THE EXPERIENCE OF LONELINESS: OBJECTIVE AND SUBJECTIVE FACTORS

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Previous research has documented both the commonality and importance of loneliness. For example, in one large survey approximately 25% of the adult U. S. population reported having felt intensely lonely during the previous two weeks (Bradburn 1969). Also, loneliness appears to be connected to a wide variety of emotional, behavioral and social problems including, for example, alcohol and drug abuse, suicide, anxiety, vulnerability to health problems, divorce, and depression (cf. Peplau & Perlman 1982b). In addition, in the United States and elsewhere, loneliness is a common presenting complaint among clients of certain therapeutic and counseling services, in particular, telephone counseling services, college psychological clinics, and marital counseling services (cf. Jones, Hansson, & Cutrona 1985).

Beyond its practical implications, however, the study of loneliness contributes to the understanding of the role of personal relationships in behavior and experience. For example, whereas much research and theorizing regarding relationships is applicable to only one type of relationship (e.g. marriage, friendship) or relevant to only one stage in the development of a relationship (e.g., acquaintanceship), loneliness has proven to be a useful index of interpersonal dynamics across various types and stages of relationships development (cf. Peplau & Perlman, 1982a).

The purpose of this essay is to summarize research on the topic of loneliness over the last 30 years (cf. Hartog, Audy, & Cohen 1980; Hojat & Crandall 1989; Peplau & Perlman 1982a; Rubenstein & Shaver 1982; Weiss 1973). We begin with a discussion of the conceptualization and measurement of loneliness. This is followed by an overview of research examining the relevance of

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developmental, personality, cognitive, and emotional processes. We also examine the association between loneliness and adjustment/health processes. Finally, we discuss evidence concerning the role of social factors (e.g., stress, interactions with others, culture) in the development and experience of loneliness. In this regard we consider whether loneliness indexes the hypothesized erosion of the social link in economically advanced societies. We conclude by summarizing major findings on loneliness and the implications of these findings for the issue of declining social ties.

1. Conceptualization and Measurement of Loneliness

Definitions of Loneliness

Loneliness has been defined in varying ways. Existential scholars (e.g., Moustakas 961) emphasized what was described as the inescapable separateness of one human being from another. From the psychoanalytic point of view, Sullivan (1953) described loneliness as an experience resulting from the failure to satisfy the basic need for human intimacy. More recent scholars have emphasized the role of a discrepancy between ideal and perceived relationships such as the difference between the number of friends one would like to have versus the number one has or deficiencies in the social network or relationships (Sermat 1978). Despite such diversity, however, virtually all conceptualizations converge on four basic assumptions regarding loneliness (Perlman & Peplau 1982b): (a) it involves deficiencies in social relationships; (b) it is at least partially subjective and dependent on an individual's expectations and perceptions; (c) it is unpleasant, and (d) it motivates efforts to alleviate it.

Assessment of Loneliness

Despite a diversity of available instruments, the most frequently used measure of loneliness has been the UCLA Loneliness Scale for which extensive reliability and validity evidence supports the claim that the UCLA Scale accurately measures loneliness (Russell 1982; Russell, eplau & Cutrona 1980; Russell, Peplau, & Ferguson 1978). Even though the words lonely and loneliness do not appear in any of the

items, the UCLA Scale yields scores consistent with other measures of loneliness (Cramer & Barry 1999; Jones, Carpenter, & Quintana 1985a; Solano 1980) and research indicates that it is not easily faked or distorted (Russell, 1982 ; Russell et al. 1980).

Evidence of the adequacy of other loneliness measures generally meets conventional standards of measurement also, although much less information is available with which to evaluate these scales (cf. de Jong-Gierveld & Kamphuis, 1985; Schmidt & Sermat 1983). Several studies (e.g., Bahr & Harvey 1979) of loneliness rely on single-item self-labeling measures of loneliness (e.g., "how frequently do you feel lonely"). Single-item measures are most often used in conjunction with interviews and large surveys. The obvious advantage of single-item measures is brevity. On the other hand, single-item measures have several disadvantages including inability to calculate internal reliability. Also, questions of validity are typically assumed rather than assessed. Furthermore, these items are usually stated directly and thus, to the extent that people are reluctant to acknowledge undesirable characteristics, results may be misleading. Specifically, single-item measures appear to over-estimate the extent of loneliness among female respondents and underestimate loneliness among men (Borys & Perlman 1985). Also, many of the loneliness scales are quite brief (the UCLA Scale contains only 20 items) making the use of single-item measures less justified.

On the other hand, loneliness scales in general and the UCLA in particular have been criticized for the assumption of unidimensionality latent in the procedures used to construct such instruments. This criticism has taken three forms. First, some researchers (e.g., Austin 1983) have reported analyses suggesting that from three to five factors underlie responses to the UCLA Scale items. On the other hand, none of these investigators has presented extensive evidence as to the utility of generating multiple scores from UCLA items. The second criticism stems from the global nature of the UCLA and related scales. Essentially, the UCLA yields an index of the respondents' overall level of loneliness without regard to potential differences, for example, among types of relationships. By contrast, in addition to a global score the Differential Loneliness Scale yields loneliness scores with respect to the respondents' family, friendship, romantic/sexual and community relationships (Schmidt & Sermat 983). Other instruments providing multidimensional

assessment of loneliness and relational satisfaction include scales developed by Young (1981), de Jong-Gierveld and Kamphuis (1985) and Scalise, Ginter, and Gerstein (1984). Third, an issue anticipated by Russell and his colleagues is the failure of the UCLA Scale to distinguish between potentially relevant conceptual distinctions such as state and trait loneliness (i.e., loneliness due to the immediate circumstances vs. cross-situational, dispositional loneliness), acute and chronic loneliness and emotional vs. social loneliness (*i.e.,* loneliness arising from the lack of intimate partners vs. loneliness arising from inadequate social networks of companions and friends). For example, it is reasonable to suppose that loneliness which is transitory and situation-bound as compared to loneliness that persists and which functions relatively independent of the individual's immediate interpersonal environment originate from divergent processes and have different implications for the lonely individual. Studies that incorporate such distinctions have demonstrated that they are empirically and theoretically useful (cf., Gerson & Perlman 1979; Hanley-Dunn, Maxwell, & Santos 1985; Jones et al., 1985a; Russell, Cutrona, Rose & Yurko 1984; Shaver, Furman & Buhrmester 1985).

2. The Psychology of Loneliness

Much of the research on loneliness has been devoted to identifying its psychological concomitants and dynamics, that is, what it feels like to be lonely, the types of people who are lonely, and the characteristics that differentiate them from non-lonely individuals. Also, these studies address some of the factors that predispose individuals to loneliness.

Biographical Characteristics

Who is most likely to become lonely? Three general conclusions regarding the biographical distribution of loneliness may be drawn from available data. First, loneliness appears to be greater among persons who are unmarried and romantically unattached (e.g., Hojat & Crandall 1989; Peplau & Perlman 1982a). The impact of relational status on loneliness is more complex than the presence or

absence of a mate. Even so, it is clearly a consistent predictor of loneliness. Second, loneliness scores are higher among younger as opposed to older respondents (e.g., Lobdell & Perlman 1985; Perlman, Gerson & Spinner 1978; Revenson & Johnson 1984; Schmitt & Kurdek 1985; Schultz & Moore 1984). Similarly, the widespread belief that elderly people are especially prone to loneliness has been contradicted in studies from several western societies (e.g., Anderson 1984; Bowling, Edelmann, Lever, & Hoekel 1989; de Jong-Gierveld, Kamphuis, & Dykstra 1987). However, studies assessing the relationship between age and loneliness are cross-sectional and thus fail to account for possible co-hort differences (i.e., generational differences associated with having been a certain age at a certain time). Third, although several studies report significant differences in loneliness between male and female participants, there is evidence that such differences reflect differences in the willingness to report negative experiences and differential consequences associated with the label loneliness rather than differences in loneliness per se (Borys & Perlman 1985).

Developmental Issues

Research has examined loneliness in the context of developmental continuities and changes across the life-span (cf. Perlman 1988). One issue concerns the age at which loneliness first appears as a self-labeled experience. Some writers (e.g., Sullivan 1953) have suggested that loneliness does not emerge prior to preadolescence, whereas the more recent consensus is that loneliness may occur much earlier (e.g., Asher, Parkhurst, Hymel, & Williams 1990; Cassidy, Parke, Butkovsky, & Braungart 1992). Some researchers have examined loneliness as a consequence of disruptions of the attachment process during infancy and childhood (*e.g.*, parental death and divorce). For example, parent-child relationship quality correlates with childhood and adolescent loneliness (Brennan & Auslander 1979; Franzoi & Davis 1985; Marcoen & Brumagne 1985), and there is evidence of the cross-generational transmission of loneliness (Lobdell & Perlman 1985). Alternatively, it is also possible that such transmission points to a genetic basis for loneliness that has yet to be explored.

The developmental correlates of loneliness appear to be stable. Among all age groups: (a) certain personality variables such as self-

esteem and social anxiety are related to loneliness; (b) measures of social deficits are related to loneliness; and (c) qualitative, as compared to quantitative, measures of relationships are more strongly related to loneliness (Perlman 1988). Also, the specific interpersonal deficits with which loneliness is related appear to be age appropriate with friendship as compared to romantic relationships more strongly related to loneliness among adolescents, whereas this pattern is reversed among young adults.

Emotions

Another area of extensive research concerns loneliness and various indicators of emotional reactions and processes (e.g., Jones, Cavert, Snider, & Bruce 1985b; Moore & Schultz 1983; Russell et al. 1978; Russell et al. 1980). In general, loneliness has been found to be associated with negative and unpleasant emotions such as anxiety, depression, hostility, and hopelessness.

Although researchers have generally focused on the relationship between loneliness and depression, loneliness is just as strongly related to measures of anxiety (e.g. Jones et al. 1985a; Moore & Schultz 1983; Schultz & Moore 1984). However, the strong association between loneliness and emotional variables does not mean that loneliness is "nothing but" emotional arousal. For example, overall, loneliness is no more strongly correlated with emotional variables than certain personality measures (e.g. shyness). Moreover, there is some evidence to suggest the discriminative validity of loneliness as a separate construct (Weeks, Michela, Peplau & Bragg 1980).

Beliefs and Attributions

There is also considerable evidence that measures of loneliness are connected to beliefs and causal attributions. Lonely individuals have been found to be cynical, pessimistic, misanthropic, and alienated from society and specific relationships, and to have greater difficulty finding meaning, purpose, and satisfaction in life (Jones et al. 1985a). Ironically, despite their pessimism, there is also some evidence that lonely persons subscribe to more idealized, unrealistic, and romanticized images of relationships and love (Jones 1982; Jones et al. 1985a). Furthermore, numerous studies have been reported in which loneliness was related to attributing one's interpersonal problems to internal and stable causes (e.g.,

personality) as opposed to external and unstable causes (e.g., luck, effort; Anderson et al. 1994; Michela, Peplau & Weeks 1982)

Personality Characteristics

Some of the personality dispositions directly related to loneliness include shyness, introversion, and self-consciousness (*e.g*. Jones et al. 1985a), whereas attachment quality (Hecht & Baum 1984), likeability (Moore & Schultz 1983), communication competence (Spitzberg & Canary 1985), self-disclosure and interpersonal competence (Jones, 1985; Sarason, Sarason, Hacker, & Basham 1985) are inversely related. Researchers have also reported inverse correlations between loneliness and social risk-taking (Moore & Schultz 1983; Sermat 1978).

Another common concomitant of loneliness is low self-esteem with several studies indicating substantial co-variation between measures of these two constructs (Jones, Freemon & Goswick 1981; Russell et al. 1980). As would be expected, low self-esteem is more strongly related to chronic than to transitory or situational loneliness (Jones, et al. 1985a ; Wilbert & Rupert 1986).

Not surprisingly then, the personality dimensions most closely related to loneliness are those pertaining to confidence and skill in initiating and developing relationships with others (Jones, et al. 1985a). Also, longitudinal studies have demonstrated that the personality correlates of loneliness often precede feelings of loneliness (e.g., Jones & Moore 1987; Shaver et al. 1985). Given the variety of personality factors related to loneliness and the common finding that many of these variables are related to one another, the question arises as to which aspects of personality are most predictive of loneliness. Two independent studies (Jones et al. 1985a; Wittenberg & Reis 1986) reported that deficits in two composite variables appear to account for the unique connections between personality and loneliness: (a) *relational competence or initiation skills* (e.g. low shyness); and (b) *enhancement skills or communality* (e.g. trust).

Adjustment, Health and Coping

Several studies have linked loneliness to a variety of psychological and even medical problems (Jones & Carver, 1990 ; Reis et al. 1985;

Rokach & Belpulsi 1999; Segrin & Kinney 1995). For example, previous research has linked loneliness and indices of neurosis, personality disorders, suicidal thinking and behavior, substance abuse, depression and anxiety disorders (Jones & Carver 1990; Peplau & Perlman 1982b; Segrin 1998; Strawnski & Boyer 2001). Similarly, research has demonstrated that loneliness co-varies with coping strategies that are ineffective (e.g. Jones & Moore 1987; Paloutzian & Ellison 1982). Ironically, the lonelier the participant, apparently the more he or she seeks to alleviate loneliness by engaging in distracting and pleasurable activities (e.g., consuming alcohol, shopping, watching television, etc), as opposed to initiating or reestablishing warm and close relationships.

Several studies have focused on therapeutic interventions for loneliness (cf. Jones et al. 1984). In general, these studies have demonstrated that a variety of therapeutic strategies result in significant reductions in loneliness both at pre-test and, where available, at follow-up (e.g., Jones, Hobbs, & Hockenbury 1982). However, follow-up intervals have been short and there has been little investigation of what might be thought of as "natural recovery" from loneliness, unaided by psychological treatments. Thus, additional research is needed to determine the permanence of reduction in loneliness induced with therapy and the strategies that are available to lonely persons to reduce loneliness on their own.

Also, loneliness has been implicated in a variety of medical problems and conditions. In some instances these studies probably reflect the emotional and interpersonal consequences of chronic and acute medical conditions such as visual and hearing problems (Evans, Wekhoven & Fox 1982, Murphey & Newton 1987), obesity (Schurmaker, Krejci, Small & Sargent 1985) and unwanted pregnancy (Polansky 1985). On the other hand, laboratory experiments, event sampling studies and prospective studies suggest that loneliness exerts a causal influence on physiological processes underlying life threatening diseases such as cardiovascular problems and high blood pressure (Cacioppo et al. 2002; Crawford et al., 2002; Hawkley, Burleson, Berntson, & Cacioppo 2003), the effectiveness of the immune system (Kiecolt-Glaser et al. 1985), and survival following bypass surgery (Herlitz et al 1998).

3. Loneliness and Social Factors

Research studies have brought to light the variety of social factors implicated in the development of loneliness. For example, in one study among college students in the U.S., participants were asked to describe the circumstances in which they typically feel lonely (Jones et al. 1985b). These situational descriptions were grouped into comparable thematic categories. The most common categories in terms of the proportion of respondents citing at least one example of that category were as follows: (a) *separation* (e.g., being away from family at college, 57.0%); (b) *solitude* (e.g., being alone at night, 45.3%); (c) *passive rejection* (e.g., not being invited to a party, 43.0%); (d) *active rejection* (e.g., boyfriend "broke-up" with me, 30.2%); (e) *interpersonal conflict* (e.g., arguing with parents, 25.6%); and (f) *social isolation* (e.g., no friends, no one to date, 22.1%). In this section we will describe research that has examined the role of such factors in the phenomenon of loneliness.

Demographic Factors

In general, loneliness has been related to various demographic variables including, for example, income, education, occupation, and quality of life. Not surprisingly, in North American samples loneliness appeared to be higher among disadvantaged persons including the unemployed and underemployed, the poor, ethnic and racial minorities, poorly educated persons and people with inadequate housing and transportation (e.g., Brennan & Auslander 1979; Kivett 1979; Pitner 1993; Polansky 1985; Reveson & Johnson 1984).

Relationship Status and Contact

Research has confirmed the commonsense expectation that loneliness is greater in the absence of certain types of relationships (e.g., romantic relationships, friendships) and at reduced levels of social contact with family, friends, and romantic partners. Loneliness is inversely related to a wide variety of "objective" indicators of relational status and interpersonal contact (e.g., marital status, being engaged, having a steady dating partner, romantic involvement, number of friends, social network size, network density,

number of social and organizational memberships; Jones 1981; Jones et al., 1985a ; Jones & Moore 1987; Sarason et al. 1985). Loneliness appears to be particularly related to whether one is romantically involved or attached. For example, loneliness is greater on average for people who are single, never-married, separated, divorced, and widowed as compared to persons who are married or who have a romantic partner (e.g. Bahr & Harvey 1979; Kivett 1979; Rubenstein & Shaver 1982). Moreover, the finding that lower loneliness was associated with being married has been replicated in several societies including, for example, the United States, Holland, Canada, and Japan (cf. Kudoh & Nishikwawa 1983; Rokach & Brock 1995).

Similarly, loneliness is inversely related to the number of casual and intimate friends (Jones et al. 1985a), and the amount of support received from one's friends and family (Schmitt & Kurdek 1985). Loneliness is significantly related to the frequency of social contact with others, time spent with others, dating frequency, and number of conversations. These findings held regardless of whether the index of intimate and social contact was based on a global and retrospective estimate by participants or assessed on a daily basis as is done in diary studies (cf. Jones 1981; Reis et al. 1985). Furthermore, in the U.S. these relationships have been observed among children (Asher & Wheeler 1985), college students (Jones 1981), and the elderly (Kivett 1979). Research evidence also indicates greater loneliness in conjunction with various situational factors including (a) *inadequate social contact and activities*, for example, more time spent alone (Hoover, Skuja & Cosper 1979), less time spent with family and friends (Bahr & Harvey 1979), fewer social activities (Russell et al. 1980), less participation in voluntary and membership groups (Bahr & Harvey 1979), and living alone (de Jong-Gierveld et al. 1987); (b) *smaller social networks of friends* (Perlman et al. 1978; Russell 1982); and (c) *less social support* (Carpenter, Hansson, Rountree & Jones 1984 ; Stokes 1985).

However, for several reasons the specifics of this commonsensical expectation have proven to be more complex than initially imagined. First, loneliness generally is more strongly related to subjective and qualitative as compared to quantitative aspects of relationships and social contact as assessed by such variables as relationship satisfaction, satisfaction with contact, commitment,

happiness, love and closeness (Jones et al., 1985a ; Jones & Moore 1987; Sarason et al. 1985). Additional qualitative variables related to the social network that have been found to be more strongly related to loneliness than quantitative measures of the same relationships include closeness to relationship partners, and intimacy (e.g., Sarason et al. 1985; Jones et al. 1985a).

Second, research has suggested that social contact and integration into a social network is not always conducive to happiness and adjustment. For example, although friends, family, and intimates provide companionship and support, these same individuals also appear to be the primary source of stress and conflict in the lives of most people (Kowalski 2001). Relationship development makes possible greater intimacy and satisfaction. However, it also increases the level of anguish and emotional upheaval in the event of violations of the trust and commitment on which relationships are formed (Hansson, Jones, & Fletcher 1990; Jones & Burdette 1994). Furthermore, Rook (1984a) has demonstrated that negative social interactions among family and friends are more consistently and strongly related to psychological well being than positive social interactions. Thus, loneliness is not solely an issue of whether or not one has friends and loved ones, but also a question of the nature and quality of those relationships.

Third, the statistical connection between objective relationship status or contact and loneliness is often mediated by other variables. For example, the level of loneliness associated with marital status varies as a function of gender. Married men yield the lowest loneliness scores, followed by married women, not married women and not married men. In most studies, the difference between married and not married men is significant, whereas the corresponding comparison for women is not, indicating that men account for the majority of the variance in loneliness scores attributable to marital status (cf. Creecy, Berg & Wright 1985). Similarly, although having some social contact should be associated with less loneliness than no social contact, ultimately it is the quality of the interactions rather than the number that appears to be important for loneliness. Indeed, in some instances lonely participants have reported greater quantitative interpersonal contact (e.g., average number of different people with whom one has interacted) than did not lonely respondents (e.g. Jones 1981).

Fourth, in some instances it is not the presence or absence of a relationship that matters as much as it is a question of whether the relationship is reciprocated or desired. For example, one study showed that loneliness was related to the proportion of reciprocated friendship choices in the social networks of college students (Williams & Solano 1983), whereas another study demonstrated that the relationship between loneliness and reciprocity of interpersonal exchanges was curvilinear with loneliness associated with giving more than one receives and receiving more than one gives (Rook 1987). Also, children who list friends instead of parents as their first comfort figures scored higher on a measure of childhood loneliness (Marcoen & Brumagne 1985), whereas college students who list a greater proportion of family members than friends in the social network were lonelier than students listing more friends than family members (Jones & Moore 1987).

For these reasons, most scholars (cf. Peplau & Perlman 1982b) have emphasized the importance of clearly distinguishing between quantitative and qualitative indexes of relationship involvement. In other words loneliness and aloneness are related, but not identical phenomena. Furthermore, there is general agreement that loneliness is an unpleasant experience, whereas the effects of aloneness and social isolation vary as a function of choice and duration (Rook 1984b).

Conversational Behavior and Interactions

Another situational factor that has been extensively investigated with respect to loneliness is the impact of engaging in conversations with others. The most frequently tested hypothesis is the idea that loneliness is perpetuated and perhaps initiated by rejection from others. Such rejection is believed to occur because individuals vulnerable to loneliness have inadequate social skill or are in some way marginalized or stigmatized. In this regard, evidence from several studies has indicated that in initial interactions among strangers, loneliness was related to more negative appraisals of self, others, and the expectation of being rejected (Bell 1985; Jones et al. 1981; Jones, Sansone & Helm 1983; Solano, Batten, & Parish 1982). However, loneliness was generally unrelated to the behaviors and perceptions of interaction partners in these studies, with the exception that lonely persons were rated as liking themselves less

(Jones et al. 1983) or as more difficult to get to know (Solano et al. 1982). Among, familiar interaction partners (e.g., partners in on-going relationships), lonely persons were rated as less attractive and less skilled (Asher et al. 1990; Asher & Wheeler 1985; Rotenberg, Bartley & Toivonen 1997). By contrast, an abundance of evidence has demonstrated that lonely persons view their on-going relationships more negatively than do not lonely individuals (Jones et al. 1981; Jones et al. 1982; Jones et al. 1983; Solano et al. 1982). To summarize, the rejection leads to loneliness hypothesis has been supported, especially among children (Asher et al. 1990, Asher & Wheeler 1985), but it is now recognized that among adolescents and young adults, it is often the lonely rather than the not lonely person who more vigorously rejects others as well as him or herself.

In addition, several studies have attempted to link loneliness and both verbal and non-verbal conversational behaviors. Available evidence suggests that loneliness is related to certain specific behaviors (e.g., less eye contact, less partner attention, etc.), but not to a dramatically different pattern of interaction (cf. Bell 1985; Jones et al. 1983; Segrin 1998; Sloan & Solano 1984). One possible exception is a general tendency reported in some studies for lonely participants to violate norms of social behavior. For example, two separate studies indicated that lonely participants disclosed more personal information at the beginning of a conversation with a stranger and less later on as compared to not lonely participants who showed the opposite pattern of self-disclosure (e.g. Sloan & Solano 1984).

Interpersonal Stress

Much of the literature on loneliness assumes that it typically or often derives from stressful interpersonal events that disrupt ordinary patterns of relating. Indeed, Weiss (1973) explicitly argued that events such as divorce and the death of a spouse were major causes of loneliness along with less dramatic disruptions. In this regard, loneliness has been related to geographical mobility, changing jobs, social isolation and restrictions on interaction, for example, due to imprisonment or hospitalization (e.g. Marshall & Hambley 1996). Researchers have also reported greater loneliness in conjunction with relational loss and rejection, for example, divorce (Weiss 1973) and widowhood (Lopata, Heinemann, & Baum 1982),

parental divorce or death (Rubenstein & Shaver 1983), and in relation to peer rejection (Asher & Wheeler 1985).

In order to explore the role of interpersonal stress in the development of loneliness Jones et al. (1985b) subjected brief statements representing descriptions of situations in which respondents reported experiencing loneliness to psychometric analyses (e.g., internal reliability) resulting in a "relational stress" score for each item. Relational stress was conceived as the probability that loneliness would result from the situation. Later, a different sample of respondents indicated which of the items they had experienced and their relational stress sum was compared to scores on measures of loneliness. Significant and positive correlations supported the validity of the relational stress scores.

Furthermore, factor analysis indicated five robust and interpretable factors underlie responses to these situations as follows: (a) *emotional threats to relationships* (25.1% of the variance, e.g., arguments with parents, arguing with a friend); *social isolation* (5.9% of the variance, e.g., not having any friends, being away from friends); (c) *extraneous constraints* (4.8% of the variance, e.g., when I'm too busy to be with others); (d) *social marginality* (4.4% of the variance, e.g., when I am with others with whom I have little in common); and *romantic conflict* (4.0% of the variance, e.g., when I broke up with my boy/girlfriend). Thus, the largest factor (and the one most strongly related to loneliness) was emotional threats to relationships. This again suggests that feelings of loneliness are not typically based on the complete lack of social opportunities; instead interpersonal conflict within relationships appears to be a better predictor of feelings of loneliness. Interestingly, some research suggests that loneliness increases in situations that are not manifestly relational at all such as being in armed combat, or suffering athletic losses, and academic failures (e.g., Solomon, Mikuliner & Hobfall, 1986). Subsequent research with the relational stress categories indicated that participants perceive these situations as (a) *negative* (e.g., illogical, bad, unfair); (b) *difficult* (e.g., difficult, threatening); (c) *unpredictable* (i.e., surprising, unpredictable); (d) *uncontrollable*; and (e) *infrequent* in occurrence.

Loneliness and Culture

The research that most directly addresses whether loneliness reflects the weakening of the social link in economically advanced countries involves cross-cultural and sub-cultural comparisons. Unfortunately, results from these studies are mixed. On the one hand, research using the UCLA Scale has indicated that loneliness was higher among minority, as compared to majority, groups in the U. S. and, as compared to North American and European samples, among culturally diverse groups. This can be seen in the comparison of means using the same scale in separate studies involving two or more cultures. For example, loneliness scores were lower in samples from the U.S. and Canada (cf. Russell et al., 1980; Stokes, 1985) as well as Germany (Stephan, Fath & Lamm, 1988), England (Halamandaris & Power, 1997), New Zealand (Hamid, 1989), and Portugal (Neto, 1992) and higher in India (Kamath & Kanekan, 1993), Iran (Hojat, 1982b), Zimbabwe (Wilson, et al., 1992), Japan (Kudoh & Nishakawa, 1983), and among Black South Africans during apartheid (Pretorius, 1993).

Moreover, in studies that directly compare loneliness measures similar results have obtained. For example, studies have found significantly higher loneliness using the UCLA Scale among college students in Puerto Rico as compared to Oklahoma (Jones et al., 1985a), China as compared to Missouri (Anderson, 1999) and Greece as compared to the U.S. (Anderson & Malikiosi-Loizos, 1992). Rokach and Sharma (1996) reported higher scores among immigrants from Southern Asia (e.g., India, Singapore, Pakistan), and the West Indies (e.g., Guyana, Trinidad, Barbados & Jamaica), in Canada as compared to native North Americans on two of five components of loneliness: emotional distress and social inadequacy/alienation. North American participants scored significantly higher on one dimension, growth and discovery, whereas the differences on the remaining two scales were unreliable. It should be noted, however, that culture and immigrant status were confounded in this study so it is not clear which of these two primary possibilities account for the observed differences. Similarly, there is some evidence that black Americans score higher on measures of loneliness than do white Americans (Pitner 1993; Polansky 1985). Also, studies in which direct comparisons between cultural groups on loneliness have been made (e.g. Anderson 1999;

Jones et al. 1985a) indicated that although significant differences in the mean level of loneliness across groups were observed, there was cross-cultural consistency in contributing factors (i.e., how personality, attribution processes, social contact, social status, etc. were related to loneliness).

By contrast, one researcher and her colleagues have reported results suggesting that loneliness is greater among native citizens in economically advanced countries such as Canada as compared to citizens of less economically advantaged societies such as Croatia, Turkey, Argentina, Spain, and Portugal (e.g., Rokach & Bacanli 2001; Rokach, Moya, Orzeck, & Exposito 2001; Rokach & Neto 2000; Rokach et al. 2001). These researchers have used an 82 item questionnaire which yields five putative components of loneliness called: (a) *emotional distress*; (b) *social inadequacy and alienation*; (c) *growth and discovery*, (d) *interpersonal isolation*; and (e) *self-alienation*. At this point it is difficult to explain the divergence of findings with respect to culture and loneliness although clearly it has something to do with differences in instruments. As it stands, studies using the UCLA, Differential Loneliness Scale and the Asher and Wheeler Children's Loneliness Scale indicate greater loneliness in economically disadvantaged countries, whereas the reverse holds for studies in which Rokach's measure was used. Rokach and her colleagues used an instrument originally developed to assess the origins of loneliness among Canadian adults. Unfortunately, this measure has not been compared to the UCLA or any of the other widely used instruments.

4. The Social Link

Research on loneliness clearly suggests that social dynamics and cross-pressures which interfere with intimacy, social contact, opportunities for relationship development, social support, family and marital stability increase the likelihood, severity, and persistence of loneliness. Thus, factors that inhibit such processes (e.g., divorce, geographical mobility, etc.) should increase the degree of loneliness and research has generally confirmed the associations between these factors and the severity and prevalence of loneliness (cf. Hojat

& Crandall, 1989; Peplau & Perlman 1982a). To the extent that these factors are more common in economically advanced countries, loneliness should be a more serious problem and this is the thesis some speculative critiques of Western and specifically U.S. culture (cf. Slater 1976). Furthermore, it is reasonable to assume that individualistic attitudes (Triandis 1994), which are believed to be typical of cultural orientations in industrialized and economically advantaged countries and which emphasize self-reliance, individual achievement, and independence, underlie many of the social and economic trends that contribute to loneliness.

On the other hand, the connection between economic advantage and loneliness is neither complete nor inexorable. First, research has found that the experience of loneliness arises from the combination of situational and personal variables, for example. Thus, although impersonal, individualistic, and achievement oriented cultural conditioning may put citizens of economically advanced countries at greater risk for loneliness, personality factors such as poor social skill also contribute. Second, there is evidence that subjective psychological processes are involved in the development of loneliness and that these subjective processes are better predictors of who will become lonely than the objective antecedents of loneliness. Third, the evidence most directly assessing the differential impact of culture on loneliness has yielded inconsistent results for reasons that remain unclear. Fourth, the connections between loneliness and social-cultural factors are not necessarily linear. Although social network density (i.e., the proportion of people in the network who know and who are connected to one another) ordinarily is inversely correlated with loneliness (e.g. Stokes 1985) under certain conditions it is positively correlated. Widows, for example, tend to lose more of their social network upon the death of the husband and experience greater loneliness in more as compared to less dense networks (Lopata et al. 1982). Fifth, although loneliness scales have been successfully translated into various languages, it may be that norms regarding relationships and family interactions vary sufficiently across cultures that the meaning of loneliness scores change from one cultural setting to the next. The same may well be true of differences between ethnic groups within the same society. This suggests that the effects of cultural variables are mediated by subjective psychological processes (e.g., beliefs, expectations, etc.) and is, of course, consistent with other

findings regarding loneliness. Also, comparing samples from two or more cultures on common variables requires careful attention to biasing factors such as the degree to which each sample is representative of its culture (Jones, et al. 1985a). Finally, several issues in cross-cultural psychology remain matters of considerable debate and controversy such as the tension between seeking culturally universal vs. culturally specific principles (cf. Fischer, Jome, & Atkinson 1998).

Several considerations point to the special danger of loneliness that develops in an individualistic context, however. First, once lonely, people tend to adopt a hostile, rejecting, and self-isolating pattern of behavior that, in turn, may reduce their attractiveness from the perspective of others and reduce also the willingness of others to befriend or become involved with them. Second, although there is evidence that most intervention strategies for loneliness are at least partially effective, there is also evidence that the lonelier a person is, the less likely he or she is to seek help through formal psychotherapy (Jones et al. 1984). Furthermore, loneliness is correlated with ineffective coping strategies that typically do not involve approaches to other people nor network building (Paloutzian & Ellison 1982). Consequently, once lonely, there is a tendency for the condition to persist in the absence of actions on the part of others such as a friend intervening in behalf of the lonely person (Jones 1982). Such fortuitous change would seem to be less likely in cultural settings that value independence, success, competition, and self-reliance over mutuality, group welfare and community.

5. Conclusions

On the bases of these and other studies, several general conclusions may be drawn with respect to the psychological experience of loneliness: (a) loneliness has been defined and conceptualized in various ways, but there are points of convergence among the conceptualizations and evidence regarding the adequacy of most measures is strong; (b) research reveals loneliness as an unpleasant state that motivates people to alleviate it, although not always by effective means; (c) although apparently anyone is capable of

experiencing loneliness from time to time, unattached adolescents and young adults have appear to be most vulnerable; (d) loneliness has been implicated in a wide variety of psychological states and processes (e.g., emotions, beliefs, attributions, personality, health and adjustment, etc.), although it is not always clear whether such states and processes result from or contribute to the development of loneliness, or both; (e) not surprisingly, loneliness has manifests itself in social and conversational behaviors, but in complex ways; and (f) although loneliness is clearly related to various objective situational and social factors (e.g., relationship status, relational stress, being isolated or rejected, etc.) it appears to be even more strongly related to subjective psychological factors including expectations regarding relationships and satisfaction with available friends and relationship partners.

Finally, it is clear that increases in factors that inhibit or disrupt close, warm, reciprocal and mutually satisfying relationships increase the likelihood of loneliness and this would include situational and culturally determined influences such as individualistic as compared to collectivistic values and practices. It is also possible that additional research, especially research that incorporates any of the several distinctions that have been suggested for refining conceptualizations of loneliness (e.g., social vs. emotional loneliness; state vs. trait loneliness, chronic vs. acute loneliness), will eventually resolve the current inconsistencies in results assessing the consequences of culture and economics for social linkages.

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