

BEHAVIOURAL VERSUS CLAIMED SELF-HANDICAPPING: UNDERLYING
MOTIVATIONS AND ATTRIBUTIONS FOLLOWING FAILURE

by

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Abstract

This research examined the motivations for behavioural self-handicapping and claimed self-handicapping and the relative effectiveness of each strategy in protecting against losses in self-perceived ability and self-esteem following failure. Study 1 examined whether individuals behaviourally self-handicap solely for purposes of self-presentation or whether self-protection is also a motive. After receiving contingent or noncontingent success feedback, subjects were given the opportunity to behaviourally self-handicap by selecting performance-enhancing or -impairing music to listen to while taking a second test. Privacy of tape choice and expected privacy of posttest scores were varied. Results indicated that male subjects self-handicapped more after noncontingent than contingent success. Females did not behaviourally self-handicap. There was no main effect or interaction of privacy on subjects' self-handicapping behaviour. These results suggested that, for males, behavioural self-handicapping is motivated, at least in part, by the desire to preserve one's own estimates of ability and not just those of an audience.

Study 2 was conducted to determine whether claimed self-handicapping is also employed for purposes of self-protection or whether it is strictly a self-presentational device. After receiving contingent or noncontingent success feedback, subjects were given the opportunity to behaviourally self-handicap or claim a handicap. Privacy of handicap and posttest scores were varied. Results indicated that subjects claimed a handicap more after noncontingent than contingent success in public and in private.

There was no main effect or interaction of privacy on claimed self-handicapping scores, suggesting that claimed self-handicapping is also a self-protective strategy. The behavioural effects found in study 1 failed to replicate.

Study 3 examined the self-perceived ability and self-esteem protection afforded by behavioural and claimed self-handicapping. All subjects received noncontingent success feedback and were given the opportunity to behaviourally self-handicap, claim a handicap, or no opportunity to self-handicap. Subjects' performance expectations and perceived impairment were assessed (in private) just prior to taking a second test, which all subjects failed. Subjects' performance attributions and state self-esteem were assessed subsequently. Results indicated that subjects in the behavioural and claimed self-handicapping conditions were less likely to attribute failure on test 2 to ability than control subjects. There were no differences in mean self-esteem scores.

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Chapter 1

Original Conceptualization of Self-handicapping

Early research on achievement behaviour indicated that individuals high in fear of failure preferred either very easy or very difficult tasks, whereas individuals high in need achievement preferred tasks of moderate difficulty (McClelland, 1961).

According to Trope (1975), the discrepancies in the performances of persons low and high in ability will be minimal on very easy or very difficult tasks, but will be greatest on tasks of intermediate difficulty. Consequently, tasks of moderate difficulty usually provide the most accurate information about one's ability (Trope, 1975; Trope & Brickman, 1975). Individuals high in fear of failure, therefore, may purposely avoid such information, presumably because they fear negative feedback. Intrigued by these findings, Berglas and Jones (1978) suggested that, in order to protect their self-esteem, individuals who fear failure should select situations in which only success can be attributed internally. In particular, they predicted that in evaluative settings some individuals would purposely disadvantage themselves so that failure could be attributed to the disadvantage rather than their ability. In the unlikely event that individuals succeeded in such situations, attributions to ability would be enhanced. They called this "self-handicapping", which they defined as any behaviour (including choice of performance setting) that encourages external attributions for failure and internal attributions for success, thereby tacitly acknowledging individuals' naive understanding of Kelley's (1971) discounting and augmentation principles.

According to Berglas and Jones (1978), the need to employ such strategies stems from a fragile sense of self-worth created by a “capricious, chaotic reinforcement history” (p. 407), where success has been abundant, but often not contingent on performance. As a result of such experiences, individuals may feel like impostors or pretenders, unable to maintain their present level of success.

The authors conducted an experiment to determine whether a recent experience of noncontingent success would motivate individuals to self-handicap by selecting a performance-inhibiting drug prior to a second evaluation. The study was described to subjects as examining the effects of drugs on intellectual performance. Subjects were given success feedback after completing a test consisting of either mostly solvable or unsolvable analogies (representing contingent and noncontingent success, respectively). Subjects expected to take a second similar test, while under the influence of either a performance-enhancing or -impairing drug. The choice of drug and dosage was theirs, thereby providing an opportunity to self-handicap. Further, to determine whether self-handicapping was motivated by self-presentational versus self-protective concerns, feedback was given under public (experimenter knew their score) or private (experimenter did not know) conditions. Presumably, if subjects self-handicapped only when the experimenter knew their test score (i.e., only in public) this would indicate a desire, on the part of subjects, to control the experimenter’s attributions rather than their own and would suggest that self-handicapping is primarily an impression management strategy. On the other hand, any evidence of

self-handicapping in the private condition, when only the subjects knew their test scores, would indicate a desire on the part of subjects to protect their own attributions for success or failure. The authors predicted that subjects who experienced noncontingent success would be more likely to choose the performance-impairing drug (i.e. self-handicap) than those who experienced contingent success. The predictions were confirmed for male subjects only. More males chose the performance-impairing drug (and more of it) after noncontingent than contingent success, whereas the means for females did not differ. There was no effect of feedback privacy.

Since the manipulation of privacy did not affect drug choice, the authors concluded that self-handicapping is a self-protective strategy, motivated by a desire to protect a fragile self-image.

Expansion - Other Research

Other self-handicapping behaviours

Jones and Berglas (1978) suggested that many so-called problem behaviours such as alcohol abuse and underachievement may be instances of self-handicapping. The applicability of self-handicapping to alcohol consumption was examined by Tucker, Vuchinich, and Sobell, (1981) in two experiments using male subjects only. In the first experiment, subjects completed either an easy or difficult concept formation task (ostensibly an intelligence test) and received either success feedback or no feedback. Further, to determine whether contingent success feedback coupled

with the expectation of a more difficult second test would produce self-handicapping, half the subjects were told that the second test would be as difficult as the first; the rest expected it would be more difficult. Subjects were then given simultaneous access to alcoholic beverages (self-handicapping option) and study materials (performance-enhancing option). A $2 \times 2 \times 2$ MANOVA on alcohol consumption, blood alcohol content (BAC) scores, and use of study materials found no significant effects. However, planned comparisons indicated that subjects consumed marginally more alcohol, and had significantly higher BAC scores after noncontingent than contingent success, regardless of their expectancies for test 2. Further, subjects who expected a more difficult test studied more than subjects who expected a test of similar difficulty. In a second study, the performance enhancing option was eliminated; instead, subjects were given simultaneous access to alcoholic beverages and test-irrelevant materials. Results indicated that subjects consumed significantly more alcohol after noncontingent than contingent success. Tucker et al. (1981) concluded that males will use alcohol to self-handicap; however, they suggested that this tendency will be reduced if a viable option to enhance performance exists.

Since Berglas and Jones' (1978) publication, self-handicapping has been applied to a variety of other behaviours including: making an unattainable goal choice (Greenberg, 1985), choosing to listen to impairing music (Rhodewalt & Davison, 1986) or distracting noise (Ferrari, 1991a), practising inadequately (Tice & Baumeister, 1990), reducing effort (Ferrari, 1991b), or giving a comparison other a

performance advantage (Sheppard & Arkin, 1991).

Noncontingent success: Necessary or not?

Berglas and Jones' (1978) original paper included a second study to determine whether merely the expectation of taking a difficult test without prior success feedback would cause subjects to self-handicap. Subjects completed solvable or unsolvable analogies, received either success feedback or no feedback, and chose a drug prior to a "second test". As in their first study, females did not self-handicap. Males self-handicapped only in the noncontingent success condition. Subjects who received unsolvable analogies, but no success feedback, did not self-handicap. The authors concluded that noncontingent success is necessary for self-handicapping, and suggested that self-handicapping is motivated by the need to protect ability attributions for previous successes rather than future failures.

Similar results were found by Higgins and Harris (1988). These investigators examined alcohol consumption as a self-handicap following contingent or noncontingent success or failure. Also included was a "no feedback" condition, as well as a "low-stress control" condition (subjects were shown the problems but asked not to try to solve them). Failure feedback was included in this study in order to determine whether noncontingent failure feedback would also motivate individuals to self-handicap. After completing a concept formation task, subjects received either success or failure feedback that was consistent (contingent) or inconsistent (noncontingent) with performance. Subjects were then presented with a pitcher

ostensibly filled with vodka and tonic (actually a placebo) and invited to drink as much or as little as they wished during the next 12 minutes. The experimenter was absent during this time. Analysis of beverage consumption indicated that noncontingent success subjects consumed more placebo beverage than subjects in the contingent success, contingent failure, or low-stress control groups. Noncontingent failure subjects consumed more placebo than contingent success subjects, but did not differ significantly from the other groups. The authors concluded that only noncontingent success produced reliable effects on subjects' drinking behaviour. Using a different measure of self-handicapping (selecting impairing versus enhancing music), Rhodewalt and Davison (1986) also failed to produce self-handicapping in subjects who experienced noncontingent failure.

Several researchers, however, have produced self-handicapping by exposing subjects to difficult practice problems but no feedback (Sheppard & Arkin, 1989a, 1989b, 1991; Tice & Baumeister, 1990; Tice, 1991). Typically, an 'easy' practice condition is not included. Instead, other factors expected to encourage or discourage self-handicapping are varied such as the task's ego-relevance (DeGree & Snyder, 1985; Pyszczynski & Greenberg, 1983; Shepherd & Arkin, 1989a, 1989b), or the presence of pre-existing handicaps (Sheppard & Arkin, 1989a). Other researchers have elicited self-handicapping by giving subjects private failure feedback (Baumgardner, 1991; Baumgardner, Lake, & Arkin, 1985). Presumably, failure on or exposure to a difficult pretest fosters doubt in subjects' minds concerning their ability

to succeed on a subsequent test. These findings conflict with those of Berglas and Jones (1978) and Higgins and Harris (1988) where experience with a difficult pretest, but no feedback, did not produce self-handicapping. As yet, no attempt has been made to explain this discrepancy. Ingestion of a performance-impairing drug or alcohol is a more invasive form of self-handicapping than reducing effort (Ferrari, 1991) or listening to impairing music (Rhodewalt & Davison, 1988; Shepherd & Arkin, 1989a, 1989b) and may require a greater level of motivation. Perhaps, for Berglas and Jones' and Higgins and Harris' subjects, the desire to protect ability attributions for a previous success produced a stronger motive to self-handicap than the desire to protect ability attributions for future failure. Alternatively, Berglas and Jones' assumption that self-handicapping is undertaken for the purpose of protecting past but not future attributions may be incorrect. Because researchers employ a variety of self-handicaps, comparison of results across studies is difficult.

Behavioural versus claimed self-handicapping

In their original formulation of self-handicapping, Berglas and Jones suggested that any action that increases the likelihood that failure will be attributed to external factors and success to internal factors should be construed as a self-handicap. Further, they stated that "any use of self-handicapping that involves more than cognitive distortion presumably decreases the chances of success" (pg. 406). This implies that individuals need not actually disadvantage themselves in order to self-handicap, but need only believe themselves to be disadvantaged. Early studies of self-

handicapping emphasized what has come to be known as behavioural self-handicapping, behaviours or actions that would actually put an actor at a disadvantage (Berglas & Jones, 1978; Kolditz & Arkin, 1982; Tucker, Vuchinich, & Sobell, 1981). Other researchers suggested that verbal claims of physical weakness or psychological distress should offer similar esteem protection against failure (DeGree & Snyder, 1985; Snyder & Smith, 1982). Research has shown that individuals will claim as self-handicaps any number of physical or psychological symptoms such as test anxiety (Snyder, Smith, Handelsman (1982). shyness (Snyder, Smith, Augelli, & Ingram, 1985), traumatic life events (DeGree & Snyder, 1985), negative mood (Baumgardner, Lake, & Arkin, 1985), and depression (Baumgardner, 1991; Rosenfarb & Aron, 1992).

In most studies of claimed self-handicapping, success contingency is not manipulated. Instead a particular characteristic or weakness is offered and/or eliminated as a possible excuse for poor performance. For example, DeGree and Snyder (1985) varied the viability of claiming a traumatic life history as a handicap. Female subjects were told they would complete a measure of social intelligence that would be given in two parts, both quite difficult. After completing the first half of the test, half the subjects were told that a history of traumatic life events would have no effect on their performance; the rest were given no information. Subjects were then asked to complete a measure of traumatic life history. Results indicated that subjects in the no information condition reported more traumatic life events than

subjects in the no effect condition. The authors concluded that individuals will exaggerate the adversity of past experiences, if such experiences provide a possible excuse for failure.

Situational variables influencing self-handicapping

As mentioned previously, many studies of self-handicapping include manipulations of the ego relevance of the task instead of success contingency (DeGree & Snyder, 1985; Greenberg, 1985; Harris, Snyder, Higgins, & Schrag, 1986; Rosenfarb & Aron, 1993; Shepherd & Arkin, 1989a, 1989b; Smith, Snyder, & Handelsman, 1982; Smith, Snyder, & Perkins, 1983; Snyder, Smith, Augelli, & Ingram, 1985). For example, Shepherd and Arkin (1989a) found that subjects were more likely to choose to listen to interfering music while taking an intelligence test if the test was described as well-established and valid rather than new and untried. Similarly, Rosenfarb and Aron (1992) found that subjects expecting to take a test of social intelligence reported more depressive affect than subjects expecting to pilot test some stimulus materials.

The incidence of self-handicapping can also be influenced by situational factors such the presence of preexisting handicaps (Shepherd & Arkin, 1989a) and external incentives for performance excellence (Greenberg, Pyszczynski, & Paisley, 1985). In Shepherd and Arkin's (1989a) study, subjects were given the option of selecting enhancing or impairing music to listen to while taking an intelligence test. In the preexisting handicap condition, subjects were told that, regardless of the music they

selected, they would hear an intermittent high-pitched ringing sound during testing that was expected to disrupt performance. It was found that, compared to no preexisting handicap controls, fewer subjects in the preexisting handicap condition chose the impairing music. This suggests that individuals will not further disadvantage themselves if they believe they are already handicapped. Presumably, once ability attributions are protected, they need no further protection.

Greenberg, Pyszczynski, and Paisley (1985) demonstrated that the offer of a monetary reward for good performance reduced claimed self-handicapping. Subjects expecting to take an intelligence test were told that either \$5 (low incentive) or \$25 (high incentive) was being offered for the highest score. Half the subjects were told that test anxiety would have no effect on performance (informed condition); the rest were given no information (uninformed condition). Prior to testing, all subjects completed a measure of test anxiety. Analysis of anxiety scores indicated that uninformed subjects reported greater anxiety (self-handicapped more) in the low than high incentive condition. The authors concluded that an external incentive for performance excellence can override the need to protect self-esteem. They failed to explain, however, why the introduction of an external incentive would discourage claimed self-handicapping, since claiming a handicap would not be expected to reduce the likelihood of success.

Individual Differences

A number of investigators have examined individual difference variables as

mediators of self-handicapping.

Sex differences. In their original study, Berglas and Jones (1978) found that females' drug choice was unaffected by the manipulation of success contingency. They suggested that, since females in both conditions attributed their success on the pretest more to luck and less to ability than males, the manipulation of contingent and noncontingent success was undermined. Because of these findings, many studies of behavioural self-handicapping used male subjects only (Greenberg, 1985; Higgins & Harris, 1988; Kolditz & Arkin, 1982; Islieb, Vuchinich, & Tucker, 1988).

The few other studies that included both males and females have yielded inconsistent findings. Sheppard and Arkin (1989a) and Tice and Baumeister (1990) found that males and females were equally likely to behaviourally self-handicap by selecting impairing music or practising inadequately, when success was uncertain. However, other researchers have found that, compared to females, males are more likely to select debilitating music after noncontingent than contingent success (Rhodewalt & Davison, 1986) on important and unimportant tasks (Sheppard and Arkin, 1989b). Shepherd and Arkin (1991) demonstrated that, when uncertain of success, only males will give another a performance advantage if they expect that their test scores will be compared.

There is considerable evidence that females engage in claimed self-handicapping (Baumgardner, Arkin & Lake, 1985; DeGree & Snyder, 1985; Harris, Snyder, Higgins, & Schrag, 1986; Smith, Snyder, & Handelsman, 1982; Smith,

Snyder, & Perkins, 1982). Only a few studies, however, have examined sex differences in claimed self-handicapping and these have also yielded inconsistent findings. Rhodewalt and Fairfield (1991) and Hirt, Deppe, and Gordon (1991) found that males and females were equally likely to claim a handicap, but Snyder, Smith, Augelli, and Ingram (1985) found effects only for males. Snyder et al. (1985) have difficulty accounting for these sex differences, but suggest they may be particular to the type of handicap employed. Subjects were given the opportunity to self-handicap by claiming shyness or social anxiety. The authors suggest that shyness may manifest itself differently in males and females.

As yet, the relationship between gender and self-handicapping is unclear. Typically, researchers have been more successful in demonstrating claimed self-handicapping than behavioural self-handicapping in females (for a review, see Leary & Sheppard, 1986). Conceivably, gender differences in the use of self-handicapping strategies may vary as a function of the task, the audience, and the handicaps available.

Self-esteem. Tice and Baumeister (1990) examined the mediating effects of trait self-esteem on self-handicapping. After completing a test of “nonverbal intelligence” subjects received either contingent success feedback or no feedback and were given the opportunity to practice prior to taking the test again. Self-handicapping was operationalized as the amount of time spent practising, with less practice indicating greater self-handicapping. In the absence of pretest feedback,

subjects high in self-esteem self-handicapped more than those low in self-esteem. In the success feedback condition there was a marginally significant reversal in this pattern. These results suggest that the manipulation of success contingency may function as a manipulation of state self-esteem.

Tice (1991) examined the relationship between self-esteem and self-handicapping as a function of the meaningfulness of the information conveyed by success or failure. Tice demonstrated that when success was meaningful (but failure meaningless) individuals high in self-esteem self-handicapped more than those low in self-esteem. However, when failure was meaningful (but success meaningless) individuals low in self-esteem self-handicapped the most. Tice suggested that individuals high in self-esteem, expecting success, may self-handicap for the purpose of self-enhancement, because succeeding with a handicap would promote greater attributions to ability and, therefore, enhance social and self-esteem. Those low in self-esteem, on the other hand, expecting failure, may be primarily concerned with avoiding ability attributions for failure and may, therefore, self-handicap in order to protect their present self-image.

Harris and Snyder (1986) and Kimble, Funk, and DaPolito (1990) examined the relationship between self-esteem certainty, the stability or certainty of individuals' self-appraisals (Maracek & Mettee, 1972) and self-handicapping. Harris and Snyder (1986) found that males low in self-esteem certainty practised less (i.e., self-handicapped more), prior to taking an intelligence test, than males high in self-esteem

certainty, whereas practice times for females did not differ as a function of self-esteem certainty. Practice times did not vary as a function of actual levels of self-esteem. Kimble et al. also found that, compared to highs, males low in self-esteem certainty self-handicapped more. However, the pattern of results was reversed for females, with those high in self-esteem certainty self-handicapping more than lows. Because Kimble et al. (1990) assessed self-handicapping in an interpersonal setting instead of an achievement setting, it is difficult to reconcile these inconsistent findings. As in Harris and Snyder (1986), actual level of self-esteem was not predictive of self-handicapping behaviour.

Research on claimed self-handicapping has found that females high in self-esteem were more likely to claim test anxiety as a self-handicap than those low in self-esteem (Harris, Snyder, Higgins & Schrag, 1986).

For the most part, the research suggests that individuals high in self-esteem are more likely to self-handicap than those low in self-esteem, particularly in the absence of prior contingent success. The inconsistencies in the literature are difficult to reconcile, because researchers have employed different methodologies and operational definitions of self-handicapping.

Trait self-handicapping. Jones and Rhodewalt (1982) developed a scale to measure dispositional tendencies to self-handicap. A number of researchers have examined the tendency to self-handicap as a function of this variable. Compared to those who score low, individuals who score high on the Self-handicapping Scale

(Jones & Rhodewalt, 1982; Strube 1985) are more likely to withhold effort (Rhodewalt & Fairfield, 1991), practice inadequately (Hirt, Deppe, & Gordon, 1991; Lay, Knish, & Zanatta, 1992; Rhodewalt, Saltzman, & Wittmer, 1984), or claim stress (Hirt, Deppe, & Gordon, 1991) as self-handicaps. For example, Rhodewalt, Saltzman, and Wittmer (1984) found that intercollegiate swimmers high in trait self-handicapping practised less before important meets than those low in trait self-handicapping. Rhodewalt and Fairfield (1991) found that, when uncertain of success, subjects high in trait self-handicapping indicated they would expend less effort than lows on ego-relevant and irrelevant tests.

Other individual differences. Sheppard and Arkin (1989b) found that, when subjects expected their test scores to be public, those high in public self-consciousness (Fenigstein, Scheier, & Bus 1975) were more likely to select performance-impairing music than subjects low on this dimension. In their examination of self-handicapping under conditions of high and low privacy, however, Kolditz and Arkin (1982) found that neither public nor private self-consciousness predicted self-handicapping.

Research on claimed self-handicapping has found that individuals high on a given trait are most likely to claim that trait as a handicap. Snyder, Smith, Augelli, & Ingram (1985) found that males (but not females) high in social anxiety were more likely to claim this as a handicap prior to taking an intelligence test than those low in social anxiety. Harris, Snyder, Higgins & Schrag (1986) demonstrated that test anxious females were more likely to claim test anxiety as a self-handicap than

nonanxious females. Males were not included in their sample. Also, Baumgardner (1991) found that depressed subjects were more likely to claim negative mood as a handicap than nondepressed. Presumably, depressed, test anxious, or shy individuals are more familiar with the secondary gains associated with these problems.

Chapter 2

Important Questions

Underlying motivations: Self-protection or self-presentation?

Originally, Berglas and Jones (1978) conceptualized self-handicapping as a self-protective strategy. That is, they suggested that individuals self-handicap in order to protect their own attributions for failure, rather than those of a target audience. Recall that, in addition to success contingency, the authors varied the privacy of pretest feedback; the experimenter was either aware of the subject's score (public condition) or was unaware (private condition). The authors reasoned that if self-handicapping is motivated primarily by self-protective concerns, subjects should self-handicap equally in public and in private. That is, the presence of an audience should not increase the motive to self-handicap. Their predictions were confirmed. There was no effect of feedback privacy on subjects' drug choice.

Kolditz and Arkin (1982) argued that Berglas and Jones' (1978) study did not address adequately the issue of self-protective versus self-presentational motives to self-handicap. Because a research assistant always knew the subject's score even if the experimenter did not, the private condition was not really private. In addition, Berglas and Jones (1978) varied only the privacy of subjects' pretest scores; posttest scores were always public. In an effort to determine better the role of self-presentational concerns in self-handicapping, Kolditz and Arkin (1982) attempted a conceptual replication of Berglas and Jones' (1978) study using two different

manipulations of privacy. Subjects were given contingent or noncontingent success feedback and asked to select a drug before taking a second test, as in Berglas and Jones' (1978) study. However, Kolditz and Arkin's subjects expected that selection and ingestion of the drug would take place either in the presence or absence of the experimenter. Crosscutting privacy of drug choice was expected privacy of the posttest scores. Subjects in the private posttest condition were instructed to put their tests in an envelope and mail them to a bogus pharmaceutical company. Ostensibly, any feedback regarding their test scores would come from this company. Subjects in the public condition were instructed to give completed test forms to the experimenter for immediate scoring. Only males were recruited for this study.

The results indicated that success contingency interacted with privacy of drug choice. Noncontingent success subjects self-handicapped when drug choice was public, but not when drug choice was private. Although the most self-handicapping occurred when both drug choice and posttest scores were public, there was no significant main effect or interaction involving posttest privacy. The authors concluded that self-handicapping is motivated primarily by impression management rather than self-protective concerns.

Kolditz and Arkin's study provides the clearest support for the self-presentational explanation of self-handicapping. Other research is less conclusive. Shepherd and Arkin (1989b) examined the relationship between public self-consciousness and self-handicapping in a public setting. After completing a few

sample problems from an “intelligence test”, subjects were given the opportunity to select performance-enhancing or -impairing music prior to taking the test. The authors found that subjects high in public self-consciousness were more likely to self-handicap by selecting distracting music than subjects low in public self-consciousness. This study demonstrates that individuals for whom impression management is an important issue will self-handicap more in a public setting than those who are relatively less concerned with managing impressions. Because Shepherd and Arkin did not include a private condition, one cannot determine from this study whether eliminating self-presentation issues completely eliminates self-handicapping.

Tice and Baumeister (1990) examined the effects of self-esteem and privacy on self-handicapping. Subjects were given the opportunity to practice in public (the experimenter observed and timed subjects while he or she practised) or private (the experimenter was absent) prior to taking a test of “nonverbal intelligence.” The authors found that subjects practised less (self-handicapped more) in public than in private, particularly subjects high in self-esteem. Unfortunately, Tice and Baumeister did not manipulate success contingency (in fact, they gave no pretest feedback). Like Shepherd and Arkin (1989b), Tice and Baumeister (1990) demonstrated that increasing self-presentational concerns increases self-handicapping, but did not include the control group necessary to determine whether subjects would not self-handicap when self-presentation is not an issue.

In two related experiments Baumgardner and her colleagues (Baumgardner,

1991; Baumgardner, Lake, & Arkin, 1985) examined the effects of prior public or private success or failure on the tendency to claim negative mood as a self-handicap. Baumgardner et al. (1985) reasoned that if self-handicapping is undertaken for purposes of maintaining a positive public image, then a spoiled public image should eliminate the need to self-handicap. Individuals who have already failed publicly have nothing to lose from further failure and nothing to gain from self-handicapping. Female subjects received public or private failure feedback after taking a test of "social accuracy." Prior to taking a memory test as part of a second experiment, the results of which were to be public for all subjects, subjects were given the opportunity to claim negative mood as a handicap. Half the subjects were told that negative mood would impair performance and positive mood enhance it (informed group), the rest were told nothing (uninformed group). Subjects in the private-failure/informed condition reported more negative mood (self-handicapped more) than subjects in the other three groups, which did not differ.

In a similar study, Baumgardner (1991) examined the effects of prior public success versus failure on the tendency to claim negative mood as a handicap, as a function of trait levels of depression. She predicted that subjects would self-handicap most after public success or private failure and that this would be especially true of depressed subjects. Partial support was obtained for her predictions. Depressed subjects reported more negative mood (self-handicapped more) after public success and private failure than nondepressed subjects. Contrary to her predictions, however,

depressed subjects also reported more negative mood after public failure than nondepressed. Unfortunately, Baumgardner (1991) compared mean affect scores only for depressed versus nondepressed subjects within public or private conditions. She made no comparisons across privacy/instructions conditions. Consequently, the issue of whether subjects actually self-handicapped more in public than in private is not addressed in this study.

The results of Baumgardner (1991) and Baumgardner et al. (1985) are difficult to interpret within the present discussion, because of their methodology. These investigators varied the privacy of pretest rather than posttest feedback and neither study included a contingent success comparison condition. Although Baumgardner (1991) did give half her subjects success feedback, it is not clear whether this constituted contingent or noncontingent success. Also, Baumgardner (1991) did not do the statistical tests necessary to address adequately the question of self-protective versus self-presentational motives to self-handicap. Furthermore, it is surprising that the subjects in these two studies self-handicapped at all, because the pre- and posttests measured abilities from very different domains (social accuracy versus memory). Why subjects' motivation to protect a public competence image would extend to other unrelated tasks is unclear and is not discussed by the authors. At best, the findings of Baumgardner (1991) and Baumgardner et al. (1985) provide further evidence that self-presentational concerns increase the incidence of self-handicapping, but do not demonstrate that the absence of self-presentational motives

eliminates self-handicapping.

Summary

The strongest support for the self-presentational explanation of self-handicapping is provided by Kolditz and Arkin (1982). They demonstrated that compared to contingent success subjects, noncontingent success subjects self-handicapped (by choosing a performance-impairing drug) in public only, but that drug choice did not differ in private. This study clearly demonstrated that individuals will not self-handicap if self-presentational concerns are eliminated. Most research, however, suggests only that increasing self-presentational concerns increases the motive to self-handicap (Baumgardner, 1991; Baumgardner et al., 1985; Tice & Baumeister, 1990; Shepherd & Arkin, 1989b). The issue of whether individuals self-handicap to self-protect remains unclear.

Behavioural versus claimed self-handicapping

Recall that early research on self-handicapping was primarily concerned with behavioural self-handicapping, the use of self-imposed performance impediments as a means of promoting self-serving attributions for performance outcomes (Berglas & Jones, 1978; Tucker et al. (1981); Kolditz & Arkin, 1982). In the original self-handicapping paradigm, the selection of a performance-impairing drug was used as a measure of self-handicapping (Berglas and Jones, 1978). Other researchers have offered different impediments such as alcohol (Tucker, Vuchinich, & Sobell, 1981), or music (Rhodewalt & Davison, 1986). In each of these studies, subjects performed

a behaviour that would presumably impair their performance. This is known as behavioural (Leary & Shepherd, 1986) or acquired self-handicapping (Arkin & Baumgardner, 1985). Snyder and his colleagues have suggested that claims of physical or psychological symptoms could also serve to control ability attributions for success or failure on evaluative tasks (e.g., see Snyder and Smith, 1982). In these studies, subjects do not actually acquire performance impediments (as in behavioural self-handicapping), they simply claim a disadvantage that would provide a viable excuse for failure. This has been referred to as self-reported (Leary & Shepherd, 1986) or claimed self-handicapping (Arkin & Baumgardner, 1985). It has been demonstrated that, when success is uncertain, individuals will claim any number of problems as handicaps: test anxiety (Snyder, Smith, Handelsman (1982). shyness (Snyder, Smith, Augelli, & Ingram, 1985), traumatic life events (DeGree & Snyder, 1985), negative mood (Baumgardner, Lake, & Arkin, 1985), and depression (Baumgardner, 1991; Rosenfarb & Aron, 1992).

There is some disagreement as to whether claimed self-handicapping is really self-handicapping (Leary & Shepherd, 1986). Leary and Shepherd (1986) argued that the two forms of self-handicapping are conceptually distinct. Although both strategies protect against ego-threatening attributions and are employed prospectively, behavioural self-handicapping actually reduces the likelihood of success, whereas claimed self-handicapping does not. Further, the individual who reports a weakness or disadvantage, they argued, does not expect that such claims will

produce decrements in performance. Therefore, according to Leary and Shepherd claimed self-handicapping differs from behavioural self-handicapping in two ways: 1) claiming a handicap does not actually put the individual at a disadvantage, whereas behavioural self-handicapping does, 2) individuals who claim a handicap do not expect performance decrements, whereas individuals who behaviourally self-handicap do.

Some indirect evidence to dispute the latter point is provided by Mercian and Rhodewalt (1988). After receiving contingent or noncontingent success feedback, males were told they would take a second test while their hand was submerged in ice cold water. Prior to taking the second test, subjects were asked to place their hand in the water and rate how painful they found it. It was explained that higher pain ratings should be associated with lower scores on the second test. For all subjects, pain ratings and posttest scores were private, yet the results indicated that subjects rated the water as more painful after noncontingent than contingent success. If Leary and Shepherd's (1986) assertion that individuals who claim a handicap do not believe themselves to be handicapped is correct, why did Mercian and Rhodewalt's (1988) subjects self-handicap in private? Because, as far as the subjects were concerned, only they would know their pain ratings and posttest scores, it seems likely that those who claimed a handicap did so to control their own attributions for success or failure rather than those of an audience. However, since Mayerson and Rhodewalt (1988) did not manipulate privacy, their results are not conclusive.

Only one study has examined the distinction between behavioural and claimed handicapping directly. Based on Leary and Shepherd's (1986) arguments, Hirt, Deppe, and Gordon (1991) reasoned that, of the two types of self-handicapping, claimed self-handicapping is less risky, because it does not actually reduce the likelihood of success. Consequently, if both claimed and behavioural self-handicaps are available and equally viable, individuals should prefer the former. They tested this prediction as a function of trait levels of self-handicapping and gender. Subjects were told that they had been selected for a study on 'integrative orientation' because they had achieved a high score on a previously administered test of this ability. Before taking the test a second time, subjects were given the opportunity to self-handicap either by: 1) practising inadequately (behavioural self-handicap), 2) reporting anxiety on a stress inventory (claimed self-handicap), or 3) practising inadequately and reporting anxiety (both handicaps available). All subjects completed the Self-handicapping Scale and were divided into high (HSH) and low self-handicappers (LSH) based on a median split of scores.

Results indicated that when inadequate practice (behavioural self-handicapping) was the only self-handicapping option available, males high in trait self-handicapping (HSH) practised significantly less (self-handicapped more) than subjects in the other three groups (LSH males, HSH and LSH females), which did not differ. As in previous research, females did not behaviourally self-handicap. When self-reported anxiety (claimed self-handicapping) was the only available self-

handicap, HSHs reported more anxiety than LSHs, regardless of sex. When both inadequate practice and self-reported anxiety were presented as viable handicaps, male and female HSHs reported more anxiety than LSHs, but their practice times did not differ (i.e., when both options were available high self-handicappers claimed a handicap, but did not behaviourally self-handicap). Different results were obtained in the two self-handicapping conditions indicating that subjects did not treat the two types of self-handicaps as interchangeable options, but as “distinctly different self-protective behaviours” (pg. 988). The authors suggested that these results provide support for Leary and Shepherd’s contention that behavioural and claimed self-handicapping are conceptually distinct.

However, there are some methodological problems with this research. In the condition where both handicaps were viable, subjects were always given the opportunity to claim a handicap first. Sheppard and Arkin (1989a) demonstrated that pre-existing handicaps eliminate the need to self-handicap. Therefore, the observed preference for claimed self-handicaps may simply be an order effect. Once Hirt et al’s (1991) subjects had claimed a handicap, there was no need for them to behaviourally self-handicap. Further, the two self-handicapping options used in this study (claiming anxiety versus practising inadequately) were so different that it is difficult to draw conclusions regarding subjects’ reasons for preferring one over the other.

Despite the study’s methodological flaws, Hirt et al. (1991) make an

interesting point. They suggested that, because claimed self-handicaps do not actually affect performance outcomes, they may best serve self-presentational concerns. By claiming a handicap individuals can protect their public image without reducing the opportunity for success and self-enhancement. On the other hand, because behavioural self-handicaps present actual impediments to performance, they may offer the best protection against threats to self-esteem and faith in one's ability. These predictions do not conflict with Mercian and Rhodewalt's (1988) findings, which demonstrated that individuals will claim a handicap in private. Hirt et al. (1991) do not suggest that individuals will refrain from claiming a handicap in private, but rather that they would be more likely to engage in claimed than behavioural self-handicapping in public.

Does self-handicapping work?

Presumably, self-handicapping strategies are undertaken to control our own and others' perceptions of our ability, and to maintain social and self-esteem. There are, however, only a handful of studies examining the attributional and esteem gains accrued when we self-handicap.

Self-esteem and self attributions. Islieb, Vuchinich, and Tucker (1988) examined changes in self-esteem and attributions for performance outcomes following alcohol consumption. After receiving noncontingent success feedback, male normal drinkers were given either alcohol or nonalcohol and were told they had consumed either alcohol or nonalcohol. Subjects then completed a concept formation task and

received either success or failure feedback. Attributions for performance outcomes were assessed and a pre/post measure of self-esteem was administered. The results indicated that, compared to those who thought they had been given a placebo, subjects who thought they had taken alcohol were less likely to attribute failure to ability, but their attributions for success did not differ. Additionally, posttreatment self-esteem scores were higher for the subjects in the "told alcohol" group than those in the "told nonalcohol" group, regardless of whether they succeeded or failed.

Rhodewalt, Morf, Hazlet, and Fairfield (1991) examined the effects of distracting music on performance attributions, mood, and self-esteem in males, as a function of trait levels of self-esteem and self-handicapping and presence of a handicap. All subjects received success feedback after completing a difficult task. Subjects then took a second test while listening to music described as slightly distracting (ambiguous handicap) or very distracting (nonambiguous handicap). Subsequently, half the subjects were told they had done well, the rest were told they had done poorly. Overall, successful subjects had the most positive mood scores, although subjects who failed with an unambiguous handicap had less negative scores than those in the failure/ambiguous handicap condition. Also, subjects in the failure/ambiguous handicap condition had lower self-esteem scores than those in the other three groups (which did not differ).

Results from Rhodewalt et al.'s (1991) attributional data were less straightforward than the self-esteem or mood effects. They found that when subjects

failed with an unambiguous handicap, only those high in trait self-handicapping (HSH) reduced negative ability attributions. On the other hand, when subjects succeeded with an unambiguous handicap, only subjects high in both trait self-esteem and self-handicapping augmented positive ability attributions. The authors suggested that self-handicapping strategies protect self-esteem and promote self-serving attributions, but only for some individuals.

The studies just described tell us how failing with a handicap, but not a self-handicap, affects people's attributions. Results from Islieb et al. (1988) and Rhodewalt et al. (1991) suggest that when individuals fail with a handicap, ability attributions will be discounted and self-esteem protected. The effects of succeeding with a handicap are less clear, since Rhodewalt et al. (1991) found evidence of augmentation (albeit only for subjects high in trait self-handicapping and self-esteem), whereas Islieb et al. did not. However, neither study gave subjects the opportunity to self-handicap; rather, a handicap was either imposed by the experimenter or not. Mercian and Rhodewalt (1988) gave subjects an opportunity to claim pain as a handicap and assessed their attributions for success or failure on a posttest. Subjects received contingent or noncontingent success feedback on a pretest and, prior to taking a second test, were asked to rate (on a 7-point scale) the painfulness of a cold water bath in which their hand was submerged. Subjects expected (correctly) that their hand would be immersed in the water while they took the second test. Further, they were told that pain ratings greater than '4' were

associated with decrements in performance, whereas pain ratings less than '4' were associated with enhanced performance. After completing the second test, subjects received either success or failure feedback and their performance attributions were assessed. Results indicated that, compared to those who did not, subjects who claimed pain as a handicap reported greater pain-related performance impairment and felt their performance was less indicative of poor ability. Self-esteem was not assessed in this study.

Impressions and Attributions of Others. Luginbuhl and Palmer (1991) had subjects watch a videotape of a student (John) who chose to either stay home and study or go out to a movie on the eve of an exam. Subsequently, subjects were told that John received one of three grades on the exam: 55%, 75% or 95%. Subjects were also given information concerning the consistency of this behaviour. They were told that John let other activities interfere with his studies often, seldom, or never. The authors predicted that a history of self-handicapping would reduce the utility of this strategy as an impression management tool. They argued that if an observer realizes that an actor is intentionally self-handicapping the observer's impression of the actor will not be protected and may be damaged.

The results of this study indicated that subjects' attributions and evaluations of John were influenced by the self-handicap. Regardless of the grade received, the self-handicapping target was seen as more intelligent, possessing greater knowledge of the course, and was expected to get higher grades in the future than the nonself-

handicapping target. However, the benefits of self-handicapping were offset by more negative evaluations on nonability dimensions. Subjects rated the self-handicapping target as less motivated, less concerned about his performance, and less desirable as a study partner than the nonself-handicapping target. Contrary to predictions, the manipulation of consistency information, whether the target had a history of self-handicapping, had no effect on any of the dependent measures.

Schouten and Handelsman (1987) examined the effectiveness of the claimed handicap of depression in discounting responsibility for a negative event. Subjects read vignettes depicting situations of domestic violence or poor job performance. The actor was described as either: 1) nondepressed; 2) currently depressed, but with no prior history of depression (inconsistent behaviour); 3) currently depressed with a history of psychiatric treatment for depression (consistent behaviour). Depressed protagonists were seen as less responsible, less blameworthy, and less of a causal factor than nondepressed. Expectations for future job performance were lowest for protagonists with a history of depression. Consistency information had no other effects. The authors concluded that appearing depressed is a viable means of public self-handicapping.

Smith and Strube (1991) examined the effects of self-handicapping on the attributions and impressions of observers as a function of trait self-esteem and trait self-handicapping. Subjects read vignettes describing an exam situation where an individual succeeded or failed after self-handicapping. The self-handicaps depicted

were either internal (hangover, illness, lack of preparation) or external (poor lighting, difficult exam, parental pressure), verified by another student or unverified. Greater ability was attributed to successful than unsuccessful targets. Contrary to the authors' predictions, however, ability attributions were not mediated by the presence or absence of self-handicaps. As in Luginbuhl and Palmer's (1991) study, subjects rated handicappers less favourably than nonhandicappers. There was no effect of handicap type.

Summary

The results of Islieb et al. (1988) and Rhodewalt et al. (1991) support Berglas and Jones' (1978) contention that individuals who fail with a handicap (albeit an imposed handicap rather than a self-handicap) will reduce negative ability attributions. Mercian and Rhodewalt (1988) found that individuals who fail after claiming a handicap will reduce negative ability attributions for failure.

The results of studies examining the attributions of observers who witnessed a target succeed or fail with a handicap are less consistent. Luginbuhl and Palmer (1991) found evidence of both the discounting and augmenting effects of behavioural self-handicapping. Schouten and Handelsman's (1987) study of claimed self-handicapping found evidence of discounting but not of augmentation. Smith and Strube (1991) included both behavioural and claimed handicaps in their study and found that observers neither discounted ability when a target person failed with a handicap, nor augmented ability when the target succeeded with a handicap. Further,

there is some evidence that self-handicapping strategies may backfire. While maintaining an image of competence, self-handicappers may give the impression that they are lacking in other positive qualities (Luginbuhl & Palmer, 1991; Smith & Strube, 1991).

The Present Research

The present research was conducted in an effort to address the issues discussed in this chapter. Specifically, is self-handicapping entirely a self-presentational strategy or do self-protective concerns come into play? Is Leary and Shepherd's (1986) assertion that claimed self-handicapping is not really self-handicapping correct (i.e., do individuals who claim a handicap believe privately that these claims are untrue)? Finally, does self-handicapping (claimed or behavioural) adequately protect against losses in self-perceived ability and self-esteem?

Kolditz and Arkin (1982) argued that self-handicapping is a self-presentational rather than a self-protective strategy. These authors found that subjects self-handicapped in public, but did not self-handicap in private. However, the failure to demonstrate self-handicapping in private may be an artifact of Kolditz and Arkin's methodology. Subjects may have been more reluctant to select and self-administer a debilitating drug when the experimenter was absent than present. Also it is unclear whether subjects in the private posttest condition ever expected to get feedback. If they did, they certainly would not have expected it immediately, like subjects in the public posttest condition. Therefore, delay of feedback may also have been a

confound in their study. Other research examining the issue of self-presentational versus self-protective motives to self-handicap has been even less conclusive, demonstrating only that increasing self-presentational concerns increases self-handicapping (Baumgardner, 1991; Baumgardner et al., 1985; Tice & Baumeister, 1990; Shepherd & Arkin, 1989b). Therefore, the issue of whether individuals will self-handicap for primarily self-protective motives (i.e., when self-presentational concerns are minimized) remains unresolved.

Tetlock and Manstead (1985) have argued that confrontations between intrapsychic and self-presentational explanations for behaviour are counterproductive, because research designed to resolve such controversies typically fails to do so. These authors suggested that intrapsychic and self-presentational theories be seen as complementary rather than mutually exclusive and that empirical tests be developed to determine the conditions under which each theory applies. Therefore, from the vantage point of Tetlock and Manstead's (1985) position, instead of trying to determine whether self-handicapping is a self-presentational or a self-protective strategy, a more fruitful line of research might examine the conditions under which self-handicaps are employed.

Hirt et al. (1991) reasoned that claimed self-handicapping may best serve self-presentational concerns, whereas behavioural self-handicapping may be relatively more effective for self-protection. They based this suggestion on Leary and Shepherd's (1986) arguments that individuals who claim a handicap do not actually

expect performance decrements, whereas individuals who acquire a handicap do. If Leary and Shepherd (1986) are correct, individuals should prefer claimed to behavioural self-handicapping in public, because claiming a handicap will promote non-ability attributions for failure without reducing the likelihood of success. In this way, individuals minimize potential losses in social esteem without reducing the opportunity to augment ability attributions for success. On the other hand, if individuals who claim a handicap do not actually believe their own claims, there should be little motivation for them to engage in claimed self-handicapping in private. Therefore, one would expect a higher incidence of claimed self-handicapping in public than in private.

Finally, the issue concerning the effectiveness of self-handicapping strategies in protecting self-perceived ability and self-esteem may depend on the type of self-handicap employed. If, as Leary and Shepherd (1986) suggested, individuals who claim a handicap do not anticipate decrements in performance, they should not discount ability as a possible cause for subsequent failure. Mercian and Rhodewalt (1988) provided evidence that disputes this assumption. They found that subjects who claimed pain as a handicap were less likely to attribute failure to ability than subjects who did not. However, these investigators did not measure anticipated decrements in performance and did not include a behavioural self-handicapping condition as a comparison group. According to Leary and Shepherd (1986), individuals who claim a handicap should not anticipate performance decrements and

should not consider themselves disadvantaged a priori. The results of Mercian and Rhodewalt (1988) suggest that claimed self-handicapping provides some protection against losses in self-esteem and self-perceived ability after the fact. One would expect, however, that individuals who claim a handicap and fail would make more negative ability attributions and have lower self-esteem than individuals who behaviourally self-handicapped.

In study 1, we addressed the issue of whether individuals will behaviourally self-handicap for purposes of self-protection. After receiving contingent or noncontingent success feedback, subjects were given the opportunity to behaviourally self-handicap by selecting performance-enhancing or -impairing music to listen to while taking a second test. Half the subjects selected a tape in the presence of the experimenter and expected that she would know their posttest scores (public condition). The remaining subjects selected a tape while the experimenter was absent and expected their posttest scores to be private. We expected that subjects would self-handicap more after noncontingent than contingent success. Because Berglas and Jones (1978) and Kolditz and Arkin (1982) found conflicting effects of privacy on self-handicapping, we were uncertain as to whether subjects would self-handicap more in public than in private, or whether the incidence of self-handicapping would be unaffected by the manipulation of privacy.

Study 2 was conducted to determine whether claimed self-handicapping is motivated entirely by the desire to self-present, or whether self-protection also comes

into play. This study also addressed Leary and Shepherd's (1986) suggestion that individuals who claim a handicap do not actually consider themselves disadvantaged. On the basis of their reasoning, one would not expect claimed self-handicapping to occur in private settings. Further, we hoped to replicate the behavioural effects of study 1. After receiving contingent or noncontingent success feedback, subjects were given the opportunity to behaviourally self-handicap or claim a handicap. As in study 1, half the subjects self-handicapped in public and expected the experimenter to know their posttest scores (public condition). The remaining subjects self-handicapped in private and expected the experimenter to not know their posttest scores (private condition). We expected that subjects would claim a handicap and behaviourally self-handicap more after noncontingent than contingent success, in public and in private.

In study 3 we examined the effectiveness of behavioural and claimed self-handicapping in protecting self-perceived ability and self-esteem. If individuals who claim a handicap do not believe their own claims, as Leary and Shepherd (1986) maintain, then individuals who claim a handicap and fail should not make self-protective attributions to the alleged handicap. Further, these individuals should experience a drop in self-esteem. On the other hand, individuals who fail after behaviourally self-handicapping should attribute failure to the handicap, not to their ability, and should not suffer losses in self-esteem. After receiving noncontingent success feedback, subjects were given the opportunity to behaviourally self-handicap,

claim a handicap, or no opportunity to self-handicap. Just prior to taking the second test, but after having an opportunity to self-handicap, subjects' performance expectations and perceived levels of impairment were assessed in private. Following this, a second test was administered for which all subjects received failure feedback. Subsequently, subjects' performance attributions and state self-esteem were assessed in private. As in studies 1 and 2, privacy of subjects' level of self-handicap and posttest scores were varied. We expected that, compared to control subjects, behavioural and claimed self-handicapping subjects would anticipate greater performance decrements. We also expected that subjects in both self-handicapping conditions would expect performance impairments as a result of their self-handicap. Finally, we expected that behavioural and claimed self-handicapping subjects would make more protective ability attributions and have higher self-esteem following failure than control subjects.

Chapter 2

Study 1

As mentioned previously, there has been some disagreement as to whether self-handicapping is a self-protective or self-presentational strategy. Study 1 was conducted in an effort to address this issue. Kolditz and Arkin's (1982) study is widely cited as evidence for the self-presentational interpretation of self-handicapping. However, as discussed previously, their failure to demonstrate self-handicapping in private may be an artifact of their methodology. Subjects may have been reluctant to select and self-administer a debilitating drug when the experimenter was absent. Further, delay of feedback was confounded with the public/private manipulation, because subjects in the public posttest condition expected to get feedback immediately, whereas those in the private condition either did not expect to get feedback at all, or expected to get it sometime in the future. In study 1, we attempted to replicate Kolditz and Arkin's (1982) study while rectifying these problems. In addition, we included both males and females in our study.

Our operationalization of self-handicapping was adapted from Rhodewalt and Davison (1986), in which subjects selected music (varying in the enhancing versus impairing effects it supposedly produced) to listen to during a posttest. It seemed unlikely that subjects would be more reluctant to select impairing music when the experimenter was absent than present. Also, subjects in both the public and private conditions expected to get feedback on the posttest immediately after completing the

test. Private subjects were told that they would be scoring the test themselves; public subjects expected the experimenter to score it. In manipulating privacy we combined Kolditz and Arkin's (1982) two manipulations into one, so that subjects' tape choice and posttest scores were either both private or both public.

We predicted that subjects would be more likely to choose impairing music after noncontingent than contingent success, and that the effect would be strongest for males.

Method

Overview and design

Subjects received success feedback after completing an easy or difficult task. Prior to taking a "second test," subjects were given the opportunity to choose to listen to either enhancing or impairing music. Half the subjects made their selection in private and expected that the experimenter would not know their posttest scores (private condition). The rest of the subjects made their choices in the presence of the experimenter and expected immediate feedback from the experimenter concerning their test scores (public condition). Tape choice was the dependent variable of interest.

Subjects

Eighty-four introductory psychology students (42 male, 42 female) at the University of Toronto participated in this experiment as part of a course requirement. The data from four subjects (two males, two females), who expressed suspicion

regarding the true nature of the study, were eliminated from all analyses.

Procedure

All subjects were run individually by a female graduate student. The experiment was described as examining the effects of music on intellectual performance (Rhodewalt & Davison, 1986). Subjects were randomly assigned to contingent versus noncontingent success and public versus private conditions. The experimenter was blind to success contingency, but not to privacy. Subjects were told that they would take two verbal tests, the first without and the second with background music. The tests were (ostensibly) short versions of the SAT and the MAT, which were chosen because they were "equally valid predictors of intelligence and university grades." Subjects were told that the tests were made up of analogies and were designed to be challenging. Since pretesting had revealed that most subjects were unfamiliar with analogies, the experimenter first gave three easy sample problems with answers and explanations.

The first test was described as consisting of 20 analogies, which subjects would be given one at a time. Subjects were told they would have 20 seconds to solve each analogy and, because there was no penalty for wrong answers, they were encouraged to guess. The experimenter timed each subject's progress to ensure that he/she did not take longer than 20 seconds on each analogy. Subjects recorded their answers on a separate answer sheet, and after each question, rated (on a 9-point scale) how sure they were that their answer was correct (Berglas & Jones, 1978).

Upon completing the test, subjects were given a music preference survey (which was consistent with the cover story) as a filler task. The experimenter then collected their answer sheets and left the room, ostensibly to score the test. After a few minutes she returned with the results. All subjects were told they had scored 16 out of 20 correct and were complimented for attaining one of the highest scores the experimenter had seen to date.

After receiving this feedback, subjects were told they would take a second test while listening to music, and that they would be allowed to choose the music. The test was described as another set of 20 analogies, similar to the first test, with the exception that one-third of a point would be deducted for each incorrect answer. The penalty for wrong answers was mentioned to increase noncontingent success subjects' fear of "being discovered" (Berglas and Jones, 1978). The experimenter then presented subjects with a set of 5 cassettes labelled: large enhancement, slight enhancement, no effect, slight impairment, large impairment. Ostensibly, the tapes were thus labelled on the basis of a pilot study conducted the previous year. The recordings were described as consisting of electronically synthesised music that sounded quite similar, but had subtle differences in frequency and beat that produced different effects on performance.

After choosing the tape, subjects were asked to complete a number of questionnaires before taking the second test, including a "midpoint questionnaire" (described below). The experimenter left the room while subjects completed the

surveys. After approximately 15 minutes the experimenter returned and informed subjects that the experiment was now over. Subjects were then fully debriefed and probed for suspicion. No second test was administered.

Manipulation of Success Contingency

Subjects in the contingent success condition received 16 solvable and 4 unsolvable analogies, whereas subjects in the noncontingent success condition received 4 solvable and 16 unsolvable analogies.

Manipulation of privacy

Public condition. Subjects in the public condition were instructed to put their names at the top of both tests and were told that the experimenter would score the tests immediately, so that both she and the subject could see the effects of music on test performance. Subjects were then presented with the five cassettes and told that “since we still need subjects in all five groups, you get to choose which tape you want to listen to while taking the second test.” Subjects then indicated which tape they preferred and the experimenter placed the appropriate cassette in the cassette player.

Private condition. Subjects in the private condition were instructed not to put any identifying marks on either test so that their scores would be entirely confidential. In fact, in order to bolster the impression of confidentiality, they were told that the experimenter would not be comparing individual scores, but rather differences in group means with and without music. In addition, before these subjects made their tape selection, the experimenter explained that she would not be

scoring the second test, because she did not want to know the outcome of the study until after all the data were collected. Consequently, subjects would be scoring the second test themselves, so they could still find out how they did. Scored tests were to be put in an envelope, sealed, and dropped in a box containing several other completed tests. Finally, the experimenter explained that, because she had to be "blind" to the experimental condition, she was not supposed to know which tape they selected; she then left the room while the subject chose a tape.

Materials

Analogies. The analogies used in this study were developed by the experimenter based on examples from the SAT and the GRE and used a multiple-choice format. Sets of analogies were pretested by students in a second year psychology course, who were asked to choose the correct answer for each analogy and indicate on a 9-point scale how sure they were of their responses. The solvable analogies used in this study were correctly solved by most subjects and received an average sureness score of 7 or greater. The unsolvable analogies received an average sureness score of 3 or less.

Midpoint questionnaire. The midpoint questionnaire consisted of a number of 11-point scales that assessed the perceived difficulty of the pretest, subjects' attributions for their performance in terms of ability, effort, and luck (as checks on the manipulation of success contingency), and the perceived anonymity of their tape choice and posttest scores (as checks on the public/private manipulation).

Results

Unless otherwise noted, all analyses consisted of $2 \times 2 \times 2$ (contingent/noncontingent success \times public/private \times male/female) analyses of variance.

Manipulation checks

Success contingency. Separate ANOVAs were performed on each of the five indices of success contingency. Mean sureness ratings on the 16 condition-congruent analogies were calculated for each subject. Two subjects failed to give ratings for all 16 condition-congruent analogies and were, therefore, not included in this analysis. Sureness ratings were given on 9-point scales with higher scores indicating greater confidence. Analysis revealed significant main effects for success contingency $F(1,70) = 95.11, p < .001$ and sex $F(1,70) = 9.54, p < .005$. Contingent success subjects were more sure of their answers ($M = 5.90$) than noncontingent success subjects ($M = 3.49$) and males were more sure ($M = 5.05$) than females ($M = 4.34$).

On the midpoint questionnaire, subjects rated on 11-point scales the difficulty of the first test and how well they expected to do on the second test. Noncontingent success subjects found the test more difficult ($M = 7.50$) than contingent success subjects ($M = 4.78$), $F(1,70) = 14.10, p < .001$. Females found the test more difficult ($M = 6.65$) than males ($M = 5.63$), $F(1,70) = 5.26, p < .03$. Contingent success subjects expected to do better on the second test ($M = 7.10$) than noncontingent success subjects ($M = 5.88$), $F(1,72) = 13.14, p < .001$. Males

expected to do better ($\underline{M} = 6.90$) than females (6.08), $F(1,72) = 5.96$, $p < .02$.

Subjects also made attributions for their performance on the first test.

Noncontingent success subjects made greater attributions to luck ($\underline{M} = 6.20$) than contingent success subjects ($\underline{M} = 3.30$), $F(1,72) = 34.31$, $p < .001$. Females attributed their performance more to luck ($\underline{M} = 5.48$) than males ($\underline{M} = 4.03$), $F(1,72) = 8.62$, $p < .005$. Contingent success subjects made greater attributions to ability ($\underline{M} = 7.40$) than noncontingent success subjects ($\underline{M} = 6.28$), $F(1,72) = 7.28$, $p < .01$.

These analyses indicated that the manipulation of success contingency was successful. Also, the performance attributions were such as to lead one to expect self-handicapping in the noncontingent success condition. The fact that females tended to make more external/unstable attributions for their performance than males suggests that females should show a greater preference for the impairing music overall.

Privacy of posttest

Two questions on the midpoint questionnaire addressed the effectiveness of the privacy manipulation. Subjects rated the extent to which they thought the experimenter was aware of the tape they had chosen (higher scores indicated less perceived privacy), as well as the likelihood that the experimenter would know their scores on the second test. Subjects in the private condition felt the experimenter was less aware of their choice of tape ($\underline{M} = 2.54$) than those in the public condition ($\underline{M} = 8.69$), $F(1,72) = 40.90$, $p < .001$. Also, private subjects felt that the experimenter

was less likely to know their test score ($M = 2.98$) than public subjects ($M = 6.90$), $F(1,72) = 111.33$, $p < .001$. This indicates that the manipulation of privacy of tape choice and posttest was successful.

Tape choice

Choice of enhancing versus impairing music was the measure of self-handicapping. Subjects were assigned a self-handicapping score based on their tape choice (1 = large enhancement, 2 = slight enhancement, 3 = no effect, 4 = slight impairment, 5 = large impairment). Analysis of subjects' tape selections found significant main effects for success contingency, $F(1,72) = 4.27$, $p < .05$, and sex $F(1,72) = 13.70$, $p < .001$. Subjects were more likely to choose impairing music after noncontingent than contingent success, $M = 3.73$ versus $M = 3.10$. Contrary to what one would expect based on the attribution data, males were more likely to choose impairing music than females, $M = 3.98$ versus $M = 2.85$. There was no main effect or interaction of privacy on tape choice. Separate 2×2 (contingent/noncontingent success \times sex) ANOVAs were performed on subjects' tape selections within the public and private conditions. The effect of success contingency approached significance in the public, $F(1,35) = 3.02$, $p < .10$, but not the private condition. The amount of statistical power lost in conducting these analyses may account for the failure to find a significant effect of success contingency in either condition.

Unlike previous research on self-handicapping, sex did not interact with success

contingency. Nevertheless, an examination of the means (presented in Table 1) gives the impression that the main effect for success contingency was carried mostly by the males. Separate 2 x 2 (contingent/noncontingent success x public/private) ANOVAs were performed for males and females. The main effect of success contingency was significant for males $F(1,36) = 5.67, p < .03$, but not for females, $F(1,36) < 1, ns$.

Correlational analyses

Within-cell correlational analyses found no significant relationship between ability attributions and self-handicapping.

Discussion

The results of this study confirm the predictions regarding the effects of success contingency on self-handicapping. Subjects were more likely to choose impairing music after noncontingent than contingent success. Also, as in previous studies, females tended not to engage in behavioural self-handicapping. It is puzzling, however, that females showed a greater preference for the enhancing music overall. Analyses of subjects' attributions for success would lead one to expect the opposite. Since females made more external/unstable attributions for success than males they should have been more likely to self-handicap. These results parallel those of previous studies where females have made more external/unstable ability attributions but have not self-handicapped (Berglas & Jones, 1978; Harris & Snyder, 1986). A number of authors have attempted to account for this sex difference (see Hirt, Deppe, & Gordon, 1991). Snyder, Ford, & Hunt (1985) proposed that the higher incidence of

self-handicapping among males than females may stem from a greater sensitivity to the negative implication of failure on the part of males. Sheppard and Arkin (1989a) suggested that, since females are less likely than males to attribute all outcomes to ability, there is less of a need for them to guard against ability attributions for failure. Other investigators have suggested that most studies of behavioural self-handicapping have used tasks (Tice, 1991) or handicaps (Hirt et al., 1991) that are more relevant to male than female identities. None of these explanation can account for the fact that females readily engage in claimed self-handicapping. It may be as Hirt, Deppe, and Gordon (1991) suggested, that females prefer claimed to behavioural self-handicapping since the former strategy is less risky (I. e., less likely to impair performance). Whatever the reason, if claimed self-handicapping is a highly accessible strategy to females, then they may not need to engage in behavioural self-handicapping. Females may simply choose to inwardly claim some disadvantage, which would eliminate the need to behaviourally self-handicap. Further research will be needed to address this issue.

Kolditz and Arkin's (1982) findings that self-handicapping occurs only in public, but not in private, failed to replicate. Subjects in this study were just as likely to self-handicap in private as in public. Since there are a number of methodological differences between the two studies, it is difficult to draw any firm conclusions regarding the cause of this discrepancy. One could argue that the privacy manipulation was ineffective and all subjects were, therefore, actually in the public

condition, but analyses of the manipulation checks argue against this.

Conceivably, as previously suggested, Kolditz and Arkin's (1982) private subjects may have been hesitant to consume a performance impairing drug without the experimenter present. Unfortunately, it is unlikely that their study could be replicated today, since ethics committees are reluctant to approve drug studies (even bogus ones) and subjects are aware of this fact. Nevertheless, Kolditz and Arkin's study is frequently cited as evidence for a self-presentational explanation of self-handicapping. These authors concluded that self-handicapping is motivated by the desire, on the part of the actor, to control the attributions of an audience rather than their own self-attributions. The results of study 1, however, suggest behavioural self-handicapping is not entirely a self-presentational strategy, but is also motivated by self-protective needs. Because subjects were just as likely to behaviourally self-handicap in private as in public, we can conclude only that this strategy is motivated, at least in part, by the actors' desire to protect their own self-attributions and self-esteem. Conceivably, self-presentational concerns may increase the incidence or amount of self-handicapping, but the results of this study demonstrate that, at least for males, minimizing self-presentational motives does not eliminate self-handicapping.

Chapter 3

Study 2

Study 1 demonstrated that individuals will behaviourally self-handicap in private as well as public settings, indicating that behavioural self-handicapping is not solely a self-presentational strategy, but is undertaken for purposes of self-protection as well. A remaining question, however, is whether the same can be said of claimed self-handicapping. According to Leary and Shepherd (1986), individuals who claim a handicap do not actually consider themselves disadvantaged. If their reasoning is correct, individuals should not engage in claimed self-handicapping in private. Presumably, individuals self-handicap in private in order to protect their self-esteem and self-perceived ability. There would be no reason to claim a handicap in private, if the individuals themselves do not believe their own claims. However, individuals should engage in claimed self-handicapping in public, because doing so would promote non-ability attributions for failure (at least in observers) without reducing the likelihood of success.

In the present study, subjects were given the opportunity to either claim a handicap or behaviourally self-handicap in public or private. We attempted to make the behavioural and claimed self-handicaps as similar as possible. An external self-handicap (distraction) was used in both the claimed and behavioural self-handicapping conditions. Subjects either chose to listen to a tape that was expected to produce a certain level of distraction (behavioural self-handicap) or listened to a

tape and rated how distracting they found it (claimed self-handicap). Specifically, subjects in the behavioural self-handicapping condition selected from a set of 5 cassettes (labelled “no effect”, “slightly distracting”, “moderately distracting”, “very distracting”, and “extremely distracting”), one to listen to during the posttest. Subjects in the claimed self-handicapping condition listened to a recording of white noise and rated how distracting they found it (no effect, slightly distracting, moderately distracting, very distracting, or extremely distracting). We expected that subjects would engage in claimed self-handicapping in public but not in private. Further we expected a replication of the behavioural effects of study 1, with subjects behaviourally self-handicapping equally in public and in private.

Although we attempted to equate the two forms of self-handicapping, they still comprised two distinct dependent variables. Consequently, study 2 actually consisted of two sub-studies, a behavioural self-handicapping study and a claimed self-handicapping study. Data from the two sub-studies were analysed separately. However, since the procedures used in the two experiments were so similar, they are described under one method section.

Method

Overview and design

Subjects received success feedback after completing a set of mostly solvable or mostly unsolvable analogies. Before taking a second test, subjects were given the opportunity to behaviourally self-handicap, claim a handicap, or given no opportunity

to self-handicap. Half the subjects were given the opportunity to self-handicap in private and expected the experimenter would not see their posttest scores (private condition). The remaining subjects were given the opportunity to self-handicap in the presence of the experimenter and expected the experimenter to see their test scores (public condition). Also, in order to test for sex differences, equal numbers of males and females were included in this study.

We expected that when claimed self-handicapping was the only available option, subjects would self-handicap more after noncontingent than contingent success in public, but not in private. We did not expect sex differences in claimed self-handicapping. When only behavioural self-handicaps were available, we expected that male subjects would self-handicap as much in private as in public. Because the results of research on behavioural self-handicapping in females has been equivocal, we wanted to determine whether the failure, in study 1, to produce behavioural self-handicapping in females would replicate in study 2.

Subjects

One hundred and sixty introductory psychology students (80 male and 80 female) at the University of Toronto participated in this study as part of a course requirement.

Procedure

All subjects were run individually by a female graduate student. The experiment was described as examining the effects of distraction on performance.

Subjects were told that they would take two tests of intellectual functioning, the first without distraction and the second with it.

The first test consisted of 20 analogies, and subjects were given 20 seconds to solve each analogy. As in study 1, after each response subjects rated how sure they were of their answer on a 9-point scale (with higher scores indicating greater certainty). Upon completing this task, all subjects were told that they had done exceptionally well, scoring 16 out of 20. The experimenter exclaimed that this was one of the highest scores she had seen to date. Therefore, all subjects received success feedback. Subjects were then given the opportunity to either claim a handicap or behaviourally self-handicap. Next, subjects completed a 'midpoint questionnaire' (actually a postexperimental questionnaire) which assessed subjects' attributions for their performance on the first test, as well as the effectiveness of our manipulations.

Manipulation of success contingency. Two versions of test 1 were used. Half of the subjects completed a test consisting of mostly unsolvable analogies (16 unsolvable and 4 solvable), the rest received mostly solvable analogies (4 unsolvable, 16 solvable). Subsequently, all subjects were told that they had done extremely well on the test, scoring 16 out of 20. It was expected that subjects who received mostly unsolvable analogies would feel uncertain of their ability to repeat this performance on the second test and would, therefore, be motivated to self-handicap.

Manipulation of privacy. Subjects in the public condition either rated or chose the tape in the presence of the experimenter. They were instructed to put their

names at the top of test 2 and were told that the experimenter would score the test immediately so that “we can both see the effects of distraction on your test score.”

Subjects in the private condition either rated or chose the tape while the experimenter was absent from the room (ostensibly so she would be blind to experimental condition). They were instructed not to put any identifying marks on either test, to put the second test in an envelope, seal it, and put it in a pile with several others. Further, the experimenter explained that she would not be scoring the second test, but would let the subject score it instead (ostensibly because she did not want to know the results of the study until the experiment was over).

Manipulation of handicap type. Subjects in the behavioural self-handicapping condition were presented with 5 cassettes labelled “no effect,” “slightly distracting,” “moderately distracting,” “very distracting,” “extremely distracting” and asked to choose one tape to listen to while taking the second test.

In the claimed self-handicapping condition, subjects listened to a tape of white noise and were asked to indicate how much the noise would distract them while they completed test 2 (no effect, slightly distracting, moderately distracting, very distracting, extremely distracting). Scores ranged from 1 (no effect) to 5 (extremely distracting). In an effort to emphasize the claimed nature of this dependent measure, subjects were told that the tape had proven to have very different effects on different people. “Some people are really bothered by it and others are unaffected. Since we have no way of knowing what effect it will have on any given subject, we have to get

you to rate it first.”

Materials

Analogies. The same analogies were used in study 2 as in study 1.

Midpoint questionnaire. The midpoint questionnaire consisted of a number of 9-point scales assessing the perceived difficulty of test 1, subjects' attributions for their performance in terms of ability, effort, and luck, and their expectations for test 2. These questions were included as checks on the manipulation of success contingency. Subjects also rated the extent to which the experimenter was aware of their distraction rating/tape choice and the likelihood that she would know their scores on the second test, as checks on our privacy manipulation.

Results

Unless otherwise stated, all analyses consisted of $2 \times 2 \times 2$ (contingent/noncontingent success \times public/private \times male/female) analyses of variance. Data from the two sub-studies were analysed separately.

Claimed self-handicapping

Manipulation checks. Separate ANOVAs were performed on each of the five indices of success contingency. Mean sureness ratings on the analogies were calculated for each subject. Analyses revealed significant main effects for success contingency $F(1,72) = 137.06, p < .001$ and sex $F(1,72) = 4.83, p < .005$. Subjects in the contingent success condition were more sure of their answers ($M = 6.43$) than subjects in the noncontingent success condition ($M = 4.16$) and males were more

sure ($\underline{M} = 5.51$) than females ($\underline{M} = 5.09$).

On the midpoint questionnaire, subjects rated (on 9-point scales) the difficulty of the first test as well as how they expected to do on the second test. Additionally, subjects' attributions for their success on the first test (ability, luck) were assessed. Subjects in the noncontingent success condition rated the test as more difficult ($\underline{M} = 6.30$) than subjects in the contingent success condition ($\underline{M} = 3.55$), $F(1,72) = 53.12$, $p < .001$. Contingent success subjects expected to do better on the second test ($\underline{M} = 6.38$) than noncontingent success subjects ($\underline{M} = 5.20$), $F(1,72) = 11.54$, $p < .001$. Contingent success subjects made greater attributions to ability ($\underline{M} = 7.00$) than noncontingent success subjects ($\underline{M} = 5.55$), $F(1,72) = 12.83$, $p < .01$. Noncontingent success subjects made greater attributions to luck ($\underline{M} = 5.03$) than contingent success subjects ($\underline{M} = 2.63$), $F(1,72) = 40.94$, $p < .001$. Unlike study 1, there were no sex differences in subjects' difficulty ratings, expectancy scores, or attribution scores.

Two questions on the midpoint questionnaire assessed the effectiveness of our privacy manipulation. Analyses of these items found a main effect for condition on the perceived privacy of subjects' distraction ratings, $F(1, 71) = 10.26$, $p < .002$, and their posttest scores, $F(1, 71) = 8.46$, $p < .05$. Subjects in the private condition felt the experimenter was less aware of their distraction rating than subjects in the public condition ($\underline{M} = 3.38$ versus $\underline{M} = 5.03$, respectively) and was less likely to know their posttest scores ($\underline{M} = 4.40$ versus $\underline{M} = 5.72$, respectively).

Distraction ratings. Subjects' distraction ratings were used as our measure of claimed self-handicapping. Scores ranged from 1 to 5 with higher scores indicating greater self-reported handicapping. Analysis of variance found a significant main effect for success, $F(1,72) = 6.84, p < .02$. Subjects rated the tape as more distracting after noncontingent ($M=2.63$) than contingent success ($M=2.15$), $t(78) = 2.75, p < .05$. There were no other significant effects. Cell means are presented in Table 2.

Behavioural self-handicapping

Manipulation checks. Analysis of subjects' mean sureness ratings yielded a significant main effect for success contingency $F(1, 71) = 112.71, p < .001$ and sex $F(1, 71) = 12.94, p < .002$. Noncontingent success subjects were less certain of their answers ($M = 3.90$) than contingent success subjects ($M = 6.30$) and females were less sure of their answers ($M = 4.72$) than males ($M = 5.50$). Compared to contingent success subjects, noncontingent success subjects rated the first test as more difficult $F(1, 72) = 51.492, p < .001$ ($M = 6.10$ versus $M = 3.48$, respectively) and expected to do worse on the second test $F(1, 72) = 4.16, p < .05$ ($M = 5.00$ versus $M = 5.63$, respectively). Subjects' attributions scores were also analysed. Analyses indicated that subjects in the noncontingent success conditions made greater attributions to luck ($M = 5.48$) than subjects in the contingent success condition ($M = 2.75$), $F(1, 72) = 41.75, p < .001$. Contingent success subjects made greater attributions to ability ($M = 6.78$) than noncontingent success subjects

($\underline{M} = 5.15$), $\underline{F}(1, 72) = 26.43$, $p < .001$. Unlike study 1, there were no sex differences in attribution scores.

Analyses of checks on our privacy manipulation found a main effect for condition on the perceived privacy of subjects' tape choice, $\underline{F}(1, 71) = 10.26$, $p < .005$, and posttest scores, $\underline{F}(1, 71) = 8.46$, $p < .005$. Subjects in the private condition felt that the experimenter was less aware of their choice of tape ($\underline{M} = 3.38$ versus $\underline{M} = 5.03$) and less likely to know their posttest scores than subjects in the public condition ($\underline{M} = 4.40$ versus $\underline{M} = 5.72$), respectively.

Tape choice. Behavioural self-handicapping scores were based on subjects' tape selection. Scores ranged from 1 (no effect) to 5 (extremely distracting). Analysis of variance found a significant main effect for sex, $\underline{F}(1, 72) = 16.54$, $p < .01$, with males ($\underline{M} = 4.38$) self-handicapping more than females ($\underline{M} = 3.60$) and for privacy $\underline{F}(1, 72) = 4.97$, $p < .05$, with subjects self-handicapping more in private ($\underline{M} = 4.20$) than in public ($\underline{M} = 3.78$). There was no main effect for success contingency, although there was a significant privacy by success contingency interaction, $\underline{F}(1, 72) = 9.10$, $p < .01$. Cell means are presented in Table 3. Planned comparisons indicated that males self-handicapped more after noncontingent ($\underline{M} = 4.60$) than contingent success ($\underline{M} = 3.50$) in public, $\underline{t}(72) = 3.41$, $p < .05$, but not in private ($\underline{M} = 4.80$ versus $\underline{M} = 4.60$), $\underline{t}(72) < 1$, ns. The mean self-handicapping scores for females did not differ as a function of success contingency in public, $\underline{F}(1, 72) = 1.05$, ns, or in private $\underline{F}(1, 72) = 1.57$, ns. Post hoc tests using Duncan's multiple range statistic (Kirk, 1982)

found that contingent success/private males self-handicapped more ($M = 4.60$) than their contingent success/public counterparts ($M = 3.50$), $q(72) = 3.08$, $p < .05$.

For male subjects, one mean appeared anomalous. Male subjects in the contingent success/private condition self-handicapped as much as those in the noncontingent success conditions. If these subjects found the first test more difficult than those in the public condition, they may have been motivated to self-handicap. However, our analyses of subjects' mean sureness and difficulty ratings produced only a significant main effect for success. In neither case did the effect of privacy or the privacy by success interaction approach significance. Additionally, reanalysing subjects' self-handicapping scores based on a median split of difficulty ratings, found no effect of difficulty.

On the midpoint questionnaire, subjects were asked to indicate (on a 9-point scale) how well they expected to do on the second test. Examination of male subjects' mean expectancy scores using Duncan's multiple range test (Kirk, 1982) indicated that subjects in the contingent success/private condition ($M = 6.20$) expected to do as well as subjects in the contingent success/public condition ($M = 5.40$) $q(72) < 1$, ns, despite the fact that their mean self-handicapping scores were higher. This suggests that male subjects in this group may have self-handicapped in an effort to self-enhance, since performing even moderately well with a handicap would augment ability attributions.

Tice (1991) demonstrated that individuals high in self-esteem self-handicapped

primarily for purposes of self-enhancement rather than self-protection. Recall that in her study, subjects high in self-esteem self-handicapped only when success was meaningful, whereas individuals low in self-esteem self-handicapped when failure was meaningful. When success was meaningless (but failure meaningful) individuals high in self-esteem did not self-handicap. With this in mind, we analysed subjects scores on the Janis-Field Self-esteem Scale, treating self-esteem as a dependent measure, and found a marginally significant main effect for privacy $F(1,70) = 2.61, p < .11$. Subjects in the private condition had higher self-esteem scores ($M = 56.38$) than subjects in the public condition ($M = 50.63$). Cell means are presented in Table 4. Males in the contingent success/private condition had the highest self-esteem scores, but analyses using Duncan's multiple range test (Kirk, 1982) indicated that this mean differed significantly only from that of noncontingent success/public males, $q(70) = 3.08, p < .05$. Within-cell correlations between ability attributions on test 1 and self-handicapping scores, yielded a marginally significant positive correlation for males in the contingent success/private condition $r = .54, p < .11$, indicating that the more these subjects attributed their success on test 1 to ability the more likely they were to self-handicap on test 2. None of the other within-cell correlations approach significance. Therefore, it is possible that males in the contingent success/private condition self-handicapped in an effort to self-enhance.

Discussion

The results of this study indicate that subjects are more likely to engage in

claimed self-handicapping after noncontingent than contingent success under conditions of high and low privacy. These findings argue against Leary and Shepherd's (1986) contention that individuals who claim a handicap do not actually consider themselves disadvantaged. Based on their reasoning, subjects should claim a handicap in public, but not in private. Claiming a handicap in private would serve little purpose if individuals do not believe their own claims. Our results suggest that individuals who engage in claimed self-handicapping may actually believe these claims to some extent.

As in study 1, females did not behaviourally self-handicap. We were puzzled, however, by our failure to replicate the pattern of behavioural effects for males. Although males self-handicapped more after noncontingent than contingent success in public, mean self-handicapping scores did not differ in private. In the private condition, males behaviourally self-handicapped as much after contingent as noncontingent success. Conceivably individuals in this group may have self-handicapped in an effort to self-enhance, if they considered themselves relatively immune to the effects of distraction or were particularly self-confident (Tice, 1991), since performing well with a disadvantage would augment ability attributions. Indeed, additional analyses indicated that males in the contingent success/private condition expected to do as well on the second test as their counterparts in the contingent success/public condition despite the fact that their behavioural self-handicapping scores were significantly higher. Males in the contingent

success/private condition had the highest self-esteem scores and their attributions on test 1 were positively correlated with self-handicapping scores.

Admittedly, many of the effects described above are only marginally significant. Taken together, however, the results suggest that males in the contingent success/private condition may have self-handicapped in order to augment ability attributions for success, rather than to discount ability attributions for failure. Why this occurred in private but not in public is not clear. It is possible that males in the contingent success/public condition were not confident enough to risk public failure or that their desire to self-enhance was offset by self-presentational concerns.

Our failure to replicate the behavioural effects of study 1 may also be due to the change in our dependent measure. Recall that in study 1 subjects had a choice of music that was enhancing, impairing, or had no effect, whereas in study 2 they chose among recordings of white noise that had no effect or produced varying amounts of distraction. Presumably, in deciding which tape to listen to while taking the second test, contingent success subjects should be motivated to look as good or better than on the first test. In study 1, subjects could accomplish this by either choosing an enhancing tape and improving their performance on the second test, or by choosing an impairing tape and achieving a respectable score with a handicap. An examination of frequency data from study 1 indicated that males in the contingent success condition split on this option. That is, of those subjects who did not choose the “no effect” tape, approximately half selected the performance-enhancing tape, whereas the

rest chose the performance-impairing tape. Contingent success subjects in study 2, however, had little hope of improving their score and could only self-enhance by performing well with a handicap.

Chapter 4

Study 3

Taken together, the results of studies 1, 2a, and 2b indicate that individuals will engage in behavioural and claimed self-handicapping in private as well as in public. These results suggest that behavioural and claimed self-handicapping are not solely self-presentational strategies, but are motivated at least in part by self-protective concerns. Minimizing self-presentational motives did not eliminate or reduce either form of self-handicapping.

Study 3 focused on two issues: 1) does self-handicapping actually protect ability attributions and self-esteem following failure? 2) If so, does behavioural self-handicapping provide superior self-esteem protection to claimed self-handicapping? As noted earlier, a few studies have addressed the first issue. Before administering a test, Islieb, Vuchinich, and Tucker (1988) gave male subjects alcohol or nonalcohol and told them they had taken alcohol or a placebo. The authors found that subjects who thought they had taken alcohol and failed subsequently attributed their failure more to the alcohol and less to ability than subjects who thought they had been given a placebo. Further, subjects in the “told alcohol” group had higher self-esteem scores than those in the “told nonalcohol” group, regardless of whether they succeeded or failed. Rhodewalt, Morf, Hazlet, and Fairfield (1991) gave subjects noncontingent success feedback and exposed them to music described as slightly distracting (ambiguous handicap) or very distracting (nonambiguous handicap) during a second

test. The results indicated that subjects who failed a test with an unambiguous handicap had higher self-esteem and more positive mood scores than did those who failed with an ambiguous handicap. Only subjects high in trait self-handicapping, however, discounted ability attributions for failure.

As discussed previously, the results of Islieb et al. (1988) and Rhodewalt et al. (1991) demonstrate that if individuals fail with a handicap, they will discount ability as a cause of this failure. It must be noted, however, that subjects in these studies did not choose a handicap. Instead, a handicap either was or was not provided by the experimenter. Only Mercian and Rhodewalt (1988) have examined the effects of self-handicapping (in this case claimed self-handicapping) on ability attributions following failure. Subjects were given contingent or noncontingent success feedback on a test and, prior to taking a second test, rated the painfulness of a cold water bath, in which their hand was submerged. Pain ratings and posttest scores were private for all subjects. Analysis of pain ratings indicated that subjects rated the water as more painful after noncontingent than contingent success. Further, compared to those who did not, subjects who claimed pain as a handicap and failed the second test attributed their poor performance more to pain-induced distraction and less to low ability. The authors did not measure self-esteem.

Leary and Sheppard (1986) suggested that individuals who claim a handicap do not actually believe they are disadvantaged. Based on this assumption, it would be predicted that: 1) people should claim a handicap only in public, and not in private,

2) individuals who have claimed a handicap should not, privately, consider themselves disadvantaged and should not anticipate performance decrements, 3) people who claim a handicap and fail should, privately, make less protective ability attributions and have lower self-esteem scores and than those who behaviourally self-handicapped. Study 2 addressed, and failed to support, the first prediction from Leary and Shepherd's assumption. Subjects in study 2 were just as likely to claim a handicap in private as in public. These results suggest that subjects who claimed a handicap may actually have perceived themselves as disadvantaged; otherwise they would not have self-handicapped in private. If this is the case, individuals who claim a handicap and fail should not attribute failure to lack of ability, but to the handicap, and their self-esteem should be undiminished (as would be also the case with a behavioural handicap). Some evidence in support of this assumption is provided by Mercian and Rhodewalt (1988). They found that, compared to those who did not claim a handicap, subjects who did claim a handicap were less likely to attribute failure to ability. However, the investigators did not manipulate opportunity to self-handicap. That is, they did not include a "no self-handicap" control condition. All subjects were given the opportunity to claim a handicap. Consequently, observed differences in ability attributions may not be a product of subjects' self-handicapping, but may simply reflect individual differences in attributional style. Furthermore, Mercian and Rhodewalt (1988) did not include a behavioural self-handicapping comparison group and did not measure self-esteem. Finally, none of the studies

examining the effectiveness of behavioural or claimed self-handicapping assessed subjects' perceived level of impairment or anticipated performance decrements. As a result, two questions remain unanswered: 1) do claimed and behavioural self-handicapping afford comparable levels of self-perceived ability and self-esteem protection? 2) do individuals who claim a handicap actually consider themselves disadvantaged and anticipate performance decrements? It was the purpose of study 3 to address these questions.

Overview and design

All subjects received noncontingent success feedback after completing an impossible "intelligence test." Before taking a second test, subjects were given either: 1) the opportunity to claim a handicap, 2) the chance to behaviourally self-handicap, or 3) no opportunity to self-handicap. Crosscutting the type of handicap available was privacy of handicap and posttest scores. Just prior to taking the second test, but after the opportunity to self-handicap, subjects' expectancies for test 2 were measured in private (how well they expected to do, how much they thought the noise would impair performance). Then, all subjects actually completed a second test and failed it. Subsequently, subjects' attributions for failure and their state self-esteem were assessed in private. We predicted that, compared to subjects in the control condition, subjects in the behavioural and claimed self-handicapping conditions would attribute failure on the second test less to ability and would have higher self-esteem scores. Finally, we expected that subjects in the behavioural and claimed self-handicapping

conditions would anticipate equal levels of performance impairment from the noise and would expect similar decrements in performance.

Although we wanted to compare the relative effectiveness in protecting ability attributions and self-esteem of the claimed and the behavioural self-handicaps used in this study, we cannot draw any firm conclusions regarding the general superiority of one type of self-handicap over the other. Our conclusions must be limited to the specific self-handicaps used in this study. Any differences in the relative effectiveness of one self-handicap over the other would not necessarily generalize to other behavioural and claimed self-handicaps.

Method

Subjects

One-hundred and twenty introductory psychology students (60 female and 60 male) participated in this study.

Procedure

The study was described as examining the effects of distraction on intellectual performance. Subjects were told that they would take short versions of two standardized aptitude tests, the Scholastic Aptitude Test (SAT) and the Miller's Analogy Test (MAT). The tests were described as equally valid measures of intelligence and academic potential. Ostensibly, subjects would take the first test without distraction as a baseline measure. Each test consisted of 15 analogies (2 solvable and 13 unsolvable). The analogies were presented to subjects one at a time,

by the experimenter, and subjects were given 20 seconds to respond to each. After each response, subjects rated how sure they were that their answer was correct. Further, subjects were instructed to guess even if they were unsure, since they would not be penalized for answering incorrectly. After subjects completed the test, the experimenter went behind a partition to score it. Upon scoring the test, the experimenter exclaimed that the subject had done very well on the first test, receiving a score 11 out of 15, one of the highest scores she had seen to date. Thus, all subjects received noncontingent success feedback.

Before taking the second test, subjects were given either no opportunity to self-handicap, the opportunity to claim a handicap, or the opportunity to acquire a handicap. Following this, but before taking the second test, subjects were asked to complete a 'midpoint' questionnaire assessing their attributions for test 1 and their expectancies for test 2 (see below), but were instructed not to let the experimenter see their answers. Instead, subjects were asked to put completed forms in an envelope, which the experimenter provided. The experimenter explained that she was not supposed to know their expectancies for the second test.

The second 'intelligence test' consisted of another set of 15 analogies (2 solvable, 13 unsolvable). The analogies used in test 2 were selected, based on pilot ratings, because they were rated as slightly less difficult than those used in test 1, in order to prevent subjects from making task attributions for failure. Subjects in the experimental conditions took the second test while listening to a recording of white

noise. Subsequently, all subjects were asked to score the test themselves, while the experimenter prepared a packet of questionnaires for them to complete. Subjects were then provided with a false, but official looking, answer key. The key was developed by administering the same 15 analogies to a group of 30 introductory psychology students. The response least often chosen for each question was listed as the correct answer on the key, with the exception of the first two responses (for which the actual answers were provided). Based on this procedure, most subjects were expected to fail the second test. Based on chance, we expected the mean score on the unsolvable portion of the test to be approximately 3 out of 13. Therefore, even if most subjects answered the two solvable analogies correctly, we were confident that the majority of subjects would receive a failing score on the test. In an effort to underscore their poor performance on the test, a guideline for interpreting the scores was provided at the bottom of the answer key. According to these guidelines, a score of 8 or less out of 15 was considered below average.

Finally, for all subjects, performance attributions and state self-esteem were assessed under conditions of complete privacy. Subjects were given a number of questionnaires that assessed their attributions for test 2, their state self-esteem and trait self-handicapping (see below). The experimenter explained that the questionnaires were not really part of her experiment, but were for her supervisor who was (ostensibly) trying to validate a personality measure. Subjects were instructed to fill them out in the order in which they received them, to put the completed

questionnaires in the envelope provided, and place the envelope in a box containing several others. They were assured that the experimenter would never see any of their responses, but that a research assistant would be scoring the questionnaires and entering the data.

Manipulation of handicap type. Subjects in the behavioural self-handicapping condition were presented with 5 cassettes labelled “no effect,” “slightly distracting,” “moderately distracting,” “very distracting,” and “extremely distracting,” and asked to choose one tape to listen to while taking the second test. The recordings were produced using a white noise generator set at increasing amplitudes. Pilot tests revealed that subjects actually perceived the tapes as increasingly distracting.

In the claimed self-handicapping condition, subjects listened to the “slightly distracting” tape used in the behavioural self-handicapping condition. The experimenter told subjects that the noise had very different effects on different people. “Some subjects find the tape extremely distracting, some moderately distracting, some find it has no effect. The more distracting it is, the more it will impair your performance on the second test. Since we have no way of knowing what effect it will have on any given individual, I am going to get you to listen to the tape for a half a minute or so and rate how distracting you think you will find it.” Subjects then listened to the tape for approximately 30 seconds and indicated on a form whether they found the noise on the tape had no effect, was slightly distracting, moderately distracting, very distracting, or extremely distracting.

After their attributions for test 1 were assessed, subjects in the no handicapping condition were told that they were in the control group and would, therefore, take the second test without distraction.

Manipulation of privacy. Subjects in the public condition rated/chose the tape in the presence of the experimenter. They were instructed to put their name at the top of test 2 and were told that the experimenter would score the test immediately so they could both see the effect of the distraction on the subject's performance. After subjects completed the second test, the experimenter explained that she had to put together a packet of questionnaires for them to complete. Since this would take a few minutes, she asked subjects if they wouldn't mind scoring the second test themselves, in order to save time. Subjects were then given the answer key. After scoring the test, subjects were asked to put their score at the top of the paper and give it to the experimenter.

Subjects in the private condition rated/chose the tape while the experimenter was absent (ostensibly so the experimenter would be blind to experimental condition). They were instructed not to put their name or any identifying marks on their test papers. As in the public condition, these subjects also scored the second test themselves. The experimenter explained that she would not be scoring the second test, but would let the subject score it instead (ostensibly because she did not want to know the results of the study until the experiment was over). Subjects were instructed to put the test in the envelope provided when they had finished checking

their answers.

Dependent measures

Midpoint questionnaire. After having the opportunity to self-handicap, but prior to taking the second test, subjects were asked to rate, on 9-point scales, the difficulty of test 1, and the extent to which they attributed their performance on the test to ability, luck, and effort. They were also asked how well they expected to do on the second test and how much they expected to be impaired by the distracting effects of the noise.

Attribution questionnaire. After checking their scores on the second test, subjects were given a number of questionnaires to complete in private. The first of these questionnaires assessed their attributions for test 2. Subjects were asked to rate, on 9-point scales, the difficulty of the second test, and the extent to which they attributed their performance to ability, luck, effort, and the distracting effects of the tape.

Self-esteem. Subjects completed the Performance and Social Self-esteem Subscales of Heatherton and Polivy's (1991) State Self-esteem Scale (SSES). The SSES is a 20 item scale designed to measure temporary fluctuations in self-esteem (e.g., I feel inferior to others at this moment; I feel good about myself). The scale has a three factor structure consisting of performance, social, and appearance self-esteem. The four items of the Appearance Self-esteem Subscale were not included. The scale was found to have satisfactory internal consistency, test-retest reliability, convergent

and divergent validity (Heatherton & Polivy, 1991).

Trait self-handicapping. Subjects completed the short version of the Self-handicapping Scale (Strube, 1986), a 10-item version of the scale developed by Jones and Rhodewalt (1982). Psychometric analyses indicated that the 10 item scale had slightly higher internal consistency than the whole scale, as well as adequate convergent and divergent validity (Strube, 1986).

Manipulation checks. Two questions were included on our postexperimental questionnaire as checks on the privacy manipulation. Subjects were asked “How likely is it that the experimenter is aware of the tape you chose (the distraction rating you made) prior to taking the second test?” and “How likely is it that the experimenter knows or will find out your score on the second test?” Subjects responded on 9-point scales (1 = not at all likely, 9 = extremely likely).

Materials

Analogies. Analogies were developed based on questions from the GRE and SAT and employed a multiple choice format. A number of unsolvable analogies was pretested on a group of 28 introductory psychology students. Subjects were asked to solve each analogy and rate on a 9-point scale how sure they were of their answers. Items were selected based on average sureness ratings so that the second test would be somewhat easier than the first test. If the second test was perceived as more difficult than the first test subjects might have attributed failure on test 2 to the difficulty of the test rather than to their self-handicap. The average sureness rating for items on

test 1 was $\underline{M} = 2.71$ and for those on test 2 was $\underline{M} = 4.16$.

Distraction tapes. The five distraction tapes used in this study were recorded using a noise generator set at increasing amplitudes. The tapes were then pretested on a group of 22 introductory psychology students. Subjects were presented with one of 5 cassettes labelled either “no effect,” “slightly distracting,” “moderately distracting,” “very distracting,” or “extremely distracting,” and were asked to rate on a 9-point scale how distracting they found it. A one-way ANOVA was performed on these ratings using a measure of individual differences in self-reported distractibility as a covariate. The covariate was significant $\underline{F}(4,16) = 14.83, p < .01$ as was the effect for tape, $\underline{F}(4,16) = 4.91, p < .01$ and the means were in roughly ascending order ($\underline{M}s = 2.80, 2.20, 4.70, 3.25, 6.25$, respectively).

Results

Unless otherwise stated, all analyses consisted of a $3 \times 2 \times 2$ (self-handicapping condition \times sex \times public/private) analysis of variance.

Manipulation checks

Analyses of our manipulation checks found a main effect for privacy on the perceived privacy of subjects tape choice/distraction ratings, $\underline{F}(1, 72) = 88.58, p < .001$, and posttest scores, $\underline{F}(1, 72) = 105.62, p < .001$. Subjects in the private condition felt that the experimenter was less aware of their tape choice/distraction rating ($\underline{M} = 8.43$) than subjects in the public condition ($\underline{M} = 4.08$). Also, subjects in the private condition thought that the experimenter was less likely to know or find

out their posttest score ($M = 8.48$) than subjects in the public condition ($M = 3.83$).

There were no other significant effects or interactions.

Self-handicapping scores

In this study, because we did not manipulate success contingency, we could not actually test whether subjects self-handicapped or not. However, we could examine differences in behavioural and claimed self-handicapping scores as a function of subject sex and privacy.

Behavioural self-handicapping. A 2×2 (subjects' sex x public/private) ANOVA on subjects' behavioural self-handicapping scores found a significant main effect for sex, $F(1, 36) = 6.98, p < .02$, indicating that males behaviourally self-handicapped more than females ($M = 4.10$ versus $M = 3.30$). There was no effect or interaction of privacy. Mean behavioural self-handicapping scores are presented in Table 5.

Claimed self-handicapping. A similar 2×2 ANOVA on subjects' claimed self-handicapping scores found no significant main effects or interaction involving subject sex, or privacy. Cell means are presented in Table 6.

These results parallel those of studies 1 and 2, where males were more likely to behaviourally self-handicap than females, but no sex differences were found for claimed self-handicapping.

Dependent measures

Impairment scores. Prior to taking the second test, but after the opportunity to self-handicap, subjects in the behavioural and claimed self-handicapping conditions

were asked to rate on 9-point scales, in private, the extent to which the distraction would impair their performance (1 = would have no effect on performance, 9 = would greatly impair performance). This item was included in an effort to determine whether, compared to subjects who behaviourally self-handicapped, subjects who claimed a handicap would actually consider themselves disadvantaged. A $2 \times 2 \times 2$ (behavioural/claimed self-handicapping \times sex \times public/private) ANOVA on these ratings found a significant main effect for self-handicapping condition, $F(1, 72) = 15.52, p < .001$. Subjects in the behavioural self-handicapping condition anticipated greater impairment from the distraction ($M = 6.03$) than subjects in the claimed self-handicapping condition ($M = 4.45$). Anticipated impairment scores were not available for control subjects, because these subjects were not exposed to any form of distraction.

Expectancy scores. In addition to anticipated impairment, all subjects (including controls) were asked to indicate, in private, how well they expected to do on the second test. As with the impairment scores, we wanted to determine whether, compared to subjects who behaviourally self-handicapped, subjects who claimed a handicap would actually anticipated performance decrements. Because control subjects expected to take a second test, we were able to get expected performance scores from them. A $3 \times 2 \times 2$ ANOVA yielded a significant sex by privacy interaction, $F(1, 72) = 10.58, p < .01$. An examination of the means suggested that males expected to do better in private ($M = 6.10$) than in public ($M = 5.00$). The

pattern of results for females was reversed with those in the public condition expecting to do better ($M = 5.33$) than those in the private conditions ($M = 4.83$). Neither claimed ($M = 5.33$) nor behavioural ($M = 5.13$) self-handicapping subjects expected to do worse on the second test than control subjects ($M = 5.50$), despite the fact that both groups of subjects anticipated some degree of performance impairment from the distraction. That is, although behavioural and claimed self-handicapping subjects expected to be impaired by the distraction, they did not expect this impairment to have an adverse effect on their test performance.

Ability attributions. On the attribution questionnaire subjects were asked to rate, on a 9-point scale, the extent to which they would attribute their performance on test 2 to ability, with higher scores indicating greater ability attributions. Analysis of subjects' ability attributions for test 2 found a significant main effect for condition, $F(2,108) = 5.14, p < .01$. Planned comparisons indicated that subjects in the behavioural self-handicapping condition were less likely to attribute failure on test 2 to ability ($M = 5.60$) than subjects in the control condition ($M = 4.30$), $t(78) = 3.19, p < .05$; subjects in the claimed self-handicapping condition were also less likely to attribute failure to ability ($M = 5.03$), $t(78) = 1.80, p < .05$ (one-tailed). Mean ability attributions in the two self-handicapping conditions did not differ significantly, $t(78) = 1.40, ns$.

Self-esteem. Analysis of subjects' scores on the SSES found only a main effect

for sex, $F(1, 108) = 12.93, p < .001$, with males ($M = 60.57$) displaying a higher state self-esteem than females ($M = 53.00$). The effect of condition did not approach significance, although the pattern of means was in the predicted direction with subjects in the behavioural ($M = 57.78$) and claimed ($M = 58.30$) self-handicapping conditions having slightly, but not significantly, higher self-esteem scores than subjects in the control condition ($M = 54.28$). Further, separate analyses using the Performance and Social Subscales of the SSES also found no significant effect of condition on either.

Trait self-handicapping. Subjects were divided into high and low trait self-handicappers based on median scores on the Self-handicapping Scale and this variable was added to the analyses of all the dependent variables. Analyses found no significant main effects or interactions of trait self-handicapping on any of the dependent measures.

Correlational analyses. Correlational analyses for both behavioural and claimed self-handicapping subjects combined, collapsing across privacy, found a marginally significant correlation between self-handicapping scores and ability attributions on the second test, $r(78) = -.21, p < .07$, indicating that the more subjects self-handicapped the less they attributed failure on test 2 to ability. Separate within-condition correlations for the claimed and behavioural self-handicapping conditions were in the predicted direction, but were not significant. Separate within-condition correlations between self-handicapping scores and state self-esteem were

not significant for the behavioural, $r(38) = .12$, $p < .50$, or the claimed $r(38) = .04$, $p < .80$ conditions.

Correlational analysis indicated that trait self-handicapping was significantly correlated with state self-esteem $r(118) = -.49$, $p < .001$. Trait self-handicapping scores did not correlate significantly with claimed self-handicapping or behavioural self-handicapping scores.

Other analyses. On the attribution questionnaire subjects were asked to rate the extent to which they would blame their performance on the second test to the distracting effects of the tape. A $2 \times 2 \times 2$ (behavioural/claimed self-handicapping \times sex \times public/private) ANOVA on these scores found a significant main effect for condition. Subjects in the behavioural self-handicapping condition blamed their poor performance on the distracting effects of the tape ($M = 6.08$) more than subjects in the claimed self-handicapping condition ($M = 4.85$).

Discussion

The results of this study indicate that after either behaviourally self-handicapping or claiming a self-handicap, individuals will discount ability attributions for failure on evaluative tasks. Subjects who were given the opportunity to behaviourally self-handicap and to claim a handicap were less likely to attribute failure on the second test to ability than were subjects in the control group, who had no opportunity to self-handicap. Furthermore, the ability attributions of subjects in the behavioural and claimed self-handicapping conditions did not differ, indicating

that the two self-handicaps afforded equal amounts of protection against negative ability attributions. Also, as in study 2, subjects were just as likely to claim a handicap in private as in public, suggesting that individuals who claim a handicap may privately believe themselves to be handicapped. These results conflict with Leary and Shepherd's (1986) assertion that individuals who claim a handicap do not actually consider themselves disadvantaged. If this were the case, subjects in the claimed self-handicapping condition should not have self-handicapped in private or discounted ability as a possible cause for failure.

Analysis of subjects' expected impairment scores indicated that both behavioural and claimed self-handicapping subjects expected that the distraction would impair their performance to some degree, although subjects in the behavioural self-handicapping condition expected greater impairment. Subjects in the behavioural self-handicapping condition also attributed their failure on test 2 to the distracting effects of the tape more than claimed self-handicapping subjects. This suggests that the behavioural self-handicap employed in this study may have been somewhat more believable than the claimed self-handicap. Indeed, the behavioural self-handicapping subjects actually listened to tapes rated as more distracting than the tape heard by claimed self-handicapping subjects. However, the differences in expected impairment and tendency to blame failure on the tape did not translate into differences in subjects' ability attributions, suggesting that the behavioural and claimed self-handicaps were equally effective in protecting self-perceived ability. This is not to say

that all forms of claimed self-handicapping would offer self-perceived ability protection equal to all forms of behavioural self-handicapping. Presumably, the discounting effects of any given self-handicap depends on the believability of the self-handicap. The results of this study must be replicated using other examples of behavioural and claimed self-handicaps before any general conclusions can be drawn concerning the effectiveness of one category of self-handicapping over the other. The results of this study do suggest, however, that Leary and Shepherd (1986) are incorrect in their assertion that claimed self-handicapping is not really self-handicapping because individuals who claim a handicap do not actually believe their own claims.

Surprisingly, neither behavioural nor claimed self-handicapping subjects anticipated performance decrements. That is, subjects in both self-handicapping conditions expected to do as well on the second test as control subjects. This calls into question subjects' motivation for engaging in self-handicapping. To our knowledge, no other research has examined expected impairment or anticipated performance decrements following self-handicapping. Self-handicapping researchers have assumed that individuals self-handicap because they expect to do poorly on an upcoming task and wish to protect against losses in self-perceived ability and self-esteem, even though they believe that doing so actually increases the likelihood of failure (Baumeister & Scher, 1988). Our finding that subjects did not anticipate performance decrements after self-handicapping suggests that they may have been

self-handicapping for purposes of self-enhancement rather than self-protection. In other words, instead of attempting to avoid looking bad by failing with a handicap, subjects may have been attempting to look good by doing moderately well with a disadvantage, because performing as well with as without a handicap would enhance attributions to ability.

State self-esteem scores of subjects in the behavioural and claimed self-handicapping groups did not differ significantly from those of control subjects, although the means were in the predicted direction. Our failure to find a significant effect of self-handicapping on state self-esteem is puzzling given that other researchers have demonstrated the protective effects of handicaps on trait self-esteem (Isleib, Vuchinich, & Tucker, 1988; Mercian & Rhodewalt, 1988; Rhodewalt, Morf, Hazlet, & Fairfield, 1991). Conceivably, the self-handicaps used in this study may not have been convincing enough to protect self-esteem from failure, although it did protect ability attributions. Ideally, we would have preferred a pre-post design to examine the relative effectiveness of behavioural and claimed self-handicapping in protecting state self-esteem following failure, but were concerned that assessing self-esteem prior to our experimental manipulations would have sensitized subjects to the true nature of the study. Hence, we may have been unable to detect between-condition differences in state self-esteem, because there was so much between-subject variability in state self-esteem scores.

Chapter 5

General Discussion

This research was conducted to address three questions: 1) Is self-handicapping (either behavioural or claimed) entirely a self-presentational strategy or do individuals also self-handicap to control their own attributions for success or failure? 2) Is Leary and Shepherd's (1986) suggestion that individuals who claim a handicap do not actually consider themselves disadvantaged correct? 3) Do behavioural and claimed self-handicapping adequately and equally protect self-perceived ability and self-esteem?

Kolditz and Arkin's (1982) study is largely cited as evidence for a self-presentational explanation of self-handicapping. These authors varied the privacy of subjects' drug choice (self-handicap) and posttest scores and found that subjects self-handicapped, by choosing a performance-impairing drug, in public, but not in private. Because subjects self-handicapped only in the presence of an audience (i.e., the experimenter), the investigators concluded that subjects were self-handicapping in order to self-present not self-protect. However, as discussed previously, subjects in the private drug choice condition may have been reluctant to ingest a performance-impairing drug with the experimenter absent. Further, delay of posttest feedback and privacy were confounded in this study. Subjects in the public posttest condition expected immediate feedback, whereas subjects in the private posttest condition did not. In fact, it is unclear from Kolditz and Arkin's (1982) procedure whether subjects

in the private posttest condition ever expected to get feedback at all. If private posttest subjects did not expect feedback, or if they did not expect to receive it for some time, they may have been less motivated to self-handicap than public posttest subjects. Finally, because Kolditz and Arkin (1982) included only males in their study, their findings cannot be generalized to females. Other research that has addressed the issue of self-presentational versus self-protective motives to self-handicap has been even less conclusive, demonstrating only that increasing self-presentational motives increases the incidence of self-handicapping (Baumgardner, 1991; Baumgardner et al., 1985; Tice & Baumeister, 1990; Shepherd & Arkin, 1989b).

A major difficulty in reconciling the inconsistencies in the self-handicapping literature stems from the tendency on the part of researchers to employ a variety of operational definitions of self-handicapping. Although this strengthens our faith in the robustness of the phenomenon, it makes comparisons across studies problematic. In this research we adopted behavioural self-handicaps (performance-impairing music, distracting noise) that were similar, if not identical, to those employed by a number of other researchers (Ferrari, 1991a, b; Rhodewalt & Davison, 1986; Rhodewalt, Morf, Hazlet, & Fairfield, 1991; Shepherd & Arkin, 1989a, b).

In study 1, we attempted a conceptual replication of Kolditz and Arkin's (1982) study using a less threatening self-handicap (impairing music) and unconfounding privacy and time of posttest feedback (feedback was immediate for

subjects in both the public and private conditions). Also, we included equal numbers of male and female subjects. We found that male subjects were just as likely to self-handicap (by selecting performance-impairing music) in private as in public. Females did not self-handicap in either condition. The results of this study indicate that, for males, behavioural self-handicapping is motivated in part by the desire to control their own attributions and is not solely a self-presentational strategy. This is not to say that the desire to self-present would not increase the motive to self-handicap. Other research has shown that the presence of an audience increases the incidence of self-handicapping (Tice & Baumeister, 1990; Shepherd & Arkin, 1989b). Tice and Baumeister (1990) found that subjects were more likely to self-handicap by practising inadequately in public than in private, especially those subjects high in self-esteem. Shepherd and Arkin (1989a) found that subjects high in public self-consciousness were more likely to self-handicap in public than were those low in public self-consciousness. Presumably, motives to control self- and audience-attributions should be additive; however, ceiling effects may have prevented us from detecting an increase in self-handicapping in the public (relative to the private) condition. In any event, our study has clearly shown that individuals self-handicap to control their own attributions and not just those of an audience.

Study 2 was conducted to determine the role of self-presentational versus self-protective motives in claimed self-handicapping. Leary and Shepherd (1986) suggested that behavioural and claimed self-handicapping are conceptually distinct

because 1) claiming a handicap does not actually impede performance, whereas behaviourally self-handicapping does, 2) individuals who claim a handicap do not actually consider themselves disadvantaged. If this reasoning is correct, then individuals should claim a handicap in public, but not in private. Presumably individuals self-handicap in private in order to control their self-attributions for success or failure. If individuals who claim a handicap really do not believe their own claims, there would be no reason for them to self-handicap in private. Mercian and Rhodewalt (1988), however, found that subjects were more likely to claim pain as a handicap after noncontingent than contingent success in private, but the authors did not include a public comparison group in their design.

In study 2, after receiving contingent or noncontingent success feedback, subjects were given the opportunity to claim a handicap or behaviourally self-handicap, in public or in private, prior to taking a second test. Analysis of claimed self-handicapping scores indicated that subjects were equally likely to claim a handicap in private as in public. These findings suggest that individuals who claim a handicap may actually consider themselves disadvantaged.

The results from studies 1 and 2 indicated that individuals engage in behavioural and claimed self-handicapping, at least in part, for purposes of controlling self-attributions. That is, individuals employ performance impediments (or claims of such impediments) in an effort to promote non-ability attributions for failure and to protect their self-esteem. In study 3, we wanted to determine how effective these

strategies are in achieving these ends. There was some evidence to suggest that individuals who failed with a handicap would discount ability attributions for failure (Islieb, Vuchinich, & Tucker, 1988; Mercian & Rhodewalt, 1988; Rhodewalt, Morf, Hazlet, & Fairfield, 1991). However, none of these studies included a no self-handicap (control) condition. Furthermore, there was no research examining subjects' performance expectations or level of self-perceived impairment prior to test administration.

Study 3, therefore, addressed two questions: 1) Does claimed self-handicapping afford self-perceived ability and self-esteem protection similar to that of behavioural self-handicapping? 2) Do individuals who claim a handicap actually consider themselves disadvantaged and anticipate performance decrements? Analysis of subjects' ability attributions indicated that behavioural and claimed self-handicapping subjects attributed failure less to ability than did control subjects. Ability attributions of behavioural and claimed self-handicapping subjects were lower than those of controls, but did not differ significantly, indicating that both afforded equal amounts of self-perceived ability protection. Mean state self-esteem scores did not differ by condition, although the means were in the predicted direction. Conceivably, the self-handicaps used in this study may not have been believable enough to protect against losses in self-esteem. Alternatively, success on test 1 may have buffered subjects against subsequent failure. Analysis of subjects' expected impairment ratings indicated that behavioural and claimed self-handicapping subjects

expected to be impaired by the distraction to some degree, although behavioural self-handicapping subjects anticipated greater impairment. Behavioural self-handicapping subjects were also more likely to blame poor performance on the distracting effects of the tape than were claimed self-handicapping subjects. These differences may reflect accurately variations in the amount of distraction produced by the tapes used in the two self-handicapping conditions. Analysis of subjects' performance expectations indicated that neither behavioural nor claimed self-handicapping subjects expected to do worse on the second test than control subjects. Researchers have often commented on the paradoxical nature of self-handicapping, that in an effort to reduce the negative implications of failure self-handicappers actually increase the likelihood that they will fail (Baumeister & Scher, 1988; Jones, 1990; Mercian & Rhodewalt, 1988). The results of study 3 suggest that individuals who either behaviourally self-handicap or claim a handicap may not actually anticipate a subsequent reduction in performance, but may expect to do as well with as without a handicap.

Consequently, individuals may self-handicap more for the purposes of self-enhancement rather than self-protection. That is, individuals may self-handicap in an effort to augment ability attributions by performing moderately well with a handicap.

In summary, results of the present research suggests that behavioural and claimed self-handicapping are not solely self-presentational strategies, but are motivated, at least to some degree, by the desire to control self-attributions. Subjects were just as likely to engage in behavioural or claimed self-handicapping in private as

in public. We recognize that it is impossible to eliminate completely self-presentational concerns in a laboratory setting. However, analyses of our manipulation checks indicate that subjects in the private conditions experienced a greater degree of anonymity than subjects in the public conditions. If Kolditz and Arkin's (1982) suggestion that self-handicapping is entirely a self-presentational strategy is correct then subjects should have self-handicapped more in public than in private, which was not the case.

Further, we found that subjects who claimed a handicap and failed were just as likely to discount ability as those subjects who behaviourally self-handicapped. These findings provide evidence against Leary and Shepherd's (1986) assertion that claimed self-handicapping is not really self-handicapping because individuals who claim a handicap do not actually believe their own claims. We cannot conclude, however, that claimed self-handicapping is generally as effective as behavioural self-handicapping in promoting non-ability attributions for failure; we can conclude only that the particular claimed and behavioural self-handicaps used in our research were equally effective. The claimed self-handicap employed in this research (claims of distraction from white noise) has not, to our knowledge, been employed previously and was adopted in an attempt to equate the behavioural and claimed self-handicaps. Despite our efforts, however, the two self-handicaps may have differed on dimensions other than the behavioural-claimed distinction. Whether these results would replicate using other types of behavioural and claimed self-handicaps is an issue for

future research.

Directions for future research

In conducting this research, we wanted to address two main issues: 1) Is self-handicapping entirely a self-presentational strategy or is it also motivated by self-protective concerns? 2) Are Leary and Shepherd (1986) correct in asserting that, in contrast to behavioural self-handicapping, individuals who claim a handicap do not actually consider themselves disadvantaged and, consequently, do not anticipate performance decrements? The results of our research suggest that Leary and Shepherd (1986) may be partly correct, but not for the reasons they put forth. Claimed self-handicapping subjects did not anticipate performance decrements relative to controls, but neither did behavioural self-handicapping subjects. Therefore, although our research indicates that individuals self-handicap to control their own attributions for performance outcomes, not just those of an audience, describing it as a self-protective strategy may not be entirely accurate. If individuals expect to do as well with as without a handicap, they may employ performance impediments (or claims of such impediments) for purposes of self-enhancement, since performing even moderately well with a disadvantage would augment attributions to ability. Some evidence for self-enhancing motives to self-handicap was provided by Tice (1991). She found that subjects high in self-esteem self-handicapped only when success was meaningful, but not when it was meaningless. That is, her high self-esteem subjects self-handicapped only when doing so provided an opportunity to

augment ability attributions for success, but did not self-handicap to self-protect (i.e., discount ability attributions for failure). Recall, also, that in our second study males in the contingent success/private condition were just as likely to self-handicap as their counterparts in noncontingent success/private condition. Since it is unlikely that contingent success subjects would anticipate failure on the second test, these subjects may have self-handicapped in order to augment ability attributions for success. As mentioned previously, self-handicapping is generally construed as a somewhat counterintuitive strategy, wherein individuals accept a greater risk of failure in order to reduce the negative implications of failure. Our results provide some evidence, albeit tentative, that individuals who engage in self-handicapping may not perceive this tradeoff. Whether self-handicapping (behavioural or claimed) actually results in corresponding declines in performance is unclear, since little research has addressed this issue. In fact, there is some evidence that the presence of a handicap (either other-imposed or self-selected) can actually improve performance (Leary, 1986; Rhodewalt, Saltzman, & Wittmer, 1984; Weiner & Sierad). Admittedly, our conclusions regarding subjects' motivation to self-handicap and corresponding performance expectations are speculative. However, it may be interesting in future research to examine further individuals' underlying motivations for self-handicapping and their resultant performance expectancies.

References

- Arkin, R. M., & Baumgardner, A. H. (1985). Self-handicapping. In J. H. Harvey, & G. Weary (Eds.). Attribution: Basic issues and applications. New York: Academic Press.
- Baumgardner, A. (1991). Claiming depressive symptoms as a self-handicap: A protective self-presentation. Basic and Applied Social Psychology, 12, 97-113.
- Baumgardner, A. H., Lake, E. A., & Arkin, R. M. (1985). Claiming mood as a self-handicap: The influence of spoiled and unspoiled public identities. Personality and Social Psychology Bulletin, 11, 349-357.
- Baumeister, R. F., Scher, S. J. (1988). Self-defeating behavior patterns among normal individuals: Review and analysis of common self-destructive tendencies. Psychological Bulletin, 104, 3-22.
- Baumeister, R. F., Kahn, J., & Tice, D. M. (1990). Obesity as a self-handicapping strategy. Journal of Social Psychology, 130, 121-123.
- 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.
- DeGree, C. E., & Snyder, C. R. (1985). Adler's psychology (of use) today: Personal history of traumatic life events as a self-handicapping strategy. Journal of Personality and Social Psychology, 48, 1512-1519.
- Ferrari, J. R. (1991a). Self-handicapping by procrastinators: Protecting self-esteem, social-esteem, or both? Journal of Research in Personality, 25, 245-261.
- Ferrari, J. R. (1991b). A second look at behavioural self-handicapping among women. Journal of Social Behavior and Personality, 6, 195-206.
- Greenberg, J. (1985). Unattainable goal choice as a self-handicapping strategy. Journal of Applied Social Psychology, 15, 140-152.
- Greenberg, J., Pyszczynski, T., & Paisley, C. (1985). Effect of extrinsic incentives on use of test anxiety as an anticipatory attributional defence: Playing it cool when the stakes are high. Journal of Personality and Social Psychology, 47, 1136-1145.

- Harris, R. N., & Snyder, C. R. (1986). The role of uncertain self-esteem in self-handicapping. Journal of Personality and Social Psychology, 2, 451-458.
- Harris, R. N., Snyder, C. R., Higgins, R. L., & Schrag, J. L. (1986). Enhancing the prediction of self-handicapping. Journal of Personality and Social Psychology, 51, 1191-1199.
- Heatherton, T. F. & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. Journal of Personality and Social Psychology, 60, 895-910.
- 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, 456-470.
- Higgins, R. L., & Harris, R. N. (1988). Strategic "alcohol" use: Drinking to self-handicap. Journal of Social and Clinical Psychology, 6, 191-202.
- Hirt, E. R., Deppe, R. K., & Gordon, L. J. (1991). Self-reported versus behavioural self-handicapping: Empirical evidence for a theoretical distinction. Journal of Personality and Social Psychology, 61, 981-991.
- Isleib, R. A., Vuchinich, R. E., & Tucker, J. A. (1988). Performance attributions and changes in self-esteem following self-handicapping with alcohol consumption. Journal of Social and Clinical Psychology, 6, 88-103.
- Janis, I. L., & Field, P. B. (1959). Sex differences and factors related to persuasability. In C. I. Howland & I. L. Janis (Eds.), Personality and persuasability. New Haven: Yale University Press.
- Jones, E. E., & Berglas, S. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. Personality and Social Psychology Bulletin, 4, 200-206.
- Jones, E. E. (1990). Forward. In R. L. Higgins, C. R. Snyder, & Berglas (Eds.), Self-handicapping: The paradox that isn't. New York: Plenum.
- Kimble, C. E., Funk, S. C., & Dapolito, K. L. (1990). The effects of self-esteem certainty on behavioural self-handicapping. Journal of Social Behavior and Personality, 5, 137-149.
- Kolditz, T. A., & Arkin, R. M. (1982). An impression management interpretation of

- the self-handicapping strategy. Journal of Personality and Social Psychology, 43, 492-502.
- Leary, M. R. (1986). The impact of interactional impediments on social anxiety and self-presentation. Journal of Experimental Social Psychology, 22, 122-135.
- Leary, M. R., & Sheppard, J. A. (1986). Behavioural self-handicaps versus self-reported handicaps: A conceptual note. Journal of Personality and Social Psychology, 51, 1265-1268.
- Luginbuhl, J., & Palmer, R. (1991). Impression management aspects of self-handicapping: Positive and negative effects. Personality and Social Psychology Bulletin, 17, 655-662.
- Mercian, N. H., & Rhodewalt, F. (1988). The role of self-protective attributions in the experience of pain. Journal of Social and Clinical Psychology, 6, 203-218.
- McClelland, D. C. (1961). The achieving society. Princeton, N. J.: D. Van Nostrand.
- Rhodewalt, F. (1990). Self-handicappers: Individual differences in the preference for anticipatory, self-protective acts. In R. L. Higgins, C. R. Snyder, & S. Berglas (Eds.), Self-handicapping: The paradox that isn't. New York: Plenum.
- Rhodewalt, F. & Davison, J. (1986). Self-handicapping and subsequent performance: Role of outcome valence and attributional certainty. Basic and Applied Social Psychology, 7, 307-322.
- Rhodewalt, F. & Fairfield, M. (1991). Claimed self-handicaps and self-handicappers: The relation of reduction in intended effort to performance. Journal of Research in Personality, 25, 402-417.
- Rhodewalt, F., Morf, C., Hazlet, S., & Fairfield, M. (1991). Self-handicapping: The role of discounting and augmentation in the preservation of self-esteem. Journal of Personality and Social Psychology, 61, 122-131.
- Rosenfarb, I. S. [1992]. The self-protective function of depressive affect and cognition. Journal of Social and Clinical Psychology, 4, 323-335.
- Schouten, P. G. W., & Handelsman, M. M. (1987). The social basis of self-handicapping: The case of depression. Personality and Social Psychology Bulletin, 13, 103-110.

- Sheppard, J. A., & Arkin, R. M. (1989a). Determinants of self-handicapping: Task importance and the effects of preexisting handicaps on self-generated handicaps. Personality and Social Psychology Bulletin, 15, 101-112.
- Sheppard, J. A., & Arkin, R. M. (1989b). Self-handicapping: The moderating roles of public self-consciousness and task importance. Personality and Social Psychology Bulletin, 15, 252-265.
- Sheppard, J. A., & Arkin, R. M. (1991). Behavioural other-enhancement: Strategically obscuring the link between performance and evaluation. Journal of Personality and Social Psychology, 60, 79-88.
- Smith, T. W., Snyder, C. R., & Perkins, S. C. (1983). On the self-serving function of hypochondriacal complaints: Physical symptoms as self-handicapping strategies. Journal of Personality and Social Psychology, 44, 314-322.
- Smith, T. W., Snyder, C. R., & Handelsman, M. M. (1982). On the self-serving function of an academic wooden leg. Test-anxiety as a self-handicapping strategy. Journal of Personality and Social Psychology, 42, 314-321.
- Smith, D., & Strube, M. J. (1991). Self-protective tendencies as moderators of self-handicapping impressions. Basic and Applied Social Psychology, 12, 63-80.
- Snyder, C. R., Ford, C. E., & Hunt, A. (1985, August). Excuse-making: Bay look at sex differences. Paper presented at the 93rd Annual Convention of the American Psychological Association, Los Angeles.
- Snyder, C. R., & Smith, T. W. (1982). Symptoms as self-handicapping strategies: The virtues of old wine in a new bottle. In G. Weary & H. L. Mirels (Eds.), Integrations of Clinical and Social Psychology (pp. 104-127). New York: Oxford University Press.
- Snyder, C. R., Smith, T. W., Augelli, R. W., & Ingram, R. E. (1985). On the self-serving function of social anxiety: Shyness as a self-handicapping strategy. Journal of Personality and Social Psychology, 48, 970-980.
- Tice, D. M. (1991). Esteem enhancement or protection? Self-handicapping motives and attributions differ by trait self-esteem. Journal of Personality and Social Psychology, 61, 711-725.
- Tice, D. M., & Baumeister, R. F. (1990). Self-esteem, self-handicapping, and self-presentation: The strategy of inadequate practice. Journal of Personality, 58,

443-463.

- Trope, Y. (1975). Seeking information vote one's own ability as a determinant of choice among tasks. Journal of Personality and Social Psychology, 31, 1004-1013.
- Trope, Y., & Brickman, P. (1975). Difficulty and diagnosticity as determinants of choice among tasks. Journal of Personality and Social Psychology, 31, 918-926.
- Tucker, J. A., Vuchinich, R. E., and Sobell, M. B. (1981). Alcohol consumption as a self-handicapping strategy. Journal of Abnormal Psychology, 90, 220-230.
- Weiner, B. and Sierad, J. (1975). Misattribution for failure and enhancement of achievement strivings. Journal of Personality and Social Psychology, 31, 415-421.

Tables

Table 1
Mean Tape Choice as a Function of Success Contingency,
Privacy, and Sex in Study 1

Success	Males		Females	
	Public	Private	Public	Private
Contingent	3.60	3.40	2.50	2.91
(n)	(10)	(10)	(10)	(10)
Noncontingent	4.60	4.30	3.11	2.91
(n)	(10)	(10)	(9)	(11)

Scores ranged from 1-5 with higher scores indicating greater self-handicapping.

Table 2
Mean Claimed Self-handicapping Score as a Function of Success
Contingency Privacy, and Sex in Study 2

Success	Males		Females	
	Public	Private	Public	Private
Contingent	2.00	2.10	2.20	2.30
(n)	(10)	(10)	(10)	(10)
Noncontingent	2.30	2.60	2.60	3.00
(n)	(10)	(10)	(10)	(10)

Scores ranged from 1-5 with higher scores indicating greater self-handicapping.

Table 3

Mean Behavioural Self-handicapping score as a Function of Success
Contingency, Privacy, and Sex in Study 2

Success	Males		Females	
	Public	Private	Public	Private
Contingent	3.50 _{ab}	4.60 _b	3.20	4.10
(n)	(10)	(10)	(10)	(10)
Noncontingent	4.80 _a	4.60	3.60	3.50
(n)	(10)	(10)	(10)	(10)

Scores ranged from 1 to 5 with higher scores indicating greater self-handicapping.
Means with the same subscript are significantly different at $p < .05$.

Table 4
Mean Self-esteem Scores as a Function of Success Contingency,
Privacy, and Sex in Study 2

Success	Males		Females	
	Public	Private	Public	Private
Contingent	52.56	59.30 _a	55.80	54.10
(n)	(9)	(10)	(10)	(10)
Noncontingent	44.20 _a	53.80	50.11	58.30
(n)	(10)	(10)	(9)	(10)

Higher scores indicate greater self-esteem. Means with the same subscript differ significantly at $p < .05$.

Table 5

Mean Behavioural Self-handicapping score as a Function of Success
Contingency, Privacy, and Sex in Study 3

Males		Females	
Public	Private	Public	Private
3.90	4.30	3.20	3.40
(10)	(10)	(10)	(10)

Scores ranged from 1 to 5 with higher scores indicating greater self-handicapping.
Cell ns are given in parentheses.

Table 6

Mean Claimed Self-handicapping score as a Function of Success
Contingency, Privacy, and Sex in Study 3

Males		Females	
Public	Private	Public	Private
2.30	2.20	2.90	2.40
(10)	(10)	(10)	(10)

Scores ranged from 1-5 with higher scores indicating greater self-handicapping. Cell
ns are given in parentheses.

Appendix A

Success X Public/Private X Sex ANOVA on mean self-handicapping scores in Study 1

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	33.263	3	11.088	6.025	.001
SUCCESS	7.860	1	7.860	4.271	.042
PUBPRI	.138	1	.138	.075	.785
SEX	25.203	1	25.203	13.695	.000
2-Way Interactions	3.312	3	1.104	.600	.617
SUCCESS PUBPRI	.612	1	.612	.333	.566
SUCCESS SEX	2.084	1	2.084	1.132	.291
PUBPRI SEX	.610	1	.610	.331	.567
3-Way Interactions	.314	1	.314	.171	.681
SUCCESS PUBPRI SEX	.314	1	.314	.171	.681
Residual	132.498	72	1.840		

Success X Public/Private X Sex ANOVA on mean behavioural self-handicapping scores in Study 2

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	17.138	3	5.712	7.864	.000
SUCCESS	1.512	1	1.512	2.082	.153
PUBPRI	3.613	1	3.613	4.973	.029
SEX	12.013	1	12.013	16.537	.000
2-Way Interactions	9.438	3	3.146	4.331	.007
SUCCESS PUBPRI	6.613	1	6.613	9.103	.004
SUCCESS SEX	2.813	1	2.813	3.872	.053
PUBPRI SEX	.013	1	.013	.017	.896
3-Way Interactions	.113	1	.113	.155	.695
SUCCESS PUBPRI SEX	.113	1	.113	.155	.695
Residual	52.300	72	.726		

Success X Public/Private X Sex ANOVA on mean claimed self-handicapping scores in Study 2

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	7.038	3	2.346	3.556	.018
SUCCESS	4.513	1	4.513	6.840	.011
PUBPRI	1.013	1	1.013	1.535	.219
SEX	1.512	1	1.512	2.293	.134
2-Way Interactions	.438	3	.146	.221	.881
SUCCESS PUBPRI	.313	1	.313	.474	.494
SUCCESS SEX	.113	1	.113	.171	.681
PUBPRI SEX	.012	1	.012	.019	.891
3-Way Interactions	.013	1	.013	.019	.891
SUCCESS PUBPRI SEX	.012	1	.012	.019	.891
Residual	47.500	72	.660		

Public/private X sex ANOVA on mean behavioural self-handicapping scores in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	7.300	2	3.650	3.982	.027
PUBPRI	.900	1	.900	.982	.328
SEX	6.400	1	6.400	6.982	.012
2-Way Interactions	.100	1	.100	.109	.743
PUBPRI SEX	.100	1	.100	.109	.743
Residual	33.000	36	.917		

Public/private X sex ANOVA on mean claimed self-handicapping scores in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	2.500	2	1.250	1.452	.248
PUBPRI	.900	1	.900	1.045	.313
SEX	1.600	1	1.600	1.858	.181
2-Way Interactions	.400	1	.400	.465	.500
PUBPRI SEX	.400	1	.400	.465	.500
Residual	31.000	36	.861		

Success contingency X public/private X sex ANOVA on mean expected impairment scores in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	57.937	3	19.312	6.043	.001
CONDIT	49.613	1	49.613	15.524	.000
PUBPRI	2.812	1	2.812	.880	.351
SEX	5.512	1	5.512	1.725	.193
2-Way Interactions	3.438	3	1.146	.359	.783
CONDIT PUBPRI	2.813	1	2.813	.880	.351
CONDIT SEX	.613	1	.613	.192	.663
PUBPRI SEX	.012	1	.012	.004	.950
3-Way Interactions	1.013	1	1.013	.317	.575
CONDIT PUBPRI SEX	1.013	1	1.013	.317	.575
Residual	230.100	72	3.196		

Success contingency X public/private X sex ANOVA on mean expected performance scores on test 2 in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	12.050	4	3.012	1.660	.165
CONDIT	2.817	2	1.408	.776	.463
PUBPRI	2.700	1	2.700	1.488	.225
SEX	6.533	1	6.533	3.600	.060
2-Way Interactions	23.067	5	4.613	2.542	.032
CONDIT PUBPRI	1.050	2	.525	.289	.749
CONDIT SEX	2.817	2	1.408	.776	.463
PUBPRI SEX	19.200	1	19.200	10.580	.002
3-Way Interactions	10.850	2	5.425	2.989	.055
CONDIT PUBPRI SEX	10.850	2	5.425	2.989	.055
Residual	196.000	108	1.815		

Success contingency X public/private X sex ANOVA on mean ability attribution scores on test 2 in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	50.300	4	12.575	3.805	.006
CONDIT	33.950	2	16.975	5.137	.007
PUBPRI	3.675	1	3.675	1.112	.294
SEX	12.675	1	12.675	3.836	.053
2-Way Interactions	12.908	5	2.582	.781	.565
CONDIT PUBPRI	3.650	2	1.825	.552	.577
CONDIT SEX	4.850	2	2.425	.734	.482
PUBPRI SEX	4.408	1	4.408	1.334	.251
3-Way Interactions	.817	2	.408	.124	.884
CONDIT PUBPRI SEX	.817	2	.408	.124	.884
Residual	356.900	108	3.305		

Success contingency X public/private X sex ANOVA on mean state self-esteem scores in study 3

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig of F
Main Effects	2101.483	4	525.371	3.953	.005
CONDIT	383.017	2	191.508	1.441	.241
PUBPRI	.833	1	.833	.006	.937
SEX	1717.633	1	1717.633	12.925	.000
2-Way Interactions	1010.467	5	202.093	1.521	.189
CONDIT PUBPRI	909.117	2	454.558	3.420	.036
CONDIT SEX	.517	2	.258	.002	.998
PUBPRI SEX	100.833	1	100.833	.759	.386
3-Way Interactions	369.617	2	184.808	1.391	.253
CONDIT PUBPRI SEX	369.617	2	184.808	1.391	.253
Residual	14352.800	108	132.896		

Appendix B

Study 1 and 2 - Analogies

Contingent Success Condition

Solvable analogies

1. GRAPES *is to* WINE *as*
 - a) butter *is to* bread
 - b) icing *is to* cake
 - c) fruit *is to* apple
 - d) barley *is to* beer

2. FOUNDATION *is to* BUILDING *as*
 - a) hammer *is to* nail
 - b) root *is to* tree
 - c) cottage *is to* house
 - d) leg *is to* foot

3. PEA *is to* POD *as*
 - a) orange *is to* juice
 - b) petal *is to* flower
 - c) pumpkin *is to* squash
 - d) nut *is to* shell

4. BUS *is to* DEPOT *as*
 - a) ship *is to* ocean
 - b) jet *is to* sky
 - c) motorcycle *is to* sidecar
 - d) train *is to* station

5. SIP *is to* GULP *as*
 - a) chuckle *is to* laugh
 - b) find *is to* loose
 - c) marry *is to* divorce
 - d) hunt *is to* fish

6. ROOSTER *is to* HEN *as*
 - a) pigeon *is to* robin
 - b) dog *is to* puppy
 - c) calf *is to* colt
 - d) gander *is to* goose

7. TRUMPET *is to* INSTRUMENT *as*
 - a) colour *is to* sound
 - b) blow *is to* horn
 - c) chisel *is to* tool
 - d) sing *is to* shout
8. FOOD *is to* HUNGER *as*
 - a) sleep *is to* fatigue
 - b) insurance *is to* premium
 - c) faith *is to* trust
 - d) diaper *is to* baby
9. CARPENTER *is to* HAMMER *as*
 - a) baker *is to* butcher
 - b) dentist *is to* drill
 - c) patient *is to* prescription
 - d) mustard *is to* sausages
10. FROWN *is to* DISPLEASURE *as*
 - a) yawn *is to* fatigue
 - b) hate *is to* love
 - c) snore *is to* relief
 - d) hope *is to* regret
11. ATLAS *is to* MAPS *as*
 - a) road *is to* sign
 - b) album *is to* photographs
 - c) star *is to* planets
 - d) tire *is to* wheel
12. ARTIST *is to* PAINTING *as*
 - a) playwright *is to* rehearsal
 - b) actor *is to* stage
 - c) opera *is to* jazz
 - d) poet *is to* poem
13. HEART *is to* PUMP *as*
 - a) lung *is to* cancer
 - b) tooth *is to* ache
 - c) stomach *is to* digest
 - d) nose *is to* face

14. HATE *is to* DISLIKE *as*
a) victory *is to* defeat
b) allow *is to* forbid
c) omit *is to* include
d) destroy *is to* damage
15. CHIEF *is to* TRIBE *as*
a) office *is to* payroll
b) captain *is to* team
c) employee *is to* vacation
d) oil *is to* lantern
16. AUTOMOBILE *is to* GASOLINE *as*
a) vaccine *is to* infection
b) milk *is to* cow
c) flashlight *is to* batteries
d) keg *is to* beer

Unsolvable analogies

17. SLINK *is to* STEALTH *as*
a) grin *is to* petulance
b) delusion *is to* displeasure
c) disguise *is to* sincerity
d) condescend *is to* admiration
18. METAPHOR *is to* ALLEGORICAL *as*
a) egalitarian *is to* conventional
b) conjecture *is to* empirical
c) cryptic *is to* comprehensible
d) algorithm *is to* tautological
19. BELAY *is to* ORDER *as*
a) calm *is to* still
b) encode *is to* memory
c) enchant *is to* delusion
d) dismiss *is to* concern

20. INTEREST *is to* USURY *as*
- a) frugality *is to* serendipity
 - b) situation *is to* position
 - c) pleasure *is to* lassitude
 - d) thought *is to* experiment

Noncontingent Success Condition

Solvable analogies

1. HILL *is to* MOUNTAIN *as*
 - a) spice *is to* herb
 - b) pond *is to* lake
 - c) tree *is to* lumber
 - d) corn *is to* cob
2. THERMOMETER *is to* HEAT *as*
 - a) bulb *is to* light
 - b) oedometer *is to* waves
 - c) barometer *is* air pressure
 - d) speedometer *is to* radiation
3. MASTER *is to* SERVANT *as*
 - a) oath *is to* verdict
 - b) monarch *is to* subject
 - c) capital *is to* investment
 - d) rent *is to* own
4. POODLE *is to* DOG *as*
 - a) stable *is to* horse
 - b) flock *is to* sheep
 - c) snake *is to* rodent
 - d) cow *is to* mammal

Unsolvable analogies

5. AMASS *is to* WEALTH *as*
 - a) lavish *is to* hope
 - b) profit *is to* liquidate
 - c) mortgage *is to* audit
 - d) disperse *is to* deposit
6. PRECIPICE *is to* STEEPNESS *as*
 - a) apex *is to* concavity
 - b) marsh *is to* aridity
 - c) defile *is to* narrowness
 - d) parallax *is to* angularity

7. REPROACH *is to* CHIDE *as*
 - a) industrious *is to* procrastinate
 - b) parsimony *is to* erudite
 - c) underscore *is to* exclude
 - d) portend *is to* forebear
8. LABYRINTHINE *is to* MAZE *as*
 - a) succinct *is to* verbose
 - b) fastidious *is to* trivial
 - c) torment *is to* solace
 - d) pressure *is to* implosion
9. FLAVOUR *is to* INSIPID *as*
 - a) corpulent *is to* weight
 - b) quaint *is to* trite
 - c) pallid *is to* texture
 - d) vanquish *is to* conquer
10. ANGER *is to* CHOLERIC *as*
 - a) wrath *is to* ironic
 - b) belligerence *is to* indifference
 - c) allegiance *is to* treachery
 - d) malicious *is to* precocious
11. ADVISE *is to* COUNSEL *as*
 - a) delight *is to* chagrin
 - b) dissuade *is to* implore
 - c) apprentice *is to* journeyman
 - d) judgement *is to* standard
12. CARTOGRAPHER *is to* GAZETTEER *as*
 - a) palaeontologist *is to* stratosphere
 - b) apprentice *is to* journeyman
 - c) lexicographer *is to* photograph
 - d) endodontist *is to* kidney
13. ANIMOSITY *is to* FRIEND *as*
 - a) chastity *is to* priest
 - b) practicality *is to* pedagogue
 - c) extravagance *is to* philanthropist
 - d) insularity *is to* hermit

14. EXTORTION *is to* FRAUD *as*
a) compliance *is to* argument
b) motivation *is to* depression
c) impatience *is to* wisdom
d) indulgence *is to* emotion
15. BELAY *is to* ORDER *as*
a) calm *is to* still
b) encode *is to* memory
c) enchant *is to* delusion
d) dismiss *is to* concern
16. ALLOY *is to* METALS *as*
a) invulnerable *is to* fortress
b) vintage *is to* bouquet
c) binding *is to* arbitration
d) cherish *is to* fragile
17. AMUSING *is to* HUMOUROUS *as*
a) bland *is to* clamorous
b) lenient *is to* intractable
c) stoic *is to* narrow-minded
d) intimate *is to* intolerant
18. HERO *is to* ACCOLADE *as*
a) vassal *is to* homage
b) witch *is to* coven
c) cavalier *is to* chivalry
d) liegeman *is to* reverence
19. NARCOTIC *is to* ANALGESIC *as*
a) palliative *is to* panacea
b) antiseptic *is to* syringe
c) antihistamine *is to* amphetamine
d) injection *is to* diagnosis
20. INTEREST *is to* USURY *as*
a) frugality *is to* serendipity
b) situation *is to* position
c) pleasure *is to* lassitude
d) thought *is to* experiment

Study 1

Midpoint Questionnaire

We are interested in your impressions of the first half of the experiment. Please answer the following questions.

1. How difficult did you find the first test?

extremely easy						neither easy nor difficult						extremely difficult
1	2	3	4	5	6	7	8	9	10	11		

2. To what extent would you attribute your performance on the first test to your ability?

not at all						moderately					entirely
1	2	3	4	5	6	7	8	9	10	11	

3. To what extent would you attribute your performance on the first test to luck?

not at all						moderately					entirely
1	2	3	4	5	6	7	8	9	10	11	

4. To what extent would you attribute your performance on the first test to your effort?

not at all						moderately					entirely
1	2	3	4	5	6	7	8	9	10	11	

5. How well do you expect to do on the second test?

very poorly											very well
1	2	3	4	5	6	7	8	9	10	11	

6. What effect do you think the music will have on your performance on the second test?

will greatly impair					no effect						will greatly enhance
	1	2	3	4	5	6	7	8	9	10	11

7. To what extent do you feel your choice of according is known to the experimenter at this moment?

not at all known											completely known
	1	2	3	4	5	6	7	8	9	10	11

8. In your opinion, how likely is it that the experimenter will know your personal score on the second test?

not at all likely											very likely
	1	2	3	4	5	6	7	8	9	10	11

9. Which recording did you select? _____

10. Why did you make this selection? _____

11. Which cassette do you think most people would select and why?

Study 2

Midpoint Questionnaire

We are interested in your impressions of the first half of the experiment. Please answer the following questions.

1. How difficult did you find the first test?

extremely easy	1	2	3	4	5	6	7	8	9	extremely difficult
-------------------	---	---	---	---	---	---	---	---	---	------------------------

2. To what extent would you attribute your performance on the first test to your ability?

not at all	1	2	3	4	5	6	7	8	9	entirely
---------------	---	---	---	---	---	---	---	---	---	----------

3. To what extent would you attribute your performance on the first test to luck?

not at all	1	2	3	4	5	6	7	8	9	entirely
---------------	---	---	---	---	---	---	---	---	---	----------

4. To what extent would you attribute your performance on the first test to your effort?

not at all	1	2	3	4	5	6	7	8	9	entirely
---------------	---	---	---	---	---	---	---	---	---	----------

5. How well do you expect to do on the second test?

very poorly	1	2	3	4	5	6	7	8	9	very well
----------------	---	---	---	---	---	---	---	---	---	-----------

6. What effect do you think the distraction will have on your performance on the second test?

will greatly impair	1	2	3	4	5	6	7	8	9	will greatly enhance
------------------------	---	---	---	---	---	---	---	---	---	-------------------------

7. To what extent do you feel your choice of according (distraction rating) is known to the experimenter at this moment?

not at all known	1	2	3	4	5	6	7	8	9	completely known
---------------------	---	---	---	---	---	---	---	---	---	---------------------

8. In your opinion, how likely is it that the experimenter will know your personal score on the second test?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
----------------------	---	---	---	---	---	---	---	---	---	----------------

Study 3 - Analogies

Test 1

Solvable analogies

1. ARMOURY *is to* WEAPONS *as*
 - a) bow *is to* arrows
 - b) warehouse *is to* merchandise
 - c) hoe *is to* garden
 - d) hospital *is to* clinic
2. TETHER *is to* HORSE *as*
 - a) circus *is to* zoo
 - b) restrain *is to* desire
 - c) handcuffs *is to* prisoner
 - d) forge *is to* document

Unsolvable analogies

3. OMEN *is to* WARNING *as*
 - a) artifact *is to* validity
 - b) order *is to* entropy
 - c) tangible *is to* imagery
 - d) perfidious *is to* insanity
4. AMUSING *is to* HUMOROUS *as*
 - a) bland *is to* clamorous
 - b) lenient *is to* intractable
 - c) stoic *is to* narrow-minded
 - d) intimate *is to* intolerant
5. BIZARRE *is to* EXOTIC *as*
 - a) succinct *is to* concise
 - b) implore *is to* beseech
 - c) surprise *is to* astonish
 - d) exhaustive *is to* cursory

6. CARTOGRAPHER *is to* TOPOGRAPHY *as*
 - a) palaeontologist *is to* stratosphere
 - b) phonographer *is to* linguistics
 - c) lexicographer *is to* literature
 - d) endodontist *is to* kidney
7. ANGER *is to* CHOLERIC *as*
 - a) wrath *is to* ironic
 - b) belligerence *is to* indifference
 - c) allegiance *is to* treachery
 - d) malicious *is to* precocious
8. PUGNACIOUS *is to* CONCILIATORY *as*
 - a) ephemeral *is to* trite
 - b) insularity *is to* segregation
 - c) abstinence *is to* prohibition
 - d) subsume *is to* superordinate
9. SEDULOUS *is to* DILIGENT *as*
 - a) haughty *is to* obsequious
 - b) devious *is to* diverse
 - c) vibrant *is to* palatial
 - d) ambitious *is to* vain
10. METAPHOR *is to* ALLEGORICAL *as*
 - a) outlandish *is to* conventional
 - b) conjecture *is to* empirical
 - c) cryptic *is to* comprehensible
 - d) algorithm *is to* tautological
11. REPROACH *is to* CHIDE *as*
 - a) industrious *is to* procrastinate
 - b) parsimony *is to* erudite
 - c) underscore *is to* exclude
 - d) portend *is to* forebear
12. FLAVOUR *is to* INSIPID *as*
 - a) corpulent *is to* weight
 - b) quaint *is to* trite
 - c) pallid *is to* texture
 - d) vanquish *is to* conquer

13. GRISLY *is to* RECOIL *as*
a) sudden *is to* rebound
b) tainted *is to* purify
c) flagging *is to* invigorate
d) craven *is to* quail
14. FEROCITY *is to* VEHEMENCE *as*
a) exaltation *is to* venerate
b) castigate *is to* punish
c) quibble *is to* dicker
d) sanctify *is to* absolve
15. BRAZEN *is to* BRAVADO *as*
a) preclude *is to* preempt
b) gaudy *is to* mawkish
c) maverick *is to* impetuous
d) honesty *is to* guile

Test 2

Solvable analogies

1. SNOW *is to* DRIFT *as*
 - a) sand *is to* dune
 - b) wind *is to* rain
 - c) desert *is to* oasis
 - d) rug *is to* carpet
2. ELECTRON *is to* ATOM *as*
 - a) individual *is to* person
 - b) knight *is to* armour
 - c) planet *is to* solar system
 - d) sound *is to* music

Unsolvable analogies

3. THEOREM *is to* PROVERB *as*
 - a) fact *is to* fiction
 - b) history *is to* legend
 - c) conclusion *is to* speculation
 - d) chance *is to* certainty
4. OBEDIENCE *is to* INSUBORDINATION *as*
 - a) similarity *is to* friendship
 - b) leadership *is to* tyranny
 - c) learning *is to* knowledge
 - d) penance *is to* salvation
5. HERO *is to* PRAISE *as*
 - a) vassal *is to* homage
 - b) witch *is to* coven
 - c) cavalier *is to* chivalry
 - d) liegeman *is to* reverence

6. SPARK *is to* BLAZE *as*
 - a) cleanse *is to* gash
 - b) suture *is to* puncture
 - c) superfluous *is to* unnecessary
 - d) thoughtful *is to* pensive

7. HUGE *is to* GIGANTIC *as*
 - a) invulnerable *is to* impenetrable
 - b) deception *is to* obfuscation
 - c) disastrous *is to* catastrophic
 - d) impossible *is to* improbable

8. ADVISE *is to* COUNSEL *as*
 - a) delight *is to* chagrin
 - b) dissuade *is to* implore
 - c) apprentice *is to* journeyman
 - d) judgement *is to* standard

9. IMPULSIVE *is to* PREMEDITATE *as*
 - a) upright *is to* integrity
 - b) cutthroat *is to* competition
 - c) backward *is to* direction
 - d) underlying *is to* foundation

10. SLINK *is to* STEALTH *as*
 - a) grin *is to* petulance
 - b) delusion *is to* displeasure
 - c) disguise *is to* sincerity
 - d) condescend *is to* admiration

11. EXTORTION *is to* FRAUD *as*
 - a) compliance *is to* argument
 - b) motivation *is to* depression
 - c) impatience *is to* wisdom
 - d) indulgence *is to* emotion

12. PRECIPICE *is to* STEEPNESS *as*
a) apex *is to* concavity
b) marsh *is to* aridity
c) defile *is to* narrowness
d) parallax *is to* angularity
13. LABYRINTHINE *is to* MAZE *as*
a) succinct *is to* verbose
b) fastidious *is to* trivial
c) torment *is to* solace
d) pressure *is to* implosion
14. AUSTERE *is to* STYLE *as*
a) affluent *is to* wealth
b) subservient *is to* demeanour
c) inspirational *is to* faith
d) pragmatic *is to* speech
15. TITANIC *is to* MINUSCULE *as*
a) gigantic *is to* monstrous
b) disastrous *is to* ingenious
c) oceanic *is to* aquatic
d) powerful *is to* wicked

Study 3

Midpoint Questionnaire

We are interested in your impression of the experiment so far. Please answer the following questions.

1. How difficult did you find the first test?

extremely easy	1	2	3	4	5	6	7	8	9	extremely difficult
-------------------	---	---	---	---	---	---	---	---	---	------------------------

2. How certain are you that your score on the first test was a result of your intelligence?

not at all certain	1	2	3	4	5	6	7	8	9	very certain
-----------------------	---	---	---	---	---	---	---	---	---	-----------------

3. How certain are you that your performance on the first test was a result of luck?

not at all certain	1	2	3	4	5	6	7	8	9	very certain
-----------------------	---	---	---	---	---	---	---	---	---	-----------------

4. How certain are you that your performance on the first test was a result of your effort?

not at all certain	1	2	3	4	5	6	7	8	9	very certain
-----------------------	---	---	---	---	---	---	---	---	---	-----------------

5. How well do you expect to do on the second test?

very poorly	1	2	3	4	5	6	7	8	9	very well
----------------	---	---	---	---	---	---	---	---	---	--------------

6. To what extent do you think the noise on the tape will impair your performance on the second test?

will
have no
effect
on performance

1 2 3 4 5 6 7 8 9

will
greatly
impair
performance

Attribution Questionnaire

Behavioural Self-handicapping Condition

We are interested in your impressions of the second half of the experiment. Please answer the following questions.

1. How difficult did you find the second test?

extremely easy	1	2	3	4	5	6	7	8	9	extremely difficult
-------------------	---	---	---	---	---	---	---	---	---	------------------------

2. To what extent would you attribute your performance on the second test to your ability?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

3. To what extent would you attribute your performance on the second test to luck?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

4. To what extent would you attribute your performance on the second test to your effort?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

5. To what extent would you attribute your performance on the second test to the distracting effects of the tape?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

6. In your opinion, how likely is it that the experimenter knows or will find out which tape you selected for the second half of the study?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
----------------------	---	---	---	---	---	---	---	---	---	----------------

7. How likely is it that the experimenter will find your actual score on the second test?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
----------------------	---	---	---	---	---	---	---	---	---	----------------

Attribution Questionnaire

Claimed Self-handicapping Condition

We are interested in your impression of the second half of the experiment. Please answer the following questions.

1. How difficult did you find the second test?

extremely easy	1	2	3	4	5	6	7	8	9	extremely difficult
-------------------	---	---	---	---	---	---	---	---	---	------------------------

2. To what extent would you attribute your performance on the second test to your ability?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

3. To what extent would you attribute your performance on the second test to luck?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

4. To what extent would you attribute your performance on the second test to your effort?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

5. To what extent would you attribute your performance on the second test to the distracting effects of the tape?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

6. In your opinion, how likely is it that the experimenter knows or will find out the distraction rating you assigned to the tape when you listened to it briefly before your took the second test?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
----------------------	---	---	---	---	---	---	---	---	---	----------------

7. How likely is it that the experimenter knows or will find out how well you (personally) scored on the second test?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
----------------------	---	---	---	---	---	---	---	---	---	----------------

Attribution Questionnaire

Control Condition

We are interested in your impression of the second half of the experiment. Please answer the following questions.

1. How difficult did you find the second test?

extremely easy	1	2	3	4	5	6	7	8	9	extremely difficult
-------------------	---	---	---	---	---	---	---	---	---	------------------------

2. To what extent would you attribute your performance on the second test to your ability?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

3. To what extent would you attribute your performance on the second test to luck?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

4. To what extent would you attribute your performance on the second test to your effort?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

5. To what extent would you attribute your performance on the second test to the distracting effects of the tape?

not at all	1	2	3	4	5	6	7	8	9	entirely
------------	---	---	---	---	---	---	---	---	---	----------

6. How likely is it that the experimenter knows or will find out how well you (personally) scored on the second test?

not at all likely	1	2	3	4	5	6	7	8	9	very likely
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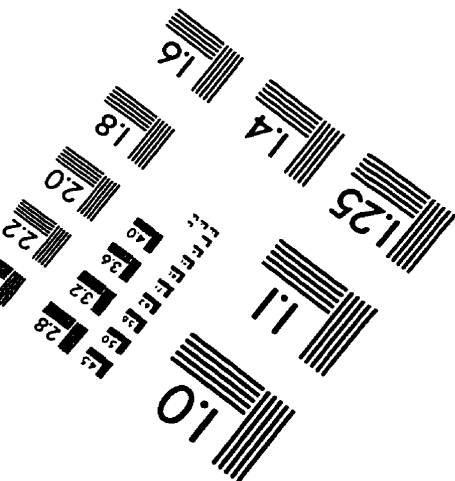
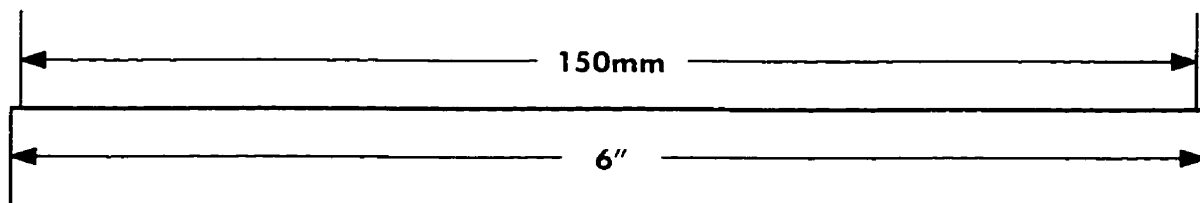
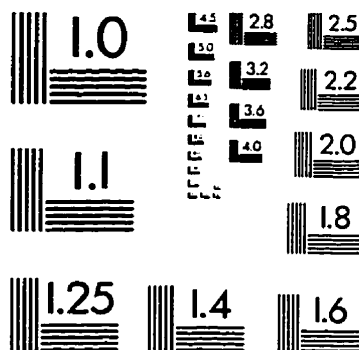
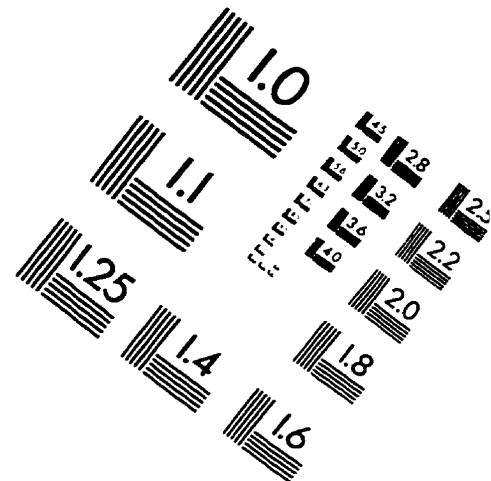
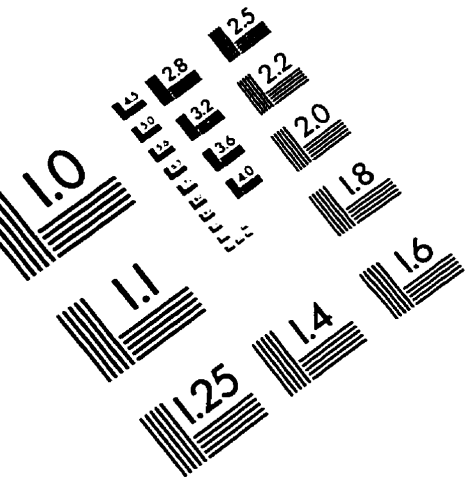
Short Self-handicapping Scale

Please indicate the extent to which the following statements apply to you generally.
Use the response scale given below.

- | | |
|--------------------------|-----------------------|
| 1 = Disagree very much | 4 = Agree a little |
| 2 = Disagree pretty much | 5 = Agree pretty much |
| 3 = Disagree a little | 6 = Agree very much |

- | | | | | | | | |
|-----|---------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|
| 1. | I tend to make excuses when I do something wrong. | 1 | 2 | 3 | 4 | 5 | 6 |
| 2. | I tend to put things off until the last moment. | 1 | 2 | 3 | 4 | 5 | 6 |
| 3. | I suppose I feel "under the weather" more often than most people. | 1 | 2 | 3 | 4 | 5 | 6 |
| 4. | I always try to do my best, no matter what. | 1 | 2 | 3 | 4 | 5 | 6 |
| 5. | I am easily distracted by noises or my own daydreaming when I try to read. | 1 | 2 | 3 | 4 | 5 | 6 |
| 6. | I try not to get too intensely involved in competitive activities so it won't hurt too much if I lose or do poorly. | 1 | 2 | 3 | 4 | 5 | 6 |
| 7. | I would do a lot better if I tried harder. | 1 | 2 | 3 | 4 | 5 | 6 |
| 8. | I sometimes enjoy being mildly ill for a day or two. | 1 | 2 | 3 | 4 | 5 | 6 |
| 9. | I tend to rationalize when I don't live up to others' expectations. | 1 | 2 | 3 | 4 | 5 | 6 |
| 10. | I overindulge in food and drink more often than I should. | 1 | 2 | 3 | 4 | 5 | 6 |

IMAGE EVALUATION TEST TARGET (QA-3)



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