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DO WE NEED TO TRAIN TEACHERS HOW TO ADMINISTER PRAISE? SELF-WORTH THEORY SAYS WE DO

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Abstract

This paper examines recent findings concerned with the self-worth theory of achievement motivation. This theory states that certain students (known as self-worth protective students) perform poorly when a negative outcome is likely to reflect low ability, but perform well in situations in which poor performance can be attributed to a factor which is unrelated to ability. The paper traces the development and maintenance of self-worth protection to attributional messages implicit in several kinds of unproductive evaluative feedback used by teachers. The adverse psychological effects of these attributional messages are compounded by personality variables associated with self-worth protective students. These psychological effects in turn exacerbate the underachievement of these students. Copyright © 1997 Elsevier Science Ltd

Introduction

This article focuses on the development and maintenance of self-worth protection in classrooms. This term describes a tendency on the part of certain students (known as self-worth protective students) to underachieve and at other times perform well when working on academic tasks which do not vary in terms of their level of objective difficulty.

As a foundation for later discussion, an account of the development of self-worth protection is offered. The development of self-worth protection is traced to several kinds of unproductive evaluative feedback from teachers. One of these is non-contingent feedback. This is feedback which excludes students from deciphering the ingredients which have brought about their success and diagnosing the cause(s) of their failure. Another form of unproductive evaluative feedback is that which gives rise to intellectual evaluative threat, creating performance pressure, while a further form is praise for success on an easy task. This form of praise communicates that a teacher holds a low estimate of a student's ability.

Each of these types of evaluative feedback is considered in an analysis which identifies attributional messages implicit in teachers' unproductive use of evaluative feedback. These messages have adverse psychological effects which, in the case of self-worth protective students, are compounded by several personality variables associated with these students. These psychological effects in turn exacerbate student underachievement.

On these bases, the original contributions of this article are several-fold. First, the article establishes a link between non-contingent evaluative feedback and the development of self-worth protection. This is done by indicating how the personality characteristics of self-worth protective students render them especially vulnerable to the effects of self-worth protection. Secondly, forms of evaluative feedback in educational settings are identified which have adverse effects on the achievement of self-worth protective students. Thirdly, the manner in which these effects mediate the underachievement of self-worth protective students are described. Finally, implications for teachers and teacher educators are considered.

Personality Variables Associated with Self-worth Protection

The understanding from self-worth theory (e.g. Beery, 1975; Covington, 1984a, 1984b; Covington & Beery, 1976) is that the inconsistent performance of self-worth protective students across occasions derives from a desire to protect self-worth. Situations which threaten self-worth are those which are likely to reveal low ability, and low ability is most evident when poor performance occurs *despite* expending effort. As a consequence, withdrawing effort offers an effective way of blurring the link between poor performance and low ability and protects the individual against feelings of humiliation (Covington & Omelich, 1985). Thereby, a sense of self-worth is preserved.

A variety of low effort strategies have been described as symptoms of self-worth protection in achievement situations (e.g. Covington, 1984b; Thompson, 1996). These include procrastination, last-minute study, selecting low, easily achieved goals (thereby minimising damage to self-esteem through low risk-taking), or selecting goals which are extremely difficult to attain. The latter strategy provides a ready-made defence to the difficulty of the goal in the event of failure.

These strategies are not typical of all students, but only those who possess certain personality characteristics. An understanding of the types of students who are most likely to withdraw effort in order to protect self-worth, and of the circumstances in which they will do so has been given from studies by Thompson (1993a) and Thompson et al. (1995).

The first of these studies used a failure feedback paradigm in which students completed four sets of cognitive problems (Sets A, B, C and D). Sets A, C and D were equivalent in level of difficulty, while Set B was a difficult (failure) set (see Thompson, 1993b). Self-worth protective students were identified on the basis of two criteria. The first of these criteria involved poor performance following failure (involving poor performance on Set C relative to Set A), while the second criterion involved improved performance on Set D relative to Set C with the provision of a mitigating excuse. This mitigating excuse, given immediately prior to Set D, allowed students to attribute poor performance to task difficulty.

In this study, three further groups were identified on the basis of performance criteria. One group of students were those whose performance deteriorated following failure, and whose subsequent performance remained unchanged despite the face-saving excuse. These students constituted a *decrement* group. Other students' performance was facilitated following failure. These students constituted a *facilitation* group. A final group of students essentially showed no difference in performance across the three parallel sets. These students constituted a *no effect* group.

With these performance groups borne in mind, self-worth protective students were set apart

from decrement, facilitation and no effect groups in terms of three personality variables. The first of these was *low academic self-esteem*. Low academic self-esteem renders students particularly sensitive to the adverse effects of failure. For these students, expectations for subsequent performance diminish to a greater extent than is the case for students with high academic self-esteem (e.g. McFarlin & Blascovich, 1981). Students with low academic self-esteem also experience greater negative affect in the form of frustration, anxiety and humiliation (Moreland & Sweeny, 1984), and are more likely to attribute their failure to low ability (e.g. Brewin & Furnham, 1986). As a consequence, these students are most likely to become demotivated in the face of failure and perform poorly, whereas students with high academic self-esteem are less affected by failure, and in certain circumstances may even perform at a superior level (e.g. Baumeister & Tice, 1985).

For these reasons, the low academic self-esteem of self-worth protective students is understood to be related to their poor performance in situations of high intellectual evaluative threat (Thompson, 1994a, 1994b). These are situations which are likely to reveal low ability. Such situations are created when poor performance is anticipated which cannot be attributed to non-ability related factors such as task difficulty, environmental distraction, teacher favouritism and the like.

A second personality variable found to be associated with self-worth protective students was *uncertain global self-esteem*. People with uncertain global self-esteem lack confidence in their estimates of their overall, or global self-esteem. This personality variable is described by Kernis et al. (1992) as reflecting “the phenomenal experience of a tenuous self-view” (p. 621). In terms of the two performance criteria mentioned above, the understanding is that uncertain global self-esteem accounts for the *improved* performance of self-worth protective students in situations of *low* evaluative threat (Thompson, 1994b).

A third important aspect of personality associated with self-worth protective students was identified from the Thompson (1993a) and Thompson et al. (1995) studies. Both studies revealed that self-worth protective students *fail to accept personal agency for their successes*. The former of these studies established that self-worth protective students attributed their hypothetical success outcomes to external factors such as task ease or good luck to a greater extent than any other performance group identified in that study. The study by Thompson et al. (1995) corroborated this finding, but added further information, revealing that self-worth protective students saw their successes as more *unstable* than their failure outcomes. Successes are seen as both more variable and more subject to the vicissitudes of external events and circumstances. Each of these personality variables has important implications in an understanding of how self-worth protection develops.

The Development of Self-worth Protection

The account of the development of self-worth developed here uses some important insights given by researchers investigating self-handicapping behaviour. This term refers to the voluntary adoption or claim of a handicap, such as environmental distraction, debilitating anxiety or illness, in order to blur the connection between poor performance and low ability. Studies of self-handicapping behaviour have shown that people are more likely to claim or adopt a handicap after being exposed to non-contingent evaluative feedback—to feedback which bears little relationship to actual performance (e.g. Berglas & Jones, 1978; Higgins &

Harris, 1988; Mayerson & Rhodewalt, 1988). The further suggestion (e.g. Berglas, 1990; Berglas & Jones, 1978) is that exposure to non-contingent success leads the individual to reject personal agency for positive outcomes. Berglas and Jones (1978) observe that rejection of success originates in a "capricious, chaotic reinforcement history" . . . [claiming] "it is not that their histories are pocked with repeated failure; they have been amply rewarded, but in ways and on occasions that leave them deeply uncertain about what the reward was for" (p. 407).

These links assume significance in that the negative effects of non-contingent success are all the more marked for self-worth protective students due to their low academic self-esteem and uncertain global self-evaluations. These two personality variables compound the effects of non-contingent feedback in these ways.

First, low academic self-esteem is associated with a selective perceptual process whereby past successes are ignored in favour of past failures, so that future performance outcomes are predicted on this basis (Shrauger, 1975, 1982). This process is reinforced by the manner in which low academic self-esteem students attribute the cause of their success and failure outcomes. Students with low academic self-esteem have a propensity to attribute their failure outcomes to lack of ability (an internal, stable factor), and their success outcomes to external and unstable factors such as good luck or task ease (e.g. McCarry et al., 1982; Schlenker et al., 1990; Weary, 1980). Given the low academic self-esteem of self-worth protective students, non-contingent success feedback is all the more likely to exaggerate a propensity to reject personal agency for success.

A second factor which makes the connection between non-contingent evaluative feedback and the development and maintenance of self-worth protection all the more compelling is the mediating role of uncertain global self-esteem. The evidence, again from studies of self-handicapping behaviour, is that non-contingent success or failure feedback creates uncertain self-images (e.g. Berglas & Jones, 1978; Higgins & Harris, 1988; Mayerson & Rhodewalt, 1988; Rhodewalt & Davison, 1986). By creating attributional uncertainty—uncertainty about the cause of the achievement outcome in question—non-contingent feedback causes individuals to doubt their *capacity* to bring about certain effects, thereby creating uncertain self-images.

By each of the above means, non-contingent feedback perpetuates the uncertain self-images and low self-estimates of ability of self-worth protective students. This tenet is important to the analysis pursued in the sections which follow, in which particular forms of unproductive (including non-contingent) evaluative feedback are identified which have a crucial role in the development and maintenance of self-worth protection.

Evidence of Unproductive Evaluative Feedback in Classrooms

In order to establish that self-worth protection does, in fact, arise from unproductive evaluative feedback in classrooms, evidence that such feedback actually occurs in classrooms is required. Specifically, evidence of two things is needed. First, evidence is required that evaluative feedback offered by teachers is able to influence students' perceptions of the causes of their successes and failures. Secondly, evidence is needed that this potential is either largely unexploited or (more seriously) distorted in its application.

Evidence in both respects is given by Dweck and her colleagues (Dweck et al., 1978; Dweck & Goetz, 1978). In an investigation comprised of two studies, Dweck et al. (1978) found

gender differences in the content of teachers' use of praise (Study 1). These differences were associated with the manner in which males versus females viewed the cause of their failure outcomes (Study 2).

Examining teachers' use of praise, striking differences emerged in the percentages of praise given to intellectual competence. Praise of this nature was far greater in the case of males (over 90% of all positive feedback) than in the case of females (approximately 80%). As a consequence, almost 20% of the positive evaluation females received was for intellectually irrelevant aspects of their work such as neatness and conforming to the teacher's requirements of "correct" procedure. When negative feedback from teachers was evaluated, gender differences were even greater. For males, only 54.4% of their work-related criticism related to intellectual inadequacy, whereas for females, 88.9% of criticism for poor performance was related to intellectual performance.

These differences were associated with a tendency on the part of female students to attribute their failures to low ability. Male students on the other hand, tended to attribute their failures to external factors such as inappropriate teacher attitudes, or to internal but unstable factors such as inappropriate effort. Their successes meanwhile, they attributed to stable, internal ability factors.

The point of these findings is that they establish a clear link between teachers' evaluative feedback and the manner in which students ascribe the causes of their achievement outcomes. This link has been corroborated by findings from other researchers (e.g. Graham, 1984; Meyer, 1982; Meyer et al., 1979; Meyer et al., 1986). For example, Graham (1984) demonstrated that students who receive unsolicited sympathy from a teacher following poor performance were prone to infer that they had *less* ability than students who did *not* receive sympathy.

Similarly, Meyer (1982) established that students who receive help from a teacher conclude that they have lower ability than students who do not receive spontaneous help from teachers. By way of a final example, Meyer et al. (1979), used hypothetical vignettes which described praise, neutral feedback or criticism offered to students following either success or failure feedback. These researchers then asked judges to rate students' abilities based on this information. Students who received neutral feedback after success but who were criticised following failure were seen as *more able* than students who were praised after success, but given neutral feedback following failure.

The potential for the attributional messages contained in teachers' use of praise becomes all the more significant given findings which indicate that this potential remains largely untapped. Evidence in this regard has been gathered by Blumenfeld et al. (1983). Analysing the content of teacher talk in the classroom, these researchers found that attributional feedback statements occur infrequently (comprising less than 1% of total communications in the classroom) and are reactive, negative and procedural (rather than informational) in nature.

Self-worth Protection and Evaluative Feedback

To this point, several things have been argued. First, a case has been made that the origins and maintenance of self-worth protection can be traced to non-contingent evaluative feedback. Secondly, deficiencies in teachers' use of evaluative feedback in classrooms have been identified which have adverse effects on student achievement. Thirdly, given the personality

traits associated with self-worth protective students, these adverse effects are likely to be particularly marked for these students.

What remains is to identify *specific forms* of unproductive evaluative feedback related to the development and maintenance of self-worth protection. While deficiencies in the use of praise (many of which amount to non-contingent praise) have been capably reviewed by a number of writers (e.g. Brophy, 1981; Dunkin & Biddle, 1974; Evertson et al., 1980), sources of non-contingent evaluative feedback associated with the development and maintenance of self-worth protection have not.

The analysis which follows considers the attributional messages implicit in a number of forms of unproductive evaluative feedback. It will be shown that the adverse psychological effects of these attributional messages are compounded by personality variables associated with self-worth protective students. These psychological effects in turn exacerbate the underachievement of these students. These linkages are summarised in Table 1 and are elaborated upon in sections which follow.

Sources of Unproductive Evaluative Feedback

Praise as a Condescension Based on Low Estimates of Ability

One form of evaluative feedback which encourages counterproductive attributions is that which is disproportionate to the measure of achievement success realised by the student. For example, praise which is excessive relative to the achievement in question can be viewed as a *condescension* based on a teacher's low estimate of that student's ability (Blickle, 1990, 1991; Meyer, 1982; Meyer et al., 1986; Reizenzein et al., 1992).

This is particularly so when praise is given following success on an easy task. (Refer here

Table 1
Psychological Effects of Forms of Unproductive Evaluative Feedback on the Underachievement of Self-worth Protective Students

Nature of evaluative feedback	Nature of attributional message	Mediating personality variable	Psychological effect(s)
Praise for success on an easy task, minimal blame, unsolicited teacher help	Internal, stable	Low academic self-esteem	Confirms already low self-estimates of ability
Blame for performance on a difficult task, person-based praise, controlling or directive praise	Internal, stable	Low academic self-esteem, sensitivity to situations of evaluative threat	Creates performs pressure, makes future performance diagnostic of ability
Excessive, vague, generalised and inconsistent forms of praise	external, unstable and uncontrollable	Rejection of personal agency for success	Attributional uncertainty, perception of non-contingency
Feedback which nominates unknown or changeable criteria, generalised, vague or inconsistent praise	External, unstable, uncontrollable or ambiguous	Uncertain global self-esteem	Creates attributional uncertainty, reinforces uncertain global self-esteem

to the first set of relationships identified in Table 1.) In circumstances in which students believe teachers have knowledge of their ability level, praise following success on an easy task leads the recipient to conclude that the person giving the praise perceived the outcome as a consequence of expending *high* effort. This is due to an assumption which both teachers and students make about the relationship between praise and effort expenditure. Both students and teachers perceive that praise is maximised following high effort expenditure, while blame is greatest following low effort expenditure (e.g. Covington & Omelich, 1979a, 1979b; Rest, Nierenberg et al., 1973; Weiner & Kukla, 1970).

Praise following success on an easy task thus leads students to believe that high effort was expended in achieving that success. This perception then acts as a cue whereby the student infers that the teacher estimates his or her ability to be low (Meyer, 1982; Meyer et al., 1979; Blickle, 1991, 1992). Groeben and Blickle (1988) document similar effects where teachers respond differentially to students for identical performances. Where teachers respond to certain students with praise, and to other students with negative or neutral feedback, students who are praised may react negatively, presuming it to be a condescension based on a low estimate of their ability.

In a similar vein, Barker and Graham (1987) identify a cluster of commonly accepted and positively motivated counsellor practices, such as generous praise, minimal blame, displays of sympathy, and unsolicited help that function as cues whereby individuals infer that they lack ability or are ineffectual in some aspect(s) of intellectual functioning. As Meyer (1982) notes, inferred judgements of others' opinions can become incorporated as stable elements of individuals' self-perceptions.

Evidence that such praise actually occurs in classrooms is given by several researchers (Brookover et al., 1978; Weinstein, 1976). For example, Weinstein (1976) found evidence that undeserving praise (albeit well-intended), is given to low achievers, while a number of researchers (e.g. Anderson et al., 1979; Brophy, 1981) have found that teachers with low expectations of students' learning deliver praise non-contingently (Brookover et al., 1978).

For self-worth protective students, praise which is excessive relative to the achievement in question, and praise which follows success on an easy task confirms already low self-estimates of ability. As low self-estimates of ability tend to have a self-fulfilling prophecy effect in terms of actual achievement levels (e.g. Hansford & Hattie, 1982), these processes can only reinforce the underachievement of self-worth protective students.

Correspondingly, blame for poor performance on a *difficult* task can be interpreted as a cue for inferring *high* ability (Meyer et al., 1979). In terms of attributional dimensions proposed by Weiner (1972, 1974), such blame involves attributing the cause of poor performance to an internal, stable factor. (Refer at this point and throughout the section which follows to the second set of relationships identified in Table 1.) This type of feedback has been described as *dispositional* (Jones & Davis, 1965) or *characterological* (Janoff-Bulman, 1979). Feedback of this nature attributes performance to an enduring dispositional quality yet to be proven. For the student receiving such praise, evaluative feedback of this type constitutes a form of performance pressure whereby future performance becomes diagnostic of ability. These conditions give rise to high intellectual evaluative threat for self-worth protective students (Thompson, 1994b). In such circumstances, these students will withhold effort, rather than seize the opportunity to confirm high ability through personal striving (Thompson et al., 1995).

Controlling versus Informational Rewards

There is also evidence that *controlling* as opposed to *informational* rewards are associated with the development and maintenance of self-worth protective behaviours. The distinction between informational and controlling rewards, in fact, derives from Deci's (Deci, 1975; Deci et al., 1975) cognitive evaluation theory, which suggests that rewards have two message components. The first is a controlling component that encourages explanations of performance to external factors, thereby undermining the individual's sense of self-determination. The second is an informational component, conducive to perpetuating needs for competence and control. Informational praise thus gives performance information and that alone, while controlling praise involves conditional statements or directive comment, for example, "If you submit another term paper like that you'll graduate with honours".

There is considerable evidence that praise which is experienced as controlling effectively chokes the intrinsic motivation of students (e.g. Bates, 1979; Butler & Nisan, 1986; Koestner et al., 1984; Ryan et al., 1983; Lepper, 1983; Pittman et al., 1980) and imposes an external performance pressure. When performance feedback is *uncontaminated* by messages which are controlling or constraining, a sense of competence is promoted and intrinsic motivation is preserved. For self-worth protective students with an already low expectancy of success and sensitivity to situations of intellectual evaluative threat, rewards which are perceived as controlling, creating performance pressure, give rise to self-worth protection.

The distinction between informational versus controlling rewards is also reflected in distinctions drawn by Berglas (1990) between *evaluative* versus *directive* components of praise. The evaluative component of praise is *reactive*, being given contingently on the basis of past successful performance. Evaluative praise informs an individual how his or her skills or performance compare with those of other people. There is no underlying message that the individual may be expected to produce a repeat performance. This is praise without a "directive" component. Directive praise on the other hand, looks forward to future performance outcomes, and imposes a pressure to repeat past successes. As Berglas (1990) puts it: "whereas the evaluative component of praise informs the individual 'you did well', the directive component conveys the message 'you *should* [again] do well'" (p. 157).

These distinctions are particularly important in the case of self-worth protective students. With the performance pressure and intellectual evaluative threat implicit in directive and controlling praise, intrinsic motivation is sapped and self-worth protection occurs. These forms of praise carry with them a performance pressure which has potential to tip the balance between the antagonistic needs to achieve success and avoid failure (e.g. Covington & Omelich, 1991). The tension between these two achievement needs is particularly apparent in the case of self-worth protective students, and is revealed in the strikingly dissimilar performances of self-worth protective students following humiliating versus face-saving failure found by Thompson et al. (1995). In naturalistic contexts, the poor performance of self-worth protective students in situations which create evaluative threat is reflected in low effort strategies such as procrastination and last-minute study, mentioned earlier.

A further distinction drawn by Berglas (1990) is between *person-based* and *task-based* praise. Person-based praise is also *idiographic*, focusing on the individual case without reference to general standards. The low achieving student who is informed "That's the best practical report you've produced this term" is receiving person-based praise which is idiographic. It is idiographic because there is no basis for comparison which extends beyond the individual's

own past performances. Such praise has a limited, and likely negative value, particularly if the grade received is known to be low relative to other students.

Task-based praise is *nomothetic*, referring to a broad number of cases as a standard of comparison. Praise of the form “You were the only person who correctly interpreted the results of the more difficult statistical analyses” offers praise which ascribes outstanding performance relative to other people whose performances were not so laudatory.

Another limitation of person-based praise is that it is often directive in nature, imposing stable dispositional qualities on the person being evaluated. To be described as “a gifted scholar” or “a talented musician” or “an ingenious designer” implies an expectation that these qualities inhere in the person as stable attributes, and that they are likely to be confirmed in future performance. Feedback of the form “You’re an ‘A’ student” or “You’re invincible”, well intended as they may be as messages of praise and encouragement, make reference to qualities which inhere in the person and which are presumed to be enduring, or dispositional. Under the present analysis, such messages give rise to intellectual evaluative threat, and impose a pressure for repeat performance. This perception of performance pressure is all the more marked for self-worth protective students. Where there is likelihood of poor performance which will reflect low ability, these students will withdraw effort in order to deflect an inference of low ability (Craske, 1988; Thompson et al., 1995).

Common to each of the distinctions outlined above is the connection between forms of praise which are directive of future performance and nominate internal, stable (dispositional) factors which exacerbate the underachievement of self-worth protective students by creating performance pressure, making future performance diagnostic of ability.

Feedback which Engenders Attributional Uncertainty

Non-contingent feedback engenders attributional uncertainty and uncertain self-images. These two effects go together. Students who are uncertain as to how to attribute the cause of their achievement outcomes, whether to internal factors such as effort, strategy or ability, or to external factors such as good fortune or task ease, doubt their personal capacity to bring about particular outcomes. (Refer in this section to the third set of relationships identified in Table 1.)

The connection between uncertain self-images and attributional uncertainty has been established by a number of studies examining self-handicapping behaviour (e.g. Berglas & Jones, 1978; Higgins & Harris, 1988; Kolditz & Arkin, 1982; Mayerson & Rhodewalt, 1988; Rhodewalt & Davison, 1986). These studies have shown that attributional uncertainty and uncertain self-images can be created in two ways. One is through exposure to non-contingent performance feedback, the other is by manipulating outcome uncertainty.

The two forms of uncertainty are, of course, linked and interdependent. The manipulation of uncertainty concerning future performance outcomes challenges the certainty of self-perceptions, often in the form of perceived competence to achieve a certain outcome, while persons with uncertain self-images doubt their ability to perform efficaciously. The creation of uncertainty in either sense is associated with the adoption of self-protective strategies shown by self-worth protective students. These are strategies which allow these students to give an “account” for poor performance.

In educational settings, attributional uncertainty—diffidence about how the cause of the

achievement outcome in question should be attributed—can arise from non-contingent feedback in a variety of forms. For example, when evaluative feedback for comparable performances is inconsistent across occasions, students have difficulty in correctly attributing the cause of their performance outcome. This is also the case for feedback which fails to make explicit the bases on which success or failing performance has been judged. Such feedback compromises the certainty with which explanations for performance are made after the event. The logical link between performance and the factors underlying that performance is lost, so that the individual is at a loss to decide the cause of the performance outcome and thereby, to achieve closure in attributional terms. Performance feedback which has little relationship, or at best, a tenuous relationship with actual performance leaves the individual wondering “was it me, or was it something to do with the task?”

In such situations, it is unlikely that students identify luck or chance as causes of their success or failure, but that they simply remain *unaware* of the causes of their achievement outcomes. Comment by one student identified as self-worth protective through the experimental manipulation which formed the basis of the Thompson (1993a) study provides a poignant illustration in this regard. Asked during post-experimental debriefing how she viewed the cause of her achievement outcomes, she answered simply “I don’t know. I don’t know what I do right when I do well, and I don’t know what I do wrong when I do poorly. It’s all a mystery to me”. Without a basis for confidently attributing the cause of one’s achievement outcome, persistence diminishes. Butler and Orion (1990) found such a sense of “unknown control” associated with poor achievement in primary-school children.

A further form of evaluative feedback which engenders attributional uncertainty is generalised verbal (or written) praise. This is illustrated in the use of cliched comments such as: “an excellent essay”, “an outstanding account—well done!” Positive and congratulatory as they may be, such comments fail to provide specific information on the basis of which students may adequately diagnose the cause of their success.

These and doubtless other forms of evaluative feedback blur the link between achievement performance and the attributions an individual is able to make for that performance. Attributional uncertainty is engendered and uncertain self-images reinforced. As these are personality variables associated with self-worth protective students, for these students, the adverse effects of such feedback are likely to be particularly marked.

Further Sources of Non-contingent Evaluative Feedback

Non-contingent evaluative feedback is that which bears little relationship with actual performance, and so fails to adequately specify the basis on which success or failing performance has been judged. (Refer throughout this section to the final set of relationships depicted in Table 1.) Evaluative feedback which attributes performance outcome to external factors which are either unstable (as in the case of assessment criteria which are not known in advance) or uncontrollable (as in the case of norm-referenced assessment standards), has such effects. A consequence of such feedback is that the individual is left bereft of information on which effective remedial action might be taken. Evaluative feedback of this nature encourages external attributions and diminishes intrinsic motivation. The connection between these two effects is well supported from studies by Deci and co-workers (Deci, 1971, 1972a, 1972b; Deci et al., 1975; Deci & Ryan, 1983), for a variety of tasks and for individuals of varying ages.

A further source of non-contingent feedback is praise which is given in disregard of performance outcome. The tendency to praise incorrect answers was noted earlier, as well as evidence that undeserving praise is given to low achievers (Brookover et al., 1978; Weinstein, 1976).

Evaluative feedback which involves a contrived bias in favour of success at the expense of failure feedback can constitute a further form of non-contingent feedback. Clifford (1984) argues that the ratio of success versus failure feedback is actually *independent* of any negative effects in terms of resultant intrinsic motivation, self-esteem, and affective reactions. She argues that failure can actually have *positive* effects in terms of subsequent achievement motivation and performance where the individual is able to make certain constructive attributions for failure. Constructive attributions will occur to the extent that the individual is able to attribute failure to inadequate study strategies, where clarity and detail are a feature of assessment process, and to the extent that performance is self-initiated rather than imposed from without.

Empirical support for these views is given by Chaikin (1971), in a study examining the effects of performance feedback patterns. This researcher found that an 83% success pattern had no greater benefit in terms of intrinsic motivation than an 83% constant failure pattern or a pattern of performance feedback which gradually favoured failure at the expense of success feedback. On the other hand, a pattern of performance feedback which steadily favoured success at the expense of failure feedback led to greater intrinsic motivation than any of the aforementioned patterns.

These data challenge the assumption that there is a connection between high levels of success feedback and the affective benefits claimed above. Furthermore, the study by Chaikin (1971) establishes that it is not the ratio of positive and negative feedback per se which affect students' attributions for their achievement outcomes, but the characteristics of the evaluative feedback itself.

Other sources of non-contingent feedback are not difficult to find. Evaluative feedback which links the cause of success to normative standards which are unstable, unknowable and uncontrollable can constitute a form of non-contingent performance feedback, particularly when these normative standards are accented to a greater degree than other criteria which are known to govern assessment.

Empirical evidence in this regard has been provided by Butler and Nisan (1986). These researchers found that students who were given individualised, specific, non-normative information about task performance showed enhanced motivation relative to other students given normative information about their task performance. They concluded that while normative grades provide information about proficiency relative to others, they "do not provide clear standards for self-evaluation or for constructive attribution" (p. 215). These researchers, furthermore, observe that normative grades "provide a striking example of feedback in which *control* [italics added] rather than *information* [italics added] is salient".

Implications for Teachers and Teacher Educators

The implications which follow from the above analysis concern both teachers and teacher educators. As evaluative feedback from teachers carries potential both to create and perpetuate the achievement-limiting behaviours of self-worth protective students, attention needs to be given to the manner in which teachers deliver evaluative feedback, whether verbally or in written form.

The above discussion has identified forms of evaluative feedback which are to be *avoided*. The implications which can be drawn in terms of teachers' *productive* use of evaluative feedback for self-worth protective students are as follows. First, evaluative feedback needs to focus on *specific actions* rather than broad competencies or skills, enduring dispositional factors. Teacher feedback which is task-based and nomothetic is likely to have positive consequences for self-worth protective students in minimising performance pressure and conditions of evaluative threat, thereby, preserving intrinsic motivation.

Secondly, particular benefits will result for self-worth protective students if teachers are able to cue students into habits of appropriate self-reinforcement following success. This need to be endorsed by these students' characteristic rejection of personal agency for success. Drawing attention to the criteria on which success has been judged will help overcome attributional uncertainty and assist self-worth protective students to internalise their success. A first step in this process may involve assisting self-worth protective students to identify those attributional elements which, logically, qualify as candidates to explain a given performance outcome. Only then can skills be developed in discriminating amongst these alternative causes.

For teachers, skills in identifying the predominant attributional messages involved in evaluative feedback are required, as well as an understanding of the nature of the attributional messages contained in evaluative feedback. Additionally, an understanding of the effects of these evaluative messages on achievement behaviour is needed.

Given the specificity of the skills involved and perhaps, the need to change teachers' existing habits of evaluative feedback, analysis of episodes of verbal evaluative feedback and prose vignettes is advised. As effective verbal evaluative feedback depends importantly on the development of social skills, direct instruction alone may prove inadequate. Video feedback of teachers' incorporated habits of praise and blame may have the confrontational value necessary to both demonstrate the need for skills development and motivate change. These means may also be used for active modelling and rehearsal of non-verbal aspects of evaluative feedback. While benefits may be confidently expected to generalise to all students, they can be predicted to be particularly marked for self-worth protective students.

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