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Loneliness: New Directions in Research

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Few of us arc strangers to feelings of loneliness and social isolation. Our earliest experiences of loneliness come when we are separated, often only briefly, from loving parents. As young children venturing beyond the family circle to play groups and school, we may suffer from rejection by peers. As teenagers, we may learn not only about the joys of first love, but also about the agony of love that sours or is not returned. Leaving home for university or a new job can pose new social challenges, creating loneliness until we are able to make new friends and recreate a social network. Indeed, our vulnerability to loneliness continues throughout life.

Loneliness is more common than the "common cold." National surveys conducted in the U.S. suggest that about one person in four has recently felt lonely or isolated from other people (Weiss, 1973). Loneliness can range from fleeting feelings of discontent to profound and unrelenting distress. There is growing evidence that when loneliness is both severe and prolonged, it can jeopardize a person's mental health (Peplau & Goldston, 1984).

My own interest in loneliness research began rather by chance. My main research interest for the past 18 years has been the study of personal relationships — dating, marriage and friendship. However, in 1973, a very bright undergraduate at UCLA asked me to work with her on an honors thesis on loneliness. In working with her, I came to see that loneliness provides a window on the importance of social relationships for psychological well-being. The pain of loneliness is really a sign of the significance of social ties in human life. Over time. I became quite fascinated with loneliness and embarked on a program

of research with UCLA graduate students. Only later did I learn — to my considerable amazement — that one of the first published papers on loneliness had been written in 1955 by Hildegard Peplau!

Hilda's early paper is, I think a testament to the importance of the topic of loneliness for psychiatric nurses. In the paper, she talked about how to conceptualize loneliness, traced possible childhood roots of loneliness, and discussed the nursing care of lonely patients. In the intervening years, we've learned a good deal about these central issues.

In this presentation, I will attempt to accomplish three goals. First, I will review rather quickly some core concepts and findings about loneliness (see also Peplau & Perlman, 1982; Garfield, 1986; Hojat & Crandall, 1987). Second, I will discuss two exciting new directions that loneliness research has taken in the past few years. Finally, with the help of suggestions from Hildegard Peplau, I will outline a tentative agenda for nursing research about loneliness. I hope to pique your curiosity about loneliness and perhaps even encourage you to contribute to our growing knowledge base about this perplexing phenomenon.

LONELINESS: CORE CONCEPTS AND FINDINGS

Defining Loneliness

Loneliness is a painful warning signal that a person's social relations are deficient in some important way. Dozens of definitions of loneliness have been offered (Peplau & Perlman, 1982, p. 4). Basically, 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 incorprates three points of general agreement among loneliness experts.

First, ***loneliness is a subjective experience.*** It is not synonymous with objective social isolation. People can be alone without being lonely, or lonely in a crowd. Aloneness and loneliness are not the same (Peplau, 1955).

Second, loneliness results from a ***deficiency*** in ***a person's social realationships***. Loneliness occurs when there is a mismatch between a person's actual social relations, and the person's needs or desires for social contact. This deficiency has been variously described. Some (e.g., Sullivan, 1953; Weiss, 1973) emphasize the notion that basic human needs for intimacy are not being met. Others (e.g., Peplau & Perlman, 1981) take a more cognitive view, that there is a discrepancy between the type, quality, or quantity of relationship that a person wants and those that the person perceives himself or herself as having.

All agree, however, that some son of relational deficit is a defining feature of loneliness.

Third, the experience of loneliness is ***aversive***. Although loneliness may be a spur to personal growth, the experience itself is unpleasant and distressing. Lonely people typically report feeling depressed, empty, anxious, bored, helpless or desperate. They do not associate loneliness with happiness or contentment.

Taken together, a comprehensive definition views loneliness as the unpleasant experience that occurs when a person's network of social relationships is deficient in some important way, either in quantity or in quality.

The Assessment of Loneliness

Given that loneliness is a subjective experience, its most direct assessment is made by verbal self-reports. (For a review of measures assessing loneliness, see Russell, 1982). Researchers have developed standardized techniques for measuring loneliness in the general population. A common approach has been to ask people one or more direct questions about their feelings of loneliness. A typical question used in large-scale surveys asks if the person has felt "very lonely or remote from other people" during the past few weeks. Other researchers have developed and validated paper-and-pencil loneliness scales. Illustrative of these measures is the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). This scale has 20 questions, ten worded in a positive or socially-satisfied direction (e.g., "There are people who really understand me") and ten worded in a negative or lonely direction (e.g., "There is no one I can turn to"). Respondents indicate how often (never, rarely, sometimes, often) each statement describes them. This scale, like most loneliness measures, is quite general and does not specify the type of relationship, such as marriage or friendship, that is deficient. Research has demonstrated that the scale has quite good reliability and validity.

Clinicians are more likely to find out about loneliness through interviews with patients. In some instances, clients may talk openly about loneliness. But it has been suggested that some individuals may be unable or unwilling to acknowledge their loneliness. In 1955, Hilda Peplau suggested that severe "loneliness is so dreaded and so painful that it must be disguised; it is therefore dissociated, not noticed". But the person's behavior may reveal the loneliness to the sensitive clinician. "For example, a patient who drinks and then needs nurses to care for him during an alcoholic bout may offer many reasons for needing to have nurses to care for him. But he misses the obvious

interpretation — that he is sorely in need of attention and contact with others." (p. 69)

Types of Loneliness

Many scholars have considered (be diverse forms that loneliness can take. Two distinctions for classifying loneliness have proved especially informative.

Duration: Loneliness can range from fleeting twinges of discomfort to severe and persistent feelings of intense misery. Researchers and clinicans have largely ignored transient feelings of loneliness, and focused instead on more enduring loneliness. Jeffrey Young (1982), a clinical psychologist who does therapy with lonely individuals, has distinguished among three types of loneliness. ***Transient*** or everyday loneliness refers to brief and occasional lonely moods. ***Situational*** loneliness occurs when a person has had satisfying relationships until some specific change occurs, such as moving to a new town or getting divorced. Situational loneliness can be severely distressing, but does not invariably last for long time periods. Finally, when a person has lacked satisfying social relationships for a period of two years or more, Young classifies them as ***chronically*** lonely.

Social versus emotional loneliness: Types of loneliness can also be identified in terms of the specific social deficit involved. Probably the most popular loneliness typology is Robert Weiss (1973) distinction between the loneliness of social isolation and the loneliness of emotional isolation. In his view, ***emotional*** loneliness is based on the absence of an intimate attachment figure, such as might be provided for children by their parents or for adults by a spouse or intimate friend. In contrast, ***social loneliness*** occurs when a person lacks a sense of social connectedness or community that might be provided by having a network of friends and associates at work or school. Weiss believes that emotional loneliness is the more serious condition.

The Causes of Loneliness

Many factors can contribute to the experience of loneliness. We find it helpful to distinguish between predisposing factors that make people vulnerable to loneliness and precipitating events that trigger the onset of loneliness.

Predisposing factors increase the risk of loneliness; they can include both characteristics of the person and characteristics of the situation. Research suggests that people who are shy, introverted or lacking in assertivenes are at risk for loneliness. Shy people are not invariably

lonely, however; in a familiar situation with friends, their introversion may not be a problem. But confronted with the need to make new friends, shy people are more vulnerable to loneliness than their more outgoing peers. Loneliness is also more common among people who have low self-esteem. For some individuals, poor social skills can also be a predisposing factor.

Certain types of social situations can also increase the risk of loneliness. Situations vary in the opportunities they provide for social contact and the initiation of new relationships. Some constraints are very basic — time, money, distance. The university student who has a full course load and a heavy work schedule may have little time for sleep, let alone making friends. 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 potential friends or lovers. For example, because women typically live longer than men, older widowed women have fewer prospects for remarriage than do 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. Periods of physical separation make it hard to maintain relationships that may once have been close and satisfying. 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.

Finally, sociologically-oriented theorists have seen loneliness as resulting from cultural factors and from the structuring of social institutions. Values of rugged individualism, self-actualization and competition have often been blamed for impairing the formation of satisfying social relations. Cultural norms about geographic mobility — for instance, the belief that people should move to advance their careers — can also be harmful to social relationships, at least in the short run.

Precipitating factors. The onset of loneliness is triggered by a change in the person's actual social relations or by a change in their needed or desired social relations. Perhaps most often, loneliness is precipitated by separation from important social ties or by the ending of an important relationship. There is abundant evidence that widowhood (e.g., Lopata, et al., 1982), divorce (Weiss, 1975), and recent geographical moves all precipitate loneliness. But loneliness can also occur if there is a decrease in the quality of social relationships. And, changes in a person's social needs or desires that are not associated with corresponding changes in actual relations can also trigger lone-

liness. For example, few 10 year olds report that they are lonely because they don't have a dating partner; but sometime during adolescence, due perhaps to a combination of puberty and social norms, teenagers come to believe that they should be dating. So teenagers who have good family ties and good relations with friends may nonetheless begin to experience loneliness because their behavior does not conform to their expectations.

Cognitive Factors

Cognitive factors can also play a role in loneliness. Once loneliness occurs, the intensity of the loneliness experience depends in part on thought processes. As one example, consider the role of causal attributions, that is, of the explanations that people create to explain their own loneliness. Scientists are not the only ones who try to figure out the causes of loneliness; lonely people are also motivated to do this. And the answers they arrive at have an impact on the course of their loneliness. Attributing one's loneliness to the situation — e.g., the thought that "I'm new in town, so it will take me a while to make friends" — encourages people to keep trying to improve their social life. In contrast, self-blaming attributions — "I'm ugly and unlovable" — tend to decrease effort and lead to depression. I am not proposing that loneliness is "merely in your head." But there is growing evidence to suggest that the way people think about their own situation can affect the experience of loneliness.

Loneliness and Mental Health

Loneliness can have serious consequences for mental health. We know most about the strong link between loneliness and ***depression.*** Studies using self-report questions find that people who say they are lonely also say they feel depressed. Studies using standardized depression scales, such as the Beck Depression Inventory, also find a strong association between loneliness and depression (Peplau & Goldston, 1984). In a study of new mothers, Carolyn Cutrona (1981) found that loneliness ***prior*** to the birth of a first child was a strong predictor of post-partum depression. Clinical impressions (Young, 1982) suggest that loneliness and depression are commonly associated in clinical populations as well, although this link is not well-documented.

Two observations can be made about the strong association of loneliness and depression. First, 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. Second, not all depressed people are lonely. Depression can stem from many factors including but not limited to loneliness. In this sense, depression is a more global phenomenon than loneliness.

Lonely people are also at risk for other psychological problems. Lonely people are often anxious. They are more likely to abuse alcohol or drugs. They are also more likely to contemplate or attempt suicide. Among adolescents, loneliness has been linked to a variety of behavior problems including poor grades, expulsion from school, running away from home, and engaging in delinquent acts of theft, gambling, and vandalism.

NEW DIRECTIONS IN LONELINESS RESEARCH

Having provided a broad, and necessarily quick, analysis of loneliness, I'd like to take a closer look at two recent directions in research. I've deliberately picked two rather different lines of research, one linking loneliness to physical health and the other looking for childhood antecedents of adult loneliness.

Physical Health

Research is beginning to document that loneliness can be detrimental to physical health. Lonely people report more symptoms such as headaches, poor appetite, or sleep problems. In studies using physiological measures to assess the body's immune response system, Janice Kiecolt-Glaser has found that lonely people may be less able to fight off infections effectively. In one study (1984a), she found that medical students who were extremely lonely showed less "natural killer cell" activity than students who were not lonely. These cells appear to help the body combat viruses and tumors. In a study of psychiatric patients, Kiecolt-Glaser (1984b) again found that the loneliest individuals showed the poorest immune system responses. In other words, very lonely people may cope less effectively with stress at a physiological level. We don't yet understand how loneliness is linked to the immune system. Perhaps loneliness itself has a direct effect, or perhaps lonely people engage in behaviors, such as greater use of alcohol or drugs, that in turn affect the immune system.

In another study, Dan Russell and Carolyn Cutrona (1985) studied the health of people over the age of 65. Those individuals who were the loneliest at the initial testing had a significantly greater risk of institutionalization and of death during a 2-year followup. Among the least lonely old people, only 4% moved from their own homes into a

nursing home; among the loneliest group, 22% moved to an institution. Even more striking is the finding that the loneliest people were four times more likely to die during the 2-year study than were the least lonely. We are not sure why these lonely old people were more vulnerable to illness. Several factors may be involved. Feelings of loneliness may be directly detrimental to health. In addition, loneliness may be associated with other risk factors, such as poorer immune response or the absence of friends who can provide care and encouragement.

At UCLA, there is currently underway a large-scale study of gay men at risk for AIDS. The study design involves following over time a large sample of gay men, some of whom have tested HIV positive at initial screening. The prediction is that loneliness and poor social support will decrease the life expectancy of these vulnerable individuals.

Developmental Issues

Early discussions of loneliness, including the work of Harry Stack Sullivan and Hilda Peplau, emphasized the importance of childhood experiences in setting the stage for adult loneliness. Peplau (1955) proposed that if parents do not participate adequately in the child's life, the child may fail to develop important social and cognitive skills, and may develop defenses against loneliness which become self-defeating. Because adults and peers have been a source of distress and anxiety in childhood, the lonely person continues to see closeness and intimacy as potentially threatening. The results can be a lifelong inability to form truly gratifying social relationships.

In recent years, an interest in the childhood origins of loneliness has led in several directions. Research by Philip Shaver and others has shown that the children of divorce are at risk for adult loneliness (Rubenstein, & Shaver, 1982; Shaver & Hazan, 1987). Moreover, the younger the child at the time of parental divorce, the more serious the consequences seem to be. Although the death of a parent during childhood can also be distressing, it does not appear to have the same long-term implications for adult social life. Shaver explains these data by suggesting that loss of a parental attachment figure during childhood affects children in two ways. First, it can lead them to have low self-esteem. Children may blame themselves for the divorce, even though such beliefs are irrational.. Second, the child may develop the belief that relationships are inherently unsatisfying and dangerous, that other people are not to be trusted. The result is that as these children grow to adulthood, they are unable to form satisfying relationships and so are likely to feel lonely. In a recent paper, Sheila Rouslin Welt (1987), a psychiatric nurse, has extended work in this area and proposed a developmental sequence in which premature aloneness may be thrust too early on the child. This creates a longing for a desired relationship that collides with the actual parental relationships. This leads to despair in finding satisfying relationships and to defensive aloneness as a way of protecting the self from further suffering. There is much more that we need to know about the development of loneliness, including studies based on the experiences of children, rather than retrospective reports from adults.

NURSING RESEARCH ON LONELINESS: A BEGINNING AGENDA

There are many ways in which nurses may have special opportunities to study loneliness. To date, most research on loneliness has been based on general samples of more or less "normal" adults. We have made good progress using this approach, but there is a great need for new work that studies loneliness in clinical samples and in special at-risk groups. Because of their diverse work settings and exposure to varied groups of people, nurses are in an advantaged position for contributing to knowledge about loneliness. In the section that follows, Hilda Peplau and I offer some suggestions about an agenda of needed nursing research on loneliness.

Describing the Experience of Loneliness in High Risk Social Groups

Much research is needed to describe in *detail* the experiences of lonely people. We are now able to sketch the experience of loneliness in broad outlines, but we do not understand much about variations in special populations. It is obvious that the loneliness of a teenager who lacks a dating partner differs markedly from the loneliness of a woman who has lost her husband of 30 years to cancer. But our existing literature does not depict these differences. Descriptive studies, including in-depth case studies, would be important additions to the literature.

We have reason to believe that certain life circumstances and social transitions put people at risk for loneliness. Studies of at-risk groups might focus on such populations as school children without friends; first-year university students making the transition to a new environment; new mothers, perhaps especially teen mothers; the newly divorced; widows; nursing home residents; military and other families who relocate frequently; members of ethnic and other "minority" groups.

Key questions that might ***be*** addressed by careful descriptive studies of specific at-risk groups include:

1. Are there common feelings, thoughts and behaviors characteristic of lonely people in this group?
2. What distinguishes individuals in this group who are lonely from those who are not?
3. Is there a predictable progression or developmental sequence for loneliness in this group? Longitudinal case studies might prove especially helpful. Can a typical progression be identified from situational loneliness to chronic loneliness to more severe psychopathology?
4. How do individuals in this group seek to cope with loneliness? What are people's "natural" coping strategies? Are **some** approaches more effective than others?

Loneliness and Mental Health Problems

Loneliness has been associated with depression, alcohol abuse, drug use, suicide attempts, and schizophrenia. But again, our knowledge of loneliness among these populations is very limited. Most loneliness research has involved college students or community samples where the general level of psychological disturbance is low. A fruitful direction for research may be to focus explicitly on clinical samples — those who seek treatment or who have recognized psychopathology. The broad question concerns the links between loneliness and various forms of psychological disturbance and psychopathology. Detailed case histories and small group studies of specific populations would be invaluable.

Key questions include:

1. Are people who seek mental health services or those with diagnosed psychopathology willing and able to talk about loneliness? Researchers who study college students find them fairly open about loneliness. But there are hints in the clinical literature that denial and the fear of social stigma may prevent some lonely individuals from recognizing or discussing their loneliness.
2. To what extent is loneliness a problem for individuals in particular clinical populations? For example, although many have speculated that loneliness is an important feature of schizophrenia, one recent study found no differences in the overall rates of loneliness among schizophrenics and a comparison group (Gerstein, Bates & Reindl, 1987).

3. To what extent is loneliness a cause of psychopathology or a consequence of the problem or both. What is the nature of this association?
4. Should the diagnosis and/or the treatment of specific mental health problems change depending on the presence versus absence of loneliness?
5. How does the severity of loneliness relate to specific DSM *III* categories?
6. Does improvement in social relations (reduced loneliness) improve general psychological well-being? Can the **presenting/diagnosed** problem be treated effectively without acknowledging the role of loneliness?

Loneliness and Physical Illness/Disability

Individuals coping with physical illness or disability may be at special risk for loneliness, although we have virtually no research on this point. Physical ill health may increase vulnerability to loneliness in two ways: First, physical impairment may increase the individual's need for social support in the form of assistance, reassurance, etc. Second, physical illness and disability may make it more difficult for the individual to maintain existing social relations at a satisfactory level **and/or** make it harder to form new social relations. Studies might profitably study specific populations of individuals with acute illness, chronic illness, chronic pain, or physical disability. Paraplegics, bum victims, or those with serious back pain might be examples.

Key questions include:

1. Do patients with pre-existing loneliness react **to/cope** with illness differently than patients who have satisfactory social relations? What questions should be included in a Nursing History that would give nurses relevant information?
2. When and how does physical illness disrupt social relations and lead to loneliness?
3. What is the role of disability or disfigurement in social relations over time?
4. How does the stigmatization of certain diseases **(e.g.,** AIDS) affect self-esteem, social relations and loneliness?
5. How does chronic pain affect social relations and loneliness? Does loneliness influence an individual's level of pain tolerance?

6. Do medications that alter cognitive or other functions increase feelings of isolation and loneliness?

Nurse-Client Relations and Health Care Settings

Nurses might usefully consider the way in which health care personnel and health care settings are affected by loneliness. Two issues illustrate the range of questions.

Interactions of Patients and Health Care Personnel. Do lonely patients make different or more frequent demands on the time of nurses and medical personnel? Are lonely patients what nurses call "the demanding patients" — or are they more likely to be the withdrawn, indifferent ones? Do lonely clients respond differently to health education and medical orders? A less obvious question might be whether professional staff who are lonely interact differently with patients than other staff members do?

Hospitalization and Health Care Settings. Studies of health care settings may shed new light on loneliness. For example, when and how does hospitalization create loneliness? When a person is admitted to a hospital for medical or psychiatric treatment, his or her social relations can be seriously disrupted. At the same time, hospital experiences, especially first-time admissions, are often frightening and increase the individual's need for the support and comfort of family and friends. How can these problems be minimized?

Key questions about loneliness and health care settings include:

1. To what extent is loneliness a general problem for persons admitted to hospitals, or a problem for individuals admitted to particular hospital units (e.g., intensive care)?
2. What match of person characteristics, illness factors, and in-hospital circumstances is most likely to create loneliness or arouse preexisting lonely feelings?
3. Are some health care settings more likely to foster loneliness than others? Comparative studies might investigate individuals with similar diagnoses who are treated in different settings (e.g., comparing home care to residential care; private psychiatric hospitals to state hospitals or community mental health centers; nursing homes to senior residential centers or home care with visiting nurses; hospital care versus hospices for the dying).
4. Can the general level of loneliness in health care settings be reduced by introducing changes in policies and procedures (e.g., rules about visiting hours; ways in which meals are served).

Intervention

There is growing awareness that interventions for loneliness are typically most useful when they are targeted at specific groups. The lonely widower and the lonely new mother may have little in common; helpful interventions must be tailored to the specifics of the person's social circumstances (Rook, 1984).

Our conceptual analysis of loneliness suggests several general ways in which nurses can be helpful to lonely clients. For example, because loneliness is a subjective experience that cannot be directly observed, it will often be helpful for nurses to encourage patients to describe their feelings about social relationships. It may also be useful to help patients to identify their expectations for relationships, and to explore ways in which these expectations are not being met. Further, knowing that loneliness is often accompanied by feelings of depression, emptiness, anxiety, helplessness or desperation might lead nurses to encourage patients to explore the range of emotions that they are currently experiencing. To the extent that a lonely patient lacks social skills, the nurse may find it helpful to teach and/or to role play new and more effective social behaviors. Nurses may also help patients to identify those individuals in their social network who are most able to offer social support, and to consider ways to make new friends or to improve existing relationships.

Interventions for loneliness usually have one of three goals. Some interventions are designed to help individuals overcome their loneliness by developing adequate social relations. Other interventions seek to help individuals cope more effectively with loneliness, for instance, in the aftermath of divorce. Finally, a third goal of intervention may be to prevent loneliness, perhaps by intervening among high risk groups.

Existing loneliness interventions include individual, group, and environmental approaches. ***Individual*** psychotherapy approaches have been developed, primarily aimed at unmarried adults. An example is the cognitive-behavior therapy for single adults proposed by David Burns (1985). ***Group*** approaches have included social skills training groups, as well as "self-help" groups for the newly divorced or bereaved. ***Environmental*** approaches entail changing a particular social situation to enhance social relations, for instance by changing practices in a nursing home.

Nurses have an important role to play in developing new approaches to interventions, in evaluating interventions, and in sharing information about interventions with patients and other professionals. Let me give just one illustration, an intervention devised by public health nurses

working with poor, socially-isolated senior citizens living in single room occupancy hotels in an inner city (reported in Pilisuk & Minkler, 1980). The residents of these hotels were reluctant to venture outside of their rooms because of physical disabilities and fears of crime. As a result, they had little social contact, even with others living in the same hotel. The nurses set up stations in the lobby of the hotel and offered free blood pressure checkups as a way of making initial contact with residents. The nurses came back repeatedly over several months, and were able to identify shared interests among the residents. They used this as the basis for linking up residents in pairs and larger groups. After a year of such informal interactions, residents on their own formed a "Senior Activities Club" which came to function as an independent support group.

In conclusion, I hope that I have succeeded in raising your interest in the topic of loneliness. Although we have learned much about this important human phenomenon in the past decade, there is much that we still need to know. Nurses can play a significant role in expanding our understanding of loneliness and in helping individuals to cope more effectively with this distressing personal experience.

SELECTED RECENT AND "CLASSIC" PUBLICATIONS ON LONELINESS

Asher, S. R., & Wheeler, V. A. (1985). Children's loneliness: A comparison of rejected and neglected peer status. ***Journal of Consulting and Clinical Psychology, 53*(4),** 500-505.

Burns, D. D. (1985). ***Intimate connections.*** New York: Morrow. [Cognitive therapy for loneliness.]

Copel, L. C. (1988). Loneliness. ***Journal of Psychosocial Nursing, 26*(1),** 14-19.

Cutrona, C. E., & Russell, **D.** W. (1987). The provisions of social relationships and adaptation to stress. ***Advances in personal relationships, 1,*** 37-67.

Essex, M. J. & Nam, **S.** (1987). Marital status and loneliness among older women: The differential importance of close family and friends. ***Journal of Marriage and the Family, 49,*** 93-106.

Fromm-Reichmann, F. (1959). Loneliness. ***Psychiatry,*** 22. 1-15.

Garfield, E. (1986, February). **Current** comments: The loneliness researcher is not so lonely anymore. ***Current contents: Arts and humanities, 8,*** 3-9.

Gerstein, L. H., Bates, **H.** D., & **Reindl,** M. (1987). The experience of loneliness among schizophrenic and normal persons. ***Journal of Social Behavior*** and ***Personality, 2*(2),** 239-248.

Glaser, R., Kiecolt-Glaser, J. **K.,** Speicher, **C.** E., & **Holliday,** J. E. (1985). Stress, loneliness, and change in herpes virus latency. ***Journal of Behavioral Medicine, 8*(3),** 249-260.

Hays, R. **D.,** & **DiMatteo,** M. R. (1987). A short-form measure of loneliness. ***Journal of Personality Assessment. 51*(1),** 69-81. [Presents an 8-item **short-form** of the **UCLA** Loneliness Scale.]

Hoeffer, B. (1987). **A** causal model of loneliness among older single women. ***Archives of Psychiatric Nursing. 1*(5),** 366-373.

Hojat, M., & **Crandall,** R. (Eds.) (1987) **Loneliness:** Theory, research, and applications. **A** special issue of the ***Journal of Social Behavior and Personality, 2*(2),** 1-302. [To purchase this issue, write to Select Press, P.O. Box 9838, San Rafael, **CA** 94912.1

Kiecolt-Glaser, J. K. et al. **(1984a).** Psychological modifiers of **immunocompetence** in medical students. ***Psychosomatic Medicine, 46*(1),** 7-14.

Kiecolt-Glaser, **J.K.** et **al. (1984b).** Urinary **cortisol** levels, cellular **immunocompetency,** and loneliness in psychiatric inpatients. ***Psychosomatic Medicine, 46*(1),** 15-23.

Lopata, H. Z., **Heinemann, G.** D., & Baum, **J.** (1982). Loneliness; Antecedents and coping strategies in the lives of widows. In L. A. Peplau & D. Perlman (Eds.), ***Loneliness: A sourcebook of current theory, research and therapy.*** New **York:** Wiley-Interscience, 310-326.

Mellor, K. **S.,** & **Edelmann,** R. J. (1988). Mobility, social support, loneliness and well-being amongst two groups of older adults. ***Personality and Individual Differences, 9*(1),** 1-5.

Peplau, H. E. (1955). Loneliness. ***American Journal of Nursing, 55*(12), 1476-1481.**

Peplau, **L.** A., & Goldston, **S.** E. (Eds.) (1984). ***Preventing the harmful consequences of severe*** and ***persistent loneliness.*** Washington, D.C.: U. S. Government Printing Office.

Peplau, L. A., & Perlman, D. (Eds.) (1982). ***Loneliness: A sourcebook of current theory, research and therapy.*** New York: Wiley-Interscience.

Rook, K. S. (1984) Promoting social bonding: Strategies for helping the lonely and socially isolated. ***American Psychologist, 39*(12),** 1389-1407.

Rode, K. **S.** (1984). Research on social support, loneliness, **and** social isolation: Toward an integration. ***Review of Personality and Social Psychology, 5,*** 239-264.

Rubenstein, C., & Shaver, P. (1982). ***In search of intimacy. MY:*** **Delacorte.** [Based on a large-scale survey of loneliness.]

Russell, D. (1982). The measurement of loneliness. In L. A. Peplau & D. **Perlman (Eds.),** ***Loneliness: A sourcebook of current theory, research and therapy.*** New York: Wiley-Interscience, 81-104.

Russell. D., Peplau. **L. A., &** Cutrona, C. E. (1980). The revised UCLA Loneliness Scale. ***Journal of Personality and Social Psychology, 39*(3),** 472-480.

Shapurian, R. & Hojat, **M.** (1987). Selected bibliography on loneliness. ***Journal of Social Behavior and Personality, 2*(2),** 273-286.

Shaver, P., & **Hazan,** C. (1987). Being lonely, falling in love: Perspectives from attachment theory. ***Journal of Social Behavior and Personality. 2*(2), 105-124.**

Shultz, C. (1988). Loneliness. In C. **K.** Beck, **R.** P. **Rawlins,** & S. **R.** Williams **(Eds.),** ***Mental health-psychiatric nursing: A holistic life-cycle approach,*** 2nd *Ed.* St. Louis: C. V. **Mosby, 382-399.**

Stem, E. M. & Natale, S. M. (Eds.), (1986). The lonely patient. *The Psychotherapy Patient, 2*(3).

Sullivan, H. S. (1953). *The interpersonal theory of psychiatry.* NY: Norton.

Weiss, R. S. (1973). *Loneliness.* Cambridge, MA: MIT University Press.

Weiss, R. S. (1975). Marital separation. New York: Basic Books.

Welt, S. R. (1987). The developmental roots of loneliness. *Archives of Psychiatric Nursing. 1*(1), 25-32.

Young, J. E. (1982). Loneliness, depression and cognitive therapy: Theory and application. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy.* New York: Wiley-Interscience, 379-406.