University of South Australia

Perfectionism: Its Domain Specificity and Relationship with Wellbeing.

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Statement of Authorship

This thesis contains no material which has been previously submitted for the award of a degree or diploma in any tertiary institution and, to the best of my knowledge and belief, this thesis contains no material previously written or published by another person, except where due reference has been made in the text.

Signed: .....

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Much research attention has been paid to the trait of perfectionism over the past two decades, particularly its relationship with wellbeing outcomes. Despite this magnitude of research, limited understanding of the relationship has been obtained. It is suggested that failure to question the definition of perfectionism and the way that it is operationalised is part of the reason for this. Current instruments used to measure perfectionism are context free. This approach appears to have led researchers to assume that perfectionism is a 'global' trait which manifests equally in all situations. However, contradictory evidence is provided by case reports, qualitative studies, and theoretical writings on perfectionism. These suggest that the trait may be of a situation-specific nature, with differences depending on the tasks undertaken. To date only two empirical studies have addressed the nature of perfectionism, both finding that an individual's level of perfectionism is task dependent. Limitations in methodology however, restrict the reliability of these studies. The present investigation thus aimed to extend upon these findings and determine whether perfectionism is generalised across situations or whether it is domain specific. It also sought to determine whether approaching perfectionism from a domain-specific perspective increased understanding of its relationship with wellbeing, above that obtained using the standard, context-free approach. The theoretical arguments by Hamachek (1978) and Shafran and colleagues (2002) suggested that it may. Four-hundred and fifty six undergraduate students enrolled at the University of South Australia completed an online questionnaire. It comprised a shortened version of the Hewitt and Flett (1991b) Multidimensional Perfectionism Scale which was administered in its original, context-free form, as well as in five adapted forms measuring perfectionism (1) at university, (2) in interactions with friends, (3) in physical appearance, (4) in sporting activities, and (5) in leisure pursuits. Life satisfaction, self-esteem, depression, and eating disturbance were also measured. Results of the factor analysis confirmed past findings and indicated that levels of perfectionism are not stable across situations, and furthermore, that the context-free Multidimensional Perfectionism Scale does not measure 'generalised' perfectionism as previously assumed. Preliminary support for the arguments of both Hamachek and Shafran and colleagues was also obtained. The hierarchical regression analyses indicated that knowing the nature and/or number of domains in which perfectionism was invested significantly increased prediction of life satisfaction, self-esteem, depression, and eating disturbance beyond that obtained using the context-free version. However, the value of each form of perfectionism in predicting these wellbeing outcomes varied considerably. For all wellbeing outcomes, socially imposed physical appearance perfectionism was found to be the strongest significant predictor. It was concluded that insight into the nature of perfectionism can be furthered by approaching it from a situation-specific perspective. Possible implications of the study are discussed and suggestions made for future research.

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Chapter One: Introduction

Perfectionism as a trait is a very commonly known and comparably misunderstood aspect of personality (Hewitt & Flett, 1991b; Saboonchi & Lundh, 1999). Until recently many have valued and promoted perfectionism as a disposition, recognising it as a positive personality attribute which ensures motivation, dedication, and ultimately success. The abundance of literature which has begun to accumulate on the topic over the past two decades however, has served to contradict this.

As a concept perfectionism has been around in lay, medical, and psychological literature for a very long time (Slade & Owens, 1998). It is only over the past two decades however, that the topic has received scientific attention (Flett, Hewitt, Blankstein & Mosher, 1995). The body of literature has thus developed rather rapidly, evolving from one primarily dominated by anecdotal evidence, to one that is increasingly influenced by empirical studies (Slade & Owens, 1998; Suddarth & Slaney, 2002). Despite this marked increase in research however, there has been surprisingly little advancement in the theoretical understanding of the trait.

In particular, much research effort has been invested into establishing the relationship perfectionism has with wellbeing. Evidence has accumulated demonstrating its strong association with numerous forms of (mainly negative) wellbeing states including: depression (Chang, 2000; Hewitt & Flett, 1991a; Kawamura, Hunt, Frost & DiBartolo, 2001); eating disorders (Bizeul, Brun & Rigaud, 2003; Sutandar-Pinnock, Woodside, Carter, Olmsted & Kaplan, 2003); anxiety disorders (Flett, Greene & Hewitt, 2004; Wei, Mallinckrodt, Russell, Abraham & Todd, 2004); phobic disorders (Evans, Lee & James, 1999); somatic disorders (Saboonchi & Lundh, 2003); personality disorders and poor overall wellbeing (Dunkley, Zuroff & Blankstein, 2003). Despite this marked increase in research, however, there has been surprisingly little advancement in the theoretical understanding of the trait, let alone in its association with wellbeing.

It is suggested that failure to question the definition of perfectionism and the way that it is approached and operationalised in the literature is part of the reason for this. In particular there seems to be an un-tested assumption that perfectionism is a global trait, which is equally manifested and invested in all tasks a perfectionistic individual undertakes.

There appears to be substantial evidence, however, provided not only in early theoretical writings, but by anecdote, clinical report, and even some preliminary empirical studies, to suggest that perfectionism may not be global. People differ significantly in the degree of perfectionism directed towards a task, depending upon the nature of the task and the values of the individual (Hewitt & Flett, 2002). To date, however, little empirical attention has been paid to the possibility that perfectionism may be situation-specific, and no attempts made to reconcile the inconsistencies between the psychometric and theoretical literature. The current study thus aimed to rectify this. Firstly, it sought to ascertain whether perfectionism is a global or domain-specific trait, and in turn clarify the exact nature of the perfectionism measured by a commonly used perfectionism scale. Secondly, it sought to establish the value of measuring the situation-specific nature of perfectionism, by determining whether additional understanding of perfectionism's relationship with wellbeing was gained.

1.1 Is Perfectionism a Global or Situation-Specific Trait?

1.1.1 Conceptualisations of Perfectionism

Many of the limitations inherent in the perfectionism literature have been exacerbated by the lack of a coherent, agreed upon definition (Ashby, Kottman & De Graaf, 1999; Chang, 2000; Shafran, Cooper & Fairburn, 2002; Shafran & Mansell, 2001). This has resulted in the tendency amongst researchers to conduct their studies without explicit consideration of the characteristics of perfectionism, instead allowing the construct to be defined by the instrument by which it is

measured. There are large discrepancies however, between the way in which perfectionism is conceptualised in theory, and the way it is measured empirically (Shafran et al., 2002).

1.1.1.1 Definitions of perfectionism

There have been many definitions posed to delineate the various characteristics of perfectionism and perfectionists. Although current conceptualisations unanimously depict perfectionism to be a dominant and pervasive personality trait, there is no universally accepted definition (Hewitt & Flett, 2002). There are, however, many similarities throughout the literature to illustrate its dominant features.

Hollander (1978) was amongst the first to define perfectionism. He stated that perfectionism is "the practice of demanding of oneself or others a higher quality of performance than is required by the situation" (p.384). Burns (1980) extended this definition, conceptualising people with perfectionism as "those whose standards are high beyond reach or reason...who strain compulsively and unremittingly toward impossible goals and who measures their own worth entirely in terms or productivity and accomplishment" (p.34). It is the cognitive distortions, however, which typify perfectionists, differentiating them from individuals who are simply highly competent and therefore strive highly (Frost et al., 1990). Perfectionists are typically shown to catastrophise, and overgeneralize failure experiences, ruminating extensively over errors, and displaying very dichotomous thinking when evaluating their performance (e.g. Burns, 1980; Hamachek, 1978; Pacht, 1984). Essentially, they believe that failure to meet one standard implies a failure to meet any of the self's standards. Thus the presentation of perfectionism, as illustrated above, is largely negative. Not all experts in the field, however, believe that perfectionism is uniformly negative (LoCicero, Ashby, & Kern, 2000).

Although acknowledging that perfectionism can certainly be maladaptive, Hamachek (1978) proposed a multidimensional model of perfectionism in which he equally recognised the opposite capacity for it to be normal and adaptive. According to Hamachek perfectionism is

manifested in two distinct forms: 'neurotic' and 'normal'. In 'normal' perfectionism people derive a sense of pleasure from painstaking effort and they strive to excel while feeling free to be less precise as the situation permits (Hamachek, 1978). As a result, success brings a sense of satisfaction (Timpe, 1989), and builds self-esteem, as people are able to accept both personal and environmental limitations (Pacht, 1984). If such individuals fall short of their desired level of achievement, they are still able to seek satisfaction and accept the outcome, knowing that they tried their best. In other words, such individuals strive for personal improvement, but are discriminate, self-confident, and flexible enough to direct their efforts towards important tasks, and be satisfied with whatever they achieve.

Neurotic perfectionism, on the other hand, is characterised by an intense need to avoid failure (Hamachek, 1978). Such individuals are driven by deep-seated feelings of inferiority and vulnerability, which force them into an endless cycle of self-defeating over-striving in which each task is perceived as another threatening challenge (Hamachek, 1978). No outcomes, regardless of how proficient they have been achieved, provide any level of satisfaction. No level of self-esteem is built by achievement, and even minuscule shortcomings and mistakes are dramatised, generalised across domains, and interpreted to indicate complete incompetence and failure as a person. Moreso, they set the expectation of achieving perfectionism in all tasks and products encountered. They hence set themselves up to obtain nothing but failure (Frost et al., 1990). It is essentially the maladaptive perfectionists' inability to tailor their strivings according to ability and situations which differentiates them from their adaptive counterparts (Hamachek, 1978).

Despite these rather detailed and prescriptive definitions, however, failure to accept one as 'universal', has resulted in the development of the practice in empirical endeavours for the concept to be defined by the instrument which measures it (Shafran & Manswell, 2002). Although many of these above-mentioned features have been incorporated, there is still a notable discrepancy between these traditional distinctions and the subsequent measures (Shafran &

Mansell, 2001). In particular, the original perfectionism theorists mention of the environment, situation, and their interaction with perfectionism, has been seemingly overlooked.

1.1.1.2 Measures of Perfectionism

At present there are two perfectionism measures dominating the literature. The first of these, entitled the Multidimensional Perfectionism Scale was created by Frost, Marten, Lahart, and Rosenblate (Frost MPS) (1990). It was devised as an alternative to the (then) current measures of perfectionism, classifying people according to the factors which maintain perfectionism. Specifically it measures the extent to which people, when going about non-specified, everyday tasks (a) are concerned over making mistakes (b) set high personal standards (c) feel criticised by their parents (d) feel that their parents have high expectations of them (e) doubt their ability to perform tasks, and (f) are driven to be excessively organised. The authors argue that people displaying these tendencies are highly perfectionistic and in turn, that by knowing their position along each of these dimensions, one can better treat the disposition, as the reasons for the behaviour are known.

The second and far more prominent of these measures is the similarly named Multidimensional Perfectionism Scale by Hewitt and Flett (MPS) (1991b). It however, was based upon a very different premise to that by Frost et al. (1990). The authors believed that existing measures (and conceptualisations) focused too much on the self-directed, cognitive aspects of the trait. Their instrument was thus created to measure both the self imposed and externally imposed aspects of the trait from a cognitive-motivational perspective. It classifies perfectionism along three dimensions. The first dimension, self-oriented perfectionism (SOP), is what most people think of when they think of perfectionism. It is the tendency for individuals to set and hold themselves to unrealistically high standards of behaviour and performance. This is distinct from socially-prescribed perfectionism, an interpersonal dimension, which involves the perception that significant others have unrealistically high expectations for oneself, to which the individual feels

compelled to comply. In other oriented perfectionism, the nature of the perfectionism deviates somewhat from traditional conceptualisations of the trait. Here the high expectations and stringent evaluation are generated by the individual, but directed towards significant others. The authors believed that each of these components represented a unique form of perfectionism.

Apart from these two measures there are numerous others which appear occasionally throughout the literature. Although such instruments have not been as widely accepted as the two Multidimensional Perfectionism Scales, they do present alternative conceptualisations. These measures are outlined in Appendix 1. What is striking upon citing all of these measures and the theory underlying them, is the universal tendency of researchers to approach perfectionism as a generalised trait.

An examination of the scales reveals that the items presented to participants are free of any specific context to which they apply. Exception to this included a few questions contained in the Frost MPS and the Hewitt and Flett MPS specifically about standards and expectations at work or school, and a minority of questions which emphasise the context of application as being 'all tasks undertaken'. Exemplars included "I must always be successful at school or work", and "I strive to be the best at everything I do", respectively. All other questions, however, are domain-free: "I set very high standards for myself".

Similarly, the written 'instructions to participants' concerning the completion of the instrument, are equally devoid of any prompting regarding a situational frame in which to respond. Instructions for the Hewitt and Flett MPS state: "Listed below are a number of statements concerning personal characteristics and traits. Read each item and decide whether you agree or disagree and to what extent". The only scale that provides people with any guidance as to a frame of references is Terry-Short et al.'s (1995) Positive and Negative Perfectionism Scale. It asks people to respond regarding how they "**generally** feel...**how you feel on the average**" (bold included). This instrument clearly intends to measure people's 'average' perfectionism across all

tasks. In reference to the other scales, their intention of measurement is far less apparent and in turn, the context in which people respond unknown.

The nature of the perfectionism measured by such instruments, or more specifically the absence of situational context has not been questioned. Researchers have instead assumed that the various perfectionism instruments measure global perfectionism, and designed and executed their studies accordingly (e.g. Hart, Gilner, Handal & Gfeller, 1998; Juster, Heimberg, Frost & Holt, 1996; O'Connor & O'Connor, 2003; Saboonchi & Lundh, 2003; Rice, Ashby & Preusser, 1996). Whether this is the case or whether perfectionism is of a domain-specific nature, differing in accordance with the task undertaken, has never been tested. Accumulating evidence in addition to that provided in the original definitions of perfectionism (reviewed above) suggests that the latter may be true.

1.1.2 Evidence Suggesting Perfectionism May be Domain-Specific?

1.1.2.1 It is Not Just a Personality Trait

Being a personality construct, perfectionism should generalise across situations and life roles. Empirical studies investigating the stability of the trait provide evidence that it is stable over time (Parker, 1997; Parker & Stumpf, 1999; Rice & Dellwo, 2001), but investigations into its consistency across situations have not been undertaken. In affiliated fields of personality, however, it is recognised that traits require the necessary environmental antecedents in order to be evoked (Kenrick, McCreath, Govern, King & Bordin, 1990). Anxiety, for example, will not be displayed in all situations – only those with the conditions conducive to its activation.

It is probably deceptive, however, to think of perfectionism only as a trait of personality. As emphasised in more recent literature, perfectionism is a construct comprised of distinct behavioural, motivational, and cognitive elements (Flett, Sawatzky & Hewitt, 1995; Hewitt & Flett, 1991a, 1991b; Pacht, 1994). From this perspective, the potential for the disposition to be

unequally applied across situations seems more plausible. Each of these elements – motivation, behaviour, and cognition – are known to change across tasks in accordance with individual differences, such as personal capacity, desires, and needs (Flett, Sawatzky & Hewitt, 1995). It follows that perfectionism may also change. Further, traits closely affiliated with perfectionism have also been found to be domain-specific. Hypercompetitiveness (Bing, 1999; Ryckman, Hammer, Kaczor & Gold, 1990), Agreeableness (Murtha, Kanfer & Ackerman, 1994), Sociotrophy-Autonomy (Mischel, 1968), Goal-orientation (Emmons, 1995), and Conscientiousness (Murtha et al., 1994) are not applied equally to all activities. Given that each of these constructs, like perfectionism, involves the way an activity is perceived, approached, and/or executed, it seems reasonable that their degree of activation will differ as the nature of the task changes.

Apart from these more theoretical lines of rationale however, additional evidence specifically pertaining to the construct of perfectionism and its potential non-universality is provided in the perfectionism literature.

1.1.2.2 Recognition of the Potential Domain-Specificity of Perfectionism.

In line with the psychometric conceptualisations of perfectionism, the literature seems to have incorporated as one of its numerous assumptions, that perfectionism is a stable personality trait which is apparent in most if not all life pursuits (Flett & Hewitt, 2002). Whilst researchers seemingly believing this, however, a distinct trend pervades the literature, for the effects of perfectionism to only be investigated (using the global measures) in relation to a very limited number of tasks. Much research has been made in determining how perfectionism impacts upon people's performance at university, at work, and to some extent, in sporting endeavours. The operation and bearing of perfectionism in other activities such as how it affects people's intimate relationships, family functioning, hobbies, religious pursuits, artistic undertakings, physical appearance, and the like, have barely been investigated. Exploration of the relevant databases

(PsychInfo and PsychArticles) strongly illustrates this point. Searches addressing the relationship between perfectionism at university, work, or sport return 113, 92, and 22 articles respectively. Equivalent searches addressing the other aforementioned domains (e.g. family functioning) return no more than 6 articles. This would seem to suggest that at some level there is the recognition that perfectionism is not universally applied to all endeavours. Whether it is this limited and restricted applicability to academic and career pursuits is a different matter. Case studies would suggest it is not.

1.1.2.3 Case Studies and Qualitative Reports of Perfectionism

Case study reports are far more expansive in their exploration of the expression of perfectionism than the empirical literature. It is suggested here, contrary to the assumptions explored above, that perfectionism has the potential to operate in any number and nature of domains, depending upon the character of the individual.

There are numerous clinical accounts detailing some of the most extreme, and maladaptive cases of perfectionism. Case studies abound describing mothers, wives, celebrities, athletes, professors, and students, all crippled by perfectionism (Blatt, Quinlan, Pilkonis & Shea, 1995; Burns, 1983; Flett & Hewitt, 2002; Nekanda-Trepka, 1984). What is so highly notable about all these case reports, however, is the emphasis placed upon expressing the perfectionism. Every case documents without exception the specific tasks towards which individuals direct their perfectionism and inturn, the way this affects both the individual and those around him/her. More specifically, they illustrate how the profile of perfectionism is unique to the individual. Flanagan (1993) for example, reported the case of Mr G., an attorney in law who was perfectionistic not only about his work, but also his physical appearance, and social interactions, spending hours in the morning deciding what to wear, and refusing in social conversations to self-disclose any information out of fear of being judged unfavourably. What these case studies seem to suggest is that individuals are only perfectionistic about tasks which are highly salient, and comprise part of

the individual's self-concept; the musician about his music, and the housewife about cleaning (Flett & Hewitt, 2002).

Qualitative reports similarly suggest that perfectionism is expressed in a limited number of domains. The self-confessed perfectionists in the studies of Slaney and Ashby (n=37) (1996), and Rice, Bair, Castro, Cohen, and Hood (n=10) (2003), both expressed the belief when discussing the expression of perfectionism, that academic and career pursuits were the two domains towards which perfectionism is most likely to be channelled. Subjects in Rice et al. study, however, did qualify this statement. They suggested that each perfectionist is different, with most demanding the highest level of performance in areas of personal importance.

1.1.2.4 Empirical Investigations of Domain-Specific Perfectionism

To date there have been only two empirical studies which have sought to investigate the possibility that levels of perfectionism may differ in accordance with the task undertaken. Mitchelson and Burns (1998) were the first to conduct such a study. Recognising the 'complexity' that trait perfectionism can add to the manageability of one's lifestyle, the authors sought to investigate levels of perfectionism in working mothers. It was suspected, due to the vast differences in the home and work environments, that levels of perfectionism would differ markedly.

To test their hypothesis, Mitchelson and Burns (1998) administered to a sample of 67 career mothers (mean age of 33.3 years) both the Positive and Negative Perfectionism Scale (Terry-Short et al., 1995), and two situation-specific forms of the Hewitt and Flett MPS (1991b); one for the context of home, and the other for work. These were created by adding 'at home' or 'at work' onto the end of each item in the original MPS.

As expected, marked differences in the presentation of perfectionism in the two domains were found, with mothers displaying significantly higher levels of perfectionism at work compared to home. The authors suggested that such differences were evidence of career mothers'

inability to maintain perfectionistic standards in all domains of life, hence leading them to compromise their standards, and lowering expectations in the less 'regulated' context, the home. Although this finding provides preliminary evidence that levels of perfectionism differ in accordance with the task undertaken, it provides a somewhat limited picture. It used a sample comprised only of females – moreso only of mothers – and measured perfectionism in only two domains – home and work. Flett, Sawatzky and Hewitt (1995) conducted a broader study.

In reviewing the literature, Flett and colleagues (1995) noted a tendency amongst past researchers to treat perfectionism purely as a cognitive construct. Despite accepting that perfectionism undoubtedly has strong cognitive elements, they argued that to understand and predict behaviour accurately, a focus upon perfectionism as a motivational construct needs to be taken. The authors' logic was that perfectionism was a stable personality trait serving to motivate an individual to achieve highly in all domains of life. They believed, however, that levels of motivation could be moderated by feedback and situation cues that discourage the individual from continuing to pursue the perfectionistic goals, hence resulting in the display of varying levels of perfectionism across situations. Thus the authors sought to investigate whether individuals display identifiable differences in perfectionistic goals, by gauging their degree of commitment to the goals.

To test their hypothesis Flett and colleagues (1995) created a Goal Commitment Scale, which they adapted to measure commitment to perfectionistic goals in seven specific areas: (1) perfect performance at work or school, (2) perfect relationship with partner (3) perfect grooming, (4) need to do things in an organised, efficient manner at all times, (5) perfect manners, (6) need to behave in a perfectly moral and ethical fashion, and (7) need to have a perfectly clean, tidy, and orderly home environment. No details were provided on how the goal context was presented to respondents, although it could be determined that they were not incorporated into each of the specific items as done by Mitchelson and Burns (1998). Participants also completed, in their original form, both the Frost and the Hewitt and Flett MPS.

Results of the study supported the authors' contention and found individual differences in perfectionistic goal commitment. The strengths of the bivariate correlations showed that the relationship between each of the perfectionistic goal commitment dimensions and each of the subscales of the Frost and the Hewitt and Flett MPS differed markedly. The general trend that emerged was for the interpersonal subscales of the two MPSs (SPP, OOP, parental standards and criticisms) to be significantly related to goal commitment in social tasks (e.g. having perfect relationships, and perfect grooming), and for the self-imposed perfectionism subscales (SOP, personal standards) to be related to goal commitment in achievement domains (e.g. being perfect at work/school, in organisation, and in cleanliness). These results supported the Hewitt and Flett (1991b) model of perfectionism (as discussed above). It suggests that self-oriented perfectionists and socially-prescribed perfectionists differ in the nature of the tasks towards which they direct their perfectionism. The former is more concerned with personal achievement and the latter with gaining social approval (Hewitt & Flett,1991b). The authors concluded that people differ in their degree of commitment to perfectionistic goals, depending upon the fit between the nature of the perfectionism and the task at hand.

A subsidiary aim of Flett et al. (1995) was to determine whether people's high perfectionistic goal commitment was domain-specific or generalisable across tasks. Findings of a correlational analysis served to show that individuals who tended to be committed to the pursuit of perfection in one life domain (e.g. grooming) tended to be committed to the pursuit of perfection in other life domains as well (e.g. perfect relationships), with all commitment domains being significantly and positively correlated with each other, at a strength of around .6. A factor analysis confirmed this conclusion, returning a one-factor solution which accounted for 43% of the total variance. This led the authors to conclude that although the strength of the relationships differed across tasks, perfectionists generalise their standards to all tasks undertaken.

Given the methodology used in the study however, this conclusion seems erroneous. The authors have measured people's outward pursuit and commitment to a range of 'hypothetical'

perfectionistic goals, posing that commitment levels influence the degree to which the perfectionistic goals are pursued, thus outwardly displayed. By doing this, however, they have premised their study upon the exact assumption they were trying to clarify. They have taken as a given that people possess equivalent perfectionistic goals in all domains, and preceded to investigate what moderates their expression. Yet they have failed to establish that the same perfectionistic standards in each of the domains are actually possessed in the first place. The present study aimed to rectify this.

1.1.3 Current Study: Part One

The primary aim of the current study was to address the oversight in literature as to whether perfectionism is a global or situation-specific disposition. At present there are seemingly many contradictions within the literature concerning this issue. Early theoretical writings, both directly pertaining to perfectionism and in the personality literature in general, as well as clinical evidence, appear to suggest the trait may be of a situation-specific nature. Psychometric measures of perfectionism however, fail to attend to such a possibility, instead treating perfectionism as a global disposition. Despite the vast limitations this oversight poses for the understanding of perfectionism, and the directedness and advancement of the field, scant empirical research has been conducted to address this topic. The current study thus attempted to address this. It sought to extend upon the preliminary investigation by Mitchelson and Burns (1998), by using a sample composed of males as well as females. University students were used. It also built upon the study by Flett and colleagues (1995) by investigating directly the individual's possession of perfectionistic goals in a vast range of everyday domains.

As scant research has been conducted in the area, there was little precedent as to the domains in which to investigate perfectionism. Five specific domains were therefore selected on the basis of their use in previous exploratory studies or the prominence of their discussion, but lack of empirical testing in the literature. They were also required to be common tasks to which

all participants could respond. The chosen domains were perfectionism directed towards (1) university pursuits, (2) interactions with friends, (3) physical appearance , (4) playing sport, and (5) leisure activities. The study also sought, for the first time to verify the nature of the perfectionism measured by current day perfectionism instruments, as consideration of the possible domain-specific nature of perfectionism casts doubt upon the context in which people respond when presented with these generalised measures. As the Hewitt and Flett (1991b) Multidimensional Perfectionism Scale (MPS) is the most commonly used measure, this was selected for the current investigation.

The first aims of the study are:

1. To examine whether perfectionism is a global trait which is equally manifest in all situations (university, interaction with friends, physical appearance, playing sport, and leisure activities), or whether it is situation-specific, being directed towards a limited number of domains.
2. To clarify the nature of the perfectionism which is measured by the Hewitt and Flett Multidimensional Perfectionism Scale.

1.2 Perfectionism, Psychopathology and Wellbeing.

Over the past two decades there has been a growing interest in the study of perfectionism as a predictor of psychological outcome (Enns & Cox, 2002). It has been clearly established that perfectionism is strongly associated with many aspects of psychological health and wellbeing, many of which are negative. Despite this abundance of literature, however, there is still little understanding about the true operation of perfectionism in these domains (Hewitt & Flett, 2002; Shafran et al., 2002). Given the above conclusion that perfectionism may not be generalisable, one consider the possibility that greater understanding of perfectionisms relationship with

wellbeing may be gained by approaching perfectionism as a domain-specific rather than a global disposition. Evidence in the literature supports this possibility.

At present the perfectionism-wellbeing association is approached by researchers in accordance with Hamachek's (1978) positive-negative perfectionism distinction. The tendency eventuated out of a series of factor analytic studies, which showed that every multidimensional perfectionism scale currently used in the literature can be reduced to two factors: one positive upon which the self-imposed forms of perfectionism (e.g. the SOP and OOP subscales of the Hewitt and Flett MPS and the Personal standards subscale of the Frost MPS load); and one negative, upon which the other imposed perfectionism subscales load (e.g. the SPP subscale of the Hewitt and Flett MPS and the Concern Over Mistakes, Parental Expectations, Parental Criticism, and Doubts About Action of the Frost MPS) (Ashby, Kottman & DeGraaf, 1998; Dunkley, Zuroff & Blankstein, 2003; Frost et al., 1993; Rice, Ashby & Slaney, 1998; Slaney et al., 1995; Suddarth & Slaney, 2001). Accordingly, much research has been done on the proposal that the two dimensions (positive/negative) will related differently to a range of variables (i.e. personality traits, coping mechanisms, attributions, physical and psychological complaints, levels of wellbeing, etc), with positive perfectionism being related to those which are adaptive and advantageous, and maladaptive perfectionism to those which are pathological and undesirable (e.g. Blatt et al., 1995; Dunkley et al., 2003; Dunn, Dunn & Syrotuik, 2002; Flett, Greene & Hewitt, 2004; Juster, Heimberg, Frost & Holt, 1996; Hart, Gilner, Handal & Gfeller, 1998; O'Connor & O'Connor, 2003; Rice & Slaney, 2002). Such endeavours, however, have lent only limited support for the contention. Overwhelming evidence has supported the contention that perfectionism and more specifically 'negative' perfectionism is strongly related to a myriad of maladaptive variables including: depression (Flett et al., 1998); obsessive compulsive personality disorder (Frost & DiBartolo, 2002); procrastination (Flett, Blankstein, Hewitt & Koledin, 1992); anxiety (Flett, Greene & Hewitt, 2004); social phobia (Juster et al., 1996); eating disorders (Pliner & Haddock, 1996); suicide ideation (Hamilton & Schweitzer, 2000); relationship problems

(Burns, 1983); self-handicapping (Hobler & Pliner, 1995); and poor treatment responsivity (Blatt, Quinlan, Pilkonis & Shea, 1995). Yet the opposite contention has received far less support.

1.2.1 The Association of Perfectionism with Negative Wellbeing

In terms of the relationship between perfectionism and negative outcomes the strongest and most direct findings have been obtained in relation to eating disorder and depression (Shafran & Mansell, 2001). Understandably due to the nature of the constructs, all of the studies in the area of perfectionism are correlational, hence causative relationships cannot be determined. The results of longitudinal and path-analytic studies have served to demonstrate, however, that perfectionism does not have a direct effect upon most forms of wellbeing. Instead it acts as a mediating or moderating variable (Hewitt & Flett, 2002; Shafran et al., 2002). Depression and eating disorders are two of the few exceptions.

1.2.1.1 The Association of Perfectionism with Depression

In the case of depression, it is generally accepted that perfectionism is a comorbid disposition, which although not causing the disorder, both exacerbates it after onset and inhibits responsivity to treatment (Chang, 2000; Hewitt & Flett, 1991a; Kawamura, Hunt, Frost & DiBartolo, 2001; Rice et al., 1998). In turn, the depressive symptomology is also thought to exacerbate levels of perfectionism. Accordingly, current empirical evidence has consistently found a robust, positive association between levels of perfectionism and depression (Blatt et al., 1995; Hewitt & Flett, 1991a; 1991b; Hewitt et al., 1996; Hill, McIntire & Bacharach, 1997; Sherry, Hewitt, Flett & Harvey, 2003; Zuroff, Blatt, Sanislow, Bondi & Pilkonis, 1999), suicidal ideation (Adkins & Parker, 1996; Hamilton & Schweitzer, 2000; Hewitt, Flett & Weber, 1994; Hewitt, Flett & Turnball-Donovan, 1992; Hewitt, Newton, Flett & Callender, 1997), and negative affect (Zuroff et al., 1999). The relationship, however, is not this straightforward.

In accordance with the positive and negative distinction, depression has been shown to be more strongly related (Enns & Cox, 1999; Flett, Hewitt, Blankstein & O'Brien, 1991; Hewitt & Flett, 1991a; Hewitt, Flett & Ediger, 1996; Wyatt & Gilbert, 1998) or in some cases exclusively related (Minarik & Ahrens, 1996) to 'maladaptive' as opposed to 'adaptive' dimensions of perfectionism. In one study with a longitudinal design, SPP was found to predict increased levels of depressive symptomology over a 4-month period (Shafran & Mansell, 2001). The relationship depression has with adaptive perfectionism, however, certainly cannot be discounted.

Hewitt and Flett (1991a) compared patients with unipolar depression (n=22), patients with anxiety disorder (n=13) and control participants (n=22). Elevated levels of SPP were found in both patient groups, but only the group with depression showed elevated SOP scores. This suggests that elevated levels of SOP may be more specific to depression. Findings in non-clinical populations have failed to attain such a relationships however (Flett et al., 1991; Frost et al., 1993).

Due to the inconsistencies in findings, researchers have begun to consider the possible role external variables may play as either mediators or moderators of this relationship. A series of regression equations supported the hypothesis that self-esteem mediates the relationship between perfectionism and depression in non-clinical samples (Preusser, Rice & Ashby, 1994), but failed to replicate in clinical populations (Rice et al., 1998). Others have suggested that the path from perfectionism to depression differs depending upon exposure to stress. More specifically they argue that elevated depressive symptomology will only result when an individual experiences a stressor that is consistent with the nature of their perfectionism (see Flett et al., 1995; Hewitt & Flett, 1991b). Thus SOPs who have experienced a stressor in an achievement domain or SPPs in a social domain, will experience increased levels of depression (Flett, Hewitt, Blankstein & Mosher, 1995; Hewitt & Flett, 1993a; Hewitt, et al., 1996). Results supporting this conclusion are somewhat mixed. Although a marked and enduring relationship between depression and perfectionism has been established, the true nature of this association is still largely unknown.

1.2.1.2 The Association of Perfectionism with Eating Disorders.

Much like depression, the role of perfectionism in eating disorders has long been acknowledged (Bauer & Anderson, 1989; Bruch, 1973; Toner, Garfinkel & Garner, 1986; Halmi, Goldberg, Eckert, Capser & Davis, 1977). Yet it has been recognised to be far stronger and more direct than in any other pathology, with evidence implicating it as a premorbid, comorbid, and maintaining factor of the disorder (Hewitt et al., 1995). Some researchers even claim it may be a causative factor (Casper, 1983). Many screening measures of eating disorders, including the Eating Disorder Inventory (Garner, Olmstead & Polivy, 1983), and Setting Conditions for Anorexia Nervosa Scale (Slade, 1986), incorporate a perfectionism subscale, deeming it a necessary diagnostic criterion. Despite this the relationship is still unclear.

Ashby, Kottman & Schoen (1998) suggested that only externally generated, maladaptive aspects of perfectionism differentiated eating disorder sufferers from their 'normal' counterparts. This conclusion was based on the finding that the clinical eating disordered sample differed significantly from the undergraduate sample only on the negative subscales of both the Frost MPS (doubts about action, concern over mistakes, parental expectations, and parental criticism) and Almost Perfect Scale – revised (discrepancy). Cockell, Hewitt, Goldner, Srikameswaran and Flett (1996) similarly found, using the Hewitt and Flett MPS, that although both SOP and SPP levels were inflated in their clinical sample (anorectics and bulimics), only the SPP subscale predicted purging behaviour.

This argument, although congruent with clinical schools of thought which strongly implicate external standards in the aetiology of eating disorders, contrasts a lot of literature. Many early studies have examined the relationship of perfectionism to eating disorder symptomology using the unidimensional perfectionism subscale of the Eating Disorder Inventory (considered to represent self-oriented, hence adaptive perfectionism). These have consistently found significant differences in the levels of perfectionism displayed by anorexics and bulimics, compared to non-

eating disordered clinical and non-clinical populations (Calam & Waller, 1998). No difference in perfectionism between the two clinical populations, however, has been found (Garner et al., 1983). More detailed studies using multidimensional approaches to perfectionism have similarly revealed significant differences between eating disordered and control samples, in levels of self-imposed, adaptive perfectionism (i.e. personal standards, SOP etc) (e.g. Bastinani, Rao, Weltzin & Kaye, 1995). Pratt, Telch, Labouvie, Wilson and Agras (1999) using probably the most comprehensive methodology and sample to date, showed that SOP was the only dimension significantly elevated in eating disordered populations (anorexic, bulimic, binge eating, obese, and eating disorders otherwise not specified) compared to the control (general population).

Addressing these contradictory findings, Hewitt et al. (1995) argued that each dimension of perfectionism operates in an independent and unique way to influence eating disordered behaviour. According to them, the eating disorder symptoms eventuated from the setting of unrealistic standards by the self (SOP) whereas affiliated issues, such as low self-esteem, concerns about appearance, and drive for thinness derive from the need to meet expectations imposed by others (SPP). The finding by Cockell et al. (2001) that eating disordered populations can be differentiated from both normal and general psychiatric populations on the basis of their scores on the SOP and SPP subscales of the Hewitt and Flett MPS, somewhat supports this argument.

1.2.2 The Association of Perfectionism with Positive Wellbeing

Conversely, the opposite contention that perfectionism can be associated with positive outcomes has received a lot less empirical support. This is somewhat attributable to the fact that researchers have continued to view the disposition as largely negative and pathological. Thus they failed to conduct research into the possible role perfectionism plays in the attainment of high levels of wellbeing and positive psychological health. Nonetheless research is starting to accumulate in certain domains, including how it relates to life satisfaction and self-esteem. The

emerging trend, however, is still unfavourable, with little or no relationship between adaptive perfectionism and positive factors being obtained.

1.2.2.1 The Association of Perfectionism with Self-Esteem

Gotwals and colleagues (2003) examined the relationship between self-esteem and perfectionism in a sporting context, using a sample of 87 inter-collegiate athletes. Results of the canonical correlations indicated that although a maladaptive perfectionism profile amongst athletes was strongly associated with lower self-esteem, there was no evidence to suggest that an adaptive profile of perfectionism related in any way (either positive or negative) to levels of self-esteem. Parker's (1997) study of 829 academically talented sixth grade children challenged this conclusion. Classifying people as either healthy (adaptive), unhealthy (maladaptive), or non-perfectionists on the basis of the results of the cluster analysis, it was found that adaptive and maladaptive perfectionists did differ significantly in levels of self-esteem. Results of the univariate analysis of variance found evidence that the healthy perfectionism group displayed significantly higher levels of self-esteem as measured by the Rosenberg Self-Esteem scale (1965), than did the unhealthy perfectionists. Comparison with non-perfectionists, however, showed no significant differences. This suggests that although being an 'adaptive' perfectionist is better than being a 'maladaptive' perfectionist, it is really no better than being 'normal'.

1.4.2.2 Perfectionism's Association with Life Satisfaction

In relation to life satisfaction, less support has been obtained for the positive outcomes of perfectionism. Chang (2002) investigated the relationship between perfectionism and life satisfaction in a comprehensive study using 371 college students. Administering to the participants a battery of measures including Diener's Satisfaction with Life Scale (2002) and the Frost MPS, Chang found little support for the proposition that perfectionism is associated with greater life satisfaction. Instead he found the opposite. Results of the zero-order correlations

showed that although the total perfectionism score of the Frost MPS was significantly related to greater levels of stress, worry and negative affect, it was negatively related to life satisfaction, and completely unrelated to positive affectivity. The interpretation of this finding is somewhat limited, however, by Chang's failure to report how each of the positive and negative subscales of the Frost MPS related to each of the outcome measures, instead reporting only the global score. Gilman and Ashby (2003) hence re-examined this issue. Their analysis confirmed expectations, showing that amongst adolescents, levels of global life satisfaction were significantly positively related to positive perfectionism (standards subscale) and significantly negatively related to negative perfectionism (discrepancy subscale). This provided some preliminary, but unconfirmed evidence that perfectionism can be of benefit.

1.4.3 Need for a New Approach to the Perfectionism-Wellbeing Relationship

Reflecting on the above-discussed findings, the contradiction between the pervasiveness of the positive-negative perfectionism distinction throughout the literature, yet the lack of research suggesting that perfectionism is anything but negative is apparent. The meagre advancement made into understanding the perfectionism-wellbeing relationship, despite the overwhelming amount of research conducted in this area, is also striking. Combined, these two findings suggest that researchers may need to question the positive-negative distinction and consider whether additional insight may be gained by approaching the relationship from a different perspective. Investigating perfectionism as a situation-specific disposition is one possible solution.

Considering Hamachek's (1978) original description of positive and negative perfectionism, it becomes apparent that the latter positive-negative perfectionism distinction has deviated somewhat from how it was originally prescribed. Hamachek put forward the view that the single feature that differentiated between adaptive and maladaptive perfectionists, was the individual's ability to discriminate when perfectionistic ideals were realistic and when they were not; it had nothing to do with the source (e.g. doubts about action, concern over mistakes, etc) or

direction (e.g. SOP/SPP/OOP) of the perfectionism as currently utilised. Adaptive perfectionists, according to Hamachek, are those who are able to recognise and accept environmental and personal limitations, choosing to direct perfectionism towards only a limited number of deserving and personally important domains. Maladaptive perfectionists on the other hand fail to implicate such boundaries, expecting perfection in a far greater number of domains, with little attention to circumstance.

This line of argument suggests that the number of domains in which people are perfectionistic may serve as a better indicator of adaptivity or maladaptivity, as it would reflect people's capacity to discriminate their perfectionism. Assertions such as that by Hewitt & Flett (1991b), that the most extreme perfectionists are those who expect perfection in the greatest number of domains, further support such a proposal. Evidence is also provided in the goal-setting literature.

In the goal-setting literature there has been considerable investigation into the effect of goals on psychological health and wellbeing. The empirical evidence here strongly supports the contention that the possession of a large number of goals is the most psychologically desirable (Bong, 2001; Emmons & King, 1988; Locke, Smith, Erez, Chah & Schaffer, 1994; Malouff, Schutte & Bauer, 1990; Peterson, 1989). Absence of goals indicates lack of drive, motivation and hopefulness (Bong, 2001; Emmons, 1995; Emmons & King, 1988; Maehr, 2001). Emmons and King (1988), however, demonstrated that the possession of numerous goals is only beneficial if they are consistent with each other. In their study, undergraduate students who possessed a non-congruent goal-system, having one or more goals that interfered the attainment of another goal, actually reported the highest rates of negative affect, depression and somatic complaints.

Applied to the idea of perfectionism (an extreme form of goal setting), it would seem that possession of perfectionistic standards in multiple domains, regardless of their nature, would likely cause conflict. It would not be possible to dedicate the required amount of time, energy and effort to obtain the desired level of performance in multiple domains (if perfectionism is even

obtainable in the first place). Thus supporting Hamachek's argument (1978), such people would be likely to report the lowest levels of wellbeing. Conversely, being perfectionistic about a single domain may be beneficial, providing people with the motivation and dedication that will set them apart. This is certainly the sentiment presented in the sports psychology literature (Koivula, Hassmen & Fallby, 2002; Gotwals et al., 2003), performance literature (Mor, Day, Flett & Hewitt, 1995) and by perfectionists themselves (Slaney & Ashby, 1996). Such a contention, however, has never been addressed empirically.

In an affiliated and more recent line of argument, Shafran, Cooper and Fairburn (2002) again considered the value of knowing the situation-specific nature of one's perfectionism. They questioned whether not only the number, but also the nature of the domains towards which perfectionism is channelled might be of great importance in understanding the perfectionism-wellbeing association. Approaching perfectionism from a cognitive-behavioural perspective, they asserted the belief that "people with perfectionism have high standards in domains of life that have personal significance but not in domains of little or no personal relevance" (p.778). In turn they argued that knowing the profile of these domains would provide significant insight into the theoretical nature, clinical operation and treatment of perfectionism. They supported their contention with a range of simple, yet illustrative examples to demonstrate how perfectionism directed towards such tasks as work or sport would be much more functional and advantageous than directed towards eating or intimate relationships. This is not only because more tangible reinforcements would be attained in the case of the former, but because the behaviour in such contexts is far less self-defeating. In other words, they suggested that certain domains of perfectionism would be less likely to result in problematic outcomes than others.

Further, they suggested that the specific domains of perfectionism could explain people's vulnerability to different types of (negative) outcomes. They argued that perfectionism contributes to the development or maintenance of a disorder, only when the domain in which perfectionism is expressed overlaps with the domain relevant to or affected by the condition. For example, the

treatment of a person for a social phobia would be affected only if their perfectionism was directed towards social tasks (e.g. interacting with friends) (Shafran et al., 2002). Shafran et al. made special comment about eating disorders. They believed that eating disorders were a direct expression of perfectionism, and argued that in order for the disposition to increase one's propensity to develop the disorder, not only did they need to possess a high level of overall perfectionism, it specifically needed to be expressed to some degree in a domain related to weight, shape or eating.

Investigations have supported the view that eating disorders are associated with unrealistic standards for physical attractiveness and thinness (e.g. Davis, Shuster, Blackmore & Fox, 2004), but the relationship of physical-appearance perfectionism and its relationship to eating disorders has never been investigated. Thus Shafran et al.'s (2002) argument, much like Hamachek's (1978), remains untested. Numerous researchers, however, upon review of the article expressed their support for the argument, validating both Shafran et al.'s line of reasoning and their call for research into situation-specific perfectionism (Flett & Hewitt, 2002; Hewitt, Flett, Besser, Sherry & McGee, 2003).

1.2.4 Current Study: Part Two

The second aim of this study is to investigate perfectionism from a situation-specific perspective, determining whether it is possible to gain a greater insight into the perfectionism-wellbeing association. At present the relationship is approached from a positive-negative perspective. Results of empirical studies, however, have lent somewhat limited support for this distinction, particularly pertaining to the positive outcomes of perfectionism such as greater life satisfaction and self-esteem. Furthermore they indicated that limited advancements in understanding have been facilitated by such an approach. It is important, however, that greater understanding of such relationships is obtained, given the important association perfectionism has been shown to have with numerous wellbeing outcomes including depression and wellbeing.

The arguments of both Hamachek (1978) and Shafran et al. (2002) suggest that by approaching the relationship from a domain-specific perspective, attending to the number and/or the nature of the situations in which perfectionism is manifested respectively, additional insight may be gained. Particularly, they suggest that this provides a more comprehensive picture of perfectionism's capacity to be adaptive or maladaptive, thus serving as a better predictor of wellbeing outcomes. To date this had never been empirically tested. The current study addressed this. It investigated the value of situation-specific perfectionism (perfectionism in university pursuits, interaction with friends, physical appearance, sport, and leisure activities) and the extensiveness of perfectionism (number of situations in which perfectionism is manifested), in its association with and prediction of wellbeing outcomes, in comparison to that obtained using the context-free Hewitt and Flett MPS. Areas of wellbeing were selected on the basis of previous literature demonstrating a clear (or the clearest existing) relationship with perfectionism. The selected variables were life satisfaction and self-esteem as positive outcomes, and depression and disturbed eating behaviour as the negative outcomes. Therefore in addition to the first two aims of part one of the study which were:

1. To examine whether perfectionism is a global trait which is equally manifest in all situations (university, interaction with friends, physical appearance, playing sport, and leisure activities), or whether it is situation-specific, being directed towards a limited number of domains?
2. To clarify the nature of the perfectionism which is measured by the Hewitt and Flett Multidimensional Perfectionism Scale.

To address Shafran et al.'s (2002) argument, further aims of this study were:

3. To determine whether levels of wellbeing (life satisfaction, self-esteem, depression, and eating disturbance) differ depending upon the *nature* of domains in which perfectionism appears.

4. To determine whether measuring the *nature* of the domains in which one manifests perfectionism provides additional insight into the association of perfectionism with wellbeing above that provided by using the context-free, Hewitt and Flett MPS.

To address Hamachek's (1978) argument, the final aims of the study were:

5. To determine whether levels of wellbeing (life satisfaction, self-esteem, depression, and eating disturbance) differed depending upon the *number* of domains in which perfectionism appears.
6. To determine whether measuring the *number* of domains in which one manifests perfectionism provided additional insight into the association of perfectionism with wellbeing (life satisfaction, self-esteem, depression, and eating disturbance), above that provided by using the context-free, Hewitt and Flett MPS.
7. To determine whether approaching perfectionism from a situation-specific perspective lent greater support to the argument that perfectionism has 'positive' as well as 'negative' outcomes.

Chapter 2: Methodology

2.1 Participants

The sample used was one of convenience. It was comprised of 456 undergraduate students from the University of South Australia, who were enrolled in a program offered through the School of Psychology, School of Health Sciences, South Australian School of Art, School of Marketing, School of Mathematics and Statistics, and School of Computer and Information Sciences. Of this group 72% were female and 27% male, with 4 cases did not specify. Age of participants ranged from 17 to 59 years (M=26.17, SD=9.22). Ethnic breakdowns revealed that the majority of the sample identified themselves as Australian (79%), followed by Middle Eastern (7%), Asian (6%), American (2%), and Aboriginal or Torres Strait Islander (1%), with four per cent selecting the category other. Enrolment in the various academic disciplines were as follows: 29% Psychology, 23% Health Sciences, 12% Arts, 11% Marketing, 9% Mathematics and Statistics, and 12% Computer and Information Sciences (2 missing cases). In total, 851 students acknowledged the receipt of an 'Introductory Email' (as automatically monitored by Survey Console), with 456 agreeing to participate and complete the online questionnaire. A response rate of 54% was thus obtained.

2.2 Materials

An online, self-report questionnaire created through the Survey Console website was used. It comprised 149 items and contained 5 different psychological instruments (see Appendix 2).

2.2.1 Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991b)

The Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991b) is a 45-item self-report personality inventory, designed to measure individual differences in levels of self-oriented perfectionism (SOP; setting high standards for the self), socially prescribed perfectionism

(SPP; believing others have high expectations for the self), and other oriented perfectionism (OOP; having high standards for other people). It yields 3 subscale scores which are mutually exclusive.

For current purposes a shortened version, as established by Cox, Enns and Clara (2002), was used as it provides a clearer factor structure. It consisted of 10 questions, 5 items addressing each subscale (SOP, SPP). The OOP subscale was omitted as only self-directed perfectionism was this study's focus. The measure was also further adapted to make it situation-specific, with six versions of the MPS being administered: (1) in its original form; (2) with 'at university' inserted into every item; (3) with 'in interaction with friends' inserted; (4) with 'in physical appearance' added; (5) with 'in sporting activities'; and (6) with 'in leisure activities' inserted. This adaptation method was based on Mitchelson and Burns (1998). The domain of interest was inserted (normally at the beginning or end of the statement) in a way which ensured maximum readability and minimal changes to the questions meaning. Each version was administered consecutively. To ensure that respondents were shifting their frame of reference between versions, the researcher also adapted the 'instructions to participants' used in the original MPS (see Appendix 2).

For all versions, participants indicated their level of agreement with each of the items using a 7-point Likert response format, ranging from strongly disagree (1) to strongly agree (7). Two perfectionism scores (SOP and SPP) can be calculated by averaging each participant's responses to the 5 items which comprise the relevant subscale. No global score can be calculated.

Cox and colleagues (2002) confirmed that the validity and reliability of the shortened MPS. Internal reliabilities for the SOP and SPP subscales were .84 and .85 respectively.

2.2.2 Satisfaction With Life Scale (SWLS) (Diener, Emmons, Larsen & Griffin, 1985)

The Satisfaction with Life Scale (Diener et al., 1985) is a self-rating instrument, which measuring an individual's contentment with his/her life. It is unidimensional in nature, measuring global life satisfaction, as opposed to satisfaction in specific life-domains (e.g. finances,

relationships, etc). It is also subjective, requiring the individual to assign ratings on the basis of their perception of their life according to their own standards, not that of others or as prescribed by the researcher.

In total the SWLS is comprised of 5 items. Exemplars of the scale include 'In most ways my life is close to my ideal' and 'So far I have gotten the important things I want in my life'. Respondents indicated their level of agreement with each statement, using a 7-point Likert scale, ranging from strongly disagree (1) to strongly agree (7). A total life-satisfaction score was obtained by totalling participants' responses across the five items, with possible scores ranging from 5 (low life satisfaction) to 35 (high life satisfaction). Total mean scores were used in this study to accommodate for missing values.

Empirical evidence has revealed favourable psychometric properties of the SWLS. Factor analytic results support the one factor solution (accounting for 66% of the variance) (Lewis & Shevlin, 1995). Its suitability for use in adolescent and adult populations has been verified (Diener et al., 1985). Adequate internal reliability has also been demonstrated with a coefficient alpha of .87 (Diener et al., 1985). Cronbach's coefficient alpha in the current study was .88.

2.2.3 Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965)

The Rosenberg Self-Esteem scale is a brief, unidimensional measure of global self-esteem. It consists of 10 statements (5 positively keyed, and 5 negatively keyed) tapping overall feelings and judgments of self-worth and self-acceptance, including 'On the whole I am satisfied with myself' and 'I certainly feel useless at times'. In the original version, respondents were required to indicate their level of agreement with each item using a 4-point Likert scale, ranging from (1) strongly agree to (4) strongly disagree. Total self-esteem was subsequently determined by summing the scores (after reverse scoring the 5 negatively worded items) to all the 10 items. For current purposes a 7-point Likert scale of opposite direction (i.e. ranging from (1) strongly disagree to (7) strongly agree) was used in order to maintain consistency and hence simplified responding throughout the questionnaire. Positively worded questions were reverse scored,

resulting in higher scores that indicated higher self-esteem. Total mean scores were used to overcome missing values.

Reports of internal reliability have ranged from .77 (O'Brien, 1985) to .89 (Dobson, Goudy, Keith & Powers, 1979) with higher levels generally obtained in university populations. Good test-retest reliability has also been reported (Fleming & Courtney, 1984) and the validity of the instrument verified (Robins, Hendin, & Trzesniewski, 2001). Cronbach alpha in the current study was .59. The reliability analysis indicated that this could be increased with the deletion of items 7 and 9. Thus the scale was reduced to 8 items. The new Cronbach alpha was .82.

2.2.4 The Center for Epidemiologic Studies Depression Inventory (CEDI) (Radloff, 1977)

The Center for Epidemiologic Studies Depression Inventory (CEDI) is a 20-item depression measure, specifically designed for use in survey research with the general population. It measures people's self-reported mood as referenced over the preceding two weeks, using a 4-point Likert response format ranging from never (1), to everyday (4). The CEDI is composed of four factors: depressed affect, somatic disturbance, interpersonal problems, and positive affect. Negative affectivity is calculated by totalling responses to all items, after reverse scoring the positive affect subscale. For current purposes a mean score was calculated. Possible scores range from 1 to 4, with higher scores indicating greater depressive affect.

The CEDI is a valid and reliable measure used in numerous populations, varying in age, ethnicity and socioeconomic class (McLean, Roper-Hall, Mayer & Main, 1991). Reliability of the scale has been established with a coefficient alpha of .85 (Radloff, 1977). The Cronbach alpha in the current study is .92.

2.2.5 Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994)

The Eating Disorder Examination Questionnaire (EDE-Q) (Fairburn & Beglin, 1994) is a standardised, clinical, self-report instrument designed to screen for eating disorders in general community populations. It is in accordance with the criteria prescribed by the Diagnostic and Statistical Manual 4th ed. revised (APA, 2000). It is comprised of four subscales: Restraint, Eating Concern, Weight Concern, and Shape Concern.

In responding to this scale participants indicated the frequency with which people have experienced a range of behaviours or beliefs related to eating and body image, over the past 28 days. For the first 13 items people responded to each statement along a 7-point Likert scale using very prescriptive ratings: no days, 1-5 days, 6-12 days, 13-15 days, 16-22 days, 23-27 days, to every day. An exemplar includes 'Have you had a definite fear that you are going to gain weight?' For the rest of the items a more subjective, 7-point Likert scale ranging from Not at all (0) to Markedly (6), was used.

The scale also included some diagnostic questions, which did not use a Likert response format. For current purposes these were omitted as they were deemed too confrontational for use with a non-clinical population. To tap the information lost by their omission, three additional questions were created. These were: 'Have you ever contemplated vomiting after eating in order to control your shape or weight?'; 'Have you ever contemplated using diuretics, laxatives, diet pills, or the like in order to control your shape or weight?'; and 'Have you exercised hard as a means of controlling your shape or weight?' The word 'contemplate' was included to make the questions less confrontational, and bring them in line with general (not clinical) eating disturbance. These questions became items 14-17, and were rated using the same Likert scale ranging from no days to every day (see Appendix 2).

In scoring the instrument, an individual's response to all items were added, then divided by the number of items to which they responded. This resulted in a total mean score. This

indicates the overall severity of the eating disturbance, with higher scores indicating higher pathology (Fairburn, Peveler, Jones, Hope & Doll, 1993). Possible scores range from 1 to 7.

Psychometrically, the properties of the EDE-Q have been supported. Factor Analytic studies have verified the four factor structure of the instrument (Mond, Hay, Rodgers, Owen & Beaumont, 2004). The internal consistency of the EDE-Q in both general and clinical populations has similarly been evident. Cronbach's alpha ranges from .68 to .90 (Cooper, Cooper & Fairburn, 1989; Beumont, Kopec-Schrader, Talbot & Touyz, 1993). In the current study Cronbach's alpha was .95.

2.2.6 Section Three: Demographics

The final section asked people for some personal information regarding their gender, age, ethnicity, university discipline, and participation in sport. This information was used by the author to determine the characteristics of the sample. It was not included in analyses. A section for further comments was also included.

2.3 Procedure

A proposal outlining the aims and rational of the current study was submitted to and approved by the Divisional Human Research Ethics Committee (Division of Education, Arts, and Social Sciences) at the University of South Australia (Appendix 3). Recruitment occurred on the 5th of July, with an 'Information Email' being posted to all students currently enrolled in the pre-selected schools at the University of South Australia.

The 'Information Letter' email sent out to students (Appendix 4) provided a brief overview of the rationale, relevance and aims of the current study, and requested their participation. It was specified that all participation was voluntary and all responses would remain anonymous and confidential. To participate in the study individuals simply clicked the hyperlink contained in the email, which took them automatically to the online questionnaire.

Instructions were provided throughout the questionnaire detailing the content of each section, providing a frame of reference (if relevant) in which to respond, and explaining the nature of the response format.

Respondents upon completion of the questionnaire simply clicked the 'submit' button contained at the end of the questionnaire. This sent their data straight to a Microsoft Excel file to be later accessed by the researcher. It also generated an automatic message thanking respondents for their participation.

Chapter 3: Results

3.1 Data Preparation

All data was entered into SPSS (version 11.5) automatically by Survey Console, thus ensuring accuracy of data entry. The raw data was subsequently modified. Negatively-keyed items within the depression scale and self-esteem scale were reverse-scored, and mean scale scores for each of the measures calculated. An additional two variables were created. This was done by transforming each subscale of the domain-specific perfectionism into a dichotomous variable (perfectionistic, not perfectionistic) using a median split, then counting (separately), the number of domains in which each individual fell above the median on the SOP subscale, and SPP subscale to create the new variables. The variables thus provided an alternative indication of the extensiveness of an individual's perfectionism. Possible scores thus ranged from 0 (no domains) to 5 (every domain measured). The general MPS was not included in this calculation as it does not specify a context.

3.2 Testing of Assumptions

Preceding analysis, all data was screened. A missing values analysis indicated that there were 189 missing values across all items, with 77 people (17%) missing at least one item. Inspection of these values, however, revealed no noticeable pattems. No item was missed more than 4 times, and no individual missed more than 2 out of the total of 149 items (each from a different scale). This suggests the items were missed accidentally and is likely attributable to the use of an online response format. The cases were thus not deleted. Instead (as previously stated), mean scale scores rather than summed scale scores were calculated for each measure.

Four cases were an exception to this. Three individuals opted (expressing personal sensitivity to the matter) not to complete the eating disorder scale, and one individual both the

eating disorder and depression scales. Such cases were thus omitted from analysis when the respective scales were required.

Exploratory descriptive analyses were run to check for normal distribution, univariate and multivariate outliers, linearity and multicollinearity. Histograms with normal probability plots revealed that a number of items and variables deviated slightly from the normal distribution. Levels of skewness and kurtosis, however, fell well within the acceptable range ($-1.3 < K < 1.53$), thus data were not transformed. Box-plots indicated that there were no extreme univariate outliers (<3 standard deviations from the mean). Comparison of the original means and trimmed means confirmed this, revealing no substantial influence from outlying values. All cases were thus retained unaltered in the data file. The only exception was the eating disorder scale. A difference of .77 between the original mean (M=2.87) and trimmed mean (M= 2.1) was found. As subsequent analyses were particularly sensitive to outliers, the five offending cases (158, 161, 174, 177 and 238) were thus adjusted. Outlining scores were reduced as recommended by Tabachnick and Fidell (2001), to within 1 unit of the first non-outlying value.

Screening for multivariate outliers using the Mahalanobis distance statistic with a $p<.001$ criterion, revealed no multivariate outliers. Furthermore, all items and variables in their respective combinations were shown to be linearly related, and bivariate correlations indicated that there were no problems of multicollinearity between independent variables ($r < .9$).

To ensure that the factor structure of the MPS had not been affected by the process of adapting it to make it domain-specific, a Principal Components Analysis using oblique rotation and the Eigenvalue greater than one criterion, was run on each of the domain-specific MPSs. The results showed that the structure had been retained for all versions with the SOP and SPP items loading separately on two components, as in the original measure. Reliability analyses were also run. The internal reliability of each version is presented in Table 1 below.

Table 1

Internal Reliability of the 5 domain-specific versions of the MPS.

MPS Version	Cronbach's Alpha for Total Measure	Cronbach's Alpha for SOP Subscale	Cronbach's Alpha for SPP Subscale
General MPS	.89	.88	.85
University MPS	.89	.91	.88
Friends MPS	.92	.92	.88
Physical Appearance MPS	.91	.94	.88
Sport MPS	.93	.96	.90
Leisure MPS	.94	.95	.91

3.3 Descriptive Statistics

Means and standard deviations for the general MPS, domain-specific MPS versions, dependent variables, and demographic information are presented in Table 2. The sample displayed rather high levels of perfectionism. The mean score for all perfectionism subscales, general and domain-specific, exceeded the mid-point (3.5). Mean SOP scores on all measures were notably higher than SPP scores, indicating that in the current sample perfectionistic standards were more likely to be derived from the self than imposed by others.

Comparison between the general and domain-specific MPS versions shows marked similarities in responses to the general and university-specific measures, with essentially identical means being obtained. No striking similarities between any of the other MPS versions were apparent. Of all domains, means indicated that the highest levels of perfectionism exist in relation to performance at university, and least in leisure activities. This is true for both the SOP and SPP subscales.

Overall levels of wellbeing amongst the group were high. Mean scores indicated high levels of life satisfaction and self-esteem, and relatively low levels of depression and disturbed eating. The mean age was reasonable considering the use of a university sample.

3.4 Bivariate Correlations

Table 2 displays the bivariate correlations between the perfectionism variables, wellbeing measures and demographics. Every subscale of every MPS version is shown to be significantly, positively correlated ($p<.001$) with all others. This is expected as each is tapping the same underlying construct: perfectionism. The strength of the relationships, however, varied quiet markedly. The strongest correlations are between the general and university-specific subscales, and the weakest between the university- and sport-specific subscales. All associations between the various MPS versions are moderate to large (Cohen, 1988).

Significant correlations between the subscales of the perfectionism measures and the wellbeing measures are also evident. High levels of perfectionism (all versions and all subscales) were significantly related to high levels of depression and eating disturbance, and low life satisfaction and self-esteem. The SPP however had a stronger association with all wellbeing outcomes than the SOP.

The 'extremity of perfectionism' variables are similarly shown to be moderately, significantly related to all wellbeing variables. The greater the number of domains in which perfectionism is manifested, either self-oriented or socially-prescribed, the lower one's self-esteem and life satisfaction, and the greater one's level of depression and eating disturbance.

Demographic variables showed few relationships. The main relationships were that being female was associated with higher perfectionism in the domain of physical appearance, and higher eating disturbance and life satisfaction. Age was associated with lower levels of self-imposed perfectionism in physical appearance and university work, and lower levels of depression and self-esteem

Table 2

Means, Standard Deviations, and Bivariate Correlations for the perfectionism variables, wellbeing measures, and demographic information.

	M	SD	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. General SOP	5.06	1.30	.81**	.55**	.45**	.38**	.43**	.61**	.51**	.48**	.39**	.33**	.33**	.29**	.42**	-.09	-.20**	.17**	.24**	.11*	-.05
2. University SOP	5.00	1.37		.46**	.37**	.28**	.34**	.56**	.41**	.45**	.32**	.29**	.26**	.21**	.34**	-.07	-.20**	.11*	.24**	.11*	.10*
3. Friends SOP	4.42	1.46			.44**	.30**	.48**	.63**	.48**	.45**	.70**	.39**	.33**	.41**	.51**	-.03	-.24**	.20**	.23**	.05	-.08
4. Phys. App. SOP	4.25	1.56				.31**	.35**	.57**	.31**	.28**	.33**	.49**	.31**	.29**	.39**	-.13**	-.20**	.22**	.34**	.16**	-.16**
5. Sport SOP	4.31	1.80					.35**	.50**	.22**	.21**	.26**	.23**	.61**	.26**	.34**	-.05	-.11*	.01	.13**	-.02	-.07
6. Leisure SOP	3.98	1.59						.52**	.31**	.31**	.40**	.33**	.35**	.62**	.46**	.01	-.11*	.15**	.14**	.01	-.07
7. Extremity of SOP	1.50	1.44							.49**	.47**	.54**	.49**	.50**	.54**	.65**	-.20**	-.28**	.31**	.34**	.03	-.05
8. General SPP	3.52	1.33								.79**	.65**	.57**	.48**	.49**	.69**	-.25**	-.36**	.40**	.26	.07	-.03
9. University SPP	3.52	1.33									.62**	.60**	.49**	.49**	.72**	-.25**	-.38**	.41**	.26**	.04	-.11*
10. Friends SPP	3.44	1.32										.59**	.48**	.60**	.76**	-.17**	-.37**	.36**	.25**	.04	-.08
11. Phys. App. SPP	3.35	1.35											.51**	.53**	.73**	-.34**	-.40**	.44**	.44**	.10*	-.09
12. Sport SPP	3.38	1.45												.52**	.69**	-.14**	-.27**	.25**	.23**	.05	-.09
13. Leisure SPP	2.81	1.27													.73**	-.15**	-.25**	.35**	.19**	.01	-.01
14. Extremity of SPP	2.06	1.72														-.21**	-.35**	.40**	.30**	.05	-.10*
15. Life Satisfaction	4.51	1.39															.58**	-.61**	-.32**	.11*	-.01
16. Self-Esteem	4.28	.70																-.65**	-.42**	-.08	.13**
17. Depression	1.78	.57																	.41**	.05	-.10*
18. Disturbed Eating	2.65	1.29																		.29**	-.03
19. Gender	-	-																			-.08
20. Age	26.17	9.22																			

Note: * p<.05 (2-tailed), ** p<.001 (2-tailed); Phys. App. MPS= Physical Appearance MPS.

3.5 Independence of the different versions of the MPS

Another factor analysis was conducted to investigate potential differences in the way participants responded to each of the versions of the MPS. All 60 items measuring perfectionism (10 items from the general measure and from each of the 5 domain-specific MPS versions) were entered into the analysis. As done by the original authors (Flett & Hewitt, 1991b), a Principal Components Analysis with oblique rotation was conducted, using the Eigenvalue greater than one criterion. Requirements of the Kaser-Mayer-Olkin (KMO) and Bartlett's Test of Sphericity were met. Nine components were extracted.

Table 3 shows that each version of the MPS loaded separately, with the SOP items (questions 1, 3, 4, 9, 10) loading on one unique component, and SPP items (questions 2, 5, 6, 7, 8) on another. The friends-MPS was an exception, with all items loading on the same component (component 6). The general and university MPSs loaded together, the SPP items from both versions upon Component 1 and the SOP items upon Component 2. Re-running the analysis using Principal Axis Factoring with both Varimax and Olique rotation returned an identical structure. Variance explained by each component is presented in Table 3.

Components were subsequently named: General/University SPP (Component 1); General/University SPP (Component 2); Sport SOP (Component 3); Leisure SOP (Component 4); Physical Appearance SOP (Component 5); Interaction with Friends (Component 6); Leisure SPP (Component 7); Physical SPP (Component 8); and Sport SPP (Component 9). Inspection of the scree plot suggested the possibility of a one factor solution. This solution strongly contradicts both the theory of the MPS, and the empirical studies demonstrating the discriminate validity of the SOP and SPP subscales. Hence it was ruled out.

Table 3

Component Loadings for all the Items Comprising the Six Versions of the MPS.

Items by Measure	Subscale in original MPS	Components (*N*=456)								
		1	2	3	4	5	6	7	8	9
General MPS										
Item 1	SOP		.564							
Item 3	SOP		.602							
Item 4	SOP		.720							
Item 9	SOP		.756							
Item 10	SOP		.568							
Item 2	SPP	.392	.346							
Item 5	SPP	.694								
Item 6	SPP	.701								
Item 7	SPP	.830								
Item 8	SPP	.693								
University MPS										
Item 1	SOP		.788							
Item 3	SOP		.795							
Item 4	SOP		.841							
Item 9	SOP		.934							
Item 10	SOP		.727							
Item 2	SPP	.496	.365							
Item 5	SPP	.653								
Item 6	SPP	.689								
Item 7	SPP	.727								
Item 8	SPP	.668								
Friends MPS										
Item 1	SOP						-.713			
Item 2	SPP						-.656			
Item 3	SOP						-.802			
Item 4	SOP						-.767			
Item 5	SPP						-.500			
Item 6	SPP						-.650			
Item 7	SPP						-.367			
Item 8	SPP						-.525			
Item 9	SOP						-.840			
Item 10	SOP						-.732			
Phys App. MPS										
Item 1	SOP					.841				
Item 3	SOP					.871				
Item 4	SOP					.817				
Item 9	SOP					.917				
Item 10	SOP					.837				
Item 4	SPP								-.610	
Item 5	SPP								-.794	
Item 6	SPP								-.832	
Item 7	SPP								-.757	
Item 8	SPP								-.651	
Sport MPS										
Item 1	SOP			.873						
Item 3	SOP			.878						
Item 4	SOP			.869						
Item 9	SOP			.931						
Item 10	SOP			.851						
Item 2	SPP									-.618
Item 7	SPP									-.783
Item 6	SPP									-.803
Item 7	SPP									-.365
Item 8	SPP									-.511
Leisure MPS										
Item 1	SOP				-.840					
Item 3	SOP				-.897					
Item 4	SOP				-.859					
Item 9	SOP				-.841					
Item 10	SOP				-.713					
Item 2	SPP							.503		
Item 5	SPP							.629		
Item 6	SPP							.696		
Item 7	SPP							.722		
Item 8	SPP							.600		
Variance Explained:		34.54%	8.59%	7.43%	5.91%	5.20%	4.01%	2.44%	1.99%	1.82%

Note: Only values with components loadings greater than or equal to .3 are displayed.
Phys. App. = Physical Appearance

3.6 Individual Predictors of Wellbeing

3.6.1 Individual Predictors of Life Satisfaction

Two hierarchical regressions were conducted to determine whether knowledge obtained by the domain-specific MPSs added significantly to the prediction of life satisfaction over and above that explained by the general measure.

The first investigated whether knowing the domain-specific nature of one's perfectionism contributed significantly to the amount of variance explained in life satisfaction in addition to that explained by the general MPS. The subscales of the general MPS were added on the first step. The subscales of each of the domain-specific MPS versions were entered on the second step with the exception of the university-specific MPS. This measure was omitted as it correlated too highly (r<.7) with the general MPS to be entered in the same analysis (Tabachnick & Fidell, 2001). Omitting the university-specific MPS was not problematic. Its predictive value would be comparable to the general MPS. The two measures were shown in earlier analyses (correlations and factor analysis) to be comparable.

The results of the hierarchical regression analysis showed that the R was significantly different from zero at the end of both steps. The B values, Beta weights, t-values, Adjusted R, and R^2 change for both models are presented in Table 4. At step one, the general MPS accounted for 6.1 per cent of the variance in life satisfaction. The SPP subscale was the only unique, significant predictor. Entering the domain-specific variables at step two (a) accounted for a further 8 per cent of the variance in life satisfaction. Both the friends SOP and physical appearance SPP subscales made a unique, significant contribution to the prediction of life satisfaction at this step. The general SPP subscale remained significance. The final model, with all independent variables entered, explained 12.1 per cent of total variance in life satisfaction, R=.38, F(10, 442)=7.25, p<.001.

To explore whether the extremity of perfectionism variables predicted extra variance in life satisfaction beyond that of the general MPS, the above hierarchical regression was again repeated, this time with the two extremity of perfectionism variables entered on the second step. The model summary statistics can be viewed in Table 4. R was significantly different from zero at the end of each step. Step one was identical to the previous analysis. The addition of the extremity variables in step two (b) significantly increased the variance explained, by a slight 1.1 per cent. All variables at this step made a unique contribution to the prediction of life satisfaction, except for the total extremity of SPP. With all variables entered, the final model explained 6.4 per cent of the variance R=.27, F(2, 450)=8.70, p<.001.

Table 4

Hierarchical Regression Analysis Indicating the Unique Contribution of either the Domain-Specific Perfectionism Variables or the Extremity of Perfectionism Variables in Predicting Life Satisfaction, in Addition to the General Perfectionism Measure.

Variable	Adjusted R Square	R Square Change	F Change	B	Beta	*t*
Step One	.06	.06	14.59**			
General SOP				.07	.06	1.14
General SPP				-.29	-.27	-5.13**
Step Two (a)	.12	.08	5.14**			
General SOP				-.01	-.01	-0.09
General SPP				-.17	-.16	-2.44*
Friends SOP				.14	.14	2.05*
Friends SPP				-.01	-.11	-0.14
Physical Appearance SOP				.00	.00	0.04
Physical Appearance SPP				-.34	-.33	-5.02**
Sport SOP				-.03	-.04	-0.68
Sport SPP				.07	.07	1.05
Leisure SOP				.09	.11	1.67
Leisure SPP				-.03	-.03	-0.38
Step Two (b)	.06	.01	2.70*			
General SOP				.14	.13	2.10*
General SPP				-.25	-.24	-3.62**
Extent of SOP				-.14	-.14	-2.04
Extent of SPP				.00	.00	0.59

Note: * p<.05 (2-tailed), ** p<.001 (2-tailed)

3.6.2 Individual Predictors of Self-Esteem

The above two hierarchical regressions conducted with life satisfaction were repeated, this time with self-esteem as the criterion. The model summary statistics for both regressions can be viewed in Table 5.

The first regression thus entered the general MPS at the first step, and all of the domain-specific MPS versions (except the university specific) at the second step. This linear combination of predictors was significantly predictive of self-esteem at both steps. At step one the general SPP subscale was a unique, significant predictor of self-esteem, with higher general SPP associated with lower self-esteem. This step accounted for 12.1 per cent of the total variance in self-esteem. The addition of the domain-specific MPS variables at the second step (a) contributed an additional 7.6 per cent to the variance explained. The friends SPP subscale and physical appearance SPP subscale made a significant unique contribution to variance while general SPP did not. The final model, with all IVs in the equation, accounted for 17.9 per cent of the total variance in self-esteem, R=.38, $F(10, 442)$=7.25, p<.001.

In the second hierarchical regression, the two extremity of perfectionism variables were entered at the second step. For both models the linear combination of predictors was significant, with step two (b) explaining an additional 2.3 per cent of variance in self-esteem. General SPP made a unique significant contribution to variance explained at both steps, and the extremity of SPP was also significant at the second step. The final model accounted for 14.4 per cent of the variance in self-esteem, R=.27, $F(2, 450)$=18.83, p<.001.

Table 5
Hierarchical Regression Analysis Indicating the Unique Contribution of either the Domain-Specific Perfectionism Variables or the Extremity of Perfectionism Variables in Predicting Self-Esteem, in Addition to the General Perfectionism Measure.

Variable	Adjusted R Square	R Square Change	F Change	B	Beta	*t*
Step One	.12	.12	31.03**			
General SOP				-.02	-.03	-0.65
General SPP				-.17	-.33	-6.43**
Step Two (a)	.18	.08	5.24**			
General SOP				-.03	-.05	-0.84
General SPP				-.05	-.10	-1.51
Friends SOP				.01	.02	0.31
Friends SPP				-.10	-.18	-2.37*
Physical Appearance SOP				.01	.01	0.26
Physical Appearance SPP				-.13	-.26	-4.05**
Sport SOP				.01	.03	0.42
Sport SPP				-.02	-.03	-0.46
Leisure SOP				.03	.08	1.25
Leisure SPP				.01	.02	0.24
Step Two (b)	.14	.02	5.94**			
General SOP				.01	.02	0.40
General SPP				-.11	-.22	-3.38**
Extent of SOP				-.04	-.09	-1.36
Extent of SPP				-.06	-.14	-2.06*

Note: * p<.05 (2-tailed), ** p<.001 (2-tailed)

3.6.3 Individual Predictors of Depression

Again the two hierarchical regression analyses were repeated, this time with depression as the outcome variable. The B values, Beta Weights, t-values, R^2 Change, and Adjusted R^2 for both regressions can be viewed in Table 6.

As presented in Table 6, the addition of the domain-specific MPS subscales at the second step explained a further 8.9 per cent of the variance in addition to the 15.5 per cent explained by the general MPS subscales in the first step. General SPP was a unique predictor at step one. At step two (a), general SPP, physical appearance SPP and leisure SPP were all identified as

significant unique contributors. At the end of both steps R was significantly different from zero. With all variables entered in the analysis, R=.49, $F(10, 442)$=14.24, p<.001.

In the second regression, entering the extremity of perfectionism variables at the second step, significantly increased the amount of variance in depression explained by a further 4 per cent. At the second step (b), all predictors were identified as unique, significant contributors. The final model accounted for 19 per cent of variance in depression,, R=.44, $F(2, 450)$=26.97, p<.001.

Table 6
Hierarchical Regression Analysis Indicating the Unique Contribution of either the Domain-Specific Perfectionism Variables or the Extremity of Perfectionism Variables in Predicting Depression, in Addition to the General Perfectionism Measure.

Variable	Adjusted R Square	R Square Change	F Change	B	Beta	*t*
Step One	.15	.16	41.13**			
General SOP				-.02	-.04	-0.87
General SPP				.18	.41	8.20**
Step Two (a)	.23	.09	6.51**			
General SOP				-.01	-.03	-0.53
General SPP				.09	.20	3.14*
Friends SOP				-.03	-.07	-1.03
Friends SPP				.04	.09	1.22
Physical Appearance SOP				.01	.03	0.49
Physical Appearance SPP				.11	.26	4.25**
Sport SOP				.01	.02	0.27
Sport SPP				-.03	-.08	-1.18
Leisure SOP				-.03	-.08	-1.32
Leisure SPP				.08	.18	2.68
Step Two (b)	.19	.04	10.98**			
General SOP				-.06	.03	-2.31*
General SPP				.12	.03	4.46**
Extent of SOP				.06	.03	2.32*
Extent of SPP				.05	.02	2.35*

Note: * p<.05 (2-tailed), ** p<.001 (2-tailed)

3.6.4 Individual Predictors of Disturbed Eating

The hierarchical regressions were run for a final time to assess the contribution added to the prediction of disturbed eating by the domain-specific MPS versions. The regression coefficient and model summary statistics for both regressions can be viewed in Table 7.

At step one the model explained 7.1 per cent of total variance in disturbed eating, with both the general MPS subscales making a unique contribution to the prediction of disturbed eating. The addition of the domain-specific MPS subscales at step two (a) contributed a further

13.5 per cent to the amount of variance explained. Only the physical appearance SOP and SPP subscales were significant at the second step. The final model explained a total of 19.2 per cent of the variance, R=.46, $F(10, 442)$=11.61, p<.001.

With the extremity of perfectionism variables being entered in the second step (b), the variance in eating disturbance explained, in addition to that contributed by the general MPS subscales, was increased by 3.5 per cents, with only the extremity of SOP being uniquely significantly predictive. At both stages the linear combination of variables was significantly predictive, with the final model explaining 10.1 per cent of the total variance in disturbed eating, R=.33, $F(2, 450)$=13.59, p<.001.

Table 7

Hierarchical Regression Analysis Indicating the Unique Contribution of either the Domain-Specific Perfectionism Variables or the Extremity of Perfectionism Variables in Predicting Eating Disturbance, in Addition to the General Perfectionism Measure.

Variable	Adjusted R Square	R Square Change	F Change	B	Beta	*t*
Step One	.07	.08	17.96**			
General SOP				.14	.14	2.66*
General SPP				.17	.17	3.25**
Step Two (a)	.19	.14	9.35**			
General SOP				.07	.07	1.25
General SPP				-.00	-.00	-0.07
Friends SOP				.03	.04	0.54
Friends SPP				-.03	-.03	-0.41
Physical Appearance SOP				.11	.14	2.52*
Physical Appearance SPP				.37	.39	6.14**
Sport SOP				-.02	-.03	-0.56
Sport SPP				.02	.02	0.33
Leisure SOP				-.03	-.04	-0.59
Leisure SPP				-.08	-.08	-1.31
Step Two (b)	.10	.04	8.60**			
General SOP				.04	.04	0.60
General SPP				.08	.08	1.20
Extent of SOP				.18	.20	2.98*
Extent of SPP				.05	.07	1.00

Note: * p<.05 (2-tailed), ** p<.001 (2-tailed)

Chapter Four: Discussion

The primary aim of the current study was to investigate whether perfectionism is a global trait that manifests itself equally in all situations or whether it differs in accordance with the task undertaken. Contrary to current belief the results of the principal components analysis are quiet clear, suggesting that the trait is specific in nature and changes across contexts. The analysis also explored the nature of the perfectionism measured by the general Hewitt and Flett MPS as it is currently administered. It indicated that the measure did not in fact gauge 'generalised' perfectionism as seemingly intended by its authors, Hewitt and Flett (1991b), or as assumed in the literature generally. Furthermore, the study sought to investigate whether insight into perfectionism's effect upon wellbeing could be increased by measuring the domains towards which the perfectionism is directed. Based on the findings of the bivariate correlations it appears that perfectionism in some domains is more strongly associated with wellbeing than in other domains. The hierarchical multiple regression analyses further suggested that measuring the nature and number of domains in which perfectionism is invested, significantly increased understanding of the perfectionism-wellbeing association in addition to the general MPS. Little support for the positive outcomes of perfectionism however, was obtained.

Although contemporary measures of perfectionism approach perfectionism as a global trait, the current findings call this practice into question. Results of the principal components analysis add to the findings of Mitchelson and Burns (1998) and Flett and colleagues (1995). They indicate that an individual's level of perfectionism changes in accordance with the task undertaken. If the trait was global – generalising across situations – then theory prescribes that a two-factor solution should be obtained with the self-oriented perfectionism (SOP) items from all versions loading together on one factor and the socially-prescribed perfectionism (SPP) items on another (Hewitt & Flett, 1991b). This was not found. Instead a nine factor solution was obtained. The SOP and SPP items of each of the MPS versions loaded independently upon a different two

components, separate to all other versions (see Table 3 above). However, the general and university-specific versions loaded on the same two components – the SOP items from both versions loading upon one component, the SPP items on another – and the interaction-with-friends version upon a single component – their SOP and SPP items loaded together. Regardless, this loading pattern indicates that the each MPS version measured a unique form of perfectionism, related to but not explained by the other versions. It reflects that people markedly changed the way they responded to the MPS depending on the context of reference. This in turn indicates that they changed their perfectionistic behaviour.

However, the bivariate correlations showed that people who are perfectionistic in one domain have a greater propensity to be perfectionistic in another – with moderate correlations of around .3 or .4 between most domains. Thus although perfectionism does not appear to be a global trait, it does seem to be rather pervasive and likely to appear in more than one domain. This finding is contrary to that of Flett et al. (1995). In their study they reported that perfectionistic goal commitment across the seven domains (e.g. grooming, relationships, etc) correlated at a strength of about .6. When factor analysed a one factor solution was obtained. The authors thus concluded that perfectionists generalise their standards across all tasks. It is likely that differences in measurement accounted for the disparity between the two studies. Particularly, Flett et al. measured how committed individuals were to being perfect (i.e. to be the perfect partner, perfect at school etc) not whether they expected themselves to be perfect (i.e. do you expect yourself to be perfect at school, etc). Thus although requiring replication, the current study provides a more accurate indication of perfectionism's generalisability as it investigated perfectionistic standards directly, not the outward pursuit of such standards (e.g. levels of commitment).

In addition to suggesting that perfectionism is domain-specific, the principal components analysis also indicated that the MPS in its original form did not measure general perfectionism as assumed in the literature. Instead it appears that the general MPS measures the same construct as the university-specific MPS. They correlated at a strength of .8 and they loaded on the same two

factors: the SPP items from both versions upon component one; and the SOP items on component two. Interpreting this result it should not be assumed that in all cases the MPS measures perfectionism in a university setting. It is likely, due to the generality of the instructions and items contained in the general MPS, that people responded to the measure with reference to a central or salient activity. As university students were used in the current study, with participants completing the questionnaire via their university email accounts, it is likely that either this activity was at the forefront of people's minds, thus influencing their responses. Or it may have been that the primary domain of achievement for such a group. If the instrument was administered in a work place or after an athletic meet, it seems probable that responding would be in reference to these contexts. Whether this was due to salience or importance of the domain would need to be determined.

An alternative explanation is that the similarity between the university and general MPS is attributable to the belief that perfectionism is only applicable to the domains of work and university. Qualitative studies (Rice et al., 2003; Slaney & Ashby, 2002), the empirical literature, and perfectionism measures, all reflect that perfectionism is equated with how one behaves at work or university. It is likely that this is also the belief of the lay public, thus the context they applied when responding to the general MPS.

However, if it is confirmed that the general MPS does not measure generalised perfectionism, then changes to the administration and interpretation of the measure could be made. This may strengthen the reliability of the measure and in turn facilitate advancement in the field. Whilst it would be possible for researchers to keep using the measure unaltered, they should be aware of the uncertainty contained in the score, and that a specific – not 'global' form of perfectionism – is likely being measured. An alternative would be for researchers to adapt the measure to make it specific to the domain of interest (Gotwals et al., 2003). The current findings indicate that this is possible without affecting the factor structure or reliability of the measure. In many cases it actually strengthens it (Cox et al., 2002).

If, however, 'global' perfectionism is truly the construct of interest then changes to the measure could be made to better ensure that this is being measured. One possibility is for the instructions to participants in the general MPS to be adapted so that they directly prompt participants to respond in reference to *all* tasks they undertake as done in the Terry-Short et al. perfectionism measure (1995). This strategy however, would need to be verified empirically before use. The possibility of developing a new perfectionism measure also exists. Currently there is no perfectionism scale, which takes into account the task towards which the perfectionism is directed (Hewitt & Flett, 2002). Additional research would need to be conducted to determine the best and most useful way for such a measure to be constructed. Until then researchers need to consider the uncertainty in the score yielded by the Hewitt and Flett MPS when administered in its current form, and determine whether or not they want to adapt the measure. Research investigating the advantage of specifying the context in which to respond to the perfectionism measure could also be conducted. It may be found that letting people respond in whatever context they select, may be the most informative method. This was the second aim of the current study.

Considering the magnitude of research conducted into the relationship perfectionism has with wellbeing, particularly negative wellbeing, the second aim of the study was to investigate whether measuring the nature or number of domains in which an individual manifested perfectionism furthers understanding of this relationship. The results suggest that the prediction of wellbeing can be significantly increased by measuring one's level of perfectionism in certain domains, and by measuring the extensiveness of one's perfectionism across situations.

At present the best indicator available for predicting wellbeing from perfectionism (using the Hewitt and Flett model) is to determine the source from which the perfectionism eventuates (Flett & Hewitt, 2002; Hewitt & Flett, 1991b). Evidence suggests that perfectionism which is imposed upon the individual from an external source (SPP) is far more detrimental, in the long-term, on one's wellbeing than that which is self imposed (SOP) (Gotwals et al., 2003; Wyatt & Gilber, 1998). Findings of this study strongly support this contention. A distinct trend emerged in

both the bivariate correlations, and hierarchical multiple regression analyses for the SPP subscales of each of the MPS versions (regardless of context) to be more strongly associated with, and predictive of one's level of life satisfaction, self-esteem, depression and disturbed eating behaviour than the SOP subscales.

However, the nature of the tasks that an individual was perfectionist about was also shown to be a useful indicator of wellbeing outcomes. The strengths and significance of the relationship between each wellbeing measure and the MPS subscales differed markedly depending upon the domain in which the perfectionism was invested. The strongest relationships were found between perfectionism in the domain of physical appearance (SOP and SPP) and the wellbeing outcomes, followed by perfectionism in interactions with friends, then in university pursuits. The weakest relationship was found for perfectionism invested in leisure activities. Further, the results of the hierarchical regression analyses suggest that determining the domain-specific nature of perfectionism can significantly increase prediction of wellbeing outcomes in addition to the SOP/SPP distinction. For all outcome variables (life satisfaction, self-esteem, depression, or eating disturbance) the addition of the four domain-specific MPSs to the hierarchical regression analyses significantly increased the amount of variance explained. This was in excess of that already explained by the general MPS. The increase was only moderate for the prediction of self-esteem and depression, with the domain-specific MPSs adding less than half the amount of variance explained by the general MPS at step one. For life satisfaction the variance explained more than doubled with the addition of the domain-specific MPSs. The most insight was gained, however, into disturbed eating. The addition of the domain-specific measures increased prediction by 13.5 per cent. The general MPS alone explained only 7.5 per cent. To be used practically, however, it is more important to determine the nature of the perfectionism which made a unique contribution to the prediction of these wellbeing outcomes.

For all outcome measures the expectation from significant others to always look 'perfect', was identified as the strongest, significant predictor. It was shown that the higher this expectation,

the lower the level of wellbeing. The finding, however, is somewhat unexpected. Physical appearance perfectionism deviates from traditional conceptualisations of the trait, which suggest that the disposition operates mainly in achievement domains such as work, sport, etc (Frost et al., 1990; Hewitt & Flett, 1991b). It is thus likely that the finding is an artefact of the sample. Being comprised mainly of young adult females there may be an exaggerated focus and value placed upon physical appearance in such a population. Thus the importance of physical appearance perfectionism and its association with wellbeing is overstated. Replicating the study using a different population – more males, and different age range – would help determine whether the result is isolated to this demographic or is more universal.

If not attributable to the sample, perhaps another explanation for the strong value of socially-prescribed physical appearance in predicting wellbeing has to do with the obtainability of the standards set. This line of thinking complements that of Slaney et al. (1995). Their measure of perfectionism, the Almost Perfect Scale (revised), was premised on the belief that the greatest impact upon wellbeing is incurred when there is a large discrepancy between the way individuals perceive themselves to be and the way they perceive they should be (Slaney et al., 1995). In the other domains measured in this study, such as university, sport, etc, the standards that one has set for them, although extremely high are probably obtainable to some degree. In regard to physical appearance, however, the eating disorder literature consistently highlights how the images presented are so altered and so far from reality that they are essentially impossible to obtain (Davis, Dionne & Shuster, 2001; Tozzi, Sullivan, Fear, McKenzie & Bulik, 2003). As a result the discrepancy between people's ideal and actual standard are likely to be far more discrepant, than in the other domains. This perhaps explains the persistent and stronger negative association that physical appearance SPP has with wellbeing. Future research could address this issue.

In addition to socially prescribed physical appearance perfectionism, the investment of perfectionism in other domains was also identified as providing notable insight into the relationship between perfectionism and wellbeing. The tendency to expect oneself to behave

'perfectly' when interacting with friends was identified as the other significant predictor of life satisfaction. The relationship in this case was positive, with levels of life satisfaction higher amongst those who set themselves this expectation. Conversely, the tendency for others to expect one to perform 'perfectly' in social interactions, was found to be significantly predictive, but negatively related to levels of self-esteem. The fact that both self-esteem and life satisfaction are social constructs, concerning how people feel about and judge themselves in relation to others, it follows that they are related to a social form of perfectionism (Flett et al., 2002; Shafran et al., 2002). As to why life satisfaction is significantly positively related to the self-imposed expectation to perform perfectly in social interactions, but not SPP, while self-esteem is negatively related to the externally imposed expectation to perform perfectly in social interactions, and not SOP, probably lies in the nature of the traits.

The question is not really why does the imposition by the self to excel in interactions with friends have a positive effect (i.e. higher life satisfaction), whereas the imposition of the standard by others have a negative effect (i.e. lowered self-esteem). It is why is life satisfaction most strongly predicted by the SOP subscale, while self-esteem by the SPP? The former relationship is explainable. If one sets oneself the standard to have better social interactions, it is likely that positive outcomes such as more frequent social interactions, closer friendships and the like eventuate (Beck, Rush, Shaw, & Emery, 1979). Conversely, having others set this standard suggests that the way one is behaving at present is not good enough, and feelings of inadequacy result. The difference in association with the SOP and SPP subscales is harder to explain. It may concern the nature of self-esteem and life satisfaction as constructs. Life satisfaction by definition is one's personal evaluation of their life, with regard to their own (not others') standards (Diener et al., 1985). It is a construct, which unlike self-esteem, is largely independent of influence by others (Hunter et al., 2004). Therefore the relevance of the SOP construct is probably far greater than the SPP, thus explaining the finding. This proposition, however, requires replication. It should therefore be considered with caution.

Similar to life satisfaction and self-esteem, the findings in relation to depression revealed two other forms of perfectionism, in addition to physical appearance SPP, that made a unique, significant contribution to the amount of variance explained. The belief that others expect one to perform perfectly in leisure activities was one such factor. General SPP was the other. Higher levels of either were related to greater depression. As the relationship is correlation, it is hard to postulate the direction of the relationship. Past research, however, suggests that depression precedes the perfectionism (Chang, 2002; Hewitt et al., 1995). It thus seems likely that the obtained perfectionism profile can be largely understood by considering the nature of the cognitions and beliefs associated with individuals who are depressed.

The finding that socially imposed perfectionism in the domain of leisure activities is significantly predictive of depression is likely to be indicative of the depressed individual's rather dichotomous and distorted cognitions. It is probably not that others actually expect one to perform perfectly when undertaking leisure activities, but that the individual perceives that everyone expects he/she to be perfect at absolutely everything, even leisure tasks. The finding (discussed below) that the extremity of perfectionism – number of domains in which one is perfectionistic – is also uniquely, significantly predictive of depression, further supports this inference.

As previously mentioned, the SPP subscale of the general MPS was also found to be significantly predictive of depression levels – a result consistent with most research on the subject (Flett et al., 1991; Hewitt & Flett, 1991a; Hewitt et al., 1996; Kawamura et al., 2001; Wyatt & Gilbert, 1998). Given the earlier finding that the general MPS does not measure 'general' or 'average' perfectionism as previously assumed, this result is difficult to interpret. The principal components analysis showed that the general MPS, in the present study, was measuring the same construct as the university specific MPS. Therefore the result should be interpreted with reference to expectations concerning university performance, not general perfectionistic tendencies. What it would suggest is that in the current population the externally imposed expectation to achieve perfectly at university is significantly predictive of levels of depression, with higher expectations

associated with higher depression. Considering the use of university students, this finding seems reasonable. Theories of depression suggest that failure to attain desired outcomes exacerbates levels of depression, with more valued outcomes having a greater impact (Brown & Beck, 2002). Amongst university students academic achievement is likely to be highly valued, and probably their major domain of achievement. In turn if one feels inadequate in this domain, which results when perfectionist standards are imposed, then a strong effect upon level of depression is likely incurred. Future research could further examine how attributed importance influence the association perfectionism has with depression and other forms of wellbeing.

Despite the above discussion illustrating the value of domain-specific knowledge in the prediction of various wellbeing outcomes, the most clear and informative findings of all, were obtained in relation to disturbed eating. It has long been thought, though never empirically tested, that domain-specific perfectionism relating to body image, eating, diet, and/or weight, plays a greater role in eating disorder pathology than perfectionism in general (Goldner et al., 2002). In line with this belief the present findings indicated that physical appearance perfectionism was a better predictor of disturbed eating behaviour, than was the general MPS. Once the domain-specific perfectionism MPSs were added to the hierarchical regression, the general MPS ceased to be a significant predictor. The only two unique predictors identified were physical appearance SOP and physical appearance SPP. Furthermore in support of Shafran et al. (2001) argument, findings of a subsequent analysis (discussed later) showed that the extremity of one's perfectionism also significantly predicted disturbed eating. Shafran and colleagues argued that the relationship between perfectionism and eating disorders was not as clear-cut as current literature portrayed. They believed that to develop an eating disturbance, individuals not only needed to have high levels of perfectionism which was manifested in many domains, but they also needed to be perfectionistic in a domain relating to body image or weight. Although this contention is difficult to test, the current study does lend some preliminary support to the suggestion, and

indicates that subsequent research could follow up this argument. Using eating disordered compared to non-eating disordered populations could be informative.

If it is found that 'eating' related perfectionism, as opposed to perfectionism in general, is related to eating disorder pathology as suggested by the current findings, then several practical implications would result. Firstly, it would suggest that in screening for eating disorders, the general perfectionism scales may be improved if they were adapted to measure more 'eating' specific perfectionism instead. Similarly, in the treatment of eating disorders there has been a shift towards targeting perfectionism in clinical programs (Goldner et al., 2002). It has been recognised that perfectionism plays an important role not only in the maintenance of the disorder, but also in one's responsivity to treatment (Shafran et al., 2002). Such initiatives, however, have been largely unsuccessful (Hewitt & Flett, 2002). The findings of this study would suggest that the wrong type of perfectionism might be being targeted: general as opposed to eating disorder specific. This suggestion needs to be considered with caution. A major limitation of the study was that neither 'eating' perfectionism, nor perfectionism in regard to weight was directly measured. Instead the broader concept of physical-appearance perfectionism was measured. Future research could address this.

Apart from examining whether the nature of the domains in which perfectionism was manifest improved prediction of wellbeing, the current study also sought to investigate whether measuring the number of domains was of use. It has commonly been suggested that the most maladaptive perfectionists are those who are perfectionistic in the most number of domains (Hamachek, 1978). However, the suggestion had never been empirically investigated. The current findings provided only limited support for this argument. The extremity of perfectionism variables – number of domains in which one was perfectionistic – were weakly, negatively correlated with life satisfaction and self-esteem, and positively correlated with depression and disturbed eating behaviour. This confirms Hamachek's (1978) argument suggesting that the more extreme one's perfectionism, the lower one's wellbeing.

In predicting wellbeing the results of the hierarchical regression analysis showed that the addition of the extremity of perfectionism added significantly to the amount of variance explained in each wellbeing outcome (life satisfaction, self-esteem, depression, and disturbed eating) above that explained by the general MPS. However, there was no clear pattern in the unique contribution of the extremity of SOP variable, and extremity of SPP variable. In predicting depression both variables were significant. Only the extremity of SOP was significant in predicting disturbed eating, whereas the extremity of SPP was significant in predicting self-esteem. Neither extremity variables were uniquely predictive of life satisfaction. As previous studies have not looked at the extremity of perfectionism, it is difficult to determine the importance of these findings. However, they seem to contradict theoretical arguments, which prescribes that the more pervasive one's perfectionism, regardless of its nature, the lower one's level of wellbeing (Flett & Hewitt, 2002; Hamachek, 1978; Hewitt & Flett, 1991b). It is thus likely that the current results are attributable to the methodology of this study. The fact that only five domains were tested – perfectionism at university, in physical appearance, sport, interactions with friends, and leisure activities – may fail to discriminate enough between respondents who do and do not have pervasive perfectionism. Alternatively, the domains chosen to measure may be misleading. Most domains measured were achievement oriented. If people were not found to be perfectionistic in one of these domains, it does not mean that they were not perfectionistic in other domains (e.g. relationships, ethically etc). It is thus a questionable indicator of the extremity of perfectionism. It is recommended that further research be conducted to verify or negate the findings before deductions regarding their meaning are made. In doing this not only could the study be replicated using different domains, but alternative means of measuring the pervasiveness of one's perfectionism could also be considered.

Finally, reviewing all of the findings together, there was little evidence found to suggest that perfectionism can be adaptive. The belief that there is both adaptive and maladaptive perfectionism has been an argument of marked prominence throughout the perfectionism

literature, even forming the basis of many perfectionism measures. However, there has been a paucity of evidence indicating that perfectionism can have positive outcomes. In exploring the construct from a domain-specific perspective, it was suggested that the investment of perfectionism in some tasks would be more adaptive than when invested in others (Bing, 1999; Burckle et al., 1999; Shafran et al., 2002). This was not found to be the case. The bivariate correlations did not show any trends which suggested that perfection might be related to positive outcomes. The hierarchical regression, however, indicated some positive associations. Both the self-imposed expectation to perform perfectly when interacting with friends (as discussed previously) and general SOP, were found to be uniquely significantly predictive of life satisfaction. Higher levels of either were related to greater life satisfaction. General SOP was also uniquely significantly predictive of self-esteem, again being positively related. In all cases, however, the variables were only positively related to the wellbeing outcome when the variance explained by the other perfectionism constructs was controlled for.

What this seems to suggest is that in theory perfectionism, especially that which is self-derived, can have positive ramifications. For example, when the extremity of SOP and SPP was controlled for in the hierarchical regression analysis, general SOP was significantly and positively related to self-esteem. In practice, however, it is unlikely that perfectionism can exist in this very isolated form. There are strong correlations not only between perfectionism in different domains, but also between SOP and SPP subscales within the same domain. Put simply, it appears that every positive form of perfectionism co-exists with a negative form; in turn, negative outcomes result. The potential of positive perfectionism certainly cannot be ruled out on the basis of this finding alone. This study was very limited both in regard to the domains in which perfectionism is invested and the outcomes to which it relates. Additional study looking at different domains and different outcomes may result in very different findings. The study is consistent with a large amount of previous research showing only negative relationships with perfectionism (Chang, 2002; Gotwals et al., 2003; Saboonchi & Lundh, 2003).

4. 1 Limitations of the Current Study

Despite the strengths of the present study, including the testing of many previously untested assumptions, there are also limitations. The main limitation is that the data is correlational, thus causation cannot be determined. Due to the subject matter, however, it is impossible for an experimental study to be conducted. The best way to gain insight into whether perfectionism decreases wellbeing, whether low wellbeing exacerbates perfectionism, or whether the relationship is somewhat reciprocal, would be to conduct a comprehensive longitudinal study monitoring how people's levels of wellbeing and perfectionism change over time. Another limitation of the study is the gender imbalance and the rather limited age range of participants. Replicating the study using a different population would help to ensure that the findings, particularly in relation to physical appearance perfectionism, are not isolated to the current demographic. Using a sample of convenience with voluntary participation also limits the generalisability of the findings. In terms of methodology, the distribution of the questionnaire to participants immediately after the university exam period may have meant that people's responses to the wellbeing measures were distorted due to the stress endured over the last two weeks. This in turn may have affected the associations obtained between levels of wellbeing and perfectionism. The fact that the order of the domain-specific MPSs was standard for all participants may have increased the likelihood of response bias, and the length of the questionnaire decreased the accuracy of responses due to participant fatigue. Overall however, the study was rather methodologically sound and contains many findings which could be followed up in subsequent research.

4.2 Suggestions for Future Research

In addition to the suggestions already mentioned, four further suggestions are made. Firstly, researchers and theorists could address the manifestation and effect of perfectionism in domains apart to those traditionally investigated (i.e. work and university). As shown here with physical-appearance perfectionism, there appears to be knowledge to be gained. Suggestions would include perfectionism in intimate relationships, parenting, and weight or eating. Replicating the current study using a different measure of perfectionism may also be of benefit. This would help determine whether participants respond to these measures in a general nature as assumed or domain-specific nature as found with the MPS. Administering Terry-Short et al.'s Positive and Negative Perfectionism Scale would be particularly informative as this is the only measure which actually includes instruction prompting participants to respond to the items with reference to 'how they behave in general'. Perfectionism in relation to its role in eating disorder should also be pursued.

The final suggestion for future research, which relates to but deviates slightly from the focus of the current study, is to investigate in detail socially-prescribed perfectionism. Considering the evident importance of SPP in its relationship with low levels of wellbeing, it is important that it is determined whether these supposed perfectionistic expectations are simply perceived by the individual or whether they actually exist. Are people who display high levels of SPP surrounded by people (e.g. parents) who constantly set them extremely high standards, and constantly pressure them to achieve. Or does the perfectionist just believe that others expect them to perform perfectly, when in fact they do not. The implications of this finding could greatly change both the understanding and treatment of perfectionism. This proposition, however, would be hard to investigate considering the number of people/sources from which the expectations may stem (e.g. parents, intimate partners, friends, etc).

4.3 Conclusion

In summary, the current findings provide some preliminary evidence to suggest that perfectionism may be a situation-specific trait, which differs in accordance with the nature of the task. Contrary to current assumption, it was also found that the commonly used Hewitt and Flett Multidimensional Perfectionism Scale does not measure global or average perfectionism, but instead perfectionism in a single domain. Furthermore it was suggested that benefit may be obtained by approaching the trait from this situation-specific perspective. In predicting wellbeing outcomes, both the number and nature of the domains in which perfectionism was manifest, were shown to significantly increase prediction, in addition to the currently used Multidimensional Perfectionism Scale. Particularly informative findings were obtained in relation to eating disorders. As discussed, the findings of the current study, if replicated, have the potential to change the way in which perfectionism is conceptualised and approached in the literature, and in turn the way in which perfectionism is targeted in a clinical setting. Many promising avenues for intervention and future research may eventuate from these findings. Given the limited advancements made in the field over the past two decades, this will be extremely beneficial.

References.

Accordino, D.B., Accordino, M.P. & Slaney, R.B. (2000). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools, 37*(6), 535-545.

Adkins, K.K. & Parker, W. (1996). Perfectionism and suicidal preoccupation. *Journal of Personality, 64*(2), 529-543.

Alden, L.E., Ryder, A.G. & Mellinga, T.M. (2002). Perfectionism in the context of social fears: Towards a two-component model. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 373-392). Washington, D.C.: American Psychological Association.

American Psychiatric Association, (1994). *Diagnostic and Statistical Manual of Mental Disorder* (4th ed.) Washington, DC: American Psychiatric Association.

Anastasi, A. & Urbina, S. (1997). *Psychological Testing* (7th Ed.). New Jersey: Prentice-Hall Inc.

Ashby, J.S. & Kottman, T. (1996) Inferiority as a distinction between normal and neurotic perfectionism. *The Journal of Individual Psychology, 52*(3), 237-245.

Ashby, J.S. & Rice, K.G. (2002). Perfectionism, dysfunctional attitudes, and self-esteem: a structural equations analysis. *Journal of Counseling and Development, 80*, 197-203.

Ashby, J.S., Kottman, T. & Shoen, E. (1998). Perfectionism and eating disorders reconsidered. *Journal of Mental Health Counseling, 20*(3), 261-271.

Ashby, J.S., Kottman, T., DeGraaf, D. (1999). Leisure satisfaction and attitudes of perfectionists: Implications for therapeutic recreation professionals, *Therapeutic Recreation Journal, 33*(2), 142-151.

Bastiani, A.M., Roa, R., Weltzin, T. & Kaye, W.H. (1995). Perfectionism in Anorexia nervosa. *International Journal of Eating Disorders, 17*(2), 147-152.

Beck, A.T., Rush, A.J., Shaw, V.F. & Emery, G. (1979). *Cognitive therapy of depression: A treatment manual.* New York: Guilford.

Belangee, S.E., Sherman, M.F. & Kern, R.M. (2003). Exploring the relationships between lifestyle personality attributes and eating disorder symptoms and behaviors in a non-clinical population. *Journal of Individual Psychology, 59*(4), 461-474.

Beumont, P.J., Kopec-Schrader, E.M., Talbot, P. & Touyz, S.W. (1993). Measuring the specific psychopathology of eating disorder patients. *Australian and New Zealand Journal of Psychiatry, 27*(3), 506-511.

Bing, M.N. (1999). Hypercompetitiveness in Academia: Achieving criterion-related validity from item context specificity. *Journal of Personality Assessment, 73*(1), 80-99.

Bizeul, C., Brun, J.M. & Rigaud, D. (2003). Depression influences the EDI scores in anorexia nervosa. *European Psychiatry, 18*(3), 119-123.

Blankstein, K.R. & Dunkley, D.M. (2002). Evaluative concerns, Self-Critical, and Personal Standards Perfectionism: A structural Equation Modeling strategy. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 285-316). Washington, D.C.: American Psychological Association.

Blatt, S.,G., Zuroff, D.C. (2002). Perfectionism in the Therapeutic Process. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 393-406). Washington, D.C.: American Psychological Association.

Blatt, S.J., Quinlan, D.M., Pilkonis, P.A. & Shea, M.T. (1995). Impact of perfectionism and need for approval on the brief treatment of depression: The National Institute of Mental Health Treatment of Depression Collaborative Research Program revisited. *Journal of Consulting and Clinical Psychology, 63*(1), 125-132.

Bong, M. (2001). Between- and within-domain relations of academic motivation among middle and high school students: self-efficacy, task-value, and achievement goals. *Journal of Educational Psychology, 93*(1), 23-34.

Bracken, B.A., Bunch, S., Keith, T.Z. & Keith, P.B. (2000). Child and adolescent multidimensional self-concept: a five-instrument factor analysis. *Psychology in the Schools, 37*(6), 483-493.

Brown, G.P. & Beck, A.T. (2002). Dysfunctional attitudes, perfectionism, and models of vulnerability to depression. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 231-252). Washington, D.C.: American Psychological Association.

Bulik, C.M., Tozzi, F., Anderson, C., Mazzeo, S.E., Aggen, S. & Sullivan, P.F. (2003). The relation between eating disorders and components of perfectionism. *American Journal of Psychiatry, 160*(2), 366-368.

Burckle, M.A., Ryckman, R.M., Gold, J.A., Thornton, B. & Audesse, R.J. (1999). Forms of competitive attitude and achievement orientation in relation to disordered eating. *Sex Roles, 40*(11/12), 853-870.

Burns, D.D. (1980). The perfectionist's script for self-defeat. *Psychology Today, November,* 34-51.

Burns, D.D. (1983). The spouse who is a perfectionist. *Medical Aspects of Human Sexuality, 17,* 219-230.

Calam, R. & Waller, G. (1998). Are eating and psychosocial characteristics in early teenage years useful predictors of eating characteristics in early adulthood? A 7-year longitudinal study. *International Journal of Eating Disorders, 24*(4), *351-362.*

Campbell, J.D. & Di Paula, C.A. (2002). Perfectionistic self-beliefs: Their relation to personality and goal pursuit. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 181-198). Washington, D.C.: American Psychological Association.

Casper, R.C. (1983).On the emergence of bulimia nervosa as a syndrome: A historical view. *International Journal of Eating Disorders, 2*(3), 3-16.

Castro, J.R. & Rice, K.G. (2003). Perfectionism and ethnicity: Implications for depressive symptoms and self-reported academic achievement. *Cultural Diversity and Ethnic Minority Psychology, 9*(1), 64-78.

Chang, E.C. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediation model in younger and older adults, *Journal of Counseling Psychology, 47*(1), 18-26.

Chang, E.C. (2002). Examining the link between perfectionism and psychological maladjustment: Social problem solving as a buffer. *Cognitive Therapy and Research, 26*(5), 581-595.

Cole, D.A., Maxwell, S.E., Martin, J.M., Peeke, L.G., Seroczynski, A.D., Tram, J.M., Hoffman, K.B., Ruiz, M.D., Jecquez, F. & Maschman, T. (2002). The development of multiple domains of child and adolescent self-concept: a cohort sequential longitudinal design. *Child Development, 72*(6), 1723-1746.

Cooper, Z., Cooper, P.J. & Fairburn, C.G. (1989). The validity of the Eating Disorder Examination and its subscales. *British Journal of Psychiatry, 154*, 807-812.

Cox, B.J. & Enns, M.W. (2003). Relative stability of dimensions of perfectionism in depression. *Canadian Journal of Behavioural Science, 35*(2), 124-132.

Davis, C., Dionne, M. & Shuster, B. (2001). Physical and psychological correlates of appearance orientation. *Journal of Personality and Individual Differences, 30*, 21-30.

Davis, C., Shuster, B., Blackmore, E. & Fox, J. (2004). Looking good – family focus on appearance and the risk for eating disorders. *International Journal of Eating Disorders, 35*(2), 136-145.

Dean, P.J. & Range, L.M. (1996). The escape theory of suicide and perfectionism in college students. *Death Studies, 20*, 415-424.

Diener, E., Emmons, R.A., Larsen, R.J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(10), 71-75.

Dobson, C., Goudy, W.J., Keith, P.M. & Powers, E.A. (1979). Further analysis of Rosenberg's Self-Esteem Scale. *Psychological Reports, 44*(2), 639-641.

Dunkley, D.M., Zuroff, D.C. & Blankstein, K.R. (2003). Self-Critical Perfectionism and Daily Affect: Dispositional and situational influences on stress and coping. *Journal of Personality and Social Psychology, 84*(1), 234-252.

Dunn, J.G., Dunn, J. & Syrotuik, D. (2002). Relationship between multidimensional perfectionism and goal orientation in sport. *Journal of Sport and Exercise Psychology, 24*(4), 376-395.

Emmons, R.A. & King, L.A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology, 54*(6), 1040-1048.

Emmons, R.A. (1995). Abstract versus concrete goals: Personal striving level, physical illness, and psychological well-being. *Journal of Personality and Social Psychology, 62*(2), 292-300.

Emmons, R.A. (1999). *The psychology of ultimate concerns: Motivation and spirituality in personality*. New York: Guilford Press.

Engler, B. (1999). *Personality Theories: An introduction*. New York; Houghton Mifflin Company.

Enns, M.W. & Cox, B.J. (2002). The nature and assessment of perfectionism: A critical analysis. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 33-62). Washington, D.C.: American Psychological Association.

Evans, D.W., Lee, F.L. & James, L.F. (1999). The rituals, fears and phobias of young children: Insights from development, psychopathology and neurobiology. *Child Psychiatry and Human Development, 29*(4), 261-276.

Fairburn, C.G. & Beglin, S.J. (1994). Assessment of eating disorders: interview or self-report questionnaire? *International Journal of Eating Disorders, 16*, 363-370.

Fairburn, C.G. & Cooper, Z. (1993). The eating disorder examination. In C.G. Fairburn & G.T. Wilson (Eds.), *Binge eating: Nature, assessment and treatment* (12th ed.) (pp.317-360). New York: Guilford Press.

Fairburn, C.G., Peveler, R.C. Jones, R., Hope, R.A & Doll, H.A. (1993). Predictors of twelve-month outcome in bulimia nervosa and the influence of attitudes to shape and weight. *Journal of Consulting and Clinical Psychology, 61*(4), 696-698.

Flanagan, C.M. (1993). Treating neurotic problems that do not respond to psychodynamic therapies. *Hospital and Community Psychiatry, 44*, 824-826.

Fleming, J.S. & Courtney, B.E. (1984). The dimensional of self-esteem: Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology, 46*(2), 404-421.

Flett, G., Blankstein, K.R., Hewitt, P.L. & Koledin, S. (1992). Components of perfectionism and procrastination in college students. *Social Behavior and Personality: An International Journal, 20*(2), 85-94.

Flett, G.L. & Hewitt, P.L. (1994/95). Perfectionism and components of state and trait anxiety. *Current Psychology, 13*(4), 326-350.

Flett, G.L. & Hewitt, P.L. (2002). Perfectionism and maladjustment; An overview of theoretical, definitional, and treatment issues. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 5-32). Washington, D.C.: American Psychological Association.

Flett, G.L., Danna, L.S. & Hewitt, P.L. (1995). Dimensions of perfectionism and goal commitment: A further comparison of two perfectionism measures. *Journal of Psychopathology and Behavioral Assessment, 17*(2), 111-124.

Flett, G.L., Davis, R.A. & Hewitt, P.L. (2003). Dimensions of perfectionism, unconditional self-acceptance, and depression. *Journal of Rational-Emotive and Cognitive-Behavioral Therapy, 21*(2), 119-138.

Flett, G.L., Greene, A. & Hewitt, P.L. (2004). Dimensions of perfectionism and anxiety sensitivity. *Journal of Rational-Emotive and Cognitive Behavior Therapy, 22*(1), 39-57.

Flett, G.L., Hewitt, P.L., Blankstein, K.R. & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology, 75*, 1363- 1381.

Flett, G.L., Hewitt, P.L., Blankstein, K.R. & Mosher, S.W. (1995). Perfectionism, life events, and depressive symptoms: A test of a diathesis-stress model. *Current Psychology, 14*(2) 112-137.

Flett, G.L., Hewitt, P.L., Oliver, J.M. & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental perspective. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 89-132). Washington, D.C.: American Psychological Association.

Flett, G.L., Sawatsky, D.L. & Hewitt, P.L. (1995). Dimensions of perfectionism and goal commitment. *Journal of Psychopathology and Behavior Assessment, 17,* 111-124.

Frost, O., Heimberg, R.G., Holt, C.S., Mattia, J.I. & Neubauer, S. (1993). A comparison of two measures of perfectionism. *Journal of Personality and Individual Differences, 14*(1), 119-126.

Frost, R.O. & DiBartolo, P.M. (2002). Perfectionism, anxiety, and obsessive-compulsive disorders. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 341-372). Washington, D.C.: American Psychological Association.

Frost, R.O., Marten, P., Lahart, C. & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research, 14,* 449-468.

Garner, D.M., Olmstead, M.P. & Polivy, J. (1983). Development and validation of a multidimensional eating disorder inventory for anorexia and bulimia. *International Journal of Eating Disorders, 2,* 15-34.

Gilman, R. & Ashby, J.S. (2003). A first study of perfectionism and multidimensional life satisfaction among adolescents. *Journal of Early Adolescence, 23*(2), 218-235.

Gotwals, J.K., Dunn, J.G. & Wayment, H.A. (2003). An examination of perfectionism and self-esteem in intercollegiate athletes. *Journal of Sport Behavior, 26*(1), 17-38.

Habke, A.M. & Flynn, C.A. (2002). Interpersonal aspects of trait perfectionism. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 151-180). Washington, D.C.: American Psychological Association.

Hamachek, D.E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology, 15*, 27-33.

Hamilton, T.K. & Schweitzer, R.D. (2000). The cost of being perfect: Perfectionism and suicide ideation in university students. *Australian and New Zealand Journal of Psychiatry, 34*, 829-835.

Hart, B.A., Gilner, F.H., Handal, P.J. & Gfeller, J.D. (1998). The relationship between perfectionism and self-efficacy. *Journal of Personality and Individual Differences, 24*(1), 109-113.

Hewitt, P.L. & Flett, G.L. (1991a). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology, 100*, 98-101.

Hewitt, P.L. & Flett, G.L. (1991b). Perfectionism in the self and social contexts: Conceptualizations, assessment, and association with psychopathology. *Journal of Personality and Social Psychology, 60*, 456-470.

Hewitt, P.L. & Flett, G.L. (2002). Perfectionism and stress processes in psychopathology. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 255-284). Washington, D.C.: American Psychological Association.

Hewitt, P.L. & Genest, M. (1990). The ideal-self: Schematic processing of perfectionistic content in dysphoric university students. *Journal of Personality and Social Psychology, 59*, 802-808.

Hewitt, P.L., Flett, G.L. & Ediger, E. (1995). Perfectionism traits and perfectionistic self-presentation in eating disorder attitudes, characteristics, and symptoms. *International Journal of Eating Disorders, 18*(4), 317-326.

Hewitt, P.L., Flett, G.L. & Ediger, E. (1996). Perfectionism and depression: Longitudinal assessment of a specific vulnerability hypothesis. *Journal of Abnormal Psychology, 105*(2), 276-280.

Hewitt, P.L., Flett, G.L. & Turnball-Donovan, W. (1992). Perfectionism and suicide potential. *British Journal of Clinical Psychology, 31*(2), 181-190.

Hewitt, P.L., Flett, G.L. & Weber, C. (1994). Dimensions of perfectionism and suicide ideation. *Cognitive Therapy and Research, 18*(5), 439-460.

Hewitt, P.L., Flett, G.L., Besser, A., Sherry, S.B. & McGee, B. (2003). Perfectionism is multidimensional: A reply. *Behaviour Research and Therapy, 41*(10), 1221-136.

Hewitt, P.L., Newton, J., Flett, G.L. & Callander, L. (1997). Perfectionism and suicide ideation in adolescent psychiatric patients. *Journal of Abnormal Child Psychology, 25*(2), 95-101.

Hobden, K. & Pliner, P. (1995). Self-handicapping and dimensions of perfectionism: Self-presentation vs self-protection. *Journal of Research in Personality, 29*, 461-474.

Hollenbeck, J., Williams, C. & Klein, H. (1989). An empirical examination of the antecedents of commitment to difficult goals. *Journal of Applied Psychology, 74*, 18-23.

Hollender, M. H. (1978). Perfectionism, a neglected personality trait. *Journal of Clinical Psychiatry, 39*, 384.

Hunter, J.A., Kypri, K., Stokell, N.M., Boyes, M., O'Brien, K.S. & McMenamin, E. (2004). Social identity, self-evaluation and in-group bias: The relative importance of particular domains of self-esteem to the in-group. *British Journal of Social Psychology, 43*, 59-81.

Juster, H.R., Heimberg, R.G., Frost, R.O. & Holt, C.S. (1996). Social phobia and perfectionism. *Personality and Individual Differences, 21*, 403-410.

Kawamura, K.Y., Hunt, S.L., Frost, R.O. & DiBartolo, P.M., (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research, 25*(3), 291-301.

Kenrick, D.T. & Funder, D.C. (1988). Profiting from controversy: Lessons for the person-situation debate. *American Psychologist, 43*(1), 23-34.

Kenrick, D.T., McCreath, H.E., Govern, J., King, R. & Bordin, J. (1990). Person-environment intersections: Everyday settings and common trait dimensions. *Journal of Personality and Social Psychology, 5* (4), 685-698.

King, K.A. (1997). Self-concept and self-esteem: a clarification of terms. *Journal of School Health, 67*(2), 68-70.

Koivula, N., Hassmen, P. & Fallby, J. (2002). Self-esteem and perfectionism in elite athletes: effects on competitive anxiety and self-confidence. *Journal of Personality and Individual Differences, 32,* 865-875.

Lewis, C.A. & Shevlin, M.E. (1995). Confirmatory factor analysis of the Satisfaction with Life Scale. *Journal of Perceptual and Motor Skills, 80*(1), 304-306.

LoCicero, K.A., Ashby, J.S. & Kern, R.M (2000). Multidimensional perfectionism and lifestyle approaches in middle school children. *The Journal of Individual Psychology, 56(*4), 449-461.

Locke, E., Shaw, K., Saari, L. & Latham, G. (1981). Goal setting and task performance: 1969-1980. *Psychological Bulletin, 90,* 125-152.

Locke, E.A., Smith, K.G., Erez, M., Chah, D. & Schaffer, A. (1994). The effects of intra-individual goal conflict on performance. *Journal of Management, 20*(1), 67-71.

Lombardi, D.N., Florentino, M.C. & Lombardi, A.J. (1998). Perfectionism and abnormal behavior. *The Journal of Individual Psychology, 54*(1), 61-71.

Maehr, M.L. 2001. Goal theory is not dead – not yet, anyway: A reflection on the special issue. *Educational Psychology Review, 13*(2), 177-185.

Malouff, J., Schutte, N. & Bauer, M. (1990). Development and evaluation of a measure of the tendency to be goal oriented. *Journal of Personality and Individual Differences, 11*(12), 1191-1200.

Marsh, H.W. & Gouvernet, P.J. (1989). Multidimensional self-concept and perceptions of control: construct validation of responses by children. *Journal of Educational Psychology, 81*(1), 57-69.

Marsh, H.W. & Yeung, A.S. (1998). Top-down, bottom-up, and horizontal models: the direction of causality in multidimensional, hierarchical self-concept models. *Journal of Personality and Social Psychology, 75*(2), 509-527.

McCabe, M.P. & Vincent, M.A. (2003). The role of biodevelopmental and psychological factors in disordered eating among adolescent males and females. *European Eating Disorders Review, 11*(4), 315-328.

McLaren, L., Gauvin, L. & While, D. (2001). The role of perfectionism and excessive commitment to exercise in explaining dietary restraint: replication and extension. *International Journal of Eating Disorders*, 29(3), 307-313.

McLean, J., Roper-Hall, A., Mayer, P. & Main, A. (1991). Service needs of stroke survivors and their informal carers: a pilot study. *Journal of Advanced Nursing, 16*(5), 559-565.

Minarik, M.L. & Ahrens, A.H. (1996). Relations of eating and symptoms of depression and anxiety to the dimensions of perfectionism among undergraduate women. *Cognitive Therapy & Research, 20*(2), 155-169.

Mischel, W. & Peake, P.K. (1982). Beyond déjà vu in the search for cross-situational consistency. *Psychological Review, 89*(6), 730-755.

Mischel, W. (1968). *Personality and Assessment.* New York: Wiley Publishing Inc.

Mischel, W. (1979). On the interface of cognition and personality: Beyond the person-situation debate. *American Psychologist, 34* (9), 740-754.

Mitchelson, J.K. & Burns, L.R. (1998). Career mothers and perfectionism: stress at work and at home. *Personality and Individual Differences, 25,* 477-485.

Mitzman, S.F., Slade, P. & Dewey, M.E. (1994). Preliminary development of a questionnaire designed to measure neurotic perfectionism in the eating disorders. *Journal of Clinical Psychology, 50*(4), 516-522.

Mond, J.M., Hay, P.J., Rodgers, B., Owen, C. & Beaumont, P.J. (2004). Validity of the Eating Disorder Examination Questionnaire (EDE-Q) in screening for eating disorders in community samples. *Behaviour Researcher and Therapy, 42*, 551-567.

Mor, S., Day, H.I. & Flett, G.L. (1995). Perfectionism, control, and components of performance anxiety in professional artists. *Cognitive Therapy and Research, 19*(2), 207-225.

Murtha, T.C., Kanfer R. & Ackerman, (1994). Goal setting, conditions of practice, and task performance: A resource allocation perspective. *Journal of Applied Psychology, 79*(6), 826-835.

Nekanda-Trepka, C.J. Bishop, S. & Blackburn, I.M. (1984). Hopelessness and depression. *British Journal of Clinical Psychology, 22*(1), 49-60.

O'Brien, E.J. (1985). Global self-esteem scales: Unidimensional or multidimensional? *Psychological Reports, 57*(2), 383-389.

O'Connor, R.C. & O'Connor, D.B. (2003). Predicting hopelessness and psychological distress: The role of perfectionism and coping. *Journal of Counseling Psychology, 50* (3), 362-372.

Pacht, A.R. (1984). Reflections on perfectionism. *American Psychologist, 39*, 386-390.

Parker, W.D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Journal, 34*(3), 545-562.

Parker, W.D. & Stumpf, H. (1995). An examination of the Multidimensional Perfectionism Scale with a sample of academically talented children. *Journal of Psychoeducational Assessment, 13*(4), 372-383.

Parker, W.D. (2002). Perfectionism and Adjustment in Gifted Children. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 133-148). Washington, D.C.: American Psychological Association.

Peterson, D.R. (1989). Interpersonal goal conflict. In L.A. Pervin (Ed.) *Goal Concepts in Personality and Social Psychology* (pp.327-361), England: Lawrence Erlbaum Associates Inc.

Pliner, P. & Haddock, G. (1996). Perfectionism in weight-concerned and unconcerned women: an experimental approach. *International Journal of Eating Disorders, 19*(4), 381-389.

Pratt, E.M., Telch, C.F., Labouvie, E.W., Wilson, G.T. & Agra, W.S. (2001). Perfectionism in women with binge eating disorder. *International Journal of Eating Disorders, 29*(2), 177-186.

Radloff, L.S. (1977). The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.

Rice K.G., Ashby, J.S. & Slaney, R.B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. *Journal of Counseling Psychology, 45*(3), 304-314.

Rice, K.G., Bair, C.J., Castro, J.R., Cohen, B.N. & Hood, C.A. (2003). Meanings of perfectionism: A quantitative and qualitative analysis. *Journal of Cognitive Psychotherapy, 17*(1), 39-58.

Rice, K.G. & Dellwo, J.P. (2001). Within-semester stability and adjustment correlates of the Multidimensional Perfectionism Scale. *Measurement and Evaluation in Counseling and Development, 34*(3), 146-156.

Rice, K.G. & Preusser, K.J. (2002). The adaptive/maladaptive perfectionism scale. *Measurement and Evaluation in Counseling and Development, 34*, 210-222.

Rice, K.G. & Slaney, R.B. (2002). Clusters of perfectionists: Two studies of emotional adjustment and academic achievement. *Measurement and Evaluation in Counseling and Development, 35*, 35-48.

Rice, K.G., Ashby, J.S. & Preusser, K.J. (1996). Perfectionism, relationships with parents, and self-esteem. *Individual Psychology, 52*(3), 246-260.

Robins, R.W., Hendin, H.M. & Trzesniewski, K.H. (2001). Measuring global self-esteem: Constructs of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*(2), 151-161.

Rosen, J.C., Vara, L., Wendt, S. & Leitenberg, H. (1990). Validity studies of the Eating Disorder Examination. *International Journal of Eating Disorders, 9*, 519-528.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton: Princeton University Press.

Ryckman, R.M., Hammer, M., Kaczor, L.M. & Gold, J.A. (1990). Construction of a hypercompetitive attitude scale. *Journal of Personality Assessment, 66*, 374-385.

Saboonchi, F. & Lundh, L.G. (1997). Perfectionism, self-consciousness, and anxiety. *Journal of Personality and Individual Differences, 22*(6), 921-928.

Saboonchi, F. & Lundh, L.G. (1999). State perfectionism and its relation trait perfectionism, type of situation, priming, and being observed. *Scandinavian Journal of Behaviour Therapy, 28*(4), 154-166.

Saboonchi, F. & Lundh, L.G. (2003). Perfectionism, anger, somatic health, and positive affect. *Personality and Individual Differences, 35*, 1585-1599.

Santonastaso, P. Friederici, S. & Favaro, A. (1999). Full and partial syndromes in eating disorders: a 1-year prospective study of risk factors among female students. *Psychopathology, 32*, 50-56.

Schmit, M.J., Ryan, A.M., Stierwalt, S.L. & Powell, A.B. (1995). Frame-of-reference effects on personality scale scores and criterion-related validity. *Journal of Applied Psychology, 80,* 607-620.

Shafran, R. & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review, 21*(6), 879-906.

Shafran, R., Cooper, Z. & Fairburn, C.G. (2002). Clinical perfectionism: A cognitive-behavioural analysis. *Behaviour Research and Therapy, 40*(7), 773-791.

Shavelson, R.J., Hubner, J.J. & Stanton, G.C. (1976). *Review of Educational Research, 46*(3), 407-441.

Sherry, S.B., Hewitt, P.L., Flett, G.L. & Harvey, M. (2003). Perfectionism dimensions, perfectionistic attitudes, dependent attitudes, and depression in psychiatric patients and university students. *Journal of Counseling Psychology, 50*(3), 373-386.

Slade, P.D. & Owens, R.G. (1998). A dual process model of perfectionism based on reinforcement theory. *Behavior Modification, 22*(3), 372-390.

Slaney, R.G. & Ashby, J.S. (1996). Perfectionists: Study of a criterion group. Journal of Counseling and Development, 74, 393-398.

Slaney, R.B., Ashby, J.S. & Trippi, J. (1995). Perfectionism: Its measurement and career relevance. *Journal of Career Assessment, 3*, 279-297.

Slaney, R.B., Rice, K.G. & Ashby, J.S. (2002). A programmatic approach to measuring perfectionism: The Almost Perfect Scales. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 63-88). Washington, D.C.: American Psychological Association.

Srikameswaran, S. (2002). Perfectionism and eating disorders. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 319-372). Washington, D.C.: American Psychological Association.

Srinivasagam, N., Kaye, W.H., Plotnicov, K.H., Greeno, C., Weltzin, T.E. & Rao, R. (1995). Persistent perfectionism, symmetry, and exactness after long-term recovery from Anorexia nervosa. *American Journal of Psychiatry, 152*(11), 1630-1634.

Stein, D., Kaye, W.J., Matsunaga, H., Orbach, I., Har-Even, D., Frank, G., McConaha, C.W. & Rao, R. (2002). Eating-related concerns, mood, and personality traits in recovered bulimia nervosa subjects: a replication study. *International Journal of Eating Disorders, 32*(2), 225-239.

Suddarth, B.H. & Slaney, R. (2001). An investigation of the dimensions of perfectionism in college students. *Measurement and Evaluation in Counseling and Development, 34*(3), 157-165.

Sutandar-Pinnock, K., Woodside, D.B., Carter, J.C., Olmsted, M.P. & Kaplan, A.S. (2003). Perfectionism in Anorexia nervosa: a 6-24 month follow-up study. *International Journal of Eating Disorders, 33*(2), *225-229.*

Tabachnick, B & Fidell, L.S. (2001). *Using Multivariate Statistics (4th ed.)*. Boston: Allyn and Bacon.

Tangney, J.P. (2002). Perfectionism and the self-conscious emotions: Shame, guilt, embarrassment, and pride. In G.L. Flett & P.L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 199-230). Washington, D.C.: American Psychological Association.

Terry-Short, L.A., Owens, R.G., Slade, P.D. & Dewey, M.E. (1995). Positive and negative perfectionism. *Personality and Individual Differences, 18,* 663-668.

Timpe, R.L. (1989). Perfectionism: Positive possibility or personal pathology? *Journal of Psychology and Christianity, 8*(2), 23-34.

Tozzi, F., Sullivan, P.F., Fear, J.L., McKenzie, J. & Bulik, C.M. (2003). Causes and recovery in anorexia nervosa: the patient's perspective. *International Journal of Eating Disorders, 33*(2), 143-154.

Wei, M., Mallinckrodt, B., Russell, D.W., Abraham, W.T. (2004). Maladaptive perfectionism as a mediator and moderator between adult attachment and depressive mood, *Journal of Counseling Psychology, 51*(2), 201-212.

Wilson, G.T. & Smith, D. (1989). Assessment of bulimia nervosa: An evaluation of the Eating Disorder Examination. *International Journal of Eating Disorders, 8*, 173-179.

Wright, J.C. & Mischel, W. (1987). A conditional approach to dispositional constructs: The local predictability of social behaviour. *Journal of Personality and Social Psychology, 53*, 1159-1177.

Wyatt, R. & Gilbert, P. (1998). Dimensions of perfectionism: a study exploring their relationship with perceived social rank and status. *Journal of Personality and Individual Differences, 24*(1), 71-79.

Zuroff, D.C., Blatt, S.J., Sanislow, C.A., Bondi, C.M. & Pilkonis, P.A. (1999). Vulnerability to Depression: Reexamining state dependence and relative stability. *Journal of Abnormal Psychology, 108*(1), 76-89.

Appendices.

Appendix 1

Table Summarising Common Perfectionism Measures

Table 1.
Summary of additional perfectionism measures used within the literature, their dimensionality and main premise.

Measure	Approach	Dimensionality	Main Premise	Subscale(s)
Almost Perfect Scale - Revised Slaney,, Ashby & Trippi (1995)	Cognitive	Multidimensional	Perfectionism only leads to maladjustment if there is a discrepancy between an individual's standards and evaluation of performance. Congruence between goals and perceived performance has positive repercussions.	Standards (+), and Discrepancy (-)
Positive and Negative Perfectionism Scale Terry-Short, Owens, Slade & Dewey (1995)	Behavioural-Developmental	Multidimensional	Perfectionistic behaviour established through positive reinforcement results in positive outcomes and a willingness to approach new tasks. Negative reinforcement gives rise to problematic, negative perfectionism.	Positive (+) and Negative (-)
Perfectionism Cognitions Inventory Flett, Hewitt, Blankstein & Gray (1998)	Cognitive	Unidimensional	The frequency of automatic perfectionistic thoughts reflect the need to obtain perfection, with greater frequency indicating greater perfectionism.	Total Perfectionism
The Burns Perfectionism Scale Burns (1983)	Psychopathological	Unidimensional	Perfectionism is a maladaptive trait of personality. The more perfectionistic one is, the greater one's maladaptivity.	Total Perfectionism
Eating Disorder Inventory Garner, Olmstead & Polivy (1983)	Clinical	Unidimensional	Perfectionism is a major predisposing factor contributing to the development of eating disorders. It thus needs to be included in screening measures.	Total Perfectionism

Appendix 2

Paper Replica of Online Questionnaire

Questions marked with a * are required

Perfectionistic Achievement Striving Across Life Domains and its impact upon Wellbeing

~ Section One: Achievement Striving ~

1. Listed below are a number of statements concerning the expectations you have of yourself. Read each item carefully and decide to what extent you agree or disagree. Indicate your position by selecting the appropriate button, where 1=strongly disagree, and 7=strongly agree. Remember there are no right or wrong answers. The best answer is an honest answer.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do	○	○	○	○	○	○	○
Anything I do that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○
I strive to be as perfect as I can be	○	○	○	○	○	○	○
I am perfectionistic in my goals	○	○	○	○	○	○	○
I feel that people are too demanding of me	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up	○	○	○	○	○	○	○
My family expects me to be perfect	○	○	○	○	○	○	○
People expect nothing less than perfection from me	○	○	○	○	○	○	○
I set very high standards for myself	○	○	○	○	○	○	○
I must always be successful	○	○	○	○	○	○	○

2. Now, think of yourself at university. Think specifically of the expectations you have of yourself at university; the way you approach university, your attitudes, motivations, and goals. With this in mind respond to the below questions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do at university	○	○	○	○	○	○	○
Anything I do in my university work that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○
I strive to be as perfect at university as I can be	○	○	○	○	○	○	○
I am perfectionistic in my goals concerning my university work	○	○	○	○	○	○	○
I feel that people are too demanding of me in regards to my performance at university	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up at university	○	○	○	○	○	○	○
My family expects me to perform perfectly at university	○	○	○	○	○	○	○
People expect nothing less than perfection from me in my university work	○	○	○	○	○	○	○
I set very high standards for myself at university	○	○	○	○	○	○	○
I must always be successful at university	○	○	○	○	○	○	○

Now Overall...

To what extent do you define yourself on the basis of your performance at university?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

To what extent, do you believe, others define you on the basis of your performance at university?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

3. Now think of yourself in interactions with friends. Think specifically of the expectations you have of yourself in interactions with friends; the way you approach interactions with friends, your attitudes, motivations, and goals. With this in mind, respond to the below questions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do in my interactions with friends	○	○	○	○	○	○	○
Anything I do in my interactions with friends that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○
I strive to be as perfect in my interactions with friends as I can be	○	○	○	○	○	○	○
I am perfectionistic in my goals concerning interactions with friends	○	○	○	○	○	○	○
I feel that people are too demanding of me in regards to my performance in my interactions with friends	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up in my interactions with friends	○	○	○	○	○	○	○
My family expects me to be perfect in my interactions with friends	○	○	○	○	○	○	○
People expect nothing less than perfection from me in my interactions with friends	○	○	○	○	○	○	○
I set very high standards for myself in my interactions with friends	○	○	○	○	○	○	○
I must always be successful in my interactions with friends	○	○	○	○	○	○	○

Now Overall...

To what extent do you define yourself on the basis of your interactions with friends?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

To what extent, do you believe, others define you on the basis of your interactions with friends?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

4. Now think of your physical appearance. Think specifically of the expectations you have for yourself in regards to your physical appearance; the way you manage your physical appearance, your attitudes, motivations, and goals. With this in mind, respond to the below questions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do with my physical appearance	○	○	○	○	○	○	○
Anything I do with my physical appearance that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○

I strive to be as perfect with my physical appearance as I can be	○	○	○	○	○	○	○
I am perfectionistic in my goals concerning my physical appearance	○	○	○	○	○	○	○
I feel that people are too demanding of me in regards to my physical appearance	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up in my physical appearance	○	○	○	○	○	○	○
My family expects me to be perfect in my physical appearance	○	○	○	○	○	○	○
People expect nothing less than perfection from me in my physical appearance	○	○	○	○	○	○	○
I set very high standards for myself in my physical appearance	○	○	○	○	○	○	○
I must always be successful with my physical appearance	○	○	○	○	○	○	○

Now Overall...

To what extent do you define yourself on the basis of your physical appearance?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

To what extent, do you believe, that others define you on the basis of your physical appearance?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

5. Now think of yourself when playing sport (or when you used to play sport). Think specifically of the expectations you have of yourself when playing sport; the way you approach sporting activities, your attitudes, motivations, and goals. With this in mind, respond to the below questions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do in sport	○	○	○	○	○	○	○
Anything I do in sport that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○
I strive to be as perfect in sport as I can be	○	○	○	○	○	○	○
In sport, I am perfectionistic in my goals	○	○	○	○	○	○	○
I feel that people are too demanding of me in regards to my performance in sport	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up in sport	○	○	○	○	○	○	○
My family expects me to be perfect in sport	○	○	○	○	○	○	○
People expect nothing less than perfection from me in sport	○	○	○	○	○	○	○
I set very high standards for myself in sport	○	○	○	○	○	○	○
I must always be successful in sport	○	○	○	○	○	○	○

Now Overall...

To what extent do you define yourself on the basis of your performance in sporting activities?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

To what extent, do you believe, others define you on the basis of your performance in sporting activities?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

6. Now think of yourself participating in leisure activities; that is, any activity (not including those previously examined above) which you actively participate in when you have free-time. Think specifically of the expectations you have of yourself in leisure activities; the way you approach leisure activities, your attitudes, motivations, and goals. With this in mind, respond to the below questions.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
One of my goals is to be perfect in everything I do in leisure activities	○	○	○	○	○	○	○
Anything I do in leisure activities that is less than excellent will be seen as poor by those around me	○	○	○	○	○	○	○
I strive to be as perfect in leisure activities as I can be	○	○	○	○	○	○	○
I am perfectionistic in my goals concerning leisure activities	○	○	○	○	○	○	○
I feel that people are too demanding of me in regards to my performance in leisure activities	○	○	○	○	○	○	○
Although they may not show it, other people get very upset with me when I slip up in leisure activities	○	○	○	○	○	○	○
My family expects me to perform perfectly in leisure activities	○	○	○	○	○	○	○
People expect nothing less than perfection from me in leisure activities	○	○	○	○	○	○	○
I set very high standards for myself in leisure activities	○	○	○	○	○	○	○
I must always be successful in leisure activities	○	○	○	○	○	○	○

Now Overall...

To what extent do you define yourself on the basis of your performance in leisure activities?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

To what extent, do you believe, others define you on the basis of you performance in leisure activities?

Not at all ○ ○ ○ ○ Moderately ○ ○ ○ Very much

~ Section Two: Life Satisfaction ~

7. The following section asks you about your contentment with life. Please be honest in your responding; there are no right or wrong answers.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
In most ways my life is close to my ideal *	○	○	○	○	○	○	○
The conditions of my life are excellent *	○	○	○	○	○	○	○
I am satisfied with my life *	○	○	○	○	○	○	○
So far I have gotten the important things I want in my life *	○	○	○	○	○	○	○
If I could live my life over, I would change	○	○	○	○	○	○	○

almost nothing *

~ Section three: Self Satisfaction ~

8. You are now going to be asked about your attitudes towards yourself.

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Undecided	5 Somewhat Agree	6 Agree	7 Strongly Agree
On the whole, I am satisfied with myself	○	○	○	○	○	○	○
At times I think I am no good at all	○	○	○	○	○	○	○
I feel that I have a number of good qualities	○	○	○	○	○	○	○
I am able to do things as well as most other people	○	○	○	○	○	○	○
I feel I do not have much to be proud of	○	○	○	○	○	○	○
I feel useless at times	○	○	○	○	○	○	○
I feel that I'm a person of worth, at least on an equal plane with others	○	○	○	○	○	○	○
I wish I could have more respect for myself	○	○	○	○	○	○	○
All in all, I am inclined to feel that I am a failure	○	○	○	○	○	○	○
I take a positive attitude toward myself	○	○	○	○	○	○	○

~ Section Four: Mood State ~

9. This section asks about how you have felt over the past week. Indicate how frequently you experienced each 'feeling' **in the past week** where 1=rarely or none of the time (less than 1 day) and 4=most or all of the time (5-7 days)

	Rarely (Less than 1 day)	Sometimes (1 - 2 days)	Occasionally (3 - 4 days)	Most of the time (5 - 7 days)
I was bothered by things that usually don't bother me	○	○	○	○
I did not feel like eating, my appetite was poor	○	○	○	○
I felt that I could not shake off the blues even with help from my family or friends	○	○	○	○
I felt that I was just as good as other people *	○	○	○	○
I had trouble keeping my mind on what I was doing	○	○	○	○
I felt depressed	○	○	○	○
I felt that everything I did was an effort	○	○	○	○
I felt hopeful about the future *	○	○	○	○
I thought my life had been a failure	○	○	○	○
I felt fearful	○	○	○	○
My sleep was restless	○	○	○	○
I was happy *	○	○	○	○
I talked less than usual	○	○	○	○
I felt lonely	○	○	○	○
People were unfriendly	○	○	○	○
I enjoyed life *	○	○	○	○

I had crying spells	○	○	○	○
I felt sad	○	○	○	○
I felt that people dislike me	○	○	○	○
I could not get "going"	○	○	○	○

~ Section Five: Eating and Body Attitudes ~

10. This section addresses your attitudes about eating and your body in general. Please respond to each item in reference to the **past four weeks only (28 days)**. Note if you are currenly pregnant, please respond in reference to the four weeks prior to your becoming pregnant. Again, there are no right or wrong answers. Please respond honestly.

	No days	1-5 days	6-12 days	13-15 days	16-22 days	23-27 days	Every day
Have you been deliberately trying to limit the amount of food you eat to influence your shape or weight	○	○	○	○	○	○	○
Have you tried to avoid eating any foods which you like in order to influence your shape or weight?	○	○	○	○	○	○	○
Have you tried to follow definite rules regarding your eating in order to influence your shape or weight; for example, a calorie limit, a set amount of food, or rules about what or when you should eat?	○	○	○	○	○	○	○
Have you wanted your stomach to be empty?	○	○	○	○	○	○	○
Has thinking about food or its calorie content made it much more difficult to concentrate on things you are interested in such as reading or watching tv?	○	○	○	○	○	○	○
Have you been afraid of losing control over eating?	○	○	○	○	○	○	○
Have you eaten in secret?	○	○	○	○	○	○	○
Have you definitely wanted your stomach to be flat?	○	○	○	○	○	○	○
Has thinking about shape or weight made it more difficult to concentrate on things you are interested in, such as reading or watching tv?	○	○	○	○	○	○	○
Have you had a strong desire to lose weight?	○	○	○	○	○	○	○
Have you had a definite fear that you might gain weight?	○	○	○	○	○	○	○
Have you gone for long periods of time (8 hours or more during the day) without eating anything in order to influence your shape or weight?	○	○	○	○	○	○	○
Have you felt fat?	○	○	○	○	○	○	○
Have you felt that on occasion you have eaten what other people would regard as an unusually large amount of food given the situation?	○	○	○	○	○	○	○
Have you ever contemplated vomitting after eating in order to control your shape or weight?	○	○	○	○	○	○	○
Have you ever contemplated using diuretics, laxatives, diet pills or the like in order to control your shape or weight?	○	○	○	○	○	○	○
Have you exercised hard as a means of controlling your shape or weight?	○	○	○	○	○	○	○

11. Now, how do you feel about your weight? Again reply in reference to **the past four weeks (28 days)** (or if pregnant, the four weeks prior to pregnancy)

	Not at all 0	1	Slightly 2	3	Moderately 4	5	Markedly 6
How much would it upset you if you had to	○	○	○	○	○	○	○

weigh yourself once a week (no more, no less)?							
How dissatisfied have you felt about your weight?	○	○	○	○	○	○	○
How dissatisfied have you felt about your shape?	○	○	○	○	○	○	○
How concemed have you been about other people seeing you eat?	○	○	○	○	○	○	○
How uncomfortable have you felt seeing your body; for example, in the mirror, while undressing or taking a bath/shower?	○	○	○	○	○	○	○
How uncomfortable have you felt about others seeing your body; for example in communal changing rooms, when swimming or wearing tight clothes?	○	○	○	○	○	○	○
Has your weight influenced how you think about or judge yourself as a person?	○	○	○	○	○	○	○
Has your shape influenced how you think about or judge yourself as a person?	○	○	○	○	○	○	○
Have you felt guilty after eating, because of the effect on your shape or weight?	○	○	○	○	○	○	○

~ Section Six: Demographic Information ~

13. Finally, please provide some general information about you.

Gender

- ○ Male
- ○ Female

Age (Please indicate Years and Month e.g. 21/5 represents 21 years and 5 months)

Ethnicity

- ○ Australian
- ○ Aboriginal/Torres Strait Islander
- ○ Asian
- ○ European
- ○ Middle Eastern
- ○ African
- ○ American
- ○ Other

Birth Order (Please indicate what number child you were in your family e.g. for the 2nd of 5 children, type 2/5 etc):

Academic Discipline

Do you currently play sport?

- ○ Yes
- ○ No

If yes...
is this sport competive/organised (as opposed to sport played for leisure/fun with friends in the absence of officials?)

- Yes
- No

If applicable, what sport(s) do you play?

Finally, any additional comments:

Submit

Please note before submitting . Some of the crucial questions have been marked as 'required'. If you have accidentally missed one of these questions you will receive a message after clicking submit telling you that the questionnaire isn't complete. Don't be alarmed. The program will automatically take you back to the question you have missed. Simply respond to this question or questions, then scroll down and resubmit. Please contact guecn001@students.unisa.edu.au if you have any questions regarding this survey.

SurveyConsole

Online Surveys Powered By SurveyConsole Survey Software

Appendix 3

Copy of Ethics Approval

Division of Education, Arts & Social Sciences
Divisional Human Research Ethics Committee
Y3-39 Academic Services, City West Campus
Ph 8302 0341
Fax 8302 0334
Email rhonda.porter@unisa.edu.au

25 June 2004

Corree Guerin
Email guecn001

Dear Corree

Project Title: **Achievement striving across life domains and its impact upon wellbeing**

Thank you for the amended information provided to DHREC about your research project.

Your submission was assessed by the Committee and has been approved as being in accordance with the guidelines set by the Divisional Human Research Ethics Committee.

Best wishes for your study.

Yours sincerely

Rhonda Porter
Executive Officer
Divisional Human Research Ethics Committee

Appendix 4

Paper Replica of Information Letter

(This email is being forwarded to all SA School of Art Students with approval from Professor Ian Davey, Pro Vice Chancellor: Research and Innovation on behalf of Corree Guerin, Student Researcher, UniSA)

Perfectionistic Achievement striving across life-domains and its impact upon wellbeing.

Hi. My name is Corree Guerin and I am an Honours Psychology student who, like you, studies at the University of South Australia. As part of the completion of my psychology degree I am conducting research into the effect of people's achievement striving upon psychological wellbeing. This is where you come in.

As a university student you would be well aware of the ever present pressure placed upon you, by both yourself and others, to be successful, not only at university, but in a variety of life-domains. According to the psychological literature, this constant pressure to achieve can have ramifications, both positive and negative, upon an individual's psychological wellbeing. The aim of my study is hence to investigate whether the inherent tendency for some individuals to set themselves or have other set them, very high "perfectionistic" standards in different life domains, impacts upon their overall wellbeing. I have contacted you in order to request your participation in this valuable research.

If you choose to participate in this study, you will be required to complete a brief online questionnaire which looks at your personal-achievement expectations (in a general context, as well as in five specific situations), and various aspects of your general wellbeing. The questionnaire is very easy and should take approximately 10 minutes to complete. It can be done completely on line. To access the questionnaire simply click on the following hyperlink:

www.surveyconsole.com/console/TakeSurvey?id=44176

Should you choose to participate in the study, your involvement will be completely voluntary. The researcher cannot however, due to the nature of the internet and email system, completely guarantee the confidentiality and anonymity of data. Be assured however that no information relating to your personal identity will be obtained in the questionnaire, nor will the process of accessing or submitting the questionnaire lead to your identification – email addresses will not be able to be traced in any way, and the researcher will have no way of telling who logged onto the questionnaire. The research data will hence all be anonymous. In line with current legislation, data obtained in the study will be securely stored for seven years at the University of South Australia, School of Psychology, with no-one other than myself and my supervisors having access to it. Furthermore you will be free to withdraw from the study at any time, without question or consequence. For some people, certain aspects of the questionnaire may be a little sensitive. If at any time after completing the questionnaire you feel any distress, please contact either myself or my supervisor and we will put you in touch with the University of South Australia's Psychology Clinic or Lifeline on 13 11 14 (24 hours, 7 days).

Upon completion of the research, a thesis will be compiled. For those who are interested in the outcome of the research, a copy of the completed thesis will be available at the University of South Australia Library, Magill Campus early 2005. Apart from this should you have any questions or concerns regarding the research, please feel free to contact either myself, Corree Gurein, or one of my supervisors, Ms Josie Luscri or Dr Phil Mohr. You may also contact the Executive Officer of the Divisional Human Research Ethic Committee, Ms Rhonda Porter, for

any ethics related queries on 8302 0341 by email: Rhonda.Porter@unisa.edu.au. This study does have the approval of the Divisional Human Research Ethics Committee at the University of South Australia.

Thankyou for your time, and invaluable contribution to this study,

Yours sincerely,

Corree Guerin.
Student Researcher
Ph: 0410 645 211
Email: Corree.Guerin@students.unisa.edu