Considerable attention in recent years has focused on the consequences of social comparisons and has suggested that learning that one's outcomes or abilities compare unfavorably to others' is an unpleasant, if not painful experience. Indeed, upward comparisons have been shown to result in negative affect, loss of self-esteem, stress symptoms, and frustration with one's outcomes. Downward comparisons have been purported to result in positive affective consequences. Seven variables appear to moderate the effects of comparisons: dependent measures used; degree of self-esteem threat; the point in the coping process in which comparisons occur; justifiability of outcome; attribute importance; similarity of comparison; and perceived control. In this study of perceived control the affective consequences of upward and downward social comparisons were examined. College students who failed a test were led to believe that it was either possible or impossible to improve performance on a subsequent test. They were then exposed to either an upward or downward social comparison. Participants exposed to upward comparison information who believed they could not improve their performance experienced greater depressive affect and greater hostility than all others. Results suggest that exposure to upward comparison is affectively and behaviorally debilitating only when perceived control is low. Examining the impact of moderating variables appears to be a fruitful approach to studying social comparisons and one that should be continued.
Affective and Behavioral Consequences of Social Comparison

Maria Testa and Brenda Major

Considerable research attention in recent years has focused on the consequences of social comparisons. Much of this research has suggested that learning that one's outcomes or abilities compare unfavorably to others' is an unpleasant, if not painful experience. Indeed, upward comparisons have been shown to result in negative affect (Pleban & Tesser, 1981), loss of self-esteem (Morse & Gergen, 1970), stress symptoms (Crosby, 1976), jealousy (Salovey & Rodin, 1984) and frustration with one's outcomes (Martin, 1986). Not surprisingly, upward comparison information is generally avoided following failure (Pyszczynski, Greenberg & LaPrelle, 1985). Downward comparisons, in contrast, have been purported to result in positive affective consequences, including enhancement of self-esteem following failure (Wills, 1981), facilitation of coping with victimization (Taylor, Wood & Lichtman, 1983), and promotion of contentment in the face of unjust treatment (Crosby, 1976).

If one were to quickly summarize the social comparison literature, one might be tempted to draw the conclusion that downward comparisons are "good" for the self and upward comparisons are "bad". This would be an oversimplification however, for there is considerable research that suggests that the consequences of upward comparisons are not always negative and, in fact, in many cases, may be positive. Similarly, the effects of downward comparisons are not always positive. We suggest that the effects of upward and downward comparisons are determined by several moderating variables. In this talk tonight I will discuss variables which appear to moderate the
effects of upward and downward comparisons. In addition, I will be presenting data that we have collected regarding one of these moderators. (See list of moderators).

First, although not truly a moderating variable, the dependent measures used may determine the conclusions drawn from many social comparison studies. Studies touting the benefits of downward comparisons have tended to focus on the effective consequences of comparisons; for example, Morse & Gergen demonstrated increased feelings of self-worth following downward comparison but diminished feelings of self-worth following upward comparisons. When behavioral consequences are considered, however, there is evidence that upward comparisons have beneficial effects on behavior. For example, upward comparisons may lead to feelings of relative deprivation and dissatisfaction with one’s own outcomes if one is underpaid or unfairly treated. However, there is evidence that upward comparisons may also promote striving and lead to constructive social change (e.g. Crosby, 1976). Bandura and his colleagues have provided numerous demonstrations of the effectiveness of exposure to successful models for improving personal performance. For example, in a study by Bandura, Adams, & Beyer (1977), snake phobias who were exposed to upward comparison information via watching a model successfully handle a snake experienced increased efficacy expectations, decreased fear arousal, and increased approach behavior.

The degree of self-esteem threat may also be a moderator of both interest in and consequences of comparisons following a negative event. According to Folkman (1984), a person who feels threatened following a negative event is likely to engage in emotion-focused coping strategies
often at the expense of problem-focused coping. In contrast, a person who appraises a situation as challenging rather than threatening is more likely to employ problem-focused coping strategies. If we extrapolate to comparison processes, we might expect that when threat is perceived as high, downward comparisons, because of their self-enhancing capabilities, should facilitate adaptation. When threat is low, we would not expect downward comparisons to be so beneficial. Under conditions of challenge or low threat, individuals are more likely to seek and to benefit from either self-evaluative information or upward comparisons which motivate problem-focused strategies.

There is some evidence that supports this hypothesis. For example, immediately following the occurrence of a negative event, when self-esteem threat is presumably very high, there is considerable interest in downward comparison information (e.g. Pyszczynski, Greenberg & LaPrelle, 1985; Levine & Green, 1984; Hakmiller, 1966). There is also some evidence that this downward comparison is beneficial in restoring self-esteem (Crocker & Gallo, 1985; Lemyre & Smith, 1985). As self-esteem threat diminishes with time, the desire for and the beneficial effects of downward comparisons appear to diminish. For example, Schulz and Decker (1985) studied spinal cord injured patients several years following their injuries and found little evidence of downward comparison in these patients. We might assume that adaptation was more important than self-enhancement for these individuals. Finally, Bandura’s studies of phobics undergoing treatment found that upward comparisons had beneficial effects in encouraging patients to overcome their fears. Thus, among people who appraised their situation as one of challenge more than of threat, upward comparisons were especially helpful in motivating behavior change.
As threat diminishes following the experience of a negative life event, comparisons appear to become less defensive. However, when a threat is anticipated rather than already experienced this pattern does not appear to hold. Thus, we suggest that the point in the coping process in which comparisons occur - that is pre-threat or post threat - may also be seen as moderator of the effects of comparisons. When a threat is anticipated rather than already experienced, downward comparisons are likely to be threatening because they suggest the possibility that the negative outcomes that others have experienced may befall the self as well. For example, Wood, Taylor, and Lichtman (1985) and Coates and Winston (1983) found that cancer patients and rape victims were very threatened by downward comparisons with others who had experienced reoccurrences of rape or cancer, their worst fears. When a negative event is feared, we might imagine that upward comparisons would be most beneficial. For example, people facing surgery are likely to feel encouraged by comparisons with others who are coping well following the operation.

Another moderating variable that has been suggested by both Mark & Folger (1984) and by Martin (1986) is the justifiability of the outcome. Justifiability is the perceived appropriateness or moral acceptibility of an outcome. When an outcome is considered justifiable, or morally acceptable, upward comparisons are unlikely to have a negative impact. Martin (1986) found that feminist secretaries were more distressed by occupational segregation and job discrimination, than secretaries with a traditional orientation. This latter group presumably felt that their treatment was justifiable. The process of finding meaning in a
negative event, for example as discussed in Taylor's work on breast cancer patients, may also be seen as promoting justifiability. Victims who believe that they were stricken as part of God's plan, for some higher purpose, are less likely to feel distressed upon comparison with healthy people, and in fact may not even make such comparisons. Analogously, we might expect that with respect to social comparison of abilities, upward comparisons would have little negative impact if they involved dimensions in which poor performance could be justified, for example, by the presence of a handicap or some other external or nonability attribution for failure.

Attribute importance also appears to moderate the effects of social comparisons, especially upward comparisons. According to Tesser, upward comparisons involving self-relevant abilities are much more threatening than those involving less important abilities. Similarly, Salovey and Rodin (1984) found that college students were distressed by upward comparisons with a successful student only when they had been outperformed on a self-relevant task. Bers and Rodin (1984) found similar results using children.

There is also considerable evidence that the similarity of comparison other moderates the effects of upward and downward comparisons. Tesser provides evidence that upward comparisons with close, similar others, such as siblings or friends, are likely to be threatening. However, if individuals perceive that they have the capability of improving performance, upward comparisons with similar others may be motivational and lead to improved performance. Seta (1982), for example, found that subjects performed best when exposed to a co-actor who was performing slightly better than the self, as opposed to much better or much worse. In contrast, upward comparisons with
dissimilar others are likely to be less important. For example, Wood, Taylor, & Lichtman (1985) found that for breast cancer patients, comparisons with "supercopers", famous women who were presented in the media as coping extremely well, were generally deemed irrelevant and hence were not especially motivating nor threatening. Tesser suggests that under certain circumstances, upward comparisons with distant others, for example, with a famous ball player who came from one's hometown, may be mildly self-enhancing.

Finally, we suggest that perceived control over an outcome is a critical moderating variable in determining the impact of comparison information. Whereas upward comparison information regarding pay is likely to be motivational for an up and coming young executive who feels capable of increasing his status and salary, it may prove disheartening to a middle-aged or minority worker who feels unable to achieve a higher position or more pay. Thus, we propose that for individuals who feel that they have control over a situation, exposure to upward comparison is likely to motivate behavior while causing little affective distress. In contrast, we propose that for individuals who feel that a negative outcome cannot be changed, i.e. that it is out of their control, exposure to upward comparison information is likely to be both affectively distressing and behaviorally debilitating, exacerbating tendencies toward learned helplessness (Abramson, Seligman, & Teasdale, 1978).

We examined these predictions regarding perceived control in a recent study in which we examined both the affective and behavioral consequences of upward and downward social comparisons. In this study, participants who failed an initial test were led to believe that it was
either possible or impossible to improve performance on a subsequent test. They were then were exposed to either upward or downward comparison information. Post-comparison affect and persistence, and interest in additional comparison were assessed.

We predicted that the consequences of social comparison information following failure would be moderated by perceived control. Specifically, our first prediction was that individuals exposed to better-off others (upward comparisons) following failure would show more negative affect relative to individuals exposed to worse-off others (downward comparison) primarily when they also believed that they had no control, i.e. could not improve their performance. Second, we predicted that individuals who were exposed to upward comparison information and who believed that improvement was within their control, would show the most behavioral persistence on a subsequent task, whereas those who were exposed to better off others and who believed that they could not improve would show the least behavioral persistence. The former effect could be thought of as a "modeling" effect, whereas the latter would be similar to a "helplessness" effect. Finally, we predicted, consistent with previous research, such as Pyszczynski, Greenberg and LaPrelle (1985) that individuals exposed to worse-off others would be more likely than those exposed to better-off others to seek additional comparison information regardless of their beliefs regarding the possibility of improvement.

The students who participated in this study first wrote an essay which was ostensibly scored by the experimenter. All subjects were then given failure feedback and told that their essay merited only 12/20 points. The control manipulation was then delivered. In the improvement possible condition, participants were told that the next
test they were about to take was not very correlated with the first test and that in fact, it is possible to do poorly on one test and well on the other. Further they were told that practice and studying could improve scores. In the no control condition, they were told the opposite; that tests were highly correlated and that there was little they could do to improve their scores.

They were then shown upward or downward comparison information. This consisted of seeing cards listing the scores of 5 recent (bogus) participants. In the upward comparison condition the scores averaged about 17 whereas in the low condition they averaged about 8. They were told that they could request more cards if they wanted, since there were about 50 more cards available. In order to control the amount of information that participants saw, those who requested cards were told apologetically by the experimenter that the cards seemed to be misplaced but that he or she should start on the next task while the experimenter continued to look.

The second task consisted of listing arguments against the 21-year-old drinking age. Participants were told that they would have as much time as they wanted to work on this task. Before beginning they completed a brief mood questionnaire. The amount of time subjects spent on the second task constituted the measure of persistence.

The affect scale we used consisted of 12 items taken from the 3 subscales of the MAACL. There were 2 positive and 2 negative affect items on each of the subscales - depression, hostility, and anxiety. Consistent with our first prediction, participants who were exposed to upward comparison information and believed they could not improve their performance experienced greater depressive affect and greater
hostility than all others. (See Table 1). Both of these interactions were statistically significant. There were no effects involving anxiety. In addition, those same people who were exposed to upward comparison but believed they had no control persisted significantly less than other participants on the second task. We had predicted that those exposed to upward comparisons who believed they had control would persist especially long but they worked only slightly and not significantly longer than others.

Finally, consistent with our third prediction, participants who were exposed to downward comparison information requested more additional cards than those exposed to upward comparison information. (See Table 2). Although those exposed to downward comparisons who believed they could not improve requested the most cards, the interaction was not significant.

Our results suggest that exposure to upward comparison is affectively and behaviorally debilitating only when perceived control is low. Upward comparisons have no negative consequences when people believe that they can control their outcomes, and under some circumstances may have positive motivational consequences.

Examining the impact of moderating variables appears to be a fruitful approach to studying social comparisons and one that should be continued. There is considerable room for research demonstrating the effects of the variables which have been suggested as moderators. In addition, there are several questions and issues that deserve attention. First, the moderating variables need to be clearly defined. For example, on what basis is a comparison other considered similar or dissimilar? How is exactly importance or justifiability defined? Second, as suggested in many of the examples given in this
presentation, the moderating variables appear to interact with each other. Research should focus on the interactive effects of these proposed moderators as well as on their effects on the impact of comparisons. Third, future research should distinguish comparisons of abilities from comparisons of outcomes to determine whether the effects of the various moderators differ. Although in many cases the effects may be similar, abilities are often considered to be more under one's personal control than are many outcomes, and hence we might expect some differences.

Finally, we suggest that more attention be directed toward placing comparison research into the larger body of coping research and also toward understanding the mechanisms by which comparison processes influence adaptation to negative events. With regard to the first issue, we suggest that downward comparison processes may be seen as a type of emotion-focused coping as discussed by Folkman & Lazarus. As such, downward comparisons appear to be most beneficial in the early stages following a negative event when threat is high, and by people who perceive little control over their outcomes. Folkman suggests that, if successful, downward comparisons, as a type of emotion-focused coping, can restore a sense of meaning and cognitive control. We suggest that upward comparisons function as a type of problem-focused coping strategy, and hence are most beneficial under conditions in which change is possible.

In situations which are amenable to change, we suggest that upward comparisons are more beneficial than downward comparisons because they lead to increased perceptions of personal control and self-efficacy. That is, by seeing another person succeed, especially a similar other,
people realize that if he or she can do it, then I can do it too. In contrast, in situations in which change is possible, downward comparisons may inhibit behavioral change. Information that the efforts of others have been unsuccessful in changing their outcomes may suggest that it is hardly worth trying. We're planning to test these ideas in a study of heart patients who are beginning a exercise rehabilitation program following bypass surgery. We also hope to examine the moderating effects of similarity and initial perceptions of control in other studies using this population.
References


