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Multidimensions of Perfectionism and Self-Concept in School Aged Children

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Perfectionism is a personality construct that involves striving for flawlessness and setting high standards. Self-concept is an individual's self-perceptions of personal attributes and competence. This study investigated the relationship between the multidimensions of both perfectionism and self-concept in Australian students. Over 300 children in grades 4 to 6 completed the Child and Adolescent Perfectionism Scale (CAPS, Flett & Hewitt, 1990), the Adaptive/Maladaptive Perfectionism Scale (AMPS, Rice & Preusser, 2002) and Self Description Questionnaire I (SDQ-I, Marsh, 1990). CAPS focused on the sources of perfectionism (i.e., self-oriented perfectionism and socially-prescribed perfectionism). AMPS focused on perfectionistic behavioral tendencies such as sensitivity to mistakes and compulsiveness (i.e., preference for order and persistence). SDQ-I examined academic self-concept, non-academic self-concept and general self-worth. It had been suggested that self-oriented perfectionism and compulsiveness are adaptive, whereas socially-prescribed perfectionism and sensitivity to mistakes are maladaptive. Unlike studies with adults, results from the present study indicated that there was a positive correlation between perfectionism dimensions and self-concept domains for school-aged children. Self-oriented perfectionism was significantly associated with academic self-concept and general self-worth. Compulsiveness was significantly associated with academic, non-academic self-concept and general self-worth. Socially-prescribed perfectionism and sensitivity to mistakes were not significantly associated with general self-worth. Implications of these findings are discussed within the education context.

“Striving for excellence” is a well-known school motto. Educators try to instil such an aspiration in their students and motivate them to work to their best abilities. As students proceed from childhood to adolescence, they experience increasing pressures to perform well in a wide range of areas, both academic and non-academic. Striving for excellence, however, is often misconstrued as striving for perfection. How striving for perfection impacts on children's self-understanding is the focus of this paper.

Perfectionism

There is no universally accepted definition of “perfectionism”. Despite the diverse conceptualisation of the construct, it has been generally agreed that perfectionism is a personality construct characterised by the striving for flawlessness and setting high standards (Flett & Hewitt, 2002). Historically, perfectionism was viewed as unidimensional, characterised by its negative features. For instance, early researchers such as Ellis (1962) and Burns (1980) tended to emphasize the association between perfectionism and dysfunctional thoughts, feelings and psychopathology. More recently, however, increasing evidence has emerged to support a multidimensional view of perfectionism, in which both positive and negative aspects are incorporated. In this context, the model developed by Hewitt and Flett (1991) encompasses the source and direction of perfectionism. In their Multidimensional Perfectionism Scale (MPS), they identify three dimensions, namely “Self-oriented perfectionism”, “Socially-prescribed perfectionism” and “Other-oriented perfectionism”. “Self-oriented perfectionism” refers to setting high personal standards for one to achieve. “Socially-prescribed perfectionism” refers to the perceived high expectations from significant others. “Other-oriented perfectionism” refers to setting high expectations for significant others to achieve. Another instrument of the same name was developed by Frost, Martin, Lahart and Rosenblate (1990). The Frost Multidimensional Perfectionism Scale (FMPS) measures six dimensions, namely, “Concern over mistakes”, “Doubts about actions”, “Parental expectations”, “Parental criticism”, “Personal standards” and “Organisation”.

The dimensions of perfectionism can also be regarded as positive/adaptive or negative/maladaptive (Hamachek, 1978) although no consensus has been reached in the existing literature about which dimension is adaptive and which is maladaptive. Generally, the maladaptiveness of perfectionism is determined by its association with negative outcomes such as depression, anxiety, or low self-esteem (Hewitt, Caelian, Flett, Sherry, Collins & Flynn, 2002; McCreary, Joiner, Schmidt, Ialanga, 2004). In this context, Frost Heimberg, Holt, Mattia and Neubauer (1993) compared the perfectionism dimensions identified by their FMPS and Hewitt and Flett's (1991) MPS and yielded two higher factors. The first factor was "Maladaptive evaluation concerns", including Socially-prescribed perfectionism, Concern over mistakes, Parental criticism and expectations, and Doubts about actions. These dimensions were classified as maladaptive as they correlated with negative affect and depression. The second higher factor was "Positive achievement strivings", which included Self-oriented perfectionism, Other-oriented perfectionism, Personal standards and Organisation. They were considered as adaptive as they correlated with positive affect rather than with negative affect or depression.

To date most empirical studies on perfectionism has been conducted with adults with an over-representation of university students and clinical populations (Chang, 2000; Frost et al., 1990; Preusser, Rice & Ashby, 1994). Studies with children have been minimal, partly because of the lack of reliable instruments designed for this group (Rice & Preusser, 2002). Moreover, studies have usually targeted special populations such as gifted adolescents. The investigation of perfectionism in mainstream children is a new endeavour (Hewitt, et al., 2002; Rice, Kubal & Preusser, 2004).

Two scales can be identified from a review of instruments available for the study of perfectionism in children. The first one was developed by the research team of Hewitt and Flett. Mirroring the adult version of their Multidimensional Perfectionism Scale (MPS), Flett and Hewitt (1990) developed a Child and Adolescent Perfectionism Scale (CAPS) which encompassed two dimensions, i.e., "Self-oriented perfectionism" and "Socially-prescribed perfectionism".

Another child measure of perfectionism was recently developed by Rice and Preusser (2002), who felt that there had been an over-emphasis on its negative aspects. In this context, they developed an Adaptive/Maladaptive Perfectionism Scale (AMPS) in children to explore new behavioural dimensions of perfectionism, namely, "Sensitivity to mistakes", "Contingent self-esteem", "Compulsiveness" and "Need for admiration". AMPS is a relatively new instrument that has not been used widely except by Rice and his colleagues. Previous research has tended to use only one assessment tool to measure perfectionism, thereby limiting the breadth of investigation. A combination of measures that are based on different theoretical frameworks would serve to clarify dimensions that might be adaptive or maladaptive.

The study of perfectionism in Australian children is limited. So far, three studies have been conducted, and all of them focused on adolescents. The first study by Einstein, Lovibond and Gaston (2000) investigated Year 12 students. By using the adult version of Hewitt and Flett's (1991) Multidimensional Perfectionism Scale (MPS), they found that Socially-prescribed perfectionism was associated with anxiety and depression, whereas Self-oriented perfectionism was not. The second study by Hawkins, Watt and Sinclair (2001) used Frost et al.'s (1990) Multidimensional Perfectionism Scale (FMPS) to investigate perfectionism in Years 7-11 girls. Also using Frost and colleagues' (1990) FMPS, the third study by Kornblum and Ainley (2005) extended the age level to include Years 6, 8, and 11 students, a majority of whom were boys, enrolled in both "gifted" and mainstream programs. Both Hawkins et al. (2001) and Kornblum and Ainley (2005) found similar results. Using cluster analyses, they identified three groups of adolescents, namely, healthy perfectionists, unhealthy perfectionists and non-perfectionists. As none of the three studies investigated perfectionism in children younger than Year 6, a study that focused on mainstream Australian primary students was deemed valuable.

Self-concept

“Self-concept” can be regarded as a person’s self-perception, which consists of sets of personal attributes, competence and behavioural characteristics. These self-attributes have both descriptive and evaluative components (Piers & Harris, 1969, Shavelson, Hubner & Stanton, 1976). Self-concepts are formed and modified through life experience, as a function of an individual’s internal evaluations and the feedback obtained from external evaluations by significant others (Marsh & Ayotte, 2003).

Similar to the conceptualisation of “perfectionism”, “self-concept” was also treated as a unidimensional construct originally (Coopersmith, 1981; Rosenberg, 1979). Early studies adopted such an approach and assumed a relatively stable and enduring global self-concept. Shavelson, Hubner and Stanton (1976) proposed a theory that considered self-concept as multidimensional in nature and hierarchical in structure. With increasing age, children become more aware of the differentiation between different facets of self-concept. For instance, they recognise the difference between the reading self, the music self and the sport self (Marsh & Ayotte, 2003). It is possible for a child to simultaneously have a positive self-concept in one dimension (e.g., sport) but a negative self-concept in another (e.g., reading).

Based on the Shavelson et al.’s (1976) model, Marsh (1990) developed a multidimensional, hierarchical measure of self-concept in children, the Self Description Questionnaire (SDQ-I). At the apex of the hierarchy is the total self-concept. The second level consists of Academic self-concept and Non-academic self-concept. The Academic self-concept is further differentiated as Reading, Mathematics and General school; whereas the Non-academic self-concept consists of Physical appearance, Physical abilities, Parent relations and Peer relations. Along with these dimensions, there is also a General self-concept, referring to one’s “General self-worth”.

Relationship between perfectionism and self-concept

It has been suggested that perfectionists tend to base their self-worth on their performance (Barrow & Moore, 1983; Burns, 1980). When there is a match between their perfectionistic personal standards and their actual performance, they have an enhanced self-concept. Conversely, when there is a discrepancy between actual performance and self-imposed high standards, they have a poor self-concept.

Studies investigating the relationship between perfectionism and self-concept in adults produced mixed findings. Flett, Besser, Davis and Hewitt (2003), for example, found that both Self-oriented and Socially-prescribed perfectionism were negatively associated with unconditional self-acceptance. Similarly, other studies also found a significant negative association between high Concern about mistakes and self-esteem (Rice, Ashby & Slaney, 1998; Campbell & Di Paula, 2002).

On the other hand, significant positive associations between adaptive dimensions of perfectionism (e.g., high Personal standards and Organisation) and self-esteem have also been reported (Grzegorek, Slaney, Franze, & Rice, 2004). Given that studies with adults have shown that evaluation of personal performance against an internalized standard by perfectionists has an impact on their self-concept and self-esteem, one could wonder if the same relationship applies to children.

Investigation of the relationship between perfectionism and self-concept in children and adolescents has been a neglected area, as demonstrated by a paucity of studies and a tendency to focus on the academically gifted (Dixon, Lapsley & Hanchon, 2004; Parker, 1997). Studies with adolescents and academically talented children have variously found that arguably adaptive aspects of perfectionism such as high Personal standards and Organisation, low Concern over mistakes, low Parental criticism and low Discrepancy between standards and attainments, were associated with positive self-esteem, academic self-concept, GPA, achievement motivation and parent relations (Dixon et al. 2004; Parker, 1997).

Conversely, high levels of Socially-prescribed perfectionism, Concern over mistakes, Parental criticism and expectations, and Discrepancy have been shown to be maladaptive by

being associated with low self-esteem (Accordino, Accordino & Slaney, 2000; Dixon, et al., 2004; Gilman & Ashby, 2003a; Gilman & Ashby, 2003b; Parker, 1997). In this context, Rice et al., (2004) investigated perfectionism scores on AMPS with scores on the multidimensional Piers-Harris Self-Concept Scale (Piers & Harris, 1969). As in previous studies, high Sensitivity to mistakes was associated with low self-concept for children.

The present study

In order to investigate the extent to which research on the relationship between perfectionism and self-concept with adults applies to mainstream school children, the present study used in a sample of Australian primary students as young as Year 4. Unlike previous research, the instruments used were designed and validated especially for children and took the multidimensionality nature of the two constructs (i.e., perfectionism and self-concept) into account. For these reasons, this study has broken new ground by using a combination of the two existing measures of child perfectionism, namely, CAPS and AMPS.

Specifically, the present study aimed at delineating the relationship between different aspects of self-concept (i.e., Academic self-concept, Non-academic self-concept and General self-worth) and different dimensions of perfectionism, with a focus on the dimensions of Self-oriented perfectionism, Compulsiveness and Need for admiration, which are generally viewed as adaptive, and the dimensions of Socially-prescribed perfectionism and Sensitivity to mistakes, which are generally viewed as maladaptive. Based on the adult literature, it was expected that:

1. Self-oriented perfectionism, Compulsiveness and Need for admiration will be significantly positively correlated with Academic self-concept, Non-academic self-concept, and General self-worth.
2. Socially-prescribed perfectionism and Sensitivity to mistakes will be significantly negatively correlated with Academic self-concept, Non-academic self-concept, and General self-worth.

Design

Participants

A total of 372 Australian mainstream primary school students (54% girls and 46% boys) participated in this study. They were recruited from Grade 4 to 6 of three public primary schools in metropolitan Western Sydney Australia. The mean age of the participants was 10.4 years with a range of 8.3 years to 12.8 years. The ethnic backgrounds of the participants consisted of Caucasian-Australian (34%), Asian-Australian (47%), Pacific-Australian (7%), Middle Eastern-Australian (6%) and others (6%), representing the ethnic composition of multicultural Sydney.

Instruments

The multidimensions of perfectionism and self-concept were assessed by questionnaires that have been validated for use with primary school children with a reading level of Year 3 or above.

The Child-Adolescent Perfectionism Scale (CAPS)

The Child-Adolescent Perfectionism Scale (CAPS, Flett & Hewitt, 1990) measures the source of high standards, and consists of two dimensions of perfectionism: (1) Self-oriented perfectionism (i.e., the individual setting high standards of performance for themselves), and (2) Socially-prescribed perfectionism (i.e., the individual's perception of high expectations from significant others). CAPS consists of 22 items and children are

required to respond on a 5-point “true or false” scale. Hewitt et al. (2002) reported the Cronbach’s alpha levels of .85 and .86 for Self-oriented perfectionism, and Socially-prescribed perfectionism respectively.

Adaptive/Maladaptive Perfectionism Scale (AMPS)

The Adaptive/Maladaptive Perfectionism Scale (AMPS, Rice & Preusser, 2002) focuses on behaviours manifested in the striving for perfection. AMPS consists of 27 items clustered in 4 dimensions: (1) Sensitivity to mistakes (i.e., children’s fears associated with making mistakes), (2) Compulsiveness (i.e., preferences for order and organisation, and conscientious and persistent approach to task completion), (3) Need for admiration (i.e., interest in being recognised, admired and appreciated for exemplary work and high standards), and (4) Contingent self-esteem (i.e., positive feelings about the self when some of the standards are met). Children are required to respond on a 4-point Likert scales. The Cronbach’s coefficient alphas for AMPS range from .73 to .91 (Rice & Preusser, 2002). The present study focused on the dimensions of Sensitivity to mistakes, Compulsiveness and Need for admiration as research has shown that these are the key behavioural features of perfectionism. In order to avoid the potential “jingle-jangle fallacy” where similar constructs are given different labels or different constructs are given the same label (Marsh, Craven, Hinkley, & Debus, 2003), the last dimension of “Contingent self-esteem” was not included in the present study as there was a possibility of conceptual overlap between “Contingent self-esteem” in AMPS and the self-concept and general self-worth dimensions to be assessed as the outcome variable in SDQ-I.

Self-Description Questionnaire I (SDQ-I)

Self-Description Questionnaire I (SDQ-I, Marsh, 1990) is a well-validated and widely-used Australian measure of multidimensional self-concept in pre-adolescent children. It consists of Academic self-concept (including Reading, Mathematics and General school), Non-academic self-concept (including Physical ability, Physical appearance, Peer relations and Parent relations), and General self-worth (i.e., measure of overall self-esteem). SDQ-I consists of 76 items and children respond on a 5-point “true or false” scale. The internal consistency of the subscales of SDQ-I range from .80 to .94 (Marsh, 1988).

Procedure

Upon the approval of NSW Department of Education and Training Planning and Innovation Directorate and UWS Human Research Ethics Committee, parental consent was obtained for each participant prior to the administration of the questionnaires. Items from the questionnaires were read aloud to the students in class. Students were required to write down their response. The order of the scales was counterbalanced and short breaks for activity were incorporated between each questionnaire.

Results

Correlation between dimensions of perfectionism and self-concepts

The Pearson correlations between the multidimensions of perfectionism (CAPS and AMPS) and self-concepts (SDQ-I) are shown in Table 1.

As expected, Self-oriented perfectionism significantly correlated with Academic self-concept ($r = .37, p < .001$) and General self-worth ($r = .21, p < .001$) in a positive direction. The correlation between Self-oriented perfectionism and Non-academic self-concept was not significant. There were also significant positive correlations between Compulsiveness and all self-concept subscales ($r = .29, p < .001$ for Academic self-concept, $r = .22, p < .001$ for Non-academic self-concept, $r = .21, p < .001$ for General self-worth). Similarly, Need for admiration also significantly correlated with all the self-concept subscales in a positive

direction ($r = .23, p < .001$ for Academic self-concept, $r = .28, p < .001$ for Non-academic self-concept, and $r = .23, p < .001$ for General self-worth).

Contrary to expectations, Socially-prescribed perfectionism was positively correlated with Academic self-concept ($r = .19, p < .001$) but was not correlated significantly with Non-academic self-concept ($r = .10, p > .05$) and General self-worth ($r = .07, p > .05$). Also contrary to expectation, Sensitivity to mistakes was significantly correlated in a positive direction with Academic self-concept ($r = .14, p < .05$). Nonetheless, its correlations with Non-academic self-concept and General self-worth were not significant ($r = -.05, p > .05$, and $r = .05, p > .05$ respectively).

Unlike adult studies, the present results indicated that nearly all perfectionism dimensions were positively correlated with most self-concept domains in school-aged children.

Table 1: Pearson correlation coefficients among dimensions of perfectionism and dimensions of self-concept

Subscales	SDQ-I		
	Academic self-concept	Non-academic self-concept	General self-worth
CAPS			
Self-oriented perfectionism	.370***	.096	.203***
Socially-prescribed perfectionism	.188***	.102	.067
AMPS			
Sensitivity to mistakes	.135*	-.049	.046
Compulsiveness	.288***	.217***	.212***
Need for admiration	.233***	.275***	.230***

Note. CAPS = Child and Adolescent Perfectionism Scale, AMPS = Adaptive Maladaptive Perfectionism Scale, SDQ-I = Self Description Questionnaire-I. * $p < .05$. *** $p < .001$.

Discussion

Much of the literature in the field of perfectionism has focussed on such negative correlates as anxiety, depression and poor interpersonal relations. This study, however, supports the contention that perfectionism may well have positive aspects. Certainly, for the 372 Australian school-aged children in this study, most perfectionism and self-concept dimensions were positively correlated with each other. “Self-oriented perfectionism” was associated with an enhanced General self-worth and increased Academic self-concept in mathematics, reading and general school. Contrary to expectations, “Socially-prescribed perfectionism” and “Sensitivity to mistakes” were also significantly positively associated with Academic self-concept, although not with Non-academic self-concept or General self-worth.

In applied terms, therefore, those children who set high standards for themselves were likely to see themselves as good at school subjects, liked mathematics and reading, and were interested in and enjoyed doing schoolwork. They also had overall positive self-images. This is consistent with previous studies among adolescents (Accordino et al., 2000; Dixon et al., 2004) that found high standards were associated positively with motivation to achieve, high academic self-esteem and better personal adjustment.

A possible explanation for this can be provided by Campbell and Di Paula’s study (2002) that identified two distinct factors within the Self-oriented perfectionism dimension. The first of these, Perfectionistic Striving, reflected positive adjustment and was correlated

with higher self-esteem, whereas the other factor, Importance of Being Perfect, was negatively correlated with self-esteem. A study by McCreary et al. (2004) also found two similar dimensions of Self-oriented perfectionism; a negative self-criticism factor, and a positive striving factor, thereby supporting a comparable two-factor structure as well.

In the present study, it was interesting to find that Compulsiveness and Need for admiration were also associated positively with self-concept and self-worth for some children. In their case, positive self-beliefs accompanied a preference for order, organisation, persistence and conscientiousness in task completion, along with a desire for their achievements to be recognised, admired and appreciated. Studies with adolescents have similarly found that a high need for order and organisation are adaptive (Dixon et al., 2004; Rice et al., 1998).

In this context, however, Flett and Hewitt (2002) argue that order and organisation are merely aspects of an individual's conscientiousness rather than their strivings for perfectionism. They maintain that compulsive preoccupations and a high need for external validation, such as in Socially-prescribed perfectionism, has almost invariably been linked to wide ranging psychopathologies in adolescents and adults (e.g., Hewitt et al., 2002). For the children in the present research, Socially-prescribed perfectionism was not associated negatively with any area of self-concept, in fact, the contrary was evident. It could be argued, therefore, that young children's perceptions of their competence in school subjects may actually be enhanced by their belief that significant others (parents and teachers) expect high standards of them.

In terms of Erikson's (1968) theory of psychosocial development, primary school children develop a sense of industry or inferiority and incompetence, depending on feedback from peers, parents and teachers about their achievements. As Erikson points out, if developmental conflicts are resolved positively by the child at this stage, a psychologically healthy sense of industry will emerge that will lead to the next stage, that of positive identity formation. Socially-prescribed perfectionism may not be experienced as an external unrealistic pressure for young children, but as a reasonable guideline for goal setting. In Campbell and Di Paula's (2002) study, the perception that acceptance by others depends on attaining high standards, was maladaptive. However, the belief that others have high expectations for the individual was not a critical factor in clinical problems associated with Socially-prescribed perfectionism. This could explain the lack of an association between Socially-prescribed perfectionism and Non-academic self-concept and General self-worth in the current study.

As with Socially-prescribed perfectionism, Sensitivity to mistakes (with its associated concerns about doubts about one's actions and about criticism from others) has been considered a major negative dimension of perfectionism (Frost et al., 1990), hence, it was expected to be negatively associated with self-concept as previous studies with adults (Frost et al., 1993; Rice et al., 1998), adolescents (Dixon et al., 2004), and children (Parker, 1997; Rice et al., 2004) have demonstrated.

In the current study Sensitivity to mistakes did not have a significant negative association with any self-concept domain; in fact, it was positively associated with Academic self-concept. These results are at odds with the generally accepted view that Sensitivity to mistakes is maladaptive and indicate it was not maladaptive for children with respect to the self-concept domains assessed in the current study. Nonetheless, as neither Socially-prescribed perfectionism nor Sensitivity to mistakes were related to General self-worth, it could not be argued that these two dimensions were adaptive. In a related vein, evidence exists that perfectionism may well be related to negative self-evaluative emotions such as shame and guilt (e.g., Choy & Drinnan, 2006; Choy & McInerney, 2005; Tangney, 2002). Covington (1992) has pointed out that too often self-worth is defined in terms of one's achievements and ability.

As the present study was limited to self-report instruments, future research using a range of data sources such as parent, teacher and student interviews should examine the emotional impact of perfectionism on primary school aged children. Such research should also take into account the demographics of school locations as these reflect socio-economic

and cultural differences and aspirations. Longitudinal study of children as they make the transition to adolescence and high school could also prove very valuable with regard to investigating developmental cognitive and affective changes.

In practical terms, the findings from the present study have important implications for children. Parents, teachers and school counsellors play crucial roles in monitoring primary school aged children's potentially maladaptive perfectionistic tendencies. In particular, they need to teach them how to set realistic personal goals for which to strive (Chang, 2000) and how to develop metacognitive strategies for planning, monitoring, and regulating their progress towards achieving these (Boekaerts, Pintrich, & Zeidner, 2000).

In terms of the goal theory of motivation (Covington, 2000; McInerney & McInerney, 2006), it would be well also to teach them not to aspire to goals unrealistically prescribed by others, for which failure might be associated with low self-esteem. Most importantly in school contexts, teachers and counsellors should help children to understand that learning is about mastery of particular tasks, rather than about demonstrating how "good" they are at performing these tasks. From this perspective, there is no room for such defeatist self-descriptions as being "imperfect" or "failing" at something. Rather, mistakes are to be understood as an integral part of learning by identifying formatively what yet needs to be mastered; there is no ego-evaluative connotation associated with errors. In this context, task-related effort over performance-related outcome is to be encouraged by parents and teachers alike, and progress towards achieving a goal is to be increasingly self-determined and self-rewarded, rather than when a final goal is attained. Self-efficacy for specific competencies will be enhanced in this way, with the consequent positive outcomes for future motivation (Bandura, 1997). Here it would be wise for educators and parents alike to heed the words of Carol Dweck, who has shown that praise for achievements can be truly "dangerous" to students' self-worth and effort (Dweck, 1999a, 1999b; 2002 a, 2002b).

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References

- Accordino, D. B., Accordino, M. P., & Slaney, R. B. (2000). An investigation of perfectionism, mental health, achievement, and achievement motivation in adolescents. *Psychology in the Schools*, 37(6), 535-545.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barrow, J. C. & Moore, C. A. (1983). Group interventions with perfectionistic thinking. *The Personnel and Guidance Journal*, 61, 612-615.
- Boekaerts, M., Pintrich, P. R., & Zeidner, M. (Eds.) (2000). *Handbook of self-regulation*. San Diego: Academic Press.
- Burns, D. (1980). The perfectionist's script for self-defeat. *Psychology Today*, 34-52.
- Campbell, J. D., & Di Paula, A. (2002). Perfectionistic self-beliefs: Their relation to personality and goal pursuit. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment* (pp. 181-197). Washington DC: American Psychological Association.
- Chang, E. C. (2000). Perfectionism as a predictor of positive and negative psychological outcomes: Examining a mediational model in younger and older adults. *Journal of Counseling Psychology*, 47, 18-26.
- Choy, G. & Drinnan, L. (2006, July). *Perfectionism and self-evaluative emotions in Australian children*. Presented at the 19th Biennial Meetings of the International Society for the Study of Behavioural Development (ISSBD), Melbourne, Australia.
- Choy, G. & McInerney, V. (2005). Perfectionism, self-concept and self-evaluative emotions in Australian primary school students. *Proceedings of the 2005 Australian Association of Research in Education Annual Conference*. Melbourne: AARE.
- Coopersmith, S. (1981). *Self-esteem inventories*. Palo Alto, CA: Consulting Psychological Press.
- Covington, M. V. (1992). *Making the grade: A self-worth perspective on motivation and school reform*. Oakleigh: Cambridge.
- Covington, M. V. (2000). Goal theory, motivation, and school achievement: an integrative review. *Annual Review of Psychology*, 51, 171-200.
- Dixon, F. A., Lapsley, D. K., & Hanchon, T. A. (2004). An empirical typology of perfectionism in gifted adolescents. *Gifted Child Quarterly*, 48(2), 95-106.
- Dweck, C. S. (1999a). Caution—praise can be dangerous. *American Educator*, 23(1), 4-9.
- Dweck, C. S. (1999b). *Self-theories: Their role in motivation, personality and development*. Philadelphia: The Psychology Press
- Dweck, C. S. (2002a). Beliefs that make smart people dumb. In R. J. Sternberg (Ed.). *Why smart people can be so stupid*. New Haven: Yale University Press.
- Dweck, C.S. (2002b). Messages that motivate: How praise moulds students' beliefs, motivation, and performance (in surprising ways). In J. Aronson (Ed.), *Improving academic achievement*. New York: Academic Press.
- Einstein, D. A., Lovibond, P. F. & Gaston, J. E. (2000). Relationship between perfectionism and emotional symptoms in an adolescent sample. *Australian Journal of Psychology*. 52(2), 89-93.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.
- Erikson, E. (1968). *Identity: Youth and Crisis*. New York: Norton.
- Flett, G. L., & Hewitt, P. L. (1990). The Child-Adolescent Perfectionism Scale: Development and association with measures of adjustment. In R. Frost (Chair), *Perfectionism: Meaning, measurement, and relation to psychopathology*. Symposium conducted at the meeting of the Association for the Advancement of Behaviour Therapy, San Francisco.
- Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett & P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment* (pp. 5-32). Washington DC: American Psychological Association.
- Flett, G. L., Besser, A., Davis, R. A., & Hewitt, P. L. (2003). Dimensions of perfectionism. Unconditional self-acceptance, and depression. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 21(2), 119-138.
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality & Individual Differences*, 14 (1), 119-126.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy & Research*, 14(5), 449-468.
- Grzegorek, J. L., Slaney, R. B., Franze, S., & Rice, K. G. (2004). Self-criticism, dependency, self-esteem, and grade point average satisfaction among clusters of perfectionists and non-perfectionists. *Journal of Counseling Psychology*, 51(2), 192-200.

- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behaviour*, 15(1), 27-33.
- Hawkins, C. C., Watt, H. M. G., & Sinclair, K. E. (2001). The promises and pitfalls of perfectionistic behaviours in Australian adolescent girls. *Proceedings of the 2001 Australian Association of Research in Education Annual Conference*. Melbourne: AARE.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456-470.
- Hewitt, P. L., Caelian, C. F., Flett, G. L., Sherry, S. B., Collins, L., & Flynn, C. A. (2002). Perfectionism in children: Associations with depression, anxiety, and anger. *Personality and Individual Differences*, 32(6), 1049-1061.
- Kornblum, M. & Ainley, M. (2005). Perfectionism and the gifted: A study of an Australian school sample. *International Education Journal*, 6 (2), 232-239.
- Marsh, H. W., Craven, R. G., Hinkley, J. W. & Debus, R. (2003). Evaluation of the Big-Two-Factor Theory of academic motivation orientations: An evaluation of Jingle-Jangle Fallacies. *Multivariate Behavioural Research*. 38(2), 189-224.
- Marsh, H. W. (1988). *Self-Description Questionnaire: A theoretical and empirical basis for the measurement of multiple dimensions of preadolescent self-concept. A test manual and a research monograph*. San Antonio, TX: Psychological Corporation.
- Marsh, H. W. (1990). *Self Description Questionnaire-I (SDQ-I) Manual*. Sydney: University of Western Sydney.
- Marsh, H. W., & Ayotte, V. (2003). Do multiple dimensions of self-concept become more differentiated with age? The differential distinctiveness hypothesis. *Journal of Educational Psychology*, 95, 687-706.
- McCreary, B. T., Joiner, T. E., Schmidt, N. B., & Ialango, N. S. (2004). The structure and correlates of perfectionism in African American children. *Journal of Clinical Child and Adolescent Psychology*, 33(2), 313-324.
- McInerney, D. M., & McInerney, V. (2006). *Educational psychology: Constructing learning (4th ed.)* Sydney: Pearson Education.
- Parker, W. D. (1997). An empirical typology of perfectionism in academically talented children. *American Educational Research Association*, 34(3), 545-562.
- Piers, E. V. & Harris, D. B. (1969). *Piers-Harris Children's Self-Concept Scale*. Los Angeles: Western Psychological Services.
- Preusser, K. J., Rice, K. G., & Ashby, J. S. (1994). The role of self-esteem in mediating the perfectionism-depression connection. *Journal of College Student Development*, 35, 88-93.
- Rice, K. G., & Preusser, K. J. (2002). The Adaptive/Maladaptive Perfectionism Scale. *Measurement and Evaluation in Counseling and Development*, 34, 210-222.
- Rice, K. G., Ashby, J. S. & Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: a structural equations analysis. *Journal of Counseling Psychology*, 45(3), 304-314.
- Rice, K. G., Kubal, A. E., & Preusser, K. J. (2004). Perfectionism and children's self-concept: Further validation of the Adaptive/Maladaptive Perfectionism Scale. *Psychology in the Schools*, 41(3), 279-290.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, 407-441.
- Tangney, J. P. (2002). Perfectionism and the self-conscious emotions: Shame, guilt, embarrassment, and pride. In G. L. Flett & P. L. Hewitt, *Perfectionism: Theory, research and treatment* (pp. 5-32). Washington, DC: American Psychological Association.