, 144*(4), 327-340. doi:10.1080/00223981003784032
- Vandiver, B. J., & Worrell, F. C. (2002). The reliability and validity of scores on the almost perfect scale-revised with academically talented middle school students. *Journal of Secondary Gifted Education, 13*(3), 108-119. doi: 10.4219/jsge-2002-372
- Verner-Filion, J., & Gaudreau, P. (2010). From perfectionism to academic adjustment: The mediating role of achievement goals. *Personality and Individual Differences, 49*(3), 181-186. doi:10.1016/j.paid.2010.03.029
- Wallden, M. (2011). Laterality. *Journal of Bodywork & Movement Therapies, 15*(2), 231-234. doi:10.1016/j.jbmt.2011.01.002
- Weisberg, Y. J., De Young, C. G., & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the big five. *Frontiers in Psychology, 2*, 178. doi:10.3389/fpsyg.2011.00178
- Wright, L., & Hardie, S. M. (2011). "Not ready to sort it yet": Revised reinforcement sensitivity theory (rRST) predicts left-handed behavioural inhibition during a manual sorting task. *Laterality: Asymmetries of Body, Brain and Cognition, 16*(6), 753-767. doi:10.1080/1357650X.2010.521752
- Wright, L., & Hardie, S. (2015). Left-handers look before they leap: Handedness influences reactivity to novel tower of hanoi tasks. *Frontiers in Psychology, 6*(58), 1-15. doi:10.3389/fpsyg.2015.00058
- Zucker, N. L., Herzog, D., Moskovich, A., Merwin, R., & Lin, T. (2011). Incorporating dispositional traits into the treatment of anorexia nervosa. *Current Topics in Behavioural Neurosciences, 6*(1), 289-314. doi:10.1007/7854\_2010\_92

## **Appendices**

### **Appendix 1**

#### **Perfectionism and Personality**

#### **Participant Information Sheet**

##### **Invitation to take part**

My name is Alison Kerr and I am a current Abertay postgraduate student carrying out a Masters in Research. As part of my degree I am conducting the following study into the nature of perfectionism, which I invite you to take part in.

##### **Purpose of the study**

The purpose of my study is to investigate perfectionism and related personality traits. Previous research has suggested that different types of perfectionism may influence how we behave and the types of personalities we exhibit. This may also be related to our handedness, with left and right handers differing from each other in their perfectionist behaviour.

##### **What will I be asked to do?**

You will be asked to complete five questionnaires measuring perfectionism, personality traits, and handedness. You will also be asked six short questions regarding your personal thoughts on perfectionism.

##### **Time Commitment**

The study will take you approximately 30 minutes to complete.

##### **Must I take part?**

No, your participation in this study is entirely voluntary. You may decide to withdraw at any point during the process without explanation by closing the webpage. You may also choose to omit answers to any of the questions if needed.

##### **Are there any risks?**

There are no known risks for you in this experiment.

**Confidentiality/Anonymity**

The data collected in this study will not contain any personal information about you other than your gender, age, programme of study, year of study, and occupation. All of your data will be kept confidential at all times. The results will be published in a way that ensures you remain anonymous.

**Further information about this study**

If you require further information about this study then please contact the researcher, Alison Kerr, [1002910@live.abertay.ac.uk](mailto:1002910@live.abertay.ac.uk), or her supervisors Dr Lynn Wright, [l.wright@abertay.ac.uk](mailto:l.wright@abertay.ac.uk), and Dr Scott Hardie, [S.Hardie@abertay.ac.uk](mailto:S.Hardie@abertay.ac.uk), telephone 01382 30XXXX.

## Appendix 2

### **Participant consent**

By clicking below you are indicating that you have read and understood the Participant Information sheet and that you are willing to participate in this research study.

Do you give consent to take part in this research study?

Yes I give my consent

No I do not give my consent (If so, please now close the browser)

## Appendix 3

### **Perfectionism and Personality**

#### **Debrief**

Thank you for taking part in my study. The aim of the study is to examine perfectionism and related personality traits. I am interested in whether perfectionism is a single personality trait, or something that people feel is only relevant in certain dimensions of their lives. I am also interested in how perfectionism relates to different aspects of our personalities, such as conscientiousness, extraversion and agreeableness. In addition, my research is also hoping to explore whether there is a link between perfectionist tendencies and handedness, particularly whether right and left handers differ in their degrees of perfectionism.

If you would like any further information on this project, please contact the researcher, Alison Kerr, [1002910@live.abertay.ac.uk](mailto:1002910@live.abertay.ac.uk), or her supervisors Dr Lynn Wright, [l.wright@abertay.ac.uk](mailto:l.wright@abertay.ac.uk), and Dr Scott Hardie, [S.Hardie@abertay.ac.uk](mailto:S.Hardie@abertay.ac.uk), telephone 01382 30XXXX.



## Appendix 4

### **The Frost Multidimensional Perfectionism Scale (FMPS) (Frost et al., 1990)**

1. My parents set very high standards for me **(PE)**
  2. Organisation is very important to me **(O)**
  3. As a child, I was punished for doing things less than perfectly **(PC)**
  4. If I do not set the highest standards for myself, I am likely to end up a second-rate person **(PS)**
  5. My parents never tried to understand my mistakes **(PC)**
  6. It is important to me that I be thoroughly competent in everything I do **(PS)**
  7. I am a neat person **(O)**
  8. I try to be an organised person **(O)**
  9. If I fail at work/school, I am a failure as a person **(CM)**
  10. I should be upset if I make a mistake **(CM)**
  11. My parents wanted me to be the best at everything **(PE)**
  12. I set higher goals for myself than most people **(PS)**
  13. If someone does a task at work/school better than me, then I feel like I failed the whole task **(CM)**
  14. If I fail partly, it is as bad as being a complete failure **(CM)**
  15. Only outstanding performance is good enough in my family **(PE)**
  16. I am very good at focusing my efforts on attaining a goal **(PS)**
  17. Even when I do something very carefully, I often feel that it is not quite done right **(D)**
  18. I hate being less than the best at things **(CM)**
  19. I have extremely high goals **(PS)**
  20. My parents have expected excellence from me **(PE)**
  21. People will probably think less of me if I make a mistake **(CM)**
  22. I never felt like I could meet my parents' expectations **(PC)**
  23. If I do not as well as others, it means I am an inferior human being **(CM)**
  24. Other people seem to accept lower standards than I do **(PS)**
  25. If I do not do well all the time, people will not respect me **(CM)**
  26. My parents have always had higher expectations for my future than I have **(PE)**
  27. I try to be a neat person **(O)**
  28. I usually have doubts about the simple everyday things I do **(D)**
  29. Neatness is very important to me **(O)**
  30. I expect higher performance in my daily tasks than most people **(PS)**
  31. I am an organised person **(O)**
  32. I tend to get behind in my work because I repeat things over and over **(D)**
  33. It takes me a long time to do something "right" **(D)**
  34. The fewer mistakes I make, the more people will like me **(CM)**
- I never felt like I could meet my parents' standards **(PC)**

Appendix 5

**Almost Perfect Scale-Revised**

*Instructions: The following items are designed to measure attitudes people have toward themselves, their performance, and toward others. There are no right or wrong answers. Please respond to all of the items. Use your first impression and do not spend too much time on individual items in responding. Respond to each of the items using the scale below to describe your degree of agreement with each item. Fill in the appropriate number circle on the computer answer sheet that is provided.*

1	2	3	4	5	6	7
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Slightly Disagree</b>	<b>Neutral</b>	<b>Slightly Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

1. I have high standards for my performance at work or at school.
2. I am an orderly person.
3. I often feel frustrated because I can't meet my goals.
4. Neatness is important to me.
5. If you don't expect much out of yourself, you will never succeed.
6. My best just never seems to be good enough for me.
7. I think things should be put away in their place
8. I have high expectations for myself.
9. I rarely live up to my high standards.
10. I like to always be organized and disciplined.
11. Doing my best never seems to be enough.
12. I set very high standards for myself.
13. I am never satisfied with my accomplishments.
14. I expect the best from myself.
15. I often worry about not measuring up to my own expectations.
16. My performance rarely measures up to my standards.
17. I am not satisfied even when I know I have done my best.
18. I try to do my best at everything I do.
19. I am seldom able to meet my own high standards of performance.
20. I am hardly ever satisfied with my performance.
21. I hardly ever feel that what I've done is good enough.
22. I have a strong need to strive for excellence.
23. I often feel disappointment after completing a task because I know I could have done better.

**(Slaney, Rice, Mobley, Trippi, & Ashby, 2001)**

Appendix 6

**The Perfectionistic Self-Presentation Scale (PSPS)**

Listed below are a group of statements. Please rate your agreement with each of the statements using the following scale. If you strongly agree, circle 7; if you disagree, circle 1; if you feel somewhere in between, circle any one of the numbers between 1 and 7. If you feel neutral or undecided the midpoint is 4.

1	2	3	4	5	6	7
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Slightly Disagree</b>	<b>Neutral</b>	<b>Slightly Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>

1. It is okay to show others that I am not perfect
2. I judge myself based on the mistakes I make in front of other people
3. I will do almost anything to cover up a mistake
4. Errors are much worse if they are made in public rather than in private
5. I try always to present a picture of perfection
6. It would be awful if I made a fool of myself in front of others
7. If I seem perfect, others will see me more positively
8. I brood over mistakes that I have made in front of others
9. I never let others know how hard I work on things
10. I would like to appear more competent than I really am
11. It doesn't matter if there is a flaw in my looks
12. I do not want people to see me do something unless I am very good at it
13. I should always keep my problems to myself
14. I should solve my own problems rather than admit them to others
15. I must appear to be in control of my actions at all times
16. It is okay to admit mistakes to others
17. It is important to act perfectly in social situations
18. I don't really care about being perfectly groomed
19. Admitting failure to others is the worst possible thing
20. I hate to make errors in public
21. I try to keep my faults to myself
22. I do not care about making mistakes in public
23. I need to be seen as perfectly capable in everything I do
24. Failing at something is awful if other people know about it
25. It is very important that I always appear to be "on top of things"
26. I must always appear to be perfect
27. I strive to look perfect to others

## Appendix 7

### Goldberg (1992) 50-Item Set IPIP Big-Five Factor Markers

#### How accurately can you describe yourself?

Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Indicate for each statement whether it is 1. Very Inaccurate, 2. Moderately Inaccurate, 3. Neither Accurate nor Inaccurate, 4. Moderately Accurate, or 5. Very Accurate as a description of you.

1. I am the life of the party
2. I feel little concern for others
3. I am always prepared
4. I get stressed out easily
5. I have a rich vocabulary
6. I don't talk a lot
7. I am interested in people
8. I leave my belongings around
9. I am relaxed most of the time
10. I have difficulty understanding abstract ideas
11. I feel comfortable around people
12. I insult people
13. I pay attention to details
14. I worry about things
15. I have a vivid imagination
16. I keep in the background
17. I sympathise with others' feelings
18. I make a mess of things
19. I seldom feel blue
20. I am not interested in abstract ideas
21. I start conversations
22. I am not interested in other people's problems
23. I get chores done right away

24. I am easily disturbed
25. I have excellent ideas
26. I have little to say
27. I have a soft heart
28. I often forget to put things back in their proper place
29. I get upset easily
30. I do not have a good imagination
31. I talk a lot to different people at parties
32. I am not really interested in others
33. I like order
34. I change my mood a lot
35. I am quick to understand things
36. I don't like to draw attention to myself
37. I take time out for others
38. I shirk my duties
39. I have frequent mood swings
40. I use difficult words
41. I don't mind being the centre of attention
42. I feel others' emotions
43. I follow a schedule
44. I get irritated easily
45. I spend time reflecting on things
46. I am quiet around strangers
47. I make people feel at ease
48. I am exacting in my work
49. I often feel blue
50. I am full of ideas

**Note: These five scales were developed to measure the Big-Five factor markers reported in the following article: Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26-42.**

Appendix 8  
**Edinburgh Handedness Inventory (EHI)**  
**(Oldfield, 1971)**

Assuming your hands are empty (except as indicated), please state which hand you would normally use for the following activities, by checking the appropriate box. If both hands are required, the part of the task in brackets is what we want to know about.

	Left Always	Left Mostly	Either	Right Mostly	Right Always
Writing					
Drawing					
Throwing					
Scissors					
Toothbrush					
Knife (without fork)					
Spoon					
Broom (upper hand)					
Striking match (match)					
Opening box lid (lid)					

## Appendix 9

### **Perfectionism and Personality**

#### **Your thoughts on perfectionism**

This section will ask you some questions about your own experiences and views on perfectionism. Please type your answers in the boxes provided.

1. Do you consider yourself to be a perfectionist?
2. Please provide your own definition of perfectionism.
3. Please provide a description of the situation or activities during which you would consider yourself a perfectionist. These can be across all dimensions of life – professional, academic, or personal.
4. What do you feel are the main influences on your perfectionism?
5. When are you less concerned with perfectionism, or not perfectionist at all?
6. Is perfectionism a positive or negative trait? Please explain your answer.

**Perfectionism and Personality: Defining “Perfectionism”**

**Participant Information Sheet**

**Invitation to take part**

My name is Alison Kerr and I am a current Abertay postgraduate student carrying out a Masters in Research. As part of my degree I am conducting the following study into the nature of perfectionism, which I invite you to take part in.

**Purpose of the study**

The purpose of the study is to investigate the most accurate way to define perfectionism as a trait. My previous research into the nature of perfectionism found that people define perfectionism in very different ways that cover a wide range of behaviours. This current study is hoping to determine which definitions of perfectionism generate the most consensus.

**What will I be asked to do?**

You will be asked to complete a short online task that will present you with a list of descriptions of perfectionism. From these you will be asked to choose the three definitions that you feel most accurately reflect the unique nature of perfectionism, and the three that least reflect perfectionism.

**Time Commitment**

The study will take you approximately 10 minutes to complete.

**Must I take part?**

No, your participation in this study is entirely voluntary. You may decide to withdraw at any point during the process without explanation by exiting the webpage. You may also choose to omit answers to any of the questions you do not wish to answer.

**Are there any risks?**

There are no known risks for you in this experiment.



**Confidentiality/Anonymity**

The data collected in this study will not contain any personal information about you other than your gender, age, programme of study (if applicable), and occupation. Your responses will be kept confidential at all times, and the results will be published in a way that ensures you remain anonymous.

**Further information about this study**

If you require further information about this study then please contact the researcher, Alison Kerr, 1002910@live.abertay.ac.uk, or her supervisors Dr Lynn Wright, l.wright@abertay.ac.uk, telephone 01382 30XXXX, and Dr Scott Hardie, S.Hardie@abertay.ac.uk, telephone 01382 30XXXX

## Appendix 11

### **Participant consent**

By clicking below you are indicating that you have read and understood the Participant Information sheet and that you are willing to participate in this research study.

Do you give consent to take part in this research study?

Yes I give my consent

No I do not give my consent (If so, please now close the browser)

**Perfectionism and Personality: Defining “Perfectionism”**

**Debrief**

Thank you for taking part in my research study. The aim of the study is to gain a more accurate understanding of how people understand and define perfectionism. Previous research has highlighted that the distinction between perfectionism and other personality traits or motivations, such as striving for excellence, is often unclear. This makes it more difficult to determine exactly what makes someone a perfectionist. Your results will help build a better understanding of how people make this distinction by looking at the definitions which seem to promote the most consensus.

For further information on this study you can contact the researcher, Alison Kerr, 1002910@abertay.ac.uk, or her supervisors, Dr Lynn Wright, l.wright@abertay.ac.uk, tel. 01382 30XXXX and Dr Scott Hardie, S.Hardie@abertay.ac.uk, tel. 01382 30XXXX.

If participation in this study has raised any concerns for you, please consider contacting a support service such as Abertay’s Student Counselling Service, counselling@abertay.ac.uk, tel. 01382 308051, or the Samaritans, jo@samaritans.org, tel. 116 123.

## Appendix 13

### Interview questions

1. Do you consider yourself to be a perfectionist?
2. What would be your own personal definition of 'perfectionism', related to yourself?
  - 2.1 Does that differ from a definition you would give of perfectionism in general?
- 3.1 Have you always thought of yourself as a perfectionist?
- 3.2 Can you recall when you first began thinking of yourself as a perfectionist? *(If not covered in answer to 3.1)*
4. I am interested in looking at the ways that perfectionism develops across the lifespan. Where do you think your perfectionism has originated from? What have been the main influences in its development?
5. Thinking of your life currently, what do you think motivates you to continue pursuing perfection?
6. What is your thought process when approaching tasks or situations that you feel perfectionist about?
  - 7.1. How often do you feel satisfied or happy with your performance?
  - 7.2 Can you think of why this might be? *(If they answer 'no' to 7.1)*
- 8.1 How often do you feel as though you have succeeded, or reached your own desired standard of performance?
- 8.2 How do you feel when you have achieved success?
- 8.2 *If answered 'never', 'rarely' etc.:* What do you think prevents you from feeling as though you have succeeded.
- 9.1 How often do you feel as though you achieved less than your desired standards?
- 9.2 How does this make you feel?
- 9.2 How do you tend to deal with this?
10. Overall, do you consider your own perfectionism to be positive or negative?  
- Can you explain your answer?

## **Perfectionism and Personality Interview**

### **Participant Information Sheet**

#### **Invitation to take part**

My name is Alison Kerr and I am a current Abertay postgraduate student carrying out a Masters in Research. As part of my degree I am conducting the following study into the nature of perfectionism, which I invite you to take part in.

#### **Purpose of the study**

The following study will take place as a one-to-one interview with the researcher. The purpose of the interview is to investigate your personal experiences of perfectionism. I am interested in discovering how perfectionism develops across the lifespan, and how people's lives are affected. This will include how you tend to deal with success and failure; your motivations for pursuing perfectionism, and the key areas of life that you feel the most perfectionist about.

#### **What will I be asked to do?**

You will be invited along to an individual interview session with the researcher and be asked some questions relating to your perfectionism. You will also be asked for your consent to have your interview voice-recorded for transcription purposes. This will be kept confidential at all times.

#### **Time Commitment**

The interview will take approximately 15 - 20 minutes of your time, however you are free to talk for longer or less time than this, depending on your answers. Some questions may be more relevant to you than others.

#### **Must I take part?**

No, your participation in this study is entirely voluntary. You may decide to withdraw at any point during the interview without explanation. You may also choose not to answer any of the interview questions without penalty.

**Are there any risks?**

There are no known risks for you in this experiment.

**Confidentiality/Anonymity**

Your responses will be kept confidential at all times and will not contain any identifiable information about you; rather your responses will be assigned a generic participant code. You will also be asked for your consent to have your interview voice recorded for later transcription purposes. This will be kept confidential at all times and accessed by the researcher only.

**Further information**

For further information on this study you can contact the researcher, Alison Kerr, [1002910@live.abertay.ac.uk](mailto:1002910@live.abertay.ac.uk), or her supervisors, Dr Lynn Wright, [L.Wright@abertay.ac.uk](mailto:L.Wright@abertay.ac.uk), tel 01382 30XXXX ; and Dr Scott Hardie, [S.Hardie@abertay.ac.uk](mailto:S.Hardie@abertay.ac.uk), tel 01382 30XXXX.

**Perfectionism and Personality: Interview**

**Consent form**

By signing below you are indicating that you have read and understood the Participant Information Sheet and that you are willing to take part in this study.

I understand that during this study I will be interviewed about the topic of perfectionism and will be asked some questions regarding my thoughts and personal experiences.

I understand that my interview will be voice recorded for transcription purposes.

I understand that my participation is voluntary and that I may decide to stop being part of the interview without explanation. I understand that I may choose not to answer any of the questions presented without explanation.

I understand that I will be entitled to ask questions throughout and after the study.

I have read the participant information sheet and I am willing to take part.

Initials: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix 16

### **Perfectionism and Personality**

#### **Debrief**

Thank you for having taken part in my research project. Your responses will help to further build upon previous qualitative research into the nature of perfectionism. The core nature of perfectionism, including what it means to be a perfectionist and how this is expressed within thinking and behaviour, is still debated today. Researchers remain unsure of how to best define perfectionism as a trait, and how best to measure it. It is also disputed whether perfectionism should be considered a positive trait, as well as a negative trait. As a perfectionist yourself, your responses will help me to explore these issues. Perfectionism as a trait, including its origins, development and influences on behaviour, varies widely across individuals, which is why your personal accounts are important within research.

For further information on this study you can contact the researcher, Alison Kerr, [1002910@live.abertay.ac.uk](mailto:1002910@live.abertay.ac.uk), or her supervisors, Dr Lynn Wright, [L.Wright@abertay.ac.uk](mailto:L.Wright@abertay.ac.uk), tel 01382 30XXXX; and Dr Scott Hardie, [S.Hardie@abertay.ac.uk](mailto:S.Hardie@abertay.ac.uk), tel 01382 30XXXX.

If participation in this study has raised any concerns for you, please consider contacting a support service such as Abertay's Student Counselling Service, [counselling@abertay.ac.uk](mailto:counselling@abertay.ac.uk), tel. 01382 308051, or the Samaritans, [jo@samaritans.org](mailto:jo@samaritans.org), tel. 116 123.



***Ethical approval for studies 1 and 2***



Project Reference Number: SHS\_R\_2015-16\_8

Project Title: **Perfectionism: An investigation into perfectionist behaviour and possible correlates**

Proposer: **Alison Kerr**

Matriculation number:

Programme: MSc/MBA/MTech/LLM By Research (SHS), Stage 1

Supervisor: Lynn Wright & Scott Hardie

The above Project has been granted Full ethical approval.

Standard Conditions:

- i The Proposer must remain in regular contact with the project supervisor.
- ii The Supervisor must see a copy of all materials and procedures prior to commencing data collection.
- iii If any substantive changes to the proposed project are made, a new ethical approval application must be submitted to the Committee. Completed forms should be resubmitted through the Research Ethics Blackboard course.
- iv Any changes to the agreed procedures must be negotiated with the project supervisor.

Additional Conditions:

Failure to comply with these conditions will result in ethical approval being revoked by the Ethics Committee.

**SHS Research Ethics Committee**

**Ethical approval for study 3**



Project Reference Number: SHS\_R\_2015-16\_8

Project Title: **Perfectionism: An investigation into perfectionist behaviour and possible correlates**

Proposer: **Alison Kerr**

Matriculation number:

Programme: MSc/MBA/MTech/LLM By Research (SHS), Stage 1

Supervisor: Lynn Wright

The above Project has been granted **Conditional approval with additional conditions as specified below.**

**Additional Conditions:**

There is a slim chance that some of the perfectionist questions could cause upset - please add a brief sentence into the 'risk section' that this might be the case (e.g. thinking about perfectionism as it applies to you in your life),

but contact details and so forth will be provided in a short debrief at the end of the task.

A short debrief should explain the purpose of the study and that if taking part raised anything for the participant, they may wish to contact a suitable support service (e.g. Samaritans or GP for non-student samples).

*NB: you are not required to resubmit your application if you have been given Additional Conditions.*

**Standard Conditions:**

*These apply to all Research Ethics applications*

- i The Proposer must remain in regular contact with the project supervisor.
- ii The Supervisor must see a copy of all materials and procedures prior to commencing data collection.
- iii If any substantive changes to the proposed project are made, a new ethical approval application must be submitted to the Committee. Completed forms should be resubmitted through the Research Ethics Blackboard course.
- iv Any changes to the agreed procedures must be negotiated with the project supervisor.

Failure to comply with these conditions will result in ethical approval being revoked by the Ethics Committee.

**SHS Research Ethics Committee**

***Ethical approval for study 4***



Project Reference Number: SHS\_T\_2015-16\_885

Project Title: **Perfectionism and Personality (Study 3: Qualitative interviews)**

Proposer: **Alison Kerr**

Matriculation number:

Programme: , Stage

Supervisor: Lynn Wright

The above Project has been granted **Full ethical approval**.

**Additional Conditions:**

From an ethical stance this study covers all the main issues relating to consent, anonymity, data storage and debrief.

*NB: you are not required to resubmit your application if you have been given Additional Conditions.*

**Standard Conditions:**

*These apply to all Research Ethics applications*

- i The Proposer must remain in regular contact with the project supervisor.
  - ii The Supervisor must see a copy of all materials and procedures prior to commencing data collection.
  - iii If any substantive changes to the proposed project are made, a new ethical approval application must be submitted to the Committee. Completed forms should be resubmitted through the Research Ethics Blackboard course.
  - iv Any changes to the agreed procedures must be negotiated with the project supervisor.
- Failure to comply with these conditions will result in ethical approval being revoked by the Ethics Committee.

**Research Ethics Committee**