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An Exploration of the Relationship Between Loneliness and Differential Diagnosis in a Rural Mental Health Center

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Contents

List of Tables and Figure

Abstract

The review of the literature discussed loneliness in general and specified three seperate forms of loneliness; social, psychic, and existential. The relationships between loneliness, social interaction, and pathology were discussed. 139 clients were given the Belcher Extended Loneliness Scale - Revised prior to therapy. They were assigned one of six diagnostic categories to determine loneliness score (LS), diagnostic, and sex interactions. An analysis of variance found a significant difference ($p < .0001$) between the diagnostic categories' LS. The schizophrenic's and the neurotic's LS s were significantly higher ($< .05$) than the remaining categories. The males had significantly ($p < .036$) higher LS than the females. It was also hypothesized that the degree of loneliness would increase the lower the diagnostic developmental level. The hypothesized order was not consistent with the results. Further research was recommended.

Introduction

"Craving liberty and self-determination, men desire to stand alone as individuals, but fearing loneliness and responsibility, they wish to unite with their fellow men as members of a group" [Szasz, 1970, p. 28]. "The manhood of man depends upon his alienation and his awareness of mortality. Without them he would be less than human; for they are the perils, not of nature, but of the human condition" [Wheelis, 1958, p. 189].

As Fromm (1956) aptly stated:

> "Man is gifted with reason; he is life being aware of itself; he has awareness of himself, of his fellow men, of his past, and of the possibilities of his future. This awareness of himself as a separate entity, the awareness of his own short life span, of the fact that without his will he is born and against his will he dies, that he will die before those whom he loves, or they before him, the awareness of his aloneness and separateness, of his helplessness before the forces of nature and of society, all this makes his separate, disunited existence an unbearable prison."

A review of the literature has revealed a number of different definitions, and, at first glance, conflicting assessments of the nature of loneliness (Belcher, 1973). It has been observed by Clark (1968) "it seems feasible that there exists a loneliness which is different in degree and kind from the universal experience (which is existential loneliness)" and that "this loneliness can be referred to as a kind of estrangement loneliness [p. 33]".

Moustakas (1961) noted that "the loneliness of modern life may be considered in two ways: The existential loneliness of self-alienation and self-rejection," which he concluded to be very different in character, and accompanied by a "vague and disturbing anxiety [p. 24]." Von Witzleben (1958) separated loneliness into two distinct categories: "primary" loneliness which he felt is experienced by everyone, and "secondary" loneliness, which is experienced as grief. Berblinger (1968) felt that the misunderstandings of loneliness "can be attributed to the clinical fact that loneliness appears under varying guises: it can manifest itself as major problems in living, as a depression, and identity crisis, or as the more serious type of a disintegrative mental illness [p. 97]."

While it is apparent that many authors have suggested there are several major forms of loneliness, relatively few have recognized that there are levels of loneliness, along with the different forms, which may be similar in nature, but which are experienced differently in either quality or intensity. Frieda Fromm-Reichmann (1960) has discussed various types and degrees of loneliness. She differentiated them as solitude, aloneness, isolation, and "real" loneliness, including voluntary and involuntary, and the temporary and lasting types of loneliness. Madsen (1950) distinguished between the sense of loneliness felt by people in normal and abnormal "mental life," and Fromm-Reichmann (1959) added another duo dimension by discriminating between

constructive and non-constructive loneliness, which she felt had much in common with such states as panic and anxiety.

The different levels of loneliness were alluded to by Fitts (1965) when he mentioned that "troubled people, disturbed people, mentally ill people--whatever you prefer to call them--are estranged and alienated, both from themselves and from others [p. 163]," in such a way as to suggest that the loneliness felt by each of these types of individuals is similar in nature, but different in intensity.

It was R. D. Laing (1967) who clearly delineated between several different levels of loneliness when he stated:

> "The element of negation is in every relationship and every experience of relationship. The distinction between the absence of relationships, and the experience of every as an absence, is the division between loneliness and a perpetual solitude, between provisional hope or hopelessness and a permanent despair [p. 37]."

Laing observed that there seems to be at least several levels of loneliness. He cautiously differentiated between the presence of satisfying but not fulfilling relationships; and the feeling of all relationships being meaningless and empty, from which the individual receives very little, if any satisfaction. Essentially, he referred to several levels: one in which the person has relationships which give some satisfaction, but doesn't fulfill certain needs; and another level where the individual has relationships which fulfill certain needs, which at the same time he realizes that he does not have other relationships that are necessary to fulfill other very important needs. Another level which may be suggested is the condition where an individual has relationships,

all of which seem meaningless and empty. Laing offered that the latter state or level can give rise to a feeling of panic, or emptiness, or worthlessness, all of which will be of much greater intensity than similar feelings aroused by the former levels.

Kinds of Loneliness

Existential Loneliness

This type of loneliness in the literature is occasionally referred to as "mature," "primary," "philosophical," or "universal" loneliness, and is described as an inescapable part of man's human condition. In the existential works of Jean Paul Sarte, Albert Camus, and Soren Kierkegaard, these philosophical forms of loneliness are a major theme.

It was suggested by Von Witzleben (1958) that existential loneliness is inborn in everyone and refers to a feeling of being basically alone and helpless in the world. He further offered that existential loneliness could not be analyzed in the "usual" way.

Existential loneliness as recognized by Sullivan (1964), and Erickson (1950), is a consequence of individual freedom. Perls (1969) felt also that loneliness is an integral part of life, and Cooper (1967) identified it as "primary alienation," while also considering it to be a necessary form of all human action and experience. Clark (1968) also expressed that a very intense level of existential loneliness "is experienced by patients who are confronted with such experiences as major

surgery, a critical illness, or impending death [p. 33]." Also Fromm (1956) forcefully described this universal loneliness of modern man, and it's basic quality in man's life [pp. 6-7].

Social Loneliness

A diffuse and generalized form of loneliness is social loneliness. It can range from a vague feeling that something just doesn't seem right in an individual's attempt to generally relate to society, to a very strong sense of a lack of relatedness, or isolation from the society, (especially the dominant society).

In social loneliness, the individual may place the responsibility for his loneliness on society. These feelings may be directly related to a society in which there is too high a degree of ambiguity, conflict, or too many discriminatory social role expectations, or, to some degree, related to a society whose culture is too rapidly changing (Toffler, 1971).

The idea that man inevitably suffers some social loneliness from the changes brought into society by industrialization, urbanization, and the increased size of the interaction unit, actually dates back to such social protest thinkers of the 19th century as Leo Tolstoy, George Sand, Charles Dickens, etc. (Barnes & Becker, 1938).

The more diffuse, generalized, and perhaps subtlest level of social loneliness seems most often to be thought of as what Durkheim (1960) called anomie. Anomie characterizes the individual who has relationships, yet he still is not

quite having all of his relationship needs adequately or fully satisfied. It appears that anomie seems to specifically result from an individual's lack of, or inability to reconcile or relate his behavior and needs to the behavioral expectations, or norms, of society in general. Anomie implies, as he suggested, being without values or norms to structure one's behavior.

Anomie has been offered by Merton (1964) to describe attitudes and behavior found in individuals who reside in a normless society. He saw anomie as developing in situations where the person finds the socially accepted goals and means to these socially accepted goals as being in an irreconcilable conflict. An anomic personality, according to McGee (1962) does not know how to behave or what to do with himself because there is no one who cares how he behaves or expects him to behave in any particular fashion; an anomic personality is unable, largely due to lack of social reinforcement and support, to organize and regulate his own behavior for himself.

Anomie as societal normlessness was coined by Nettler (1957). He stated, "Anomie according to Durkheim, refers to a societal condition of relative normlessness [p. 617]." Anomie in the sense generalized by contemporary social scientists beyond Durkheim's original formulation, was defined by Vaughan (1972), as the state of a social system characterized by a general breakdown, or at least a felt inadequacy of the rules of interaction. Anomic loneliness is felt as an inability to obtain complete satisfaction for relationship needs. The individual feels he could receive all of the satisfaction he

needs, if the rules of interaction were somehow constant and consistent.

A growing sense of limited utility has been reflected in Durkheim's specification of anomie as referring to the breakdown of moral norms that limit aspiration and desires (a breakdown which he seemed to associate with somewhat of a special "change of role" situations). It has been observed by Srole (1956) that "this development has been accompanied by diversification in the usage of the term, in one direction toward convergence with the broader concepts of dysfunction and malintegration in molar systems [p. 712]," an outstanding example of which may be found in Merton (1959). A convergence that most closely approximates the definition proposed by Srole as being the most appropriate, is to be seen in the definition of anomie as "the breakdown of the individual's sense of attachment to society [MacIvar, 1950, p. 84]," and the reading of the concept as a lack of identification, on the part of the primary ego, of an individual with a "self" that includes others (Lasswell, 1952).

A somewhat less diffuse, and much more intense level of social loneliness, would be alienation. It has been most often described as the lack of identity with, or the rejection of prevalent social values by an individual. This rejection is largely on the basis of esthetic, cultural, or humanistic grounds. A lack of relatedness is felt by the individual with society, and a concomitant isolation from the general culture. Unacceptance of the individual by others may be experienced.

An individual doesn't have all the necessary relationships, and feels, perhaps accurately, that society is somehow restricting his opportunities to establish these relationships. He feels he would have no problem satisfying his relationship needs, if only he were given the opportunity.

Alienation, as an intense form of social loneliness, also includes the concept of anomie. This level of social loneliness Fromm (1941) called "moral aloneness," which he felt was the lack of relatedness to society's values, symbols, and patterns. Riesman, Denney, and Glazer (1950) dealt somewhat with alienation and they described it as a characteristic which is directed toward the other individual, and not towards the self.

Nettler (1957) described alienation as the individual's "feeling state." For Nettler, as Vaughan (1972) pointed out "an alienated person is one who is disaffected from, has become estranged from, or is unfriendly toward his society and culture [p. 31]." The sense of estrangement by the individual from his social context was concurred with when Vaughan defined it.

Fromm (1941) emphasized the need to feel related to society when he pointed out:

> "This relatedness to others is not identical with physical contact. An individual may be alone in a physical sense for many years and yet he may be related to ideas, values, or at least social patterns that give him a feeling of communion and "belonging." On the other hand, he may live among people and yet be overcome with an utter feeling of isolation...The spiritual relatedness to the world can assume many forms; the monk in his cell who believes in God and the political prisoner kept in isolation who feels one with his fellow fighters are not alone morally. Neither is the English gentleman who wears his dinner jacket in the most exotic surrounding nor the petty bourgeois who, though being deeply

> isolated from his fellow men, feels one with his nation or its symbols. The kind of relatedness to the world may be noble or trivial, but even being related to the basest kind of pattern is immensely preferable to being alone. Religion and nationalism, as well as any custom and any belief however absurd and degrading, it only connects the individual with others, are refuges from what man most dreads: (social) isolation [pp. 19-20]."

Psychic Loneliness

Compared to social loneliness psychic loneliness is a much more explicit and circumscribed feeling. The individual has decreased the diffuse aspect, present in social loneliness, by focusing upon himself as the source or cause of the loneliness. It has occasionally been referred to as "self-alienation" because the individual focuses upon himself as the cause. Often-times the individual has some awareness of either his unmet relationship needs, or what his inabilities are which interfere with his development of satisfying relationships.

The individual is receiving satisfaction, but not fulfillment in social loneliness and he has the necessary relationships appropriate to his chronological level of development, according to Belcher (1973). He states, "the individual experiencing psychic loneliness lacks some or all of the necessary appropriate relationships" at different levels of development. He continues to say that while the individual may have age appropriate relationships, he still has grossly unsatisfied relationship needs which can only be met by a relationship appropriate to earlier developmental levels.

One might consider estrangement loneliness as a mild and less intense form of psychic loneliness. Belcher (1973) described

the individual as having many age appropriate relationships but is receiving relatively little satisfaction. The individual feels there is something wrong with the way he is living with or relating to others, and if he could just do the right things he would receive the satisfaction he's seeking, along with additional needed or desired relationships.

This level of psychic loneliness is experienced by an individual when he has either lost an essential relationship, or has had his needs fulfilled to the point where he develops and experiences other needs. His new needs cause a gap for which he does not have an appropriate relationship available to provide the minimal level of satisfaction required for need fulfillment. It is estrangement loneliness, according to Belcher (1973) that appears to be oftentimes identified with a mild sense of distress and confusion.

The most intense form of psychic loneliness might be considered pathological loneliness. For one reason or another, the individual has, as Belcher (1973) states, "no age appropriate relationships from which he is receiving satisfaction." He may feel somehow that there is something wrong with him because he isn't able to establish and maintain satisfying relationships.

This level may be experienced by an individual who has either suffered an acute loss, or it may be experienced by an individual who has chronically failed to establish those relationships which provide more than intermittent and very mild incomplete satisfaction of relationship needs. This pathological loneliness is oftentimes identified with the intense sense of distress

experienced by extremely disturbed individuals, i.e., schizophrenics.

According to Clark (1968) pathological loneliness is the kind of loneliness "expressed by psychotic patients or the look of abandonment that is seen in the eyes of children on pediatric units [p. 33]." This loneliness, she observed, may be referred to, in less intense states, as estrangement loneliness. It can also be referred to as an experience of psychic pain, when the degree or depth of psychic loneliness is extreme enough to be considered pathological loneliness.

The review of the literature has attempted to answer the question of what is loneliness. This effort revealed three separately definable areas of loneliness. Existential, psychic, and social loneliness appear to relate to another area.

The area of social interaction seems to have an effect on the individuals felt loneliness. Social interaction is viewed in this paper as it relates to mental disorder and loneliness. This is an attempt to view how a lack of social ability may be viewed by different theorists. This consideration is made due to the logical possibility that the ability to relate may result in loneliness or as a result of loneliness, the ability to relate may deteriorate.

Social Interaction and Mental Disorder

According to Argyle (1969) detailed clinical studies of mental patients have been important in the study of social behavior. Their social behavior is disturbed in one way or another. They are unsuccessful interactors and at times this may be their main symptoms. As he explains the causes of

disorders may be partly due to social behavior failures. In others social performance may be as a result of more general failures in their system as in the example of a breakdown in thought processes. He discusses the social interaction traits in the area of schizophrenia, depressions, manic states, paranoid, anxiety neurosis, hysteria and delinquents.

Bateson, Jackson, Haley, and Weakland (1956) considered the theory that the schizophrenic may have been brought up in a home where the ability to relate to others in a way which would bring about satisfaction was not encouraged in the more "normal" way. They propose that "....he must live in a universe where the sequences of events are such that his unconventional communicational habits will be in some sense appropriate [p. 144]."

The peculiarity of the schizophrenic is not that he uses metaphors, but that he uses unlabeled metaphors. The special difficulty comes when handling signals of that class whose members assign Logical Types to other signals.

They propose that through the repeated experience of being caught in a "double bind" situation with important others, like the mother, the response will be of necessity defensive and metaphorical. If the mother is expressing two orders of message and one of these denies the other, then the safer response would be one of a metaphorical order. In an impossible situation the schizophrenic may find it better to shift and become somebody else, or shift and insist that he is somewhere else. Then the "double bind" cannot work on

the "victim". The "victim" isn't he, and besides he is in a different place.

Due to experiencing the "double bind" the writers feel the schizophrenic may begin to assume that behind every statement there is a concealed meaning that is detrimental to his welfare. He may become concerned with hidden meanings and determined to demonstrate that he could not be deceived, as he had been all his life. He may give up trying to discriminate between levels of messages as unimportant or to be laughed at. He may find it necessary to see and hear less and less of what goes on around him. He may try to avoid provoking a response in his environment.

As Freida Fromm-Reichmann (1959) points out "....it is probably true that what psychiatrists describe as separation-anxiety can also be described as fear of loneliness. Furthermore, most authors agree, explicitly or implicitly, with the definition of anxiety as a response to the anticipated loss of love and approval by significant people in one's environment." She felt that the interrelation of loneliness and anxiety needs to be questioned in an effort to accomplish a new and more precise differentiation between the two dynamisms.

Tanner (1973) states [pp. 12, 13] that the central point to his book is:

> "Fear of love is the root cause of every attitude and form of behavior that separates us from each other. A fear of love is the cause of poor communication or no communication at all between people."

Loneliness he feels hinges on the intensity of our fear of love.

Sullivan (1953) discusses the developmental history of the motivational system which underlies the experience of loneliness. He mentions the first appearance of loneliness in infancy, as the need for contact, "the need for tenderness." This need extends into childhood where the very young child has to learn how to express emotions by successes and failures in escaping anxiety or in increasing "euphoria". In the "juvenile era" he sees components of what will eventually be loneliness "in the need for compeers" and later the need for acceptance. In preadolescence he sees the final component of the really intimidating experience of loneliness-" the need for intimate exchange with a fellow being, whom we may describe or identify as a chum, a friend, or a loved one—that is, the need for the most intimate type of exchange with respect to satisfactions and security [p. 17]." He feels these developmental levels need to be successfully passed through to be rid of anxiety.

Maladjustment according to Adler (1956) is the result of a lack of social interest. "All failures—neurotics, psychotics, criminals, drunkards, problem children, suicides, perverts, and prostitutes....approach the problems of occupation, friendship, and sex without the confidence that they can be solved by cooperation [p. 156]." "The task of the physician or psychologist is to give the patient the experience of contact with a fellow man, and then to enable him to transfer this awakened social interest to others [p. 341]."

Maier (1956) finds Erickson's basic premise to assume that "innate ability" coordinates "with an average, predictable

environment" [p. 17, 18]. He concerned himself with the dynamics between members of the family and their sociocultural reality. He felt the nature of emotional content, or the quality of interpersonal relationships, determines the basic core of man's make-up. Thus, Erickson, as well as Freud, concerned his work with the emotional relationship between persons. Maier discussed Erickson as seeing the child as investing much in refining his muscular activities, his accuracy in perception, his assessment of others, and his skills in communication. Since meaningful interaction with others seems to be so important in an individual's development, its relationship to pathology should be considered.

Research on Loneliness and Pathology

Extreme levels of loneliness have been associated with different types of pathologies by numerous authors. Belcher (1973) felt that some individuals, unable to tolerate the continued presence of loneliness, choose suicide in preference to a life of loneliness. Other individuals lessen the horror by the invention of a private fantasy world and the companionship of hallucinatory figures. All of the unhappy individuals who are enmeshed in a neurotic way of life are also acquainted with loneliness. By their various defensive maneuvers, they handle its presence and are more or less miserable according to the success or failure of these psychic dynamisms or defenses.

"Although loneliness is a universal experiential phenomenon, extreme degrees of loneliness are an important factor in emotional problems (Bradley, 1969, p. 5)." Belcher (1973) has pointed out that varying degrees and forms of loneliness may be related to

different types of pathologies. Konopka saw loneliness as the result of an individual's unfulfilled need for dependence. Berblinger (1968) saw this desire for independence on the one hand and the fear of loneliness on the other leading to deep conflict.

Clark (1965) did a study on loneliness where she had 98 patients and 53 nursing students write a short paper on the topic, "What Loneliness Means to Me." She compared the descriptions by students with those by patients, and noted a difference in the "degree of depth and permanence of the loneliness [p. 34]." Konopka (1966) discovered that adolescent girls with emotional conflicts were withdrawn from their relationships, and suffered from an "utter" and "despairing" loneliness. Hadja (1961) in a study on a group of lonely students found "a high number of anxiety symtoms: headaches, insomnia, periods of feeling blue, periods when they cannot force themselves to work, worries about their school work, loss of appetite, and confusion about their goals."

The relationship between loneliness and deviant behavior has been examined (Cloward, 1959; Dubin, 1959; Merton, 1959) giving rise to the view that deviancy is a result of the individual's attempt to rid himself of an overpowering sense of loneliness. Often times the behaviors engaged in are also unacceptable to the dominant culture. The social isolation and stigma which often results from deviancy may be accompanied by additional feelings of loneliness. (Churchill, 1967; Schofield, 1965; Belcher, 1973)

Berenbaum (1968) attempted to identify personality constructs as predictive of success in treatment, or as appropriate for one of several treatment modalitites. Differences between diagnostic categories were demonstrated around diagnostic signs or attitudinal differences that dist inguished one from another. Differential intensities of anxiety, self concept, and other variables have also been used to differentiate between diagnostic groups that present similar behavioral manifestations.

Shuchter (1970) compared the three diagnostic underachiever categories of adolescent reaction, neurotic, and non-achievement syndrom on four scales of the Minnesota Multiphasic Personality Inventory (MMPI): hypochondriasis, depression, hysteria and psychopathic deviate. The MMPI she found, did not differentiate among the three groups. She stated in reference to another study in which this differentiation was found, "It should be noted that Berenbaum (1968) utilized more typical clinical techniques in his identification and diagnostic procedures than the psychometrically oriented projective model of the MMPI. The classic differences between clinical and statistical or psychometric predictions may in part explain the differences in results [p. 21]." The means of the neurotic group of underachievers, however was higher than the means of the other two groups on all four MMPI scales. "Thus, the neurotic underachievers were shown to be more pathological than other diagnostic categories [p. 22]."

A Loneliness Scale developed by Bradley (1969) was administered to four groups of prison inmates: a randomly selected group, an

emotionally disturbed group, a sexual offender group, and members of the prison chapter of the Junior Chamber of Commerce. The emotionally disturbed group's mean was the only one significantly higher (<.05) than the Junior Chamber of Commerce and random group means. Bradley offered the suggestion that "further validation procedures could entail comparing groups of normal Ss with emotionally disturbed Ss in settings other than prison [p. 20]."

The diagnosis of thirteen clients seen in the course of one day in a mental health center was reached jointly by two of three mental health professionals (psychiatrist, psychologist, and psychiatric social worker). The general diagnostic categories were those formulated by Roth, Berenbaum, and Hershenson (1967). Belcher (1972) assigned each diagnostic category a score from 1 through 6, with the score of 1 representing the lowest level psychopathology (schizophrenia) and a score of 6 representing the highest level psychopathology (adolescent reaction) other scores assigned were manic-depressive psychosis = 2; neurosis = 3; character disorder = 4; and behavior disorder = 5. A rho of -0.67 (p .01) was obtained between these diagnostic ratings and the total scores of the BELS (which does not include the SRS), indicating that lower level psychopathologies may tend to be accompanied with higher levels of loneliness. The total score seemed to be overall more related to the level of psychopathology than any single subscale.

Bradley's Loneliness Scale (LS) was administered by Belcher (1973) to three groups of subjects. 32 students from a university counseling center being treated for emotional problems and

disturbances were Group 1 Ss. 32 students in undergraduate psychology and sociology classes matched, on the basis of sex, age, year of education, and academic major with Group 1 Ss, made up Group 2 Ss. The remaining 205 students from undergraduate classes were Group 3 Ss. Group 1 Ss, he found, scored significantly higher ($p < .001$) than Group 2 or Group 3 Ss on the LS. No significant difference was found between Group 2 and Group 3. The self-rating scores were also found to be significantly higher for Group 1 than those for Group 2 Ss. None of the Ss in Group 2 scored over 120, while fifty percent of Group 1 Ss had scores over 120. Belcher referred to the 50 percent of Group 1 Ss who scored below 120, and concluded that half of the emotionally disturbed Ss do not feel alienated or lonely, "perhaps due to different sorts of emotional problems, or that loneliness is an additional dimension with some individuals" [p. 15]. No differences in the two sexes were found.

Belcher (1973) also compared two groups of subjects in which Group 3 (N=32) was made up of students who had requested therapy at a university counseling center, completed the diagnostic intake procedure, and had been assigned a therapist for individual therapy. Group 4 (N=18) Ss differed from Group 3 Ss in that they voluntarily terminated their therapy before eight weeks had elapsed. Group 3 Ss remained in therapy after eight weeks and were voluntarily retested by their therapist between nine and eleven weeks later. Using the subscales and a total score from the Belcher Extended Loneliness Scale (BELS) the two groups were compared. Group 3 had consistently higher

scores than the standardization group (N=371) and Group 4, with the exception of one subscale (Existential).

Belsher (1973) did an additional study, in which he found that loneliness can be used to differentiate between non-therapy normal and self-selected therapy subjects. In addition the subscale loneliness depression and the general elevation of scores were found to differentiate significantly between short term and long term therapy subjects. He suggested that there were different diagnostic categories involved which he felt would account for the overall differences in loneliness between groups of subjects. He recommended additional research into the relationship between differential pathologies and loneliness.

Tueth (1973) tested the relationship between loneliness and the three pathology groups diagnosed as adolescent reaction, behavior disorder and neurotic. She compared 185 Ss from undergraduate psychology courses with 67 Ss who had applied for therapy at the Illinois Institute of Technology Counseling Center on a Loneliness Scale and Self Rating Scale. Some of the 67 Ss who applied for therapy had had prior therapy. Her findings indicated that there was more loneliness present in the experimental group who had applied for therapy than in the control group. She found that the three diagnostic groups were shown to be significantly ($<.01$) different on both the Loneliness Scale and on the Self Rating Scale with the neurotics showing more loneliness, the adolescent reactions the next, and the behavior disorders showing the least loneliness of the three groups. She suggested that further research should be

conducted using the BELS on the three diagnostic groups used in her study. She also suggested that there was a definite relationship between loneliness and pathology, in that those who applied for therapy had more loneliness.

Measurement and Research Leading to the BELS-R

There is a scarcity of research on loneliness, and also an absence of substantial research in the literature concerned with the dynamics of loneliness. This may be due to the previous lack of unifying and organizing constructs, and an absence of a comprehensive measurement instrument.

Shipley and Veroff (1952) completed the earliest work relating to the measurement of any of the elements of loneliness. They measured the need for affiliation as a separation anxiety using TAT protocols. This evolved into an elaborate tool under Atkinson, Heyns, and Veroff (1954). A "desire to establish and/or maintain warm and friendly interpersonal relationships" was defined by French & Chadwick, (1956, p. 296) as "a need for affiliation," which involves limitations as to the objectivity of scoring. Another limitation which is avoided using the following approach to the measurement of loneliness is that the cues in the picture may tend to heighten or dampen motivation for particular goals to such an extent that the situation portrayed is relevant to the life experiences of the respondent (Veroff, Atkinson, Feld, & Gurin, 1960).

Other than the TAT, which is the most commonly discussed in the literature, there are the subscores of the Edwards Personal Preference Schedule (Cronbach, 1970) and the Personal

Orientation Inventory (Shostrom, 1966). These scales are again discussing the need for affiliation defined as the need to be with others, rather than the subjective state accompanied by unmet relationship needs.

A modified version of the Likert (1932) technique was utilized by Bradley (1969) to derive a Loneliness Scale (LS) from an original list of 134 statements expressing feelings or experiences of loneliness and "belongingness". Bradley constructed and selected statements based on her definition of loneliness. Thirty-five statements were taken from sentence completion and peak experience responses in her preliminary study. This list of 134 statements was then administered to 94 male junior college students and the results were used for item selection and reliability studies. Thirty-eight items were selected on the basis of their ability to discriminate ($p < .0005$ on one-tailed t-tests) between the 10 highest and 10 lowest scores made by the students.

A measure of reliability of the total scores on the LS was obtained by Bradley. This was done using the split-half method with 94 junior college students as subjects. The items for the two halves were chosen to equate the sum of the mean differences (56.0 and 56.9 for the two halves) and the sum of the standard error for the difference between means (113.4 and 109.56 for the two halves). The correlation coefficient was 0.90 ($p < .001$). The Spearman-Brown prophecy formula yeilded a value of 0.95, as an estimate of full scale reliability for the 38 LS items. According to this split-half correlation

coefficient the LS items are internally consistent. The standard deviation was 33.49 and the total mean score on the LS was 100.17.

Belcher (1971) did a follow-up study testing 117 undergraduate college students with the LS and retested again in 14 days. This brought results of a rho of 0.89 ($p < .001$). Using the Pearson r to correlate the LS scores for 16 students who were tested and retested again eight weeks later, Belcher (1971) obtained a correlation coefficient of 0.83 ($p < .001$).

Belcher (1973) in an exploratory work used the Pearson r to correlate Self Rating Scales (SRS) scores of 16 undergraduate college students who were tested and retested again eight weeks later. He obtained a correlation coefficient of 0.71 ($p < .01$). He assumed after numerous observations and case studies that the SRS may reflect the level of an individual's defenses, or the effectiveness of his defenses, against loneliness.

It was felt that the LS, with the SRS was inadequate, in that it was representative of the psychological frame of reference only. As a result Belcher added 27 items to represent the sociological frame of reference.

The theoretical works of Durkheim (1960) and Merton (1964), were combined with the efforts of Srole (1956), Seeman (1959), and Keniston (1960) to operationalize the concepts of alienation and anomie. This led to numerous studies, as well as many scales for the measurement of alienation and anomie. Items from two standard measurement instruments that have been accepted in the field of sociology as among the best measurement instruments available for measuring alienation and anomie were combined with the LS and the SRS. Five items from Srole's (1956) anomie scale

and 22 items from Keniston's (1960) alienation scale were used without any additional research. Keniston's original questionaire contained eleven subscales to evaluate alienation, four of which were selected to be modified and included in the Belcher Extended Loneliness Scale (BELS). The selection of these subscales was because they had the largest correlations with clinical alienation ranks assigned to a normal group by Keniston (1966) and his researchers. The clinical alienation ranks were assigned by the researchers to students after they had written lengthy autobiographies. The correlations were 0.85 for distrust vs. trust, 0.83 for pessimism vs. optimism, 0.83 for unstructured universe vs. structured universe, and 0.84 for interpersonal alienation. Priority has been established for the utility of using only the above four subscales, rather than the original eleven (Keniston 1966; Horman, 1971).

The product was an eight page survey, in which the individual fills in a space to represent a score ranging from one through six. The direction of scoring in the modified items on alienation (AL) and anomie (AN) was an extension of the original scoring to fit the format of the LS. The original BELS, as a result, included 65 items and a self rating scale to measure psychic and social loneliness. Due to the concept that loneliness is a matter of degree, the six-point rating scale was reasoned as applicable. Loneliness, also, was considered to occur as a range of experiences represented across the rating scale.

The four subscales (LS, AL, AN, SRS) of the BELS have been intercorrelated in several exploratory studies. Their moderate

positive correlations suggest that the subscales tend to measure different aspects of loneliness (Belcher 1973).

The subscales were correlated with the total score (TOT) of the BELS, which did not include the SRS. These correlations, in most cases, were higher than the intercorrelations, and indicated that each subscale was significantly related to the TOT score (Belcher 1973).

Using the BELS Belcher (1973) obtained factor loading scores (FLS) by multiplying each individual's raw score on each item by the factor loading for each factor. The resulting item scores were then summed for each factor, which were in turn summed for a total score (Total). The computation for the raw scores (RS) was the same, except the individual raw scores were used without multiplying them by their factor loadings. Each item with a factor loading of at least .300 received equal weight while those with loadings below .300 received no weight. Only those items with a factor loading of at least .300 were included in the factor scores and the Total of Belcher's (1973) study. The product-moment method was used to correlate the FLSs and the RSs for each factor in order to obtain an indication of their equivalency. Since six items did not have factor loadings of at least .300, they were dropped in the present study.

Also, the instrument used in the present study deleted the four incomplete sentences used in the BELS originally for research purposes.

Hypotheses Being Tested

Hypotheses are stated below:

1. There is a relationship between loneliness as measured by the BELS-R and diagnostic categories. A significant difference will be found between measured loneliness and the six diagnostic categories.

2. Significant differences will be found between the six diagnosed client groups with the relationship between measured loneliness and developmental level being consistent: i.e. the schizophrenics will be found most lonely, the affective disorders next, the neurotics next, the behavior disorders next, the adolescent reactions next, and the adjustment reactions least lonely.

3. There will be no significant differences between the degree of loneliness as measured in females and the degree of loneliness as measured in males.

Method

Subjects

Subjects (Ss) were 139 outpatient applicants for Mental Health services at a small rural county Mental Health Center in the midwest. There were 59 males and 80 females in the sample.

The Ss ranged from 14 to 63 years of age. All Ss were able to read, understand, and respond to the questions appropriately. The Mental Health Center's clinical director evaluated whether or not the Ss understood the statements used in the Belcher Extended Loneliness Scale - Revised (BELS-R). Any Ss who were unable to understand the questions in the instrument were not used in the results.

Ss who required emergency treatment, were excluded from taking the BELS-R until actual outpatient therapy was begun. Thus a S who needed temporary emergency hospitalization, did not take the BELS-R until he was released from the hospital. A S who required emergency hospitalization, took the BELS-R prior to his first session with his therapist in the clinic. A S who was involved in a crisis such that he needed immediate medication, was not given the BELS-R until his medication needs had been met. A S with emergency medication needs took the BELS-R prior to his first therapy session with his therapist.

Measuring Instrument

The BELS-R (refer to Appendix) was used to measure social, psychic, and existential loneliness. The 50 items are divided into four parts; the Loneliness Scale, the Alienation Scale,

and the Self Rating Scale. The Self Rating Scale was not used in the results. The Loneliness Scale was developed by Bradley (1969) and modified by Belcher (1973) creating 35 items. The Alienation Scale was originally developed by Keniston (1960) and modified by Belcher (1973) creating 19 items. The Anomie Scale was developed by Srole (1956) and modified by Belcher (1973) creating five more items. The four parts mentioned above made up the first section of the BELS-R in which the respondent answered the statements with a check in one of the six squares provided which ranged from "rarely or almost never true" to "true all or most of time". The four parts yielded the Loneliness Score (LS). The SRS was a scale on which the respondent rated the degree of loneliness he felt as compared to those around him on a six-point scale which ranged from least lonely to most lonely.

Procedure

Administration of BELS-R. The BELS-R was administered for a twelve month period. Prior to the first session with his counselor each S was asked to fill out (1) an application form and (2) the BELS-R. Each S was assured that his answers were completely confidential. He was also told that the second form (BELS-R) was to find out about his feelings, how he felt that day, and how he felt about a number of other things. Nothing more specific was discussed prior to his taking the BELS-R. A clinic employee was available to answer questions during the time the S was completing the scale.

Diagnosis. The diagnosis for each client was established by combining information obtained in (1) a diagnostic interview by the clinical director, and (2) diagnostic impressions made by the client's therapist. These diagnostic impressions were shared with the clinical director through the process of clinical supervision. The final diagnosis was confirmed through consultation with the consulting psychiatrist. Any subject for whom the diagnosis was questionable was not included in the study. Each S was assigned to one of six categories: schizophrenic, affective disorder, neurotic, behavior disorder, adolescent reaction, and adjustment reaction. The BELS-R was scored after the diagnosis was made. Thus, the diagnosis was made without using any information from the BELS-R.

The diagnostic categories were based on "The Developmental Theory of Psychotherapy: A Systematic Eclectisism" (Roth, Berenbaum, and Hershenson, 1967). The adjustment reaction was not defined in the diagnostic theory mentioned above. This category was defined as a reaction to a crisis situation or an environmental stress that was not associated with an underlying pathology. This definition was similar to that discussed in the diagnostic paper mentioned above, as Existential Crisis. Also, the consulting psychiatrist considered the diagnosis of "affective disorder" to be interchangeable with the diagnosis of a manic depressive disorder.

Statistical Analysis. The analysis of variance was used in order to compare the various groups in the present study. Scheffe's Method of Paired Comparison was used to analyze the specific areas in which the analysis of variance found significance.

Results

The first of the three hypotheses, was generally supported by the results. There were significant differences ($p < .0001$) between loneliness scores (LSs) for the six diagnostic categories. When paired comparisons between the diagnostic LSs were made, eight of the fifteen comparisons differed significantly ($p < .05$). Hypothesis 2, stated that individuals who were viewed by their therapist as lower in developmental diagnosis, was partially supported. The six diagnoses, however, did not consistantly follow the developmental order stated in hypothesis 2. It was stated in hypothesis 3 that there would be no significant differences between the measured loneliness in males and the measured loneliness in females. Contrary to hypothesis 3, it was found that male LSs were significantly higher than female LSs. When paired comparisons were made between male diagnostic categories, only four pairs out of fifteen differed significantly ($p < .05$). When paired comparisons of LSs were made between female diagnostic groups, six out of ten, differed significantly ($p < .05$).

An analysis of variance was used to test the significance of the differences between diagnostic categories, sex differences, and their interaction. This test revealed highly significant differences between the six diagnostic categories ($p < .0001$, $F = 22.88$, 5 & 128 df). The results for the analysis of variance according to diagnoses are shown in Table 1. The mean loneliness scores and the standard deviations for the six diagnostic categories are shown in Table 2.

TABLE 1

Analysis of Variance Between Loneliness Scores According to Diagnosis and Sex

Source of Variance	Sum of Squares	Degrees of Freedom	Mean Square	F	Probability
Total	393293	138	2849.95	-	-
Diagnosis	177822	5	35564.40	22.8783	.0001
Sex	1107	1	1107.00	4.4957	.0360
Diagnosis X Sex	15382	4	3845.50	1.5282	.1979
Error	198982	128	1554.50	-	-

TABLE 2

Mean Loneliness Scores and Standard Deviations

Diagnoses	Mean Loneliness Scores	Standard Deviations
Schizophrenics	252.2916 *	50.57147
Affective Disorders	145.9583 *	38.98197
Neurotics	227.6660*	42.94248
Behavior Disorders	154.2500	38.85667
Adolescent Reactions	178.6535 *	17.69956
Adjustment Reactions	147.8737	27.58561

* Male loneliness scores higher

Scheffe's method of paired comparisons was used to test the significance of the differences between diagnoses and measured loneliness. This method of pairing was used to specify which particular diagnostic categories' LSs had differed significantly from another particular categories' LSs. Eight of the fifteen combinations of diagnoses differed significantly at or beyond the .05 level. Scheffe's critical values and the mean diagnostic LSs differences are listed in Table 3.

The Scheffe's method found that schizophrenics and neurotics differed significantly ($p < .05$) from all the other diagnostic categories but they did not differ significantly from each other. The four remaining categories of affective disorder, behavior disorder, adolescent reaction, and adjustment reaction did not differ significantly from each other on measured loneliness scores. Thus, seven of the fifteen comparisons revealed no significant differences.

Hypothesis 2 stated that the six diagnostic groups would differ in degree of measured loneliness, according to their specific developmental level. The mean loneliness scores did not consistently follow the hypothesized direction. The hypothesized order was, from most to least lonely; schizophrenics, affective disorders, neurotics, behavior disorders, adolescent reactions, and adjustment reactions. The diagnostic order according to LS means is shown in Figure 1 and was, from most to least lonely; schizophrenic, neurotic, adolescent reaction, behavior disorder, adjustment reaction, and affective disorder.

TABLE 3

Diagnoses Compared Using Scheffe's

Method of Paired Comparison and Mean Differences

Diagnoses	Critical Values	Mean Differences
1 & 2 *	55.2387	106.3333
1 & 3	43.7008	24.6256
1 & 4 *	43.1898	98.0416
1 & 5 *	48.266	73.6381
1 & 6 *	50.0790	104.4179
2 & 3 *	45.5155	81.7077
2 & 4	57.1241	8.2917
2 & 5	49.919	32.6952
2 & 6	51.6713	1.9154
3 & 4 *	42.1262	73.4160
3 & 5 *	31.6842	49.0125
3 & 6 *	34.3784	79.7923
4 & 5	46.8509	24.4035
4 & 6	48.7131	6.3763
5 & 6	40.0235	19.2202

1 Schizophrenics
2 Affective Disorders
3 Neurotics
4 Behavior Disorders
5 Adolescent Reactions
6 Adjustment Reactions
* $p < .05$.

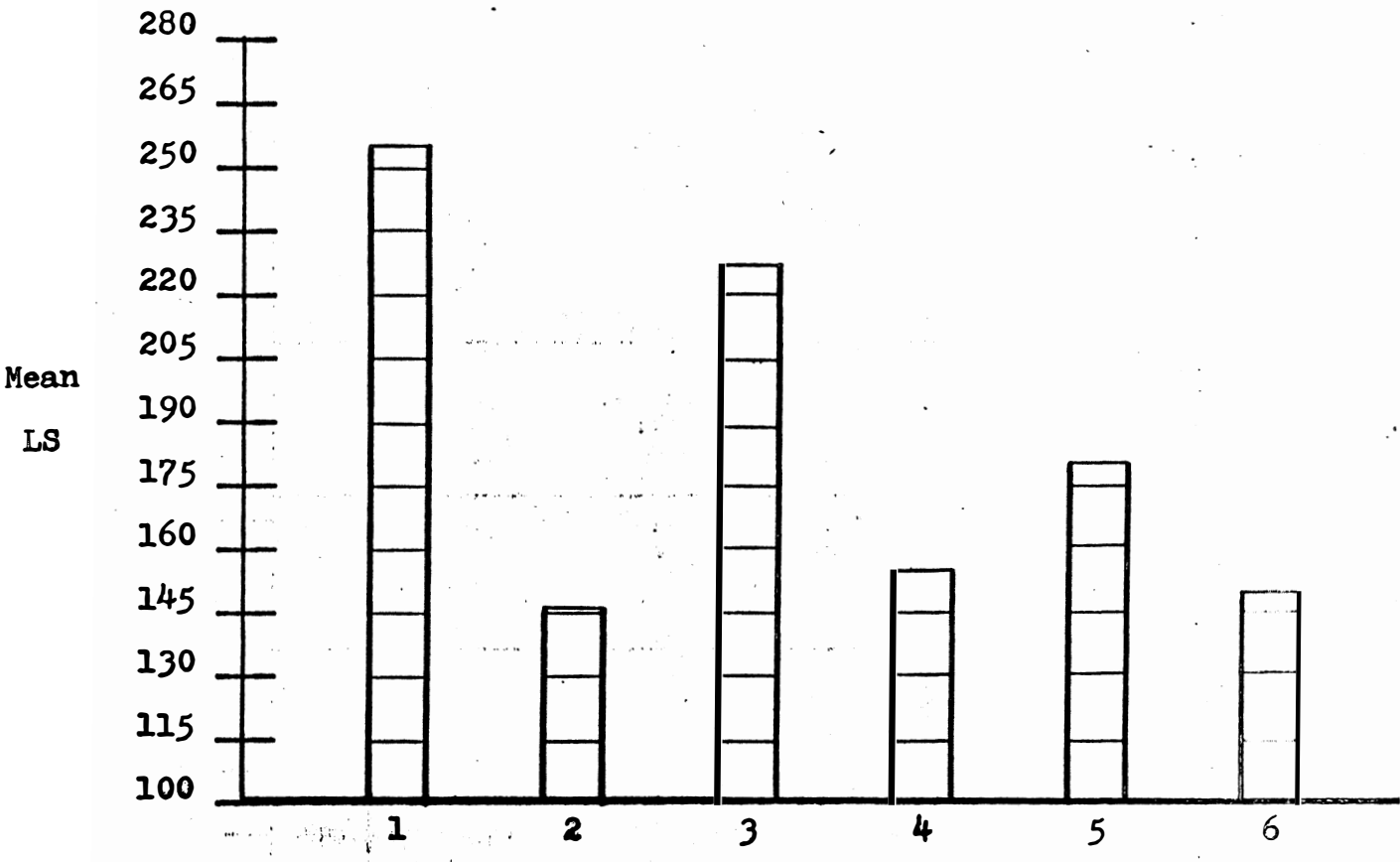

FIGURE 1

Loneliness Score Means

According to Diagnoses

1 Schizophrenics
2 Affective Disorders
3 Neurotics
4 Behavior Disorders
5 Adolescent Reactions
6 Adjustment Reactions

Hypothesis 3 stated that males and females would reveal no significant differences in their measured loneliness. This hypothesis was not supported. The analysis of variance, as shown in Table 1, revealed that the mean male and female loneliness scores differed significantly ($p < .05$). The males LSs were higher than the female LSs ($p < .036$, $F = 4.4957$, 1 & 128 df). Table 4 lists the mean male and female LSs and their standard deviations.

Scheffe's method of paired comparison was used to determine which specific pairs of male diagnoses differed in LSs. Four of the fifteen comparisons yielded significant differences ($p < .05$), as shown in Table 5. This pairing method was also used to identify the significant differences between female categories. These results are shown in Table 6.

In the male paired comparisons, the schizophrenics and the neurotics were again significantly different from the same diagnostic categories, but not significantly different from each other. The male schizophrenics' LSs were significantly higher ($< .05$) than the LSs for the male categories of behavior disorder and adjustment reaction. The male neurotics' LSs were also significantly higher ($< .05$) when compared to the male categories' LSs of behavior disorder and adjustment reaction. The remaining eleven comparisons were not significantly different. Thus, the male diagnostic groups of affective disorder, behavior disorder, adolescent reaction, and adjustment reaction were not significantly different from each other according to LSs.

TABLE 4

Male and Female Mean Loneliness Scores

and Standard Deviations

Diagnoses	Mean Loneliness Scores		Standard Deviations	
	Male	Female	Male	Female
Schizophrenics	253.3333	251.2500	31.65965	69.48330
Affective Disorders	177.1667	114.7500	37.56284	40.40111
Neurotics	238.8571	216.4750	39.72693	46.15803
Behavior Disorders	154.2500		38.85667	
Adolescent Reactions	179.8333	177.4737	19.97415	15.42497
Adjustment Reactions	144.6364	151.1111	27.45641	27.71482

TABLE 5

Male Diagnoses Compared Using

Scheffe's Method of Paired Comparison and Mean Differences

Diagnoses	Critical Values	Mean Differences
1 & 2	94.3338	76.1666
1 & 3	82.345	14.4762
1 & 4 *	86.118	99.0833
1 & 5	94.338	73.5000
1 & 6 *	86.898	108.6969
2 & 3	61.759	61.6904
2 & 4	66.707	22.9167
2 & 5	77.026	2.6666
2 & 6	67.710	32.5303
3 & 4 *	48.279	84.6071
3 & 5	61.759	59.0238
3 & 6 *	49.656	94.2207
4 & 5	66.707	25.5833
4 & 6	55.690	9.6136
5 & 6	67.710	35.1969

1 Schizophrenics
2 Affective Disorders
3 Neurotics
4 Behavior Disorders
5 Adolescent Reactions
6 Adjustment Reactions
* $p < .05$.

TABLE 6

Female Diagnoses Compared Using Scheffe's Method of Paired Comparison and Mean Differences

Diagnoses	Critical Values	Mean Differences
1 & 2 *	85.431	136.5000
1 & 3	54.031	34.7750
1 & 5 *	58.798	73.7763
1 & 6 *	67.789	100.1389
2 & 3 *	73.159	101.7250
2 & 5	76.746	62.7237
2 & 6	83.834	36.3611
3 & 5 *	38.870	39.0013
3 & 6 *	51.469	65.3639
5 & 6	56.452	26.3626

1 Schizophrenics
2 Affective Disorders
3 Neurotics
4 Behavior Disorders
5 Adolescent Reactions
6 Adjustment Reactions
* $p < .05$.

Comparisons of the female LSs yielded six significant differences ($p < .05$) out of the ten possible combinations. These results are shown in Table 6. Once again the schizophrenics and neurotics were significantly different from the same diagnostic categories. Both the female schizophrenics' LSs and the female neurotics' LSs were significantly higher than the following female LSs categories: affective disorder, adolescent reaction, and adjustment reaction ($p < .05$). Again, the schizophrenics' and the neurotics' LSs did not differ significantly from each other. The female adolescent reactions' LSs did not differ significantly from affective disorders' LSs nor from the adjustment reactions' LSs. The female affective disorders' LSs did not differ from the female adjustment reactions' LSs.

According to the analysis of variance, no significantly unique combinations were found when comparing the LSs interactions between diagnoses and sex. This is shown in Table 1. Therefore, the interaction between diagnoses, and sex were attributed to chance.

Discussion

The presence of loneliness in pathology has been indicated in both the research and the literature. The initial expectation that diagnostic categories may differ significantly in degree of measured loneliness was supported. This finding is consistent with the concept of diagnostic entities.

Another investigation (Tuite, 1973) which closely resembles the present investigation, also found the degree of measured loneliness to differ significantly between diagnostic categories. Tuite's analysis of variance yielded an F value of 29.22 which was significant ($p < .01$). She compared three diagnoses using the Bradley Loneliness Scale. Her neurotics scored highest in measured loneliness; her adolescent reactions were next; and her behavior disorders scored lowest with all differences attaining significance. The neurotics in the present study were also significantly higher ($p < .05$) than the adolescent reactions and behavior disorders. The mean scores in the present study also revealed the same order, in that the neurotics' mean was highest, with the adolescents next and the behavior disorders' mean the lowest.

The literature on neurotics also supports the intensity of felt loneliness found in the present study. Coleman (1950) refers to Horney's approach to the neuroses to include disturbed social relations, and ego conflicts in a broad sociological setting. Coleman discusses the feelings of the neurotic as those of inferiority, insecurity, and fearfulness in dealing with others, bringing about a tendency to withdraw

without reducing the desire and need to feel equal and successful in strivings toward social status and achievement. Instead, the neurotic's conflict intensifies, which interferes with the give and take and the reality testing essential to an adequate social adjustment. The neurotics indicated more loneliness in this investigation than all of the categories except for the schizophrenics.

It is important to consider that the schizophrenic group indicated more loneliness than any other category. The literature supports the findings of a high degree of measured loneliness. This is not too surprising after reviewing Adolf Meyer's statements regarding the schizophrenic's development. Coleman (1950) quotes Adolf Meyer as saying [258]:

> "The individual who later develops schizophrenia usually manifests an early withdrawal from a world he interprets as frustrating and hostile. This withdrawal is often concealed behind what seems to be an exemplary childhood, but which on closer examination reveals adherence to meekness and formally good behavior in order to avoid fights and struggles. Instead of participating in an active and healthy way in the activities of childhood, the individual withdraws behind a facade of goodness and meekness. This withdrawal, of course, inevitably leads to failures and disappointments which in turn serve to encourage further withdrawal from the world of reality and foster the use of fantasy satisfactions to compensate for real life failures."

It is interesting that the affective disorders had the lowest mean LS. As Coleman (1950) states, extreme fluctuations in mood are characteristic of this diagnostic category. Also, the affective disorders, if in crisis, were not tested until they had been either medicated or hospitalized, before therapy could begin. Another consideration is that they may be unable

to rationally determine their need for therapy in either the extreme states of mania or depression. This category was the smallest category and almost half of them had been marked as having other symptoms such as being suicidal, homicidal and alcoholic.

The present study indicates that the degree of loneliness does not necessarily increase or decrease according to the order of developmental level. Further research investigating differential diagnostic developmental levels could use the seperate and more clearly delineated subscales of loneliness found by Belcher (1973). For example, the degree of psychic loneliness may be more prevalent in the adolescent reaction than in the adjustment reaction. Whereas, existential loneliness may be less prevalent in adolescent reaction and more prevalent in the adjustment reaction.

It is interesting to note that the males investigated were significantly higher in loneliness than the females. It is possible that males in a rural community may apply for therapy when under more discomfort than females. Since the social structure emphasizes the importance for males to be independent and strong, their decision to seek help may occur when their loneliness is more prevalent. On the other hand, the females may tend to seek assistance sooner, before their loneliness is as severe.

The number of generalizations which can be made from this study are limited due to a number of factors. The Ss were tested in a rural setting, which inhibits generalizations to other settings. Statistical methods were relied upon, as the

design did not allow for the matching of the number of Ss in each diagnostic category. The Ss tested were a random representation of mental health center clients who sought treatment in a rural community. All qualifying clients were tested according to the time allowed. As a result the variables such as sex, age, marital status, prognosis and duration of therapy were not controlled.

Due to the difficulty in controlling for a variable such as diagnosis, generalizations from this study are cautioned. It is possible that through consultation a biasing of diagnostic assignments may have occurred. There is the possibility that the diagnostic categories assigned would differ if different therapists made the assignment. If further research were to be conducted, dissimilar results would be found if other diagnostic approaches, rather than the one by Roth, Berenbaum, and Hershenson (1967) were used.

The BELS-R can lead to a better understanding of mental disorder as well as loneliness. This instrument can be used to aid the therapist in determining the kind of loneliness a client may be experiencing. More research may clarify the importance of the loneliness issue with a client of a certain diagnostic group. It is important to consider loneliness when counseling the individual client, as well as in diagnostic conceptualizations.

Summary

The review of the literature described loneliness in general. The three more clearly definable elements in loneliness were defined as social loneliness, psychic loneliness, and existential loneliness. These were viewed seperately. The effect of social interaction on loneliness and pathology was discussed. The introduction ended with the research on loneliness related to pathology.

139 rural mental health center clients were given the Belcher Extended Loneliness Scale - Revised (BELS-R) prior to therapy. They were assigned to one of six diagnostic categories to determine loneliness score (LS), diagnostic, and sex interactions.

It was hypothesized that diagnostic categories would not only differ significantly in LS, but that the measured degree of loneliness would increase the lower the client was developmentally. The diagnoses did differ significantly ($p<.0001$) in LS. Scheffe's Method of Paired Comparisons found the schizophrenics and neurotics to have been significantly higher ($p<.05$) in measured loneliness than the remaining categories of affective disorder, behavior disorder, adolescent reaction, and adjustment reaction. Thy hypothesized order was the schizophrenics as the most lonely, affective disorders next, neurotics next, behavior disorders next, adolescent reactions next, and adjustment reactions least lonely. The mean loneliness scores found the schizophrenics to be the most lonely, neurotics next, adolescent reactions next, behavior disorders next, adjustment reactions next, and affective disorders least lonely. It was also hypothesized that the males and females would not differ in LS. It was found

that the males were significantly higher ($p < .036$) in measured loneliness.

Tuite's investigation (1973) found similar results in an urban university clinic setting. Her neurotics were also higher than her categories of behavior disorders and adolescent reactions. The literature also supports the high intensity of measured loneliness found in the present study by both the schizophrenics and the neurotics. Further research of developmental diagnoses using the BELS-R's more clearly delineated subscales was recommended by the writer. The importance of the therapist's consideration of loneliness both in therapy and in his conceptualizations of pathology was pointed out by the writer.

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APPENDIX

Belcher Extended Loneliness Scale - Revised

NAME: _____ SEX: _____

PARTICIPATION DATE: _____ AGE: _____

RELIGIOUS AFFILIATION: _____

EDUCATION COMPLETED: _____

I N S T R U C T I O N S

1. Answer each question by filling in one space in the six position answer column. Notice that the first or left hand side is titled RARELY OR ALMOST NEVER TRUE FOR ME and that the right hand side is titled TRUE FOR ME ALL OR MOST OF TIME. To answer each question, mark one of the six columns which most closely approaches your feelings.
2. Be sure to answer each question. There is no time limit, but work quickly. There is no right or wrong answer. It is YOUR FEELINGS THAT ARE IMPORTANT.

EXAMPLE:

	Rarely or almost never true					True all or most of time
1. When I am in a group, I feel that others in the group are happier than I am.	X					
2. When others voice an opinion contrary to what I believe, I say nothing.			X			

	Rarely or almost never true					True all or most of time
1. It is hard for me to get out of bed and face the prospects the day holds.						
2. I feel like I am worthless.						
3. There is no one with whom to share my happy and sad moments.						
4. I have friends that understand me.						
5. Riding in a crowded elevator bothers me.						
6. I feel bored.						
7. I feel that no one cares about me.						
8. I have no one to depend upon but myself.						
9. I need someone to talk to about my problems and there is no one there.						
10. I feel like I don't have a friend in the world.						
11. I am afraid of being different than other people.						
12. I feel very empty inside.						
13. I am embarrassed to show fear or pain.						
14. People do not seem to notice that I am around.						
15. I worry about the impression I make on others.						

	Rarely or almost never true					True all or most of time
16. I cannot discuss my problems with anyone.						
17. I know that life is worthwhile.						
18. I feel sort of like a "hollow shell."						
19. I believe that no one cares what happens to me.						
20. I wonder if I can really love another person.						
21. People enjoy my company.						
22. People do not like me.						
~~23. I think for myself.~~						
24. When a group tours the institution, I feel like I am on exhibit (like a germ under a microscope).						
25. I feel like I don't have a world of my own.						
~~26. My mind works in an orderly manner.~~						
27. I feel that others in a group are happier than I am.						
28. People would think that I was foolish if they really knew me.						
29. Memories of past friends and the happy times I have spent with them are sad.						
30. I feel isolated from human contact--like I'm on the outside looking in.						

	Rarely or almost never true.					True all or most of time
31. I feel terrible when I know that someone is watching me.						
32. I have difficulty in starting to do things.						
33. When I am in a group I feel like a small fish in a large fish bowl.						
34. I am afraid of people not liking me.						
35. When I am around a group, I feel like I don't belong.						
36. Most any time, I would rather sit and daydream than to do anything else.						
37. I feel free to just be myself around other people.						
38. Even when I am with people I feel lonely much of the time.						
39. You can count on most people you meet.						
40. Man's life on earth has real meaning and purpose.						
41. Nice as it may seem to have faith in other people, it doesn't pay off.						
42. I doubt if I will ever find anyone who really understands me.						
43. Our lives don't have any real meaning or purpose.						
44. People are basically good.						

	Rarely or almost never true.					True all or most of time
45. There is as much pain and misery in life as there is pleasure and enjoyment.						
46. Very few people can be trusted.						
47. You can't ever really predict the future; you can never tell what will happen next.						
48. To avoid disappointment, a person has to expect the worst of others.						
49. Most people are pretty alone and friendless.						
50. It's almost impossible to find anyone who will accept you for what you are.						
51. The average person can usually have a good idea of what the future will be like.						
52. I do not expect much help or praise or sympathy from other people.						
53. Most friendships end up with disappointment.						
54. There are always plenty of people to lend a helping hand.						
55. Almost everyone has a good chance of leading a happy and useful life.						
56. A person should plan his life so that he doesn't have to count on other people, that way he won't get hurt.						

	Rarely or almost never true					True all or most of time
57. The world is full of people who will take advantage of you if you give them a chance.						
58. In the long run, things usually work out for the best.						
59. If you have faith in your friends they will seldom disappoint you.						
60. There is not much chance of ever finding real happiness or success in life.						
61. There is little use writing to public officials because often they aren't really interested in the problems of the average man.						
62. Nowadays a person has to live pretty much for today and let tomorrow take care of itself.						
63. In spite of what some people say, the lot of the average man is getting worse, not better.						
64. It's hardly fair to bring children into the world with the way things look for the future.						
65. These days a person doesn't really know whom he can count on.						

Below you will find the beginnings of sentences. Complete each one with the first thing that comes into your mind. Work quickly.

I feel lonely even though I am around people when _____

_____

_____

Loneliness is _____

_____

_____

Lonely people _____

_____

_____

I feel loneliest _____

_____

_____

Rate yourself on the following scale of loneliness - that is, the degree of loneliness you feel as compared with others around you.

_____ least lonely

_____ much less lonely

_____ less lonely

_____ more lonely

_____ much more lonely

_____ most lonely

MJB - 3/73