



THE TRANSDIAGNOSTIC PROCESS OF PERFECTIONISM

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Abstract: The transdiagnostic approach to theory and treatment of psychological disorders is gaining increasing interest. A transdiagnostic process is one that occurs across disorders and explains their onset or maintenance. The purpose of this review is to provide evidence that perfectionism is a transdiagnostic process that it is elevated in anxiety disorders, eating disorders, depression, obsessive compulsive personality disorder and somatoform disorders. Data are also reviewed to show that perfectionism can explain aetiology as it is a prospective predictor of depression and eating disorders. Perfectionism is also demonstrated to predict poorer outcome to treatment for anxiety disorders, eating disorders and depression, suggesting the need for specific treatment of perfectionism. Evidence is provided to demonstrate that perfectionism can be successfully treated with cognitive behavioural therapy which results in reduction in psychopathologies. Clinical guidelines are outlined to assist in treatment planning for individuals with elevated perfectionism.

Keywords: Perfectionism; transdiagnostic; anxiety; depression; eating disorder; somatoform disorder.

El proceso transdiagnóstico del perfeccionismo

Resumen: El enfoque transdiagnóstico sobre la teoría y el tratamiento de los trastornos psicológicos está generando un interés creciente en la literatura. Un proceso transdiagnóstico es aquel que se da a través de los trastornos y explica su inicio o mantenimiento. El objetivo de esta revisión consiste en aportar evidencia sobre el perfeccionismo como un proceso transdiagnóstico que se encuentra elevado en los trastornos de ansiedad, los trastornos alimentarios, la depresión, el trastorno de personalidad obsesivo-compulsivo y los trastornos somatoformes. Revisamos la evidencia empírica para mostrar que el perfeccionismo puede explicar la etiología como predictor prospectivo de la depresión y los trastornos alimentarios. También se ha demostrado que el perfeccionismo predice un peor resultado terapéutico del tratamiento de los trastornos de ansiedad, los trastornos alimentarios y la depresión, sugiriendo la necesidad de un tratamiento específico del perfeccionismo. Proporcionamos evidencia para demostrar que el perfeccionismo puede ser tratado con éxito mediante terapia cognitivo conductual y que el tratamiento del perfeccionismo produce reducciones en un rango amplio de psicopatologías. Se describen directrices clínicas para asistir en la planificación del tratamiento en individuos con elevados niveles de perfeccionismo.

Palabras clave: Perfeccionismo; transdiagnóstico; ansiedad; depresión; trastorno alimentario; trastorno somatoforme.

In a recent review of transdiagnostic treatments for anxiety and depression (Craske, 2012), two forms of therapy were discussed. The first was generic cognitive behaviour therapy (CBT)

approaches which focus on mechanisms related to managing threat situations and response to emotions. The second form of transdiagnostic therapy included acceptance based approaches that tackle experiential avoidance, such as mindfulness-based stress reduction and Acceptance and Commitment Therapy. The need for new directions in transdiagnostic research was recognised, especially with respect to developing

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therapies that can successfully target *both* anxiety and depression. As part of this new direction, it was suggested that such a therapy should be able to work with individual differences. The purpose of this paper is to suggest that perfectionism represents a promising transdiagnostic process which can lead to the development of effective transdiagnostic therapies, of relevance to not only anxiety and depression, but to eating disorders as well (Egan, Wade, & Shafran, 2011). Further, perfectionism can be conceptualised within a framework that can form the basis of an individualised case conceptualisation which will generate an individualised therapy approach. Therefore a second aim of this paper is to consider the clinical implications of perfectionism as a transdiagnostic process.

PERFECTIONISM AS A TRANSDIAGNOSTIC MECHANISM

Definition of a transdiagnostic process

A transdiagnostic process that occurs across disorders is «*an aspect of cognition or behaviour that may contribute to the maintenance of a psychological disorder*» (Harvey, Watkins, Mansell, & Shafran, 2004, p. 14). A transdiagnostic process is seen a major factor that can explain the maintenance of numerous disorders that an individual may experience. If we can understand a process that is cutting across a range of disorders, this holds important information regarding prevention and treatment of complex psychopathology.

There has been an increasing interest in the transdiagnostic approach to theory and treatment of common underlying processes present across diagnostic categories. One of the first transdiagnostic theories included clinical perfectionism as one of the core processes maintaining all eating disorders (Fairburn, Cooper, & Shafran, 2003). The transdiagnostic theory of eating disorders has been found to have validity (Hoiles, Egan, & Kane, 2012) and both efficacy and effectiveness treatment studies have shown around 50% of participants to have good outcome when their body mass index is above

17.5 (Byrne et al., 2011; Fairburn et al., 2009). This transdiagnostic approach has explicitly taken the emphasis away from diagnostic categories in eating disorders which have been argued to be flawed and not representing clinical presentations. Instead the transdiagnostic approach focuses on targeting factors that maintain the eating disorder, rather than which diagnosis the individual meets (Fairburn et al., 2003). Other transdiagnostic treatments that have been found to be effective include transdiagnostic CBT for anxiety disorders developed by Norton and colleagues (e.g., Norton & Philipp, 2008), and Craske et al's Coordinated Anxiety Learning and Management (CALM) (Craske et al., 2011; Roy-Byrne et al., 2010). Furthermore, the transdiagnostic unified treatment protocol for mood and anxiety disorders has evidence of efficacy for psychopathology (Bossieau, Farchione, Fairholme, Ellard, & Barlow, 2010; Ellard, Fairholme, Bossieau, Farchione, & Barlow, 2010; Farchione et al., 2012).

What all of the transdiagnostic approaches to treatment have in common is the notion that addressing critical processes that maintain a range of disorders holds promise in representing an effective and time efficient treatment for comorbid disorders rather than utilising a single disorder or numerous disorder specific interventions in a sequential fashion. Arguably, they are also easier to disseminate and therefore may be more frequently implemented in clinical practice. Consequently, there are two main rationales behind transdiagnostic treatments: (1) the ability to treat comorbidity and (2) practical efficiency and cost-effectiveness.

Transdiagnostic treatment can address comorbidity

The argument regarding transdiagnostic approaches having the ability to address comorbidity is based on the notion that comorbidity occurs because disorders share maintaining mechanisms (Harvey et al., 2004). Comorbidity is the norm in clinical practice and there is extensive data to show that the majority of individuals seeking treatment meet multiple disorders rather than single diagnoses (e.g., Kes-

sler et al., 2005). Barlow et al. (2011) argue transdiagnostic treatment is justified on this basis and that the nature, aetiology and structure of disorders are highly similar and overlapping in nature. Consequently, transdiagnostic treatment is designed to be effective for multiple disorders rather than just one disorder. This is important, as to date while there are extensive guidelines for evidence based treatments for specific, single disorders (e.g., NICE guidelines), there are currently no evidence based guidelines regarding what treatment protocols are effective when their client has multiple disorders. The absence of such empirically based guidelines for comorbidity may be one reason that evidence-based interventions are not routinely implemented in clinical practice (see Shafran et al., 2009).

The lack of evidence based guidelines regarding comorbidity results in clinicians being faced with a dilemma of needing to choose one disorder specific protocol, and hope that the treatment of one disorder may impact on the other disorders. While some evidence exists to show that a disorder-specific approach for anxiety disorders can decrease comorbid depression (Tsao, Mystkowski, Zucker, & Craske, 2002), our understanding of how efficiently and effectively it can do this compared to a transdiagnostic approach is unknown. Furthermore, Craske (2012) has argued that even though there is evidence that some comorbid conditions can reduce with the successful treatment of one disorder, it is unusual for all disorders to remit and they may return over time (Brown, Antony, & Barlow, 1995) and simultaneous application of more than one disorder specific protocol simultaneously does not enhance outcome (Craske et al., 2007). Addressing multiple disorders with a single approach is where transdiagnostic therapy holds significant promise.

Transdiagnostic treatment has practical efficiency and cost-effectiveness

The second argument that is important in considering a rationale for the transdiagnostic approach to treatment is that on a practical basis, providing one treatment, with one set of

principles to address key constructs across multiple disorders is easier; more cost effective, easier to disseminate and more efficient than utilising many specific, disorder based protocols. For example, if a client met four diagnoses, then according to a single disorder based approach, the individuals would receive treatment for each disorder in a sequential fashion, where the disorder that is interfering most with the individual would be targeted first, followed by the other disorders. The problem with this approach is that in reality clinicians are not able to implement disorder based protocols in a sequential fashion as due to time constraints it is impractical and too expensive; for example to deliver four evidence based treatment protocols of an average duration of 12 weeks would require 48 weeks of therapy time, which in most clinical settings is unfeasible.

In addition to increased time and cost efficiency, it may be practically easier to train clinicians in the principles of one transdiagnostic treatment and one set of treatment principles, than multiple disorder based approaches. Finally, if symptom relief across several disorders could be achieved by one transdiagnostic treatment in a shorter time period than employing single disorder based protocols in a sequential manner, this is a more ethical treatment as it holds promise in reducing a wider range of psychopathology in a shorter time period. Clearly there are numerous general arguments that support the transdiagnostic approach to theory and treatment of psychopathology and these are described elsewhere in this special issue. We turn next to the definition of perfectionism and why it can be considered as one example of a transdiagnostic process.

Definitions and measures of perfectionism

The predominant measures of perfectionism are the two widely used Multidimensional Perfectionism Scales (MPS); the FMPS (Frost et al., 1990) and the HMPS (Hewitt & Flett, 1991a). The FMPS consists of 6 subscales; Personal Standards (PS; setting high standards), Concern over Mistakes (CM; negative reactions to mistakes), Doubts about Actions (DA; doubting ones

performance), Parental Expectations (PE; parents setting high standards), Parental Criticism (PC; parents being critical of mistakes), and Organisation (O; organisation and neatness). The HMPS (Hewitt & Flett, 1991a) has 3 subscales; *self-oriented perfectionism* (SOP; setting high standards for achievement and self-criticism over standards); *other-oriented perfectionism* (OOP; high standards for others) and *socially-prescribed perfectionism* (SPP; perceiving others hold high standards for the individual).

There is extensive evidence of reliability and validity of both scales (Enns & Cox, 2002). Factor analytic studies have found a consistent two factor solution of 'positive striving' (PS, O and OOP) and 'maladaptive evaluative concerns' (CM, DA, PC, PE, SPP and SOP) (e.g., Bieling, Israeli, & Antony, 2004). There has been debate over the degree to which positive achievement striving can be considered to be adaptive, and while there is some evidence for this construct being associated with positive outcomes (see Stoeber & Otto, 2006 for a review), others have argued that no dimensions of perfectionism are positive (e.g., Flett & Hewitt, 2005). Indeed there is evidence that the positive achievement striving dimension of perfectionism is associated with eating disorder pathology (e.g., Bardone-Cone et al., 2007), thus providing evidence that this dimension is not universally 'positive'.

A competing view of perfectionism was developed out of the recognition of the need for a definition that is linked to theory of the maintenance of perfectionism and strategies designed to treat perfectionism rather than being driven by measurement as in the case of the multidimensional approach (Shafran & Mansell, 2001). Perfectionism of particular clinical relevance is termed '*clinical perfectionism*', and involves the determined pursuit of demanding standards despite negative effects and basing self-worth on achievement of those standards (Shafran, Cooper, & Fairburn, 2002). Clinical perfectionism is therefore seen as involving the main components of setting high personal standards and self-criticism over mistakes, and has sometimes been operationalized and measured by subscales such as a combination of Personal Standards and Concern over Mistakes on the FMPS. To date there is one measure of clinical

perfectionism that has been developed; the 12 item Clinical Perfectionism Questionnaire (CPQ; Shafran, Cooper, & Fairburn, in preparation, cited in Riley, Lee, Cooper, Fairburn, & Shafran, 2007). The Clinical Perfectionism Questionnaire measures striving to meet standards and the effect on self-esteem when the person feels they have not met their standards (Riley et al., 2007) and has a time-frame which enables changes with therapy to be assessed. There is evidence for the Clinical Perfectionism Questionnaire having good reliability and concurrent validity with the FMPS in eating disorder and community samples (Chang & Sanna, 2012; Egan et al., in preparation; Dickie, Surgenor, Wilson, & McDowall, 2012; Steele, O'Shea, Murdock, & Wade, 2011).

EVIDENCE THAT PERFECTIONISM IS A TRANSDIAGNOSTIC PROCESS

The evidence for perfectionism, as indicated by the measures discussed above, as being elevated across disorders and as a predictor of treatment outcome will be reviewed. Evidence demonstrating that the treatment of perfectionism results in reductions of a wide range of symptoms of psychopathology will be considered in addressing the second aim of this review. Taking these different sources of evidence together can suggest that perfectionism is a transdiagnostic process that, if successfully addressed in treatment, has the potential to reduce Axis I psychopathology.

An extensive review demonstrating that perfectionism is elevated across anxiety, depression and eating disorders has previously been conducted (Egan et al., 2011). In this section we will summarise this evidence, along with more recent studies that have been published since the review and also consider other areas that were not included in the previous review (e.g., somatoform disorders).

Anxiety disorders

Perfectionism is significantly elevated in Obsessive-Compulsive Disorder (OCD), Social

Anxiety, Panic Disorder, Generalised Anxiety Disorder (GAD) and Post Traumatic Stress Disorder (PTSD). There is no evidence that perfectionism is significantly elevated in specific phobia (Antony et al., 1998). Several studies have found a significant correlation between perfectionism and OCD. Personal Standards and Concern over Mistakes on the FMPS and socially-prescribed perfectionism on the HMPS is significantly elevated in OCD compared to controls (Antony, Purdon, Huta, & Swinson, 1998; Buhlmann, Etcoff, & Wilhelm, 2008; Frost, Steketee, Cohn, & Griess, 1994; Frost & Steketee, 1997; Sassaroli et al., 2008). Patients with panic disorder (with or without agoraphobia) also have significantly higher scores on Personal Standards, Concern over Mistakes and socially-prescribed perfectionism compared to controls (Antony et al., 1998; Frost & Steketee, 1997; Iketani et al., 2002). Similarly, individuals with social anxiety score significantly higher on concern over mistakes and socially-prescribed perfectionism compared to healthy controls (Antony et al., 1998; Juster et al., 1996; Saboonchi, Lundh, & Ost, 1999).

There is evidence of a positive correlation between worry and perfectionism in non-clinical samples (e.g., Kawamura, Hunt, Frost, & DiBartolo, 2001; Stoeber & Joorman, 2001). There is only one study to date that has examined perfectionism in a clinical GAD sample, where Personal Standards, Concern over Mistakes and Clinical Perfectionism Questionnaire scores were found to significantly predict pathological worry in 36 people with a diagnosis of GAD (Handley, Egan, Rees, & Kane, in preparation). However this study did not include a control group therefore further research is required to determine if clinical GAD samples have significantly elevated perfectionism compared to controls. To date only one study that has examined perfectionism in a sample of 30 people in treatment for trauma post sexual assault (Egan, Hattaway, & Kane, manuscript accepted subject to changes) where 63% of the sample met criteria for PTSD. Although the sample was not a pure clinical sample, participants mean score was in the clinical range on the Post Traumatic Stress Checklist (PCL-C; Weathers, Huska, & Keane, 1991). The mean

level of Concern over Mistakes ($M = 29.7$) was similar to samples of individuals with social phobia, OCD and panic disorder ($M = 21.5 - 27.5$; Antony et al., 1998). However as this study did not include a control group future research is required. Perfectionism has been shown to interfere with treatment in OCD and social anxiety. Perfectionism scores on the OBQ (OCCWG, 2001) have been found to predict treatment outcome in OCD (Kyrios et al., 2007).

Doubts about Actions has also been found to predicted poorer response to treatment in OCD (Chik, Whittal, & O'Neill, 2008). Pre-treatment perfectionism has been shown to be a predictor of treatment outcome in social anxiety (Lundh & Ost, 2001) and changes in Concern over Mistakes and Doubts about Actions predicted outcome of group CBT for social anxiety (Ashbaugh et al., 2007).

Eating disorders

The link between perfectionism and eating disorders has been long recognised (e.g., Bruch, 1978; Slade, 1978). Patients with eating disorders hold extremely high standards regarding their eating, shape weight and its control, and can have a drive to attain perfection in these areas that maintains the eating disorder. In their transdiagnostic theory of eating disorders that can explain anorexia nervosa (AN), bulimia nervosa (BN) and eating disorder not otherwise specified (EDNOS), Fairburn, Cooper and Shaf-ran (2003) stated that clinical perfectionism is one of the four key maintaining mechanisms of all eating disorders. Indeed there is extensive evidence to suggest that perfectionism is linked to eating pathology.

Numerous studies have demonstrated that perfectionism is elevated in eating disorders compared to controls, perfectionism is significantly higher in anorexia nervosa (AN) and bulimia nervosa (BN) compared to controls (Bastiani, Rao, Weltzin, & Kaye, 1995; Cockell et al., 2002; Halmi et al., 2000; Niv, Kaplan, Mitrani, & Shiang, 1998; Lilenfeld et al., 2000; Moor, Vartanian, Touyz, & Beumont, 2004; Sassaroli et al., 2008). Research has also shown that eating disorders remain elevated in those

recovered from eating disorders (Bastiani, Rao, Weltzin, & Kaye, 1995; Halmi et al., 2000; Lilienfeld et al., 2000; Nilsson, Sundbom, & Hagglof, 2008). However one study has suggested that using a different definition of recovery that perfectionism does not differ in recovered patients compared to controls (Bardone-Cone, Sturm, Lawson, Robinson, & Smith, 2010). While these mixed findings do not confirm that perfectionism is a risk factor for eating disorders, several reviews have suggested based on the evidence that perfectionism is a risk factor for eating disorders (Bardone-Cone et al., 2007; Jacobi, Hayward, de Zwaan, Kraemer, & Agras, 2004; Lilienfeld, Wonderlich, Riso, Crosby, & Mitchell, 2006; Stice, 2002). Furthermore, there is evidence that perfectionism and eating disorders are not merely correlated, as studies have found that perfectionism is a prospective predictor of the development of symptoms of BN (Steele, Corsini, & Wade, 2007; Vohs, Bardone, Joiner, & Abramson, 1999).

Regarding the aetiology of perfectionism and eating disorders, there is evidence of both genetic and environmental impacts on the association. Research has found that mothers' levels of perfectionism predict eating pathology in longitudinal (Westerberg-Jacobson, Edlund, & Ghaderi, 2010) and correlational studies (Jacobs et al., 2009). This association between maternal perfectionism and development of eating pathology is not only environmental given the evidence from twin studies to suggest a genetic component to the development of perfectionism and eating disorders (Wade & Bulik, 2007; Wade et al., 2008).

Despite one study that has shown perfectionism does not predict treatment outcome in BN (Mussell et al., 2000), perfectionism on the the Eating Disorders Inventory has been found to predict poorer prognosis (Bizuel, Sadowsky, & Rigaud, 2001) and treatment drop-out in AN (Sutandar-Pinnock, Carter, Olmsted, & Kaplan, 2003). Furthermore, as perfectionism remains elevated post-treatment (Bastiani et al., 1995; Lilienfeld et al., 2000; Nilsson et al., 2008; Pla & Toro, 1999; Srinivasagam et al., 1995) it is possible that if perfectionism is not targeted in treatment then it may remain a significant factor for relapse of the eating disorder.

Somatoform disorders

The two somatoform disorders where perfectionism has been investigated are body dysmorphic disorder (BDD) and chronic fatigue syndrome. Similar to eating disorders, those with BDD and elevated perfectionism express intense concern over the perfection of their body, however instead of this being shape and weight related, it involves the particular body part of concern. Two studies have found a relationship between perfectionism and BDD. Bartsch (2007) found in a student sample that self-oriented and socially-prescribed perfectionism predicted the BDD symptom of dysmorphic concerns. Buhlmann et al. (2008) found a clinical sample of individuals with BDD to have significantly higher Concern over Mistakes and Doubts about Actions scores compared to healthy controls.

The link between perfectionism and chronic fatigue syndrome is an intuitive one given that individuals with perfectionism commonly work extremely long hours and describe feeling exhausted and burned out as a result, and studies have found a link between perfectionism and burnout (e.g., Childs & Stoeber, in press; Philip, Egan, & Kane, 2012). Two studies have found significantly higher Concern over Mistakes and Doubts about Actions scores in chronic fatigue syndrome samples compared to controls (Deary & Chalder, 2010; White & Schweitzer, 2000). Research has also found in a large chronic fatigue syndrome sample that Concern over Mistakes and Doubts about Actions are correlated with severity of fatigue (Kempke et al., 2011).

Depression, bipolar disorder and suicidal ideation

Similar to the role of perfectionism in chronic fatigue syndrome being intuitive it is not surprising that there has been a strong link found between perfectionism and depression, with individuals describing symptoms of depression when they feel they have failed to meet up to their high personal standards. Studies have found that compared to controls those with de-

pression have significantly higher socially prescribed perfectionism compared to controls (Enns, Cox & Borger, 2001; Hewitt & Flett, 1991b) and Concern over Mistakes (Huprich, Porcelli, Keaschuk, Binienda, & Engle, 2008; Norman, Davies, Nicholson, Cortese, & Malla, 1998; Sassaroli et al., 2008). One study has found that self-oriented perfectionism was significantly higher in a depressed sample compared to controls (Norman et al., 1998). This evidence along with the fact that self-oriented perfectionism has been found to be significantly elevated in eating disorders calls into question the positive nature of perfectionism. This is strengthened by research that has also recently shown a link between personal standards and pathological worry in a clinical GAD sample (Handley et al., in preparation). While outside the scope of this review to consider the argument regarding positive conceptions of perfectionism, there is now evidence that the 'positive achievement striving' dimension of perfectionism is strongly related to eating disorders, and there is evidence in two studies of it being related to depression and GAD.

One of the most important contributions however to our understanding of the role of perfectionism in psychopathology has resulted from prospective studies regarding perfectionism and depression. Hewitt, Flett and Ediger (1996) demonstrated that socially-prescribed perfectionism predicted development of depressive symptoms at four month follow-up. The causal role of perfectionism in the development of depression was demonstrated in two studies where scores on the perfectionism subscale of the Dysfunctional Attitudes Scale (Weissman & Beck, 1978) predicted increase in depressive symptoms at 3 year (Dunkley, Sanislow, Grilo, & McGlashan, 2006) and 4 year follow-up (Dunkley, Sanislow, Grilo, & McGlashan, 2009).

The role of perfectionism has also been recognised in bipolar disorder where individuals with bipolar disorder have been found to score higher on the perfectionism subscale of the Dysfunctional Attitudes Scale compared to controls (Jones et al., 1995). Perfectionism scores on the Dysfunctional Attitudes Scale have also been found to predict onset of hypomanic and manic episodes (Alloy et al., 2009).

It is of concern that evidence suggests there is a strong relationship between perfectionism and suicidal behaviours (Hewitt, Flett, Sherry, & Caelian, 2006). It is not only correlational studies that have demonstrated a link between socially-prescribed perfectionism and suicidal ideation (Hewitt, Flett, & Weber, 1994; Hewitt, Norton, Flett, Callander, & Cowan, 1998) but also prospective studies where socially-prescribed perfectionism has been found to be a predictor of suicidal ideation in inpatients hospitalized for self-harm (Rasmussen, O'Connor, & Brodie, 2008).

There are five studies of perfectionism and treatment outcome in depression based on data from the Treatment of Depression Collaborative Research Program which compared CBT, interpersonal therapy and medication (Elkin et al., 1989). Perfectionism on the Dysfunctional Attitudes Scale was a predictor of poorer treatment outcome in all groups at post treatment (Blatt, Quinlan, Pilkonis, & Shea, 1995) and 18 month follow-up (Blatt, Zuroff, Bondi, Sanislow, & Pilkonis, 1998). Zuroff et al. (2000) found one reason for this was perfectionism being a significant predictor of poor therapeutic alliance. Moreover, pre-treatment perfectionism predicted less social support which was a significant predictor of treatment outcome (Shahar, Blatt, Zuroff, Krupnick, & Sotsky, 2004). Finally, perfectionism was related to poorer coping ability at 18 month-follow up (Blatt & Zuroff, 2005). Similar findings have emerged recently from the Treatment for Adolescents with Depression Study of 439 adolescents with clinical depression which compared CBT, fluoxetine, combination CBT/fluoxetine and pill placebo (Jacobs et al., 2009). Adolescents with higher perfectionism scores on the Dysfunctional Attitudes Scale at pre-treatment were found to have continued elevated depressive symptoms over the course of treatment across groups, and also have poorer improvement on suicidal ideation compared to those with lower perfectionism. Furthermore, treatment outcome was found to be partially mediated by change in perfectionism. However, it is interesting that perfectionism decreased after treatment across all groups, with the combination CBT/fluoxetine group experiencing the largest decrease in

depression. Taken together, these studies suggest that perfectionism has a significant impact on an individual's ability to engage with and benefit from evidence based therapies for depression.

Obsessive compulsive personality disorder (OCPD)

Clearly perfectionism is relevant to the diagnosis of OCPD given it is one of the criteria for diagnosis of this disorder. Pinto, Liebowitz, Foa and Simpson (2011) found in a sample of individuals with OCD that having a diagnosis of OCPD was a predictor of poorer outcome to exposure and response prevention. Pinto et al. (2011), tested each criteria of OCPD separately regarding treatment outcome, and found that perfectionism predicted poorer treatment outcome over and above all other criteria. Research has also examined the link between OCPD and eating disorders. Halmi et al (2005) argued that perfectionism and OCPD were predisposing factors for eating disorders as they found in a large sample of 667 AN and BN patients that perfectionism scores on the perfectionism subscale of the Eating Disorders Inventory were most elevated in those who also met a diagnosis of OCPD. Similar findings have also been reported when individuals with an eating disorder were asked to recall traits of OCPD they displayed in their childhood, the odds ratio for developing an eating disorder were increased 6.9 times for each additional trait of OCPD compared to controls (Anderluh, Tchanturia, Rabe-Hesketh, & Treasure, 2003).

CLINICAL IMPLICATIONS OF PERFECTIONISM BEING A TRANSDIAGNOSTIC PROCESS

If perfectionism is a transdiagnostic process then it should be associated with a significant reduction of symptoms across disorders without directly addressing symptoms in the treatment. This would be consistent with the finding that perfectionism is an explanatory factor of comorbidity as suggested by Bieling, Summer-

feldt, Israeli and Antony (2004), where they found in a large clinical sample that degree of comorbidity was correlated with perfectionism (as measured by Concern over Mistakes, Parental Criticism, Doubts about Actions, self-oriented and socially-prescribed perfectionism). Bieling et al. (2004) found that perfectionism measured in this way predicted higher comorbidity even after controlling for symptoms and therefore concluded that perfectionism is not associated with a single disorder but is an underlying factor that is present across psychopathologies. This finding provides support for the idea of transdiagnostic treatment of perfectionism arguing that addressing perfectionism would most likely lead to a decrease in a number of symptoms across different areas and therefore would be more effective with comorbidity than single disorder based treatments target maintaining factors in a sequential way. The rationale of Bieling et al. (2004) and Egan et al. (2011) that perfectionism is transdiagnostic is supported by the data that shows treatment of perfectionism results in reductions in non-targeted psychopathologies. This data will be reviewed below across low intensity (i.e., self-help) and high-intensity (i.e., face to face individual and group treatment) formats, but first we suggest that a functional analysis of the role of perfectionism and associated disorders should be conducted before the treatment format is decided.

Functional analysis of the role of perfectionism

It is useful to consider if perfectionism is a presenting problem alone or if it is occurring in the context of other disorders. Sometimes perfectionism is the main presenting problem. Clients will complain of key symptoms such as repeated checking to ensure that they have not made a mistake, avoidance and procrastination, feelings of failure accompanied by intense self-criticism, and a life dominated by rules, regulations and unattainable standards that they persistently strive to achieve. For such clients, the adverse consequences of social isolation, low mood, and low self-esteem are not sufficient to

change their perfectionism. Clearly in such a case where perfectionism is the main presenting problem driving anxiety and low mood, it should be addressed first following CBT treatment strategies for perfectionism (Shafran, Egan, & Wade, 2010) that have evidence of efficacy (e.g., Steele et al., in press).

In clinical practice, it is rare for perfectionism to be the main clinical problem for which the client is referred. More typically, however, clients are referred for treatment of their Axis I disorder such as depression, anxiety or an eating disorder. We would suggest that it makes sense to start with the intervention with the strongest evidence base for the Axis I psychopathology, even if perfectionism is clearly present and thought to be a factor in the maintenance of the psychopathology. This is because there is a great deal more evidence for the treatment of Axis I disorders using the evidence based treatment protocols that are supported for each of the disorders (see NICE guidelines for a review). For such clients, CBT, behavioural activation or interpersonal psychotherapy would be used for the treatment of depression, and a disorder-specific CBT protocol used for the treatment of anxiety. CBT would also be the treatment of choice for the eating disorder. It might be that despite the elevated perfectionism, treatment can progress for the Axis I disorder and the perfectionism declines as a result of successful treatment of the Axis I psychopathology. This has been found to be the case in some studies, for example the treatment of depression in adolescents study (Jacobs et al., 2009). Even if a patient has perfectionism as a predisposing factor to a range of axis I disorders, but these disorders are prominent and there are clear maintaining factors that are important over that of perfectionism, then the evidence based disorder specific protocols indicated for the disorders should be employed. Again, this is due to the extensive evidence that supports these protocols over multiple studies, and this evidence cannot be ignored in favour of taking a transdiagnostic approach, even if a factor like perfectionism could be seen as having a clear role in predisposing the patient to the development of the Axis I disorders.

In many cases, however, it will be difficult to progress with the treatment for the Axis I psychopathology as the perfectionism may interfere. For example, a therapist may suggest introducing pleasurable activities as part of the intervention for depression. The client may find this difficult owing to beliefs that pleasurable activities are of no value and only activities related to productivity and achievement are worthwhile. In such cases where perfectionism is interfering with treatment progress for the Axis I disorders, then it is suggested to put the treatment of the Axis I psychopathology on hold while the treatment of perfectionism is focused upon. Once the perfectionism has been successfully treated, if the Axis I psychopathology still remains, then the original therapeutic protocol should be resumed.

Perhaps the greatest clinical dilemma is what to do if a client presents with several disorders that are elevated. Should a single intervention be offered because it has a strong evidence base for a particular psychopathology bearing in mind that it could benefit the other disorders? Craske et al. (2007) found that it is preferable to utilise the single disorder based protocols in a sequence rather than using pieces of each of the protocols simultaneously. Alternatively, should a general transdiagnostic intervention such as Barlow's unified treatment protocol (Barlow et al., 2011) be utilised? A third option might be to address the perfectionism if it appears from the conceptualisation that perfectionism is a key factor in the development and maintenance of the psychopathologies. One of the difficulties is the dearth of research that has examined exactly what it is that a clinician should do when there are multiple disorders. Until there is further data to support transdiagnostic treatments including transdiagnostic treatment of perfectionism as we have presented in the review, and others (e.g., Barlow et al., 2011) then clinicians are faced with needing to make clinical decisions based on the specific formulation of the axis I pathologies and transdiagnostic processes that are playing a role in maintenance.

Our view is that unless there is clear evidence based on the individualised formulation that perfectionism is a maintaining factor across

each of the disorders the individual has, and that treatment of these disorders using a standard disorder specific approach may be interfered with due to perfectionism, then disorder specific treatments in sequence should be utilized. Future research is required to determine the evidence regarding when to implement treatment of perfectionism versus disorders specific protocol. A case formulation approach can help guide clinicians regarding treatment options until this evidence is available. The main point of importance here is for the clinician to determine a formulation of how perfectionism is a maintaining factor in the psychopathology of their client.

Evidence that treating perfectionism leads to reductions in different types of psychopathology

There have been several studies that have investigated low intensity approaches to treatment for perfectionism based on self-help and internet delivered interventions. Pleva and Wade (2007) investigated guided self-help versus pure self-help treatment for perfectionism in a non-clinical sample based on the book 'When Perfect isn't Good Enough' (Antony & Swinson, 2009). The pure self-help group received readings each week with guidance on what areas to focus on, and the guided self-help also received the addition of eight weekly 50 minute sessions with a trainee therapist to help guide them the book, while the pure self-help group was given the book and a detailed information sheet outlining which areas of the book to focus on each week. Treatment resulted in clinically significant reductions in perfectionism, anxiety and depression in both groups although outcomes were better in the guided self-help condition. Brief psycho-education has also been investigated where participants received information about the type of perfectionism (adaptive or maladaptive) they were classified in based on self-report measures and discussion of their emotional reaction to the information, compared to a control who received no feedback (Aldea, Rice, Gormley, & Rojas, 2010). Participants in the feedback condition reported

significant reductions in symptoms and emotional reactivity.

There have also been studies that have investigated online interventions for perfectionism. Arpin-Cribbie et al. (2008) investigated a 10 week online CBT intervention for perfectionism in undergraduate students and compared a control, stress management, or stress management plus CBT conditions. Participants in the stress management condition had significant decreases in self-oriented perfectionism and Concern over Mistakes post treatment but no change in anxiety or depression. Participants in the stress management plus CBT condition however also reported decreases in self-oriented perfectionism and Concern over Mistakes as well as socially-prescribed perfectionism and depression. A recent randomized controlled trial where university students were allocated to either a stress management or CBT 10-week treatment or control found similar results, where the participants who received CBT for perfectionism experienced significantly greater reductions in perfectionism than the other groups (Arpin-Cribbie, Irvine, & Ritvo, 2012). While both the stress management and CBT group experienced significant reductions in distress compared to the control group, it was found that changes in perfectionism were significantly correlated with changes in distress in the CBT group.

One of the most relevant studies that demonstrates of the potential for perfectionism to be a transdiagnostic process is that of Steele and Wade (2008) where 8-session guided self-help CBT for BN and CBT for perfectionism were found to have equivalent results in decreasing BN. However treatment of perfectionism resulted in much larger effect sizes for non-targeted psychopathology of anxiety and depression. While larger effect size decreases were noted for bulimic behaviours in the CBT for bulimia nervosa approach, a much larger effect size decrease in global eating disorder psychopathology was noted for the perfectionism approach.

A short-intensity approach, an 8-session classroom perfectionism intervention for 15 year old girls, was also found to significantly decrease concern over mistakes perfectionism compared to one other treatment arm (media literacy) and a control group (Wilksch, Dur-

bridge, & Wade, 2008). This was a universal prevention program (i.e., not targeting people at risk for psychopathology or perfectionism), and perfectionism was found to decrease in the 3-month follow-up more in the perfectionism group than the other two groups. Additionally, over half of those girls with higher levels of shape and weight concern at baseline experienced clinically significant improvements in dieting at the 3-month follow-up.

A number of studies in clinical samples have shown that individually-tailored face to face CBT for perfectionism leads to significant reductions in perfectionism, anxiety and depression. Glover, Brown, Fairburn and Shafran (2007) found in a single case experimental design series that 10 session CBT for clinical perfectionism similar to that described in recent treatments (e.g., Shafran et al., 2010) lead to clinically significant decreases on perfectionism as measured by the Clinical Perfectionism Questionnaire and both MPS scales, and significant reductions in depression although not anxiety. Egan and Hine (2008), also found significant reductions in perfectionism on the total FMPS scale in a single case experimental design series following an eight session treatment for clinical perfectionism in a mixed anxiety disorder and depression sample. Riley et al (2007) reported on an RCT in a mixed anxious and depressive sample where participants received either 10 sessions of CBT immediately or after a wait-list control period. It was found that 75% of the sample had clinically significant reductions in perfectionism on the Clinical Perfectionism Questionnaire, and significant reductions in anxiety and general distress at post-treatment and eight week follow-up. While the participants in the wait-list had no change in diagnoses, the number of participants with a diagnosis of an anxiety disorder or depression reduced by 50% after treatment.

Efficacy of CBT for perfectionism has also been shown in a group treatment trial where Steele, Waite, Egan, Finnigan, Handley and Wade (in press) reported on the results of 21 participants across two sites who received an eight week CBT group program using a structured protocol based on the Shafran et al. (2010). CBT for perfectionism is described in

detail in this book which is an extension of earlier protocols (e.g., Glover et al., 2007; Riley et al., 2007). The sample was a mixed anxious and depressive sample where participants received a four-week wait-list period to provide a no treatment control condition, followed by a four week psychoeducation condition, where they read the first four chapters of the Shafran et al. (2010) book on a weekly basis, followed by the eight week group treatment program. While there was no change in perfectionism or distress over the control or psychoeducation period, at post-treatment there were significant reductions in perfectionism (Clinical Perfectionism Questionnaire, Concern over Mistakes, Personal Standards and perfectionism subscale of the Dysfunctional Attitudes Scale) as well as depression, anxiety and stress that were maintained at 3 month follow up. These treatment effects of these high intensity studies of CBT for perfectionism are predominately large (see Egan et al., 2011 for further details).

SUMMARY

Evidence has been reviewed that demonstrates perfectionism is a transdiagnostic process. This includes that it is elevated across anxiety disorders, eating disorders, depression and somatoform disorders. Not only is perfectionism correlated with a wide range of disorders, but several studies indicate it is a prospective predictor of the development of psychopathology (e.g., depression and eating disorders). Furthermore evidence was presented showing that perfectionism interferes with treatment outcome. Finally the data showing that treatment of perfectionism results in reduction of a wide range of non-targeted psychopathology was taken as additional evidence supporting perfectionism as a transdiagnostic process. While further research is required to determine evidence for treatment of perfectionism, particularly regarding the stage at which to implement treatment of perfectionism versus a standard treatment protocol for a disorder, the treatment of perfectionism holds promise as a transdiagnostic treatment. These transdiagnostic treatments which are becoming increasingly popular (e.g., Barlow, 2011) hold great

promise in providing an option for an effective and time efficient treatment for the common situation of comorbidity in patients. The transdiagnostic approach may help to address the gap in the literature regarding what clinicians should do with complex clients who meet multiple diagnoses, and may potentially improve clinical outcomes for these individuals.

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