PERFECTIONISM IN CHILDREN AND ADULTS:

MAINTAINING MECHANISMS AND TREATMENT IMPLICATIONS

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Thesis submitted in partial fulfilment for the degree of Doctor of Clinical Psychology

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ACRONYMS

AMPS	Adaptive/Maladaptive Perfectionism Scale
APS	Almost Perfect Scale
ASI	Anxiety Sensitivity Index
ATQ	Automatic Thoughts Questionnaire
BN	Bulimia Nervosa
CAMHS	Child and Adolescent Mental Health Service
CBT	Cognitive Behaviour Therapy
CM	Concern over Mistakes
CPE	Clinical Perfectionism Examination
CR	Cognitive Restructuring
DAS	Dysfunctional Attitudes Scale
GSH	Guided Self-help
GSM	General Stress Management
HCM	High Concern over Mistakes
IT	Immediate Treatment
LCM	Low Concern over Mistakes
MPS	Multidimensional Perfectionism Scale
N.A.	Non-Applicable

NATs	Negative Automatic Thoughts
NICE	National Institute of Clinical Excellence
NT	No Treatment
OOP	Other Orientated Perfectionism
PCI	Perfectionism Cognition Inventory
PHSCS	Piers-Harris Self-Concept Scale
PIS	Participant Information Sheet
PSH	Pure Self-help
RCT	Randomised Control Trial
RSES	Rosenberg Self-Esteem Scale
SEM	Structural Equations Modelling
SMFQ	Short Mood and Feelings Questionnaire
SOP	Socially Orientated Perfectionism
SPP	Socially Prescribed Perfectionism
SRS	Self-Rating Scale
SUDS	Subjective Units of Distress Scale
WEIRD	Westernised Educated People from Industrialised Rich Democracies
WL	Waitlist

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DECLARATION

The thesis has been carried out and submitted as part of the Clinical Psychology Doctorate provided jointly by Coventry University and The University of Warwick. The thesis has only been submitted for this doctoral programme and has not been submitted at any other institution. The thesis is the candidate's own work.

The thesis was carried out under the supervision of three supervisors at Coventry University; Jacky Knibbs, Dr Ian Hume, and Dr Laura Taylor.

The three thesis papers will be prepared for publication for the following journals:

1. **Literature Review**: Clinical Psychology Review
2. **Empirical Paper**: Journal of Child Psychology and Psychiatry
3. **Reflective Paper**: Reflective Practice

See appendices 1-3 for author's instructions on preparing for publication for the above journals.

SUMMARY OF THESIS

The thesis consists of three papers; literature review, empirical paper, and reflective paper. The literature review evaluates the effectiveness of psychological interventions for perfectionism in adults. The systemic review analysed 12 papers comprising of; randomised control trials, group intervention studies, and single case designs. Interventions were varied in delivery, such as face-to-face or web-based with the majority using a CBT intervention. A number of studies showed effectiveness for the treatment of perfectionism in adults, but some were narrow in use of population e.g. a high proportion of female participants. Clinical implications are discussed.

The empirical paper investigated the relationship between multidimensional perfectionism, self-criticism, self-esteem, and mood in primary school children. A non-clinical population (9-11 years of age) of 90 children were recruited with quantitative measures utilised. Mediation models were used to establish if any relationships existed. Results showed a significant relationship between self-esteem and mood, and perfectionism dimensions, such as sensitivity to mistakes and mood were significantly mediated by self-esteem and self-criticism. Results are discussed in comparison with previous research and clinical and education implications are discussed.

The reflective paper reflects upon the personal and professional doctoral thesis journey. Starting from generation of idea, moving through the emotional journey of design, recruitment and write-up, and focusing on aspects such as self-care.

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Chapter 1: Literature Review

A Systematic Review of Psychological Interventions for Perfectionism in Adults

Chapter Word Count: 7,986 (excluding title page, figures, tables, and reference list)

Prepared for Submission to: Clinical Psychology Review (see Appendix 1 for Author Guidelines)

1.0 ABSTRACT

A person experiencing maladaptive perfectionism will try to achieve as highly as possible and will have high levels of fear regarding mistakes and failure, which can be maintained by negative appraisals of situations and achievements (Shafran, Cooper, & Fairburn, 2002). This debilitating condition can present as a primary problem, but is also viewed as being transdiagnostic (Egan, Wade, & Shafran, 2011). Since 1994 a number of studies reporting the evaluation of psychological treatments for maladaptive perfectionism in adults have been published. This systematic review assesses the quality of this empirical research and discusses what types of treatments are effective for perfectionism in adults. Five key databases were searched for relevant peer-reviewed articles published in the English language. After exclusion criteria were applied, twelve articles were included in the review, which comprised of randomised control trials, group intervention studies, and single case design studies. The articles were assessed using a quality checklist. Results of the review suggest that psychological treatments for perfectionism in adults, especially CBT is effective in the short-medium term. Future research needs to address whether treatments are effective in the long-term and also whether other treatment models are effective in the treatment of perfectionism.

Keywords: maladaptive/clinical perfectionism, psychological intervention, adults, systematic review

1.1 INTRODUCTION

1.1.1 Definition and Different Types of Perfectionism

'Clinical perfectionism' is defined as:

> '*The over dependence of self-evaluation on the determined pursuit of personality demanding, self-imposed, standards in at least one salient domain, despite adverse consequences*.' (Shafran, Cooper, & Fairburn, 2002, p. 778).

The authors state that central to clinical perfectionism is how much a person fears failure and because of this they constantly try to achieve as much as possible. They suggest this is maintained by a negative appraisal of situations and achievements. Flett & Hewitt (2002) describe perfectionism as a personality trait where a person sets extremely high standards for themselves and are heavily critical of any completed task.

As well as numerous definitions of perfectionism, researchers have proposed different types of perfectionism. Hamachek (1978) described 'normal perfectionists' and 'neurotic perfectionists'. Normal perfectionists strive for success, but do not always have to be perfect in everything they do. Neurotic perfectionists are never happy with what they achieve and are left feeling dissatisfied, whatever the outcome. Sorotzkin (1985) argued that perfectionism can be present in narcissistic individuals trying to exhibit a grandiose sense of self, so as to avoid shame. Sorotzkin suggests that neurotic perfectionists try to avoid feelings of guilt brought on by not being able to keep the superego happy. The author concluded that this can have implications for treatment and cause ruptures, particularly for narcissistic

perfectionists, as perfectionism is required for self-worth and a challenge to this may be problematic. Although early research viewed perfectionism as a unidimensional construct (Burns, 1980), recent research has reported perfectionism to be a multidimensional construct (e.g. Hewitt & Flett, 1991).

Perfectionism has also been termed 'adaptive' and 'maladaptive' (Rice, Ashby, & Slaney, 1998). Adaptive perfectionism is linked with setting of high standards, but failure is not feared and positive affect is linked with this type of perfectionism (Frost, Heinberg, Holt, Mattia, & Neubauer, 1993). However, maladaptive perfectionists are described as having excessive concern over mistakes and fearing failure, with links to low self-esteem and depression (Preusser, Rice, & Ashby, 1994). Shafran et al. (2002) found the differing terms ambiguous. They argued that a healthy pursuit of excellence (i.e. adaptive perfectionism) is not clinically relevant. They added that clinical perfectionism, however, has such a negative impact upon a person's well-being that this type of perfectionism warranted research.

1.1.2 Aetiology

The development of perfectionism has been viewed as being linked with demanding parents (Frost, Lahart, & Rosenblate, 1991). Rodgers (1959) term 'conditions of worth' was seen by Barrow and Moore (1983) as an important element in the development of perfectionism. When a perfectionistic person attempts to achieve set goals, they believe that regard from others is crucial in this process. This self-worth can be developed by direct and indirect criticism where certain expectations are seen to be needed to be met and also modelling of perfectionistic behaviour from

parents. The authors further added that this can be maintained by maladaptive thinking and becomes more ingrained during adolescence due to developmental stage and strenuous life events. Research has demonstrated these links (Rice, Ashby, & Preusser, 1996). This study with 52 undergraduate students, reported that neurotic perfectionists viewed their parenting as more critical than normal perfectionists. The authors concluded that critical parenting can influence the development of perfectionism.

1.1.3 Characteristics in Perfectionism and Maintaining Mechanisms

Shafran et al. (2002) reviewed the features of clinical perfectionism from a cognitive behavioural approach. They examined the core processes involved and hypothesised there are a number of maintaining mechanisms, including i) *Core psychopathology*, termed as *'the morbid fear of failure and the relentless pursuit of success*' (p. 779). When someone perceives something as failure, this can lead to self-criticism and low self-image/esteem is maintained, which has been demonstrated (e.g. Flett, Hewitt, Blankstein, & Mosher, 1991). ii) *Setting of standards that embody dichotomous thinking*; a person has a set of rules to adhere to and when this does not occur a person may feel guilt. iii) *The need for self-control*; people will do everything they can to meet their goals and will not carry out activities, which impede this. vi) *Evaluation of performance*; an analysis of preparation and performance towards goals and any negativity is evidence that they are working tirelessly towards achieving their goals. v) *Failure to meet standards*; people evaluate their outcomes in a biased manner and focus on negative aspects of performance. These individuals will heavily self-monitor and end up avoiding tasks due to fear of failure. vi) *Successfully meeting standards*;

even if this occurs, reassessment can occur and targets can be set higher, thus strengthening levels of self-criticism. vii) *Other reasons for the persistence of perfectionism*; the continuous pursuit of excellence may help to provide control over aspects of a person's life. The authors further add that comorbidity is common, with links to eating disorders and obsessive compulsive disorder prevalent.

Qualitative analysis to identify key themes in perfectionistic behaviour was carried out using semi-structured interviews by Riley and Shaffran (2005). Fifteen people with clinical perfectionism were recruited to a study that used grounded theory for analysis. Six maintaining mechanisms were identified; self critical reaction to failure, positive emotional reaction to success, cognitive biases, rules and rigidity, avoidance, and escape. Other maintaining mechanisms also emerged; including safety behaviours, procrastination, fear driven motivation for achieving, and values driven motivation for achieving.

1.1.4 Measures of Perfectionism

There are a number of measures of perfectionism available for use with adults, including the Multidimensional Perfectionism Scale (MPS) (Hewitt & Flett, 1991). The scale consists of 45 items, scored over a seven point Likert scale (agree or disagree) and has three subscales which measure self-orientated perfectionism (SOP), other orientated perfectionism (OOP) and socially prescribed perfectionism (SPP). Hewitt and Flett's (1991) study reported that the three subscales have good reliability and validity.

Other measures include the Frost Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990), which has six subscales e.g. concern over mistakes. Although this has been used extensively in research, it has been argued that there is factorial instability due to over extraction of components (Stoeber, 1998). The Almost Perfect Scale Revisited (Slaney, Rice, Mobley, Trippi, & Ashby, 2001) is a 23 item scale, which measures three subscales; discrepancy, high standards, and order. Good reliability was reported, though the goodness-to-fit indices were deemed not acceptable (Vandiver & Worrell, 2002).

1.1.5 Consequences of Perfectionism

Perfectionism has shown to impact heavily upon a person's day-to-day functioning (Burns, 1980). A study carried out with students; found that perfectionism was linked to low self-esteem, anxiety, and low mood (Brown et al., 1999). Research has shown perfectionism to be associated with eating disorders and depression **(**Pacht, 1984**),** obsessive compulsive disorder (Frost & Steketee, 1997), anxiety (Alden, Bieling, & Wallace, 1994), and depression (Argus & Thompson, 2008). Such a debilitating condition is thought to have a big impact upon a person's life, which Pacht (1984) succinctly summarises:

> *'In true life not only is perfection impossible, but the cost to those who seek it is inordinately high.'* (p. 390).

1.1.6 Treatment Implications

Some researchers have suggested that perfectionism can be difficult to treat and can interfere with treatment. The National Institute of Mental Health Treatment of Depression Collaborative Research study found that perfectionism predicted poor treatment outcome at the end of treatment and at 18 month follow up (Blatt, Zurroff, Bondi, Sainslow, & Pilonis, 1998). According to Blatt and Zuroff (2002) rigid beliefs held by perfectionists are difficult to change and therefore interfere with treatment and can lead to unsuccessful interventions.

Perfectionism has also been described as a *transdiagnostic process* (Egan, Wade, & Shafran, 2011). In their clinical review the authors reported evidence has demonstrated that perfectionism causes and maintains a number of psychological difficulties that unless treated can lead to adverse outcome in therapeutic work, which clinicians should address.

Aware of possible treatment implications, Shafran et al. (2002) outlined some important treatment features consisting of four components. i) After understanding that perfectionism is causing adverse consequences, compiling a formulation, which will help develop a rich understanding of the origin of the problem and more specifically, the maintaining mechanisms ii) setting goals, which will see a client evaluate themselves iii) Use of behavioural experiments iv) Use of a CBT approach to evaluate standards and self-criticisms.

1.1.7 Treatment of Perfectionism in Adults

As perfectionism is viewed as a distressing personality feature to endure, Ferguson and Rodway (1994) proposed an empirical evaluation of a CBT treatment for perfectionism, which appears to be the first known evaluation of perfectionism treatment (Shafran & Mansell, 2001). Ferguson and Rodway argued that although treatments were being used clinically, little evidence for the effectiveness of these treatments was available. Since this publication, there has been more published empirical research regarding psychological treatments for perfectionism in adults and this review will be analysing the research and providing an overview of this.

1.2 AIMS OF THE REVIEW

The aim of this paper is to carry out a systematic review of psychological interventions for perfectionism in adults. The last review of research and treatment of perfectionism was carried out in 2001 (Shafran & Mansell, 2001). A number of randomised control trials (RCTs) and case studies have been published since. The specific aims of the systematic review are as follows:

1. To provide a critical appraisal of the empirical evidence base for the psychological treatment of perfectionism in adults.
2. To identify current gaps in research and to make recommendations for the focus of future research.
3. To provide a useful clinical tool for clinicians working with adults with maladaptive perfectionism.

1.3 METHOD

1.3.1 Search Terms

To carry out a search to identify the relevant papers for the review, a list of search terms were generated to ensure the appropriate research articles were included for analysis. Different variations of terms were used and some key words were truncated (see Table 1 below).

Table 1: Table displaying search terms used to identify papers reporting psychological interventions treating perfectionism in adults:

Search Term	Variation of Term
- Clinical Perfectionism	Perfectionism, maladaptive perfectionism
- Psychological intervention	Treatment*, therap*
- Adult	Adult*

Note. Search terms were incorporated using the Boolean search operator 'and' and 'or' being used with variant terms. Some variant terms were also truncated to include all possible terms and are denoted by *. Although perfect was not truncated, the search strategy was thorough enough to have produced variant terms e.g. perfectionistic in the title of articles.

1.3.2 Database Search

A number of key databases were used to ensure all the relevant literature was captured by the search. The flowing databases were used for the search; Amed, Cinahl, Medline, Psychinfo, and Scopus.

1.3.3 Inclusion and Exclusion Criteria

Inclusion Criteria

To ensure reviewed articles were of sufficient quality, only peer-reviewed papers were included. Intervention studies for participants with perfectionism were included and participants with comorbidity were included as long as the intervention was clearly treating perfectionism. Participants were 18 years of age upwards. Research studies from 1994 onwards were included as Shafran and Mansell (2001) identified no papers before this date detailing an evaluation of treatment of perfectionism in adults and because their review did not systematically review studies from 1994 onwards.

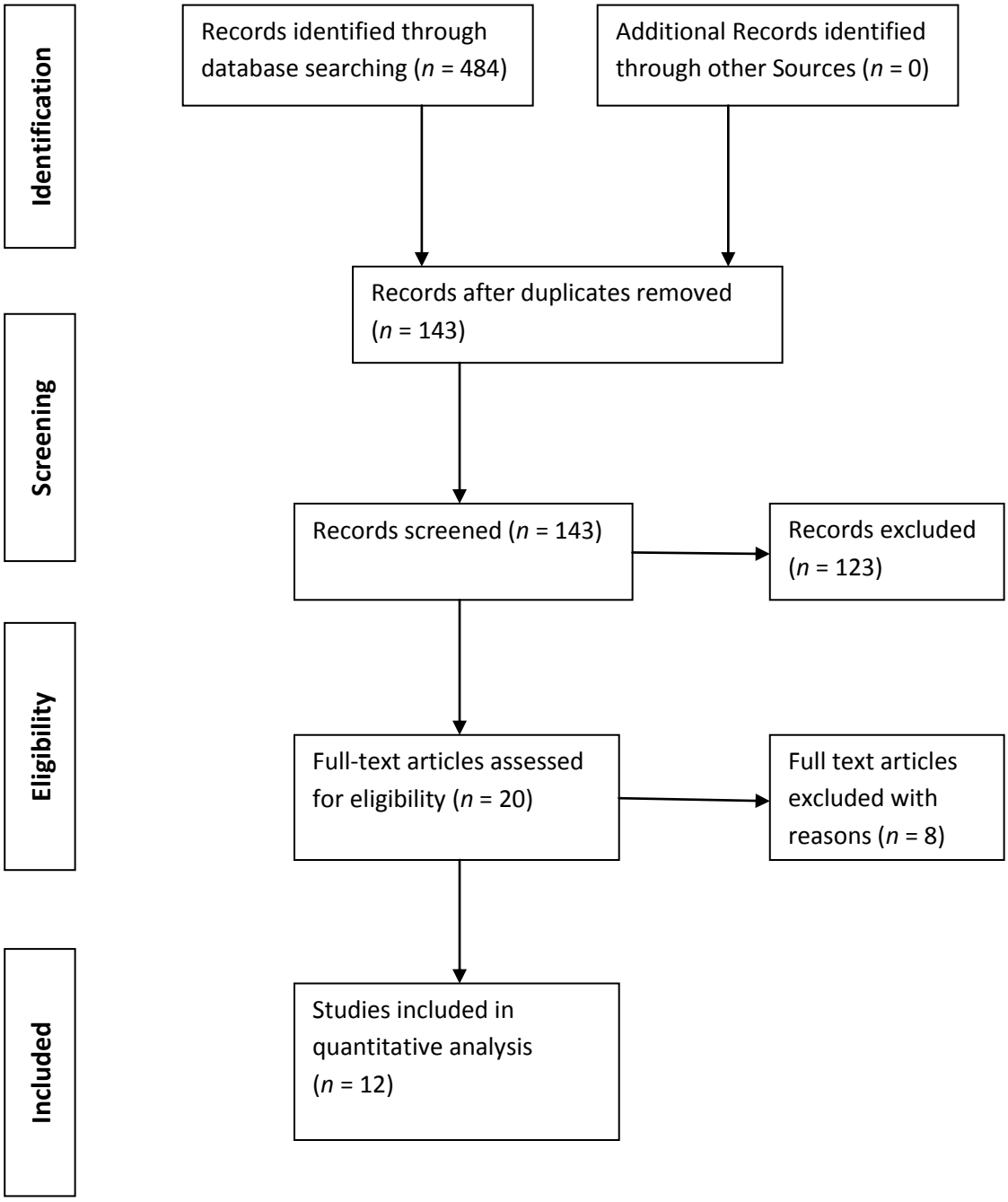
Exclusion Criteria

To ensure the clarity of the review a number of exclusion criteria were applied to the search results. Articles were excluded if they were not reported in English and if they were not empirical research e.g. book chapters or commentaries were excluded. If comorbidity occurred and the treatment focus was not on perfectionism, then these papers were excluded. If an empirical article reported treatment of perfectionism, but the primary presenting problem was not perfectionism e.g. eating disorder, this was excluded. Papers from age groups under the age of 18 years and non peer-reviewed journals were also excluded.

1.3.4 Systematic Review Search Results

Search terms were entered into the databases and initial search results produced 484 research papers and after duplicated articles were excluded, 143 articles remained. Reference lists of articles were searched to ascertain if any additional records could be identified through other sources, but none were discovered. The 143 article abstracts were then read to ascertain whether or not they met the inclusion criteria, 123 papers did not meet the criteria and were excluded, with 20 articles then remaining. Full articles were then scanned and exclusion criteria applied, with 12 studies included in the systematic review. This included; five RCTs, three group intervention studies, and four single case design studies. The PRISMA statement (Liberati et al., 2009) which details the reporting of systematic reviews was followed for displaying the search process (see Figure 1).

Figure 1: Prisma Flow Diagram Identifying the Search Process



1.3.5 Reviewing Papers

Upon completion of the search process, the relevant information was prepared for quality analysis. A summary of the reviewed papers is provided in Table 2.

1.3.6 Quality Checklist

To evaluate the identified papers a quality checklist was compiled to aid the analysis of the articles and to provide a quality checklist percentage mark for each paper.

The checklist incorporated a number of statements taken from a variety of quality checklists. Although there are a number of quality checklists available for use in systematic reviews, due to the range of methodologies used in the reviewed studies, it was felt a novel checklist would be beneficial. Items were used from Downs and Black's methodological quality checklist (Downs & Black, 1998), the Evidence Based Library and Information Practice (EBLIP) Critical Appraisal Checklist (Glynne, 2006.), the Cochrane Tool for Assessing Bias (Cochrane.org, n.d.) and NICE Quality Appraisal Checklist (NICE, 2012). One further item was also added by the research team after consultation *('was the analysis carried out in such a way it answered the research question.'*).

The Agency for Healthcare Research and Quality (AHRQ, 2012) reported on use of quality checklists for systematic reviews. They reported that two reviews carried out (Deeks et al., 2003; West et al., 2002) recommended only a small number of checklists be used for systematic reviews, with both reviews recommending the Downs and Black tool. Downs and Black (1998)

conducted a feasibility study on the checklist and reported that it had high internal consistency, good test-retest and inter-rater reliability, although the external validity subscale showed poor reliability. With good reliability and validity reported, the authors concluded the checklist was appropriate for use with randomised and non-randomised studies.

As the systematic review included papers with a range of methodologies e.g. RCTs and case studies, relevant items were included to assess the quality of the studies and an appropriate scoring method compiled that would be congruent with all items.

After the process was complete, the quality checklist for the review included 33 items covering all research areas; including confounding variables and reporting of results (see appendix 4). All 12 papers were analysed across the quality checklist, which used a five point scale; yes (two points), partially (one point), and unclear, no or N.A. (non-applicable) all resulted in zero points. Papers were scored according to the number of assessed criteria and if a study had reduced criteria due to non-applicable items, the score was reduced accordingly (see appendix 5 for scoring breakdown). A higher percentage indicated greater quality, with scores ranging from 52% to 87% with a mean average of 73%.

1.4 RESULTS

Table 2: Table Displaying an Overview of Studies and Quality Analysis Results

Title of Paper	Author and Year	Type of Study	Participant/s	Method/Procedure	Results	Quality Analysis (%)
Web-based Cognitive-Behavioural Therapy for Perfectionism: A Randomized Controlled Trial	Arpin-Cribbie, Irvine & Ritvo (2012)	RCT	- Canadian post secondary students (*n* = 77, 70% - female) - Aged between 18 and 48, mean age = 21.14	- Participants were randomly allocated to one of three web-based treatment conditions; no treatment (NT), general stress management (GSM) or CBT.	- CBT was shown to effectively reduce perfectionism and there was a significant improvement compared with NT and GSM. - CBT participants; changes in perfectionism were significantly correlated with changes in depression and anxiety.	**82%**
Perfectionism and Psychological Distress: A Modelling Approach to Understanding their Therapeutic Relationship	Arpin-Cribble, Irvine, Ritvo, Cribbie, Flett, & Hewitt (2008)	RCT	- Canadian psychology undergraduates (*n* = 83, approx. 30% male) - Aged between 18 and 48, mean age = 21.14	- Participants allocated across three conditions; No Treatment (NT), General Stress Management Intervention (GSMI), and GSMI/Cognitive Behavioural Intervention (GSMI/CBI). Web-based intervention lasted for 10 weeks.	- Structural modelling showed GSMI/CBI participants improved significantly and showed greater perfectionistic behaviours and that the more therapeutic involvement the more improvement was shown.	**79%**
Guided Self-help versus Pure Self-help for Perfectionism: A Randomised Controlled Trial	Pleva & Wade (2006)	RCT	- 49 (19 male, 30 female), Australian participants recruited via newspaper and local radio - Mean age = 43.93	- Guided self-help (GSH) (*n* = 24) versus pure self-help (PSH) (*n* = 25)	- GSH and PSH were shown to be effective in reducing perfectionism, but improvement in symptomology was greater for GSH. - Improvements maintained at three month follow-up.	**74%**

Title of Paper	Author and Year	Type of Study	Participant/s	Method/Procedure	Results	Quality Analysis (%)
Evaluating a Web-based Cognitive Behavioural Therapy for Maladaptive Perfectionism in University Students	Radhu, Daskalakis, Arpin-Cribbie, Irvine, & Ritvo (2012)	RCT	- American undergraduate university students classed as maladaptive perfectionists (via a perfectionism screening measure) (*n* = 47, 34 females) - Mean age = 22.63	- Students were randomly allocated to either a CBT treatment condition (12 weeks duration) or a wait-list condition.	- CBT group participants when compared with wait-list controls showed a significant reduction in sensitivity to anxiety and negative automatic thoughts (NATs). - Changes in perfectionism for the CBT group were significantly correlated with positive difference in factors such as anxiety and NATs.	**85%**
A Randomised Controlled Trial of Cognitive-Behavioural Therapy for Clinical Perfectionism: A Preliminary Study	Riley, Lee, Cooper, Fairburn, & Shafran (2007)	RCT	- English study (*n* = 20; 18 females and two males) recruited via clinicians or advertisement (type not stated) - Age of participants not reported	- Participants allocated to immediate treatment (IT) (*n* = 10) or a waitlist (NL) (*n* = 10). Intervention entailed 10 sessions of CBT over a 10 week period.	- 15/18 participants (two did not complete follow-up data) showed a clinically significant improvement with a large effect size (1.8). Improvements were maintained at 8 and 16 week follow-up.	**61%**
Can Cognitive Restructuring Reduce the Disruption Associated with Perfectionistic Concerns?	DiBartolo, Frost, Dixon, & Almodovar (2001)	Group Comparison	- 60 American female undergraduate students, some with low or high concern over making mistakes - Mean age = 18.98	- Two group x two condition method used. Looking at perfectionistic patterns regarding a speech task. Participants randomly allocated to either a cognitive restructuring (CR) or distraction group.	- Participants receiving CR showed significantly lower 'horriblessness rating' regarding their prediction over the speech and a significant improvement in their reported ability to cope with such a task, compared with prior to the task.	**56%**

Title of Paper	Author and Year	Type of Study	Participant/s	Method/Procedure	Results	Quality Analysis (%)
Overcoming Negative Aspects of Perfectionism through Group Treatment	Kutlesa & Arthur (2008)	Group Treatment	- Canadian undergraduate and graduate students (*n* = 90; 75 women and 15 men). - Recruited through advertisement - Age not reported	- Eight week group treatment intervention using a CBT and interpersonal approach. Participants allocated to treatment group (*n* = 30) or comparison groups; career group (*n* = 30) and psychology group (*n* = 30).	- Participants who received the therapeutic intervention significantly reduced their levels of perfectionism, as well as anxiety and depression compared to comparison groups.	**71%**
Psycho-Education and Group Cognitive-Behavioural Therapy for Clinical Perfectionism: A Case Series Evaluation	Steele, Waite, Egan, Finnigan, & Handley (2012)	Case Series	- Australian adults with reported high perfectionism scores (*n* = 21), recruited via advertisement at a local psychology clinic - 15 females and 6 males - Aged between 18-67, *m* = 35.77	- Clients participated in a CBT intervention, eight weeks in duration - Assessed on five occasions; baseline, waitlist, weeks after receiving materials, post treatment, and follow-up.	- Self-help material did not yield any significant outcomes - CBT intervention showed significant reductions on measures e.g. perfectionism, self-criticism and produced large effect sizes. Results were maintained at the three-month follow-up period.	**82%**
Cognitive Behavioural Treatment of Perfectionism: A Single Case Experimental Design Series	Egan & Hine (2008)	Single Case	- Four Australian adults (one male) recruited via a university psychology clinic - Aged 39-62, mean age = 55	- AB design used; three week pre and post baseline phase used. - Intervention included eight treatment sessions and a follow-up two weeks later.	- Visual inspection of the data revealed reduction in perfectionism for participants, with two clients experiencing a clinically significant reduction in perfectionism.	**87%**

Title of Paper	Author and Year	Type of Study	Participant/s	Method/Procedure	Results	Quality Analysis (%)
Cognitive Behavioural Treatment of Perfectionism: Initial Evaluation Studies	Ferguson & Rodway (1994)	Single Case	- Adult referred by counselling agencies (*n* = 9) - Eight females and one male - Aged between 18 and 45, mean age = 31.4	- ABA design used, replicated for each of the nine clients. CBT intervention used.	- Participants showed a reduction in their levels of perfectionistic behaviours.	**69%**
A Preliminary Evaluation of Cognitive-Behaviour Therapy for Clinical Perfectionism: A Case Series	Glover, Brown, Fairburn, & Shafran (2007)	Single Case	- Patients recruited from an NHS adult psychology department (out-patients) (*n* = 9; 7 females, 2 males, ranging in age from 23 years to 45).	- CBT intervention delivered, using a multiple baseline design.	- Six out of nine patients showed a clinically significant reduction on two measures of perfectionism. - Three out of nine participants showed clinically significant reduction in clinical perfectionism. - All participants showed a statistically significant improvement on all three measures. Results maintained at follow-up.	**80%**
The Perfect Patient: Cognitive-behavioural Therapy for Perfectionism	Hirsch & Hayward (1998)	Case Study	- 40 year old male	- CBT intervention used.	- Reported reduced perfectionism. Post perfectionism scores not reported. Post depression and anxiety scores reduced significantly from pre-scores.	**52%**

1.4.1 Analysis of Reviewed Studies

1.4.1.1 *Introduction*

An overview of each reviewed study is provided in Table 2. This gives information about type of study, participants, methodology, main findings, and the quality assessment mark.

The systematic review analysed a wide range of studies with RCTs, group intervention studies, and single-case design studies. The review gives a broad overview of interventions for perfectionism, whether they are effective, and the quality of these studies. Interventions mainly used a CBT approach, with a range of formats including self-help (guided and pure), group, and individual CBT. Methods of delivery ranged from face-to-face work, to web-based interventions; using a variety of participants from university students, to clients from psychology waiting lists. A number of measures were used to provide outcome data for the studies including the Frost Multidimensional Perfectionism Scale (Frost et al., 1990).

1.4.1.2 Key Findings of Reviewed Studies

1.4.1.2.1 Randomised Control Trials

Five of the studies reviewed were RCTs, all using a CBT intervention. Treatment delivery varied from web-based to face-to-face, through to guided self-help.

Web-based Cognitive-Behavioural Therapy for Perfectionism: RCT

Arpin-Cribbie et al. (2012) reported the results of an RCT assessing the effectiveness of a web-based intervention in reducing perfectionism in students. Participants age ranged from 18-48 years, with a significant amount of females participating (*n* = 70%). The participants involved were assigned to one of three different conditions using an appropriate randomisation method. Treatment options included; no treatment (NT), general stress management (GSM) and CBT, with duration of a 10 week treatment period. The study reported careful consideration of the use of outcome measures ensuring psychometrically robust measures were chosen and used more than one measure of perfectionism to ensure different components of perfectionism were included in analysis. All of the measures were reported to exceed .70 for internal consistency. Perfectionism, depressive mood, anxiety, and cognitive vulnerability were measured. Validity checks were also carried out by the researchers and treatment adherence measured.

Results showed participants exhibited higher levels on measures compared with norms. No significant differences were found regarding credibility and

expectancy between the two treatment options. For the CBT intervention, participants showed significant differences in pre and post test scores for all measures except for anxiety; GSM participants showed differences on four measures e.g. perfectionism cognitions inventory (PCI), with the NT group showing no significant changes in pre and post scores. However, only a small amount of clients showed clinically significant change e.g. 31% of clients showed this improvement on the PCI. With the problematic nature of measuring change, clinical significance (a client moving from clinical to sub clinical levels) is seen as being important (Jabonsen & Traux, 1991).

Limitations were also present, which the authors acknowledged. The length of time spent using the materials was not known and the CBT treatment was lengthier compared to the GSM, so all variables do not appear to have been controlled and may have impacted upon results. Also, the authors did not discuss why participants had dropped out and the reasons for this could be important as to why there were treatment implications. However, results show CBT treatment produced significantly better reductions in perfectionism compared to GSM and NT, so this is an encouraging option for the treatment of perfectionism.

Perfectionism and Psychological Distress: A Modelling Approach to Understanding their Therapeutic Relationship

Arpin-Cribbie et al. (2008) carried out a study assessing the effectiveness of a CBT web-based intervention for use with perfectionism. The study used three conditions; NT, GSM, and GSM plus CBT over a 10 week duration. The authors did report that participants not comfortable with the use of computers were excluded, so this highlights one difficulty with only offering

web-based interventions. The participants were distributed across three groups, but there is no report of randomisation, which may have impacted upon the results. As well as perfectionism being measured, other variables including anxiety and depression were recorded. Structural equation modelling (SEM) was used to enable the analysis of numerous hypotheses simultaneously. Pre and post tests scores were analysed using paired samples *t*-test, which showed GSM-CBT participants showing significant reductions on all variables, apart from anxiety. GSM participants showed change on three scales e.g. PCI, with no significant changes recorded for NT participants. SEM indicated that the more therapeutic input given, the more likelihood that levels of perfectionism will decrease, again highlighting the importance of therapeutic influence. However, anxiety scores were still above normal at post-test and the authors stress the need for interventions to include anxiety related techniques as anxiety and more specifically fear of failure are important processes involved in the maintenance of perfectionism (Flett et al., 2002).

Guided Self-help versus Pure Self-help for Perfectionism: RCT

Pleva and Wade (2006) carried out an RCT, assessing the effectiveness of a CBT approach for perfectionism. The treatment modality used guided self-help (GSH) versus pure self-help (PSH), with all participants receiving the same self-help materials. It was hypothesised that GSH would be more effective in symptom reduction. There was no wait-list control in the study; however use of WL participants can be seen as problematic (Devilly & McFarlane, 2009). Again as in the previous study, there were a greater number of female participants (males, *n* = 19; females *n* = 30). However,

sample size was smaller than needed as a power calculation indicated a sample of 56 was required. The study results found that PSH participants received telephone calls at weeks three and six, which could be argued was a form of guidance as GSH can be telephone based (IAPT, 2010). Although some basic participant characteristics were reported, further information was not reported e.g. occupation status, and previous mental health history.

The study utilised intention to treat analysis (ITT), which includes data for all participants, including non-compliance (Gupta, 2011). Although seen as being an important element of analysis, ITT reportedly has flaws as researchers cannot presume reasons for non-adherence would be the same in a clinical trial as it would be in a real clinical setting (Moncur & Larmer, 2009). This study was able to provide data on time spent reading self-help books as well as carrying out exercises/tasks, with GSH participants spending significantly more time compared to PSH participants. Results showed reductions for perfectionism for both groups and reductions in depressive and obsessive-compulsive symptoms; with improvements being maintained at three-month follow-up. However, authors reported that 20% of PSH participants experienced a clinically significant increase in depressive symptoms during treatment, which was maintained at three month follow-up. The authors suggest that the face-to-face contact with therapy may have been the reason for higher engagement in the intervention and why GSH was more effective overall; with more participants achieving clinically significant changes e.g. for perfectionism, more than half of the participants for GSH achieved this. Benefits of the study include discussion of adverse treatment reactions and the reason why this may have occurred, as well as

treatment implications for clinicians to consider. For example, it was hypothesised that increases in depressive symptomology for 20% of the PSH group may have been due to self-learning, which led to the increase and without clinician assistance were unable to challenge/change these symptoms.

However, the researchers were unable to completely control blinding in participant treatment allocation, which they acknowledge may have contributed towards initial improvements for GSH participants and drop out in the PSH group. They also reported some PSH participants fell behind with their material during telephone conversations, which may have contributed to changes in motivation. However, the authors did conclude that GSH was seen as more effective, but reports of PSH being effective for reduction of perfectionism should be treated with caution.

Evaluating a Web-based Cognitive-Behavioural Therapy for Maladaptive Perfectionism in University Students

Radhu et al. (2012) screened 992 undergraduate students for maladaptive perfectionism. Forty-seven students took part in the study and were randomly assigned to one of two conditions; CBT intervention and waitlist control group, completing pre and post measures. The study assessed the effectiveness of web-based CBT in reducing levels of maladaptive perfectionism and other variables such as anxiety and depression. Psychometrically robust measures such as Multidimensional Perfectionism Scale (MPT), Almost Perfect Scale (APS), Automatic Thoughts Questionnaire (ATQ) and Anxiety Sensitivity Index (ASI) were used for outcome data. Demographic data was clearly displayed via table format and

apart from sex (>70% female in both conditions), there was a wide variation in ethnicity and educational status, but the majority of participants were single. The demographic data was the most comprehensive of the reviewed studies and provided useful information regarding risk factors for maladaptive perfectionism. The results showed significant improvements for participants on aspects of the ATQ, the ASI, and four of the perfectionism measures e.g. MPT. Waitlist participants showed a significant decrease in scores for the parental expectations subscale from the MPS, but there were significant differences between waitlist and CBT groups, for example, ASI scores decreased significantly more in CBT group.

The study provides good evidence for the treatment of maladaptive perfectionism and further builds upon evidence for web-based approaches. With a quality analysis mark of 85% in the review (see table 2), it is a robust study. However, there remain some limitations. The study originally had 248 people who met inclusion criteria, but only 56 consented (nine participants decided not to take part), but no explanation was given for this, resulting in a small sample size and poor attrition rate. The reasons for this are not discussed and this could be crucial information for the future use of this intervention. As in previous studies the sample is heavily female populated and included a very young sample (aged between 21-23). The study did not take into account the amount of time spent using the intervention material and this is an important treatment variable to consider. The study did not use a comparison group and so the authors were not able to control all variables. Although the authors did acknowledge some of these limitations,

they did not elaborate on other possible avenues of future research, which would have been beneficial.

RCT of CBT for Clinical Perfectionism: A Preliminary Study

Riley et al. (2007) assessed the effectiveness of CBT for clinical perfectionism, with 20 participants randomly allocated to immediate treatment (IT) or waitlist (WL), with 10 sessions of CBT. Participants were again predominantly female (18 females and 2 males). WL participants received the intervention after eight weeks (treatment duration). Valid and reliable measures including the MPS were used for outcome data. No significant differences were found for the two groups regarding MPS scores. However, for other measures such as the clinical perfectionism examination (CPE), which assesses severity of clinical perfectionism, the changes were significantly greater in the IT group compared with the WL group. Large effect sizes, d = 2.05 were reported for the IT group for CPE, but small for the WL group; d = 0.27 (Cohen, 1998). Seventy-five percent of participants showed a clinically significant change maintained at follow-up (8 and 16 weeks), with a large effect size reported (d = 1.8).

Although the study provided evidence that CBT was an effective treatment option for adults experiencing clinical perfectionism, there were study flaws. The majority of participants were female and the sample size was small. Also, a comparison group was not used, which may impact upon the internal validity of the study.

1.4.1.2.2 Group Intervention Studies

A number of group intervention studies were also evaluated, which the review presents. The studies evaluated the effectiveness of psychological intervention for perfectionism. They all used a CBT approach and used Canadian, American, and Australian populations with face-to-face delivery. These studies are discussed below.

Can Cognitive Restructuring Reduce Disruption Associated with Perfectionistic Concerns?

DiBartolo et al. (2001) were interested in whether cognitive restructuring was an effective intervention for perfectionism. An initial pool of 138 female psychology students completed a subscale of the MPS, namely concern over mistakes (CM). Participants with low CM (LCM) and high CM (HCM) scores were asked to take part in the study using a 2 x 2 group design. Participants were asked to complete a public speaking task. Prior to the task participants answered questions regarding task performance, including 'how well do you expect to perform on this task?' Lower expectancy was reported by HCM participants compared to LCM. Levels of anxiety, and positive and negative affect were also assessed, with measures reported as having good psychometric properties. Subjective units of distress scale (SUDS) levels were significantly higher in the HCM group.

Participants received either a cognitive restructuring intervention or distraction task prior to giving their speech. SUDS rating were taken on regular occasions including during the speech task. Students were given course credits or entered into a draw for $50, but it was not stated which

occurred or whether a choice was given. Nor was it clear of how participants were randomised into one of the two groups.

The results showed a significant condition effect; with students receiving cognitive restructuring, reporting themselves as significantly less anxious than the distraction group students.

Although the research study showed some possible benefits for people with perfectionism through the use of cognitive restructuring, there were a number of flaws, which resulted in the study receiving the second lowest quality analysis mark (56%). Firstly, the choice of sample could be viewed as being biased and is not explained. Participants were all female and it is not well explained why only a women's college was approached. Secondly, the college students were from a private institution and this may be a variable in the amount of perfectionism displayed and task performance. Thirdly, the offer of course credits or a cash prize may have impacted upon not only participation, but how students self-reported. These are confounding variables which do not appear to be accounted for and may have impacted upon the results. Also as previously stated, the randomisation methods were not explained and clarity of this is important regarding the overall quality of the research. Finally, the length of the intervention was eight minutes, given that some treatment options last for up to 10 weeks (e.g. an hour of therapy per week), this is an extremely short example of a possible treatment option. The only facet of perfectionism assessed was concern over mistakes and participants were only exposed to one possible area of difficulty (public speaking); the study focus was therefore narrow and lacked depth.

Psycho-education and Group Cognitive-behavioural Therapy for Clinical Perfectionism: A Case-Series Evaluation

This study (Steele et al., 2012), investigated the effectiveness of psychoeducation and group CBT. Participants (*n* = 21) were assessed on a number of different data points, including; i) baseline ii) after a four week WL period and prior to psychoeducation iii) after psychoeducation and prior to CBT intervention iv) at the end of the CBT intervention v) three month follow-up, using a variety of measures including the CPQ, which they reported as having good validity and reliability. Although the study had 28 eligible participants, seven withdrew due to various reasons, including; feeling suicidal, though some did not give a reason. Of the 21 participants; 13 were taking psychotropic medication, with eight receiving psychotherapy and one receiving electroconvulsive therapy as well as psychotherapy, and five receiving psychotherapy alone. This was reported to be occurring during the WL period, but no detail is given as to whether other treatments extended over this period.

The results showed main effects from baseline to post-treatment for perfectionism and other measures e.g. self-criticism with a large effect size (*d* = 1.46). The effect size changes for this period were also reported as being large (>.92). The results at follow-up were reported to have been maintained with large effect sizes once again reported. However, only 21% of participants showed a clinically significant improvement.

Although this was a well conducted study in a number of respects and therefore received a high percentage mark for study quality (82%), the confounding variables were not adequately controlled for. Firstly, the

majority of participants were receiving some form of intervention; either medication, psychotherapy, or both. The benefits that resulted may have been due to these interventions, rather than the group intervention. Secondly, this conclusion is strengthened by the lack of a comparison group. Although some useful information has been gained regarding the use of group CBT for perfectionism, the findings are ambiguous and future studies need to be more rigorously controlled.

1.4.1.2.3 Single-Case Studies

There has also been a number of single-case experimental design studies carried out evaluating the effectiveness of perfectionism in adults. The review analysed four papers, with number of participants ranging from one to nine, using designs such as AB or ABA.

Cognitive Behavioural Treatment of Perfectionism: A Single-Case Experimental Case Design

Egan & Hine (2008) carried out an American based study, which investigated the effectiveness of individual CBT for four clients taken from a psychology WL, using an AB single-case experimental design. With a three-week baseline and post period, clients of a mean age of 55 were seen weekly over eight sessions. The study used an older age group than many other studies in the review and did not use students, which many others did. Perfectionism and anxiety were measured, using the MPS to measure perfectionism.

The results showed there were reductions in the levels of perfectionism for three out of four clients who all showed clinically significant reductions,

although one client did not maintain this at follow-up. 'Concern over mistakes' moved to the recovered stage for two participants with the use of the reliable change index. This study received the highest quality mark in the review (87%) and provided useful information for perfectionism treatment approaches. The authors reported that as well as being a stand-alone treatment, the treatment of perfectionism for axis 1 disorders may be beneficial as perfectionism could be an underlying factor in many disorders, supported as part of a transdiagnostic process (Bieling, Summerfeldt, Israeli, & Antony, 2003).

Cognitive Behavioural Treatment of Perfectionism: Initial Evaluation Studies

The earliest study in the review (Ferguson, & Rodway, 1994) used a single-case ABA design. The authors reported on the use of a CBT treatment for perfectionism with nine clients referred by counselling services.

Visual analysis was carried out on the data (baseline, intervention, and post-data collected), which showed reductions for the majority of clients on all measures; indicating CBT is a beneficial intervention for clients with perfectionism. The authors also reported themes that emerged from the data, including high levels of self-criticism and procrastination being present in individuals with perfectionism. Although receiving a quality mark of 69% for the study, this was lower than a number of the other studies reviewed. A clearer description of the intervention would have been useful to try to ascertain the specific parts of perfectionism targeted and how this was treated. A further criticism of the study was the lack of statistical analysis used. Although visual analysis is a useful tool in single case design; with the

use of statistical analysis, the quantifiable information can be compared with other study results (Brossart, Parker, Olson, & Mahadevan, 2006). The visual analysis only provided a small number of data points and not weekly data points and this may have been useful to record session by session change

A Preliminary Evaluation of Cognitive-Behaviour Therapy for Clinical Perfectionism: A Case Series.

A UK based study by Glover et al. (2007) assessed the effectiveness of a 10 session CBT intervention for nine clients with clinical perfectionism, which employed a multiple baseline design. Participants included seven females and two males, with a mean age of 33 years. The CBT intervention was based on CBT analysis from Shafran et al. (2002).

There was a range of analyses reported. On the perfectionism subscale of the DAS, five patients showed a clinically significant improvement between pre and post phases, with four maintaining this at follow-up. On one subscale of the MPS, socially orientated perfectionism (SOP), five patients showed clinically significant improvement from pre-post phase and these changes were maintained at follow-up. However, the authors did report that clients with initial high scores tended not to have a reduction in perfectionism and they suggested that for these clients a longer-term intervention (e.g. a schema-focused intervention) may be more appropriate, important for clinicians to consider. The authors concluded that this CBT treatment has shown benefits in reducing perfectionism, but if other axis 1 difficulties exist, that this approach could be used alongside other treatment approaches,

particularly if clinical perfectionism is something which could hinder change; supported by other research e.g. Blatt et al. (1998).

Although the study has limitations, the authors clearly stated these. For example, being a case series there was there was no opportunity for a control group. They also discussed that as per the intervention strategy they were using formulation that was compiled during the baseline stage. Formulation is viewed as important and can help to offer a deeper understanding for the client (Johnstone & Dallos, 2006). The compilation therefore may have had therapeutic benefits and brought about initial changes, so could be viewed as an extraneous variable. Lastly, although the majority of the measures used had sound psychometric properties, one measure had not yet been validated (Clinical Perfectionism Questionnaire); so caution regarding the properties of this measure should be taken into account. More detailed suggestions for future research would also have been beneficial, but with further useful case studies providing clinicians, information about perfectionism treatment, the study did receive a high percentage mark (80%).

The Perfect Patient: Cognitive Behavioural Therapy for Perfectionism

Hirsch and Hayward (1998) described the case of a 40 year old male who engaged in a CBT intervention for perfectionism. The treatment emphasis focused on perfectionistic beliefs e.g. 'If I don't perform at 100% people will think I am defective.' Although the article clearly states the type of treatment received, reporting of the outcome measures was poor. Although they briefly reported pre and post anxiety and depression scores, only pre perfectionism

scale scores were reported. No statistical analysis was reported and with clearer design, analysis and reporting needed, this received a lower quality mark (52%). It may be that the case was not specifically designed as a single-case experimental design study and was reported just for clinical purposes, but any such ambiguity could perhaps have been reported. Although the authors report decreases in perfectionism; as this is not reported effectively, it is difficult to draw upon conclusions and this may only be viewed as anecdotal evidence.

1.4.1.3 Other Study Characteristics

1.4.1.3.1 Study Participants (Type, Sex, Recruitment, and Age)

It is worth taking some time to consider the type of participants used in the studies and whether this represents the populations accurately. It is important to highlight that a number of the studies in the review used students, often psychology students e.g. Arpin-Cribble et al. (2008) (see Table 2 for types of participants). Researchers at one American University have recently discussed the aspect of American undergraduate psychology students dominating research studies, terming them *WEIRD outliers* (westernised, educated people from industrialised rich democracies) (Henrich, Hiene, & Noranzayan, 2010). The authors stated that 68% of leading psychology journals reviewed were from the US and 67% of these used psychology undergraduate students. They concluded that due to this, studies were not very representative.

Some students and other participants were recruited using advertisements e.g. Pleva & Wade (2006), a less than representative sampling technique.

The studies are markedly drawn towards the use of female participants, with one study using a 100% female sample (DiBartolo et al., 2001). Does this suggest there is a sex imbalance for people who exhibit perfectionism or is it because females are more likely to respond to advertisements for such studies? Future research needs to think of ways to recruit a sample which is more representative of the population to gain a broader and more accurate data set.

Although some studies have a wider spread of age groups e.g. Steele et al. (2012), with an age range of 18-67 (*m* = 35.77), many other studies show little variation in age range and use a much younger age group. For example, one study (Radhu et al., 2012) had a mean age of 22.63 and another study (DiBartolo et al., 2001) had an even lower mean average age of 18.98. Again if such a young age group is used in studies, which tends to be university based participants; this could be viewed as showing perfectionistic characteristics and an ability to change in one small group, rather than being able to generalise findings to a wider population. This is something clinicians need to consider when choosing an appropriate intervention for clients with maladaptive perfectionism. Finally, a number of studies used small sample sizes and future studies need to consider larger sample sizes. Overall, a number of the studies showed population bias in the study samples.

1.4.1.4 *Quality of Analysis*

There were a variety of analyses carried out in the reviewed studies due to differing methodologies. The RCT studies used a range of appropriate

statistical tests throughout their analysis e.g. ANCOVA used in the Arpin-Cribbie et al. (2012) study, to ensure thoroughly analysed data and a presentation of results which are useful for clinicians and clients. Other studies (e.g. DiBartolo et al., 2001) used robust statistical methods to ensure appropriate analyses were carried out and the study also controlled for type 1 errors.

Single-case experimental design studies in the review relied upon visual analysis and did not supplement this with appropriate statistical analysis, which may have made the evidence of successful perfectionism treatment more effective.

1.5 DISCUSSION

1.5.1 Summary of Key Findings

The reviewed studies were valuable in the evaluation of psychological treatments for perfectionism in adults. RCTs have shown that face-to-face interventions using a CBT approach are effective in reducing levels of perfectionism and also other associated variables, such as anxiety and depression e.g. Riley et al. (2007). As well as the effectiveness of face-to-face interventions in the treatment of perfectionism, studies have also shown that web-based interventions can be beneficial in reducing levels of perfectionism e.g. Arpen-Cribbie et al. (2012). Pure self-help (e.g. Pleva & Wade, 2006) has also proved to be beneficial in helping to reduce unhelpful perfectionistic behaviours. Although many studies have been able to show a significant change in levels of perfectionism and other levels e.g. anxiety,

only a small number of clients demonstrated clinically significant change which was maintained at follow-up.

Although single-case experimental design research may be viewed as being not as robust and an inability to control confounding variables, a number of these studies have been reported in the literature (e.g. Egan & Hine, 2008). These studies have further supported the use of CBT approaches with clients exhibiting maladaptive perfectionism.

1.5.2 Methodological Concerns of Reviewed Studies

Although a number of the studies reviewed were good quality studies, there were however some methodological concerns that are important to highlight. The participant groups were often quite narrow showing population bias, so generalising the findings is problematic.

The lack of comparison groups was also a difficulty (e.g. Riley et al., 2007) in concluding that the changes found were due to the intervention used. Also, a number of studies were single-case design and without statistical analysis did not provide robust enough evidence. These pooled together with RCT studies form an emerging evidence base for interventions for perfectionism, although further developments are needed.

1.5.3 Limitations of the Review

Although the review is a vital tool for clinicians working in mental health, which highlights relevant perfectionism intervention research with adults, there are some limitations regarding the review. Firstly, all of the studies reviewed were from westernised nations; England, America, Canada, and

Australia. As discussed earlier, a number of the studies used students and these are seen as WEIRD outliers (Henrich et al., 2010). As the reviewed studies were from westernised nations, sometimes using students, this could be viewed as a limitation. The reason why other studies were not included was due to exclusion criteria. For example, non-English language papers were excluded and non-peer reviewed journal papers. Although the exclusion criteria demonstrated a sound rationale, relevant papers may have been excluded.

A further limitation of the review is that it was only able to provide reviews of study interventions, in a field predominantly CBT based. The search strategy only produced mainly CBT based studies, with few other approaches used; for example, general stress management. With evaluation of only one main approach, findings of the systematic review could be viewed as limited with few other interventions included. Further evaluation of other interventions would be useful for the field of perfectionism.

1.5.4 Clinical Practice and Future Research

It is important for practitioners working clinically to know which interventions are effective in treating perfectionism. As prevalence is high (Rhadu et al., 2012), it is vital that clinicians are aware of the quality of the empirical research available and what demonstrates effectiveness. As well as managing perfectionism when presented as a single issue, comorbidity frequently occurs (Shafran et al., 2002). Awareness that perfectionism can be a treatment barrier is an important consideration for clinicians and accounting for this may improve therapeutic progress.

Although limitations of reviewed studies have been highlighted, there is a range of evidence showing CBT can be a useful intervention for treating perfectionism. Not only have studies evaluated face-to-face therapeutic treatments, but web-based and guided self-help have also shown to be effective treatments for perfectionism. The range of interventions and type of studies e.g. RCT, single-case design; strengthen the field due to the variety of evidence provided. What needs to be clearer are the longer term benefits. Some studies carried out three or six months follow-up, but 12, 18 and 24 month follow-ups would be beneficial to try to establish if benefits are maintained in the long-term. Also, clearer information about comorbidities and how best to treat this would be beneficial, to avoid any ambiguity for practitioners.

Future research needs to continue to evaluate treatments for perfectionism, with RCT studies ensuring they use comparison groups to control for confounding variables. Larger samples need to be used with more balanced sex, age, and ethnicity representation. Additional demographic information regarding ethnicity and education/occupation status may be beneficial. Regarding aetiology, it would also be useful for quantitative and qualitative studies looking at parental style as a measurable variable to analyse alongside measures of perfectionism and other associated variables such as anxiety and depression.

A clearer definition of perfectionism and the sub-types, with a more uniformed approach may be beneficial for the research and treatment of perfectionism.

1.5.5 Conclusion

According to Shafran and Mansell (2001), prior to 1994 there was no empirical research published detailing the evaluation of treatments for maladaptive perfectionism in adults. The prevalence of perfectionism both as a primary problem and also as a comorbidity is reported to be increasing (Shafran et al., 2002) and is a difficulty, which can impede therapeutic progress for other primary problems, such as depression (e.g. Blatt et al., 1998). However, since 1994 there have been a variety of peer reviewed studies which have been published. A strength of the research field is the variety of empirical research available; from RCTs to single-case designs. A limitation is that virtually all of the research uses CBT interventions, alongside other general approaches e.g. stress management and are heavily populated with young female participants. To provide a richer and more valued evidence base, more robust research and clinical trials should be carried out using other approaches which may theoretically and anecdotally support such research. Use of a more representative population would also be beneficial. Further research focusing on perfectionism as a treatment for other conditions, such as eating disorders, as it may impede treatment (e.g. Shafran et al., 2002) may help to clarify the role of perfectionism. Finally, more early educational interventions for parents and teachers would be beneficial to help break the possible causes and maintaining mechanisms of this debilitating difficulty.

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Chapter 2 – Empirical Paper

THE RELATIONSHIP BETWEEN MULTIDIMENSIONAL PERFECTIONISM, SELF ESTEEM, SELF-CRITICISM, AND MOOD IN PRIMARY SCHOOL CHILDREN

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2.0 ABSTRACT

Perfectionism in children can be adaptive and has been linked to academic achievement and high self-esteem (Stoeber & Childs, 2012). However, maladaptive perfectionism with features such as sensitivity to mistakes can have a number of distressing psychological implications such as depression and anxiety (Hewitt et al., 2002) and has demonstrated links with eating disorders (Fairburn, Cooper, & Shafran, 2003). With such health concerns regarding perfectionism, researchers have argued for further research into understanding the processes involved in perfectionism in children (Flett & Hewitt, 2012). The present study investigated the relationship between perfectionism, self-esteem, self-criticism, and mood in 9-11 year old children. Ninety children from four schools in Coventry and Warwickshire participated in the study. Self-report measures of variables were completed. Multiple regression analysis and the Sobel *z* test were used, with mediation models used to demonstrate the relationship between variables. Results showed a significant relationship between self-esteem and mood. Significant mediating relationships were found between sensitivity to mistakes and mood, mediated by self-esteem and self-criticism. Significant mediating relationships were found between contingent self-esteem and mood, mediated by self-esteem and self-criticism. Girls showed higher levels of perfectionism, and self-criticism, lower levels of self-esteem, and higher levels of negative affect compared with boys, but these differences were not significant. Theoretical and clinical implications of the processes involved in perfectionism and the need for future preventative measures are discussed.

Keywords: perfectionism, self-esteem, self-criticism, mood, children,

2.1 INTRODUCTION

2.1.1 Multidimensional Perfectionism

Research carried out investigating perfectionism has shown associations with adverse psychological difficulties in adults (Gnilka, Ashby, & Noble, 2012). These difficulties include depression, anxiety, and suicide (Flett & Hewitt, 2002) and perfectionism has links with eating disorders (Brouwers & Wiggum, 1993). Flett and Hewitt (2002) describe perfectionists as striving for flawlessness, setting excessively high standards for themselves and when self-evaluating their performance, being highly critical. Early research reported perfectionism as being negative and linked to psychological ill-health; thus perfectionism being labelled as one-dimensional (Stoeber & Otto, 2006).

However, carrying on from the work of Hamachek (1978), research has suggested that there are two types of perfectionism; adaptive and maladaptive (Rice & Ashby, 2007). Adaptive perfectionism has been described as a person striving for excellence, but enjoying success and not fearing failure or worrying about mistakes (Davis & Wosinski, 2012). This type of perfectionism is viewed as being healthy and has shown positive associations with self-esteem (Ashby & Rice, 2002). Maladaptive perfectionism may be displayed through intolerance to mistakes, fear of failure, and a decrease in productivity (Davis & Wosinski, 2012). Research has demonstrated this type of perfectionism in adults is linked to low self-esteem and a range of psychological difficulties (Bieling, Israeli, Smith, & Antony, 2003).

2.1.2 Origins and Development of Perfectionism

It has been argued the development of perfectionism stems from parents who offer love and praise for exceptional performance, but exhibit disappointment when this level is not achieved (e.g. Burns, 1980; Missildine, 1963). Research studies have indicated a harsh over-critical parental style is linked to perfectionism developing in children (e.g. Frost, Lahart, & Rosenblate, 1991). The study with undergraduate female students assessed levels of perfectionism and demanding parental style. Results showed associations between harsh parenting, and students' levels of perfectionism and higher symptoms of psychopathology. Furthermore, there was a correlation between parental perfectionism (for mothers) and child perfectionism and that sex of parent was an important variable in the development of perfectionism. In a study of 232 American students, research reported authoritarian parental style was related to maladaptive perfectionism, but not adaptive perfectionism (Kawamura, Frost, & Harmatz, 2002).

2.1.3 Processes Involved in Perfectionism

Sorotzkin (1985) stated that when perfectionists do not achieve goals, distress can be caused and highlighted self-criticism and self-esteem as key factors in perfectionism. Research carried out with college students by Rice, Ashby, and Slaney (1998) showed links between multidimensional perfectionism, self-esteem, and depression. Their study of 464 college students, produced path models, which showed maladaptive perfectionism was associated with low self-esteem and depression. However, results

showed adaptive perfectionism was not associated with depression. Further research with adults has shown support for the mediational role that self-esteem plays between perfectionism and depression (e.g. Flett, Hewitt, Blankstein, & O'Brien, 1991; Preusser, Rice, & Ashby, 1994). Results showed adaptive perfectionism was positively associated with self-esteem and maladaptive perfectionism was associated with low self-esteem and depression. A further investigation using structural equation modelling was carried out with 262 undergraduate students (180 females and 82 males) (Ashby & Rice, 2002). The study investigated the relationship between perfectionism and self-esteem, using the Almost Perfect Scale and Dysfunctional Attitudes Scale. Results showed maladaptive perfectionism was negatively associated with self-esteem. Aspects of the measures, such as discrepancy concerns and self-criticism related to performance, were found to be significant predictors of low self-esteem. Adaptive perfectionism was reported to be positively associated with self-esteem and there was a significant positive relationship found between high standards and self-esteem. The authors state their findings are consistent with previous research that shows maladaptive perfectionists exhibit lower levels of self-esteem. Research has demonstrated that low self-esteem occurs in perfectionism due to desired goals not being obtained. Such perfectionism can lead to persistent habits of expecting perfection from self and others and result in depression and worthlessness (Melrose, 2011).

As well as research indicating self-esteem is a mediating factor between perfectionism and mood in adults, self-criticism has also shown to be an important underlying process in perfectionism. It has been argued that self-

criticism is linked with self-orientated perfectionism due to over stringent self-evaluation (Hewitt & Flett, 2001) and perfectionism is believed to be associated with self-criticism (Blatt & Zuroff, 2002). This relationship is linked with depression because people exhibiting perfectionism can experience depression due to levels of self-criticism caused by shame and guilt (Blatt, 1995). Correlations have also been found between perfectionism and self-criticism (Blaney & Kutcher, 1991; Hewitt & Flett, 1990). A longitudinal study of a 12 year old with high levels of self-criticism indicated this can lead to psychological difficulties later in adulthood; including difficulties with personal and social adjustment and that origins can begin with early experiences with parents/guardians (Zuroff, Koestner, & Power, 1994). Qualitative research (Riley & Shafran, 2005) has highlighted a number of maintaining mechanisms, such as self-critical reaction to failure. Indeed treatment of perfectionism can focus on dealing with self-criticism, which has led to effective results using a cognitive behaviour therapy (CBT) approach to target such self-critical thoughts and behaviours (e.g. Ferguson & Rodway, 1994).

2.1.4 Perfectionism in Adolescence and Adulthood

As previously discussed, perfectionism in adults has indicated a relationship with mood, mediated by factors such as self-esteem. As well as having links with depression, studies have reported that perfectionism has links with eating disorders (e.g. Fairburn et al., 2003), so this characteristic can have a profound impact. Eating disorders such as bulimia nervosa (BN) have been shown to have links with higher levels of perfectionism compared with controls (Lilenfield, Wonderlich, Riso, Crosby, & Mitchell, 2006). To establish

if perfectionism is a feature of eating disorders, intervention research was carried out to see if treatment of perfectionism helped reduce symptoms of bulimia. An RCT with 48 participants in one of three groups; guided self-help (GSH) for perfectionism, GSH for BN or placebo showed that at post-intervention phase and follow-up, both treatment groups showed decreased BN symptomatology. To help deter the development and maintenance of such debilitating conditions, further information about perfectionism may be beneficial.

Although there is a vast wealth of research regarding perfectionism in adults, there is less evidence available for children and adolescents (O'Connor, Rasmussen, & Hawton, 2010). Research with adolescents, has shown perfectionistic concerns (worrying about mistakes) is associated with stress, depression and lack of confidence in school; whereas perfectionistic strivings (striving for high standards) is associated with higher motivation and confidence, higher school grades and healthier psychological wellbeing (Stoeber & Childs, 2012). Further research with adolescents has indicated that setting of high standards is linked to high levels of motivation and self-esteem (Dixon, Lapsley, & Hanchon, 2004). Maladaptive perfectionism and stress have been linked to depression and anxiety (O'Connor et al., 2010) and a perfectionistic thinking style linked to psychological maladjustment (Flett et al., 2012).

Dimensions of perfectionism, such as sensitivity to mistakes have been shown to correlate with psychological difficulties in adulthood (Frost, Heinberg, Holt, Mattia, & Neubauer, 1993). Other aspects such as

contingent self-esteem can be viewed as a positive aspect of perfectionism in children (Rice, Kabul, & Preusser, 2004).

Use of the Adaptive/Maladaptive Perfectionism Scale (AMPS) with adolescents was carried out by Rice, Leever, Noggle, and Laspsely (2007). Adolescents from an American middle school (n = 145, 12-14 years old), participated in the study. AMPS subscales were analysed against depression measure scores. For girls, sensitivity to mistakes and compulsiveness were significantly associated with depressive symptoms (β = -.36, p = .004). Analysis showed sensitivity to mistakes as a maladaptive element of perfectionism, but compulsiveness as adaptive due to lower levels of depressive symptoms linked to higher compulsiveness and this was similar for boys. The authors reported that lower levels of need for admiration was seen to be maladaptive, but only in the instance when girls scored lower on the compulsiveness subscale and boys with higher levels of sensitivity to mistakes.

2.1.5 Perfectionism in Children

Regarding child perfectionism research, Rice and Preusser (2002) argued that a more comprehensive understanding of perfectionism in children was needed and that this could contribute to preventative educational measures being provided. They argued this could lead to adaptive perfectionism being encouraged and help being given for maladaptive aspects of perfectionism, which supports the need for further empirical research in this area. However, as stated earlier, the vast body of perfectionism research has been carried out with adults, with little available evidence on perfectionism and adverse

psychological factors in children. The study of perfectionism and children in non-clinical populations is relatively new and more research needs to be carried out (Hewitt et al., 2002). Hewitt et al. (2002) carried out a study with children investigating the relationship between perfectionism and depression, anxiety, and anger; 114 children (45 boys and 69 girls), aged 10-15 years participated in the study. Measures included the Child and Adolescent Perfectionism Scale (Flett, Hewitt, Boucher, Davidson, & Munro, 2001). Results showed, self-orientated perfectionism (SOP) (a person must be perfect, setting unrealistic goals) was significantly associated with depression and anxiety. Socially prescribed perfectionism (SPP) (exhibiting perfectionistic behaviours as a person thinks others expect it) was significantly correlated with depression and anxiety, stress, and anger. The authors concluded that perfectionism and associated variables may contribute to psychological distress in children. With research indicating perfectionism and depression is mediated by self-esteem in adults (e.g. Rice et al., 1998) and with perfectionism significantly correlated with depression in children (Hewitt et al., 2002), mood seems an important variable to consider when carrying out perfectionism research with children.

Research has also focused on the relationship between perfectionism and self-concept. A study carried out with 284 Egyptian children (*m* = 12 years), showed perfectionism was significantly correlated with self-concept (Tofaha & Ramon, 2010). Further research with non-clinical populations has been conducted with gifted children. LoCicero and Ashby (2000) studied American children (*m* = 13 years). Results showed gifted children displayed higher levels of perfectionism than non-gifted children, but did not experience

any psychological impairment. Much of the non-clinical child perfectionism research has been conducted with children from non-UK populations, which further supports the rationale for more empirical research.

Perfectionism research conducted with Australian children (aged 10-12) reported the role that cognitive errors play in maladaptive perfectionism (Davis & Wosinski, 2012). Cognitive errors, such as catastrophising and overgeneralization were found to be a significant predictor for maladaptive perfectionism in children. These findings demonstrate the role cognition plays in child perfectionism and that this should be addressed during treatment. Further research has examined the role of cognitive appraisal. DiBartolo and Varner (2012) investigated how maladaptive evaluative concerns versus positive achievement striving are linked to goal setting, cognitive appraisal, and anxiety in 157 American school children (*m* = 9.74 years). Children completed a task under one of three goal setting conditions. Results showed children with high levels of SPP exhibited higher levels of anxiety compared to children low in SPP.

As research demonstrates that perfectionism has links with anxiety and depression, a study was carried out investigating whether an educational intervention would decrease symptoms of anxiety and depression (Nobel, Manassis, & Wilansky-Tryanor, 2012). Children (*n* = 78) at risk for depression and/or anxiety participated in an RCT and took part in a CBT or activity group. Pre and post perfectionism, anxiety, and depression measures were recorded. Both groups showed significant reductions in all three measures. Furthermore, supplementary analyses suggested that perfectionism can interrupt treatment progress and researchers have argued

that perfectionism can halt treatment progress (Egan, Wade, & Shafran, 2011).

Gender differences have also been highlighted in child perfectionism research. Validating a multidimensional perfectionism scale with 9-11 year old children (Rice et al., 2004), results suggested perfectionism may be more harmful for girls than boys and cited research which reports girls are at greater risk for eating disorders (Leon, Fulkerson, Perry, & Early-Zald, 1995), with links between eating disorders and perfectionism highlighted (McVey, Pepler, Davis, Flett, & Abdolell, 2002). O'Connor, Dixon, and Rasmussen, (2009) found boys set higher standards than girls and that gender differences warrant further investigation. O'Connor (2007) stated that perfectionism research should analyse gender differences. However, although gender differences have been highlighted, the evidence is limited at present.

Even though the aetiology of perfectionism has links with childhood the reason why much of the perfectionism research has been carried out with adolescents and adults, rather than children, may be due to the lack of standardised scales for this age group (Rice et al., 2007). To address this, the Adaptive/Maladaptive Perfectionism Scale (AMPS) (Rice & Preusser, 2002) was produced so research in child perfectionism could be more widely conducted.

The AMPS (Rice & Preusser, 2002) consists of four dimensions of perfectionism; sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration. The authors reported that there

are adaptive and maladaptive items present in the measure. *Sensitivity to mistakes* measures negative feelings related to making mistakes e.g. 'when I make a mistake I feel so bad, I want to hide' and is seen as a key dimension of perfectionism in children. *Contingent self-esteem* measures positive emotions resulting from task evaluation e.g. 'once I do well at something I am pleased.' *Compulsiveness* measures order over completing tasks e.g. 'I take a long time to do something because I check it many times'. Compulsiveness was moderately correlated with sensitivity to mistakes and need for admiration, which the authors suggests may mean children are trying hard not to make mistakes and seek positive responses from other people. The final dimension, *need for admiration* measures the need for approval e.g. 'I want to be perfect so others will like me.' If parents do not provide admiration, healthy self-image may not develop and a grandiose sense of self and perfectionism may develop (Rice & Preusser, 2002).

With the majority of research indicating that maladaptive perfectionism leads to mental health difficulties in adolescents and adults, it is important to increase understanding of the risk factors in children (Davis & Wosinski, 2012). Indeed recent research, (Flett & Hewitt, 2012, p.54) stated:

> *'Unfortunately, when it comes to understanding the nature of perfectionism in young people, we have more questions than answers at present.'*

The authors added that psychological difficulties in children were becoming more prevalent with depression in adolescents quoted as being between 4%-24% and that given the role perfectionism plays in psychological distress,

more understanding was needed. Regarding perfectionism research in children they concluded (Flett & Hewitt, 2012, p.54):

> *'Clearly, more research is needed on the developmental foundations of perfectionism and the causes, correlates, and consequences of perfectionism. New information can then be incorporated into treatment and prevention programs.'*

This further adds to the rationale for the empirical investigation as further information could be beneficial. The proposed empirical study will aim to enhance the understanding of perfectionism in children and provide further information about the risk factors for perfectionism in this under researched age range. It is hoped a better understanding of the process and mechanisms involved in perfectionism in this age group will increase awareness and lead to more preventative measures so debilitating difficulties such as depression, anxiety, and eating disorders do not develop or are managed more effectively. Due to this, further child research is important and it is hoped the empirical study will add to the research base.

2.2 AIMS, RESEARCH QUESTION, AND HYPOTHESES

Building on findings from research within adult and adolescent populations, the empirical research will investigate the relationship between multidimensional perfectionism, self-esteem, self-criticism, and mood in primary school children (9-11 years of age). The study is interested in establishing the processes, mechanisms and relationships present in perfectionism. The study will hopefully help further understanding in the field and lead to preventative educational and clinical interventions for children.

Research Question

What is the relationship between multidimensional perfectionism, self-esteem, self-criticism, and mood in 9-11 year old children?

Hypotheses

1. Self-esteem will mediate the relationship between perfectionism and mood
2. Self-criticism will mediate the relationship between perfectionism and mood
3. Self-esteem will mediate the relationship between each separate perfectionism dimension (sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration) and mood.
4. Self-criticism will mediate the relationship between each separate perfectionism dimension (sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration) and mood.

2.3 METHOD

2.3.1 Design

The study used a correlational analytic survey design. The self-reported variables tested were perfectionism, self-esteem, self-criticism, and mood.

2.3.2 Participants

A non-clinical population was used in the study, with opportunity sampling utilised. Participants were primary school children, aged between 9-11 years (*m* = 9.76, *SD* = 0.7). The rationale for the age range was due to the lack of perfectionism research carried out with children, as more knowledge is required about the processes involved in this age group.

Schools in the Coventry and Warwickshire area were approached for participants. It was calculated that 90 children would be required for the study. This was calculated based on the recommendations of Kline (2005) for path analysis models. The author suggests that ideally a parameter ratio of 20:1 should be used, but that a ratio of 10:1 would be sufficient. There were nine parameters for the second and third proposed mediation models, which equalled 90 participants using the 10:1 ratio.

Four schools gave permission to participate, with 102 returned parental consent forms across the four schools. Twelve children did not consent; 90 children gave consent and participated in the study.

Participants consisted of 34 boys (37.8%) and 56 girls (62.2%), with ages 9 (*n* = 35), 10 (*n* = 41) and 11 (*n* = 14) taking part in the study. Mean age of participants = 9.76, *SD* = 0.7.

2.3.3 Materials

The following measures were used in the study:

2.3.3.1 Adaptive/Maladaptive Perfectionism Scale (AMPS) – Rice & Preusser (2002)

This 27 item scale, measures both adaptive and maladaptive features of perfectionism in children (see appendix 11). The scale has four subscales; sensitivity to mistakes, contingent self-esteem, compulsiveness, and need for admiration. Children read statements e.g. 'I am fearful of making mistakes' and circle an answer most appropriate to them. The measure uses a four point Likert scale, ranging from 'really unlike me' to 'really like me'. The scale was developed with samples of children, aged 9-12 years in America. The authors reported the scale to have adequate reliability. Item-total correlations showed sensitivity to mistakes ranged from .57 - .78 (α = .91), contingent self-esteem ranged from .53 - .72 (α = .86), compulsiveness .66 - .72 (α = .87) and need for admiration item total correlation ranging from .67 - .71. (α = .85). Research has shown that the measure has good external criterion validity (Rice et al., 2004). More recently, research supported the validity of the AMPS, but that further research on validity across different samples is needed (Davis & Wosinski, 2012).

2.3.3.2 Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1989)

This is a global measure of self-esteem for children and a widely used measure in clinical and non-clinical settings (Winters, Myers, & Proud, 2002) (see appendix 12). The scale has 10 items, for example 'I feel I have a number of good qualities' and children have to choose a response most true for them. The measure uses a four point Likert scale, ranging from 'strongly disagree' to 'strongly agree'. Developed with high school students, this measure has shown good reliability and validity; test retest correlations in a number of samples are strong, ranging from .82 - .88, with Cronbach's alpha in samples ranging from .77 - .88 (Blascovich & Tomaka, 1993; Rosenberg, 1986).

It should be noted that on one of the items some of the language was changed to ensure children fully understood the items presented to them. Item 7 was amended after consultation with the research team. Originally worded: *'I feel that I am a person of worth at least on an equal plane with others'*, it was changed to *'I feel that I am equally as worthwhile as others.'* Although this was given careful consideration, it should be highlighted this could have impacted upon validity.

2.3.3.3 Self-Rating Scale (SRS) (Hooley, Ho, Slater, & Lockshin, 2002)

This is an eight item scale measuring self-criticism in children (see appendix 13). A Likert scale (from 0-7) is used to determine the extent to which a child agrees or disagrees with each statement. Statements include 'sometimes I feel completely worthless' and 'others are justified in criticising me'. The measure is reported as having an alpha reliability of .73 (Hooley, Ho, Slater,

& Lockshin, 2010). Good internal consistency reliability has been shown (α = .88) for this measure in a study carried out with 12-19 year old children (Glassman, Weierich, Hooley, Deliberto, & Nock, 2007).

As with the RSES, certain items on the SRS were amended, with small changes in language to ensure items were fully understood by participating children. After consultation with the research team, four items were amended; items 1, 3, 4, and 8. For example, item 4 was originally worded '*I often feel inferior to others*', changed to '*I often feel as though I am not as good as other people.*' As with the RSES, it is important to consider any possible impact upon validity with the change of wording.

2.3.3.4 Short Mood and Feelings Questionnaire (SMFQ) (Angold, Costello, & Messer, 1995)

This 13 item scale measures levels of recent mood (how a child has felt over the past two weeks) in children and was developed with 8-16 year old children (see appendix 14). The measure uses a three point Likert scale (true, sometimes, or not true), with children using this scale to respond to statements such as 'I felt lonely'. It has been reported as a useful scale in helping to measure depressive symptoms in children (Angold et al., 1995). Further studies with young children (7-11 years of age) have investigated the psychometric properties of the measure. Results showed good internal construct validity and showed its scaling properties for depression (Sharp, Goodyer, & Croudace, 2006).

2.3.4 Procedure

Ethical approval for the empirical research was granted by Coventry University (see appendix 6). Letters were sent to all primary school across Coventry and Warwickshire (see appendix 7). Four schools agreed to be participating schools in the research study. Parents of children aged 9-11 years of age were sent study information/consent letters (see appendix 8). From the four primary schools, 102 parental consent forms were returned. A total of 90 children gave consent to participate in the study, with 12 deciding not to participate.

Children took part in the study during the school day at a specific classroom located within each school. Children were seen in groups of approximately 10-15. Information about the study was provided visually via a participant information sheet (PIS) (see appendix 9) for children to read. Each child had a copy of this and this was also presented on a large interactive whiteboard. The study information was then explained verbally to ensure understanding. Each measure was presented on a whiteboard and children had a copy of each measure in their pupil information pack. The four measures were presented to participants in 24 different orders to avoid order effect. It was carefully explained how to complete each measure if children were to participate. Children had the opportunity to ask questions if they wanted to. Consent was clearly explained and children were informed they did not have to take part in the study and could return to class at any stage with their data withdrawn and destroyed. Children were also told that they had up to four weeks to have their data withdrawn from the study and participant code was

explained (children took home a copy of the PIS with participant code recorded).

Participating children completed a child consent form (see appendix 10). Children then completed the four measures with the principal investigator present at all times during data completion. Upon completion of measures, children were debriefed (see appendix 15), which was read and verbally explained. This was to ensure children felt comfortable and to establish what support avenues were available, which included the opportunity to speak to the principal investigator.

2.4 RESULTS

2.4.1 Data Analysis

Data was inputted into the computer statistical package SPSS. Data analysis was then completed. Multiple regression analysis was carried out and a Sobel *z* test (Baron & Kenny, 1986) used to determine if there were any significant mediating effects between the variables. Analysis was used to determine if the hypotheses were met; to ascertain if self-esteem and self-criticism were mediating the relationship between perfectionism and mood, and between the four perfectionism dimensions and mood. Mediation models are presented to display the relationships between the variables. Standardised beta coefficients, *t*-values and associated *p*-values are reported. Ad hoc analysis on sex differences was carried out and correlations between variables calculated.

2.4.2 Analysis of Sex Differences

Mediation models were compiled for participants as a whole and not for boys and girls separately. However, it was important to establish whether there were any significant differences between boys and girls for perfectionism scores and other variables. Data was inputted using SPSS and an independent samples *t*-test was conducted. Table 1 below reports the analysis carried out.

Table 1: Sex Differences with Perfectionism, Perfectionism Dimensions, Self-Esteem, Self-Criticism, and Mood

Variable	Sex	Mean	*SD*	*t*	*p*
Perfectionism	Male	67.71	14.13	0773	.442
	Female	69.13	10.22		
Sensitivity to Mistakes	Male	17.59	4.44	1.724	.088
	Female	19.52	5.53		
Contingent Self-esteem	Male	25.18	4.53	0.157	.875
	Female	25.04	3.85		
Compulsiveness	Male	15.09	3.24	0.873	.385
	Female	15.70	3.18		
Need for Admiration	Male	9.85	3.17	1.479	.143
	Female	8.88	2.96		
Self-esteem	Male	21.44	4.22	1.513	.134
	Female	19.80	5.38		
Self-criticism	Male	23.38	14.13	0.795	.429
	Female	25.43	10.22		
Mood	Male	5.68	4.50	1.097	.276
	Female	6.91	8.14		

As can be viewed in table 1, the mean average for boys reports they have higher self-esteem and lower levels of self-criticism compared to girls and the majority of the maladaptive aspects of perfectionism are also higher in girls, apart from need for admiration. Higher levels of negative affect on the mood measure were also present for girls. However, there were no significant

differences between boys and girls scores on the characteristics measured and analysed. Further, separate correlations between variables for boys and girls indicated there were no significant differences in either the strength or relationship between variables. Although perfectionism has links to eating disorders and prevalence of eating disorders is higher amongst girls, as previous research reports (e.g. Leon et al., 1995), the study offers no evidence of significant differences for perfectionism between boys and girls. Due to the non-significance of the results and lack of strength or relationship between variables, this supports the use of one mediation model, rather than separate models for boys and girls.

2.4.3 Correlations between Variables

Table 2: Correlation Matrix detailing Correlations between Dimensions of Perfectionism and other Variables

VARIABLE		Sensitivity to mistakes	Contingent Self-esteem	Compul-siveness	Need for Admiration	Self-esteem	Self-Criticism
Contingent Self-esteem	*r*	-.315					
	p	.002					
Compulsiveness	*r*	.099	.284				
	p	.353	.007				
Need for Admiration	*r*	.008	.161	.300			
	p	.944	.129	.004			
Self-esteem	*r*	-.598	.497	.065	.135		
	p	<.001	<.001	.541	.204		
Self-criticism	*r*	.381	-.428	-.038	-.161	-.700	
	p	<.001	<.001	.723	.129	<.001	
Mood	*r*	.551	-.334	-.084	.008	-.789	.623
	p	<.001	.001	.433	.944	<.001	<.001

As can be viewed in table 2 there are some significant correlations between perfectionism subscales. Sensitivity to mistakes and contingent self-esteem showed a significant negative correlation, showing a weak correlation, (r = .315, p = .002). There were also weak positive correlations between compulsiveness and contingent self-esteem (r = .284, p = .007), and compulsiveness and need for admiration (r = .300, p = .004). The correlations indicate the perfectionism dimensions are related and are

measuring key facets of perfectionism. There were also significant correlations between other variables. There was a strong negative correlation between self-criticism and self esteem (r = -.700, p = < .001) and a moderate negative correlation between sensitivity to mistakes and self-esteem (r = -.598, p = < .001), highlighting the strength of the relationship between these characteristics. There were further positive correlations between other variables, for example, there was a significant moderate correlation between sensitivity to mistakes and mood (r = .551, p = < .001), and also between mood and self-criticism (r = .623, p = < .001). The strongest significant positive correlation was between mood and need for admiration (r = .944, p = .008) further highlighting the linear relationship between the tested variables.

2.4.4 Preliminary Data Screening

Given that much of the data analyses involved in mediation analysis is based on multiple regression analysis, the data was screened to determine whether they satisfied the assumptions for this type of analysis. Cook's D indicated that there were no multivariate outliers. A histogram of residuals indicated that the distribution was normal. A scatterplot was viewed to check for: i) independence of residuals, ii) no heteroscedasticity, and iii) linearity of relationship between the predictor and predicted variables; all three of these assumptions were satisfied. Finally, variance inflation factor values indicated that multicollinearity was not excessive.

Three mediation models were computed. The first model looked at the mediating effects of both self-esteem and self-criticism on the relationship

between perfectionism and mood. This model is presented in figure 1 below and standardised beta coefficients, *t*-test values and associated *p*-values are presented in table 3.

2.4.5 Perfectionism and Mood, Mediated by Self-Esteem and Self-Criticism

Figure 1: Mediation Model 1 - Perfectionism and Mood, Mediated by Self-Esteem, and Self-Criticism

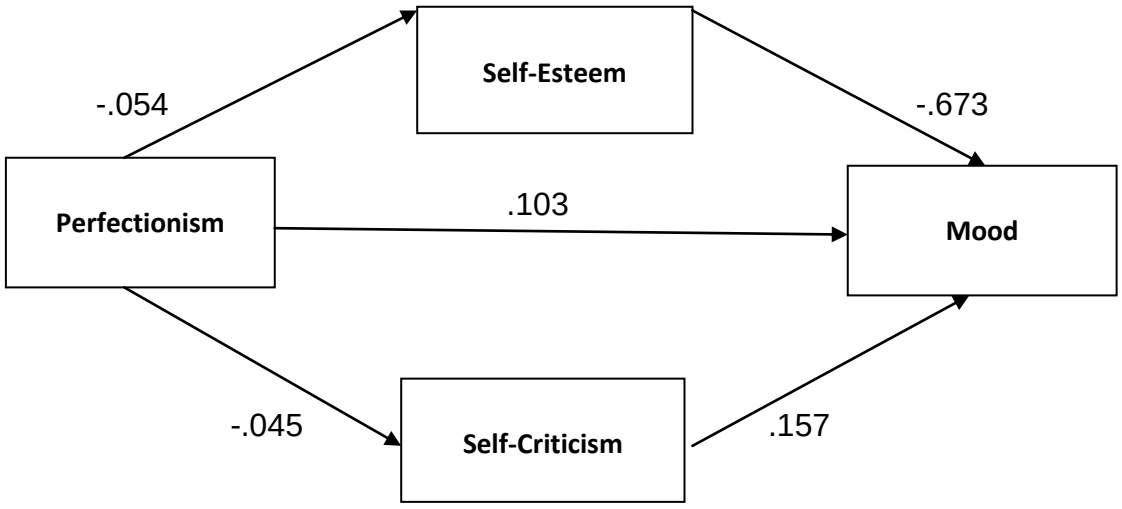

Table 3: Standardised beta coefficients, *t*-values and associated *p*-values for the Relationship between Variables in Mediation Model 1

	β	*t*	*p*
Perfectionism → Self-esteem	-.054	0.51	.614
Perfectionism → Self-criticism	-.045	0.42	.673
Perfectionism → Mood	.103	1.59	.116
Self-esteem → Mood	-.673	7.41	< .001
Self-criticism → Mood	.157	1.73	.088

As can be seen in table 3, the only significant relationship in the model presented in figure 1 is between self-esteem and mood. However, self-esteem did not significantly mediate the relationship between perfectionism and mood: $z = 0.50$, $p = .62$ (two tailed). This hypothesis was not supported, and there was also no mediating effect of self-criticism on the relationship between perfectionism and mood, which also failed to reach significance: $z = 0.36$, $p = .72$ (two tailed); so again the hypothesis was not supported.

2.4.6 Dimensions of Perfectionism and Mood, Mediated by Self-Esteem

Figure 2: Mediation Model 2 - Dimensions of Perfectionism and Mood, Mediated by Self-Esteem

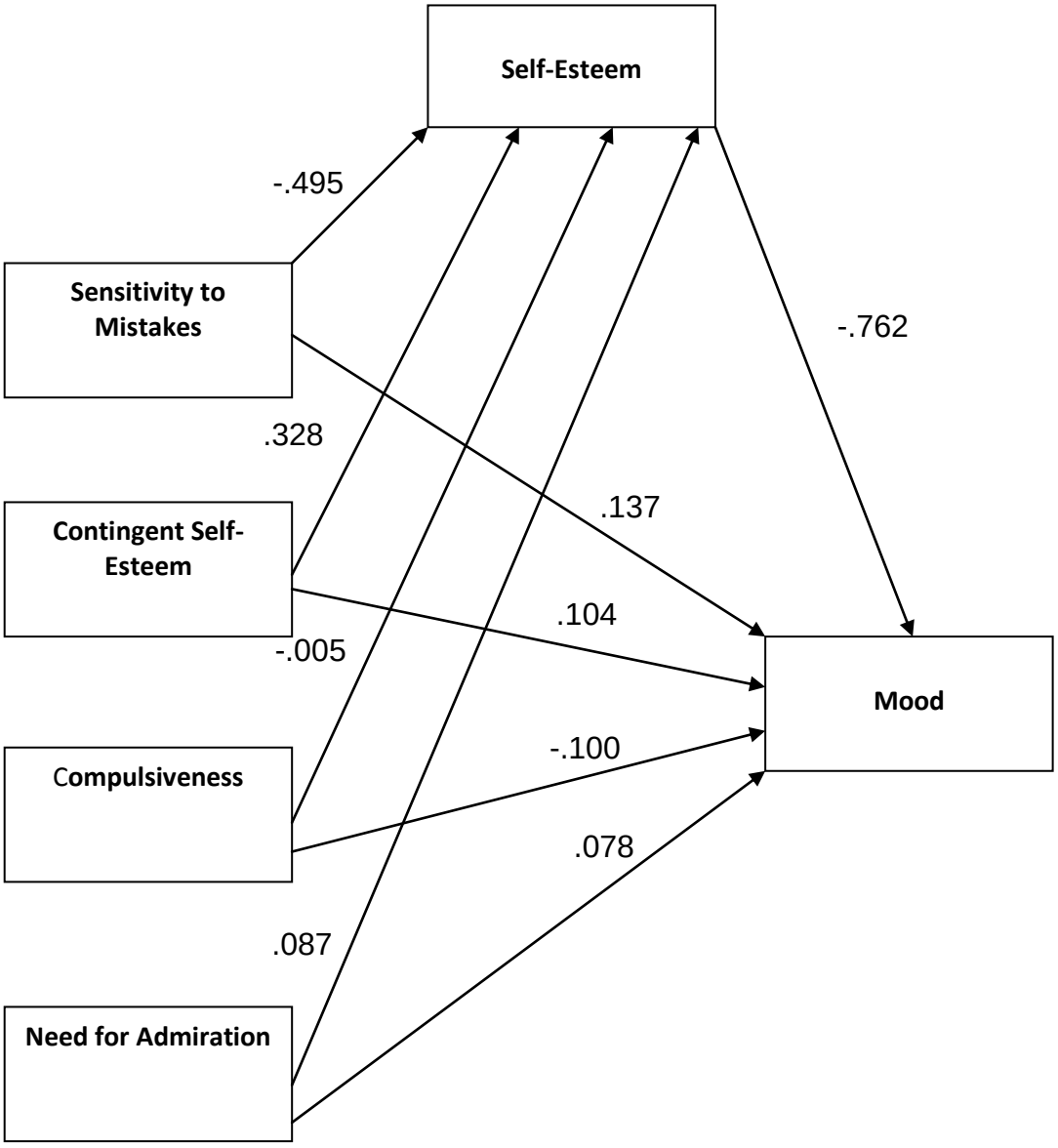

Table 4: Standardised beta coefficients, *t*-values and associated *p*-values for the Relationship between Variables in Mediation Model 2

	β	*t*	*p*
Sensitivity to Mistakes → Self-esteem	-.495	5.82	< .001
Contingent Self-Esteem → Self-esteem	.328	3.71	< .001
Compulsiveness → Self-Esteem	-.005	0.06	.952
Need for Admiration → Self-Esteem	.087	1.05	.295
Sensitivity to Mistakes → Mood	.137	1.66	.100
Contingent Self-Esteem → Mood	.104	1.32	.189
Compulsiveness → Mood	-.100	1.40	.164
Need for Admiration → Mood	.078	1.14	.259
Self-Esteem → Mood	-.762	8.56	< .001

The second mediation model can be seen in Figure 2, which investigated the relationship between four dimensions of perfectionism and mood, with self-esteem mediating the relationship. Standardised beta coefficients, *t*-values and associated *p*-values are reported in table 4.

Self-esteem was found to significantly mediate the relationship between one dimension of perfectionism, sensitivity to mistakes and mood, $z = .478$, $p < .001$ (two tailed). Self-esteem was also found to have a significant mediating effect between another aspect of perfectionism, contingent self-esteem and mood, $z = 3.39$, $p < .001$ (two tailed), which confirms one of the original hypothesis. However, self-esteem was found not to be a significant mediating relationship between compulsiveness and mood, $z = 0.06$, $p = .95$ (two tailed), and need for admiration and mood, $z = 1.04$, $p = .30$ (two tailed).

2.4.7 Dimensions of Perfectionism and Mood, Mediated by Self-Criticism

Figure 3: Mediation Model 3 - Dimensions of Perfectionism and Mood, Mediated by Self-Criticism

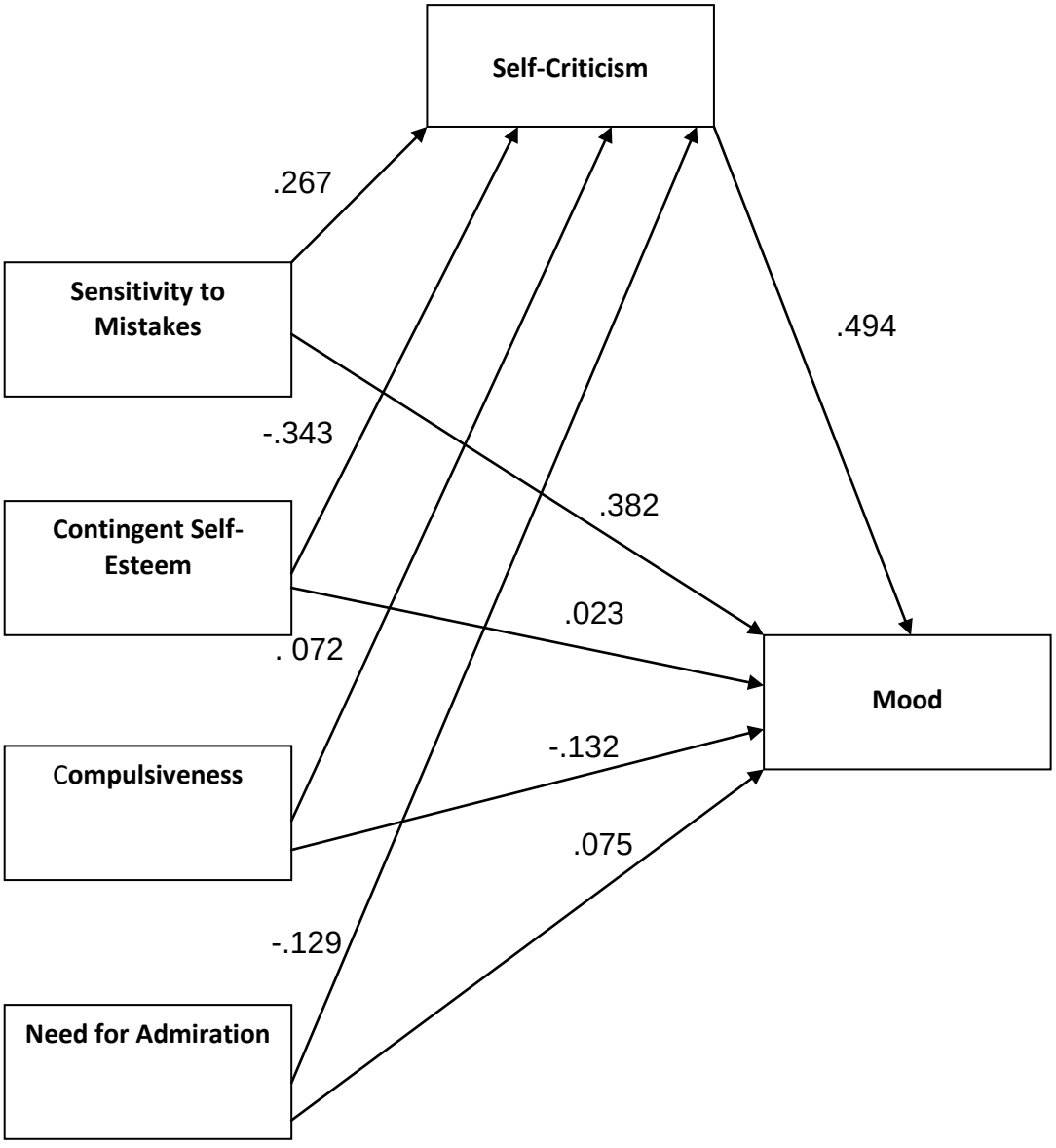

Table 5: Standardised beta coefficients, *t*-values and associated *p*-values for the relationship between variables in Mediation Model 3

	β	*t*	*P*
Sensitivity to Mistakes → Self-Criticism	.267	2.67	.009
Contingent Self-Esteem → Self-Criticism	-3.43	3.29	.001
Compulsiveness → Self-Criticism	.072	0.69	.487
Need for Admiration → Self-Criticism	-.129	1.32	.189
Sensitivity to Mistakes → Mood	.382	4.50	< .001
Contingent Self-Esteem → Mood	.023	0.25	.801
Compulsiveness → Mood	-.132	1.57	.119
Need for Admiration → Mood	0.75	0.94	.352
Self-Criticism → Mood	.494	5.59	< .001

The third mediation model (see Figure 3), investigated the relationship between four dimensions of perfectionism and mood, with self-criticism the mediating factor in the relationship. Multiple regression analysis and Sobel *z* tests were completed. Standardised beta coefficients, *t*-values and associated *p*-values are reported in table 5.

Self-criticism was found to significantly mediate the relationship between sensitivity to mistakes and mood, $z = 2.38$, $p = .017$ (two tailed), supporting one of the hypothesis. Self-criticism was also found to have a significant mediating effect between contingent self-esteem and mood, $z = 2.80$, $p = .005$ (two tailed), which supported the hypothesis. However, self-esteem was found not to be a significant mediating relationship between compulsiveness and mood, $z = 0.68$, $p = .495$ (two tailed) and need for admiration and mood, $z = 1.27$, $p = .205$ (two tailed).

2.5 DISCUSSION

2.5.1 Present Study

This study investigated the relationship between multidimensional perfectionism, self-esteem, self-criticism, and mood in 9-11 year old children. Due to the lack of information about key processes within perfectionism in children, it was important to further the knowledge base, particularly as researchers indicate the base for perfectionism originates in childhood (Frost et al., 1991). More empirical information about key underlying mechanisms will hopefully help with preventative measures and help inform intervention approaches. No previous studies with children had examined the relationship between these variables and it was hoped the study would add novel findings to the field of child perfectionism.

2.5.2 Correlations between Perfectionism Dimensions and other Variables

The present investigation reported a number of linear relationships between the perfectionism dimensions and other associated variables with many significant positive and negative correlations. Previous studies (Rice & Preusser, 2002) have also reported correlations between AMPS subscales e.g. compulsiveness was moderately correlated with sensitivity to mistakes and need for admiration, similar to the present study.

2.5.3 The Relationship between Perfectionism and Mood, Mediated by Self-Esteem

The study predicted that self-esteem and self-criticism would mediate the relationship between perfectionism and mood. Research with adults indicates that self-esteem is an important factor in perfectionism and mood (e.g. Rice et al., 1998), but it appears research has not investigated the relationship with self-criticism via meditational modelling. Research from Rice et al. (1998) showed that maladaptive perfectionism was associated with self-esteem and depression, although self-esteem did not mediate this relationship. However, they did state that self-esteem was a buffer for maladaptive perfectionism in that people only reported depression when feeling low levels of self-worth. Similar results have also been found in other studies e.g. Ashby & Rice (2002).

The present study using multiple regression analysis and mediation modelling using a Sobel *z* test, was able to examine the relationship between perfectionism, self-esteem, and mood in 9-11 year olds. The first mediation model showed that self-esteem did not mediate the relationship between perfectionism and mood (not supporting the predicted hypothesis), which is in line with findings with adults (e.g. Rice et al., 1998). One significant relationship was demonstrated between self-esteem and mood ($p = < .001$). Given other research findings in adults and children, theoretically this supports the relationship and highlights the need to support children with low self-esteem.

2.5.4 The Relationship between Perfectionism and Mood, Mediated by Self-Criticism

The study also investigated the relationship between perfectionism and mood mediated by self-criticism. Theoretically much has been published about the role self-criticism plays in perfectionism and how it can be focused upon during treatment approaches for adults (e.g. Ferguson & Rodway, 1994). Due to this it was important for the study to focus upon this aspect of the mediation model.

However, there was no significant mediating effect found. This may be due to the AMPS having adaptive and maladaptive features whereas analysis between the different dimensions of perfectionism did show significant mediating effects with mood (see section 2.5.6). So although other studies have shown self-criticism to be a process involved in perfectionism (e.g. Riley & Shafran, 2005), the current study indicates it does not mediate the relationship between perfectionism and mood in children.

2.5.5 The Relationship between Dimensions of Perfectionism and Mood, Mediated by Self-Esteem

As the measure of perfectionism used in the study, AMPS, provides scores for four dimensions of perfectionism, it was important to carry out analysis looking at the relationship between these factors and mood mediated by self-esteem.

Sensitivity to Mistakes

Firstly the relationship between sensitivity to mistakes and mood was analysed. Sensitivity to mistakes is viewed as being a core dimension of perfectionism in adults and children (Rice & Preusser, 2002), so this dimension of perfectionism was important to assess. In adult populations excessive concern over mistakes has been associated with maladjustment (Rice & Preusser, 2002). In their research, the authors reported that sensitivity to mistakes in children (using the AMPS) was associated with self-concept, measured using the Piers-Harris Self-Concept Scale (PHSCS) (Piers & Harris, 1969). For boys, significant correlations were found between PHSCS subscales and sensitivity to mistakes; the more sensitive to mistakes the lower the self-concept. For girls, all of the PHSCS subscales were associated with sensitivity to mistakes, apart from the behaviour subscale, with effect sizes ranging from medium to large.

The mediation model and Sobel *z* test showed self-esteem significantly mediated the relationship between sensitivity to mistakes and mood. Not only does this highlight sensitivity to mistakes as a key dimension of perfectionism, but it appears that high levels of sensitivity to mistakes lead to higher levels of negative affect, mediated by lower self-esteem; indicating that this variable is an important mechanism in childhood perfectionism. Awareness for parents, schools and children's services of these processes may be beneficial.

In studies with adults, self-esteem has shown to mediate the relationship between perfectionism and mood (Preusser, Rice, & Ashby, 1994). Although

as reported earlier this relationship was not present in this study, self-esteem has shown to mediate the relationship between aspects of perfectionism and mood, so some similarities between child and adult studies are demonstrated and will be important to assess further for developmental and clinical reasons.

Sensitivity to mistakes has also been shown in child research to be associated with other variables. Bas's (2011) study showed sensitivity to mistakes being significantly and positively correlated and being a predictor of anxiety. The author concluded the need for educational establishments to focus on this perfectionism dimension.

Contingent Self-esteem

The second aspect of perfectionism analysed was contingent self-esteem, which measures positive feelings stemming from task performance (Rice & Preusser, 2002). Results showed contingent self-esteem mediated the relationship between self-esteem and mood. This positive relationship indicates that contingent self-esteem is an adaptive element of perfectionism. Of course as there are similarities between self-esteem and contingent self-esteem, a relationship involving these variables would be expected.

Previous research using the AMPS has shown contingent self-esteem as a significant predictor of anxiety in boys (Rice et al., 2004). The study reported that contingent self-esteem was associated with PHSCS scores with higher levels of contingent self-esteem leading to higher levels of self-concept. There appears to be debate about whether or not contingent self-esteem is an adaptive or maladaptive aspect of perfectionism. Although this subscale

was reported as producing positive feelings if children stem from a family with conditional love/praise, children may feel the need to achieve because otherwise they will not receive these positive feelings (Rice et al., 2004). But the authors did conclude that it was an adaptive aspect of perfectionism for children. However, dimensions similar to contingent self-esteem (self-orientated and socially prescribed perfectionism) have shown to be associated with psychological difficulties such as anxiety (Hewitt et al., 2002).

Contingent self-esteem has also been found to significantly and positively correlate and be a predictor of life satisfaction and academic achievement (Bas, 2011). The author viewed this dimension to be adaptive, which the present study also demonstrated. The present study and previous research have shown the importance of contingent self-esteem as a characteristic of perfectionism and the relationship it has with other variables such as mood and that it has adaptive elements.

Compulsiveness and Need for Admiration

Two further areas of perfectionism, compulsiveness and need for admiration, did not demonstrate a significant relationship with mood mediated by self-esteem. Compulsiveness was another dimension of perfectionism that emerged during scale compilation of the AMPS (Rice & Preusser, 2002). This dimension was moderately correlated with sensitivity to mistakes and need for admiration, which the authors suggested could mean that children would show high levels of compulsiveness to avoid making mistakes Compulsiveness compared with the measures in the current study have not

previously been assessed, but has been compared with other aspects of self, such as areas of the PHSCS. For example, significant correlations have been found between compulsiveness and a number of features such as anxiety, happiness, and satisfaction (Rice et al., 2004). Need for admiration in children has been shown to have links to adverse psychological difficulties, being significantly and positively correlated with anxiety (Bas, 2011).

It is difficult to ascertain why these dimensions of perfectionisms did not show a significant effect. It may be that these dimensions do not lead to lower mood and as other research has shown have greater significance with other variables such as anxiety. Further analysis of this relationship in future studies would be beneficial.

2.5.6 The Relationship between Dimensions of Perfectionism and Mood, Mediated by Self-Criticism

Interestingly similar findings can be seen in mediation model 3 compared with the second model previously discussed. As when self-esteem is the mediating factor, self-criticism mediates the relationship between sensitivity to mistakes and mood, and contingent self-esteem and mood. This indicates that self-criticism, as well as self-esteem as an important mediating factor between dimensions of perfectionism and mood. Research has shown links between perfectionism and mood (e.g. Rice et al., 1998) and perfectionism and self-critical depression (Grzegorek, Rice, Slaney, & Franze, 2004); the present study contributes towards the understanding of what mediates this relationship and the factors involved. We now know from the present study that mediating factors such as self-criticism play an important role in child

perfectionism, with higher levels of sensitivity to mistakes linked with lower levels of mood, mediated by higher levels of self-criticism.

2.5.7 Sex Differences in Perfectionism and Associated Variables

It has been stated that sex differences are important to investigate when conducting perfectionism research (O'Connor, 2007) and therefore the present investigation presented these results. As previous research with children had not shown clear sex differences, no hypotheses regarding possible differences between boys and girls were stated. It was because of this that separate mediation models for boys and girls were not produced. Ad hoc analysis on sex differences was carried out, comparing mean scores for all measures between boys and girls. The present study's results showed girls had higher level of perfectionism and higher levels of a number of dimensions of perfectionism, such as sensitivity to mistakes. Girls also showed higher levels of self-criticism, lower self-esteem, and higher levels of negative affect. However, none of the differences were significant and correlations indicated there were no significant differences in either the strength or relationship between variables. Similarly, Rice and Preusser (2002) found no significant difference between perfectionism subscale scores for boys and girls.

Further studies have highlighted sex differences. Specific facets of perfectionism such as sensitivity to mistakes, compulsiveness, and need for admiration showed a significant relationship with physical appearance and attributes (an aspect of self-concept) for girls. This indicates that perfectionism links with physical appearance is more prominent for girls

(Rice et al., 2004). In a further study using the AMPS, significant differences between boys and girls were recorded (Bas, 2011). In a study of 418 children (*m* = 11.75 years) investigating the relationship between perfectionism and anxiety, life satisfaction, and academic achievement, it was reported girls scored significantly higher on three perfectionism dimensions; sensitivity to mistakes, contingent self-esteem, and compulsiveness. However, effect sizes were small.

2.5.8 Limitations

Although the present study has added to the literature base for processes and relationships involved in perfectionism in children, there are some limitations. First of all only a small amount of demographic information was collected from participants, age and sex. To truly understand perfectionism and how it impacts upon a child, further demographic information may be useful. For example, ethnicity may be a useful demographic factor to take into consideration to try to establish if ethnic/cultural difference exist in levels of perfectionism. A number of research studies with adolescents discuss the impact perfectionism can have on academic performance (e.g. Bas, 2011), so recorded information about academic/educational level could also be very important when analysing data and discussing levels of perfectionism and the impact of this.

A further limitation of the study is the sole reliance on using self-report measures for collection of data. Although the quantitative data was important in establishing mediating relationships, using only self-report measures may be seen to lack richness in data. For example, it may have

been more useful if qualitative information detailing key themes had been used to supplement quantitative data to further aid understanding of child perfectionism e.g. parent and teacher interviews.

Although the RSES and SMFQ are widely used measures in child research, the AMPS and SRS have not been extensively used with children and so may not be as psychometrically robust as other measures. Furthermore, the SRS when previously used in studies was used with an older age group (12-19 years) and so the validity of use with a younger age group may be questioned. To adjust for the younger age group, two of the measures (RSES and SRS) had small amounts of language changed to certain items. This may have impacted upon the validity and reliability of the measures and a pilot study was not carried out initially to try to ascertain if the measures were indeed understood effectively by children.

2.5.9 Directions for Future Research

Although the present study has added to the knowledge base of processes involved in child perfectionism, there is still much research to be carried out. Many researchers have argued that little research has been carried out in the area (e.g. Flett & Hewitt, 2012) and that there are still many questions left to be answered. Further research with non-US samples may be beneficial so as to ensure findings are more generalisable. Further research with young children would be advantageous due to aetiology indicating that perfectionism has origins in childhood (e.g. Frost, Lahart, & Rosenblate, 1991). Investigation of a wider range of variables so as to further ascertain the processes and mechanisms involved in the aetiology and maintenance of

perfectionism may be helpful. For example, investigating self-concept, which may give a broader understanding of perfectionism. As anxiety has been found to have a significant effect with perfectionism (e.g. Bas, 2011; Hewitt et al., 2002,), use of an anxiety measure may also help explore the processes involved.

Further use of demographic data may also be beneficial. Sex, age, and ethnicity are frequently collated during child research, but few studies appear to have collected information regarding social class. It may be beneficial to analyse any link with socially prescribed perfectionism (SPP), which Hewitt and Flett (1991), describe as a person holding beliefs that others have unrelenting standards for them. A study carried out with adolescents (14-18 years old) from a middle-upper class geographical area, found SPP was associated with emotional distress (Hankin, Roberts, & Gotlib, 1997). Further research comparing levels of perfectionism in differing social class backgrounds may be beneficial.

As much of the available research is quantitative; qualitative or mixed methods research may be useful in furthering understanding. Qualitative research with adults has helped to establish key maintaining factors in perfectionism (Riley & Shafran, 2005). Similar research with children would be helpful in establishing key maintaining mechanisms, which may give richer information for theoretical and clinical purposes. Not only may it be useful to gather qualitative data from children, but also from teachers, with focus groups being conducted. Parental interviews, using quantitative and/or qualitative measures may also be helpful in further strengthening our

understanding of the origins and maintenance of perfectionism to ensure more preventative measures and effective interventions are implemented.

2.5.10 Conclusion

Although there are limitations of the present study, it provides further data to a research field which has unanswered questions. The present study has been able to highlight some of the positive and negative relationships which occur between perfectionism and mood in 9-11 year old children. First of all the study was able to show a significant relationship between self-esteem and mood. Further significant relationships presented between sensitivity to mistakes and mood mediated by self-esteem, and self criticism; and contingent self-esteem, mediated by self-esteem, and self criticism. The study indicated there are adaptive features of perfectionism, such as contingent self-esteem, which was linked to stable mood. Maladaptive dimensions were demonstrated such as sensitivity to mistakes, with high levels of this feature, mediated by higher levels of self-criticism and lower self-esteem, linked with lower mood. The study highlights key relationships and with further quantitative and qualitative research carried out in this age group, preventative educational and clinical approaches could be implemented to ensure maladaptive perfectionism in children is approached in an effective manner.

Table 6: Main Study Findings

Key Points

- There was a significant relationship between self-esteem and mood
- There was a significant relationship between sensitivity to mistakes and mood, mediated by self-esteem
- There was a significant relationship between contingent self-esteem and mood, mediated by self-esteem
- There was a significant relationship between sensitivity to mistakes and mood, mediated by self-criticism
- There was a significant relationship between contingent self-esteem and mood, mediated by self-criticism

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Chapter 3 – Reflective Paper

CONFESSIONS OF A TRAINEE CLINICAL PSYCHOLOGIST: REFLECTIONS ON THE DOCTORAL THESIS JOURNEY

Chapter Word Count: 3,998 (excluding title page, figures, tables, and reference list)

Prepared for Submission to: Reflective Practice (see Appendix 3 for Author Guidelines)

3.0 INTRODUCTION

This paper details the journey I have taken, professionally and personally throughout the doctoral thesis process. It felt important that I was able to write about something truly reflective and personal, as the two previous thesis papers had been more formal in basis. I hoped it would be beneficial for other practitioners in similar situations.

The writing of the reflective paper seemed natural in its process, evidence to me it was truly reflective. The doctoral thesis journey began whilst teaching, where the idea for my empirical research arose. This paper will reflect upon all phases of the research process; from design, to recruitment phase, to write up. And finally bringing it all together and reflecting upon my anxieties around the research process and where it took me to as a trainee clinical psychologist.

3.1 'WHY DID YOU TEAR IT UP?'

Before commencing the doctorate at Coventry University, I had a research project in mind. My research idea was to investigate perfectionism in primary school children having previously worked with this age range whilst teaching and working as an assistant psychologist for a child and adolescent mental health service (CAMHS).

Upon thinking of a research idea, I thought of an incident I had witnessed whilst working as a primary school teacher. I was supply teaching at the time, so I worked across a range of schools. I was teaching a year 5 class. The children were completing a piece of art work. Most of them enjoyed this and happily went out for afternoon break. One girl (aged 10) had done a

beautiful piece of work, but was still at her desk when the rest of the class had joyfully left for outside fun. She then proceeded to rip it up into several pieces and looked distressed. I said 'why did you tear it up?' The girl replied, 'it's not good enough, I'll have to do it again.' 'Can I stay in at break time and do it again please, Mr Wilde?' We had a short sensitive discussion around this and I gently encouraged her to use her break-time for what it was for and she did go outside. This stuck with me. Writing about it now makes me feel upset, my stomach churning. When I thought of this incident, the idea of investigating perfectionism in primary school children seemed important.

3.2 RESEARCH DESIGN AND THESIS PROPOSAL

During February 2012, we were asked to consider our research design in a more formal manner. I met with potential supervisors and discussed research designs. I spent a number of research days over the coming months in the library reading a vast amount of articles. It felt like I was drowning in a sea of journals, I was treading water and getting nowhere. I originally proposed a mixed methods design. The population was to be non-clinical, as using a clinical sample was deemed to be too difficult due to high levels of comorbidity seen in people with maladaptive perfectionism (Shafran, Cooper, & Fairburn, 2002). I felt comfortable regarding the designated population as the literature suggested that more information was needed about the processes involved in perfectionism in young children (Hewitt et al., 2002; Rice & Preusser, 2002).

I was interested in investigating the relationship between perfectionism and other variables, such as self-criticism, with 9-11 year old children. I was proposing collecting quantitative data from children and to use focus groups to enrich data.

However, as time passed the design became problematic. I was advised to change methodology to quantitative. The change in methodology at a late stage in the proposal phase made me feel overwhelmed. At the same time I was completing clinical work and a clinical practice report, so felt pressurised. I spent time away from work and the course, trying to incorporate mindfulness principles. Having fortunately participated in a mindfulness course, provided by Coventry University, I was starting to use the principles to help me cope with stress. The thesis proposal was submitted, though this was surrounded by uncertainty.

3.3 THESIS PROPOSAL GRADE

Having previously passed all assignments, it was a shock to receive a 'fail' for the thesis proposal. Due to the lack of structure I found the thesis proposal difficult, with major grappling over the empirical design. However, I make mistakes, can fail and did, so accepted this. I changed the focus of my literature review, which gave it greater clarity. A systematic review was to be completed - reviewing psychological treatments for maladaptive perfectionism in adults, a potentially useful clinical tool. I also amended other aspects of the proposal where appropriate and resubmitted. My empirical research was to be '*The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism, and Mood in Primary School*

Children'. It was to assess the 9-11 year old age range. As maladaptive perfectionism has links to adverse consequences in adolescence and adulthood (Gnilka, Ashby, & Noble, 2012), and not enough was known about the processes involved in children, I felt it was important to increase the knowledge base so clinical and educational preventative measures could be implemented. Upon return of my resubmission, I passed with good feedback. I was back on-track, for now.

3.4 FIGHTING FIRES

It was now February 2013, so there was sufficient time to complete necessary thesis tasks. However, I frequently put aside commitments due to more imminent demands e.g. clinical work, doctorate assignments, and conference presentations, which I was enjoying. I was aware of time elapsing and somewhere in the back of mind I was worried. I recall a conversation around this with a fellow psychologist:

Me: *'I know I need to be crackin' on with the thesis, but I am busy fighting fires; I'm putting out the little ones close to me (more imminent doctorate assignments), the thesis is the big one at the back.'*

Colleague: *'But the big fire can bring the house down.'*

Me: *'Thanks for that.'*

Of course this meant that I could not pass the doctorate if I did not complete the thesis to a satisfactory standard. I was worried.

3.5 LEARNING AND REFLECTION

Working in CAMHS further strengthened my desire to add to the knowledge base of perfectionism. Some clients in the service exhibited features of maladaptive perfectionism with parental style appearing to be a contributing factor. Theoretical views of perfectionism argue that children feel the need to perform at such a high level otherwise they will not receive love or attention from important others e.g. parents/guardians (Missildine, 1963).

After handing in final non-thesis assignments, I now had one further piece of work to submit, the doctoral thesis. The big fire was now raging and closing in. Although I began the ethics application many months before, I had not submitted. After many changes, I eventually gained ethical clearance in January 2014; with hand in date May 9th, much was still to be done.

Experientially, this was a big learning and development period for me. Feeling fatigued and burdensome from the demands of the clinical doctorate meant I continually set aside aspects of the thesis, such as the ethics application. But perhaps also due to the inner fear I displayed towards the thesis, this was exacerbated by procrastination towards the project and whether or not I had the ability to succeed. Thoughts such as '*is my research design suitable?*' on reflection, deterred me from submitting my ethics application earlier in the process. Gaining ethical approval at such a late stage brought about enormous pressure, which meant many months of working long hours alongside clinical demands. Although I continued to enjoy the doctorate, I was feeling fatigued. This led to increased stress and the need to increase self-care aspects, which had lapsed. The eventual

realisation that I could function effectively as a researcher enabled me to reflect about how I may have approached such a process differently.

Working reflectively in a clinical capacity enabled me to learn more about myself and led to the doctorate being a successful professional and personal learning experience. Having used Kolb's learning cycle (Kolb, 1984) in clinical situations; it is this model, which I used to help reflect on this situation. Although design and submission of ethics was a concrete and active experience, I was experientially involved with, I avoided the *reflective observation* and *abstract conceptualization* stages of the reflective cycle. I did not reflect upon what was occurring and so therefore did not fully understand what was happening; fear and avoidance curtailed this experience, which may have been useful and stemmed later episodes of stress. Without learning, I was unable to implement the *active experimentation* phase of the learning process. Reflection after the event however, will enable me to implement this learning at a later point. For example, if I encounter difficult and stressful projects in the future, I would look to take a step back, think and reflect, communicate my fears and discus in the appropriate setting e.g. supervision and with a better understanding, implement learning points. Hopefully this would lead to less procrastination and a more achievable balance and therefore more manageable stress levels.

3.6 THE BEAST

Having to fully integrate myself into the research process made me start to think about what I needed to complete and how much time I had; on top of working clinically, as I had just begun working in neuropsychology. I felt overwhelmed by the research process and felt it was my weakest area. My thoughts fluctuated about the outcome, from 'I'll pass, I'll be okay', to 'I won't get enough data, I'll have to resubmit.' I was always confident when awaiting doctorate assignment marks, knowing I had passed. This felt different. I did not have much research experience and it was difficult and time consuming; I nicknamed the thesis 'the beast'.

During this period, I attended teaching on writing the reflective paper and read Claire David's (2006) paper. One particular quote resonated with me (p.194):

> *'Furthermore, if I failed the research I would not gain my qualification. By the time I qualified, I had spent nine years working towards the qualification as an undergraduate, assistant psychologist and finally a trainee. To have failed at the final hurdle would have been sickening.*'

I had used similar words on a number of occasions in previous weeks and it was *exactly* how I felt. I too had spent a number of years reaching this point, passing all other doctorate assessments, so I felt to fail at the final stage would be extremely unfair. The thesis continued and although I was enjoying the experience, as I was working on it daily during a seven week research block, it was becoming '*gruelling'* and my concentration levels were diminishing. Self-care was needed.

3.7 SELF-CARE

3.7.1 'I've got a Doctoral Thesis to do.'

I was working in neuropsychology and really enjoying it. The pressure was high, trying to juggle clinical and research demands and I was becoming tired. During the thesis period I was able to carry out my job to a good standard and interact effectively out of work, if nothing out of the ordinary happened and if nobody irritated me. My tolerance and capacity was low. For example, out of work if someone started arguing with me or even if this happened close-by, I walked away. If I was trying to study and someone nearby was making noise, I had to move to another desk, I could only manage working in a quiet environment. Working in neuropsychology I was aware of how cognition worked and how fatigue affected it. Indeed it has been demonstrated that fatigue can impact upon cognitive performance (Kahol et al., 2008). At the end of each week I felt so fatigued, I had little tolerance. For example, in supermarkets if people were choosing items in an area I wanted access to, I was furious that my time was being slowed by them. I often uttered quietly (non-audible level) *'come on, I've got a doctoral thesis to do*'. Basically saying my need was greater than their need due to the pressure I was under. I would normally be more patient. This confirmed to me that I was experiencing high levels of stress and needed to react to this not only for the good of the research project, but for the sake of my own health.

3.7.2 Mindfulness

During the first year our cohort participated in a mindfulness course. Mindfulness has its roots in Buddhist approaches and tries to teach people not to continually be in automatic pilot and to enjoy the present moment, being attentive to what is occurring in a non-judgemental way (Grossman, Niemann, Schmidt, & Walach, 2004). Meditation is a central part of the approach and was first used successfully with chronic pain patients in America (Kabat-Zinn, 1982).

As well as using mindfulness in practice with clients, I personally use mindfulness meditation and practices to help manage my stress levels, which fluctuated at various periods throughout the thesis journey. It helped me to manage my stress during difficult times. From meditation exercises through to showering and walking mindfully to ensure I was enjoying these experiences moment by moment. Indeed as I was enjoying the doctorate so much, I aimed to *savour each moment* whilst it lasted.

For added self-care benefits I also read a mindfulness book my neuropsychology supervisor had bought me, which I treasure. I remember during a particularly difficult day when working on the systematic review and feeling like I was getting nowhere, I opened up the book on a random page. The following comment was present:

> '*Trying too hard to solve a problem often makes it worse.'* (Rowan, 2013, p.46)

This enabled me to reflect that I was too immersed in what I was trying to do and needed to approach it from a different perspective. This enabled me to continue with renewed motivation.

On a further occasion I randomly opened the same book and came across the following extract:

> *'Take a few moments to stop and notice whatever sounds are going on around you at the moment.'* (Rowan, 2013, p.42).

This is something I enjoy during mindfulness practice and reminded me to not only do this during formal practice, but at random moments wherever I was on the journey. This way of being helped me to cope with the stresses and strains of the thesis journey.

3.7.3 Nil Satis Nisi Optimum

Although on occasions I had to reduce social aspects during this busy period, I still attended football matches watching my beloved Everton. *'Nil Satis Nisi Optimum'* is Everton's Latin motto which translates as *'nothing but the best is good enough.'* In the world of perfectionism this would not be a good motto for somebody to have, but unfortunately many do live life in this manner. But in the passion, tradition and joy of Everton Football Club, it works and Everton fans alike truly value the Latin motto.

It was important for me to attend social events/football, as it gave me space and time away from the thesis. The train journey gave me space and time to reflect and be mindful. The occasion itself was joyful and atmospheric, particularly if winning and the social aspects of the day out were also

mentally beneficial. The Mental Health Foundation (n.d.) reported benefits on mental health regarding football spectating, which accurately reflects some of the delirious joy I can experience:

> *'When your team does well, it prompts feelings of happiness, well-being and collective euphoria. Fans 'bask in reflected glory' (BIRG). It has been suggested that 'BIRGing' improves mood both in individuals and in communities. If a team loses a match, however, it does not necessarily have a negative impact on mental health. '*

I do not entirely agree with this as if Everton lose, my mood fluctuates for a short time afterwards and I do not mix as effectively; so it can impact emotionally, cognitively, and behaviourally, though not in a significant manner. The mental health site also describes the relational aspects of attending football matches and this quote resonated with me:

> *'Having strong relationships is known to be a key factor in the maintenance of positive mental health. Football plays an important role in the formation and maintenance of social and familial relationships. Over 90% of people who attend matches go with friends, family or colleagues.'*

Again this was true for me, attending matches with family and friends and enjoying the social contact that comes with it. The article also discusses other benefits, such as a release of cathartic emotion (e.g. when screaming) and that social identity theory where being part of a group in such a strong way, helps people feel belonged and strengthens self-identity. I can identify with this and felt this helped with my psychological balance during thesis write-up. The fact that Everton went on a seven match winning streak and

coupled with this meant feelings of euphoria and social contact with family and friends, strengthened my resolve for the rest of the thesis study block.

3.7.4 Increasing Cerebral Blood Flow

I also listened to music on a number of occasions throughout the thesis write-up. One study (Blood & Zattore, 2001) through use of emission tomography has shown psychophysiological changes in the brain occur whilst listening to music, in areas such as the amygdala and hippocampus and is associated with reward and motivation systems. After listening to music prior to completing work, my motivation levels often felt higher, from disco music to improve mood to classical during preparation for this paper. All of the different self-care factors were important in not only helping me to complete the thesis to a standard deemed good enough, but also to keep my physical and mental wellbeing in a stable of equilibrium.

3.8 REFLECTING IN AND ON ACTION

In schools I reflected during data collection sessions and afterwards. During initial sessions I felt I was not engaging the children effectively enough and during the first two sessions at one school, 12 children said they did not want to participate in the research. I have previously utilised *reflecting in and on action* (Schon, 1991) in clinical practice. During sessions I made small changes to ensure the children felt comfortable. Reflection after the original sessions ensured that I then made further changes such as carrying out warm-up and warm-down exercises, so children felt comfortable whilst participating in the study and after completion.

3.9 FEELING SAD

When scoring measures for the empirical research I found it difficult, in particular when scoring the Short Mood and Feelings Questionnaire (Angold, Costello, & Messer, 1995). I was scoring items such as 'I hated myself' and 'I thought nobody really loved me' and some children were rating this as 'true'. I felt nauseous doing this and felt sad that I could not intervene clinically, though there was some form of support in place for children if required (see appendix 15). Although as a psychologist, clinical and research skills are important, I felt I had to separate myself in this instance and try to learn to accept that I cannot always intervene in situations. Although working as a clinician and researcher have similarities; this was a difference I had not previously experienced and was a further experience I learnt from.

3.10 PERFECTIONISM

As the empirical research investigated perfectionism, I spent some time reflecting upon my own way of working. On reflection of how I work and feel, I concluded that during periods of study and work, I exhibited features of adaptive perfectionism, which is viewed as healthy and has positive links with wellbeing and academic achievement (e.g. Stoeber & Rambow, 2007). I strive for success, but enjoy success and do not fear failure. I failed the thesis proposal and although upsetting, accepted this and moved forward. The thesis I felt, required all aspects of adaptive perfectionism, as I viewed it as a piece of work, which was not only complex and demanding, but was required at a high standard. Having reflected upon my beliefs and fears over

my research skills, I did fear failure early in the process. This way of thinking and feeling, may have exacerbated my levels of stress and started to impact upon me. Behaviourally and mindfully I continued to progress and I shifted my focus away from these thoughts, which helped ground me and enabled me to progress with the research process without ruminating about failure. It did not have to be 'perfect', just 'good enough'.

3.11 PROGRESSION AS A PSYCHOLOGIST AND RESEARCHER

It is important to also reflect upon my skills as a trainee clinical psychologist and as a scientist-practitioner developing research skills. Upon starting the doctorate I felt anxious about my ability to carry out research to a doctorate standard. Early success with a small scale service project with my local employing National Health Service Trust gave me confidence. This was further encouraged by disseminating the findings locally and at conference. However, I still had an underlying anxiety that I would fail the thesis as my research skills were 'not good enough'. I continued to get excellent feedback on my clinical work and clinical practice reports, but this was not enough to be a clinical psychologist. Research on trainee clinical psychologists stress levels and coping mechanisms was carried out by Cushway (1992). Fifty-nine reported psychological difficulties via the general stress questionnaire. The reason for stress was highlighted through factors, such as self-doubt and workload. This was evident for me because of the workload. The study reported coping strategies such as exercise, talking to friends, and supervision. I was limited with exercise due to post viral fatigue, but processing my stress and worries through talking to family and friends was beneficial. Immediate family members telling me 'you can do it' and 'we're

proud of you' made me feel very emotional, in a positive way and helped to motivate me.

Use of research supervision was also helpful in guiding me through the process and strengthening my belief that I could produce a thesis worthy of doctorate level. Experientially, actually carrying out the research saw a big shift in not only my belief about myself as a scientist-practitioner, but also proving I did indeed have the necessary research skills. This was seen through not only how I successfully designed the study, but data collection, analysis and successful write up of the systematic review and empirical paper. In turn this gave me the confidence that only did I have the clinical skills, but also the research skills to become a clinical psychologist. It felt good. And finally my reflective skills which were encouraged and fostered during training have developed further. Not only do I now reflect clinically and personally, but also as a researcher and these areas complement each other to achieve further balance

3.12 CONCLUSIONS

The doctoral thesis journey has been a long and difficult one, at times really stressful. The idea for my empirical research was discussed informally with the course director during interview, so to eventually see it come to fruition felt good.

Professionally and personally my strengths and limitations were laid bare. Physically and cognitively; the journey has been highlighted through a wide range of physical sensations and emotional experiences. I learnt to be aware of this and use effective coping strategies where appropriate, such as

mindfulness. Not only am I now a much more skilled researcher, but in my view a more rounded psychologist. Not only due to the increased range of research skills I now possess, but also because I am now more aware of the clinical implications for research and how I may now approach clinical work differently due to this experience. I'm now more aware of systematic reviews and the importance of these; what is effective and what is not, and the importance of treatment implications. From my empirical research, I am now more aware of underlying mechanisms and processes and to formulate in a careful manner. This is something I will take forward and continue to grow and develop as a researcher and overall as a clinical psychologist, and I look forward to this exciting and enjoyable experience.

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APPENDIX 1 – AUTHOR GUIDELINES: CLINICAL PSYCHOLOGY REVIEW

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CLINICAL PSYCHOLOGY REVIEW

AUTHOR INFORMATION PACK

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APPENDIX 4 – QUALITY CHECKLIST

Area	Quality Check Points	Yes	Partially	Unclear	No	N.A.
Aims/introduction	Is the hypothesis/aim/objective of the study clearly described?					
	Are the main outcomes to be measured clearly described in the Introduction or Methods section?					
Study Population	Was ethical approval obtained?					
	Was informed consent obtained?					
	Is the study population representative of all users, actual and eligible, who may be included in the study?					
	Are inclusion and exclusion criteria definitively outlined?					
	Are the characteristics of the patients included in the study clearly described?					
Internal Validity Bias	Was an attempt made to blind study subjects to the intervention they have received?					
	Was an attempt made to blind those measuring the main outcomes of the intervention?					
	Was compliance with the intervention/s reliable?					
Selection Bias	Does the design or analysis control account for important confounding and modifying variables?					
	Were the participants recruited in an acceptable way?					
	Is the choice of population bias-free?					
Allocation/Confounding Variables	Were the patients in different intervention groups (trials and cohort studies) or were the cases and controls (case-control studies) recruited from the same population?					
	Was treatment adequately randomised?					

Data Collection/Measures	Are data collection methods clearly described?					
	Were the main outcome measures used accurate (valid & reliable)?					
	Is the instrument included in the publication?					
Design	Did the authors use an appropriate method to answer their question?					
	Are the interventions of interest clearly described?					
	Is the research methodology clearly stated at a level of detail that would allow its replication?					
	Are the methods of allocation clearly described?					
	Was the study apparently free of other problems that could put it at a high risk of bias?					
Results	Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?					
	Are the main findings of the study clearly described?					
	Were the statistical tests used to assess the main outcomes appropriate?					
	Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?					
	Are all the results clearly outlined?					
	Are confounding variables accounted for?					
	Are adverse effects reported?					
Discussion	Was the analysis carried out in a way it answered the research question?					
	Do the conclusions accurately reflect the analysis?					
	Are suggestions provided for further areas to research?					

APPENDIX 5 – QUALITY ANALYSIS RESULTS

Quality Analysis		Papers Systematically Reviewed					
Area of Analysis	**Quality Checklist Points of Analysis**	Arpin-Cribbie et al. (2012)	Arpin-Cribble et al. (2008)	Pleva & Wade, (2006)	Radhu et al. (2013)	Riley et al. (2007)	DiBartolo et al. (2001)
Aims/Introduction	Is the hypothesis/aim/objective of the study clearly described?	Yes	Yes	Yes	Yes	Yes	Yes
	Are the main outcomes to be measured clearly described in the Introduction or Methods section?	Yes	Yes	Yes	Yes	Yes	Yes
Study Population	Was ethical approval obtained?	Yes	Unclear	Unclear	Yes	Unclear	Unclear
	Was informed consent obtained?	Yes	Yes	Unclear	Yes	Unclear	Yes
	Is the study population representative of all users, actual and eligible, who may be included in the study?	Yes	Yes	Yes	Yes	Yes	No
	Are inclusion/exclusion criteria definitively outlined?	Partially	Yes	Yes	Yes	Partially	Partially
	Are the characteristics of the patients included in the study clearly described?	Yes	Partially	Yes	Yes	Partially	Partially
Internal Validity Bias	Was an attempt made to blind study subjects to the intervention they have received?	Yes	Yes	Yes	Yes	Yes	Unclear
	Was an attempt made to blind those measuring the main outcomes of the intervention?	Yes	Unclear	Unclear	Yes	Unclear	Unclear
	Was compliance with the intervention/s reliable?	Unclear	Yes	Partially	Partially	Yes	Unclear
Selection Bias	Does the design or analysis control account for important confounding and modifying variables?	Yes	Yes	Unclear	Yes	Unclear	Partially
	Were the participants recruited in an acceptable way?	Yes	Yes	Yes	Yes	Yes	Partially
	Is the choice of population bias-free?	Partially	Partially	Partially	No	Partially	No
Allocation/Confounding Variables	Were the patients in different intervention groups (trials & cohort studies) or were the cases and controls (case-control studies) recruited from the same population?	Yes	Yes	Yes	Yes	Yes	Yes
	Was treatment adequately randomised?	Yes	Yes	Yes	Yes	Yes	Unclear

Data Collection/ Measures	Are data collection methods clearly described?	Yes	Partially	Yes	Yes	Partially	Yes
	Were the main outcome measures used accurate (valid and reliable)?	Yes	Partially	Yes	Partially	Partially	Partially
	Are the instruments included in the publication?	No	No	No	No	No	No
Design	Did the authors use an appropriate method to answer their question?	Yes	Yes	Yes	Yes	Yes	Yes
	Are the interventions of interest clearly described?	Partially	Yes	Partially	Yes	Partially	Yes
	Is the research methodology clearly stated at a level of detail that would allow its replication?	Partially	Yes	Partially	Partially	Partially	Partially
	Are the methods of allocation clearly described?	Yes	Yes	Partially	Yes	Partially	No
	Was the study apparently free of other problems that could put it at a high risk of bias?	Yes	Yes	Yes	Yes	Partially	Partially
Results	Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?	Yes	Yes	Yes	Yes	No	No
	Are the main findings of the study clearly described?	Yes	Partially	Yes	Yes	Yes	Yes
	Were the statistical tests used to assess the main outcomes appropriate?	Yes	Yes	Yes	Yes	Yes	Yes
	Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?	Yes	Yes	Yes	Yes	Yes	Yes
	Are all the results clearly outlined?	Yes	Partially	Yes	Yes	Yes	Yes
	Are confounding variables accounted for?	Unclear	Yes	Unclear	Yes	Partially	Partially
	Are adverse effects reported?	Unclear	Unclear	Yes	Unclear	Unclear	Yes
Discussion	Was the analysis carried out in such a way it answered the research question?	Yes	Yes	Yes	Yes	Yes	Yes
	Do the conclusions accurately reflect the analysis?	Yes	Yes	Yes	Yes	Yes	Yes
	Are suggestions provided for further areas to research?	Yes	Yes	Yes	Partially	No	Partially
Total	**Total and Percentage Mark from Quality Analysis**	**54/66 = 82%**	**52/66 = 79%**	**49/66 = 74%**	**56/66 = 85%**	**40/66 = 61%**	**37/66 = 56%**

Quality Analysis		Papers Systematically Reviewed					
Area of Analysis	**Quality Checklist Points of Analysis**	Kutlesa & Arthur (2008)	Steel et al. (2012)	Egan & Hine (2008)	Ferguson & Rodway (1994)	Glover at al. (2007)	Hirsch & Hayward (1998)
Aims/Introduction	Is the hypothesis/aim/objective of the study clearly described?	Yes	Yes	Yes	Partially	Yes	No
	Are the main outcomes to be measured clearly described in the Introduction or Methods section?	Yes	Yes	Yes	Partially	Yes	Partially
Study Population	Was ethics approval obtained?	Unclear	Unclear	Unclear	Unclear	Unclear	Unclear
	Was informed consent obtained?	Unclear	Unclear	Unclear	Partially	Unclear	Unclear
	Is the study population representative of all users, actual and eligible, who might be included in the study?	Yes	Yes	Yes	Yes	Yes	Yes
	Are inclusion and exclusion criteria definitively outlined?	No	Yes	Yes	Yes	Yes	No
	Are the characteristics of the patients included in the study clearly described?	Yes	Partially	Yes	Yes	Yes	Yes
Internal Validity Bias	Was an attempt made to blind study subjects to the intervention they have received?	N.A.	Yes	N.A.	N.A.	N.A.	N.A.
	Was an attempt made to blind those measuring the main outcomes of the intervention?	N.A.	Unclear	N.A.	N.A.	N.A.	N.A.
	Was compliance with the intervention/s reliable?	No	Yes	Yes	Unclear	Yes	Yes
Selection Bias	Does the design or analysis control account for important confounding and modifying variables?	Yes	Yes	Yes	Yes	Yes	Partially
	Were the participant/s recruited in an acceptable way?	Yes	Yes	Yes	Yes	Yes	Yes
	Is the choice of population bias-free?	No	Partially	Partially	Partially	Partially	Partially
Allocation/Confounding Variables	Were the patients in different intervention groups (trials and cohort studies) or were the cases and controls (case-control studies) recruited from the same population?	No	Yes	N.A.	N.A.	N.A.	N.A.
	Was treatment adequately randomised?	No	Yes	N.A.	N.A.	N.A.	N.A.

Data Collection/ Measures	Are data collection methods clearly described?	Yes	Yes	Yes	Partially	Yes	Partially
	Were the main outcome measures used accurate (valid and reliable)?	Yes	Yes	Yes	Partially	Yes	Yes
	Are the instruments included in the publication?	No	No	No	No	No	No
Design	Did the authors use an appropriate method to answer their question?	Yes	Yes	Yes	Yes	Yes	Yes
	Are the interventions of interest clearly described?	Yes	Yes	Yes	Partially	Yes	Yes
	Is the research methodology clearly stated at a level of detail that would allow its replication?	Yes	Yes	Yes	Partially	Yes	Partially
	Are the methods of allocation clearly described?	Yes	Yes	N.A.	N.A.	N.A.	N.A.
	Was the study apparently free of other problems that could put it at a high risk of bias?	Partially	Yes	Yes	Yes	Yes	Yes
Results	Have actual probability values been reported (e.g. 0.035 rather than <0.05) for the main outcomes except where the probability value is less than 0.001?	Yes	Yes	N.A.	N.A.	Partially	N.A.
	Are the main findings of the study clearly described?	Yes	Yes	Yes	Yes	Yes	Partially
	Were the statistical tests used to assess the main outcomes appropriate?	Yes	Yes	Yes	Partially	Yes	N.A.
	Did the study have sufficient power to detect a clinically important effect where the probability value for a difference being due to chance is less than 5%?	Yes	Yes	N.A.	N.A.	Yes	Unclear
	Are all the results clearly outlined?	Yes	Yes	Yes	Yes	Yes	No
	Are confounding variables accounted for?	Yes	No	Yes	Partially	Yes	Yes
	Are adverse effects reported?	Yes	Yes	Yes	Yes	Unclear	Yes
Discussion	Was the analysis carried out in such a way it answered the research question`?	Yes	Yes	Yes	Yes	Yes	No
	Do the conclusions accurately reflect the analysis?	Yes	Yes	Yes	Yes	Yes	Partially
	Are suggestions provided for further areas to research?	Partially	Yes	Yes	Yes	Partially	No
Total	**Total and Percentage Mark from Quality Analysis**	**44/62 = 71%**	**54/66 = 82%**	**45/52 = 87%**	**36/52 = 69%**	**45/56 = 80%**	**27/52 = 52%**

APPENDIX 6 – ETHICAL APPROVAL

The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism, and Mood in Primary School Children
P13788

REGISTRY RESEARCH UNIT

ETHICS REVIEW FEEDBACK FORM

(Review feedback should be completed within 10 working days)

Name of applicant: Damian Wilde .....

Faculty/School/Department: [Faculty of Health and Life Sciences] Psychology & Behavioural Sciences

Research project title: The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism, and Mood in Primary School Children

Comments by the reviewer

1. Evaluation of the ethics of the proposal:

The proposal is sound.

2. Evaluation of the participant information sheet and consent form:

These are generally good and only need minor amendment. As noted by LT add an area for participant codes to the PIS and information on external sources of support. Add withdrawal information to the PIS and consent form. On the parental consent form add an email contact and correct the spelling of anonymised.

3. Recommendation:

(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

X	Approved - no conditions attached
	Approved with minor conditions (no need to re-submit)
	Conditional upon the following – please use additional sheets if necessary (please re-submit application)
	Rejected for the following reason(s) – please use other side if necessary
	Not required

Name of reviewer: Anonymous.....

Date: 10/01/2014 .....

APPENDIX 7 – RESEARCH LETTER FOR SCHOOLS

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

17th January 2014

Dear Head Teacher,

I am writing to see if your school would be interested in taking part in my research study. My name is Damian Wilde and I am a Trainee Clinical Psychologist based at Coventry University and The University of Warwick. I am employed by Coventry and Warwickshire NHS Partnership Trust, working clinically and I attend university completing a clinical psychology doctorate. As part of the award of the doctorate I have to complete a piece of research. My area of investigation is:

The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism and Mood in Primary School Children

Information and Rationale for the Research

I previously worked as a primary school teacher and am interested in how children strive for success and the impact of this. Much of the existing research with adults indicates that those who strive for success and do not fear failure, may feel motivated, may have high self-esteem and may perform well academically. This type of perfectionism is termed adaptive perfectionism and many researchers argue it can be beneficial. The unhelpful type of perfectionism - maladaptive perfectionism, is associated with low self-esteem and may hinder academic progress. Research with adolescents and adults indicates this type of perfectionism may also be linked with factors such as low mood and anxiety.

However, little is known about perfectionism and how this may be linked to personality characteristics such as self-esteem. Gaps in the research field indicate more research with children would be useful. More knowledge and information may increase our understanding of how perfectionism affects children of school age. I am researching the 9-11 year age group.

What's involved in the Study?

The study requires each child to complete four different questionnaires. A child will be presented with various statements, such as 'once I do well at something, I am pleased'. Each statement has a choice of responses, for example, 'agree' or disagree'. There are normally four-five response options; with a child placing a tick in a box to the option which best describes them.

If you agreed to be a participating school and parental and child consent had been gained, all children who had given consent could (depending on the school's convenience) complete the data set together and so would hopefully ensure only one visit to your school.

Research Team

I am the principal researcher for the study and I have three supervisors based at Coventry University. Jacky Knibbs is a clinical psychologist and tutor on the clinical psychology doctorate course. Dr Ian Hume is a research tutor on the clinical psychology doctorate course. And Dr Laura Taylor is associate head of the psychology and behavioural sciences department.

Ethics, Confidentiality and Consent

If you give permission for your school to take part, child and parental consent would be required. I have compiled information and consent letters for parents and children and data collection would only commence if consent had been given by parents and children. All photocopying and postal costs would be incurred by the university.

Ethical approval for the research has been granted by Coventry University. Ethical research guidelines recommended by the British Psychological Society (BPS) would be strictly adhered to. If at any stage (if consent has been gained) children wanted to withdraw from the study, their participation would be immediately stopped and data collected from them would not be used. What is involved in completing the questionnaires will be clearly explained to children (pupil information sheet provided) and they will be debriefed afterwards (debrief sheet provided) to ensure their wellbeing. It is anticipated that this would take approximately 25-30 minutes time to complete the questionnaires, plus some short additional time to give instructions, answer any questions and debrief.

If you agreed to be a participating school in the study, children's data sets would be stored confidentially. Children's names would be anonymised in all written documents and publications. Also, the name of your school would be anonymised in all publications.

If children decide after completing the data set they wish to withdraw their data, they can do so (they have four weeks) by having a parent or guardian (or the school) contact me with their participation code (stated on their pupil/participation information sheet given to each participating pupil) and their data will be securely destroyed. When the research is complete, any data sheets used will be securely destroyed.

DBS Clearance

As I work clinically, I received CRB clearance at the beginning of my post in September 2011. However, my current placement (working within a different trust - University Hospitals Coventry and Warwickshire NHS Trust) required a DBS check, which came back clear in September 2013, which I am happy to present to you.

Dissemination and Additional Session

The empirical research will be written up and form part of a doctoral thesis being submitted to The University of Warwick. I will also be attempting to have the research published in a journal.

If your school takes part in the study, I would be happy to return to the school after the completion of the research to report the findings.

Also, I appreciate that participating will be an extra demand on the school, so would be pleased to also offer a session to staff or pupils e.g. on wellbeing or another topic if this would be helpful.

What will happen next?

I will be in-touch shortly via telephone to ascertain if your school is interested in being part of this exciting new development in child research. If you have any questions regarding the study, please do not hesitate to contact me on the above telephone number or via e-mail (wilded@coventry.ac.uk). I look forward to speaking with you soon.

Yours sincerely

Damian Wilde
Trainee Clinical Psychologist

APPENDIX 8 – PARENTAL INFORMATION/CONSENT LETTER

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Dear Parent/Carer,

My name is Damian Wilde and I am a Trainee Clinical Psychologist based at Coventry University and The University of Warwick. I am employed by Coventry and Warwickshire NHS Partnership Trust, working clinically and I attend university completing a clinical psychology doctorate. As part of the award of the doctorate I have to complete a piece of research and I am writing to you to ask for consent for your child to take part in the study. My area of investigation is:

The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism and Mood in Primary School Children

Information and Rationale for the Research

I previously worked as a primary school teacher and was interested in how children strive for success and the impact of this. Much of the existing research with adults indicates that those who strive for success and do not fear making mistakes or fear failure may feel motivated, may feel good about themselves and may perform well. This type of perfectionism is called adaptive perfectionism and many researchers say it can be helpful. The not so helpful type of perfectionism 'maladaptive perfectionism' may be associated with low self-esteem and may hinder academic progress. Research with adolescents and adults shows that this type of perfectionism may also be linked to difficult emotions, such as low mood and anxiety.

However, little is known about perfectionism and how this may be linked to personality characteristics such as self-esteem. Gaps in the research field indicate more research with children would be useful. More knowledge and information may increase our understanding of how perfectionism affects children of school age.

The study requires each child to complete four different questionnaires. A child will be presented with various statements, such as 'once I do well at something, I am pleased'. Each statement has a choice of responses, for example, 'agree' or disagree'. There are normally four-five response options; with a child placing a tick in a box to the option which best describes them.

Research Team

I am the principal researcher for the study and I have a supervisory team based at Coventry University. Academic supervision will be provided by Dr Laura Taylor, Associate Head of the Psychology and Behavioural Sciences Department and Dr Ian Hume, a Research Tutor on the Clinical Psychology Doctorate Course. Supervision from a clinical perspective will be provided by Jacky Knibbs, Consultant Clinical Psychologist and Tutor on the Clinical Psychology Doctorate Course. If you have any questions regarding the research, please do not hesitate to contact me on the above telephone number or e-mail me at wilded@coventry.ac.uk

Ethics, Confidentiality and Consent

As your child is under 16 years of age, parental and child consent must be sought. Ethical approval for the research has been granted by Coventry University. Ethical research guidelines recommended by the British Psychological Society (BPS) will be strictly adhered to. If at any stage (if consent has been gained) your son or daughter wishes to withdraw from the study, their participation will be immediately stopped and data collected from them will not be used. What is involved in completing the questionnaires will be clearly explained to children (explained verbally and via a written pupil information sheet) and they can ask me any questions they want to. This will take place at school during normal school hours. It is anticipated that this will take approximately 30 minutes to complete the questionnaires, plus some additional time for instructions and debriefing. If there is anything at the end of the session they would like to discuss, it will be explained to them that they can speak to myself, a teacher or yourself.

All of your child's information will be kept confidentially and anoymised in all written documents and publications. Children will only be asked to state their sex, age, and school (school name will be anonymised in all publications) on the pupil information sheet and not asked to write their name (they will have a participant code that cannot be linked to their name). They will be also asked to complete a brief, simple consent form, so parental and child consent has been gained. Paper documentation will be securely destroyed at the end of the research process.

Publications

The research will form part of a doctoral thesis and be submitted to The University of Warwick. I will also attempt to have the research published in a journal. But as stated above, children's names will not be reported in any form of publication.

Withdrawal

Your child's questionnaire data can be withdrawn. If they are completing the questionnaires and decide they do not want to continue, data collection will be stopped immediately and data destroyed if they wish. If after completing the questionnaires, your child wished for their data not to be used, please contact me (with your child's participation code) and data will not be used in the study and questionnaires destroyed immediately (you would have four weeks to do this).

If you give consent for your child to take part in the study, please complete the details below and send back the consent form in the envelope in the next *one – three days* (to be given to class teacher).

Thank you for your time in reading this letter and if you have any questions, please do not hesitate to contact me.

Yours sincerely

Damian Wilde
Trainee Clinical Psychologist

✂.....

Parental Consent Form

I have read and understood the letter requesting consent for my child to take part in the study: *The Relationship between Multidimensional Perfectionism, Self-esteem, Self-criticism and Mood in Primary School Children*

I ..... Parent/Guardian/Carer, give permission for ..... to take part in the study.

Signed ..... Date: .....

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APPENDIX 9 – PARTICIPANT INFORMATION SHEET

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Pupil Information Sheet ☺

Participant Code: ☐ **School:** _____

Sex: Boy ☐ Girl ☐ (please tick in the right box) **Age:** _____

About the Project

I am interested in your views on how hard you work and how this may feel and I have asked you to take part as I am interested in the views of children aged 9-11 years. The information I collect will hopefully give us more knowledge about how children work and how they feel. I plan to write up the results for my doctorate qualification at university and for a children's journal, which teachers and doctors may read. Hopefully this will help other children.

What do I have to do?

During the short session, I will be asking you to complete four different questionnaires. There are instructions on each one, but I will also explain what to do before you start. There are no right and wrong answers, just answer what you think or feel. Also, there is no rush to finish it, take your time!

Do I have to take part?

No you do not. It is up to you if you want to complete these questionnaire sheets, so if you do not want to, that is fine. If you have started, but do not want to carry on, please just tell me and you can then stop what you are doing and go back to class. If you complete the questionnaires, but do not wish for them to be used, please either tell me at the time or if you decide afterwards, inform your parent/guardian or teacher who can contact me (telling them your participant code). You would have a four week time limit to do this (from today). Your questionnaires would then be destroyed if you wanted. And remember if you do not want to take part or change your mind, you do not have to explain why.

What happens to my questionnaires?

Nobody will be told your answers. I am the only person who will see your questionnaire sheets and I will not know you completed them because your name will not be on the sheets, just your sex (whether you are a boy or girl), age and school.

Unsure about anything or need support?

If you are not sure about anything, please ask me any questions you want to! If there is anything that you want to discuss about what you have done in this session, please speak to me, your teacher or your parent or guardian.

Okay, if you understand everything and feel comfortable, please complete the sheet which is titled 'consent' and if you give consent, then you can start completing the questionnaires.

Thank-you – Damian ☺

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009

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APPENDIX 10 – CHILD CONSENT FORM

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Child Consent Form

	Please tick ✓
1. I have read and understood the pupil information sheet and have had the opportunity to ask questions.	☐
2. I understand that I do not have to fill out the questionnaires and that I can stop at any time and go straight back to class	☐
3. I understand that all the answers I give will stay private	☐
4. I understand that even if I complete the questionnaires I can ask for my information not to be used (without giving an explanation) and have the questionnaires destroyed immediately	☐
5. I agree to take part in the research study	☐

- Remember, you do not have to complete the questionnaires and can stop if you have started without giving a reason why. Also, if you decided after finishing the questionnaires you do not want your answers to be used in the study, please say so and I will destroy the questionnaires.

  If you decide in the next few days or weeks you do not want your questionnaires to be used in the study, tell your parent/guardian or teacher (giving them your participant code) and they will contact me and I will remove them from the study; you would have four weeks from today to do this.

Name of Pupil: ..... Date: .....

Name of Researcher: Damian Wilde Signature of researcher: .....

Date: .....

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

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APPENDIX 11 – ADAPTIVE/MALADAPTIVE PERFECTIONISM SCALE

Adaptive and Maladaptive Perfectionism Scale

Please read each statement. **Circle** the answer that best describes you

.

If you think that the statement is really **unlike** you, circle **1**.
*If you think that the statement is somewhat **unlike** you, circle **2**.*
If you think that the statement is somewhat **like** you, circle **3**.
If you think that the statement is really **like** you, circle **4**.

1 = really unlike me
2 = somewhat unlikeme
3 = somewhat like me
4 = really like me

1.	I feel super when I do well at something.....	1	2	3	4
2.	I am fearful of making mistakes.....	1	2	3	4
3.	I like for things to always be in order.....	1	2	3	4
4.	I like to be praised for my work because then others will want to be like me.....	1	2	3	4
5.	I do not get mad if I make a mistake.....	1	2	3	4
6.	I take a long time to do something because I check it many times...	1	2	3	4
7.	Once I do well at something, I am pleased.....	1	2	3	4
8.	When I make a mistake, I feel so bad that I want to hide.....	1	2	3	4
9.	I always make a list of things and check them off after I do them...	1	2	3	4
10.	I do not get excited when I do a good job.....	1	2	3	4
11.	I do good work so that others think I am great.....	1	2	3	4
12.	I get mad when I see a mistake in my work.....	1	2	3	4
13.	I have certain places where I always put my things.....	1	2	3	4
14.	I never feel good about my work.....	1	2	3	4
15.	Mistakes are O.K. to make.....	1	2	3	4
16.	I want to be known as the best at what I do.....	1	2	3	4
17.	I become sad when I see a mistake on my paper.....	1	2	3	4
18.	I like to help others after I do something well.....	1	2	3	4
19.	I want to be perfect so that others will like me.....	1	2	3	4
20.	I notice more what I do right than what I do wrong.....	1	2	3	4
21.	After doing an activity, I feel happy.....	1	2	3	4
22.	I cannot relax until I have done all my work.....	1	2	3	4
23.	When one thing goes wrong, I wonder if I can do anything right.....	1	2	3	4
24.	My work is never done well enough to be praised.....	1	2	3	4
25.	I only like to do one task at a time.....	1	2	3	4
26.	Making one mistake is as bad as making ten mistakes.....	1	2	3	4
27.	I like to share my ideas with others.....	1	2	3	4

APPENDIX 12 – ROSENBERG SELF-ESTEEM SCALE

ROSENBERG SELF-ESTEEM SCALE

Please place a tick in the appropriate box to say whether you strongly agree, agree, disagree, or strongly disagree with the statements below.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole I am satisfied with myself				
2. At times I think I am no good at all				
3. I feel I have a number of good qualities				
4. I am able to do things as well as most other people				
5. I feel I do not have much to be proud of				
6. I certainly feel useless at times				
7. I feel that I am equally as worthwhile as others				
8. I wish I could have more respect for myself				
9. All in all I tend to feel that I am a failure				
10. I take a positive attitude towards myself				

APPENDIX 13 – SELF-RATING SCALE

SELF-RATING SCALE

Please respond to the following questions with respect to the scale below.

1 **2** **3** **4** **5** **6** **7**
Strongly Disagree Strongly Agree

1. When I am with other people I feel weak and not liked. _____

2. If others criticise me, they must be right. _____

3. I can't stand weaknesses, defects and mistakes. _____

4. I often feel as though I am not as good as other people. _____

5. At times I have been so ashamed I just wanted to hide. _____

6. Sometimes I feel completely worthless. _____

7. I am no more special than anyone else. _____

8. Others are right in criticising me. _____

APPENDIX 14 – SHORT MOOD AND FEELINGS QUESTIONNAIRE

Moods and Feelings Questionnaire (7-18)

This form is about how you might have been feeling or acted recently.
Please check how much you have felt or acted this way in the past two weeks

	0 Not True	1 Sometimes	2 True
I felt miserable or unhappy.	☐	☐	☐
I didn't enjoy anything at all.	☐	☐	☐
I felt so tired I just sat around and did nothing.	☐	☐	☐
I was very restless.	☐	☐	☐
I felt I was no good anymore.	☐	☐	☐
I cried a lot.	☐	☐	☐
I found it hard to think properly or concentrate.	☐	☐	☐
I hated myself.	☐	☐	☐
I felt I was a bad person.	☐	☐	☐
I felt lonely.	☐	☐	☐
I thought nobody really loved me.	☐	☐	☐
I thought I would never be as good as other kids.	☐	☐	☐
I did everything wrong.	☐	☐	☐

Score: _____

Angold, A., Costello, E. J., Messer, S. C., Pickles, A., Winder, F., & Silver, D. (1995)

APPENDIX 15 – PARTICIPANT DEBRIEF SHEET

Coventry University
Priory Street, Coventry CV1 5FB
Telephone 024 7688 8328
Fax 024 7688 8702

Programme Director
Doctorate Course in Clinical Psychology
Dr Eve Knight
BSc Clin.Psy.D. CPsychol

THE UNIVERSITY OF WARWICK

Coventry University

Debrief Sheet for Children

Questionnaires

Okay, if you have managed to finish completing all four questionnaires, thank you! Don't worry if you haven't, that is fine and thank you for making the effort to come along ☺

Remember, if you do not want your questionnaires to be used, please say so and I will destroy them. If you decide some days/weeks after we have finished you do not want your questionnaires to be used in the study, please get your parent/guardian or teacher to contact me (with your participation code – which is on your pupil information sheet) and I will then destroy your questionnaires and they would not be used in the study; you would have four weeks from today to do this.

Feeling okay?

If you are feeling okay and happy to go back to class, please do so ☺

Feeling a little worried or upset?

If you are feeling a little worried or upset about any questions you have answered, please let me know if you want to. I am happy to talk to you about any concerns or if you would prefer you can chat to your class teacher or another member of staff you are comfortable talking to. You can also speak to your parent/s or carer/s. If you are not sure who to speak to, please ask me and we can have a chat if you would like.

Alternatively, if you wanted to talk to someone and would not be comfortable talking to a teacher or someone else, you can always ring ChildLine on ☎ 0800 1111 who you can chat to about any sort of problem or worry no matter how big or small.

Question after we have finished?

If you have any other questions, your teachers and parent/s or carer/s have my contact details and can get in-touch with me.

Thank you very much for your time and hopefully this will help to give us more information about how children work and feel in and out of school.

Thanks - Damian

Dean of Faculty of Health and Life Sciences
Dr Linda Merriman Mphil PhD DpodM CertEd Coventry University Priory Street Coventry CV1 5FB Tel 024 7679 5805

Head of Department of Psychology
Professor James Tresilian BSc PhD University of Warwick Coventry CV4 7AL Tel 024 7657 3009