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BLUEPRINT FOR A SOCIAL PSYCHOLOGICAL THEORY OF LONELINESS

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Loneliness is a common problem (Weiss, 1973). This is apparently as true in the British Isles and Europe as it is in America. Although numerous articles and books have been written about loneliness, the empirically based, social psychological study of loneliness is in its infancy. In 1975 the senior author of the present paper began a program of loneliness research at UCLA. To date, the UCLA group has developed a scale for measuring loneliness (Russell *et al.*, 1978), surveyed several groups about their loneliness experiences (Peplau *et al.*, in press), analyzed the problem of loneliness in the aged (Peplau & Caldwell, in press), and reported on how observers perceive the causes of another person's loneliness (Michela & Peplau, Note 1; Wimer, Note 2).

The purpose of the current paper is to articulate concisely the blueprints for a social psychological theory of loneliness. In the phrasing of an architect, this paper is a set of preliminary sketches and drawings. Details have been omitted; many aspects of the design must still be tested; and some parts of the edifice may eventually need to be redesigned before the structure would be viable. As unfolded in this presentation, the blueprints focus on four aspects of loneliness: (1) how to define loneliness, (2) its manifestations and antecedents, (3) the role of attributions in loneliness, and (4) ways people cope with loneliness.

LONELINESS DEFINED

Loneliness can be conceived as a social deficiency. Our working definition is as follows: loneliness exists to the extent that a person's network of social relationships is smaller or less satisfying than the person desires. A person's desired or preferred level of social contact can be ascertained by conventional measurement techniques. The alternative of defining loneliness in terms of the discrepancy between achieved and "needed" levels of social contact has considerable appeal. However, developing an absolute standard for how much social contact each person "needs" would require an omniscience we are reluctant to claim.

In this definition of loneliness, as in Sermat's (Note 3), loneliness reflects the relationship between two factors, the desired and achieved level of social interaction. The level of social contact a person desires is based on many considerations including their past levels of contact and their expectations for future social relations. Thus loneliness is not synonymous with social isolation, solitude or aloneness. When low levels of social contact are desired, they may be

experienced as positive. We assume, however, that virtually all people have recurring needs to engage in social interactions with others.

Five additional, but important aspects of loneliness should be noted. First, when a person's social contact is suboptimal, this discrepancy is almost always experienced as aversive. Second, this discrepancy is typically noticed, and labelled as loneliness. Third, in assessing loneliness, the person's network of relationships must be considered. The absence of or decrease in any given relationship may be compensated for via other relationships. Fourth, while loneliness may be associated with psychopathology and mental illness, we are most concerned with the more common experience of loneliness in "normal" populations. Finally, several forms of loneliness may exist, but empirical work has not developed far enough to date to permit conclusively identifying their nature.

MANIFESTATIONS OF LONELINESS

The manifestations of loneliness can be divided into three main categories: affective, cognitive (and/or motivational) and behavioral. As other theorists (Fromm-Reichmann, 1959; Ortega, 1969; Weiss, 1973) concur and as existing evidence (Russell *et al.*, 1978) indicates, loneliness is an emotionally unpleasant experience. In particular, loneliness has been linked with feelings of general dissatisfaction, unhappiness, depression, anxiety, emptiness, boredom, restlessness and marginality.

Two seemingly contradictory viewpoints have been expressed concerning the motivational aspects of loneliness. On the one hand, some authors (see Sullivan, 1953) consider loneliness arousing. On the other hand, other authors (Fromm-Reichmann, 1959) believe that loneliness decreases motivation. Several factors may be helpful in resolving the apparently paradoxical motivational properties of loneliness. For instance, loneliness may arouse motivation for interpersonal contact but diminish motivation for other tasks. Furthermore, loneliness may influence the fluctuations in, rather than the average level of, one's motivational state. In other words, lonely individuals may alternate between periods of high and low motivational arousal.

In addition to its purely motivational manifestations, loneliness generates a vigilance about interpersonal relationships. Weiss (1973) commented on this as follows: "The individual is forever appraising others for their potential as providers of the needed relationships, and forever appraising situations in terms of their potential for making the needed relationships available . . . [Loneliness] produces an oversensitivity to minimal cues and a tendency to misinterpret or to exaggerate the hostile or affectionate intent of others." Surprisingly, of loneliness' various manifestations, the least has been written about behavioral manifestations. However, some observers (Sermat, Note 3) have speculated that inasmuch as loneliness generates feelings of anxiety, lonely individuals are prone to displaying the physical signs of anxiety such as headaches or disturbances in eating and sleeping patterns.

ANTECEDENTS OF LONELINESS

The possible antecedents of loneliness are numerous and varied. In thinking about the origins of loneliness, it is useful to distinguish events that *precipitate* the onset of loneliness from factors that may *predispose* individuals to become lonely or to persist in being lonely over time. Based on our definition of loneliness, precipitating events may be broadly categorized into

changes in a person's achieved social relations and changes in a person's desired or expected social relations. In this section, we consider each of these possibilities separately, although it seems likely that changes in both may occur simultaneously. Next, factors that may predispose a person to loneliness are considered. These include characteristics of the individual such as personality traits and physical attributes. Undoubtedly, more general characteristics of a given situation or culture also predispose people to loneliness (see Slater, 1970) but, in the interest of brevity, these factors will not be elaborated.

Changes in the Achieved and Desired Levels of Social Contact

Loneliness is frequently precipitated by changes in a person's social relationships that lead to a suboptimal level of achieved social interaction. These changes may affect a single relationship, or may affect a person's total network of social relations. Four types of precipitating factors have been identified which promote loneliness by reducing the person's achieved level of contact.

First, the ending of a close emotional relationship is a common cause of loneliness. Available research demonstrates that such events as widowhood (Lopata, 1973), divorce (Weiss, 1976) and the breakup of dating relationships (Hill *et al.*, 1976) are all associated with loneliness. Second, physical separation from family and friends puts people at risk for loneliness (Weiss, 1973; Weissman & Paykel, 1973). Third, status changes such as the departure of one's children (Bart, 1971), retirement, unemployment or even promotion can reduce social contacts and thereby promote loneliness. Fourth, reduced satisfaction in the qualitative aspects of one or more relationships may also generate loneliness.

Loneliness may also be precipitated when an increase in a person's desired or expected level of social contact occurs without a corresponding change in their achieved level of social relations. An individual's own expectations and desires for social interaction are importantly affected, among other factors, by social norms. According to Gordon (1976): "It is clear to the teenager that he or she should have a date after school, and it is clear to the average man or woman that he or she should have a mate, family, a circle of friends." As Gordon's remarks illustrate, our expectations change with our age and developmental stage. Similarly, Sullivan (1953) contended that people's needs change at different developmental stages.

Our desire to be with other people is not constant even within a given stage of the life cycle. Instead, it fluctuates frequently depending on the task, the physical setting, our own mood and the like. For instance, Schachter's (1959) classic studies demonstrated that situations of stress or uncertainty can influence our desire to be with others. Even holidays and seasonal changes are important (Wenz, 1977; Gilger, Note 4).

It is useful for people to adapt their expectations for social relationships to their changing circumstances. For instance, a person entering a hospital may correctly anticipate reduced social contact with friends. In contrast, a child going away to camp may inappropriately expect to make new friends quickly. In any case, these anticipatory expectations may modulate our desire for contact and influence the extent of the loneliness we experience.

Personal Factors Contributing to Loneliness

Individual characteristics that make it difficult for a person to establish or maintain satisfactory relationships may increase the likelihood of loneliness. These characteristics affect

loneliness in several related ways. First, characteristics that reduce a person's social desirability may limit the person's opportunities for social relations. Second, personal characteristics may influence a person's behavior and "success" in social situations. Third, personal qualities may determine how a person reacts to changes in his or her achieved social relations and so influence how effective the person is in avoiding, minimizing or alleviating loneliness. In this section we consider characteristics of individuals that may predispose them to loneliness.

Significant correlations between self-reports of shyness and loneliness have been found by Zimbardo (1977) and Jones (Note 5). Work by Sermat (Note 6) has indicated that lonely men are lower in a measure of social risk-taking. A cluster of related factors, shyness, low social risk-taking, lack of assertiveness, self-consciousness in social situations, may all contribute to loneliness.

There is some evidence that low self-esteem correlates with loneliness. Sermat (Note 6) found significant correlations between scores on a loneliness scale and on Jackson's self-esteem scale. Moore & Sermat (1974) reported that lonely individuals scored lower on the self-regard, self-actualization and inner-directedness subscales of the Shostrom Personal Orientation Inventory. Eddy (1961) found a significant correlation between loneliness and an indirect measure of self-esteem, the discrepancy between the person's actual and ideal self-concepts.

Weiss (1973) and others have suggested that a lack of social skills, perhaps stemming from childhood, may be associated with loneliness. A potential difficulty with this reasoning is evidence indicating that loneliness is not invariably correlated with objective characteristics of a person's social life. For instance, Sisenwein (1964) found no relationship between students' reports of loneliness and their dating status or frequency of receiving mail from friends and family. Several factors may operate to produce such results. First, measures of "objective" social relationships, corresponding to the achieved level of social relations in our definition, do not address the issue of the individual's preferences for the number and kind of relationships they have. Our position suggests that objective indices of frequency of interaction are less appropriate predictors of loneliness than subjective measures of satisfaction with social relationships. In addition, it seems likely that over time, people with very low levels of social contact may adapt (Weiss, 1973) and lower their desired level of social relations.

There is considerable evidence that physically attractive men and women are better liked and have more opportunities for social interaction than their less attractive peers (Berscheid & Walster, 1974). Thus we anticipate that attractive people are less likely to be lonely. More generally, people with low social desirability should be more vulnerable to loneliness. This might include people who are handicapped or physically disabled, those who are obese or who stutter, the mentally retarded, and so on.

The most consistent finding in research on interpersonal attraction is that, other things being equal, similarity leads to liking. This suggests that the match between an individual and the social groups he or she participates in will affect loneliness. In any given social situation, people who are "different" because of their racial or ethnic background, nationality, religion, age or interests may be more likely to be lonely.

Some data indicate that loneliness is correlated with gender, marital status, income and age. Although it may only reflect greater willingness to reveal their feelings, more women than men report feeling lonely (Donson & Georges, 1967; Weiss, 1973). Loneliness is lower among married people than unmarried (Weiss, 1973); but, when the unmarried group is further subdivided, loneliness is higher among widowed and divorced people than among singles, who do not differ from marrieds (Gubrium, 1974). There is some indication that loneliness is higher among the poor (Weiss, 1973). Finally, while loneliness can occur at any age, it may be more

common at particular points in the life cycle, especially late adolescence and perhaps in old age (Dyer, 1974; Fidler, 1976).

MODULATORS OF THE LONELINESS EXPERIENCE: ATTRIBUTIONS, SOCIAL COMPARISON AND PERCEIVED CONTROL

We believe that in most Western societies, loneliness can be viewed from an achievement perspective. In such societies, success is measured not only by income or occupational prestige, but also by the kinds of relationships a person has. As Gordon (1976) observed in the American context: "To be lonely is to have failed." Once conceived within an achievement framework, attributional theories of success and failure become relevant for understanding loneliness. Of various attributional models, Weiner's work (Weiner, 1974; Weiner *et al.*, in press) is the most important for our purposes. Like social comparison processes and perceived control, attributions modulate the loneliness experience.

Causal Attributions

Weiner's work (1974) has demonstrated that people give a variety of different causal explanations for success and failure. These include four primary reasons (ability, effort, task difficulty and luck), plus several less common ones (e.g. mood, fatigue or illness). Specific causal explanations can be classified on two underlying dimensions: locus of causality (internal versus external vis-à-vis the actor) and stability (stable versus variable over time). Kelley (1967) and others have developed a number of principles concerning when people will attribute their behavior to themselves instead of external or circumstantial factors. Among these principles, in our judgment, the following should be especially important in determining people's attributions regarding loneliness. Attribution to personal causes is common given: (1) *low distinctiveness*, the actor responds to other stimulus situations in the same way; (2) *low consensus*, other people react differently than the actor to the stimulus situation; and (3) *high consistency*, the actor responds to the situation on different occasions in the same way. Suppose Pat feels lonely in many different situations, most other people do not experience loneliness in these settings, and Pat always feels lonely in these settings. Then Pat would probably attribute being lonely to internal factors.

Consequences of Causal Attributions

Weiner's model suggests that causal attributions for loneliness should have implications for the person's expectations, emotions and behavior. The stability dimension of attributions is especially important for the person's expectations. If one perceives the precipitating factors in loneliness as being stable or unchanging, then the person will probably anticipate being lonely in the future. In his more recent writing, Weiner (Weiner *et al.*, in press) has argued that

different causal attributions arouse different emotional reactions. Weiner's recent model is very helpful in formulating predictions about people's reactions to loneliness. In this regard, some of the specific links Weiner *et al.* postulate between attributions and emotions are noteworthy. Internal attributions for failure should magnify such feelings as shame and inadequacy. Other attributional theorists (Storms & McCaul, 1976) have also claimed that internal attributions intensify anxiety. According to Weiner *et al.*, stable, internal attributions (e.g. ability, personality) for failure should be linked with feelings of depression and hopelessness. Attributing one's own failures to other people should lead to greater feelings of hostility and aggression. Attributing one's failures to external, unstable factors such as luck should lead to feeling surprised and astonished.

Some studies (Mazo & Perlman, 1977) suggest that people who attribute their behavior to internal causes cope more persistently and effectively. Perhaps people think and act as follows: "If I caused my situation, I can also change it." The one difficulty with this line of reasoning is that we previously linked internal, stable attributions to depression and despair. Such despair should inhibit coping. Thus, a prediction more consistent with our overall logic would be as follows: people who attribute loneliness to unstable, internal causes cope more persistently and effectively. Dweck & Reppucci's (1973) findings on learned helplessness among children are consistent with this view.

Social Comparison and Perceived Control

In the process of evaluating a social deficiency, several factors besides attributions may act to modulate one's experience of loneliness. In this section, we consider how the processes of social comparison and perceived personal control may heighten or diminish a person's reaction to their own loneliness.

In assessing one's social relations, a person is apt to compare himself to others in similar situations (Pettigrew, 1967). The lonely college freshman may compare his success in making new friends to that of other new students. Believing that others are doing better at making friends than he is may increase feelings of loneliness. Conversely, knowing that other students are faring less well, or that others have lower expectations, may lead the person to minimize his own loneliness. In short, social comparison processes may affect how large or important a social deficit is believed to be.

A final modulator of the loneliness experience is the extent to which an individual can exercise personal control over his social relationships to achieve a desired level of contact. Existing evidence suggest that feelings of personal control may generally reduce stress (Averill, 1973) and enhance performance under specified conditions. More directly relevant evidence that personal control affects loneliness comes from a field study conducted in a nursing home for the aged. The investigator, Schulz (1976), had undergraduates visit the elderly for a 2-month period. The elderly patients who could choose and predict when their visitor would come reported less loneliness than patients whose visitor just dropped in, even though the total interaction time in both conditions was identical. Additional evidence bearing on this theme comes from a study of the break-up of college-age dating relationships. While both members of a couple typically reported loneliness and depression as a result of the break-up, partners who wanted the relationship to end were less distressed (Hill *et al.*, 1976).

COPING WITH LONELINESS

People cope with loneliness in a variety of ways. These techniques could be conceptualized within an existing model of coping processes. However, given the present view of loneliness, a more compatible way of categorizing these strategies is to divide them into three broad, loosely defined groups. These groups are: (1) strategies which alter the desired level of social contact, (2) those which alter the achieved level of social contact, and (3) those which alter the importance and/or perceived magnitude of the gap between the desired and achieved levels of contact.

Changing One's Desired Level of Social Contact

People have several mechanisms which reduce their desired level of contact. We will mention three: adaptation, task choice and standards for evaluating social relationships. Over time, people's expectations about and desires for social contact tend to converge to their achieved level. This is analogous to adaptation in psychophysical processes. A second way people can alter their desired level of social contact is to select tasks and situations they enjoy alone. Consider someone who enjoys going to movies alone but only enjoys eating in restaurants with companions. Such a person might avoid aroused feelings of loneliness by spending the evening at the movies rather than an elegant restaurant. A third technique people use to reduce their desired level of social contact is to change their standards of who is acceptable as a friend. As an example of this phenomenon, consider a professional who usually forms friendships with other high-status professionals. If this person became lonely, he or she might be willing, even happy, to form friendships with a much wider set of people.

Achieving Higher Levels of Social Contact

People employ a variety of techniques to achieve higher levels of social contact. Several of these techniques will be mentioned, but no pretense is made that these illustrations are exhaustive. A convenient approach is to discuss these techniques in three subgroups: (a) ways of forming new relationships, (b) ways of more fully using existing relationships, and (c) surrogate relationships.

Perhaps the most obvious way of achieving higher levels of social contact is to meet new friends. Ways of doing this include meeting a neighbor, striking up a conversation with a stranger on a public beach, spending the evening at a singles bar, participating in an encounter group, or taking a cruise. Sometimes such direct efforts to overcome loneliness work well, but often they don't (Weiss, 1973). To help initiate new relationships, many people primp themselves. They do whatever they think will make them more appealing to others. This might involve cosmetic efforts to make themselves more physically attractive. Or, it might involve self-improvement programs to transform themselves into more desirable persons. In this regard, hairdressers and psychotherapists alike may be allies of the lonely.

Another tactic lonely people can use for achieving more optimal levels of social contact is to make fuller use of their existing social network. This can involve increasing either the quantity or the nature of existing relationships. Increasing the quantity of contact might involve communicating with physically distant friends via the mail or telephone, deciding to engage in

social activities rather than other tasks, or increasing contact with psychologically peripheral members of one's social network. Changing the nature of relationships is a subtle process. It can involve "improving" the quality of a relationship (e.g. a marriage) so it more fully satisfies one's needs for social provisions. Or, it can involve trying to satisfy additional provisions within an existing relationship which previously had narrower bounds.

As a third class of techniques for achieving greater social contact, let us consider surrogate relationships. In this context, a surrogate relationship refers to ways people gain a sense of social connectedness without actually establishing two-way interactions with other humans. Such techniques might include caring for a pet, watching television soap operas, listening to radio talk shows, nostalgically recalling past social interactions and the like.

Minimizing Loneliness

As noted earlier, a third major way of coping with loneliness is to alter the importance and/or perceived magnitude of the gap between the desired and achieved levels of social interaction. At least four variations on this theme can be identified. First, lonely people can simply deny that there is a discrepancy between their desired and achieved levels of social contact. They can try to suppress their emotional reactions. Second, lonely people can devalue social contact; they can rationalize their plight by saying other objectives are more important. Third, people can try to reduce loneliness-induced deficits by gratifying their needs in alternate ways. For instance, if loneliness threatens a person's sense of self-esteem, they might engage in non-social means of bolstering their self-regard. Finally, people can engage in behaviors designed to alleviate the negative impact of loneliness. One example of this, consistent with evidence (Clinebell, 1968; Rouse & Ewing, 1973) linking alcoholism and drug use to loneliness and depression, would be drinking "to drown one's sorrows".

SUMMARY

In summary, this paper has offered a brief prospectus for a social psychological theory of loneliness. Loneliness was viewed as a social deficiency — a discrepancy between one's desired and achieved level of social contact. This view provided an organizing framework for conceptualizing various antecedents and ways of coping with loneliness. Several affective, motivational and behavioral manifestations were identified. While various personal characteristics may serve as predisposing factors, the precipitating causes of loneliness were classified as events which change the person's desired and/or achieved level of social contact. Similarly, the ways people cope with loneliness were classified into efforts to increase one's actual level of social contact, efforts to reduce one's desired level of social contact, and strategies to minimize the size or importance of one's social deficiency. In this perspective, cognitive processes, especially attributions, were given a central role in modulating the loneliness experience. If successful, this blueprint will be fruitful in stimulating more social psychological research on loneliness. Ultimately, we hope the implications of such research can be translated into practices which will help prevent and mitigate loneliness.

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REFERENCE NOTES

1. Michela, J. L. & Peplau, L. A. Applying attributional models of achievement to social settings. Paper presented at the meeting of the Western Psychological Association, Seattle, April 1977.
2. Wimer, S. Personal communication, July 1977.
3. Sermat, V. Personal communication, March 1977.
4. Gilger, K. *Loneliness and the Holidays* (Holiday News Story No. 19, Dept. of Agricultural Communications, University of Nebraska, Lincoln, 1976).
5. Jones, W. H. Personal communication, May 1977.
6. Sermat, V. Progress report: Loneliness and social isolation. Unpublished manuscript, York University, 1977.

REFERENCES

- Averill, J. R. Personal control over aversive stimuli and its relationship to stress. *Psychological Bulletin*, 80, 286-303 (1973).
- Bart, P. Depression in middle-aged women. In V. Gornick & B. Moran (Eds.), *Women in Sexist Society*. Basic Books, N.Y. (1971).
- Berscheid, E. & Walster, E. Physical attractiveness. In L. Berkowitz (Ed.), *Advances in Social Psychology*, Vol. 7. Academic Press, N.Y. (1974).
- Clinebell, H. *Understanding and Counseling the Alcoholic*. Abingdon Press, N.Y. (1968).
- Donson, C. & Georges, A. *Lonely-land and Bedsitter-land*. Chapples, Bala (1967).
- Dweck, C. S. & Reppucci, N. D. Learned helplessness and reinforcement responsibility in children. *Journal of Personality and Social Psychology*, 25, 109-116 (1973).
- Dyer, B. M. Loneliness — there's no way to escape it. *Alpha Gamma Delta Quarterly*, Fall 1974, pp. 2-5.
- Eddy, P. D. Loneliness: A discrepancy with the phenomenological self. Unpublished doctoral dissertation, Adelphi College (1961).
- Fidler, J. Loneliness — the problems of the elderly and retired. *Royal Society of Health Journal*, 96, 39-44 (1976).
- Fromm-Reichmann, F. Loneliness. *Psychiatry*, 22, 1-15 (1959).
- Gordon, S. *Lonely in America*. Simon & Schuster, N.Y. (1976).
- Gubrium, J. F. Marital desolation and the evaluation of everyday life in old age. *Journal of Marriage and the Family*, 36, 107-113 (1974).
- Hill, C. T., Rubin, Z. & Peplau, L. A. Breakups before marriage: The end of 103 affairs. *Journal of Social Issues*, 32, 147-168 (1976).
- Kelley, H. H. Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation*, Vol. 15. University of Nebraska Press, Lincoln (1967).
- Lopata, H. Z. Loneliness: Forms and components. In R. S. Weiss, *Loneliness: The Experience of Emotional and Social Isolation*. Massachusetts Institute of Technology Press, Cambridge (1973).
- Mazo, A. & Periman, D. The importance of performance attributions in learning from punishment. *Personality and Social Psychology Bulletin*, 3, 115-118 (1977).

- Moore, J. A. & Sermat, V. Relationship between loneliness and interpersonal relationships. *Canadian Counselor*, 8, 84-89 (1974).
- Ortega, M. J. Depression, loneliness and unhappiness. In E. S. Schneidman & M. J. Ortega, *Aspects of Depression*. Little, Brown, Boston (1969).
- Peplau, L. A. & Caldwell, M. A. Loneliness: a cognitive approach. *Essence*, in press.
- Peplau, L. A., Russell, D. & Heim, M. An attributional analysis of loneliness. In I. H. Frieze, D. Bar-Tal & J. S. Carroll (Eds.), *Attribution Theory: Applications to Social Problems*. New York: Jossey-Bass, in press.
- Pettigrew, T. F. Social evaluation theory: Convergences and applications. In D. Levine (Ed.), *Nebraska Symposium on Motivation*, Vol. 15. University of Nebraska Press, Lincoln (1967).
- Rouse, B. & Ewing, J. Marijuana and other drug use by women college students: Associated risk taking and coping activities. *American Journal of Psychiatry*, 130, 486-491 (1973).
- Russell, D., Peplau, L. A. & Ferguson, M. L. Developing a measure of loneliness. *Journal of Personality Assessment*, 42, 290-294 (1978).
- Schachter, S. *The Psychology of Affiliation*. Stanford University Press (1959).
- Schulz, R. Effects of control and predictability on the physical and psychological well-being of the institutionalized aged. *Journal of Personality and Social Psychology*, 33, 563-573 (1976).
- Sisenwein, R. Loneliness and the Individual as Viewed by Himself and Others. Unpublished doctoral dissertation, Columbia University, 1964.
- Slater, P. *The Pursuit of Loneliness: American Culture at the Breaking Point*. Beacon Press, Boston (1970).
- Storms, M. D. & McCaul, K. D. Attributional processes and emotional exacerbation of dysfunctional behavior. In J. H. Harvey, W. J. Ickes & R. F. Kidd (Eds.), *New Directions in Attribution Research*, Vol. 1., Wiley, N.Y. (1976).
- Sullivan, H. S. *The Interpersonal Theory of Psychiatry*. Norton, N.Y. (1953).
- Weiner, B. *Achievement Motivation and Attribution Theory*. General Learning Press, Morristown, N.J. (1974).
- Weiner, B., Russell, D. & Lerman, D. Affective consequences of causal ascriptions. In J. H. Harvey, W. J. Ickes & R. F. Kidd (Eds.), *New Directions in Attribution Research*, Vol. 2. Hillsdale, N.J.: Erlbaum Press, Hillsdale, N.J. (in press).
- Weiss, R. S. *Loneliness: The Experience of Emotional and Social Isolation*. The Massachusetts Institute of Technology Press, Cambridge (1973).
- Weiss, R. S. The emotional impact of marital separation. *Journal of Social Issues*, 32, 135-146 (1976).
- Weissman, M. M. & Paykel, E. S. Moving and depression in women. In R. S. Weiss, *Loneliness: The Experience of Emotional and Social Isolation*. Massachusetts Institute of Technology Press, Cambridge (1973).
- Wenz, F. V. Seasonal suicide attempts and forms of loneliness. *Psychological Reports*, 40, 807-810 (1977).
- Zimbardo, P. G. *Shyness*. Addison-Wesley, Reading, Mass. (1977).