
When a High Distinction isn't Good Enough: A Review of Perfectionism and Self-Handicapping

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Abstract

This paper addresses two problems which are common amongst university students, namely perfectionism and self-handicapping. Perfectionism deals with setting unreasonably high standards for one's own performance, while self-handicapping behaviours provide a possible excuse for poor performance, for example putting tasks off until the last minute. Although they have the potential for many negative outcomes in students, such as anxiety and poor performance, university communities have done little to investigate these problems or reduce their incidence. This paper aims to provide a comprehensive overview of perfectionism and self-handicapping, with particular reference to how they impact upon higher education students, so that universities may become more aware of these problems and their implications. We also discuss a new model, which describes a relationship between these two constructs, and suggests a method for reducing these problems in a university environment.

Introduction

Universities, by their very nature, are highly evaluative settings. Students face a constant barrage of tests, assignments and exams, which force an evaluation of their competence and place the results on display for all to see. As such, universities are a breeding ground for two problems which occur frequently in evaluative circumstances; namely perfectionism and self-handicapping. Many students display perfectionistic tendencies, setting exceedingly high standards for themselves and for others, while still others display self-handicapping strategies, which include behaviours such as procrastination,

putting things off until the last minute, and overcommitting, taking on too much at once. This can have serious consequences for students, as all too often, they set high goals for themselves, and feel extreme disappointment and self-criticism when they fail to reach these goals. Others fail to live up to their potential because they leave assignments and revision until the last minute.

Although these problems have the potential to be linked with many negative psychological outcomes (Flett, Hewitt, & Dyck, 1989; Rice, Ashby, & Slaney, 1998) they have, surprisingly, received scant attention amongst university communities. In this paper, we will discuss these issues, focusing on how they affect students in the higher education setting, with the aim of drawing attention to the common problems these students may face. We will also propose a new model, which describes the relationship between perfectionism and self-handicapping, and provides a framework for addressing these issues.

Perfectionism

While many of us view ourselves as being perfectionistic, we often don't see this as a problem. In fact we may believe this helps us to strive for the best, and fail to appreciate that these tendencies can, in some people, be linked to negative outcomes.

In the psychological literature, Hollender in 1978 provided one of the earliest definitions of perfectionism, which he saw as an essentially negative construct, involving abnormally or unjustifiably high expectations of oneself or of others (Shafran & Mansell, 2001). Hamachek (1978) however was one of the first researchers to draw the distinction between "normal" and "neurotic" forms of perfectionism. He described normal or adaptive perfectionists as those who set high expectations of themselves, but who feel a sense of accomplishment when those expectations are met; while neurotic or maladaptive perfectionists are those who set high standards, but view themselves as never seeming to meet their own high expectations (Adler, 1956; Burns, 1980; Hamachek, 1978; Hollender, 1965; Pacht, 1984). For example, an adaptive perfectionist might set themselves the goal of attaining a "high distinction" on a particular exam, and will feel a real sense of pride and accomplishment when they achieve that grade. The maladaptive perfectionist, on the other hand, who is also aiming for a high distinction, will experience disappointment and be self-critical when he scores 90% instead of 100%.

There have been numerous theories as to the roots or causes of perfectionism, however as Flett, Hewitt, Oliver and Macdonald (2002) note, very little empirical work has been conducted to test these theories. The social expectations model (Hamachek, 1978; Missildine, 1963) proposes that perfectionism develops in response to contingent

parental approval. According to this model, a child learns or believes that if they perform perfectly they will gain their parents' approval. Bandura's (1986) social learning model proposes that children learn behaviour by observing and imitating the behaviour of others. The implication of this model is that children with perfectionistic parents would be more likely to be perfectionistic themselves. This has received some empirical support, with one study showing that perfectionism in mothers was associated with perfectionism in daughters (Frost, Lahart, & Rosenblate, 1991) and another indicating a modest positive correlation ($r=.25$) between perfectionistic children and their parents (Chang, 2000). It is possible however that these results reflect the influence of genetic factors, in that perfectionistic traits may be inherited rather than learned.

The social reaction model proposed by Flett et al. (2002) is based on the assumption that some people develop perfectionism as a response to harsh family or social circumstances. This draws upon studies from the eating disorders field (Kaner, Bulik, & Sullivan, 1993; Kinzl, Traweger, Guenther, & Biebl, 1994; Zlotnick et al., 1996) that show that some people with eating disorders may have developed perfectionistic tendencies as a way of dealing with difficult life situations. Finally, a fourth model suggests that perfectionism may be associated with having overly anxious parents who encourage children to focus on mistakes and their negative consequences (Flett et al., 2002).

These four models have a common emphasis on the role of parents and family in the development of perfectionism. Flett et al. (2002) however point out that other factors may also be involved and suggest that child factors (temperament, attachment style); parent factors (goals, practices, style of parenting, personality); and environmental pressures (culture, peers, teachers and occupation) may also play an important role. It is clear that more research is required to empirically test the origins of perfectionism.

The implications of perfectionism

While the "normal" or "adaptive" form of perfectionism can encourage students to reach their full potential, "neurotic" or "maladaptive" perfectionism may be associated with a number of negative outcomes. Researchers have found correlations between perfectionism and a number of constructs, such as trait anxiety (Deffenbacher, Zwemer, Whisman, Hill, & Sloan, 1986; Flett et al., 1989; Juster et al., 1996; Spielberger, Garsuch, & Lushene, 1970) a higher incidence of psychological symptoms and suicide risk (Chang, 1998; Rice et al., 1998), depression (Chang, 2000; Hewitt & Flett, 1991; Kawamura, Hunt, Frost, & DiBartolo, 2001; Rice et al., 1998) and eating disorders (Fairburn, 1997; Fairburn, Shafran, & Cooper, 1999).

While these problems are quite serious and more frequently seen amongst clinical populations, perfectionism also has implications at a sub-clinical level. People who

are more perfectionistic have been shown to be less satisfied with their performance (Frost & Henderson, 1991), to show attitudinal inflexibility (Ferrari & Mautz, 1997), to experience higher levels of stress (Flett, Parnes, & Hewitt, 2001); to be prone to persistent worry and fear of failure (Flett, Hewitt, Blankstein, & Mosher, 1991), and to engage in self-handicapping behaviours (Frost, Marten, Lahart, & Rosenblate, 1990; Hobden & Pliner, 1995).

Perfectionism is likely to be particularly evident in the academic setting. From a young age, students are subjected to a continuous flow of tests, assignments and exams, all designed to assess their level of competency. Urdan and Midgley (2001) claim that in academia, students endlessly encounter situations in which feedback about their ability and intelligence are on display to others. This is likely to encourage some to set excessively high standards for themselves, so they appear competent and intelligent. For example, the student perfectionist is constantly provided with opportunities to set exceedingly high standards for herself – to score 100% in the exam, to achieve the best mark in the class for an assignment, or to have her PhD thesis pass without need for amendments. The results of these strivings are constantly on display, to teachers and markers, and to peers, so it can become particularly important to the student that their standards are met.

As would be expected based on the general literature, perfectionism is linked with negative outcomes in academic settings. Boice and Jones (1984) found that perfectionism was correlated with a higher incidence of writer's block, while Phillips (1986) found that perfectionists were more likely to suffer essay-writing phobia. Mobley, Slaney and Rice (2005) found correlations between perfectionism and trait anxiety, self-esteem and depression, as well as grade point average (GPA) and one's satisfaction with their GPA. Bottos and Dewey (2004) investigated the incidence of chronic headaches, a common problem in university students, and found that experiencing frequent headaches was correlated with higher levels of perfectionism.

There has been some research linking perfectionism with achievement motivation within a higher education setting. Neumeister (2004) in her interview study found that amongst gifted college students, self-oriented perfectionism can lead mastery and performance-approach goals. In other words, self-oriented perfectionists were motivated towards achievement. On the other hand, socially-prescribed perfectionists were motivated to avoid failure, setting both performance-approach and performance-avoidance goals.

Treatment

One of the difficulties in treating perfectionism is that the perfectionism itself can be a barrier to any attempts to modify a person's perfectionistic beliefs. Perfectionists are

less likely to seek treatment as they can see this as an admission of failure (Habke, 1997; Nadler, 1983; Neilsen et al., 1997), and even if they do attend treatment they may be less willing to reveal information which they may perceive as a failing or weakness (Habke, 1997).

The literature relating to perfectionism reveals a paucity of studies describing treatment of perfectionism. In fact Shafran and Mansell (2001), in their review, found only one empirical study which treated perfectionism. In this study which involved cognitive behavioural therapy (including cognitive restructuring, role playing and relaxation), seven of the nine participants showed a reduction in levels of perfectionism (Ferguson & Rodway, 1994).

Several authors have proposed models for treating perfectionism but these have not been rigorously tested. Burns (1980) proposed a variety of cognitive interventions that could be used in the treatment of perfectionism, for example, identifying the advantages and disadvantages of perfectionism, finding other sources of pleasure or worth and identifying cognitive distortions. Hewitt and Flett (2002) propose focusing on the core issues of perfectionism, such as the motivators and precursors of perfectionistic behaviours, while Blankstein and Dunkley (2002) recommend helping perfectionists develop more adaptive methods of appraising people and events. Antony and Swinson (1998), based on these principles, developed a self-help book for dealing with perfectionism which involves a wide range of cognitive and behavioural strategies including keeping a perfectionism diary, identifying triggers, examining standards and rigid perfectionistic beliefs, and developing goals and plans for change. The strategies proposed by Antony and Swinson are based on the cognitive behavioural approaches used successfully in the treatment of anxiety and affective disorders, in particular cognitive restructuring and graded exposure with response prevention. (Clark & Fairburn, 1997).

These principles would be the foundation for developing a treatment plan for students displaying high levels of perfectionism. In a later section of this paper, we discuss our own research endeavours in this direction.

Self-handicapping

As well as perfectionism, there is another pattern often seen in the academic setting, namely self-handicapping. How frequently have students been observed putting revision off until the last minute? Or claiming they did poorly on an essay because they're involved in so many other activities that they don't have time to study? These students are likely to be engaging in what are known as self-handicapping strategies, which are very common amongst university students (e.g., Ellis & Knaus, 1977).

Jones and Berglas (1978) first used the term self-handicapping to describe the situation where a person creates obstacles to their achievement of success with the aim of having a ready-made excuse for failure if it occurs.

By finding or creating impediments that make good performance less likely, the strategist nicely protects his sense of self-competence. If the person does poorly, the source of failure is externalised in the impediment: . . . If the person does well, then he or she has done well in spite of less than optimal conditions. (Jones & Berglas, p. 201).

Most researchers agree that the reason people self-handicap is to protect themselves from the negative implications of failure, for example, that they are not competent. So, by rendering performance feedback from an exam ambiguous, students can protect the image of themselves as competent scholars.

Features of Self-handicapping

One of the defining features of self-handicapping is that it is a proactive, before-the-event strategy. The relevance of the task to the person or to the person's self-worth has also been identified as a critical feature. Jones and Berglas (1978), Berglas and Jones (1978) and Snyder and Smith (1982) theorise that self-handicapping is more likely in people who are uncertain about their abilities and competence. In a study looking at claims of test anxiety as a self-handicap, Greenberg (1985) found that people were more likely to self-handicap if they viewed the task they were involved in as important or relevant to them. A consequence of this is that self-handicapping is more likely to occur when a person is presented with an evaluative situation (Jones & Berglas, 1978), for instance, taking a test, or making a presentation. The more relevant the evaluative task is to the person's sense of competence the greater the possibility of self-handicapping. So, if a student is uncertain about their abilities in a particular subject, and it is important for them to do well, they are more likely to use self-handicapping strategies.

Forms of Self-handicapping

Since Berglas and Jones (1978) defined the concept, numerous researchers have proposed and identified strategies that can be used to self-handicap. Jones and Berglas' original work looked at the role of alcohol as a self-handicapping device. Jones and Berglas also speculated that some people may adopt a "sick" role as a way of avoiding personal responsibility and even suggested that for some people a mental illness could be partly strategic in nature. In the same article the authors identify underachievement through lack of effort as another self-handicapping strategy. The lack of effort, or not taking opportunities to practise, has been used by many researchers (Bailis, 2001; Deppe & Harackiewicz, 1996; Kimble, Kimble, & Croy, 1998) as a measure of self-handicapping. Rhodewalt, Saltzman and Wittmer (1984) measured the amount of

practice of individuals in a college swimming team. They found that before important swimming competitions, low self-handicappers increased their practice while high self-handicappers did not.

Martin, Marsh, Williamson and Debus (2003) point out that competitive educational environments, where rewards are explicitly tied to achievements and where performance depends on outachieving others, are likely to promote self-protection strategies among students. Covington (1992) states that many students work hard to avoid being labelled "stupid". Self-handicapping provides an excellent alibi for poor academic performance.

Urdan and Midgley (2001) identified a range of academic self-handicapping behaviours. These included not putting in effort, not seeking help when required, not taking risks, and giving up after encountering a challenge. Martin et al. (2003) interviewed first year university students to identify self-handicapping strategies. These included procrastination: "It's just like if I have an assignment due, say it's due on Monday and it's the weekend, I seem to just want to watch TV or go out", and time wasting: "I've got study to do, well I really need to clean my wardrobe" (Martin et al., p. 620). They found that students who identified themselves as self-handicappers seemed to seize opportunities to engage in distractions while low self-handicappers seemed to actively resist distractions.

One of the most common self-handicapping strategies used by students is procrastination. Ellis and Knaus (1977) found that a majority of college students procrastinated on academic tasks to the extent that they experienced anxiety, and report that the proportion of students who procrastinate may be as high as 95%. Solomon and Rothblum (1984) also discovered high rates of procrastination among undergraduate students, with 46% reporting that they frequently or always procrastinated while writing assignments. Onwuegbuzie (2004), in his study, found that graduate students had particularly high levels of procrastination, which he reported to be 3.5 times that of the undergraduates in Solomon and Rothblum's study.

Correlates of Self-handicapping

In student populations, self-handicapping has been associated with poor adjustment and academic underachievement (Zuckerman, Kieffer, & Knee, 1998) and lower achievement (Garcia, 1995). Procrastination has been linked with higher levels of depression and anxiety and reduced self-esteem in both clinical and non-clinical populations (Lay & Silverman, 1996; Martin et al., 1996; Saddler & Sacks, 1993). Zuckerman et al. (1998) found that self-handicappers displayed worse performance, poorer study habits and lower self-esteem than those who didn't self-handicap. Garcia (1995) found that self-handicappers had low levels of intrinsic goals, poor rehearsal strategies and poor time management practices.

Etiology

According to Jones and Berglas (1978) the key motivator for self-handicapping is uncertainty about one's skill or ability. They call this concern about skill or ability a competence complex and suggest that it is the result of parental influences, in particular how praise is given to the child. They suggested two ways in which parental praise can lead to a competence complex and ultimately to self-handicapping. Firstly, they suggested a difficulty in distinguishing between praise resulting from performance and that due to unconditional love (Jones & Berglas, 1978). Jones and Berglas suggest that to avoid facing the unpleasant possibility that they may not be accepted on their own account the self-handicapper creates failures so that they can hold onto the illusion of acceptance.

The second source of the competence complex relates to non-contingent positive reinforcement. Jones and Berglas proposed that self-handicappers could be individuals who have received praise or rewards but are unable to determine the reasoning behind the reward (1978). This uncertainty about the reason for the praise means the individual doubts their ability and so future tests of ability become threatening. Self-handicapping then becomes a strategy to create an alternative explanation for failure. As such, self-handicapping tendencies are likely to develop where a person has a somewhat positive self-image (probably as a result of praise) but where their hold on this self-image is very uncertain (due to confusion about the source of the praise).

Treatment

As with perfectionism, there have been very few attempts to empirically test treatments for self-handicapping. However, Higgins and Berglas (1990) make some suggestions about the most appropriate method of treatment. They believe that a purely behavioural approach to treating self-handicapping is unlikely to be effective. For example, helping the self-handicapper develop some skills (e.g., time management for a procrastinator), is unlikely to make a significant difference as the self-handicapper has a vested interest in retaining the handicap. Self-handicappers need to begin by changing their attitudes and beliefs about their performance. They suggest this can be done by the use of cognitive reorientation techniques such as examining automatic thoughts, replacing negative thoughts and clarifying the criteria for success. They also point out that self-handicappers are generally uncertain about their abilities and what counts as success and so the treatment should involve clarifying the criteria for success.

A new model

Although the psychological literature has, in the past, treated perfectionism and self-handicapping as separate, relatively unrelated constructs, we suggest that there is in fact a link between the two. We have spent years working with higher degree students, investigating their self-handicapping strategies and levels of perfectionism, and from this work we propose a model which forms a link between these two common problems.

Our model suggests that perfectionism is one trait that can give rise to self-handicapping behaviours. Perfectionism can be thought of as one of a number of faulty cognitions that people have. These faulty cognitions can have a number of different behavioural manifestations, such as the self-handicapping strategies of procrastinating, overcommitting, busyness and lack of effort. This model is shown in Figure 1, which shows that the different faulty cognitions (such as perfectionism) can lead to different behavioural outcomes (such as self-handicapping). Although the behaviours have thoughts associated with them (e.g., “I’ll do this tomorrow”, “I’ve been so busy, it’s hard finding time to do this”), it is in fact the deeper, core-level thoughts which are ultimately responsible for the behaviours.

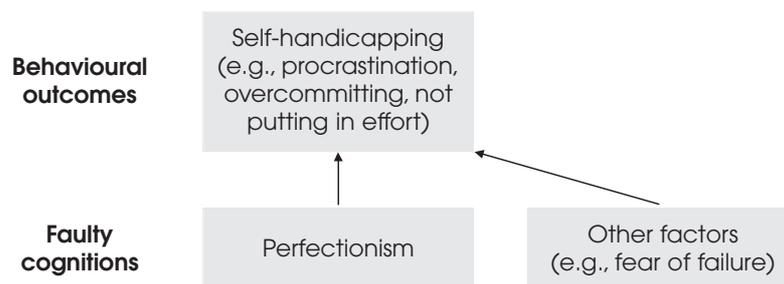


Figure 1: A new model suggesting a relationship between perfectionism and self-handicapping

This model does not suggest that perfectionism always results in self-handicapping behaviours, or that self-handicapping behaviours are always the result of perfectionistic beliefs, however we have observed that the two often go hand-in-hand. As such, we suggest that this model may be a useful way of integrating the two constructs.

A useful way to think of this model is to imagine an iceberg. Rising above the water is only part of the iceberg; the majority is hidden beneath the water. In our model, the visible part of the iceberg represents the behavioural strategies that people use, and the top-level thoughts that are associated with these behaviours (Figure 2). As an example, consider a university student. This student might be a procrastinator; she would put her

exam revision off, thinking, “I’m a bit tired; tomorrow will be a better time to do this”. Underlying these behaviours (out of “view”) lie a set of faulty cognitions, which are the true cause of her procrastinating. In our student’s case, these might be perfectionistic thoughts. She might actually believe that what she does won’t be good enough. Because of this belief, she may be reluctant to start something that would not meet her own high standards, and hence this would result in her procrastinating.



Figure 2: An example of visible behaviours and their underlying cognitions

Our theoretical model does have some empirical support in the psychological literature. Several researchers have found correlations between self-handicapping and perfectionism. Those with higher levels of perfectionism are likely to display more frequent self-handicapping behaviours (Frost et al., 1990; Hobden & Pliner, 1995; Sherry et al., 2001). Clearly however, more empirical testing is required.

One of the implications of this model is that attempting to reduce the behaviours by focusing only on top-level thoughts or behaviours is unlikely to be effective; to effect long-term change it is necessary to delve deeper, below the surface, to core faulty cognitions. In our example above, if we were to attempt to simply reduce the student’s procrastinating behaviour, we would be unlikely to succeed; we would need to uncover her core perfectionistic beliefs and try to change those, otherwise her self-handicapping behaviours are likely to recur.

Treatment

The most effective way to uncover and alter faulty cognitions is with the use of Cognitive Behavioural Therapy (CBT). CBT is based on the premise that it is a person’s interpretation of events, rather than the events themselves, that determines how we feel or react to the events (Beck, 1976; Ellis, 1994). In the process of interpreting events a number of inaccurate cognitive processes can occur. These include selective attending, overgeneralising, catastrophising and others. CBT involves challenging these cognitive inaccuracies and exploring more helpful interpretations. The therapy involves a wide range of techniques including: behavioural experiments and reality

testing, cognitive restructuring, thought diaries, normalising of thoughts, checking of assumptions, structured problem-solving, identification of safety behaviours, exposure with an explanation of the rationale for exposure, relapse prevention and, maintenance strategies, action planning, and out-of-session homework.

CBT has been found to be effective in the treatment of a wide range of psychological disorders including panic disorder, social phobia, generalised anxiety disorder, obsessive compulsive disorder and depression (Butler & Booth, 1991; Clark et al., 1994; Hollon & Beck, 1994; Salkovskis & Westbrook, 1989). Due to the high level of cognitive involvement on the part of the perfectionist, CBT is also likely to be an effective treatment for perfectionism.

Although CBT may be an effective method for the treatment of faulty cognitions associated with perfectionism, due to its high level of involvement on a one-to-one basis it is not appropriate for a university setting. As such, a new technique, Cognitive Behavioural Coaching (CBC) has been developed, which uses the principles of CBT in non-clinical settings (Neenan & Palmer, 2001). In a previous study, we tested the efficacy of a CBC-based course on reducing self-sabotaging behaviours amongst PhD students, and found that the program, which includes a focus on challenging faulty beliefs, resulted in more effective behaviours related to their PhDs (Kearns, Gardiner & Marshall, 2008). In a further study, we investigated the effectiveness of CBC in reducing levels of perfectionism in higher degree students, and found our approach to be very successful (Kearns, Forbes & Gardiner, 2007). In addition, some time after the completion of the program, participants displayed a drop in their levels of self-handicapping, indicating that addressing core beliefs is likely to lead to a subsequent drop in self-handicapping behaviours, which lends support for the model proposed.

While approaches such as CBC may be effective at reducing perfectionism and self-sabotaging behaviours in an academic context, are there strategies or considerations for those who teach or instruct? At the research supervision level, much can be achieved by the supervisors. Of particular importance is to begin early on in the candidature to set regular and honest reviews. Writer's block or procrastination around writing is the most common self-handicapping behaviour in research higher degree students. To avoid this, it is advisable that students be requested to write (and show their work) from the first few weeks of candidature. It would also be of great assistance for the research supervisor to understand the faulty cognitions that are likely driving the poor productivity of their student. In particular, an informed supervisor can better formulate how and when they provide feedback to students; in essence we teach supervisors to "speak softly and write with a green pen".

But what can teachers and instructional designers who have less individual contact with their students do? There are a number of implications for teachers particularly relating to the instructional design and delivery of their teaching material. Teachers need to be clear about the relative importance of different components of the curriculum and provide some guidance to students on the amount of effort required. In addition, teachers need to provide clear structure and support around deadlines and also to make explicit to students how feedback will be provided. Finally some teachers may wish to include information in their curriculum about the impact of personality factors, for example perfectionism on effective study.

Conclusion

The aim of this paper is to raise the important and widespread issues of perfectionism and self-handicapping among university students. Despite the many negative consequences of these patterns, and the fact that most students at some stage fall victim to these thoughts and behaviours, very little research or theoretical explanation has been conducted. We argue, based on our comprehensive review of the literature, that the area warrants further investigation, especially with regard to treatment. In particular, we posit a theoretical model that ties perfectionism to self-handicapping and provides a model to guide treatment. With both universities and students now highly concerned with progress, pass rates and non-completion rates, this area of study, we believe, will provide an innovative and productive angle. While this article does not provide all the answers, we hope, in the true spirit of non-perfectionists, that it does its best to raise awareness of these problems.

References

- Adler, A. (1956). The neurotic disposition. In H. L. Ansbacher & R. R. Ansbacher (Eds.), *The individual psychology of Alfred Adler*. New York: Harper.
- Antony, M. M., & Swinson, R. P. (1998). *When perfect isn't good enough: Strategies for coping with perfectionism*. Oakland, CA: New Harbinger Publications.
- Bailis, D. S. (2001). Benefits of self-handicapping in sport: A field study of university athletes. *Canadian Journal of Behavioural Science*, 33, 213-223.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Beck, A. T. (1976). *Cognitive Therapy and the emotional disorders*. New York: New American Library.
- Berglas, S., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to non-contingent success. *Journal of Personality and Social Psychology*, 36, 405-417.

- Blankstein, K. R., & Dunkley, D. M. (2002). Evaluative concerns, self-critical, and personal standards perfectionism: A structural equation modelling strategy. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment*. Washington DC: American Psychological Association.
- Boice, R., & Jones, F. (1984). Why academicians don't write. *Journal of Higher Education*, *55*, 567-582.
- Bottos, S. & Dewey, D. (2004). Perfectionists' appraisal of daily hassles and chronic headache. *Headache: The Journal of Head and Face Pain*, *44* (8), 772-779
- Burns, D. D. (1980). The perfectionist's script for self-defeat. *Psychology Today*, *November*, 34-52.
- Butler, G., & Booth, R. (1991). Developing psychological treatments for generalised anxiety disorder. In R. M. Rapee & D. H. Barlow (Eds.), *Chronic anxiety and generalised anxiety disorder*. New York: Guilford Press.
- Chang, E. C. (1998). Cultural differences, perfectionism and suicidal risk: Does social problem solving still matter? *Cognitive Therapy and Research*, *22*, 237-254.
- Chang, E. C. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediation model in younger and older adults. *Journal of Counselling Psychology*, *47*, 18-26.
- Clark, D. M., & Fairburn, C. G. (Eds.). (1997). *Science and practice of cognitive behaviour therapy*. Oxford, UK: Oxford University Press.
- Clark, D. M., Salkovskis, P. M., Hackmann, A., Middleton, H., Anastasiades, P., & Gelder, M. G. (1994). A comparison of cognitive therapy, applied relaxation and imipramine in the treatment of panic disorder. *British Journal of Psychiatry*, *164*, 759-769.
- Covington, M. V. (1992). *Making the grade: A self-worth perspective on motivation, and school reform*. New York: Cambridge University Press.
- Deffenbacher, J., Zwemer, W., Whisman, M. A., Hill, R. W., & Sloan, R. (1986). Irrational beliefs and anxiety. *Cognitive Therapy and Research*, *10*, 281-292.
- Deppe, R. K., & Harackiewicz, J. M. (1996). Self-handicapping and intrinsic motivation: Buffering intrinsic motivation from the threat of failure. *Journal of Personality and Social Psychology*, *70*(4), 868-876.
- Ellis, A. (1994). *Reason and emotion in psychotherapy, revised and updated*. New York: Birch Lane Press.
- Ellis, A., & Knaus, W. J. (1977). *Overcoming procrastination*. New York: Institute for Rational Living.
- Fairburn, C. G. (1997). Eating disorders. In D. M. Clark & C. G. Fairburn (Eds.), *Science and practice of cognitive behaviour therapy*. Oxford, UK: Oxford University Press.
- Fairburn, C. G., Shafran, R., & Cooper, Z. (1999). A cognitive-behavioural theory of anorexia nervosa. *Behaviour Research and Therapy*, *37*, 1-13.
- Ferguson, K. L., & Rodway, G. R. (1994). Cognitive Behavioural Treatment of perfectionism: initial evaluation studies. *Research on Social Work Practice*, *4*, 283-308.
- Ferrari, J. R., & Mautz, W. T. (1997). Predicting perfectionism: Applying tests of rigidity. *Journal of Clinical Psychology*, *53*, 1-6.

- Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Mosher, S. W. (1991). Perfectionism, self-actualization, and personality adjustment. *Journal of Social Behavior & Personality*, 6(5), 147-160.
- Flett, G. L., Hewitt, P. L., & Dyck, D. G. (1989). Self-oriented perfectionism, neuroticism and anxiety. *Personality and Individual Differences*, 10, 731-735.
- Flett, G. L., Hewitt, P. L., Oliver, J. L., & Macdonald, S. (2002). Perfectionism in children and their parents: A developmental analysis. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment*. Washington, DC: American Psychological Association.
- Flett, G. L., Parnes, J., & Hewitt, P. L. (2001). *Perfectionism and perceived pressure*. Manuscript submitted for publication.
- Frost, R. O., & Henderson, K. J. (1991). Perfectionism and reactions to athletic competition. *Journal of Sport and Exercise Psychology*, 13, 323-335.
- Frost, R. O., Lahart, C., & Rosenblate, R. (1991). The development of perfectionism: A study of daughters and their parents. *Cognitive therapy and research*, 15, 469-489.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
- Garcia, T. (1995). The role of motivational strategies in self-regulated learning. *New Directions in Teaching and Learning*, 63, 29-42.
- Greenberg, J. (1985). Unattainable goal choice as a self-handicapping strategy. *Journal of Personality and Social Psychology*, 15, 140-152.
- Habke, A. M. (1997). The manifestations of perfectionistic self-presentation in a clinical sample. *Dissertation Abstracts International*, 59, 02B (UMI No. 872).
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15, 27-33.
- Hewitt, P. L., & Flett, G. L. (1991). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, 100, 98-101.
- Hewitt, P. L., & Flett, G. L. (2002). Perfectionism and stress processes in psychopathology. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment*. Washington, DC: American Psychological Association.
- Higgins, R. L., & Berglas, S. (1990). The maintenance and treatment of self-handicapping: from risk-taking to face-saving and back. In R. L. Higgins, C. R. Snyder, & S. Berglas (Eds.), *Self-handicapping: The paradox that isn't*. New York: Plenum Press.
- Hobden, K., & Pliner, P. (1995). Self-handicapping and dimensions of perfectionism: Self-presentation vs self-protection. *Journal of Research in Personality*, 29, 461-474.
- Hollender, M. H. (1965). Perfectionism. *Comprehensive Psychiatry*, 6, 94-103.
- Hollender, M. H. (1978). Perfectionism, a neglected personality trait. *Journal of Clinical Psychiatry*, 39, 384.
- Hollon, S., & Beck, A. (1994). Cognitive and cognitive-behavioral therapies. In *Handbook of psychotherapy and behavior change* (4th ed.) (pp. 428-466). Oxford, England: John Wiley & Sons.

- Jones, E. E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. *Personality and Social Psychology Bulletin*, 4, 200-206.
- Juster, H. R., Heimberg, R. G., Frost, R. O., Holt, C. S., Mattia, J. I., & Faccenda, K. (1996). Social phobia and perfectionism. *Personality and Individual Differences*, 21, 403-410.
- Kaner, A., Bulik, C. M., & Sullivan, P. F. (1993). Abuse in adult relationships of bulimic women. *Journal of Interpersonal Violence*, 8, 52-63.
- Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety and depression: Are the relationships independent? *Cognitive Therapy and Research*, 25, 291-301.
- Kearns, H., Forbes, A., & Gardiner, M. (2007). A cognitive-behavioural coaching intervention for the treatment of perfectionism and self-handicapping in a non-clinical population. *Behaviour Change*, 24(3), 157-172.
- Kearns, H., Gardiner, M., & Marshall, K. (2008). Innovation in PhD completion: The hardy shall succeed (and be happy!). *Higher Education Research and Development*, 27(1), 77-89.
- Kimble, C. E., Kimble, E. A., & Croy, N. A. (1998). Development of self-handicapping tendencies. *The Journal of Social Psychology*, 138(4), 524-535.
- Kinzl, J. F., Traweger, C., Guenther, V., & Biebl, W. (1994). Family background and sexual abuse associated with eating disorders. *American Journal of Psychiatry*, 151, 1127-1131.
- Lay, C., & Silverman, S. (1996). Trait procrastination, anxiety and dilatory behaviour. *Personality and Individual Differences*, 21, 61-67.
- Martin, T., Flett, G., Hewitt, P., Krames, L., & Szanto, G. (1996). Personality correlates of depression and health symptoms: A test of a self-regulation model. *Journal of Research in Personality*, 31, 264-277.
- Martin, A. J., Marsh, H. W., Williamson, A., & Debus, R. L. (2003). Self-handicapping, defensive pessimism and goal orientation: a qualitative study of university students. *Journal of Educational Psychology*, 95(3), 617-628.
- Missildine, W. H. (1963). Perfectionism – if you must strive to do better. In W. H. Missildine (Ed.), *Your inner child of the past* (pp. 75-90). New York: Pocket Books.
- Mobley, M., Slaney, R.B., & Rice, K.G. (2005). Cultural validity of the Almost Perfect scale – revised for African American college students. *Journal of Counseling Psychology*, 52(4), 629-639.
- Nadler, A. (1983). Personal characteristics and help seeking. In B. M. Depaulo, A. A. Nadler & J. D. Fisher (Eds.), *New directions in help-seeking* (Vol. 2) (pp. 303-340). San Diego, CA: Academic Press.
- Neenan, M., & Palmer, S. (2001). Cognitive Behavioural Coaching. *Stress News*, 13(3).
- Neilsen, A., Hewitt, P. L., Han, H., Habke, A. M., Cockell, S. J., Stager, G., et al. (1997, August). *Perfectionistic self-presentation styles and attitudes toward professional help seeking*. Paper presented at the annual meeting of the Canadian Psychological Association, Toronto, Ontario.

- Neumeister, K. L. S. (2004). Understanding the relationship between perfectionism and achievement motivation in gifted college students. *The Gifted Child Quarterly*, 48(4), 259-274.
- Onwuegbuzie, A. J. (2004). Academic procrastination and statistics anxiety. *Assessment & Evaluation in Higher Education*, 29(1), 3-19.
- Pacht, A. R. (1984). Reflections on Perfection. *American Psychologist*, 39(4), 386-390.
- Phillips, J. P. N. (1986). Essay-writing phobia in undergraduates. *Behaviour Research and Therapy*, 24, 603-604.
- Rhodewalt, F., Saltzman, A. T., & Wittmer, J. (1984). Self-handicapping among competitive athletes: the role of practice in self-esteem protection. *Basic and Applied Social Psychology*, 5(3), 197-209.
- Rice, K. G., Ashby, J. S., & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: a structural equations analysis. *Journal of Consulting Psychology*, 45, 304-314.
- Saddler, C. D., & Sacks, L. (1993). Multidimensional perfectionism and academic procrastination: relationship with depression in university students. *Psychological Reports*, 73, 863-871.
- Salkovskis, P. M., & Westbrook, D. (1989). Behaviour therapy and obsessional ruminations: can failure be turned into success? *Behaviour Research and Therapy*, 27, 149-160.
- Shafran, R., & Mansell, W. (2001). Perfectionism and Psychopathology: A Review of Research and Treatment. *Clinical Psychology Review*, 21(6), 879-906.
- Snyder, C. R., & Smith, T. W. (1982). Symptoms as self-handicapping strategies: The virtues of old wine in a new bottle. In G. Weary & H. L. Mirels (Ed.), *Integrations of clinical and social psychology* (pp. 104-127). New York: Oxford University Press.
- Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioural correlates. *Journal of Counselling Psychology*, 31, 503-509.
- Spielberger, C. D., Garsuch, R. L., & Lushene, R. E. (1970). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Urduan, T., & Midgley, C. (2001). Academic Self-handicapping: What we know, what more there is to learn. *Educational Psychology Review*, 13(2), 115-138.
- Zlotnick, C., Hohlstein, L. A., Shea, M. T., Pearlstein, T., Recupero, P., & Bidad, K. (1996). The relationship between sexual abuse and eating pathology. *International Journal of Eating Disorders*, 20, 129-134.
- Zuckerman, M., Kieffer, S. C., & Knee, C. R. (1998). Consequences of self-handicapping: effects on coping, academic performance and adjustment. *Journal of Personality and Social Psychology*, 74, 1619-1628.