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Chapter 2

LONELINESS RESEARCH: A SURVEY OF EMPIRICAL FINDINGS

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Introduction

Millions of Americans suffer from loneliness. One national survey found that 26 percent of Americans—the equivalent of over 50 million people—had recently felt lonely (Weiss 1973). Although some people are at greater risk for loneliness than others, no segment of society is totally immune. Loneliness is typically an unpleasant, distressing experience. When loneliness is both severe and prolonged, it can jeopardize a person's mental health. Thus, loneliness is justifiably taking its place among the important topics being investigated by social and mental health researchers.

This paper provides a concise overview of what is known about loneliness from empirical research. The paper attempts to provide information about loneliness and its mental health consequences useful to both loneliness researchers and to mental health practitioners with expertise in intervention and treatment. (For a detailed review of work on loneliness, see ***Loneliness: A Sourcebook of Current Theory, Research, and Therapy*** edited by Peplau and Perlman, 1982.)

Primary Prevention and Loneliness

Loneliness is a painful warning signal that a person's social relations are deficient in some important way. It is unlikely and perhaps even undesirable that loneliness be eliminated from the repertoire of common human experiences. What does seem imperative, however, is to prevent transient episodes of loneliness from evolving into a condition of severe and chronic loneliness. Empirical evidence (to be reviewed later in this paper) is beginning to document the harmful effects of persistent loneliness on mental health. Persistent loneliness can set the stage for depression, increase the risk of suicide, and in other ways jeopardize psychological well-being. It is these harmful mental health consequences of loneliness that are a prime target for intervention.

A preventive mental health perspective takes what might be called an "upstream" approach. The focus is on actions taken to avoid serious psychopathology rather than on rehabilitative efforts to reduce existing psychopathology. According to Goldston (1977):

> Primary prevention encompasses activities directed toward specifically identified vulnerable high risk groups within the community who have not been labeled psychiatrically ill and for whom measures can be taken to avoid the onset of emotional disturbance and/or to enhance their level of positive mental health. Programs for the promotion of mental health are primarily educational rather than clinical in conception and operation, their ultimate goal being to increase people's capacities for dealing with crises and for taking steps to improve their own lives. (p. 20)

In other words, our focus is on preventing the harmful mental health consequences of loneliness before they evolve into major mental disturbances.

According to the Task Panel on Prevention of the President's Commission on Mental Health, the defining attributes of primary prevention are health building, proactive, mass-oriented, and educational (Report of the Task Panel on Prevention, 1978). Goldston (1977, p. 21) lists "mental health education, anticipatory guidance, a variety of mental health consultation, and the training of vital caregivers" as illustrative of primary prevention activities. The training of vital caregivers is complementary with the view that a good deal of primary prevention occurs in conjunction with crisis intervention. Kessler and Albee (1975, pp. 363–364) claim:

> The major strategies of primary prevention depend . . . for their effectiveness on the truth of this proposition—that early happenings have later consequences, especially that emotional damage to the child is reflected in its adult disturbance.

As can be inferred from these remarks, prevention efforts frequently attempt to capitalize on the individual's naturally occurring interactions (as with physicians, the clergy, or other helpgivers). Preventive approaches also make use of existing social systems such as the schools, mass media, or community mental health centers and programs. If oriented toward selected audiences, programs are often aimed at children or high risk groups.

Kessler and Albee (1975) note that there are at least two major approaches to establish a research base for preventive efforts in mental health:

> The first is the attempt to study the possible . . . factors in the origins of disorders. A second is the attempt to study the pattern of distribution in the population: epidemiology. (p. 567)

Two important topics for this review are thus the causes of loneliness and the groups most at risk for loneliness.

We begin with a discussion of the nature and mental health consequences of loneliness. This is followed by a review of the major causes of loneliness and a summary of findings about groups most at risk for loneliness. We briefly consider ways of overcoming loneliness used by lay people, and describe outcome studies of existing treatments for loneliness. We conclude with recommendations for needed research relevant to intervention.

What Is Loneliness?

Loneliness Defined

Many different definitions of loneliness have been offered (Peplau and Perlman, 1982, p. 4). In our view, loneliness is the unpleasant experience that occurs when a person's network of social relationships is significantly deficient in either quality or quantity. This definition shares three points of agreement with the way most other scholars view loneliness. First, loneliness results from a deficiency in a person's social relationships. Loneliness occurs when there is a mismatch between a person's actual social relations and the person's needs or desires for social contact. Sometimes loneliness results from a shift in an individual's social needs rather than from a change in their actual level of social contact. Second, loneliness is a subjective experience; it is not synonymous with objective social isolation. People can be alone with-

out being lonely, or lonely in a crowd. Third, the experience of loneliness is aversive. Although loneliness may be a spur to personal growth, the experience itself is unpleasant and distressing.

The Experience of Loneliness

A common medical approach for identifying a disease is examining its symptoms. This approach has not been common in studies of loneliness. Nonetheless, several manifestations of loneliness have been noted (Perlman and Peplau 1981). For example, in the affective sphere, loneliness has been linked with feelings of general dissatisfaction, unhappiness, anxiety, hostility, emptiness, boredom, and restlessness. In the cognitive domain, lonely individuals are believed to be vigilant about their interpersonal relationships (i.e., oversensitive to cues of acceptance or rejection and constantly checking to see if others can satisfy their interpersonal needs).

Horowitz et al. (1982) offer another approach for describing the nature of loneliness. They have identified the prototype that lay people have of loneliness. This prototype consists of the "fuzzy set" of features that form our stereotyped description of a person who is lonely. People who manifest a higher proportion of the prototypic features are more likely to be seen as lonely. However, as Horowitz and associates point out, a person need not manifest all the features to be seen as lonely.

Horowitz et al. found that the major attributes of a lonely person fall into three clusters. The first major cluster reflects feelings and thoughts of being different, isolated and separate from others. The person thinks "I don't fit in" and feels unloved, inadequate and friendless. The second cluster includes negative feelings of depression, sadness, anger, and even paranoia. The final cluster reflects actions, such as avoiding social contacts or working for long hours, that may bring about loneliness.

Types of Loneliness

Many social scientists have speculated about the various forms that loneliness can take. Three underlying dimensions have been identified in these discussions of the different types of loneliness (de Jong-Gierveld and Raadschelders 1982). These dimensions have to do with the positive or negative nature, the source, and the duration of loneliness.

Positivity-negativity. The first dimension, positivity-negativity, can be seen in the writings of Moustakas (1961). He distinguished between existential loneliness and loneliness anxiety. According to Moustakas, existential loneliness is an inevitable part of the human experience, involving periods of self-confrontation and providing an avenue for self-growth. Existential loneliness can lead to positive experiences of "triumphant creation." In contrast, loneliness anxiety is a negative experience that results from a "basic alienation between man and man."

Very little research has focused on existential loneliness or one's philosophical awareness of aloneness as part of the human condition. Empirical evidence suggests that negative feelings predominate in the lives of lonely people (Russell et al. 1980). Although periods of solitude can have benefits (Suedfeld 1982), the subjective experience of loneliness is seldom accompanied by positive thoughts or feelings.

Social versus emotional loneliness. A second way of categorizing forms of loneliness has been on the basis of the social deficiency involved. Weiss (1973) distinguished emotional loneliness (based on the absence of a personal, intimate relationship or attachment) from social loneliness (based on a lack of social "connectedness" or sense of community). He believes that emotional loneliness is the more acutely painful form of isolation; social loneliness is experienced as a mixture of feeling rejected or unacceptable, together with a sense of boredom. While relatively little empirical work has been done to verify this distinction, Rubenstein and Shaver (1982) present some findings consistent with Weiss' model.

Chronicity. The duration of loneliness over time is an important dimension. Young (1982) distinguished among three types of loneliness. ***Transient*** or everyday loneliness includes brief and occasional lonely moods. These experiences have not been of much concern to researchers or clinicians. ***Situational*** or transitional loneliness involves people who had satisfying relationships until some specific change occurred, such as divorce, bereavement or moving to a new town. Situational loneliness can be a severely distressing experience. Young defined ***chronic*** loneliness as occurring when a person has lacked satisfactory social relations for a period of two or more years. When situational loneliness persists for long periods, it can become chronic. From the standpoint of intervention, greatest attention should be directed at preventing situational loneliness from becoming a severe and chronic experience. Recent studies (e.g., Hojat, 1983) have begun to demonstrate the utility of the chronicity distinction. For instance, Gerson and Perlman (1979) found that temporarily lonely subjects were better at communicating their feelings than were chronically lonely subjects.

Loneliness, Social Support and Social Networks

There is growing awareness in the mental health community that social relations are vital to psychological well-being. However, several rather different conceptual approaches have been taken to this topic. Some professionals have emphasized the negative effects of ***loneliness.*** Others have focused on the positive effects of ***social*** support (House 1981; Leavy 1983). Still others have examined features of the person's ***social network*** such as marital status or divorce (Bloom et al. 1978).

There appears to be considerable overlap in the goals and findings of studies from these diverse traditions. An important direction for future work will be the integration of these conceptual and research perspectives.

In a very general way, loneliness and social support can be seen as opposite concepts. Loneliness refers to the experience of deficits in social relations; social support refers to the availability of interpersonal resources. But the parallelism is by no means perfect. Loneliness researchers have typically defined loneliness as a subjective, personal experience, and have distinguished loneliness from objective social isolation. In contrast, research on social support (House 1981) has investigated both subjective (perceived) support and objective social support. A second difference concerns the attention given to specifying the nature of the social interchanges involved. Loneliness researchers have usually been fairly vague about the specific social deficits that result in loneliness. An exception has been Weiss' (1974) effort to identify the provisions of social relations, and to link two important provisions (attachment and social integration) to two types of loneliness (emotional and social loneliness, respectively). In contrast, social support researchers have given greater attention to the types of social exchanges that are supportive. House (1981), for example, identified four major classes of support: emotional, informational, instrumental, and appraisal support.

The rationale for efforts to integrate work on loneliness and social support is not merely the desire for conceptual clarity. Equally important is evidence linking both loneliness and social support to mental health outcomes. It seems likely that both lines of work are getting at a common phenomenon of importance to people coping with stress and crisis. Both lines offer clues about how to foster positive psychological functioning. In understanding loneliness and social support, several specific questions seem pertinent:

1. What is the relationship of loneliness and perceived social support? It seems likely that loneliness is associated with a perceived lack of social support. Measures of social support (House 1981) ask such questions as "To what extent is your spouse concerned about your welfare?" or "How much is your work supervisor willing to listen to your work-related problems?" Measures of loneliness include similar themes. The UCLA Loneliness Scale, for example, asks how often a person has felt that "No one really knows me well" or "My interests and ideas are not shared by those around me." Indeed, a recent study (Sarason et al. 1983) found a significant relationship between the UCLA Loneliness Scale and a newly developed Social Support Questionnaire (Sarason et al. 1983). This suggests that existing findings about loneliness and social support may provide complementary information about the importance

of social relations for mental health. Further methodological and conceptual analyses of the links between loneliness and social support are needed.

2. What social deficits are most detrimental to mental health? The effort to understand loneliness and social support points to the utility of going beyond global discussions of "deficient" and "supportive" relationships to identify more precisely the types of social exchanges that lead people to feel support versus loneliness, and the exchanges that are most essential for mental health. Several typologies of social exchanges have been offered (Rook and Peplau 1982), but little empirical work has investigated the specific effects of different types of social supports and deficits.

3. How do objective social network features affect subjective feelings of loneliness versus support? As mentioned earlier in this paper, it is important to distinguish loneliness from social isolation. Although loneliness is linked to features of the person's objective social network such as marital status or number of friends, the association is never perfect and many exceptions occur. For example, old people with a lifetime history of social isolation are less likely to report loneliness than are old people who have had more social ties. The link between objective social relations and subjective experiences may depend on cognitive factors such as the person's expectations or values.

4. How do objective and subjective features of social relations *affect* mental health? The interrelationships among objective social networks, subjective feelings of loneliness versus support, and mental health are not well understood. One simplistic model might suggest that objective social ties determine subjective experiences of loneliness/support which in turn influence mental health. From such a view, loneliness and perceived social support would be better predictors of vulnerability to psychopathology than are objective features of social relations. But this model has not been tested. It may well be that objective social deficits have detrimental consequences on mental health regardless of whether the deficits are perceived by the person involved.

The point of this discussion is to suggest that our understanding of the harmful mental health consequences of loneliness can be enhanced by an examination of related work on social support and social networks. In addition, we may benefit from an effort to specify more precisely the nature of the social deficits that lead to loneliness and that give rise to psychopathology.

Loneliness and Mental Health

The available evidence suggests that loneliness is associated with poor mental health. In a large-scale survey of Swedish senior citizens, Berg and his associates (1981) found that lonely respondents scored higher on Eysenck's neuroticism scale (Diamant and Windholz 1981; Hojat 1981) and were more frequently judged in a structured psychiatric examination as having mental symptoms needing treatment. Among college students in other studies (Goswick and Jones 1981; Loucks 1980), loneliness was associated with indices of poor Personality Integration, Neurosis, and General Maladjustment derived from the Tennessee Self-Concept Scale. Rubenstein and Shaver (1980) reported a strong relationship between loneliness and a checklist of psychosomatic symptoms such as headaches, poor appetite, and feeling tired. Loneliness is strongly correlated with anxiety (Russell et al. 1980). Diamant and Windholz (1981) obtained a correlation of .68 between loneliness and Zung's Clinical Index of Potential Suicide.

A number of studies (Diamant and Windholz 1981; Loucks 1975; Sennat 1980) have documented an association between loneliness and aggressive tendencies. More recent research (Check et al. 1983) suggests that loneliness in males is associated with aggression toward women and proclivity toward rape.

Further evidence linking loneliness with social problems comes from Brennan and Auslander's (1979) secondary analyses of several large scale surveys of American adolescents. They found that loneliness was associated with poor grades, expulsion from school, running away from home, and engaging in delinquent acts such as theft, gambling, and vandalism. Collectively, research indicates that loneliness is often associated with behavioral and mental health problems. The evidence just cited comes from studies that have focused specifically on loneliness. It seems likely that studies of particular clinical problems, such as suicide, alcoholism, or depression would find that loneliness is often involved. Indeed, the serious mental health consequences of loneliness may not be readily observed in studies of college students and other community-based populations. Research on loneliness among clinical samples is needed.

Loneliness and Depression

The well-documented association of loneliness and depression deserves special note (see Chapter 3, p. 67). Depression is one of the most common mental health problems associated with loneliness. Empirical studies using self-report questions find that people who say they are lonely also say they feel depressed (Perlman et al. 1978; Russell et al. 1978). Studies using longer depression scales such as the Beck Depression Inventory also find a strong relationship between loneliness and depression (Bragg, 1979; Russell et al. 1980; Weeks et al. 1980; Young 1979). More recently, Cutrona (1981) found that loneliness prior to the birth of a child was a strong predictor of post-partum depression. Most empirical investigations have examined loneliness and depression in college student or community samples. Clinical impressions (Young 1982) suggest that loneliness and depression are commonly associated in clinical populations as well, although this has not been systematically documented.

The consistent association of loneliness and depression led Bragg (1979) to propose a distinction between "depressed loneliness" and "nondepressed loneliness." In a study of college students, Bragg found that depressed loneliness was associated with fairly global negativity, seen in dissatisfaction with social relations, school, work, and many facets of life. In contrast, nondepressed lonely people expressed dissatisfaction only with their social relations; they were not necessarily unhappy about other aspects of their lives. More recently, Young (personal communication) has proposed that "lonely depression" be considered a major type of depression in which social deficits play a prominent part.

Two observations can be made about the association of loneliness and depression. First, as Bragg and others have shown, not all lonely people are depressed. It seems likely that depression is more common when severe loneliness persists over time. Cognitive processes may also influence the loneliness-depression link. Lonely people who blame themselves for their social problems and who attribute their loneliness to unchangeable factors may be most prone to depression (Peplau et al. 1979). Second, not all depressed people are lonely. Depression can stem from many factors including but not limited to social deficits. In this sense, depression is a more global phenomenon than loneliness.

Important questions about loneliness and depression await empirical study. First, we need to know more about when loneliness is associated with depression. The possibility of a temporal sequence in which situational loneliness becomes severe and persistent and leads to serious depression seems plausible, but requires empirical verification. Although most discussions have described depression as a consequence of loneliness, the opposite pattern—depression leading to a disruption of social relations and to loneliness—may also occur. Second, we need to know more about the implications of the loneliness-depression link for intervention. Minimally, those who seek to help the lonely should be aware that depression and, in extreme cases, suicidal tendencies, may be present. In addition, we need to know more about whether effective intervention should focus exclusively on social relations, should focus on depression before tackling social deficits, or should use some combined strategy.

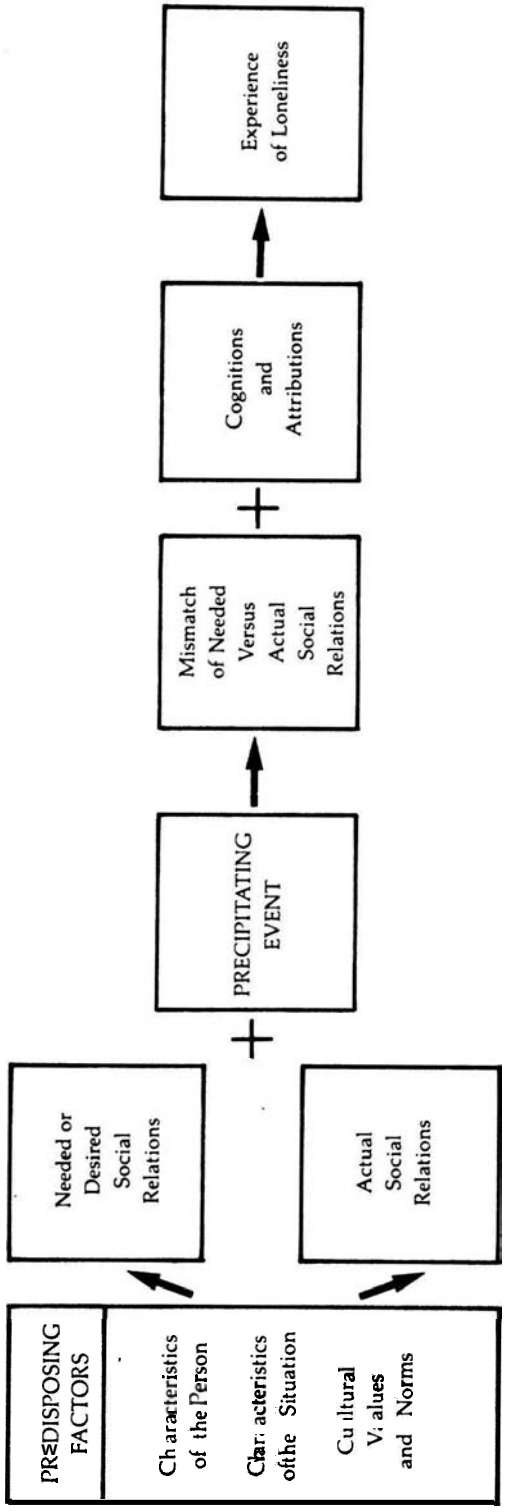

Figure 1. A Model of the Causes of Loneliness

The Causes of Loneliness

Many factors can contribute to the experience of loneliness. We find it helpful to distinguish between ***predisposing*** factors which make people vulnerable to loneliness and ***precipitating*** events that trigger the onset of loneliness. Predisposing factors can include characteristics of the person (e.g., shyness, lack of social skills), characteristics of the situation (e.g., competitive interaction, social isolation), and general cultural values (e.g., individualism). Precipitating events are factors such as the break-up of a love relationship or moving to a new community which change a person's social life in some significant way. Precipitating events create a mismatch between the person's actual social relations and the person's social needs or desires; a change in one of these two factors without a corresponding change in the other can produce loneliness. Finally, we believe that cognitive processes can influence the experience of loneliness. These diverse causal factors are outlined schematically in Figure 1. (This is a modified version of a figure presented in Rubenstein et al. 1979).

In the following sections, we briefly consider each of these causes of loneliness.

Predisposing Factors

Characteristics of the person. A large number of studies (Perlman and Peplau 1981) have investigated personality correlates of loneliness. Taken together, available evidence indicates that loneliness is associated with:

- —low self-esteem (Cutrona 1982; Jones et al. 1981)
- —shyness (Jones et al. 1981; Maroldo 1981)
- —self-consciousness (Jones et al. 1981)
- —introversion (Russell et al. 1980)
- —lower affiliative tendencies (Russell et al. 1980)
- —lack of assertiveness (Russell et al. 1980)
- external locus of control (Diamant and Windholz 1981)

Lonely people also manifest certain distinctive social behaviors. These behaviors (or some might say, social skill deficits) may make it difficult for lonely people to form and/or maintain relationships. For example, lonely students suffer from "inhibited sociability," that is, they report problems making friends, introducing themselves, participating in groups, enjoying parties, making phone calls to initiate social activities, and the like (Horowitz et al. 1982). Other studies (Chelune et al 1980; Solano et al. 1982) have shown that lonely people are lower (or anormative) in self-disclosure and less successful, during a selfdisclosure exercise, in making themselves known to a partner.

In this same vein, lonely people manifest distinct patterns of dyadic interaction. Jones (1982) analyzed videotaped conversations held in his laboratory between new acquaintances. Lonely participants made more self-statements, asked fewer questions of their partners, and changed the topic more frequently. Lonely people also responded more slowly to their partners' statements. Finally, lonely people were less attractive to their partners and rated their partner's personality more negatively. Overall, Jones characterized the interaction style of lonely individuals as "self-focused and nonresponsive."

Based on a number of studies (Bergenstal 1981; Brennan and Auslander 1979; Hojat 1981; Paloutzian and Ellison 1982; Perlman and Goldenberg 1981; Rubenstein et al. 1979), one can generally conclude that cold, less nurturant parents have lonely offspring. For instance, in one large-scale study (Rubenstein et al. 1979), lonely respondents remembered their parents as being remote, less trustworthy, and disagreeable. Nonlonely respondents remembered their parents as warm, close, and helpful. Similar findings have been reported by Brennan and Auslander (1979, p. 200). They summed up their evidence by stating that lonely adolescents come from families manifesting "an absence of emotional nurturance, guidance or support. The climate is cold, violent, undisciplined, and irrational." Among other findings, lonely adolescents reported higher levels of parental rejection, more parental use of rejection as a form of punishment and greater parental dissatisfaction with their choice of friends. Lonely offspring, furthermore, felt their parents gave them very little encouragement to strive for popularity. In a third study (Bergenstal 1981), loneliness was positively related to past (real and threatened) separations from one's father, and inversely related to the number of hours per week fathers were available to interact with their sons.

Situational determinants. Situational factors can also predispose people to loneliness. Situations vary in the opportunities they provide for social contact and the initiation of new relationships. Some constraints are very basic—time, distance, and money. The student who carries a full course load and a heavy work schedule may have little time for sleep, let alone making friends. The firespotter who lives in a remote part of the forest has few opportunities to socialize. The single parent on a tight budget may not be able to afford the babysitter who would permit time for social activities. Constraints can also limit a person's "pool of eligibles"—the set of people whom we consider appropriate as friends or lovers. People who are "different" from those around them—the one old person in the apartment building or the only Hispanic family on the block—may have fewer opportunities to start relationships. For example, because women live considerably longer than men,

older widowed women have fewer prospects for remarriage and are significantly less likely to remarry than are older widowed men.

Situational factors can also reduce the possibilities of maintaining satisfying social relationships. Co-workers who are in direct competition for scarce resources may find it difficult to be supportive of each other. Families in situations of stress may find it hard to interact in positive, rewarding ways. Periods of separation make it difficult to maintain relationships that may once have been close and supportive. The point of these examples is that the risk of loneliness can be increased by situational factors that are sometimes outside a person's direct control.

Cultural determinants. Sociologically oriented theorists have seen loneliness as resulting from cultural factors and the structuring of social institutions. For instance, sociologists have argued that secularization, mobility, and/or urbanization contribute to the high incidence of loneliness in American society.

Riesman et al. (1961) characterized Americans as "otherdirected," concerned with popularity and how others evaluate them. However, they are cut off from their inner selves, their feelings, and their aspirations. The result, paradoxically, is that the otherdirected person "remains a lonely member of the crowd because he never really comes close to others or to himself (p. 22).

For Slater (1970), America's problem is not other direction, but rather individualism. Slater believes we all have a desire for community, engagement, and dependence. We want to trust and cooperate with others. However, these basic social needs are thwarted in American society because of our commitment to individualism. We believe that everyone should pursue his or her own destiny. The more we succeed in realizing this value, the more we become "disconnected, bored, [and] lonely" (Slater 1970, p. 34).

Unfortunately, most sociological speculations about how cultural factors influence loneliness have not been subjected to empirical investigation. One exception concerns the hypothesized effects of geographic mobility on loneliness. Although it has commonly been asserted that mobility increases loneliness, empirical evidence fails to support this view. For example, Rubenstein and Shaver (1982a) found no relationship between current loneliness and how frequently an individual had moved during his or her life time. Although the immediate impact of moving may be to create loneliness, these effects are typically short-lived. We need to be wary of untested speculations about the causes of loneliness.

It is possible, however, to illustrate how social norms operating within a given culture can influence levels of loneliness. Larson et al. (1982) had high school students carry electronic paging devices. When-

ever they were paged, the students indicated on a brief form whether they were alone and how lonely they were feeling. If students were alone on weeknights, they reported only moderate feelings of loneliness, but students who were alone on Friday or Saturday nights reported intense feelings of loneliness. Here the expectation that weekends are for social activities appears to enhance students' desired level of contact and thus to produce greater loneliness.

Actual Social Relationships

Perhaps the most obvious determinant of loneliness is the nature of a person's actual social relationships (see figure 1). Despite a few anomalies and failures to replicate, the weight of the evidence firmly suggests that lonely people have fewer social contacts than do nonlonely people. For instance, lonely students report dating less often, having fewer social activities, and having fewer friends (Jones 1982; Perlman and Goldenberg 1981; Russell et al. 1980). Lonely senior citizens have less contact with their friends (Perlman et al. 1978).

In three studies (Jones 1981; McCormack and Kahn 1980; Wheeler et al. in press) students kept daily records of their interactions. In McCormack and Kahn's study, lonely students reported spending less time with other people. In contrast, in Jones' study, loneliness was not related to the total number of interactions the students had. Jones* lonely record-keepers did, however, report more interactions with strangers and casual acquaintances and fewer interactions with family and friends. McCormack and Kahn's data also revealed a tendency for nonlonely subjects to have a higher proportion of their contacts with close friends. Thus, even if lonely people maintain the same total number of contacts, the overall pattern of results suggests deficiencies in the types of contacts they sustain. (Perlman and Goldenberg 1981; Russell et al. 1980).

Some evidence suggests that the relative importance of different kinds of relationships varies with age. Perlman and Goldenberg (1981) surveyed adolescents in Grade 8, Grade 11, and first year of university. As students got older, contact with friends became an increasingly strong predictor of loneliness, and mother-child relations decreased in importance. When students reach the end of university and enter graduate school, romantic relations become an increasingly important factor in loneliness (Russell et al. 1981).

Loneliness is affected not only by the number of social relationships and the frequency of social interaction, but also by the quality of relationships. For example, among senior citizens, marital dissatisfaction was associated with greater loneliness (Perlman et al. 1978). Similarly, in Cutrona's (1982) study of UCLA students, dissatisfaction with one's friendships, dating life, and family relationships were all significant

predictors of loneliness. In Perlman and Goldenberg's (1981) study, the less positively the students rated the quality of their relationships on such dimensions as positive regard, empathy, and authenticity, the more lonely students reported being.

Needed or Desired Social Relations

Our model suggests that loneliness results from a mismatch between a person's actual social relations and the social relations the person needs or wants. As mentioned earlier, loneliness researchers have seldom specified the particular social needs that are most pertinent to loneliness. An exception is Weiss' (1974) delineation of six basic "provisions" supplied by social relationships. These include feelings of personal attachment (as in intimate relations), social integration, the opportunity to receive nurturance, reassurance of one's worth, sense of reliable alliance, and guidance. In a study of UCLA students (Cutrona 1982), participants rated how well their current relationships supplied them with each of Weiss' six provisions. As predicted, students whose needs were well met tended to be less lonely. In particular, having a set of relationships that provided social integration, a sense of worth, and guidance helped students avoid being lonely. An important direction for future loneliness research will be to identify and empirically test the importance of particular social deficits for the experience of loneliness among various populations.

Precipitating Events

The onset of loneliness is initiated by a change in a person's actual or desired/needed social relations. Perhaps most often, loneliness is precipitated by separation from important ties or by the ending of important relationships. There is abundant evidence that widowhood (Lopata et al. 1982), divorce (Weiss 1975), and recent geographical moves precipitate loneliness. When Cutrona (1982) asked college students what precipitated their loneliness, the three most frequent responses were leaving family and friends to begin college, the breakup of a romantic relationship, and problems with a friend or relative. In a study of school children, Greene (1980) found that being rejected, being alone, and feeling inadequate were rated as the main elicitors of loneliness. Events that increase a person's desire for social contact can also precipitate loneliness if they are not associated with a corresponding increase in actual contact. Thus Jones (1981) found that loneliness was sometimes triggered by events such as flunking an exam or having a flat tire which presumably arouse unfulfilled affiliative needs.

Cognitive Processes

Once a mismatch occurs between one's desired and achieved levels of contact, loneliness is a likely outcome. But, in our view, the intensity of the loneliness response is mediated by intervening cognitive processes. Three important factors are attributions, social comparisons, and perceptions of personal control.

According to attribution theorists, people are motivated to understand the causes of their experiences. ***Causal attributions*** for loneliness thus refer to lay people's perceptions of the factors that caused them to become lonely and to remain lonely over time. According to the theory, causal explanations can have important implications for a person's feelings, expectations for the future, and self-concept.

Studies conducted at UCLA (Michela et al. 1982; Peplau et al. 1979) have demonstrated the applicability of attributional concepts to the phenomenon of loneliness. For example, the longer people are lonely, the more apt they are to attribute their dilemma to personal factors about themselves rather than to situational factors. Furthermore, when people believe that their loneliness is due to factors that are both personal and unchangeable (e.g., their personality), depression and pessimism are more likely to accompany loneliness.

In assessing the adequacy or inadequacy of one's relations (i.e., evaluating the degree of mismatch), ***social comparisons*** with others in similar situations are important. Students who believe they have fewer friends than their age peers are apt to be lonely (Perlman and Goldenberg 1981). Social comparisons with peers and with one's own previous relationships affect satisfaction with one's social relationships, and satisfaction in turn is linked to loneliness (Cutrona 1982; Russell et al. 1981). In figure 1, cognitive processes are depicted as operating late in the causal chain that leads to loneliness. One might, however, depict social comparison processes as operating at other, earlier points (i.e., influencing the person's desired level of contact). Regardless of exactly where they enter the chain, it is clear from the available data that social comparison is an important antecedent of loneliness.

A final cognitive modulator of the loneliness experience is the person's perception of having ***personal control*** over his or her relationships. Existing evidence suggests that feelings of personal control may generally reduce stress (Averill 1973) and enhance performance. More directly relevant evidence that perceived control affects loneliness comes from a field study conducted in a nursing home for the aged. Schulz (1976) had undergraduates visit the elderly for a 2-month period. Those elderly residents who could choose or predict when their visitor would come reported less loneliness than residents 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 breakup of college dating relationships. Although both members of a couple typically reported loneliness and depression as a result of the breakup, partners who wanted the relationship to end and initiated the breakup were less distressed (Hill et al. 1976).

Are Explanations of Loneliness Too Person-Centered?

Caplan and Nelson (1973) have noted the tendency of psychologists to explain social problems (i.e., delinquency, alcohol abuse, race relations) in person-centered terms. For instance, in examining a large number of research reports on black Americans, they found that 82 percent of the articles directly or indirectly interpreted the difficulties of blacks in terms of the blacks' own personal shortcomings. As Caplan and Nelson observe, there are several reasons for this. One explanation is that psychologists, especially clinical psychologists, have been trained to think in terms of individual differences and dynamics. Another reason pertinent to topics such as loneliness is the relative ease of doing research involving personality measures and/or questionnaires that tap individual rather than system-level variables.

Despite the explicit role assigned in figure 1 to situational and cultural factors, the loneliness literature is probably as person-centered as most other areas of research. As was noted earlier, solutions typically grow out of assumptions about where the causes of a problem lie. To the extent that loneliness research focuses on person-centered variables, we would expect loneliness researchers frequently to hit upon person-oriented treatment techniques and intervention strategies.

We do not deny the value of such approaches. However, if we had infinite power to manipulate the circumstances, we are convinced we could make virtually anyone lonely. Thus, we would encourage colleagues to keep the system-level causes of loneliness clearly in mind. In designing interventions to prevent or alleviate loneliness, we urge careful consideration of situational and social system changes.

The Epidemiology of Loneliness—Who Is at Greatest Risk?

The question of "Who is at risk for loneliness?" can be approached in two ways. First, one can consider how demographic factors such as age, marital status, gender, and income correlate with loneliness. Second, one can look for groups of people who are prone to loneliness.

Demographic Characteristics

Age. Although popular culture depicts youth as a time of sociability and old age as a time of loneliness, several large-scale surveys challenge this folk view (Fidler 1976; **Parlee** 1979; Rubenstein and Shaver **1982b; Woodward** and Visser 1977). As shown in Table 1, self-reports of loneliness are highest among adolescents. (This is true despite the validity of conventional wisdom that adolescents are a highly sociable **group—Dickens** and Perlman 1981.) As people get older, self-reported loneliness declines. The one possible exception to this pattern is some evidence that among the very old, those over 80, loneliness is very common. Thus, in **Parlee's** survey (see Table 1), 79 percent of respondents under age 18 said they were sometimes or often lonely, compared to only 53 percent of 45–54 year olds, and 37 percent of those 55 and over. As is also shown in Table 1, Dean (1962) found fairly similar levels of loneliness among adults ages 50 to 79, but a sharp increase in loneliness among those age 80 and over.

The reasons for the general pattern of decreased self-reports of loneliness by respondents from successive stages in the life cycle are not well-understood (Campbell et al. 1976). One possibility is that old people are genuinely more satisfied with their social relations than are young adults. Although young people typically have many more social opportunities, they may also have high and perhaps unrealistic expectations about social relations. With age, individuals may establish more reasonable expectations and standards for social relations. A second possibility is that these trends reflect difference in willingness to acknowledge feelings of loneliness, rather than in the experience itself. Young adults may be more influenced by the contemporary ethic of "openness" and emotional expressiveness **(Rubin** et al. 1980) than are older adults. Finally, we do not know whether observed patterns represent developmental trends linked to aging or life stage, or rather reflect cohort effects due to historical differences in the experiences of various age groups.

Marital **status.** Several data sets document that loneliness is less common among married people (Berg et **al.** 1981; Gubrium 1974; Harvey and Bahr 1974; **Parlee** 1979; Weiss 1973). When the unmarrieds are divided into various more specific groups, the results vary somewhat by sample. The general tendency (see Table 2) appears to be for single (never-married) people to be less lonely than the divorced or widowed.

Loneliness among widows and widowers has been a frequent focus of investigation (Lopata et **al.** 1982). Perhaps this is because loneliness is such a salient problem for widows. In one study, for instance, 70 percent of a random sample of urban widows mentioned loneliness as a problem, and 48 percent of them said it was the major problem they

Table 1

Age Trends in Loneliness

Survey by Rubenstein and Shaver*							
Age in Years	18–25	26–30	31–39	40–49	50–59	60-69	70 +
Mean loneliness score (max. = +20)	+12.8	+9.5	+8.9	+2.9	–3.8	–9.4	–22.5
Survey by **Parlee** (1979)							
Age in Years	under 18	18–24	25–34	35-44	45–54	55 +	
%saying they feel lonely sometimes or often	79%	71%	69%	60%	53%	37%	
NIMH Survey (Radloff 1982)							
Age in **Years**	18–24	25–44	45–64	65 +			
% saying they felt "very lonely or remote from others" during the past week	39%	24%	21%	25%			
Study by Dean (1962)							
Age in Years	50–59	60-69	70-79	80 +	Total		
% saying they feel lonely "sometimes" or "more often"	26%	35%	29%	53%	32%		

*Adapted from Rubenstein, Shaver, and **Peplau** (1979).

faced (Lopata 1969). Fortunately, there is some evidence (Lopata et al. 1982) that the loneliness of widows declines over time.

Gender. Existing research on gender and loneliness presents what at first may appear to be a confusing picture. However, further inspection suggests the results may be measure specific. Typically, no sex differences occur when the 20-item UCLA Loneliness Scale is used, but **sex** differences are found when respondents are asked to answer direct questions about whether they are lonely or not. On single item ques-

tions, women are more apt to describe themselves as lonely than are men (see Table 3).

Table 2

Percentage of Respondents Reporting Loneliness as a Function of Marital Status

Study	Sample *	Marital Status			
		Married	Single (Never Married)	Divorced	Widowed
NIMH (Radloff 1982)	2835	18	38	43	41
Berg et al. (1981)	1007	10	16	16	43
Gubrium (1974)	210	49	41	67	72
Harvey & **Bahr** (1974)	2005	17	—	—	34
Parlee (1979)	4000+	56	72	69	59

Note—Because of differences in question wording, etc. between studies, comparison of loneliness levels is not possible. Four of the investigations presumably selected representative samples; Parlee did not. Two of the samples (Gubrium and Berg et al.) consisted only of older adults. Harvey and Bahr did not report levels of loneliness for single and divorced individuals.

Table 3

Comparison of Percentage of Men and Women Reporting Loneliness

Study	Men	Women
NIMH (Radloff, 1982)	19	30
Berg et al. (1981)	12	25
Borys et al. (1982)	68	86
Parlee (1979)	67	67
Weiss (1973)	9	14

There are several possible reasons why sex differences emerge in **self-labelled** loneliness. One possibility is that the negative consequences of admitting loneliness are greater for men than for women; results may reflect a sex bias in self-disclosure. Another possibility is that there are sex differences in other personality attributes, such as self-esteem or depression which are linked to loneliness. Thus, these "third factors" might really be the underlying causes of observed sex differences in loneliness.

Work currently in progress (Borys et al. 1982) supports the first (but not the second) of these explanations. To test the possibility of differential willingness of men and women to admit loneliness, a short story was written depicting a lonely person. Some subjects read the story with a male central character. Other subjects read the identical story but with a female central character. Subjects rated the male lonely person as less well adjusted, less socially acceptable, and less effective in performing various roles than the female. The data suggest that people are less tolerant of men than of women who experience loneliness.

Socioeconomic **status. A** final demographic factor worthy of comment is socioeconomic status. Several studies have found that loneliness is more prevalent among lower income groups (Harvey and Bahr 1974; **Parlee** 1979; Radloff 1982; Rubenstein et al. 1979; Weiss 1973). One exception to this generalization is Berg et **al.'s** (1981) study of Swedish senior citizens. Perhaps because of their government's strong commitment to providing benefits for retired people, economic differences among Swedish seniors are relatively small and less important.

Finally, some psychologists (Dunn and Dunn 1980) have also speculated on loneliness among specific ethnic or racial groups. Unfortunately, there is not much available data on this topic. **A** large scale **NIMH** survey (Radloff 1982) of two communities (Kansas City, Missouri and Washington County, Maryland) found that blacks were more apt to report loneliness than were whites, but this difference did not take into account race differences in SES.

Croups at Special Risk for Loneliness

Besides certain demographic categories, there are undoubtedly other aggregates of people who are at especially high risk for loneliness. **These** include individuals who have experienced major disruptions in their social relationships. Groups at risk here are: people who have moved recently, couples separating and/or getting divorced, recent widows, students changing schools, employees starting new jobs and the like. Groups that are marginal or chronically cut off from social contacts are obviously also at risk. Rubenstein et al. (1979) found that loneliness was especially prevalent among the unemployed. Prison in-

mates, being unable to maintain normal social ties, also have atypically high scores on the UCLA Loneliness Scale (Saulnier and Perlman 1981). It is widely assumed that the severely ill and the chronically disabled are apt to be lonely. Loneliness is more common among people who live alone (Berg et al. 1981; Shaver 1979).

Loneliness is also linked with life cycle factors. Children of divorced parents (Rubenstein et al. 1979; Wallerstein and Kelly 1980) are more likely to become lonely, and one wonders if "latch key" children who have to take care of themselves after school are also at risk. Ban (1974) documented the distress felt by some mothers when their grown children leave home, and indicated that women who have invested the most in the maternal role suffer the most from having an "empty nest." In old age, having only limited means of transportation puts some people at risk (Berg et al. 1981; Kivett 1979; Perlman et al. 1978).

Although one could undoubtedly extend the list of high risk groups, the discussion so far clearly establishes the point: loneliness is more common among some elements of society than others. From the perspective of prevention, this information is extremely useful. It may provide clues about the causes of loneliness. In addition, knowledge of groups at risk helps identify the higher priority audiences for educational campaigns and the groups where "screening tests" might be done to identify afflicted individuals. Furthermore, by knowing which groups are at risk, one can gain insight into who might have contact with lonely people. Those in contact with the lonely can, in turn, facilitate intervention programs by knowing how to educate, help, and/or refer the lonely themselves. More will be said about the networks and contacts of the lonely in our next section on overcoming loneliness.

Overcoming Loneliness

Effective ways to combat loneliness are of interest to both lay people and professionals. Public interest in loneliness can be seen in the popularity of books and articles on the topic. Typical is an article entitled "Im Lonely" that appeared recently in *McCalls* magazine (Jacoby 1983) offering advice about "what helps most." Popular literature on loneliness seems to be increasingly common. Another facet of public response to loneliness can be seen in the booming "loneliness business" described by Gordon (1976). Dating services, singles bars, cruises, clubs, religious retreats and ,other activities prosper by offering help in developing satisfying relationships. The effectiveness of such ventures is, however, a matter of speculation. We know of no outcome studies on the usefulness of any of these popular remedies.

In recent years, professionals have also turned their attention to the alleviation of loneliness (Rook and Peplau 1982). We examine research on four topics: what people say they do when lonely; to whom lonely people commonly turn for help; who is successful over time in reducing loneliness; and outcome research on the effectiveness of various clinical methods for treating loneliness.

Common Responses to Loneliness

Two studies (Paloutzian and Ellison 1982; Rubenstein and Shaver 1982) have asked people what they do when they feel lonely. In both studies, reading, listening to music, and contacting friends were among the most frequently given specific responses. Rubenstein and Shaver (1982) identified four main types of responses to loneliness. These were ***Sad Passivity*** (i.e., crying, sleeping, thinking, doing nothing), ***Active Solitude*** (i.e., working, listening to music, exercising), ***Spending Money.*** and ***Social Contact.***

In a third study (French 1981), ratings of the effectiveness of various coping strategies were obtained from clinicians (Paloutzian and Ellison 1982). The procedures were as follows. Subjects listened to a lonely person describing himself, and then the subjects were asked what advice they would give to that person. The answers were then coded into 16 categories. The categories were then rated by 21 experienced clinicians from a veterans' hospital. The most highly ranked responses all involved social contact. For instance, clinicians felt the single best strategy for a lonely person would be to "join a group or do an activity involving other people." The clinicians rated increasing one's self-esteem and thinking more positively as being of medium effectiveness. "Doing an activity alone" was rated as very low in effectiveness.

On this last point (the ineffectiveness of solitary activity), there is some controversy. Other experts (Rook & Peplau 1982; Young 1982) have recommended the potential value of such activities. It has been argued, in part on the basis of activity approaches to the treatment of depression, that solitary activities may help alleviate loneliness by enhancing the individual's mood and sense of control.

Mass Media: The Impact of Television

One of the most frequent responses to loneliness is watching television. In one survey (Rubenstein & Shaver 1982), 61% of young Americans ages 18–25 said that watching TV was one of their most common responses to loneliness. Similar findings emerged in a study of older adults in Canada (Perlman et al. 1978); lonely senior citizens reported watching significantly more TV than those who were not lonely. This link between loneliness and television viewing appears to be widespread, although further research on this point is needed. It would also

be useful to learn more about the particular types of programs that lonely people watch; for instance, are talk shows and soap operas especially attractive to the lonely?

The impact of television on the lonely has not been investigated systematically. Nonetheless, loneliness researchers have speculated on the possible effects of television, typically seeing television as a harmful influence. Rubenstein and Shaver (1982) argue that television is generally "a substitute for social life, not a route into it" (p. 85). They suggest that the unrealistic images of love and beauty depicted on television may raise peoples' expectations and aggravate their social needs. They are also critical of the facile "solutions" for loneliness offered by the mass media such as buying cosmetics or taking a cruise. They conclude that "as an anesthetic for loneliness, [television] becomes part of a downward spiral toward greater loneliness and depression" (p. 86). It seems possible, however, that television might also be helpful to at least some lonely people. For those engaged in the arduous task of making new friends, television may provide a needed source of respite and relaxation. For some, pseudo-relationships with TV personalities may offer a partial substitute for face-to-face interaction. Further, advice offered on TV talk shows may occasionally prove useful to viewers. Unfortunately, loneliness researchers have not yet tested empirically these interesting speculations.

In addition to the impact of TV on those who are already lonely, it may also be useful to consider the possible role of television in the etiology of loneliness. Flanders (1982) argues that television creates loneliness by channeling limited time away from social interactions toward solitary television viewing. To the extent that television replaces interpersonal activities, it may increase the risk of loneliness. In addition, Flanders suggests that television has changed family life and diminished the opportunities for families to engage in meaningful social exchanges. Others (e.g., Rubenstein & Shaver 1982; Zimbardo 1977) propose that the very process of watching television may promote a passive orientation that inhibits people, especially children, from taking the initiative to form social relations. Again, however, it may be important to consider the possible ways in which television might contribute to social relations. For example, educational programs for children may help youngsters to develop social skills by providing adult models, talking about common problems of social life, and exposing children to diverse lifestyles. Given the increasing role that television plays in American life, research on these issues is an important need.

To Whom Do Lonely People Turn for Help?

As has already been noted, it would be useful to know to whom lonely people turn for help. Unfortunately, relatively little research has been done on this topic.

One conclusion from the available research (Cutrona 1982; Lopata et al. 1982) is that most lonely people do not typically turn to psychotherapists or counselors. For instance, among UCLA students, only 9 percent used this strategy (Cutrona 1982). This relatively low use of professional services is not surprising. As noted earlier, loneliness can range from transient moods to chronic conditions; individuals suffering from brief bouts of loneliness are unlikely to define their problem as serious or to seek professional help. Only when loneliness is severe and persistent—or when people feel unable to cope independently with the situation—are they likely to turn to others for aid. In addition, social pressures may keep some people from acknowledging to themselves or to others that they are lonely. Thus it is reasonable that only a small proportion of the general public would seek help for loneliness. However, if we were to investigate samples of people who do seek professional help, we might find that loneliness is a frequent complaint. At present, evidence about the frequency of loneliness as a problem among people seeking professional assistance is not available.

Lopata and her associates (1982) stress the importance of the lonely person's informal social supports. In trying to alleviate loneliness, a high proportion (61 percent) of Madison, Wisconsin, widows turned to friends. Other common resource persons included children (mentioned by 55 percent of respondents), siblings (40 percent), and neighbors (33 percent). A smaller proportion of these widows turned to such formal supports as their church (31 percent) or voluntary associations (22 percent). And, it should be noted, widows turned to the church as a social organization rather than to formal church leaders such as priests or ministers.

Three caveats should be mentioned when considering intervention strategies that work through friends and other informal contacts to help the lonely. First, as was suggested earlier in this paper, lonely people may have fewer "significant others" in their networks and have less contact with these individuals. Thus, there may be fewer people who are motivated and in a position to help lonely individuals. Second, some clinicians believe that lonely people have difficulty recognizing and/or discussing their problem. For instance, Fromm-Reichmann claimed that "Even mild . . . states of loneliness do not seem to be easy to talk about" (1959, p. 6). Third, at least in initial social encounters, it is not easy for untrained observers to correctly identify which people are and are not lonely (Jones 1982). Thus, for network type interventions to be most successful, it may be necessary to educate network members to

recognize loneliness and to realize that they, themselves, may have to take the initiative in bringing up the problem.

Who Recovers Most Easily from Loneliness Over Time?

Longitudinal studies on the course of loneliness over time are an important direction in which loneliness research is currently proceeding. To date, Cutrona (1982) has provided the major published investigation. She followed 162 college students from September to May of their first year at UCLA. Cutrona divided the initially lonely students into those who, during the year, did and did not overcome their loneliness.

While "finding a boyfriend/girlfriend" was perceived by the respondents as being the best way to overcome loneliness, this factor was not a good predictor of who actually overcame loneliness. Another ineffective way of coping with loneliness was to think about the more positive aspects of one's life. The students who used this strategy remained lonely.

Those who overcame loneliness had a positive self-image. At the beginning of the year, they had higher expectations for future relationships. Over the year, individuals who recovered from loneliness reported some increase in the number of their friends. They also reported a large increase in satisfaction with their friendships. In considering this set of findings, Cutrona reaches the overall conclusion that self-esteem and attitudes were better predictors of recovery from loneliness than were reported social behaviors. Additional research with more diverse samples is needed.

Outcome Research

There is a growing body of outcome research on the treatment of loneliness (Gallup 1981; Jones 1982; Pittman 1977; Shaul 1981). To date, the results have been uniformly encouraging. For instance, Gallup (1981) found that a social skills training program reduced loneliness and increased participants' social activity level. Shaul (1981) compared two treatment approaches (Rogerian and cognitive behavior modification a la Meichenbaum). Treatment involved group counseling, and its effectiveness was compared against a no-treatment control group. As expected, strong support was found for the effectiveness of both treatment approaches. On the matter of which treatment approach was superior, the results were inconclusive.

Because it was developed out of general research on loneliness, the therapy outcome study by Jones (1982) and his colleagues is especially noteworthy. Jones identified three unique characteristics of the way lonely people interact in conversations: (1) they make fewer other-references and ask fewer questions of their partner; (2) they change the topic more often; and (3) they delay longer in filling gaps in the conversation. Jones therefore developed a short social skills training program to help students overcome these interpersonal deficits, incorporating explanation, modelling, practice with prompting, and feedback on the students' performance of target behaviors. Compared with a no-treatment and a placebo treatment (conversation only) control group, the skills training produced desired changes in the participants' interactional styles. The intervention also reduced students' loneliness. Indeed, the magnitude of the reduction in loneliness was appreciable compared to that reported in most psychological research. (For a further discussion of intervention strategies for loneliness, see Rook's paper, chapter 3, in this monograph, as well as the chapter by Rook and Peplau 1982.)

Recommendations for Needed Research

Knowledge about loneliness has grown rapidly in recent years, but important gaps in our basic information about loneliness remain. The following research directions seem useful in providing a solid empirical basis for preventive interventions.

1. Epidemiological studies. Existing research provides some information about the distribution of loneliness in the American population, but most studies have involved small-scale non-representative samples. Thus, although age trends and effects of marital status seem well-documented, little is known about variations across ethnic or income groups. Studies including samples of people other than white, middle-class citizens would be useful.

2. High risk groups. Existing research has identified some of the groups most vulnerable to loneliness: the newly widowed or divorced, children of divorce, those who have recently relocated geographically. Other possible high risk groups are less well-established; it has not been well-documented that loneliness is higher among the disabled, the unemployed, those with serious illnesses, etc. Studies of particular high risk groups may be especially useful in understanding the dynamics of loneliness and in offering suggestions for intervention.

3. Loneliness and psychopathology. Although there is some evidence linking loneliness to poor mental health, findings in this area are limited. Most existing studies have used college student or community samples where the general level of mental disturbance is low. A fruitful direction for research may be to focus explicitly on clinical samples (e.g., those who seek treatment or who have recognized psychopathology) to determine the extent to which loneliness and deficient social relations contribute to psychopathology.

4. Loneliness and depression. Both empirical research and clinical observations suggest that depression is a major possible consequence of loneliness. We need to know more about the relationship between these phenomena. Of particular interest are possible temporal sequences in which transient loneliness becomes a severe and chronic condition and induces depression. Analyses of the naturally-occurring temporal course of enduring loneliness would be useful.

5. Loneliness and social support. Research on loneliness and on social support have developed quite independently. Yet both seem to be directed at a common underlying set of problems. Efforts to integrate these lines of research—conceptually, methodologically, and empirically—appear warranted.

6. Social deficits and mental health. Loneliness is a distress signal that a person's social relations are deficient in some important way. But the identification of loneliness per se does not necessarily specify the nature of the social deficit involved. Research is needed to identify the important interpersonal resources that people typically provide to each other, and to specify those social deficits that are most detrimental to mental health.

7. Outcome studies. We need to know more about the effectiveness of both (a) the self-help strategies that lay people typically use to overcome loneliness and (b) various interventions that have been proposed or designed by professionals. At present, we know very little about how best to help those suffering from severe and persistent loneliness.

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