

Fear of Failure: Friend or Foe?

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Fear of failure is examined from a need achievement perspective and in the context of research amongst high school and university students. Theory and data suggest that fear of failure can be separated into two camps: overstriving and self-protection. Although each has yields in terms of achievement or in terms of self-protection, they render the academic process an uncertain one for students marked by anxiety, low resilience, and vulnerability to learned helplessness. A cascading model of failure avoidance is developed that differentiates various aspects of fear of failure on the basis of a number of correlates and outcomes and provides direction for intervention. An alternative orientation — success orientation — is explored in detail as are four factors identified as the key means to promote success orientation. These factors are self-belief, control, learning focus, and value of school and ways to promote these in the educational and counselling context are discussed.

Fear of failure! friend or foe? This may seem like a silly and possibly rhetorical question. In fact, it is not such a silly question. As this paper shows, a fear of failure is a friend to some students in the sense that it drives them to achieve and persist in the face of challenge and adversity. However, as the paper also shows, for these students, it is not a particularly good friend because it also renders them vulnerable to setback, takes them on a roller-coaster ride of emotional ups and downs, and renders the journey to success somewhat difficult and uncertain. For many other students, a fear of failure is more clearly a foe, yielding high anxiety, underachievement, reduced resilience, and leading some to learned helplessness. This paper examines these two groups of failure fearers and explores an alternative orientation — success orientation — and ways to facilitate it. To illustrate the arguments, the paper draws primarily on educational and counselling psychology theory, data, and research — but practitioners will readily recognise that the principles are applicable in many other contexts.

Theoretical Foundations

The theoretical context for this paper is located in need achievement theory and later refinements of this theory. From a need achievement perspective, students vary in terms of their motive to avoid failure and approach success (Atkinson 1957; McClelland, 1965). Based on a need achievement model of motivation, students can be characterised in terms of three typologies: those that are success oriented, those that are failure avoidant, and those that are failure accepting.

Success-oriented students tend to be optimistic, adopt a proactive and positive orientation to tasks, and respond to setback with optimism and energy (Covington & Omelich, 1991; Martin, 1998, 2002; Martin, Marsh, & Debus, 2001a).

Failure-avoidant students are the classic failure fearers. They tend to be anxious (Alpert & Haber, 1960), motivated by a fear of failure, live in self-doubt, and are uncertain about their ability to avoid failure or achieve success (Covington & Omelich, 1991). While these students often work hard and achieve, they tend to be adversely affected by setback as it tends to confirm their doubts about their ability and their uncertain control (Covington & Omelich, 1991; Martin, 1998, 2001, 2002; Martin et al., 2001a, 2001b). In essence, they lack resilience. Often in response to this fear of failure, these students may even actively sabotage their chances of success (e.g., procrastinate, leave tasks until the last minute, or expend little effort) so that they have an excuse if they do not do so well. This excuse serves a protective function in that they can blame their poor performance on their procrastination, for example, rather than a possible lack of ability (Covington, 1992).

Failure-accepting students (sometimes referred to as learned helplessness) have given up to the point of not even trying to avoid failure. These students are generally disengaged from tasks and display a helpless pattern of motivation (Abramson, Seligman, & Teasdale, 1978; see also Covington, 1992). These students lack both motivation and resilience.

A Quadripolar Model of Need Achievement

The classic theory of need achievement (Atkinson, 1957; see also McClelland, 1965) has recently been revisited and represented in a two-dimensional model that locates students in terms of the dual motives to avoid failure and approach success (Covington, 1992; Covington & Omelich, 1991). This two dimensional framework, adapted from Covington (1992) is shown in Figure 1. This figure presents four broad typologies that vary in the extent to which they are failure avoidant and success oriented.

In previous work by Martin and colleagues (Martin, 1998; Martin et al., 2001a), failure fearers have been separated into two groups:

1. Students who deal with their fear of failure by hard work and/or success — the *overstriver* in Figure 1 who is high on both failure avoidance and success orientation.
2. Students who deal with their fear of failure through counterproductive activity that is aimed more at self-protection than attaining success — the *self-protector*

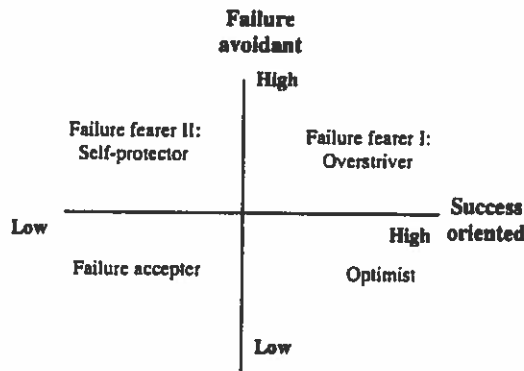


FIGURE 1
 Quadripolar model of need achievement from *Making the Grade: A Self-worth Perspective on Motivation and School Reform* by M. Covington, 1992, Cambridge: Cambridge University Press. (Adapted with permission from Cambridge University Press).

in Figure 1 who is high on failure avoidance and low on success orientation.

The Overstriver

The overstriver tends to avoid failure by succeeding (Covington & Omelich, 1991; Martin et al., 2001a). As is discussed below, this is in marked contrast to the student who is success oriented and achieves to attain success rather than to avoid failure. The fact that a fear of failure underpins much of what the overstriver does means that many of the factors that are associated with fear of failure “come along for the ride” — an expression used deliberately because even though performance may be unimpaired, the *journey* is far from pleasant. These concomitant factors include anxiety, perceptions of low control, and an unstable self-esteem (Martin, 1998, 2001; Martin et al., 2001a, 2001b).

This form of failure avoidance is quite common. As Table 1 shows, amongst two samples of university students (first and second year students from three universities in Sydney, Australia), around 45% agreed with survey items reflecting a need to succeed based on a fear of failure (Martin, 1998). Amongst high school students (Year 9, 10, and 11 students from two Australian high schools), this was 40% (Martin, 2001).

The risks inherent in this form of motivation are two-fold. First, as indicated above, it renders the journey somewhat unpleasant — fraught with anxiety, perceptions of low control, and unstable self-esteem (Martin et al., 2001a). Second, when overstrivers do not succeed, failure is seen as proof of suspected incompetence and this increases the risk of falling into the second and more counter-productive form of failure avoidance: self-protection (Covington,

1992; Covington & Omelich, 1991; Martin et al., 2001a). Essentially, then, overstrivers are less resilient than their success-oriented counterparts and so in this sense what appears to be the friend can in fact be a foe.

The Self-protector

The self-protector does not aim so much to avoid failure but to avoid the *implications* of failure (Covington, 1992). They avoid the implications of failure through strategically manoeuvring in ways to protect their self-worth. In doing so, they are able to mitigate the extent to which failure reflects poorly on their ability and consequent self-worth (Covington, 1992). They do this in a number of ways, two of which will be discussed here: self-handicapping and defensive pessimism.

Self-handicappers choose impediments or obstacles to successful performance that enable them to deflect the cause of failure away from their ability and on to the acquired impediment. In doing so, they avoid disconfirmation of a desired self-conception (Rhodewalt & Davison, 1986). Failure under these conditions is seen as related to the acquired impediment and not because of low ability. Examples of self-handicapping include the strategic reduction of effort, engaging in little or no practice for upcoming tasks, procrastination, or the choice of performance debilitating circumstances (see Berglas & Jones, 1978; Rhodewalt & Davison, 1986). In the event of failure, the student has a ready excuse. For example, the lack of effort is seen as the cause and not the student’s lack of ability.

Defensive pessimism involves setting unrealistically low expectations prior to events in which one’s performance is to be evaluated (Norem & Cantor, 1986a, 1986b). In the event of failure, the student has cognitively and affectively “stepped” him or herself for the outcome (Norem & Cantor, 1986a, 1986b), and so in this sense, defensive pessimism is self-protective. Moreover, setting lower, and possibly safer, expectations can reduce the threshold for satisfactory performance (Baumgardner & Brownlee, 1987) or serve to set performance standards that are less difficult to achieve (Showers & Ruben, 1990). Setting lower and safer standards against which one’s ability is judged reduces the likelihood that it will be judged as inadequate in a way that would call into question one’s self-worth.

Of the two self-protective strategies, defensive pessimism is the most commonly seen. As Table 1 shows, amongst university students, over one-third in their first and second years endorse items reflecting defensive pessimism (Martin, 1998), while a similar number of high school students agree to such items (Martin, 2001). Table 1 also shows that at least 10% of high school students endorse items reflecting self-handicapping while 6% of first and second year university students do so.

A Cascading Model of Failure Avoidance

Martin and colleagues (1998; Martin et al., 2001a) have also shown that the three forms of failure avoidance can be

TABLE 1
 Percentage of Three Samples Agreeing to Items in Subscales

	High School (n = 479)	First Year Uni (n = 584)	Second Year Uni (n = 489)
Overstriving	40%	47%	45%
Defensive pessimism	33%	44%	34%
Self-handicapping	11%	6%	7%

Note: Subscales are not independent so students can endorse items on more than one subscale.

differentiated in terms of the degree to which they are inimical to achievement and accomplishment. Multidimensional scaling by Martin (1998; Martin et al., 2001a) showed that when mapped in multidimensional space, overstriving is high in success orientation and failure avoidance, defensive pessimism is high in failure avoidance and neither high nor low in success orientation, while self-handicapping actually borders failure acceptance. This is conceptually feasible given that self-handicapping involves active sabotage to one's performance, whereas defensive pessimism primarily involves cognitive posturing that does not necessarily put in place behavioural barriers to success. Outcomes for overstrivers are the least impaired because they are known to work hard — but their effort is steeped in fear.

In support of this, Martin et al. (2001a, 2001b, in press) found that self-handicapping yielded the most markedly negative outcomes predicting lower self-regulation, lower persistence, an unwillingness to continue with one's studies, later withdrawal, and lower achievement (see also Midgley, Arunkumar, & Urdan, 1996; Midgley & Urdan, 1995; Rhodewalt & Davison, 1986). Further down the cascade, defensive pessimism negatively predicted academic outcomes such as self-regulation; however, the strength of predictive paths was markedly lower than those between self-handicapping and the same outcomes. Finally, overstriving actually positively predicted outcomes, but was also highly correlated with anxiety — underscoring the fact that although the outcomes may be adaptive, the journey can be unpleasant for these people.

Perhaps the most maladaptive aspect of self-protective failure avoidance is that it renders the individual particularly vulnerable to setback and consequently failure acceptance or learned helplessness (Martin et al., 2001a). The self-doubt and uncertain self-esteem that plagues the overstriver is even more pronounced in the self-protector and setback, no matter how isolated, can have the effect of confirming the doubts these students have about themselves and lead to a downward spiralling of underachievement and ultimately failure acceptance (Martin, 1998).

Failure avoidance can be further differentiated in terms of the cognitions students hold about success and failure as well as the behaviours they exhibit when going about their studies. More specifically, they are cognitively and behaviourally engaged with success and failure in different ways. As is discussed more fully below, success orientation is reflected in both cognitive and behavioural engagement (e.g., optimism and hard work) that is oriented towards achievement. Overstriving is reflected in behavioural engagement similar to success orientation but also reflects a cognitive disposition that is more engaged with fear than success (e.g., hard work and anxiety). Defensive pessimism represents greater cognitive engagement with fear that is not yet carried through behaviourally (e.g., pessimism but not overtly counterproductive behaviour). Self-handicapping reflects full cognitive engagement with fear that is also followed through behaviourally (e.g., pessimism and negativity yielding counterproductive behaviour). Finally, failure acceptance reflects cognitive and behavioural disengagement from fear of failure and success.

Taken together, the data, the theory, and our hypothesising suggest that there is something of a cascading model of failure avoidance. This model is shown in Figure 2 with the process moving from success orientation to overstriving to defensive pessimism to self-handicapping to failure acceptance.

The arguments presented above indicate that the cascading nature of fear of failure or failure avoidance is borne out in a number of ways. First, as the orientation moves from overstriving to defensive pessimism and then to self-handicapping, decreasing numbers of students (hence cascading from an item-response theory perspective) endorse survey items measuring these constructs (see Table 1). Second, as Martin and colleagues (Martin, 2001, Martin et al., 2001a, 2001b, in press) have shown, achievement and other outcomes become more adversely affected the further a student moves down the cascade. Third, multidimensional scaling maps these constructs in ever declining success orientation and increasing failure avoidance (and then to failure acceptance). Fourth, across university students'

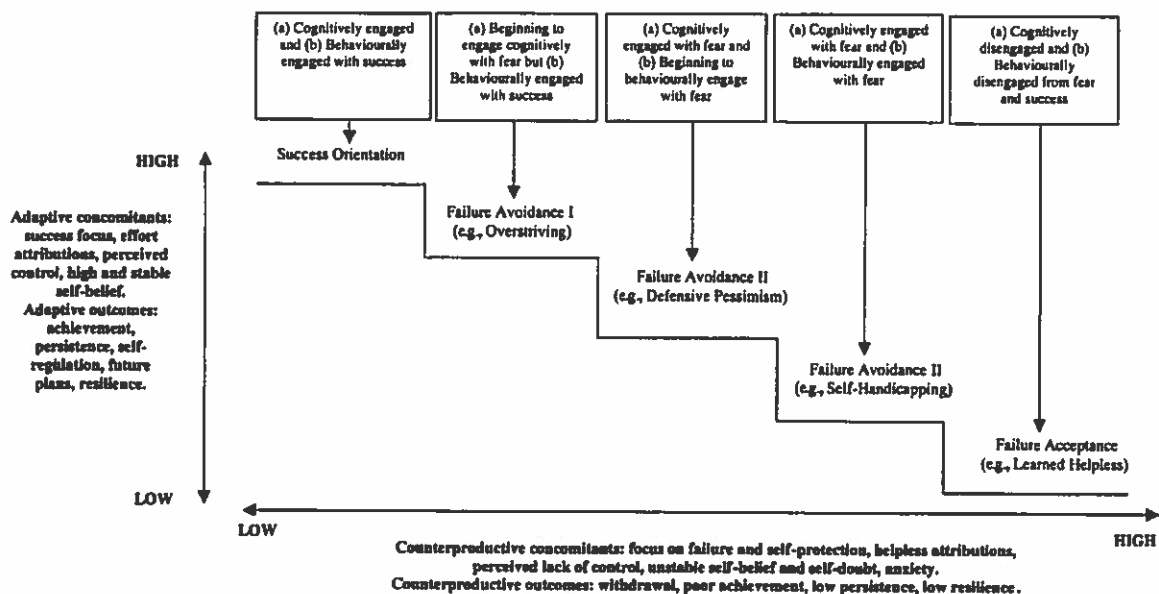


FIGURE 2
Cascading model of failure avoidance.

first two years, correlations between the constructs progressively decrease the more distant they become in terms of failure avoidance and success orientation (Table 2 demonstrates). For example, overstriving is more proximal to defensive pessimism than it is to self-handicapping and the respective correlations support this. The fact that this finding is supported in students' first and second years at university (where the same students were again assessed one year later) underscores the stability of this phenomenon.

The implications of a model along these lines are three-fold. First, it shows that students do not so much differ in kind but in degree. This means that there is likely to be a set of common factors that underpin their orientations and which can be harnessed in intervention (as is discussed below). Second, following from this the model provides information on how students are oriented in terms of failure avoidance, processes and outcomes, and cognitive and behavioural engagement. Third, in locating students on this continuum we are able to develop appropriate interventions. For example, if a student presents as overstriving, intervention would primarily target cognitive aspects of their academic lives on the understanding that behaviourally they share many characteristics with the success-oriented student. On the other hand, intervention with self-handicappers would target both cognitive and behavioural aspects of their academic lives (see Covington, 1992; Covington & Omelich, 1991; Martin, 2001; Martin et al., 2001a, for conceptual and empirical expansion of these ideas).

An Alternative: Success Orientation

We now revisit the central question of whether failure avoidance or fear of failure is friend or foe. The theory and data suggest that for the overstriver, fear of failure can be construed as a friend but not a very good one while for the self-protector it is more clearly a foe but offers the individual self-protective rewards that may be misconstrued as a friend of sorts. The fact that each has particular yields makes the selection of these strategies very tempting for students.

Progressing the friendship analogy further and identifying the criteria that constitute good friendships provides a useful heuristic for exploring alternatives. A good friend is someone who is optimistic for us, recognises and values our abilities and talents, is focused on our betterment, and looks beyond our weaknesses to our strengths. Good friendships are characterised by a focus on improvement, self-development, striving for personal potential, and autonomy/self-determination.

What emerges from this analysis of friendship and viewed from a need achievement perspective is that friends and friendships are success oriented and promote a success orientation. Success orientation is characterised by optimism,

energy and drive focused on achieving positive outcomes (not avoiding negative ones), resilience to setback, and a focus on strengths rather than deficits (Atkinson, 1957; Covington, 1992; Covington & Omelich, 1991; Martin, 1998, 2001, 2002; Martin et al., 2001a; McClelland, 1965). The factors that drive these processes and outcomes are a focus on personal development, maintenance and fostering of an individual's sense of worth, a valuing of the relationship, and the scope for self-determination and autonomy. It is these factors that we harness to develop the alternative orientation — success orientation.

Factors Underpinning Success Orientation

In the educational context, Martin (2001, 2002), has developed a model of motivation and resilience, the Student Motivation Wheel, that encompasses the factors described above that underpin success orientation. Four (psychometrically sound and reliable — see Martin, 2001) factors in his model that are particularly congruent with our criteria underpinning friendship are self-belief (mean target loading = .53; Cronbach's alpha = .81), learning focus (mean target loading = .54; Cronbach's alpha = .79), value of school (mean target loading = .54; Cronbach's alpha = .79), and perceived control (mean target loading = .66; Cronbach's alpha = .85). Most importantly, it is these factors that are the conduits for intervention aimed at promoting success orientation (Martin, 2001). Each of these four factors is explored in turn.

Self-belief

Self-belief is students' belief and confidence in their ability to understand or to do well in what they set out to do, to meet challenges they face, and to perform to the best of their ability. Self-belief is important for three primary reasons. First, it constitutes a generative capacity such that students high in self-belief tend to generate and test alternative courses of action when they do not meet with initial success. Second, self-belief enhances students' functioning through elevated levels of effort and persistence. Third, self-belief enhances students' ability to deal with a problem situation by influencing cognitive and emotional processes related to the situation (Bandura, 1986, 1997). Students low in self-belief tend to focus on their deficiencies rather than their strengths and view situations as more difficult than they are in reality (Bandura, 1986, 1997). Self-belief has been linked to a number of adaptive outcomes including self-regulation, effort, persistence, and achievement (Marsh, 1990; Martin & Debus, 1998; Meece, Wigfield, & Eccles, 1990; Pintrich & Blumenfeld, 1985; Schunk, 1990; Skinner, Wellborn, & Connell, 1990).

Value of School

Value of school is how much students believe what they learn or do at school is useful, important, and relevant to them or to the world in general. When students see the importance and usefulness of what they learn and do, they tend to be more engaged in tasks and are in a stronger position to achieve (Martin, 2001, 2002). A value of school is also relevant to resilience in the sense that it is related to persistence in the face of challenge and even adversity (Martin, 2001, 2002) and it is this persistence that demarcates students that abandon tasks prematurely from those who are able to effectively meet challenges. A value of school can also strengthen students for tough times in the way that it also predicts their willingness to continue with their studies in the future (Martin & Debus, 1998).

TABLE 2

Time 1 and Time 2 Correlations ($n = 328$ university students)

	OS1	DP1	SH1	OS2	DP2	SH2
OS1	.82					
DP1	.43	.92				
SH1	.29	.32	.92			
OS2	.61	.28	.27	.84		
DP2	.35	.57	.31	.48	.92	
SH2	.13	.19	.59	.33	.44	.92

Notes: All correlations significant at $p < 0.05$; Bolded coefficients are test-retest correlations (1-year time lapse)
Coefficients in diagonal are reliability coefficients (Cronbach's alpha)
OS = Overstriving; DP = Defensive Pessimism; SH = Self-Handicapping

Learning Focus

Learning focus refers to a focus on solving problems and developing skills. If students are learning focused they tend to work hard, want to learn more, enjoy learning new things, enjoy solving problems, and do a good job for its own satisfaction and not just for rewards. Learning-focused students are focused on mastery rather than outperforming others. These students see achievement on tasks as reflecting more on their effort than their ability and failure is viewed as diagnostic feedback that can lead to improvement at a later time (Middleton & Midgley, 1997). Because of this effort and mastery emphasis, learning-focused students are not so threatened by failure because failure says more about their effort and strategy than their ability. It has been found that learning-focused individuals choose challenging tasks and are less inclined to worry about performance (Duda, 1995). Moreover, learning focus is linked to the practice of mastery strategies and negatively correlated with avoidance strategies (Lochbaum & Roberts, 1993).

Control

Control refers to the extent to which students believe they are able to avoid failure and achieve success. Students who believe they have little or no control over outcomes are increasingly uncertain as to whether they can avoid failure or bring about success. When students are low in perceived control, they are more likely to engage in counterproductive behaviour such as self-handicapping or may give up altogether along the lines of learned helplessness (Martin et al., 2001a, 2001b). Perceived control predicts individuals' persistence, attention, effort, and participation (Patrick, Skinner, & Connell, 1993) while uncertain control is negatively correlated with achievement, mastery motivation, competence evaluation, and competence affect (Harter & Connell, 1984). Moreover, individuals high on an uncertain control dimension are likely to score significantly lower on IQ tests and others' ratings of competence and are also low in mastery orientation (Connell, 1985).

Strategies for Promoting Success Orientation

Consistent with the proposition that success orientation is multifaceted, it follows that intervention or prevention strategies must also be multifaceted. In line with the four pivotal factors identified above, a series of strategies is put forward aimed at enhancing students' self-belief, value of school, perceived control, and learning focus.

Strategies to Enhance Self-belief

Self-belief is perhaps the most critical facet to develop primarily because it is one of the strongest predictors of task achievement and engagement (Bandura, 1986, 1997; Marsh, 1990; Martin & Debus, 1998). It has been shown that one of the strongest predictors of a positive self-belief is students' previous experience of success (Bandura, 1997; Marsh, 1990). Thus, from an educator's perspective, enhancing students' self-belief involves structuring activities so as to maximise their opportunities for success. One way to do this is to break class work into smaller and more manageable components ("chunking") so that students can experience small successes along the way, thus building confidence and intrinsic motivation. Students can also be encouraged to chunk their own schoolwork tasks in a similar way. Another behavioural strategy is to build "hard skills" such as study management and time management. Research into behaviour analysis shows that students can be taught study and self-management strategies with the results of increasing the

time they spend on tasks (e.g., homework), enhancing their academic achievement, and experiencing fewer problems with completing tasks (Olympia, Sheridan, Jenson, & Andrews, 1994).

Of course, for a more comprehensive approach to enhancing students' self-belief, educators should address both behavioural and cognitive dimensions. Accordingly, challenging students' negative thinking and encouraging them to also do this is relevant here. For example, harnessing principles of cognitive-behavioural therapy (Beck, 1976; Meichenbaum, 1974), we encourage students to challenge their negative thinking by teaching them the skills they require to observe their automatic thoughts when they receive feedback or are assigned tasks, showing them how to look for the evidence that challenges their negative thinking, and then encouraging them to challenge these thoughts with this evidence. Another cognitive strategy is to maximise students' opportunities for success by repositioning their perception of success in terms of personal bests and improvement — outcomes accessible to all students (Covington, 1992).

Strategies to Enhance Perceived Value of School

The issues of relevance and meaning underpin students' value of school. Enhancing the relevance and meaning of school requires educators to link what is taught in class with students' lives or interests, students' talents, what they may do when they leave school, and perhaps what they do in other parts of their lives. Doing one or more of these things builds opportunities for students to see the relevance, utility, and importance of what they do — this builds a value of school. It is also important to show students that what they learn not only teaches them facts but also how to think and analyse and that these skills help them in many walks of life including later workplace responsibilities, their social and personal lives, and other areas of their lives such as sport. Moreover, educators themselves must be role models by showing that they value what they are teaching (McInerney, 2000).

Strategies to Enhance Learning Focus

Researchers make a distinction between a learning focus and a performance focus (Duda & Nicholls, 1992; Martin & Debus, 1998; Middleton & Midgley, 1997). Learning focus refers to an individual's focus on the task at hand, mastery on it, developing new skills, and extending him or herself. A learning focus is also underpinned by an individual's focus on effort and strategy rather than ability (Martin et al., 2001a, 2001b, in press; Middleton & Midgley, 1997). Essentially, it reflects a focus on process. Performance focus refers to an individual's focus on outcomes and how performance on the task will be judged or evaluated. Essentially, it reflects a focus on outcomes. Following from this, enhancing students' learning focus also involves promoting a focus on mastery and skill development, aspiring to personal bests rather than outperforming others (Martin, 2001, 2002), emphasising effort and strategy as the key means to mastery (Craven, Marsh, & Debus, 1991; Martin et al., 2001a), and encouraging students to focus on the task at hand and how to do it (McInerney, 2000; Nicholls, 1989; Qin, Johnson, & Johnson, 1995). In essence, these strategies encourage students to focus on the task at hand and this reduces cognitive interference in the form of concern (or fear) about how they are being evaluated or their performance relative to others.

Research into class climate also provides direction for enhancing students' learning focus (Urduan, Midgley,

& Anderman, 1998). Not only does a learning focus differ at the individual level, but it can also vary at a group level. This is not uncommon in classrooms, sporting teams, or workplaces. Ideally, then, we need to not only address a learning focus at the individual level but also at the group level. Three ways to affect a group- or class-level learning focus are through peer tutoring, cooperative learning, or collaborative learning (Kamps, Barhetta, Leonard, & Delquadri, 1994; Killen, 1998). For example, Kamps et al. (1994) found that classwide peer tutoring in reading not only facilitates interactions between students in the class but also enhances reading fluency and correct responses to reading comprehension.

Strategies to Enhance Control

Attribution research shows that amongst the key means to enhance students' sense of control one is to encourage them to focus on causes of success and failure that are within their control (Weiner, 1985, 1994). The core causal factors within students' control are effort (how much work they do) and strategy (how they do that work). Students develop a sense of control when they focus on the connection between their effort (and strategy) and outcomes. Students also develop a sense of control when they see that they are able to make choices and decisions in class that affect the way work is done. One way to do this is to provide students with choices (within sensible and clearly thought-out parameters) over class objectives, assessment tasks, criteria for assessment, and due dates for work assigned (McInerney, 2000). Students' control is also enhanced when they know what they need to do to maintain good performance and to minimise the risk of poor performance. This requires educators to provide students with feedback in effective and consistent ways (Martens, 1992; Martens & Mellor, 1990). Research shows that feedback that enhances a sense of control is primarily task-based and makes it very clear how they can improve (Craven et al., 1991; Martin et al., 2001b). Enhancing students' control is also about reducing uncertainty in their academic lives. Students who are uncertain as to why they received a particular mark or outcome have a low sense of control (Thompson, 1994). Hence, an important strategy to reduce students' uncertainty is to administer rewards that are directly contingent on what they do and reduce inconsistent reward contingencies that can create confusion and uncertainty in students' minds as to what they did to receive that reward and how they should go about things next time around (Thompson, 1994).

Effective goal setting combined with effective reinforcement (as described above) can be an even more powerful way to enhance students' sense of control and also their achievement (Martens, Witt, Daly, & Vollmer, 1999; McInerney, 2000; Miller & Kelley, 1994). Effective goal setting requires that goals are achievable, believable, clear, and desirable (ABCD; McInerney, 2000) and when these criteria are met students have a greater sense of direction and capacity.

Other Issues Relevant to These Strategies

The relationship between the quadripolar model and the four strategies is, we propose, bi-directional in that (a) the strategies are a means to improve students' orientations to their studies and (b) the quadripolar model is a means to assist interventions using these strategies. In relation to the former, the four strategies are a means to shift students up the cascade towards success orientation. Obviously the further down the cascade students are

located, the more intensively these strategies would need to be implemented over a longer period of time. Conversely, the quadripolar model is also a means to classify students and this classification leads to assessments that can better guide practitioners and educators in their application of cognitive and behavioural strategies.

Future Directions

Although this paper is primarily aimed at answering a specific question (friend or foe?), along the way a number of new ideas and propositions have emerged that require further analysis and empirical verification. It was proposed that failure avoidance orientations are attractive to the student because they can enhance achievement or offer self-protection opportunities. There is a need to explore strategies in the classroom and counselling contexts to promote the attractiveness of success orientation. This will require addressing such issues as peer group influence, family backgrounds, and even the school culture. Following from this, some solid intervention research is needed to examine the impact of assistance on the four facets proposed here to underpin success orientation — self-belief, control, learning focus, and value of school.

The cascading model of failure avoidance is a new representation of need achievement theory and requires verification. This might involve tracking students and their cognitive and behavioural movement over time to explore shifts along the lines of that presented in the model. Also requiring further empirical consideration is the interface of self-belief, control, learning focus, and value of schooling and each stage of the cascade — with particular emphasis on which facets and in what degree are most effective in moving students up the cascade towards success orientation.

The impact of the learning climate on students' fear of failure must also be addressed. The learning climate has been shown to hold implications for students' motivation and has also been linked to students' tendency to self-protect (Midgley & Urda, 1995). This raises the issue of students' contexts and how they impact on other aspects of their academic lives. For example, the learning climate and its impact on defensive pessimism has not been addressed to date. Also, the impact of altering the learning climate (e.g., from competitive to cooperative — see Johnson & Johnson, 1989; Qin et al., 1995) on students' academic strategies has not been studied and future research might focus on this with a view to identifying interventions that can take place at class and institutional levels.

Conclusion

This paper began with what seemed like a silly question. Examination of the evidence and the separation of fear of failure or failure avoidance into two groups indicated that it is not such a silly question. In some respects fear of failure can be a friend of sorts — but not a very good one, and in other respects it is more a foe — but with some self-protective advantages. Pursuing the friendship analogy a little further, four characteristics of adaptive friendships were identified that are congruent with factors underpinning a model of success orientation developed by Martin (2001, 2002). The factors — self-belief, learning focus, value of school, and control — are each important means by which success orientation is nurtured in students' lives and thus important points of intervention for practitioners operating in contexts where students fear failure and are motivated to avoid it.

Endnote

- 1 Throughout the paper, "fear of failure" and "failure avoidance" are often used interchangeably. It is recognised, however, that fear of failure is a cognitive phenomenon and failure avoidance is its behavioural counterpart.

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References

- Abramson, L.Y., Seligman, M.E.P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49-74.
- Alpert, R., & Haber, R.N. (1960). Anxiety in academic achievement situations. *Journal of Abnormal & Social Psychology, 61*, 207-215.
- Atkinson, J.W. (1957). Motivational determinants of risk-taking. *Psychological Review, 64*, 359-372.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. New Jersey: Prentice Hall.
- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: Freeman & Co.
- Baumgardner, A.H., & Brownlee, E.A. (1987). Strategic failure in social interaction: Evidence for expectancy disconfirmation processes. *Journal of Personality and Social Psychology, 52*, 525-535.
- 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 noncontingent success. *Journal of Personality and Social Psychology, 36*, 405-417.
- Connell, J.P. (1985). A new multidimensional measure of children's perceptions of control. *Child Development, 56*, 1018-1041.
- Covington, M.V. (1992). *Making the grade: A self-worth perspective on motivation and school reform*. Cambridge: Cambridge University Press.
- Covington, M.V., & Omelich, C.L. (1991). Need achievement revisited: Verification of Atkinson's original 2 x 2 model. In C.D. Spielberger, I.G. Sarason, Z. Kulcsar, & G.L. Van Heck (Eds.), *Stress and emotion* (Vol 14, pp. 85-105). New York, NY: Hemisphere.
- Craven, R.G., Marsh, H.W., & Debus, R.L. (1991). Effects of internally focused feedback and attributional feedback on the enhancement of academic self-concept. *Journal of Educational Psychology, 83*, 17-26.
- Duda, J.L. (1995). Motivation in sport settings: A goal perspective approach. In G.C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 57-91). Champaign, IL: Human Kinetics Books.
- Duda, J.L., & Nicholls, J.G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology, 84*, 290-299.
- Harter, S., & Connell, J.P. (1984). A model of children's achievement and related self-perceptions of competence, control, and motivation orientation. In J. Nicholls (Ed.), *The development of achievement motivation* (pp. 219-250). London: JAI Press.
- Johnson, D.W., & Johnson, R.T. (1989). *Cooperation and competition: Theory and research*. Minnesota: Interaction.
- Kamps, D.M., Barhetta, P.M., Leonard, B.R., & Delquadri, J. (1994). Classwide peer tutoring: An integration strategy to improve reading skills to promote peer interactions among students with autism and general education peers. *Journal of Applied Behavior Analysis, 27*, 49-61.
- Killen, R. (1998). *Effective teaching strategies*. Katoomba: Social Science Press.
- Lochbaum, M.R., & Roberts, G.C. (1993). Goal orientations and perceptions of the sport experience. *Journal of Sport and Exercise Psychology, 15*, 160-171.
- Marsh, H.W. (1990). A multidimensional, hierarchical model of self-concept: Theoretical and empirical justification. *Educational Psychology Review, 2*, 77-172.
- Martens, B.K. (1992). Contingency and choice: The implications of matching theory for classroom instruction. *Journal of Behavioral Education, 2*, 121-137.
- Martens, B.K., & Mellor, P.J. (1990). The application of behavioural principles to educational settings. In T.B. Gutkin & C.R. Reynolds (Eds.), *The handbook of school psychology*. (2nd ed., pp. 612-634). New York: John Wiley & Sons.
- Martens, B.K., Witt, J.C., Daly, E.J.D., & Vollmer, T.R. (1999). Behavior analysis: Theory and practice in the educational setting. In C.R. Reynolds & T.B. Gutkin (Eds.), *The handbook of school psychology* (3rd ed.). New York: John Wiley & Sons.
- Martin, A.J. (1998). *Self-handicapping and defensive pessimism: Predictors and consequences from a self-worth motivation perspective*. Unpublished doctoral dissertation, University of Western Sydney, Macarthur, Australia.
- Martin, A.J. (2001). The Student Motivation Scale: A tool for measuring and enhancing motivation. *Australian Journal of Guidance and Counselling, 11*, 1-20.
- Martin, A.J. (2002). Motivation and academic resilience: Developing a model of student enhancement. *Australian Journal of Education, 14*, 34-49.
- Martin, A.J., & Debus, R.L. (1998). Self-reports of mathematics self-concept and educational outcomes: The roles of ego-dimensions and self-consciousness. *British Journal of Educational Psychology, 68*, 517-535.
- Martin, A.J. Marsh, H.W., & Debus, R.L. (2001a). A quadripartite need achievement representation of self-handicapping and defensive pessimism. *American Educational Research Journal, 38*, 583-610.
- Martin, A.J., Marsh, H.W., & Debus, R.L. (2001b). Self-handicapping and defensive pessimism: Exploring a model of predictors and outcomes from a self-protection perspective. *Journal of Educational Psychology, 93*, 87-102.
- Martin, A.J. Marsh, H.W., & Debus, R.L. (in press). Self-handicapping and defensive pessimism: A model of self-protection from a longitudinal perspective. *Contemporary Educational Psychology*.
- McClelland, D.C. (1965). Toward a theory of motive acquisition. *American Psychologist, 20*, 321-333.
- McLernery, D. (2000). *Helping kids achieve their best*. Sydney: Allen & Unwin.
- Meece, J.L., Wigfield, A., & Eccles, J.S. (1990). Predictors of mathematics anxiety and its influence on young adolescents' course enrolment intentions and performance in mathematics. *Journal of Educational Psychology, 82*, 60-70.
- Meichenbaum, D. (1974). *Cognitive behaviour modification*. Morristown, NJ: General Learning Press.
- Middleton, M.J., & Midgley, C. (1997). Avoiding the demonstration of lack of ability: An unexplored aspect of goal theory. *Journal of Educational Psychology, 89*, 710-718.
- Midgley, C., Arunkumar, R., & Urdan, T.C. (1996). "If I don't do well tomorrow, there's a reason": Predictors of adolescent's use of academic self-handicapping strategies. *Journal of Educational Psychology, 88*, 423-434.
- Midgley, C., & Urdan, T. (1995). Predictors of middle school students' use of self-handicapping strategies. *Journal of Early Adolescence, 15*, 389-411.
- Miller, D.M., & Kelley, M.L. (1994). The use of goal setting and contingency contracting for improving children's homework performance. *Journal of Applied Behavior Analysis, 27*, 73-84.
- Nicholls, J.G. (1989). *The competitive ethos and democratic education*. Cambridge: Harvard University Press.

- Norem, J. K., & Cantor, N. (1986a). Anticipating and post hoc cushioning strategies: Optimism and defensive pessimism in 'risky' situations. *Cognitive Therapy and Research*, 10, 347-362.
- Norem, J. K., & Cantor, N. (1986b). Defensive pessimism: Harnessing anxiety as motivation. *Journal of Personality and Social Psychology*, 51, 1208-1217.
- Olympia, D.E., Sheridan, S.M., Jenson, W.R., & Andrews, D. (1994). Using student-managed interventions to increase homework completion and accuracy. *Journal of Applied Behavior Analysis*, 27, 85-99.
- Patrick, B.C., Skinner, E.A., & Connell, J.P. (1993). What motivates children's behavior and emotion? Joint effects of perceived control and autonomy in the academic domain. *Journal of Personality and Social Psychology*, 65, 781-791.
- Pintrich, P.R., & Blumenfeld, P.C. (1985). Classroom experience and children's self-perceptions of ability, effort, and conduct. *Journal of Educational Psychology*, 77, 646-657.
- Qin, Z., Johnson, D.W., & Johnson, R.T. (1995). Cooperative versus competitive efforts and problem solving. *Review of Educational Research*, 65, 129-144.
- Rhodewalt, F., & Davison, J. (1986). Self-handicapping and subsequent performance: Role of outcome valance and attributional certainty. *Basic and Applied Social Psychology*, 7, 307-322.
- Schunk, D.H. (1990). Introduction to the special section on motivation and efficacy. *Journal of Educational Psychology*, 82, 3-6.
- Skinner, E.A., Wellborn, J.G., & Connell, J.P. (1990). What it takes to do well in school and whether I've got it: A process model of perceived control and children's engagement and achievement in school. *Journal of Educational Psychology*, 82, 22-32.
- Showers, C., & Ruben, C. (1990). Distinguishing defensive pessimism from depression: Negative expectations and positive coping mechanisms. *Cognitive Therapy and Research*, 14, 385-399.
- Thompson, T. (1994). Self-worth protection: Review and implications for the classroom. *Educational Review*, 46, 259-274.
- Urduan, T.C., Midgley, C., & Anderman, E.M. (1998). The role of classroom goal structure in students' use of self-handicapping strategies. *American Educational Research Journal*, 35, 101-122.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548-573.
- Weiner, B. (1994). Integrating social and personal theories of achievement striving. *Review of Educational Research*, 64, 557-573.