CHAPTER 19

SOCIAL COMPARISON PROCESSES IN COPING AND HEALTH

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This chapter considers the role of social comparison in coping with adversity. The field of social and clinical psychology encompasses a number of stressors that present challenges to well-being, such as depression, physical disability, and psychological illness. Social comparison processes are a type of cognitive coping mechanism that may be used, possibly with other coping mechanisms, in the attempt to restore and maintain psychological well-being. The purpose of this chapter is to discuss the theory of social comparison and the role of comparison processes in coping with problems that are of concern for social and clinical psychology.

Research on social comparison has undergone considerable development in recent years (Suls & Wills, in press). The work originally was based in laboratory studies investigating the role of social comparison in self-evaluation of abilities and opinions (see Latané, 1966; Suls & Miller, 1977). In recent years attention has shifted to the role of social comparison in self-esteem maintenance, because theory has suggested that social comparison is influenced by self-esteem concerns (Goethals, Arrowood, Wills, Suls, & Wheeler, 1986). This work provides a theoretical base for research in field studies, and this chapter discusses how social comparison is relevant for coping and adjustment in clinical and health settings.

This chapter begins with a presentation of the theory of social comparison, including upward comparison and downward comparison. I consider the current evidential base for social comparison theory and then discuss applications to four types of clinical problems. A final section summarizes the current state of research and suggests some additional questions about comparison and adjustment.

THEORY OF SOCIAL COMPARISON

Social comparison theory considers how a person’s perceptions of his or her attributes are influenced through comparison with those of other persons. It is assumed that people compare with others in the social environment, that selection of comparison targets is predictable from specific principles, and that comparison may have effects
on subjective well-being. The derivations from these postulates have been developed in several bodies of theory that proceed from somewhat different starting points.

Upward Comparison

Social comparison theory was originated by Leon Festinger in an attempt to understand aspiration-level and conformity processes in small group settings (cf. Festinger, 1950; Festinger, Schachter, & Back, 1950). The original theory was based on the proposition that some personal attributes (e.g., abilities, opinions) cannot be evaluated easily through objective measures; therefore, comparison with other people is useful to determine one's standing on a particular dimension. Through comparison with others, Festinger posited, people can obtain greater certainty concerning their standing on a particular dimension. Accurate evaluation was assumed to be the principal goal of social comparison and, by implication, for effective coping and adjustment.

Several hypotheses formed the basis of the theory. The principles are worth stating in detail, as they have stimulated much research.

1. There is a drive to evaluate one's opinions and abilities. This is the primary postulate of the theory and is known as the "drive for comparison." It was assumed that people desire accurate information about the level of their abilities and the sharing of their opinions; hence, comparison will be a common process.

2. There is a tendency to compare with similar others. It was posited that comparison with a target who is very different in ability or opinion does not provide useful information in evaluating the level of one's own attributes. Therefore, the prediction is that people will select comparison targets who are close to their own ability or opinion; a classic example is a tennis player who compares with other players who are in his or her own league, not with either tennis pros or rank amateurs.

3. There is a unidirectional drive upward in the case of abilities, which is absent in the case of opinions. Festinger assumed that cultural pressures for performance would lead people to compare with others of higher ability, because this could lead to self-improvement. This is principle known as "upward comparison." However, it was suggested that this would not be true for opinions because there is no standard for what is a better or worse opinion, the only real criterion being that the opinion is similar to one's own.

4. When relevant comparisons are available, subjective evaluations of abilities and opinions will become more certain and more stable. This corollary follows from the postulate that comparison is pursued in order to obtain greater confidence in self-evaluations.

Support for the theory initially was based on studies of aspiration level, which showed that subjects' level of aspiration was changed by performance feedback only when subjects received information about performances similar to their own (Festinger, 1954). More specific support was provided by a group of studies that gave a subject some minimal feedback about his or her performance, presented the subject with brief information about the performances of several other people, and then examined specific social comparison choices or consequences of comparison. These studies indicated that subjects tend to select similar others for comparison (e.g., Wheeler, 1966; Thornton & Arrowood, 1966), and suggested that comparison produces increased certainty about one's attributes (Radloff, 1966; cf. Wrightsman, 1960). This work provided impressive support for Festinger's formulation and the view of social comparison it represented.

Studies with sophisticated designs subsequently tested other aspects of the theory. Broadening the range of comparison choices showed that when the dimension of comparison was unfamiliar, people tend to choose first the top score in the distribution, then the bottom score, in order to establish the range of the attribute (Wheeler et al., 1969). These findings on range-seeking were extended by a number of studies showing that under relatively neutral conditions, subjects show a preference for comparison with similar and better-off others (e.g., Brickman & Berman, 1971; Gruder, 1971; Nosanchuk & Erickson, 1985; Wilson & Benner, 1971).

Downward Comparison

Social comparison theory as originally formulated was based on situations in which people were in relatively good standing on an attribute. Another question is, How is comparison pursued in conditions where the person is not relatively well off? The theory of downward comparison was developed from the belief that comparison may operate differently when one departs from relatively
neutral conditions. It addresses how comparison operates in conditions where people are not relatively well off (i.e., they are distressed or threatened).

Downward comparison theory derives from the postulate that subjective well-being may be improved through comparison with another person who is not well off (Wills, 1981). In conditions where people are temporarily or chronically distressed and where problems are not easily remediable through instrumental action, subjective appraisal of one's own situation may be altered if comparison targets are available who also are stressed. The comparison between the self and the other may enable the person to feel better about his or her own situation. The strong version of the theory posits comparison with a target who is worse off than the self (downward comparison); the weak version posits that subjective well-being may be improved through comparison with another who is distressed, but at the same level as the self (lateral comparison).

The basic principle of downward comparison produces several corollaries, which are summarized as follows:

1. Comparison choices will differ in situations where people are stressed or threatened, compared with relatively neutral conditions.
2. When people are stressed they will show a tendency to compare with relatively worse-off others.
3. Downward or lateral comparison will produce an increase in subjective well-being.
4. People are ambivalent about downward comparison.

The initial support for downward comparison theory was based on a range of evidence. From laboratory research, a direct test was a study by Hakmiller (1966), in which subjects were given negative versus positive personality feedback and then were given the opportunity to obtain information about personality attributes (ranging from very maladjusted to very adjusted) of five other people. Results indicated that subjects given negative personality feedback showed a shift toward comparison with a worse-off other, and in the high-threat condition the majority of comparison choices (54%) were with the worst-off comparison target. Similar shifts in comparison behavior as a function of situational stress or low self-esteem were observed in studies by Friend and Gilbert (1973) and Wilson and Benner (1971). These findings supported the hypothesis that when people are distressed, there is a tendency to shift from upward to downward comparison.

Other evidence from a range of sources was consistent with the postulates of downward comparison theory. In studies of fear-affiliation, for example, it was noted that distressed subjects showed a preference for affiliation with other people who were worse off than themselves (Darley & Aronson, 1966; Schachter, 1959; Zimbardo & Formica, 1963), and Bell (1978) showed that subjects in a negative mood, given a range of affiliation choices, preferred affiliation with people in a more negative mood. Indirect evidence in several studies that pitted similarity against downward comparison suggested that similarity was not the crucial variable in the effect (Bell, 1978; Hakmiller, 1966). Additionally, a number of studies with various paradigms indicated that downward comparison effects occur only when the comparison target is exposed to the same stressor as the subject; when the target person is not stressed, different and typically opposite results occur (e.g., Berkowitz & Knurek, 1969; Buck & Parke, 1972; Feshbach & Singer, 1957; Kenrick & Johnson, 1979; Rotton, Barry, Frey, & Soler, 1978).

Also, mood change was observed in some studies. These included studies using paradigms from fear-affiliation (Amoroso & Walters, 1969; Kiesler, 1966), comparison choice (Hakmiller, 1966), and projection (Bennett & Holmes, 1975; Burish & Houston, 1979). When measures of affect are obtained from stressed subjects before and after exposure to a downward comparison target, results show a decrease in negative affect from pre-to postmeasures (i.e., an increase in subjective well-being).

It is postulated that people are ambivalent about downward comparison. Such comparison goes against normative prescriptions and empathic tendencies of concern with other people (e.g., Berkowitz, 1972); so the opportunity for comparison presents a person with some conflict between these tendencies and the potential benefits of downward comparison. Also, the motive for self-esteem maintenance may conflict somewhat with the desire for accurate evaluation of abilities and more certain self-understanding. These considerations suggest that people's attitudes toward downward comparison will show some contradictions.

This ambivalence was exemplified in a classic
study by Brickman (1975) in which subjects participated in groups that contained either a negatively skewed distribution of outcomes (i.e., one member was worse off than the subject), an equal distribution of outcomes, or a positively skewed distribution (i.e., one member was better off than the subject). Results showed that subjects expressed greater satisfaction with their own scores in the first condition, which represents a downward comparison situation. At the same time, they rated this condition as most unfair with respect to distribution of outcomes (even though outcomes supposedly were attributable to subjects’ own performances). Thus, subjects’ ratings displayed ambivalence about comparison situations. Subjects did not necessarily endorse negative outcomes to others as a philosophically desirable basis for producing happiness, but they were more satisfied in a situation where one member was worse off and less satisfied in a situation where one member was better off.

**Forced Comparison**

Models of upward and downward comparison have coexisted with several related models of social relations that focus on negative discrepancies between self and other. These include models of equity (Adams, 1965; Berkowitz & Walster, 1976) and relative deprivation (Crozy, 1976; Davis, 1959). Influential papers by Brickman and Campbell (1971) and Brickman and Bulman (1977) discussed the potential costs of social comparison for interpersonal and intergroup relations. While these models address somewhat different issues, they all concern situations in which a person faces comparison with others who are better off, either because of their own efforts or through social factors that produce vested advantage. Additionally, Tesser’s model of self-evaluation maintenance addresses issues of comparison in close relationships (Tesser, 1980; Tesser, Campbell, & Smith, 1984) and delineates processes that may influence reactions to comparison in ongoing relationships (Tesser, 1986). A related model by Salovey and Rodin (1984) considers the role of social comparison in interpersonal jealousy and envy (Salovey, in press).

Because of the variety of models, there is no simple summarization of their postulates and derivations. One common principle is the proposition that people will be dissatisfied when they make a comparison with other people who are better off. There is considerable evidence for this proposition (Cook, Crosby, & Hennigan, 1977; Pettigrew, 1976; Tesser, 1988). Other principles relevant for forced comparisons are that dissatisfaction is influenced by the magnitude of the discrepancy between self and other (large), the similarity between the self and the other (similar), and the centrality of the comparison dimension for self-concept (central rather than peripheral).

The fact that social comparison may produce dissatisfaction is of considerable importance and raises difficulties for other social comparison theories, which have yet to be resolved. At the same time there are some unresolved paradoxes for forced comparison theories. A primary question derives from the observation that inequity is typical in societies, but dissatisfaction is not. This has led to suggestions that people may deal with unequal distributions by defining others as dissimilar, finding other dimensions on which the self is relatively advantaged, or altering the perceived centrality of the comparison dimension. Other mechanisms are possible, such as simply avoiding comparison. However, direct evidence regarding these possible avenues for dissonance reduction currently is lacking.

The postulates of upward and downward comparison have both received support. In relatively neutral conditions, people compare with similar others and with others who are better off than themselves. These replicated findings, together with confirmation of other predictions, have supported the basic validity of Festinger’s theory. Correspondingly, it is found that when people are stressed or threatened, their comparison choices tend to shift from upward to downward, and there is evidence that this type of comparison produces an increase in subjective well-being. Hence, downward comparison also has support. There is also a good deal of evidence for the proposition that comparison with better-off others may produce dissatisfaction, but the relation of forced comparison to other types of comparison theory is not well understood at present.

**CURRENT RESEARCH**

Continuing research in social comparison has supported and elaborated the basic theory while extending the evidential base for social comparison processes. In the following sections, I consider recent basic research that has extended the scope of social comparison theory.
Related Attributes

The theory of social comparison was extended by considering the attributional basis of judgments about performance. When a particular performance is observed, the performance may be attributed to the ability of the actor but also may be attributed to other attributes that are related to the performance, such as effort. Following this line of thinking, the statement of related-attributes comparison by Goethals and Darley (1977) predicted that in addition to comparisons on a dimension of interest, people also would seek comparison on other dimensions that were related to the performance.

Research on related attributes has shown that such comparisons are relevant (e.g., Gastorf & Suls, 1978; Suls, Gastorf, & Lawhon, 1978; Zanna, Goethals, & Hill, 1975). For example, Gastorf and Suls (1978) gave subjects feedback about their scores on a test together with equal or upward comparison information about the scores of other subjects, and then assessed the subject's certainty about his or her own ability. In the first study, subjects who were given performance comparison information did not show any significant change in certainty. In a second study, however, when undergraduate subjects were given feedback about their performance together with information about a related attribute of the comparison person (undergraduate student vs. graduate student), they did show increased certainty. This supported the related-attributes hypothesis.

Similarly, Wheeler, Koestner, and Driver (1982) formulated groups of nine subjects, gave subjects feedback about their own scores on a task (below midrank in the group) together with the distribution of scores, and then gave them the opportunity to select information about other members who represented various combinations of performance level and another attribute (amount of practice). The belief that the additional attribute either was or was not related to performance was also manipulated. Results indicated that when true related-attributes information was available (i.e., the attribute was related to performance), subjects rated their own performance higher, apparently because they could attribute their relatively poor performance to lack of practice. In this condition they also showed more interest in comparison information, apparently because they believed the comparison would be more informative. An ambiguity in these data, however, was that subjects showed a preference for similar comparison, choosing the person just above themselves, irrespective of the related-attribute manipulation. Hence the role of similarity as a primary principle in comparison was still supported.

Another ambiguity in related-attributes research concerns whether the additional attributes must be related to performance. In several studies, subjects have shown a preference for comparison targets who are similar on general attributes (e.g., sex, age) even when the attributes supposedly are not related to performance (Feldman & Ruble, 1981; Miller, 1982; Suls, Gaes, & Gastorf, 1979). For example, in the study by Miller (1982) subjects given scores about a test performance tended to choose a comparison other who was physically attractive, even when told that physical attractiveness was unrelated to test performance. Data such as these suggest that social comparison is influenced by concerns above and beyond the specific arena of performance, which may include the role of attributes in general competitive standing or the central importance of the attribute for self-concept.

Subjective Distress and Comparison

The possibility that comparison choices are influenced by esteem threat was tested by Levine and Green (1984) with a sample of children aged 8 to 10 years. Subjects worked alone at a computer terminal that presented a series of 10 visual perception tasks. After each trial, subjects could elect to receive feedback about their own scores, the typical score of other children on the problem, or both. Experimental variables, provided through manipulated feedback, were the subject's improving versus declining performance over trials (intrapersonal comparison) and their superior versus inferior standing relative to other children (interpersonal comparison). An "intrapersonal × interpersonal" interaction indicated that in the improving condition subjects looked equally often at scores of superior and inferior others, whereas in the declining performance condition subjects looked more frequently at the scores of inferior others (i.e., a downward comparison effect). Repeated-measures analyses showed that preference for downward comparison increased over trials when performance was declining. This study confirmed the proposition that downward comparison is evoked by an esteem threat (from poor performance), and that this comparison process can
be observed in a sample of relatively young children (cf. Ruble, Boggiano, Feldman, & Loebel, 1980).

Information selection as a function of failure was examined by Pyszczynski, Greenberg, and LaPrelle (1985). Subjects were given a test purportedly measuring social sensitivity, were given manipulated feedback about their performance, and then had an opportunity to examine information about the performance of other subjects. Results indicated a general tendency for subjects to avoid information about others who had done better than themselves and to prefer information about others who had done less well than themselves (i.e., downward comparison). The preference for information about worse-performing others was particularly marked among subjects who were told their performance was poor. This study also found that subjects who failed tended to disparage the accuracy of the test. These results are similar to data from Frey and Stahllberg (1986), who found that persons experiencing ego-threat because of negative feedback from intelligence tests results tended to disparage the validity of the test. The latter is not, strictly speaking, a comparison effect, but suggests related self-enhancement processes that may operate together with social comparison processes.

Smith and Insko (1987) tested whether social comparison for ability evaluation was affected by own standing and by the public versus private status of the comparison. In a factorial design, undergraduate subjects were given information indicating that they had scored high versus low on a test of "social intelligence," were told that they ranked 5 in a group of 7 people, and then had the opportunity to examine other subjects' scores in a forced-choice comparison paradigm. Trait self-esteem also was included as a factor in the design. Results showed that for high-scoring subjects with private comparison, the majority of choices were of the top score in the group (i.e., rank 1). However, there was a progressive downward shift (a) when comparison was public, (b) when the subject's score was low, and (c) for persons low in self-esteem.

This study provides evidence that ability evaluation in neutral conditions is consistent with upward comparison theory (replicating previous findings), but that it is influenced by esteem concerns when there are potential threats to the self. The data also support the proposition that comparison shifts will be more prevalent among people low in self-esteem (cf. Wills, 1981). These results are consistent with studies of test diagnosticity, which show that subjects who expect to perform well choose tests that are highly diagnostic of ability (e.g., Trope, 1979, 1980), but subjects with ego-protective motives, including low self-esteem and expectation of failure, show a preference for tests that are less diagnostic (Strube & Roemmele, 1985).

Social Cognition Effects

In addition to comparison choices, effects may be observed on social cognition measures. When subjective distress occurs, perceptions of other people may be shifted in a manner that presents a more favorable situation for the self. This possibility was tested by Sherman, Presson, and Chassin (1984) in laboratory research where subjects were given manipulated information indicating success versus failure on a task and then were given an opportunity to make ratings of the performance of other people. Two studies showed that failure produced a downward shift in subjects' ratings of the performance of other people (i.e., subjects who failed overestimated the percentage of the population who would fail). Relevant control conditions in this and another study (Sherman, Presson, Chassin, & Agostinelli, 1984) indicated that the shift was attributable to a self-enhancement mechanism, not simply attributive projection from one's own behavior, because consensus shifts were found mainly for undesirable but not for desirable behaviors. An opposite effect (underestimation of population proportions, or "false uniqueness") is obtained when subjects rate positive aspects of themselves (Campbell, 1986; Marks, 1984; cf. Gerard & Orive, 1987; Goethals, Messick, & Allison, in press). This effect also seems guided by a self-enhancement process; that is, if people perceive that their competencies are rare in the population, they appear advantaged relative to others.

A study by Suls and Wan (1987) examined social cognition as a function of specific fears. A population of undergraduates was screened on a 51-item fear survey and subjects were identified as high on specific fears on the basis of extreme responses to specific items (e.g., snake phobia, public-speaking anxiety). As subjects completed the fear survey, they also indicated the percent of other undergraduates they thought would have high fear for each item. In this population, the
scoring criteria indicated generally high levels of fear, with 20% to 54% of the overall sample classified as high fear. Analyses comparing social perceptions of high- and low-fear subjects indicated that both groups tended to overestimate the prevalence of fear in comparison with actual population figures, but high-fear subjects were significantly more inaccurate in their estimates; that is, they tended to overestimate fear prevalence more than other subjects. The authors suggested that such perceptions make people feel better about themselves because they indicate that many other people have the same problem (i.e., a lateral comparison process).

Comparison and Subjective Well-Being

The relation between comparison and subjective well-being has been examined in both correlational and experimental designs. Heath (1984) obtained ratings of the level of local crime (i.e., in one's own city) and nonlocal crime (i.e., crime in other cities) as presented in 36 newspapers from different regions. Telephone interviews were then conducted with residents of the 36 cities to elicit data on fear of crime. Results showed that fear was lower in areas where the newspaper reported a higher level of nonlocal crime; the results apparently exemplify a process in which people compare the level of crime in their own area with that in other areas and arrive at a relatively favorable perception of their own situation (i.e., a downward comparison process). In an exemplary design, Heath then tested this process in a laboratory study with controlled independent variables and ratings of mood as dependent variables. Results of the laboratory study paralleled the findings from the field study.

Laboratory studies of comparison effects on mood by Gibbons (1986) also showed enhancement of subjective well-being. Subjects were selected to represent high versus low depressive affect on the basis of a prior screening. In the context of an impression formation experiment, subjects first wrote a self-disclosing statement about a positive versus negative event and then had an opportunity to choose one from a set of other statements reflecting a range of positive to negative affects. Results of the first study indicated that depressed subjects preferred to read negative statements, particularly when negative mood was induced; this preference was reversed among nondepressed subjects. In a second study, subjects wrote a self-disclosure statement and then were given a statement (purportedly from another subject) that was negative in tone (i.e., a downward comparison manipulation). Self-ratings of mood obtained pre- and poststatement showed an improvement in subjective state among depressed subjects; for nondepressed subjects, the comparison experience had no effect on mood. These data are consistent with the proposition that downward comparison enhances subjective well-being, and that downward comparison effects occur primarily when subjective distress is present.

A subsequent study (Gibbons & Gerrard, 1989) employed a design in which subjects, preselected on self-esteem, were told they would be participating in support groups in which the topic was coping strategies for adjustment to college life. Subjects spent some time writing a self-disclosure statement about a problem they had in adjustment, and then were given a statement supposedly written by another participant. The experimental manipulation was that the statement reflected either upward comparison (no difficulty in adjustment), downward comparison (the individual was having trouble in adjusting to college), or severe life problems (the individual had experienced a number of life problems but felt he or she was coping pretty well). Results for the downward comparison condition showed improvement in mood state among subjects low in self-esteem, but not for high self-esteem subjects. For the upward comparison target, improvement in mood state was observed for high self-esteem subjects. For the third target, improvement in mood state was noted for both subject groups, though the tendency was for greater improvement among people with low self-esteem.

Other studies have examined comparison variables in relation to judgments of life satisfaction (see Diener, 1984, for a discussion of comparison theories of life satisfaction). For example, Emmons and Diener (1985) used a sample of undergraduates, administering a questionnaire that included measures of current affect, satisfaction in 11 life domains, and a rating of comparative standing in relation to the average college student. Objective measures of each domain also were obtained (e.g., grade point average, number of friends). While the objective measures were significantly related to overall life satisfaction, the social comparison measure was the best single predictor of satisfaction and positive affect. This pattern held when other contributing fac-
tors (aspirations and life change) were partialled out.

To summarize, basic research has confirmed and broadened the base of social comparison theory. Research on related attributes has supported the role of social comparison for increasing confidence about evaluations of ability, although there is still some ambiguity about whether related attributes are primarily employed for accurate evaluation or for the broader purpose of determining one's competitive standing in the social environment. Research on downward comparison has provided support for several theoretical principles, showing that downward comparison is evoked by ego-threat, that it produces improvement in subjective well-being, and that it is more characteristic of people with low self-esteem. The relation of downward comparison to other cognitive coping strategies relevant for self-esteem maintenance has been suggested in several studies. The correspondence of results from laboratory and field research also has increased the evidential base for downward comparison.

**SOCIAL COMPARISON AND COPING**

Recent research on social comparison has extended to investigations of coping with particular life events (Wills, 1983, 1987). In the following sections, I will discuss some recent work from the areas of physical illness, disabilities, group process, and depression.

**Physical Illness**

Because physical illness presents people with multiple coping demands, may be long term, and sometimes is not readily treatable, cognitive coping mechanisms may be utilized to help people adapt to chronic physical conditions (Moos & Billings, 1982). Research on comparison-oriented coping has suggested that social comparison is relevant for people's attempts to cope with chronic illness.

A sample of 78 cancer patients, all female, participated in a study by Wood, Taylor, and Lichtman (1985), which investigated social comparison constructs. Measures included structured ratings of how the respondent rated her own adjustment to illness relative to other patients, and codings of spontaneous statements from the interview protocol. Results suggested that the respondents had a considerable amount of information about other cancer patients, and data from structured questions indicated that the majority of patients perceived their own coping and adjustment as better than that of other patients, consistent with a downward comparison process. Interview statements suggested the prevalence of comparisons in which the respondent compared with another person who was worse off on a related dimension, which the authors termed *dimensional comparison*. The investigators included measures to test for upward comparison, but overall the data showed little evidence of upward comparisons in this sample. These data suggested that the process of downward comparison was used by patients to help deal with distress evoked by their illness.

Arthritis is a disease condition that, although not life threatening, may involve considerable pain and functional limitations on activity. The role of social comparison for coping with the disease was examined by Affleck and colleagues in a sample of 130 arthritis patients who had the illness for an average of 10 years (Affleck, Tennen, Pfeiffer, Fifield, & Rowe, 1987; Affleck, Tennen, Pfeiffer, & Fifield, 1988; Affleck & Tennen, in press). The study employed measures similar to those of Wood et al. (1985). Interview procedures elicited open-ended statements from respondents about what it is like to have the disease, and structured questions indexed respondents' perceptions of their own coping relative to other patients. In this study, standardized measures of psychological outcomes were obtained, including subjective measures of mood state and ratings by practitioners (rheumatologists and nurse practitioners) of the patient's adjustment to illness. Data for interview codings indicated that spontaneous comparison statements were relatively rare (coded for only 17% of the sample), but the comparison statements that were made predominantly reflected downward comparisons (82% of spontaneous statements). These statements reflected patients' perceptions that they were able to remain physically active, to control negative emotions and attitudes, and to maintain an attitude of optimism about the future. Correlations of comparative ratings with outcome measures indicated significant relationships with practitioners' ratings of adjustment; and these correlations remained significant when the effects of actual disease activity, functional status, and illness duration were partialled out. The latter finding is important because it
shows that comparative ratings are not simply reflections of disease status.

Related findings from another research program with arthritis patients showed some evidence of both upward and downward comparison processes, which depended on the context of comparison. Blalock, DeVellis, and DeVellis (in press) used a choice paradigm to elicit the comparison preferences of patients under two conditions: (a) when they were experiencing difficulties in functioning and (b) when they wished to set goals for themselves. These data showed that in the first condition subjects preferred downward types of comparison, that is, with patients who also were experiencing performance difficulties. In the second condition, however, patients tended to prefer information about patients who were not experiencing difficulties, that is, upward comparison. Another study (DeVellis et al., in press) examined comparison preferences and found a general tendency for downward comparisons, with some range-seeking (i.e., asking about patients who were functioning well). Subjects’ comparative ratings indicated that they saw themselves as functioning better than the average patient. In this study, comparative ratings did not show a net contribution to outcome measures when disease activity was partialled.

Disabilities

Disabilities present another area where social comparison processes may be relevant. Here, in addition to the functional limitations posed by the disability, there may be some element of social stigma that presents a challenge to the person’s self-esteem. Research on comparison among people with physical or intellectual disabilities has suggested that social comparison plays a role in efforts at adaptation.

Gibbons (1985a, 1985b; cf. Strang, Smith, & Rogers, 1978) investigated the operation of self-esteem processes in samples of mentally retarded (MR) adolescents. Respondents were asked about perceptions of retarded and nonretarded targets, as well as self-perceptions. Results showed that while subjects held fairly negative perceptions of MR persons in general, they rated themselves more favorably than other MR targets and about equal to nonretarded targets for outcomes such as likelihood of cognitive success. The inference was that subjects were arriving at relatively favorable ability perceptions through comparison with MR targets whom they perceived to be worse off. However, no effects were noted for social dimensions, where subjects rated themselves quite negatively. These data suggested a possible negative consequence of downward comparison: If subjects make negative comparisons with members of their own group, it may reduce positive social relationships with these members.

Similar results were obtained by Harter and colleagues (Harter, 1985; Silon & Harter, 1985). Measuring self-perceptions of MR and nonretarded individuals in mixed classrooms, they found that the MR students rated themselves equal to nonretarded students, while learning-disabled (but not retarded) students rated themselves lower than nonretarded students. Questions about comparisons indicated that MR students were comparing themselves to their retarded peers, thus arriving at a relatively favorable comparison, while learning-disabled students were comparing themselves with normal students, thus arriving at a relatively unfavorable perception.

The reactions of parents of handicapped children were studied by Affleck and colleagues in neonatal units (Affleck et al., 1987; Affleck & Tennen, in press; cf. Tennen, Affleck, & Gershman, 1986). Mothers were interviewed shortly after the birth of a child with perinatal complications, and were reinterviewed 6 months later. In this study the mother’s perception of the condition of her own infant, relative to other infants in the unit, was recorded in addition to her perception of her own coping ability. Data indicated that spontaneous comparison statements were more common in this population (coded for 73% of respondents) and that the majority of these statements represented downward comparison (86% of all statements); these included comparisons of the infant’s medical condition relative to others, and comparison of the present outcome with potentially worse outcomes. Comparative ratings also indicated that mothers perceived the severity of the child’s medical condition as less than average and their own coping as better than average. In this population currently facing a life crisis, spontaneous comparisons were more frequent than in the arthritis sample. For data obtained shortly after birth, correlations of comparison measures with indices of illness severity and adjustment were not significant, but follow-up data indicated that comparative ratings were significantly related to indices of mood and parenting competence, with control for baseline comparison index and
current caretaking difficulty. This suggested a delayed effect of comparison-oriented coping on psychological outcomes.

With regard to adults' perception of their own disability, Schulz and Decker (1985) interviewed a sample of 100 spinal cord-injured people who had incurred the disability an average of 20 years previously. Data from this study are somewhat indirect because respondents generally declined to answer a direct question about their comparison preferences. Further probing produced data indicating that 25% of respondents said they compared with other disabled persons, 16% said they compared with nondisabled persons, and 59% said they just compared to "people in general," not any specific target. However, comparative ratings indicated that the respondents perceived their own life situation to compare favorably with that of other people, both disabled and nondisabled. Qualitative responses suggested that this occurred because disabled people focus on particular dimensions, such as intellectual ability and social sensitivity, on which they perceive themselves as advantaged relative to the comparison targets.

**Group Processes**

The possibility that social comparison processes operate in group therapy settings was investigated in a series of studies (Gerrard, Gibbons, & Sharp, 1985; Gibbons & Gerard, in press; Gibbons, Gerrard, Lando, & McGovern, 1989). Participants in self-help groups for eating disorders were initially studied. In Gerrard et al. (1985), participants assessed at intake were told they could examine case studies of other people with eating disorders and could choose from among cases with a more versus less severe problem, and with greater versus less success in coping with the problem. Subjects were blocked into two groups based on responses to the Beck Depression Inventory (though all subjects scored relatively high on this measure). Results indicated that all participants wished to read about a case that was fairly severe. Analyses for the coping question showed that low-depression subjects preferred a case with complete coping success, but high-depression subjects preferred a case with lower coping success. This is suggestive of the shift toward downward comparison as a function of distress noted in other studies, although the predominant tendency in this group was for downward comparison.

Measures of comparison were obtained from 120 participants in smoking cessation groups over 16 sessions by Gibbons et al. (1989). At the first and last sessions, participants completed questionnaire measures concerning seriousness of their problem, absolute and relative to other smokers; perceptions of the typical smoker; and comparison preference for other (potential) group members, in terms of amount of smoking and difficulty in quitting. Specific effects for comparison preference indicated that over all subjects, the relationship between problem seriousness and preference for downward comparison targets was significant: The more serious a subject thought his or her smoking problem was, the more preference he or she showed for targets with serious problems and lower coping success. The strength of this relationship was modest in the baseline measurement, probably because threat levels were relatively high for all subjects, but longitudinal analyses showed that the strength of the relationship in the total sample increased over time, because some subjects quit and the variability in the severity measure increased. Moreover, within-subject analyses showed that as perceived problem seriousness declined over time, so did preference for downward comparison targets. It should be noted that in this study the comparison targets were outside the group; data on ratings of other group members showed no indications of derogation within the group, and in fact the participants rated other group members quite favorably.

**Depression and Social Comparison**

Some other research not encompassed under the above categories has been directed toward the relationship between social comparison and depression. For the most part this research has not been conducted with clinically depressed subjects, so there is some qualification to the external validity of the studies. For example, in conceptually related studies one can find evidence either that distressed people in clinical settings show evidence of self-protective attributions (Tennen et al., 1986) or that in student samples, self-protective attributions are more characteristic of high self-esteem subjects (Tennen & Herzberger, 1987). Whether the latter type of result is more typical of college samples, where subjects represent the upper end of the self-esteem distribution, is currently unknown because few studies have been conducted with actual clinical populations. Nonetheless, this
research may have theoretical implications for processes of coping.

A first issue concerns the prevalence of self-enhancement tendencies in the general population. A number of studies have shown the existence of such an effect. For example, Alicke (1985) obtained ratings from college student subjects concerning various personality traits that varied in desirability and controllability. Subjects rated the extent to which a given trait characterized (a) themselves and (b) the average college student. Results showed that subjects viewed desirable traits as more characteristic of themselves than of others. Also, a crossover interaction with controllability was found: Subjects rated desirable/controllable traits as more characteristic of themselves (relative to others), whereas they rated undesirable/controllable traits as more characteristic of others (relative to the self). This effect was attenuated for traits low in controllability.

Similar data by Marks (1984) derived from studies in which subjects defined attributes that they regarded as their best ability and most important opinion, and then estimated the prevalence of these attributes in the population. For attributes named in the original subjects' responses, ratings of actual prevalence for the abilities and opinions were obtained from an independent sample. Results showed a crossover interaction, in which subjects underestimated the prevalence of their best ability (i.e., false uniqueness) and overestimated the prevalence of their important opinion (i.e., false consensus). Data from a similar paradigm using sample-based prevalences (Campbell, 1986) indicated that subjects overestimated the prevalence of their own opinions and low abilities, but underestimated the prevalence of their own high abilities. The results were interpreted as reflecting a self-enhancement process in which subjects perceive prevalence figures in a way that produces a positive evaluation of the self.

A further issue concerns the relative importance of cognitive consistency versus self-enhancement in reactions to feedback. The consistency model posits that people will respond positively to feedback that is consistent with their self-concept; that is, people with negative self-concepts will accept negative feedback, and people with positive self-concepts will accept positive feedback. A self-enhancement formulation, in contrast, predicts that people will respond only to feedback that produces a favorable image of the self. Each formulation is internally consistent and has some supporting evidence (Jones, 1973; Shrauger, 1975). The contrasting predictions of these models were tested in a study by Swann, Griffin, Predmore, and Gaines (1987). Subjects, prescreened on social self-esteem were given negative feedback about a task performance. Reactions to feedback were assessed both through cognitive measures (e.g., competence of evaluator) and through affective measures (mood adjective checklists for depression, anxiety, and hostility). Results for cognitive measures showed a main effect for feedback, with all subjects responding more positively to favorable feedback. There was also an interaction: Cognitive reactions to favorable feedback were more positive for high- compared with low-esteem subjects, whereas cognitive reactions to unfavorable feedback were more positive for low- compared with high-esteem subjects. In contrast, results for affective reactions were consistent with a self-enhancement model; all subjects had more positive affective reactions to favorable than unfavorable feedback, and there were no interactions with self-esteem level. These data provide evidence for self-enhancement as a determinant of affective processes in the general population. However, there is currently no direct test of consistency versus enhancement models using social comparison choices or consequences as the dependent measure.

Relations between social comparison and dysphoric symptomatology in college student samples have been assessed by several investigators. For example, Weary, Elbin, and Hill (1987) presented subjects, prescreened on depressive symptoms, with several case histories about events occurring to other persons, and gave subjects manipulated feedback indicating that another subject had made either quite similar or quite dissimilar attributions about the events. The dependent variable was a single rating of the extent to which the feedback had influenced the subject's feeling about him or herself. Results showed a marginal main effect for depression, with dysphoric subjects reporting being more affected, and a significant main effect for similarity of feedback, with subjects who received similar feedback more affected by the feedback they received, compared with subjects who received dissimilar feedback. The data were interpreted as indicating that depressed people are more sensitive to social comparison. In this study, however, social comparison choices were not assessed, nor were effects on behavior or subjective well-being measured.

Tabachnik, Crocker, and Alloy (1983) presented
subjects, blocked on depressive symptomatology, with a list of 60 trait adjectives. The set of traits was grouped by the experimenters into subsets representing items that were positive, negative, or neutral in descriptive content. The experimenters obtained subjects' ratings of (a) the extent to which a given item was true of themselves and (b) of the average college student, (c) the estimated percentage of students whom each item characterized, and (d) the percentage of students who would say that the item characterized themselves. Self-ratings by an independent sample of students on the 60 items, (i.e., population prevalence figures) also were obtained. Comparisons of a with b showed that depressed subjects rated themselves higher on negative traits and lower on positive traits than they rated the average student, a result that was consistent with the original measure of depression (i.e., perceiving oneself negatively). Analyses of variance comparing subjects' estimates of the prevalence of an item (rating c) with population prevalence figures showed a "depression × trait type" interaction. Depressed subjects, relative to nondepressed subjects, were more inaccurate in social perceptions because they overestimated the prevalence of negative attributes, underestimated the prevalence of positive attributes, and did not differ on neutral attributes. The data indicate a processing of social consensus information in a self-enhancing manner by depressed subjects. These results are consistent with the study previously discussed by Suls and Wan (1987), which showed that people who had a specific fear tended to overestimate the prevalence of that fear in the population. Both sets of data seem to reflect a tendency for distressed people to perceive social information in a manner that indicates there are many other people who have the same problem (i.e., a lateral or downward comparison process).

A converse view of this issue has been presented by Swallow and Kuiper (1988). Their model proposes that individuals become depressed because of excessive concern with upward comparison. It is suggested that if a person continually makes what he or she perceives as unfavorable comparisons with other people, and is unable to make compensating comparisons that provide favorable information about the self, then depressive affect might ensue because of negative self-image and feelings of lack of self-worth. It is suggested that if people are at risk for depression because of low self-complexity and high self-awareness, then negative life events may lead the person to focus on unfavorable comparisons with other people, leading to development and perhaps maintenance of a negative self-concept (cf. Pyszczynski & Greenberg, 1987). If individuals are uncertain about their self-concept (Warren & McEachren, 1983), maintain a set of excessively high standards for performance evaluation (Kuiper & Olinger, 1986), are inclined to compare on central dimensions of self-concept (Tesser & Campbell, 1980; Harter, 1983), and overperceive similarity between self and others (Swallow & Kuiper, 1987), then a process could be set in motion that would lead to a series of unfavorable comparisons. Swallow and Kuiper (1988) further proposed that depressive individuals fail to perceive the contribution of related attributes to others' performances, which again would tend to produce unfavorable comparisons for the self. This model contains many promising suggestions about how comparison processes may relate to affect and adjustment. At present, however, there is little direct evidence for the basic postulates of the model.

**GENERAL DISCUSSION**

This chapter has outlined the theoretical basis for the study of social comparison and discussed recent research on comparison conducted in laboratory and field settings. This work has provided consistent support for social comparison theory. The predictions of upward comparison theory and related-attributes theory have been extended in current research, and the propositions of downward comparison theory have been supported in a number of settings. Social comparison theory continues to provide predictions that may lead to better understanding of self-evaluation and self-concept maintenance (Goethals et al., 1986; Wood, 1989).

One conclusion of this chapter is that downward comparison processes are observed with high prevalence in clinical settings. While results vary somewhat according to the measure employed and the population studied, the evidence indicates that comparison with other distressed people is observed in populations with physical illness, disability, and other health problems (eating disorder, smoking). The suggestion of these findings is that comparison is being employed as a coping mechanism, and the further question is whether downward comparison provides functional benefit for
distressed people; that is, does it lead to better adjustment?

A convergence of findings from clinical populations suggests that this is the case, as both concurrent and prospective studies have shown comparison measures significantly related to adjustment (e.g., Affleck & Tennen, in press). Experimental studies (e.g., Gibbons, 1986) also have shown downward comparison conditions to improve subjective well-being. The concordance of results from controlled experiments and naturalistic studies conforms to theoretical predictions, and together this evidence suggests that downward comparison does provide functional benefit. At the same time there are still a number of methodological issues unresolved in this research (Wills, 1987), so conclusions about the status of downward comparison as a coping process remain somewhat qualified. It should be noted as well that upward comparison is observed in clinical populations, so this aspect of comparison theory should not be ignored. In the following sections I discuss some issues raised by current studies, and make some suggestions for further research.

Temporal Effects in Comparison

One question deriving from the health-related research is whether comparison processes are temporally linked. In theory, comparison-oriented coping should be employed during times of intense emotional distress, so the derivation is that downward comparison should be observed with greatest prevalence among people who are recently confronted with a health problem, either their own or another person's. The evidence is limited but seems consistent with this suggestion, because the clearest evidence has been obtained from samples assessed immediately after a health crisis (Affleck & Tennen, in press) or in the process of self-change of a health behavior (Gibbons et al., 1989). Studies of samples surveyed at longer intervals after illness onset (Affleck & Tennen, in press; Schulz & Decker, 1985) have shown less evidence of coping effects. Wood et al. (1985), studying a sample with an intermediate time frame (mean 2 years postsurgery), found comparison measures inversely related to time since diagnosis, so these data also are consistent with a temporal trend.

If a predictable time course exists, it may represent an intense period of comparison-oriented coping occurring around the time of disease onset, followed by a period where cognitive mechanisms decline and are replaced by information- or behaviorally oriented coping. From this perspective, the possibility is that a shift from downward to upward comparison will occur as people deal successfully with anxiety and emotional distress, and turn attention to instrumental types of coping. Another formulation suggests that patients are initially dealing with the effect of the disease on self-concept, but when these issues are dealt with, then people shift attention from the self to other people, and to issues of maintaining interpersonal relationships (Moos, 1986).

Correlation with Other Cognitive Mechanisms

Another issue concerns whether downward comparison is part of a larger class of cognitive coping mechanisms. In the previous discussion there were suggestions that downward comparison is accompanied by several other cognitive mechanisms that also operate to produce enhancement of self-esteem; for example, overestimating the prevalence of negative attributes in the population (e.g., Suls & Wan, 1987). There is no reason to believe that comparison-oriented coping will be employed to the exclusion of other coping mechanisms (Wills & Shiffman, 1985), so the question is whether there is significant association with other cognitive mechanisms, either those that might be classified as avoidant (e.g., denial, distraction) or those that might be classified as attentional (e.g., situation redefinition, focus on positive aspects).

This leads to the suggestion that coping research attempts to obtain measures of different coping mechanisms and test for unique effects as well as for shared variance (Wills, 1987). The contribution of comparison-oriented coping might be unique, but it is quite possible that the contributions to adjustment occur through the application of a variety of coping mechanisms, in which case the shared variance would be most important (cf. Perri, 1985; Shiffman, 1985). Alternatively, it is conceivable that relations of comparison-oriented coping to adjustment are spurious, deriving from their association with other mechanisms that are causally important, or with third factors. Further descriptive research is needed to determine the correlation among coping mechanisms and to test for differential relationships to outcomes. This is
combined with the need for multiple measures of comparison as a coping mechanism (cf. Affleck & Tennen, in press).

Effects of Downward Comparison

At present there is little understanding of the precise effects of downward comparison. There are suggestions that downward comparison may decrease anxiety or fear, and increase optimism or life satisfaction. These seem, on the face of it, to be different processes, and so there is a need for more exact specification of the cognitive or behavioral consequences of downward comparison. If comparison served simply to produce short-term decreases in anxiety, then its predicted consequences would be rather different than would be the case if comparison produced enduring shifts in optimism. More attention to this issue is needed.

In addition, there is the question of whether downward comparison produces changes in self-concept. Going with a straight derivation from upward comparison theory, one would say it should not; lateral comparison produces no information about one's relative standing in the population, and downward comparison in its simplest form only produces a suggestion that one is better off than someone else. If downward comparison were employed after a period of range-seeking (Wheeler et al., 1969), then this difficulty might be alleviated; but there has been no test of such a sequential process. Neither is there any requirement in downward comparison theory that the comparison target be a similar other. Since the field evidence is ambiguous on this point, there is at present no compelling basis for believing that downward comparison requires a similar other as a target (Wills, in press).

There is, then, no clear requirement that downward comparison must change self-concept. But if not, why would it be a prevalent coping mechanism? One possibility is that downward comparisons produce only short-term fluctuations in subjective well-being, which are useful for affect regulation but have no long-term impact on self-perception. The question is, What processes are responsible for the high stability of self-concept over time and the observation that self-concept may be unaffected by severe negative life events? This question needs further investigation.

There is also a question about possible negative effects of downward comparison. It could be suggested that if people rely exclusively on coping through comparison, then other types of coping mechanisms may be reduced. People could fall into passivity, lose the benefits of self-improvement through upward comparison, and, through indiscriminate comparisons, arrive at self-images that are out of touch with actual personality attributes. I think this perspective is oversimplified, because it assumes that people will use only one coping mechanism (I don't believe this is the case), but it is worth considering. Also, there is a question as to whether a reliance on downward comparison would lead to negative perceptions of other people (Gibbons, 1985a). I think this is a real concern (see Wills, 1981) and should be investigated in detail. Social cognition is not a zero-sum process, but a coping mechanism that leads one to focus on negative attributes of other people, and as such, may have potential cost for the overall process of coping and supportive relationships.

Upward Comparison and Clinical Psychology

There has been relatively little attention paid to the process of upward comparison in clinical populations. This is not unreasonable as downward comparison has been the prevalent process observed in clinical samples. But it is possible that upward comparison has been short-changed. In theory, upward comparison could be useful to people who are undergoing a process of change. At the same time, there are a number of indications that distressed people wish to avoid social comparisons, because the comparisons are generally unfavorable to themselves. This tendency is supported by studies that have shown negative effects of forced comparison information (e.g., Marsh & Parker, 1984; Salovey & Rodin, 1984; Tesser, 1986). What then are the barriers to social comparison in distressed populations, and what processes of comparison theory could be employed to increase the ability of distressed people to obtain useful information from their social environments? Is there a rationale for introducing some downward comparison into clinical procedure to produce short-term change in self-concept so that people can be motivated for further coping efforts? It seems worthwhile to think about this issue.
Finally there is the question of whether psychological distress is produced through excessive upward comparison, or a focus on noncentral performance dimensions (Harter, 1983; Swallow & Kuiper, 1988). It is possible that psychological distress arises through underutilization of mechanisms normally used to produce positive self-concept (Snyder & Higgins, 1988), or that depression is maintained because of excessive focus on negative attributes of the self, with a consequent inability to consider one's favorable standing relative to others on some dimensions (Pyszczynski & Greenberg, 1987). It is apparent that upward comparison also may have mixed effects, and understanding the balance of these effects may have significant implications for social and clinical psychology.

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