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Effect of Interaction between Parental Treatment Styles and
Peer Relations in Classroom on the Feelings of Loneliness
among Deaf Children in Egyptian Schools

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# Zusammenfassung

### Interaktionseffekte zwischen Elterlichen Erziehungsstilen und Kameradenbeziehungen im Klassenzimmer auf die Gefühle von Einsamkeit bei Gehörlosen Kindern in Ägyptischen Schulen

Geselligkeit ist eine der wichtigsten Eigenschaften des Menschseins, weil der Mensch von Natur ein geselliges Wesen ist. Er ist geschaffen als Paar von Mann und Frau, als Gefährten gegen das Gefühl der Einsamkeit. Frühere Untersucher interessierten sich für Einsamkeit bei Erwachsenen. Studien über die Erfahrung der Einsamkeit in der Kindheit gibt es erst neuerdings. Dieser Mangel an Aufmerksamkeit für Einsamkeit bei Kindern mag bedingt sein durch die früheren Forschern gemeinsame Ansicht, daß jüngere Kinder die Bedeutung von Einsamkeit nicht verstehen und sich nicht dazu äußern. Neuere Untersuchungen haben jedoch gezeigt, daß diese Annahme nicht korrekt ist.

Es ist bemerkenswert daß in Untersuchungen zum Problem der Einsamkeit kein ausdrückliches Interesse an gehörlosen Kindern gefunden wurde, obwohl behinderte Kinder, vor allem taube, mehr als normale Kinder unter dem Problem Einsamkeit leiden. Da ein taubes Kind das Gehör verloren hat, schweigt es, während alle ringsherum sprechen; es sitzt unter den Leuten, aber nicht mit ihnen.

Es wurden auch keine Untersuchungen gefunden, die den Effekt der Behandlung durch die Eltern und Beziehung zu Klassenkameraden und die Bedeutung der Förderung von Kameradenbeziehungen bei gehörlosen Kindern miteinander verbinden, ebenso auch keine Untersuchungen über Unterschiede des Einsamkeitsgefühls von gehörlosen und normalen Kindern.

Diese Arbeit soll daher die Interaktion von elterlichem stil und Beziehung zu Klassenkameraden auf das Gefühl von Einsamkeit bei gehörlosen Kindern in ägyptischen Schulen untersuchen. Das ist wichtig wegen der negativen psychologischen Einflüsse der Einsamkeit auf die Persönlichkeit des Kindes in der Zukunft. Verschiedene Studien haben gezeigt, dass Einsamkeit zu vielen psychologischen Schwierigkeiten führen kann, wie Depression, niedriger Selbstachtung, Schüchternheit, zu neurotischen Störungen und Ängstlichkeit; außerdem zu sozialen und Verhaltensproblemen wie sozialem Rückzug, Agression, Suizidneigung, Stehlen, Alkoholismus.

Ferner kann die Bestimmung ursächlicher Faktoren für die Einsamkeit tauber Kinder grundsätzlich Eltern und Lehrern, die mit gehörlosen Kindern umgehen, positive Behandlungsmethoden anbieten. Sie kann auch helfen, Beratungsprogramme zu entwickeln, welche die Einsamkeitsgefühle bei tauben Kindern reduzieren. Deshalb ist diese Arbeit wichtig als versuch, zu bestimmen, welche Auswirkung der elterliche Erziehungsstil und die Beziehung zu Klassenkamer-

aden und die Interaktion von beiden auf die Einsamkeitsgefühle von tauben Kindern haben.

Die Stichprobe bestand aus 415 gehörlosen Kindern der vierten, fünften, sechsten und siebten Klasse im Alter von 8.5 bis 13.2 Jahren an sechs ägyptischen Schulen für taube Kinder (Tanta, Menshih Mobark, Banha, Shobra, Alabasia, Helwan). Für die Definition der Kameradenbeziehung wurde die soziometrische ``peer nomination scale´´ hohe, durchschnittliche, geringe Akzeptiertheit an der gesamten Stichprobe angewandt. Für den Fragebogen zum Verhalten der elterlern Akzeptanz-Vernachlässigung-Ablehnung konnten nur 397 Kinder ausgewertet werden. 19 Formulare für die Einsamkeitsskala tauber Kinder waren unvollständig; hier belief sich die Stichprobe auf 378.

Die in dieser Studie benutzten Instrumente waren: die soziometrische ``Peer Nomination´´ Skala; das Parental Promotion of Peer Relations Inventory; der Parental Acceptance-Neglection- Rejection- Fragebogen (PANRQ),der Parental Strictness-Indulgence-Fragebogen (PSIQ). Und die Deaf Children's Loneliness Skala (DCLS).

Die Ergebnisse zeigten:

1.  Es gibt bei gehörlosen Kindern keinen signifikanten Unterschied im Grad der Einsamkeit zwischen Jungen und Mädchen [206, 172) = 0.27, P > 0.05]

2.  Es besteht ein statistisch signifikanter Unterschied im Grad der Einsamkeit zwischen tauben und hörenden Kindern [t (132, 179) = 3.04. P <0.01]. Die gehörlosen Kinder gaben höhere Werte von Einsamkeit an als die hörenden Kinder.

3.  Einsamkeit ist negativ korrelliert mit der elterlichen Förderung von Kameradenbeziehungen (r = - 0.64).

4.  Bei den Kameradenbeziehungen zeigte die einfaktorielle Varianzanalyse (ANOVA) statistisch signifikante Unterschiede im mittleren Einsamkeits-Punktwert gehörloser Kinder, entsprechend den 3 Typen von Klassenkamerdenbeziehungen [F (2, 285) = 17.20, P < 0.001]. Vergleiche zwischen den 3 Arten- hohe, mittlere, niedrige Akzeptanz (Post hoc t-test) ergaben, daß der Unterschied zwischen hoher und mittlerer Akzeptanz nicht signifikant war [t (96) = .11, P > 0.05]. Dagegen war der Unterschied zwischen hoher und niedriger Akzeptanz signifikant [t (96) = 3.11, P > 0.001], beziehungsweise mittlere und niedrige Akzeptanz [t (96) = 3.23, P < 0.001]. Die Kinder mit niedriger Akzeptanz gaben höhere Einsamkeits-Punktwerte an als die mit hoher und mittlerer Akzeptanz.

5.  Statistisch signifikante Unterschiede im mittleren Einsamkeits-Punktwert tauber Kinder ergaben sich entsprechend der elterlichen Strenge oder Nachsicht. Gehörlose Kinder mit strengen Eltern gaben mehr Einsamkeit an als gehörlose Kinder mit nachsichtigen Eltern [t (80, 73) = 2.68, P < 0.01].

6. Bei der einfaktoriellen Varianzanalyse (ANOVA) von elterlicher Akzeptanz -Vernachlässigung-Ablehnung wurden statistisch signifikante Unterschiede bei den tauben Kindern zwischen den 3 Gruppen gefunden [F (2, 285) = 21.77, P < 0.001]. Der Vergleich unter diesen 3 Gruppen (Post hoc t-test) brachte signifikante Ergebnisse: Taube Kinder mit vernachlässigenden Eltern gaben höhere Grade von Einsamkeit an als Kinder mit akzeptierenden Eltern [t (96) = 2.63, P < 0.001]. Taube Kinder mit ablehnenden Eltern gaben signifikant höhere Grade von Einsamkeit an als Kinder mit akzeptierenden Eltern [t (96) = 4, P < 0.001]. Taube Kinder mit ablehnenden Eltern gaben keine signifikant höheren Grade von Einsamkeit an als Kinder mit vernachlässigenden Eltern  [t (96) = 1.38,  P > 0.05].

7. Es besteht eine statistisch signifikante Interaktion zwischen elterlichem Erziehungsstil (Strenge-Nachsicht) und der Beziehung zu Klassenkameraden (hohe, mittlere, niedrige Akzeptiertheit) auf das Einsamkeitsgefühl von gehörlosen Kindern [F (2, 132) = 3.29, P < 0.05].

8. Es besteht eine statistisch signifikante Interaktion zwischen elterlichem Verhalten (Akzeptanz-Vernachlässigung-Ablehnung) und den Beziehungen zu Klassenkameraden (hohe, mittlere, niedrige Akzeptiertheit) auf das Einsamkeitsgefühl der gehörlosen Kinder [F (4, 279) = 2.92, P < 0.05].

**Abstract**

Effect of Interaction between Parental Treatment Styles and
Peer Relations in Classroom on the Feelings of Loneliness
among Deaf Children in Egyptian Schools.

Sociability is one of the most important properties of humanity as human beings are social by nature. God has created most things consisting of two couple, male and female to be close friends and companionable for each other and never feel loneliness. Earlier researchers have been interested in adults' loneliness, but studying loneliness experience in the childhood years has been recently existed. This lack of attention to children's loneliness may be due to the earlier researchers' common view that young children can neither understand nor report the meaning of loneliness. However, recent research has proved that these theoretical assumptions are incorrect.

It should be noted that, no mentioned interest was found from the researchers for studying loneliness problem in deaf children. Although handicapped children in general, and the deaf in particular, may suffer from loneliness problem more than normal children, as a deaf child has hearing loss and is silent when others all around him are speaking; he is sitting among people but not with them. Furthermore, no research found on the combined effect of both parental treatment style and peer relations in classroom on children's loneliness, or the impact of parental promotion of peer relations on children's loneliness or research about the difference between hearing and deaf children loneliness. Hence, this research has essentially aimed to investigate the interaction between parental style and peer relations in classroom on the feelings of loneliness among deaf children in Egyptian schools. It is important however to study this problem because of the negative psychological influences of loneliness on the child's personality in the future. Several studies have indicated that loneliness may result in many psychological difficulties such as: depression, low self-esteem, shyness, neuroticism, and anxiety. Social and behavioural problems, such as: Social withdrawal, aggression, suicide, stealing, and alcohol use may also occur. Furthermore, Wahl, Weinert & Huber (1984) indicated that students who suffer from isolation do not have opportunities for good social experiences and are not satisfied with their peer relations (p. 151). Moreover, determining loneliness causative factors among deaf children can basically provide parents and teachers are dealing with lonely deaf children with positive treatment methods and may help in building counselling programs for reducing loneliness feelings in deaf children. Therefore, it was important to do this research in an attempt to determine the effective role of both parental treatment styles and peer relations in the classroom and the interaction between them on deaf children's loneliness.

The sample has consisted of 415 deaf children in the fourth, fifth, sixth, and

seventh grades, and ranging in age from 8.5 to 13.2 years old in six elementary schools for the deaf children in Egyptian (Tanta, Menshih Mobark, Banha, Shobra, Alabasia, Helwan). The sociometric measure of peer relations was applied on the previous total sample to be defined into high, average, and low acceptance. By using the Parental Acceptance, Neglection, Rejection Questionnaire; 18 children were excluding, thus, the sample has become 397. Also 19 forms of Deaf Children Loneliness Scale were not completed. Thus, the final sample consisted of a total of 378 students.

The used instruments in this study were: The Sociometric Peer Nomination Rating Scale (developed by the researcher); The Parental Promotion of Peer Relations Inventory (Mounts, 2000, modification by the researcher); The Parental Acceptance, Neglection, Rejection questionnaire (PANRQ, developed by the researcher) ); The Parental Strictness, Indulgence Questionnaire (PSIQ, developed by the researcher); and The Deaf Children's Loneliness Scale (DCLS, developed by the researcher).

The results indicated that:-

1- There is no significant statistical difference in the mean scores of loneliness between the deaf boys and girls children (206, 172) = 0.27, P > 0.05.

2- There is significant statistical difference between the deaf and hearing children's loneliness mean scores [t (132, 179) = 3.04, p < 0.01]. The deaf children reported higher levels of loneliness than the hearing children.

3- Loneliness is negatively correlated with parental promotion of peer relations (r = 0.64).

4- A one-way (peer relations) analysis of variance (ANOVA) indicated that there are statistical significant differences in deaf children's loneliness mean scores according to the three types of peer relations in classroom [F (2, 285) = 17.20, p < 0.001]. Comparisons between the three types, high, average, and low acceptance (Post hoc t-test) indicated that differences between the high and average acceptance were not significant [t (96) = .11, p >0.05]. However, the comparison between low acceptance and high, average acceptance was significant [t (96) = 3.11, p < 0.001]; [t (96) = 3.23, p < 0.001] respectively. The low accepted children reported higher levels of loneliness than the high and average accepted children.

5- There are statistical significant differences in deaf children's loneliness mean scores according to the parental indulgence, strictness. The deaf children with strict parents reported more lonely than deaf children with indulgent parents [t (80, 73) = 2.68, p < 0.01].

6- A one way (parental acceptance, neglection, rejection) analysis of variance (ANOVA)indicated that that statistical significant differences ware found among the deaf children's loneliness scores within the three groups, [F (2, 285) = 21.77, p < 0.001]. A comparison between the three types (Post hoc t-test) was significant. The deaf children whose parent was neglectful reported higher levels of loneliness than children whose

parent was accepting [t (96) = 2.63, p < 0.001]. Deaf children whose parent style was rejectful reported significantly higher levels of loneliness than children whose parental style was acceptance [t (96) = 4, p < 0.001]. However, there is no statistical significant difference in loneliness scores between deaf children whose parents' style was rejection and neglection. [t (96) = 1.38, p > 0.05].

7- There is statistical significant interaction between parental treatment styles, indulgence, strictness; and peer relations in classroom high, average, and low acceptance on the feelings of loneliness among deaf children [F (2, 132) = 3.29, p < 0.05].

8- There is statistical significant interaction between parental treatment styles acceptance, neglection, rejection; and peer relations in classroom high, average, and low acceptance on the feelings of loneliness among deaf children [F (4, 279) = 2.92, p < 0.05].

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# 1- THE THEORETICAL BACKGROUND

## 1.1. Introduction

The main purpose of this chapter is to summarize historical literature and descriptive research that provides important background information pertinent to this study. Three areas will be covered: first, loneliness; second, parental styles; third, peer relations.

## 1.2. Loneliness

### 1.2.1. Historical Perspectives on Loneliness

It is possible to understand the historical development of psychological work on loneliness through a comprehensive survey of the vast literature on loneliness. Although the experience of loneliness may well be as old as the human race, however, the psychological research on loneliness is recent. Prior to the 1960s, there is a scarcity of loneliness studies, according to Peplau and Perlman (1982) of the 208 publications available in English from 1932 to 1977; only 6 % were published before 1960. These early publications dealing with loneliness were almost restricted to clinical observations of patients (p.6-7).

Until at least the beginning of the 20$^{th}$ century, the term ``loneliness´´ appears to refer most frequently to the physical absence of persons. In the 1930s and 1940s, loneliness was used to describe the pathological consequences of physical and social isolation. From the 1940s to 1960s, loneliness was used to describe the distress of physical separation, first in adults, and later in children. During the 1950s and 1960s loneliness was posited as a psychiatric state of social isolation (Wood, 1986, p. 193).

In the 1960s, the researchers attempted to distinguish loneliness from both physical and social isolation (Wood, 1986, p.193). In their historical review of loneliness, Peplau and Perlman (1982, p.7) pointed out that in the 1960s there were 64 new publications on loneliness. Although many continued to rely on clinical observations, empirical research became more evident.

In the 1970s, psychologists and sociologists began studying loneliness in an empirical way. Loneliness was posited as a feeling quite separate from isolation, although sometimes described as being weakly associated (Wood, 1986, p.193). In the 1970s work on loneliness grew rapidly, as where prior to that there was a time of little interest on the study. The promotion of loneliness research was linked to some reasons; first the being that loneliness had become a widespread phenomenon. Second, a general increase of interest was found on the study of relationships. A third reason was that a psychometrically sound scale became widely available (Perlman, 1989, p.19-20). In addition, the empirical investigateons of some researchers contributed in developing loneliness studies (Asher, Parkhurst, Hymel, & Williams, 1990, p. 254; Peplau and Perlman, 1982, p.7). Moreover, the last quarter of the 20th century has witnessed an appearance of loneliness scales. Although considerable research exists on adults' loneliness, there is relatively little research in children; however, the last two decades of the 20th century have witnessed interest of loneliness in children. Cassidy and Berlin (1999) have revealed that loneliness phenomenon exists in childhood, and it is important and necessary to investigate childhood loneliness (p.35).

Through the historical review of children's loneliness, it should be noted that studying children's loneliness began to growing at a late stage in the 1980s. But undoubtedly, prior to the 1980's there was very rare research concerning children's loneliness. The reason for that may be the previous researchers' view that children can neither understand, nor report the meaning of loneliness; however, several studies have since proved the contrary.

The prominent development in adult loneliness research in the 1970s and 1980s has been a great influence in shaping and directing research in children's loneliness (Perlman & Landolt, 1999, p.326). The increasing interest for studying the loneliness phenomenon in children, to a considerable extent, depends on the efforts, concepts, and studies, from the literature on adult loneliness (Sippola & Bukowski, 1999, p. 282; Hymel, Tarulli, Thomson, &

Terrell-Deutsch, 1999, p. 80). Rotenberg (1999, P.4) described the development of the publication rates of research on loneliness during childhood and adolescence through historical reviews on loneliness research from 1950 to 1997. He showed in a curve figure, that there was a scarcity on loneliness research during childhood and adolescence prior the 1980s, but in the mid-1980s, research in this field grew rapidly and flourished, particularly after Asher et al (1984) published their influential research and scale to assess children's loneliness and social dissatisfaction.

## 1.2.2. Definitions of Loneliness in the Light of Various Theoretical Orientations

Psychologists, Sociologists and Educational Scientists have suggested various definitions of loneliness; these varying definitions reflect three main theoretical orientations to help understand the loneliness:

### 1.2.2.1. Loneliness According to the Social Needs Perspective

According to the social needs approach, loneliness is a result of not satisfying an inherent human set of social needs. That is, one needs intimacy, tenderness and contact with others; unless these social needs are satisfied, loneliness will result.

The satisfactory social needs for tenderness, intimacy, and contact with the others, may go back to one's early infancy through a satisfactory early relation to the mother which traces its influence on the later stages of life (Fromm-Reichmann, 1980, p.342). Margalit (1994) mentioned that the loneliness experience can be seen within a development context, as related to the unfulfill-ed individual need for various types of social relations at different stages of development. According to this approach, the unmet developmental needs can be a causative factor for later interpersonal difficulties that underlie in the experience of loneliness (p. 5).

One of the definitions Weiss's (1973) considers loneliness throughout the social needs perspective. He described loneliness as caused not by being alone,

but by being without an important interpersonal relationship or a response to a relational provision deficit. Within this approach, he classified loneliness into two types: social loneliness and emotional loneliness. The emotional loneliness was viewed as a response to an absence of a close emotional attachment. He clarified that emotional loneliness is like that of a small child who fears that he has been abandoned by his parents. This type of loneliness can only be remedied by the integration of another emotional attachment, or the reintegration of the one that had been lost. The second type, social loneliness, may be a response to the absence of engaging into a social network. He described the social loneliness to that of the small child whose friends are all away, therefore, feelings of boredom, exclusion, marginality, and restlessness will result. Social loneliness can be remedied only by accessing into a social network (p.17-20).

It should be noted that, through Weiss's differentiating between social and emotional forms of loneliness, these two types may be a result from deficits in the need of satisfactory relationships. In despite of distinguishing between these two types of loneliness, it does not prevent that there is an overlap between them. Both of these forms are associated with the satisfaction of the social needs.

According to this dimension, the current study aims to investigate the influence of two important factors (parents and peers) which are hypothesized to have great role in satisfying the child's social needs of intimacy, tenderness and contact with other people. It is hypothesized that children's emotional loneliness is associated with parents-children's relationships, whereas, social loneliness is more associated with children-peer relationship.

### 1.2.2.2. Loneliness According to the Cognitive Processes Perspective

The cognitive processes approach emphasizes the cognitive processes concerning people's perception and evaluation of their social relations. According to this approach, loneliness results from perceived dissatisfaction

with one's social relationships. Deutsch (1999) indicated that the cognitive processes approach contrasts the social needs approach in regard to loneliness, because loneliness results not from unfulfilled inherent social needs but from dissatisfaction with one's perceived social relationships (p.13). Peplau and Perlman (1982) proposed that loneliness could be created when one experiences a discrepancy between two factors, the desired and the achieved pattern of social relationships. Loneliness therefore, results when one perceives a discrepancy between what he wants or hopes for his social relationships, and what one actually achieves - because, each person has an optimal level of social relationships - When the person's social relations happen to be under the desired standard, he or she experiences the distress of loneliness (p.5).

The importance of cognitive processes regarding the experience of loneliness appeared to be emphasized in cognitive discrepancy models that concentrated on subjective perceptions and standards. The cognitive perspective posited loneliness as a subjective perception process, focusing on how the lonely person perceives and evaluates his or her social relations. Therefore, the cognitive processes defines loneliness as an individual experience varying from person to person according to what one desires or hopes for his or her social relationships and his or her subjective perceptions and comparisons between the person's actual social ties and the person's desired pattern or standard for social relations (Peplau, Miceli, & Marasch, 1982, p.137). In accordance with the cognitive processes in regarding loneliness, measuring deaf children's loneliness in the present study depend on self-report, that is through children's perception and evaluation of their loneliness, through their evaluation to their social relationships with other people and not by others evaluation. This is highly consistent with the cognitive processes perspective on one side and with loneliness characteristics as an individual experience on the other side. Because, self-report of loneliness may be better than others' assessment of one's loneliness, such as, parents or peers. So it should be noted that, previous scales

in which loneliness was measured depended mostly on self reports through the individual's own   evaluation of loneliness feelings.

Accordingly, the cognitive processes approach may help in diagnosis and recognising loneliness through an insider's perspective focus on one's own subjective perceptions.

### 1. 2. 2. 3.  Loneliness According to the Behavioural Approach Perspective

According to this perspective, the cognitive discrepancy between the desired and actual relationships, or the absence of satisfactory social relations may be insufficient to be lonely, however, such discrepancies or such perceived absences, should be accompanied by symptoms of psychological distress (e.g., anger, sadness, anxiety). In the light of this perspective, Young (1982) defined loneliness as a negative emotional response accompanied by symptoms of psychological distress as a result of the insufficient social reinforcement and one's unfulfilled social relations (p.380).

It is reasonable to note that the social needs approach focused on the emotional side, and cognitive perspective emphasizes the intellectual side that depend on perceptions and evaluations of social relationships and rational deficits, in regard to the behavioural perspective, emphasizes the perceived behavioural aspects. It was also noted that the social needs and cognitive approaches to conceptualizing loneliness viewed loneliness as an internal subjective experience (the one's self report method can be used to measure loneliness); however, the behavioural perspective, defined loneliness as an external perceived behaviour associated with psychological distress ( the observation style can be used to measure loneliness).

Although the distinction between these three approaches of conceptualizing loneliness is evident and some researchers, such as, Peplaue & Perlman, (1982) were interested in each approach separately; however, nothing prevents from combining and integrating between these three approaches with respect to loneliness. Loneliness can be considered as an unpleasant individual experience

accompanied with psychological distress (behavioural orientation) as a result of unsatisfactory social needs (social needs orientation) that are inconsistent with what one desires or hopes for his social relations (cognitive orientation).

### 1.2.2.4. Loneliness Properties And The Combining of The Previous Concepts

In despite of the variation between these three approaches and the definitions that interpret loneliness, there appears to be three important points of agreement between the scholars' views (Peplau & Perlanman, 1982, p.3; Russell, Cutrona, Rose, & Yarko, 1984, p. 1313).

**Loneliness is an aversive experience**

Loneliness is a hateful, distressing, and an unpleasant experience that has been clearly shown in lonely children describing themselves as feeling bored and depressed and expressing their unhappy moods, using sentences such as, `` I'm sad´´.

**Loneliness Is a Subjective Experience**

In expressing feelings of loneliness, children use subjective social comparisons, for example, the other children have fun and many good friends while they themselves remain alone and feel lonely. Moreover, in some instances, some children may enjoy their aloneness and don't feel lonely when they are alone, or feel lonely even while in a group. Therefore, the individual's own self-report can be considered as the only reliable report for feelings of loneliness.

**Loneliness Is Not Synonymous With Social Isolation**

Whereas, loneliness is an unpleasant and negative experience, isolation can be viewed as a pleasant, positive, and sometimes desirable state that may promote a creative experience or at least give a chance to rest from stressful reality or overwork. Furthermore, the consideration of the loneliness construct as an individual's subjective perception of a deficit in the social relations is distinct

from isolation which indicates to a physical situation and involves a wilful choice to be alone. Isolation may stem from a wish for meditation or some purposeful activities such as studying or hobbies (Hecht & Baum, 1984, p.195; Peplau & Perlman, 1982, p.3; Russell, Cutrona, Rose, Yurko, 1984, p. 1313; Margalit, 1994, p.8-9).

It is reasonable to note that many used loneliness definitions concentrated on loneliness as being isolated or alone and feeling sad. That is consistent with children's reporting, when asked about the meaning of loneliness, defining it as "a feeling of being sad and alone" (Cassidy & Asher, 1992, p.355). And some of loneliness definitions as listed by Sippola and Bukowski (1999): "Loneliness refers to feelings of sadness that derive from sense of isolation" (p. 280). Youngblade, Berlin, and Belsky (1999) "Loneliness is a sad subjective state resulting from dissatisfaction with one's social experiences" (p.136). Woodward (1988) "Loneliness is a feeling of being alone and alienated or disconnected from positive people, places and thing" (p. 4). Perlmen & Peplau (1981) "Loneliness is the unpleasant experience that occurs when a person's network of social relations is deficient in some important way, either quantitatively or qualitatively" (p. 31). Cassidy and Berlin (1999) "Loneliness is a negative feeling, resulting from a belief that others are unavailable when desired" (p.34). Parkhurst and Hopmeyer (1999) "Loneliness is a sad or aching sense of isolation; that is, of being alone, cut off, or distanced from others. This is associated with a felt deprivation of, or longing for, association contact, or closeness'' (p.58).

From the previous presentation of the definitions and theoretical orientations of loneliness, it was noted that no general coincidence was found for defining the loneliness concept; however, although the psychologists variation in defining loneliness was related to their theoretical attitudes and approaches. Most of these definitions were highly consistent with loneliness characteristics (such as, loneliness is a distressful subjective experience, differing from isolation).

In the light of the previous orientations, definitions and the common characteristics of the loneliness concept, I could construct a new definition of loneliness. Taking the three previous orientations in their view to loneliness (the social needs approach, the cognitive processes approach, the behavioural approach) into consideration and respecting the common properties of loneliness, and at the same time consistent with young children's own conception of loneliness:

"Loneliness in an unpleasant experience, related with psychological difficulties (e. g., sadness, distress or anxiety), and a result of one's sense of isolation from the others, because of his or her unsatisfactory need of affection, sense of belonging and successful social relationships, or because the network of social relations are under the desired standard.

### 1.2.3. Measuring Childhood Loneliness

Measuring children's loneliness has been associated with answering an important question: Can children understand the meaning of loneliness? Can they feel and report it? Earlier psychologists have neglected the issue of childhood loneliness, as they suggested that it is not until adolescence that an individual can experience loneliness; for example, Sullivan (1953, p.261) described loneliness as a "phenomenon ordinarily encountered in pre-adolescence and afterward". Also, Weiss (1973) mentioned that "loneliness properly becomes a possible experience only when in adolescence, parents are relinquished as attachment figures" (p.90). And it has been a commonly held view that children don't understand the concept of loneliness and they are not susceptible to feelings of loneliness. However, several studies have proved with evidence that these assumptions are incorrect, and that children can understand the meaning of loneliness. Cassidy and Asher (1992) reported that 93% of kindergarten and first grade children could understand the concept of loneliness, reporting that loneliness is "a feeling of being sad and alone". Furthermore, Asher, Hamel, & Renshaw (1984) indicated that more than 10 % of children

reported feelings of loneliness. In addition, the younger children are more open in revealing and expressing their feelings of loneliness than are their older counterparts (Margalit, 1994, p.14). Scales for measuring the loneliness experience has grown in the last quarter of the 20th century. These scales were designed at the beginning to measure the loneliness in adults, and later on, few scales to measure the loneliness experience in children have been available. It is important to note, however that no scale has been specialized for measuring loneliness in the deaf (either adult or children).

Researchers have taken two different conceptual approaches to measuring loneliness. One, the unidimensional approach, posited loneliness as a unitary phenomenon that varies primarily in its experienced intensity. According to this approach, the experience of loneliness has common themes, regardless of what the individual's own causative factors of loneliness feelings are (Russell, 1982, 81; Marangoni & Lckes, 1989, p. 108). The most famous and frequently used measurement in the area of elementary school aged children according to the uni-dimensional approach has been the Illinois Loneliness Questionnaire (ILQ; Asher, Hymel & Renshaw, 1984); this questionnaire was devised to measure loneliness and social dissatisfaction in children. This Scale consisted of 24 items. 16 primary items focused on children's feelings of loneliness which, to a large extent, dealt with peer relationships in the school context ( e.g., "I'm lonely at school"), feelings of social adequacy versus inadequacy (e.g., "I'm good at working with other children at school"), or the subjective estimations of peer status (e.g., "I have lots of friends in my class").There were also eight other "filler" items focusing on children's hobbies or preferred activities (e.g., "I like to paint and draw " ; "I watch TV a lot"). These eight "filler" items were included to help children feel more open and relaxed about indicating their attitudes about various topics. Children responded to each of the 24 items by indicating on a five–point scale how much each statement was   true for themselves (i.e., always true, true most of the time, true sometimes, hardly ever

true, not true at all). On the basis of the factor analysis, all 16 loneliness items were used to compute a total loneliness score for each child. Responses to each of the loneliness items were scored from one to five, with order reversed for particular items, such that a score of five was always indicative of greater loneliness or social dissatisfaction. Responses for each of the 16 items were then summed to create a total loneliness score for each child that could range from 16 (low loneliness) to 80 (high loneliness).

In contrast, the multidimensional approach views loneliness as a multifaceted phenomenon that includes different types of loneliness, not a single global loneliness measure. Rather than focusing on the common qualities underlying the experience of loneliness for all individuals, this approach attempts to distinguish between the various hypothesized types or manifestations of loneliness (Russell, 1982, 82). The most famous loneliness measurements in the field of childhood loneliness of the elementary school age, according to the multi-dimensional approach are available in two scales. The first, The Lovuain Loneliness Scale for Children and Adolescents (LLCA; Marcoen, Goossens and Caes, 1987). LLCA includes four subscales: Peer-related loneliness (loneliness-peer), Parent- related loneliness (loneliness-parent), Affinity for being alone (Alone-Positive), Aversion to being alone (Alone-Negative). Each subscale has 12 items, for a total of 48 items. Children answer on a four-point scale to what degree each items is true or not true for them. Scores are then totalled for each subscale. The second scale of the multi-dimensional approach is The Relational Provision Loneliness Questionnaire (RPLQ; Hayden, 1989). This scale includes four subscales: Peer group-integration, peer personal–intimacy, family group-integration, and family personal-intimacy. There are seven items for each subscale, with a total of 28 items. The children answer each item on a five-point scale.

These three Scales, ILQ, LLCA, and RPLQ, have many advantages and properties, they are easy to use and take little time to administrate. Furthermore,

they have excellent psychometric properties that are due to theoretical approaches in its structure. In addition, they are appropriate to the nature of loneliness as an individual experience, but most of the researchers addressed some criticisms to these scales. According to Deutsch (1999), these three scales haven't clearly distinguished between loneliness and self-concept of social competency with peers. An item analysis of these three measures have shown that the bulk of the items are more related to children's beliefs about their social competency with peers and their satisfaction with the forms of relational support than they do to loneliness per se, with only a few items on the LLQ and the LLCA (and none on the RPLQ) relating directly to loneliness (p.25). Accordingly, the RPLQ assesses children's loneliness by assessing their perceived lack of social support, thus, the RPLQ can be considered as an indirect measure of loneliness through its direct assessment of children's social support and satisfaction (p.18). Furthermore, the two subscales of the LLCA (Aversion to Being Alone and Affinity for Being Alone) assess children's coping mechanisms; that is, how they cope with being alone when it is not desired (e.g. "when I am lonely I go to see other people myself") and what kinds of situations cause them to seek solitude ("when I have an argument with someone, I want to be alone to think it over") (p.17). The scale is also more related with the psychological results of loneliness rather than measuring loneliness itself.

It's noted that most of the previous loneliness scales have concentrated on the causes of loneliness rather than the characterizations of the experience referred to loneliness. These measures have also assessed the experience of loneliness indirectly by optioning information's about perceived social deficits. Finally some scales mixed between loneliness and social isolation and don't differentiate between the two.

Therefore, I attempt to construct a new loneliness scale measuring deaf children's loneliness directly through some situations which might meet children in their daily life. It should be simple and easy for children to understand the

situations and the responses that focus on loneliness per se, it is also an attempt to avoid the previous loneliness scales' flaws and criticisms.

I have built this scale in the light of children's understanding of loneliness, my studying and understanding of the theoretical literature, and of the previously mentioned definition of loneliness for deaf children. It is also in conformity with the Arabian culture, sample characteristics and ages. Furthermore, according to the present children's loneliness scales (e. g., ILQ; Asher et al., 1984; LLCA; Marcoen et al, 1987; RPLQ; Hayden, 1989), which were very profitable to me in preparing this scale.

## 1.2.4. Contributing Factors for Children's loneliness

Several factors may contribute to feelings of loneliness in young children; these factors can be divided into two types: Personality factors, which are related to the child's own personality, and the second type is social factors (e. g., peer relations in the school and parental styles). Moreover, the personal and social factors, and their influences on loneliness can not be separated.

Overall, both personality and social factors could interact together and contribute to the occurrence of the loneliness, and each of them may be no lees important than the other (Cheek & Busch, 1981, p. 572-573). Understanding the causes of loneliness is a first step toward predicting, controlling and ultimately alleviating loneliness (Perlmen & Peplau, 1981, p.46). Because loneliness is an interpersonal problem or a psychological phenomenon, personality can be viewed as factor leading to loneliness. Thus, several studies attempted to investigate these important personality variables, through a link between loneliness on one hand, and personality variables on the other hand. The previous results indicated that loneliness is positively related with several personality variables such as: depression (Jackson & Cochran, 1991; Lau, Chan, & Lau, 1999; Moore & Schultz, 1983; Peplau, Miceli, & Morasch, 1982; Russell, cutrona, Rose, & Yurko, 1984; Russell, Peplau, & Ferguson, 1978; Strauss, Forehand, Smith, & Frame, 1986; Weeks, Michela, Peplau, & Bragg,

1980), low self esteem (Hojat,1982 b; Inderbityen-Pisaruk, Clark, & Solano, 1992; Jackson & Cochran, 1991; Jones, Freedom, & Goswick, 1981; Nurmi, Toivonen, & Eronen, 1997; Russell, Peplau, & Cutrona, 1980), Inderbityen-Pisaruk, Clark, & Solano, 1992), shyness (Cheek & Busch, 1981; Jones & Carpenter, 1986; Maraldo, 1981), neuroticism (Czernick & Steinmeyer, 1974; Stokes, 1985), anxiety (Ellison, 1978; Nerviado & Gross, 1976; Russell, Cutrona, Rose, & Yurko, 1984; Strauss, Forehand, Smith, & Frame, 1986 ), social withdrawal (Cassidy & Asher, 1992; Parkhurst & Asher, 1992; Rubin, Hymel, & Milis, 1989 ), negative self concept (Goswick & Jones, 1981; Kalliopuska & Laitinen, 1991; Lau, Chan, & Lau, 1999; Strauss, Forehand, Smith, & Frame, 1986),  and Hopelessness (Page, 1991). These results are highly  consistent with the results of  Hojat (1982a) who indicated that loneliness significantly correlated positively with depression, anxiety, neuroticism, psychoticism, misanthropy, low self esteem,  and an external locus of control.

In addition to the previous personal factors, several social and environmental factors may contribute to children's loneliness. Some factors are within the school environment, such as rejection or neglection of peers, moving to a new school, learning disabilities, failure in making new friends in school, and lack of social skills. Likewise, more factors within the family environment have been found to contribute to loneliness, such as parental treatment styles, parent's death, parental fights, conflict or separation, loss of a friend, moving to a new house. Rokach (1988) designed a model of the antecedents of loneliness, based on the content analysis of verbatim reports of loneliness experiences provided by 526 subjects. Results of this study suggest four factors to be the most common causes of loneliness: Loss (20.4 % of all reported causes), inadequate social support system (17.7 %), personal shortcomings (16.2 %), and crisis (14.2 %). These four factors accounted for 66 % of the total number of causes provided.

Furthermore, the cultural values provoking competition, rugged individualism and personal success may increase the loneliness existence (Perlman & Peplau, 1981, p.44). Quay (1992) has shown that the causes of loneliness are multiple and complex and that identifying these causes of children's loneliness need to be pinpointed before remediation so that remediation can be strongly related to causation (p. 108). Through my review to the previous literature, it was noted that, researchers have directed great interest to study the individual internal causative factors of loneliness. However, rare interest was found to the external environmental causative factors of loneliness. These environmental factors have great importance, as they may influence the individual factors on one hand, and are more like to be treated and changed than the internal factors. Huber (1994) indicated that it is difficult to understand the individual problems or the social relationships without understanding the social environment and that the social environment may contribute in reducing and treating these personal problems (p. 4). Hence, one of the present study aims is to explore the role of two important environmental variables in loneliness existence. The current study aims to do this by identifying two important variables, peer relations and parental styles variables, and understanding the interactions between these variables because they have both strongly influenced loneliness in childhood.

### 1.2.5. The Loneliness Characteristics among Children with Special Needs

Few studies about loneliness feelings in children in general, and in particular children with special needs have been available. There is a great importance of studying loneliness problems in this special type of children, as loneliness is a result from a deficit in social skills, children with special needs appear to have difficulties in their social relations with peers and in establishing new friendships, especially the deaf. Because a deaf child loses the most important means for communication, that is, hearing and speaking; he is silent and all around speaking; he is sitting among people but not with them. Thus, the deaf

children have difficulties in communication with others and in developing relations, and they may be more vulnerable to be rejected and neglected by their peers and that causes loneliness feelings.

Based on the perspectives of scholars over 30 years, Peplau and Perlman (1982) indicated that loneliness is a subjective experience (p.3); however, this subjective experience of loneliness for the deaf may be different from the normal hearing loneliness (Murphy & Newlon, 1987, p.23). According to Steinberg, Sullivan, & Montoya, (1999), causes of low employment rates among youth with severe disabilities are due to difficulties in communication, poor social interactions, loneliness and isolation, especially among deaf individuals (p.22).

In despite of the increased attention that has been directed recently by sociologists and psychologists toward the experience of loneliness, few empirical studies have investigated this important problem among the deaf. One of these studies was The Stevens (1982) Study; the principal aim of this study was to identify the psychological problems of acquired deafness in a sample of 49 persons; ages ranged from 45 to 82 years. He found that social isolation was the principal handicap associated with adventitious deafness. In addition, the Murphy and Newlon (1987) study examined the loneliness experience in deaf students in eight universities in the United States. The results indicated that deaf students were found to be more lonely than hearing students, no difference was found between mean loneliness scores in terms of the hard of hearing /deaf dichotomy. The findings also found that satisfaction with parental and peer relationships, comfort with sign language for deaf students, adjustment to disability, and comfort with speech for hard of hearing students, were inversely related to loneliness. Whereas, The Backenroth (1993) Study was designed to describe the nature of loneliness in the deaf community on a sample of 59 deaf persons, ranging in age from 20 to 78 years old; the data for this study was obtained from an interview with the deaf persons. The findings of this study

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indicated that 95 % of the deaf persons chose deaf persons to be their friends, and from 5 % to 10 % of deaf people do experience loneliness in the deaf community; additionally, deaf individuals have high abilities of both perception and expressing loneliness, 95 % of deaf individuals explained the origins of the loneliness. An analysis of the results suggested that loneliness in the deaf community can be attributed to three factors: interaction with family, interaction with peers, and situational factors.

Steiberg, Sullivan, and Montoya (1999) investigated the association between loneliness and workplace for the deaf. The sample consisted of 15 deaf volunteers, who ranged in age from 18 to 30. This study found that many factors increased loneliness in the workplace for deaf individuals such as: communication difficulties between deaf and hearing, and deaf individuals being more lonely among hearing people than being among deaf people. The Charlson et al (1991) Study was designed on a sample of 23 cases of deaf adolescents. The results indicated that most of deaf adolescents have almost all experienced some degree of isolation from peers or family or both and that communication difficulties was the direct cause of this isolation.

Other studies considered loneliness on another special class of special needs, that is, mental retardation. Williams and Asher (1992), determined whether children with mild mental retardation could understand the concept of loneliness and whether there are differences in loneliness between children with and without mental retardation. Results from a sample of 62 students with mild mental retardation, ages 8 through 13, indicated that high percentages of both groups understood the meaning of loneliness. Boys but not girls with mental retardation reported significantly higher levels of loneliness than did children without mental retardation. This is consistent with Luftig (1988) Study; the aim of this research was to assess the perceived school loneliness and isolation of the mentally retarded and non-retarded students. Results found that retarded

students reported significantly higher levels of loneliness and isolation than did their non-retarded counterparts.

At the same time, other researchers focused their interest on another group of special needs, that is, children with learning disabilities. The research results indicated that the children with learning disabilities are more vulnerable to feelings of loneliness than their peers without learning disabilities (Pavri & Luftig, 2000).

The previous researches have indicated that children with special needs are more vulnerable to the feelings of loneliness than normal hearing children. In addition, the previous researches examined loneliness problem in adults, not in deaf children. Most of the previous studies attributed loneliness problem in deaf people to the communication difficulties and don't explore the origins and potential factors of loneliness. Therefore, one of the principal aims of the current study is to pay more attention to loneliness problem in deaf children.

### 1.3. Parental Treatment Styles

Parent-child interactions play an effective role in the child's socialization processes. Within the family context, the child has been provided with several social skills, social growth, and peer relations may be developed as well. Thus, loneliness may be considered as a product of interactions between child and parental treatment style. Hanke, Huber, & Mandl (1978), indicated that the family is considered the first place for socialization, because children learn through the family the first social experiences which are effective in the future (p. 16-17).

The relation between the family and their handicapped children is one of influence and being influenced. Hintermair (2000), indicated that the parents with deaf children suffer from more stress. While the children influence their parents, have they in turn been influenced by the parental treatment styles inside the family? Hintermair (2000), suggests the need to pay more attention to the situation of families with children who are multiply disabled and to seek ways to

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help influence this in a positive way (p.330). The different views and attitudes toward their handicapped child than normal child may influence the parenting treatment style for the child with disabilities. Margalit (1994) mentioned that the parents' interactions and reactions toward the social failure and feelings of loneliness of the child with disabilities may well be influenced by parental attitudes toward the disability and expectations from their child (p. 46).

Although parents are not the only attachment figures of their children, they are the first and most important attachment figure that influence a child's peer relations and loneliness; because parents are playmates, disciplinarians, teachers, and caregivers, and they directly influence their children in these roles (Cassidy & Perlin, 1999, p.54).The nature of the parent-child relationship will serve as an important factor in understanding the child loneliness origin. The child's loneliness may be more directly associated with the type and quality of the parent-child relations. These relations may also influence the child's ability to establish intimate relationships with other people as well as his personality construction which would be developed over time. To a large extent, the children's different attachment patterns to their parents may reflect their vulnerability to loneliness at later stages of development. Also the development-tal changes in parent-child relationships could be balanced to changes in the child's loneliness (Schultz & Moore, 1989, P. 37-38).

Because of the great importance of the effective role played by parents in shaping and developing their children's behaviours, one of the essential aims of this study is to investigate the influence of the types of the parental styles on their deaf child's feelings of loneliness.

## 1.3.2. The Parental Treatment Styles and Children's Loneliness

Early parent-child interactions and the family socialization system inside the family context have essentially been associated with developing the child's personality, his social behaviours, and his attitudes as well. Parents can be

considered as the cornerstone of the child's socialization processes, support for this view comes from Steinberg et al (1999), where they viewed that the family climate is the first natural environment for the deaf child's social interactions with hearing people. Positive parent-deaf child interactions have a great influence on the deaf child's interactions with other hearing people outside the family context (p.27); especially, if we take into consideration that more than 90 % of deaf children have been born to hearing parents. Moreover, loneliness in children has been found to be influenced by both after-school care and family structure. Quay (1992), has shown that loneliness in children is distinct according to after-school care. His study was on a sample consisting of 876 kindergarten through fourth-grade children. The study indicated that children whose parents or single parent were at home and living with them were significantly less lonely than children living with a friend, relative, or babysitter whether at the child's home or in the other person's home.

Through my review of literature, it was noted that the previous researchers have been interested in the parental psychological characteristics and to which extent parents have positive mental health or experience psychological and social maladjustment, which in turn, influences the type and shape of interactions with their children. Therefore, parental behaviours patterns may have a great influence on their children's social behaviours. The Calderon, Greeberg and Kusche (1991) Study, was an attempt to investigate the relation between the family coping and their deaf child's coping, and if the family coping influenced the cognitive and social skills of deaf children. The sample of this study consisted of 36 deaf children with a mean age of 10 years and 2 months, and their families. The findings of this study indicated that a positive parental adjustment to a deaf child was related to a lower level of child impulsivity, greater cognitive flexibility, and higher social understanding. Also, parents' loneliness can be transmitted to their children. Several studies indicated that there is a significant positive correlation between children's loneliness and

their parents' loneliness. Rotenberg (1999), has found a significant positive correlation between the adolescents' loneliness and parents' loneliness. Results similar to these have been obtained by Henwood and Solano's study (1994) which were on 52 first-grade children and their parents (47 mothers, 32 fathers).The results have shown that the children's loneliness was significantly correlated with the level of loneliness of their mothers, but not between father and child, and the children's loneliness was significantly associated with using fewer relationship-enhancing strategies, and having less positive attitudes toward the others. These findings are consistent with the study by Lobdell and Perlman (1986), on loneliness in parents and children in college-aged students. The results indicated that a modest correlation was found between daughters' and their fathers' loneliness ($r = .19$, $p < .05$), they indicated that there is significant positive correlation between daughters' loneliness and their mothers' loneliness ($r = .26$, $P < .05$).

In addition to the parental characteristics, the previous studies have revealed that early parent-child attachment and the quality of this parental attachment with their children have been found to be closely associated with children's feelings of loneliness. Several researchers suggested that early negative attachments experienced between child and parent may be a predictor for later loneliness (Waters, Wippman, & Sroufe, 1979; Brennan, 1982; Leiderman, 1980; Peplau, Miceli, & Morasch, 1982; Perlman & Peplau, 1981). Examining the association between different early experiences of the types of attachment in childhood and loneliness has a great importance, because it can not only provide us with new dimensions to the treatment of loneliness, but also help in preventing the causes of loneliness originally (Hojat & Crandall, 1989, p. 272).

Berlin, Cassidy and Belsky (1995), examined the secure attachment of infants (12 month-olds) to their mothers as a predictor of subsequent loneliness in childhood (5-7 years of age). The sample consisted of 64 children and their mothers (36 boys and 28 girls) living in central Pennsylvania. The used

instrument was The Loneliness and Social Dissatisfaction Questionnaire for Young Children (Cassidy & Asher, 1992). It was found that children who were classified with an insecure-ambivalent attachment to their mothers during infancy were more lonely than children who had been classified as having a secure attachment to their mothers during infancy. The study of Hecht and Beum (1984), aimed to determine how early attachment patterns affect the later development of loneliness. The sample was of 47 young adult college students residing in Los Angeles, the instruments were The Attachment History Questionnaire (Wallace, 1977), and UCLA (Russell, Peplau, & Cutrona, 1980). The results revealed positive relationships between feeling lonely and early disrupted attachment, and that disrupted attached students were significantly more lonely than their non-disrupted counterparts.

The parental treatment style with disabled child may create further hindrances in the process of social growth, such as neglection or intrusion styles may result in relational problems in later years and hence loneliness may result (Margilit, 1994, p.39). The parents with handicapped children may use the overprotection and intrusion treatment style with their children, in view of their over anxiety of their handicapped child and their belief that he can't achieve his demands himself. Parents often experience excessive parental love that leads to over control and overprotection; this overprotection may inhibit the child to recognize the outside world and interact with the others, which in turn, results in feelings of loneliness. This hypothesis that parental overprotection may result in loneliness is consistent with the study of Andersson, Mullins, and Johnson (1989) who examined the relationship between loneliness and parental intrusion in childhood years. The sample was on 207 elderly women in Stockholm. The results revealed that loneliness is greater among the intrusion group in comparison to those whose parental influence was not intrusive.

Two studies, Franzoi and Davis (1985), and Davis and Franzoi (1986), attempted to study the relationship between the parental warmth and loneliness

among high–school students, with a mean age of 16 years. The students answered questions concerning their father and mother's warmth, loneliness was assessed by using the short version of the UCLA. In the first study, Franzoi and Davis (1985), indicated that there is significant negative association between boy's perception of mothers' warmth and loneliness but not in the adolescent girls. They (1986), supported this result and also found that there is a significant negative association between loneliness of both male and females and their perception of the fathers' warmth.

It is clear now that the previous vast research of the parent-child relationship have focused on the parental characteristics and its effects on children's loneliness, also, the relationship between the types of early parent-child attachment figures and children's feelings of loneliness. It should be noted that, there is a scarcity of research concerning the parental style patterns and children's feelings of loneliness (deaf children in particular).

With regards to deaf children, the attachment figures of the parents are expected to have a greater influence on them than normal hearing children, as a deaf child, to a considerable extent, relies on his parents in responding to his demands and acquiring several social skills. The parental–deaf child interaction has an effective role in developing a deaf child's social life and his mental health as well. Support for this view comes from Calderon and Greenberg (1993), they mentioned that "The effects of parental-child communication is one of the most investigated areas of research in deafness" (p.32). It would be expected that negative interactions between a deaf child and his parents and the parents' inability to understand or to respond to their deaf child's needs and demands, may support in developing behavioural difficulties in deaf children (Brubaker & Szakowski, 2000, p.14).

The parental influence may appear directly through the style of the parent-child interactions, and indirectly through the interactions between parents and the other family members, such as, father-mother relationships or parent-deaf

child's sibling's relationships. Familial problems such as, separation, divorce, or parental fights may indirectly have negative influences on the deaf child's present and future life, whenever he tries to escape from such familial problems through playing or school works, he can not escape from the psychological effects resulting from these familial problems. Chava and Martin (2002) found that negative comparisons by parents between deaf and their hearing siblings were effective factors in deaf-hearing sibling's relationships. In such families where parents made negative comparisons between their deaf and hearing children, the relationships between siblings tended to be more negative than in families where parents did not make such negative comparisons. Deaf-hearing brother and sister relationships can be considered as an important factor in understanding the deaf child's social growth because a deaf child's hearing siblings are his first peers.

Through the results of an analysis of 59 deaf individual's interview, ages ranged from 20 to 78 years, Backenroth (1993) found that deaf individuals' loneliness can be due to three main factors. One of these three factors includes interactions with family. During infancy children should receive positive opportunities from parents for social development in all age stages that result in positive attitudes to others, an interest in establishing and developing positive relationships, optimism, and high self confidence. However, lack of development opportunities inside the family may lead to negative human interactions, poor self confidence, deficit in language, knowledge, and social competence, negative attitudes to others, poor acceptance of one's own deafness, being pessimistic or different compared to other deaf individuals and difficulties in interactions with others. Such negative provisions are directly associated with loneliness feelings. Notably, Murphy and Newlon (1987), found that satisfaction with parental relationship was negatively associated with loneliness feelings in deaf university students.

Although there is a great importance of the role played by parent–child interactions in shaping and developing a child's socialization process, few empirical research was found with respect to the familial factors associated with children's loneliness (Burgess et al, 1999, p. 123); furthermore, no mentioned interest has been obtained by the researchers on the effect of deafness on parent-deaf child relationship particularly during middle and late childhood.

Through the survey of loneliness literature, it was important to note that, most of the previous studies have concentrated on the degree of quality of the parent-child relationship, or relation between children's feelings of security and their loneliness, or loneliness transferring from parents to children. There was relatively scarce research concerning the role of parental treatment styles in children's loneliness (deaf children in particular). Also, there had not been any investigations exploring the relationship between parenting style and deaf children's loneliness; therefore, the present study was designed to investigate the relationship between the constellation of parental styles (acceptance, neglection, rejection; indulgence, strictness) and deaf children's loneliness. In accordance with this aim, I have constituted two new specific questionnaires to measure parental treatment styles; they are: The Strictness, Indulgence Questionnaire and The Acceptance, Rejection, Neglection, Questionnaire.

With respect to defining parental treatment style, I have taken the definition of Darling and Steinberg (1993), where they defined the parenting style as "a constellation of attitudes toward the child that are communicated to the child and that, taken together, create an emotional climate in which the parent's behaviours are expressed" (p.488).

**The parental treatment styles are operationally defined in this research through:**

**1- The Parental Acceptance, Neglection, Rejection Questionnaire,** which divided the parental treatment styles into three types:

(a) **Parental acceptance**: parents in this type are characterized by treating

their children in a warm, approving, and loving way. They encourage their children and give them more time to listen to them and their problems.

(b) **Parental neglection:** parents in this type tend to use a careless attitude toward their children's behaviour, they are characterized as careless and disregarding their children's demands and affaires.

(c) **Parental rejection**: parents in this type tend to be censurer, punitive, critical and disapproving of their children, the child of rejecting parents may feel that he is disliked and not needed or wanted by his parents.

**2- Parental Strictness, Indulgence Questionnaire,** which divided the parental treatment styles into two types:

(a) **Indulgence parents**: they, to a considerable extent, allow their children autonomy and freedom in their behaviours, activities and in making decisions, they tend to make fewer demands and rules on their children and use a minimum of punishment and they tend to forgive their children when they are mistaken.

(b) **Strictness parents:** tend to have great parental authority on their child-run's behaviour, they value unquestioning obedience and punishment style to control their children's behaviour.

### 1.3.3. Parents' Promotion of Peer Relationships

The parenting styles may have great influence on the children's relationships with peers, consequently with the loneliness experience. The freedom and autonomy which parents allow their children to practice may help in more social interactions with other children and with society overall, and support in acquireng new social skills, which, in turn, enable children to establish and maintain positive relationships with peers. On the contrary, parents' restriction and lack of parenting promotion of peer relations may deprive children of social interactions opportunities with other children, and hence, it may be difficult for them to

develop or maintain satisfactory friendships and this in turn increases children's loneliness. Some researchers suggested that early parent-child relationships may affect peer relations (e.g., Bierman & Smoot, 1991; Jacobson & wille, 1986; Lafreniere & Sroufe, 1985; Lieberman, 1977; Pastor, 1981; Putallaz, 1987), whereas, there is a relation between parent-child interactions and peer-child interactions; so it is reasonable to say that parent-child relationships may directly influence the child's emotional loneliness and indirectly affect their social loneliness. through review of several studies, Berlin, Cassidy & Belsky (1995), indicated that insecure infant-mother attachments are expected to contribute to poor peer relationships and social withdrawal, the insecure attachment children may have fewer opportunities to participate in satisfying social interaction and they are rejected and spend most of their time alone, all in turn, contributing to loneliness feelings (p, 93, 98). Alles-Jardel et al (2002) empirical findings were in this same direction. Alles-Jardel (2002) has investigated the relation between parents' styles of structuring children's daily lives and the quality and stability of children's friendships. This study delineates three parenting structuring styles (rigid, flexible, laissez-fair) the participating children were 224 elementary school children. The findings showed a significant positive correlation between parenting styles and children's friendships. The results indicated also that those children who were characterized by a laissez-fair style of parenting had more positive features in their friendships than children with flexible or rigid styles.

Thus, parental positive promotion and encouragement of their children's peer relations can be useful in reducing children's loneliness. Because, parents can increase their children's success in peer relationships by providing them with appropriate guidance in peer interactions and provoking children to participate in peer-group activities, which in turn, increases the children's satisfaction with their peer relationships and increases their social skills, that of course results in reducing the level of loneliness. Vernberg et al (1993), have proposed four

strategies which parents can use to help their adolescents in establishing new friendships: parental contact and involvement with the parents of other adolescents, enabling the adolescents to spend more time with a friend, parental open discussions with adolescent about friendships, and parental encouragement to participate in activities with peers.

Positive parent-child relationships may provide children with more opportunities to establish peer networks. Parents may advise their children in developing and maintaining positive relationships with others' including peers. Moreover, they may be a model for their children in positive social behaviours, as the children observe their parents in interactions with their own adult peers (Cassidy & Berlin, 1999, p. 52-53). According to Henwood and Solano (1994), there is correlation between the size of the parents' social network and the size of the child's social network.

There is relatively a little number of researchers concerned with the relation between parental promotion of peer relationships and loneliness; among these researchers, Rotenberg (1999), designed a study to examine the parental antecedents of loneliness in children. The sample was 97 children (54 boys and 43 girls) from second through eighth grade, and their mothers (n = 97) and fathers (n = 64), for each of two age periods: middle childhood and adolescence. The used instruments were The Loneliness and Social Dissatisfaction Scale (Asher et al, 1984), to measure loneliness in both children and adolescents and The UCLA to measure loneliness in parents, Schaefers (1965) Children's Reports of Parental Behaviour Inventory (CRPBI) for both child, adolescent and parents. The results regarding to adolescents, loneliness was negatively correlated with parents' promoting their adolescents' peer relationships. In reference to children, no correlations between parents' promotion of peer relationships and loneliness in children.

In spite of the importance of the relation between parental promotion of peer relations and loneliness, little interest was found by the researchers with this

issue, and that was the reason of my interest to examine the role played by the parent's promotion of their children's peer relationships in reducing loneliness.

## 1.4. Peer Relations

### 1.4.1. The Peer Interactions inside the Classroom and Loneliness

In addition to parent-children interactions inside the family environment, there are peer-children interactions inside the classroom which have the same influence and importance as parental influence on children. The classroom role has never been restricted to providing children with scientific information only, but it extends for learning social skills and acquiring behavioural patterns as well. A child sometimes spends more of his time with his classmates inside the classroom than his parents at home because of his parents' occupations, activities or works. Those children inside the classroom have been obligated to be with each other whether they want or not. Being children with each other inside the classroom is a definitive and conclusive matter; no child can avoid it, unlike, friends or playmates outside school that a child can leave them as he likes. Furthermore, it would be possible that peers have a greater influence than do adults' influences on children, because, children can understand each other easily as they are related with close experiences and problems. Through the interactions between children, a child may learn the idea of one's duty and proper manners, such as giving and taking and non selfishness, while a child is restricted to parents' interactions he may experience selfishness–taking every thing without giving anything. Therefore, Huber (1984) revealed that children's social relationships inside the classroom may influence the shape of their future social relations and may provide them with effective social skills. Peer-children relations in the same age have a great role in the sex role development for both boys and girls; moreover, peer relations inside the classroom may lead to some behavioral problems such as smoking and drug use (p. 466).

Child-child interactions with which a child learns and recognises the rules of social relationships, are more mutual and equal, whereas, child-adult interactions

are more unilateral (Rachford & Furth, 1986, p. 392).Therefore, peer group-children interactions inside the class has an inevitable and mutual influence whether this influence is positive or negative. Matters like these, dealing with children's peer relations and its social and psychological impact have been the reasons of my focus on peer group interactions in classrooms.

In addition to the children's peer group inside the classroom climate, there is the teacher who is posited as the leader of the educational process and has great influence on children's interactions with each other. Margalit (1994, p. 84) identified three systemic dimensions of classroom climate that teachers can control: reinforcing positive relationships between the classroom members to create supportive learning environment, enhancing individual growth of each student and reducing competition within the classroom, and maintaining organization, rules, consistency and work habits within the classroom.

Through my review of the previous literature, I have found that several studies have been interested with some social behaviour in peer relations related to children's loneliness, such as: social withdrawal, aggression, rejection, and friendship. Most of these studies have revealed that the social difficulties which may face children and are related to their peer relations in a school environment, such as: lacking friendships, lacking peer acceptance, rejection, internal attribution, and social withdrawal, all can be direct predictors for children's loneliness. Renshaw and Brown's (1993) study on 128 third through sixth graders found a positive association between loneliness (as assessed by the Loneliness and Social Dissatisfaction Scale, Asher, Hymel, and Renshaw, 1984), and social withdrawal behaviour and an internal-stable attribution style and a negative relationship between loneliness and friendships, peer acceptance. Likewise, Cassidy and Asher's study (1992) used a sample of 452 kindergarten and first grade children, age ranging from 5 to 7; the findings revealed that high-lonely children compared to low lonely children were viewed as more aggressive, withdrawn, shy, less prosaically, and more disruptive. This result, to

a large extent, is consistent with a large amount of previous studies which also included the relation between loneliness and social withdrawal, and have demonstrated significantly positive association between loneliness and social withdrawal (Crick & Ladd, 1993; Hymel, Rubin, Rowden & Le Mare, 1990; Rubin, Hymel & Mills, 1989; Rubin & Mills, 1988).

The Crick et al findings (1999), were in the same direction, the participants were of 919 third through sixth grade elementary school children. The results of this study have shown that loneliness is significantly related to relatively high levels of negative peer treatment, such as: peer rejection, physical victimization and relational victimization. Results similar to these have been obtained by Boivin, Poulin and Vitaro (1994), they indicated that a positive association was found between aggression and loneliness.

Furthermore, Sletta et al (1996), have proposed a theoretical path model in which loneliness has a mediating position between behaviour characteristics and peer acceptance on the one hand, and self-perceptions on the other hand. The participants of this study were 95, eight grade students. Behavioural characteristics were assessed by teachers and peers including humour, externalising, internalising, and prosaically behaviour. The findings of this proposed model have indicated that direct correlation between behavioural characteristics and peer acceptance was found as an indirect link between behavioural characteristics and loneliness which can be predicted through behavioural characteristics and poor peer acceptance. In addition, a significant negative correlation was found between peer acceptance and loneliness; loneliness negatively affects self-esteem and self- perception of social competence.

Furthermore, Parkhurst and Asher (1992), examined peer relations in middle school on a sample of 450 seventh and eighth grade students. The finding of this study was, to a large extent, consistent with the results from studies of younger children. The findings suggest that rejected children reported higher levels of

loneliness than accepted students and that accepted students were less aggressive, less disruptive, average on assertive dimensions, and perceived by peers as cooperative and trustworthy. The findings of this study have also indicated that rejection is associated with aggression and withdrawal and lack of pro-social qualities. Moreover, Parkhurst and Asher, examined whether rejected subgroups are different in assessing loneliness using the comparing aggressive-rejected and submissive–rejected subgroups. The results revealed that submissive-rejected students were more lonely than their matched sample of submissive–average students, no significant differences in loneliness between aggressive–rejected students and their matched sample of aggressive–average students were found.

Concerning the relationship between children's loneliness and friendships, considerable research has been found on children's friendships and whether quantity or quality is better. Most of these studies, suggest that friendship has negatively been linked with loneliness. Some studies indicated that a number of friends has a significant main effect on the degree of loneliness, and that children without friends were significantly more lonely than children who had a good number of friends (Asher, Hymel, & Renshaw, 1984; Parker & Seal, 1996; Renshaw & Brown, 1992). Friendships can consistently reduce feelings of loneliness; rejected children with friendships were significantly less lonely than rejected children without friendships (Parker & Asher, 1993; Renshaw & Brown, 1993). Children who reported a high level of conflict in their friendships tended to be more lonely in school (Ladd, Kochenderfer & Colemen, 1996); in addition, children who reported high levels of loneliness were associated with negative behaviours from their friends (Youngblade, Berlin, & Belsky, 1999). Friendship was negatively correlated with loneliness (Cheng & Furnham, 2002).

## 1.4.2. Peer-Acceptance Perception and Loneliness

Increased interest has been found in the social, educational, and clinical psychology literature in the study of a child's peer relationships. Because of the great positive and negative psychological influences that result from the nature and shape of peer relations, support for the importance of these relationships is significantly related to children's feeling of loneliness; this can be found in the cognitive and social approaches in their regards to loneliness, The Cognitive Framework defined loneliness as the state when one perceives a discrepancy between the actual and desired levels of social relationships (Perlman & Peplua, 1982, p. 128), and when one's social relations are under the desired levels, if so, he or she experiences loneliness feelings. In the social needs approach, loneliness is a result of not satisfying an inherent human set of social needs, that is one needs intimacy, tenderness and contact with the others, unless these needs are satisfied, loneliness will result.

Social difficulties in children's peer relationships in early childhood (e. g., peer rejection, aggression, social withdrawal) are related to poor peer acceptance and loneliness (Hymel, Rubin, Rowden, & LeMare, 1990). The importance of the child's perception of peer relationships and the nature of these relationships should be noted, because, successful peer relationship can enhance the quality of children's lives by satisfying their desires for belongingness and satisfied connections with individuals and with groups ( Crick, Grotpeter, & Rockhill, 1999, p. 155 ).

Based on consideration of the previous literature, I have designed a representational model of peer relations in classroom and loneliness as an attempt to identify the factors contributing to children's loneliness (Figure, 1). Through this representational model, peer relations in classroom can be divided into three types: high acceptance, average acceptance, and low acceptance (Paths a, b, and c). Low acceptance may lead to rejection (Path d), with which child may experience aggression (Path g), withdrawal or shyness
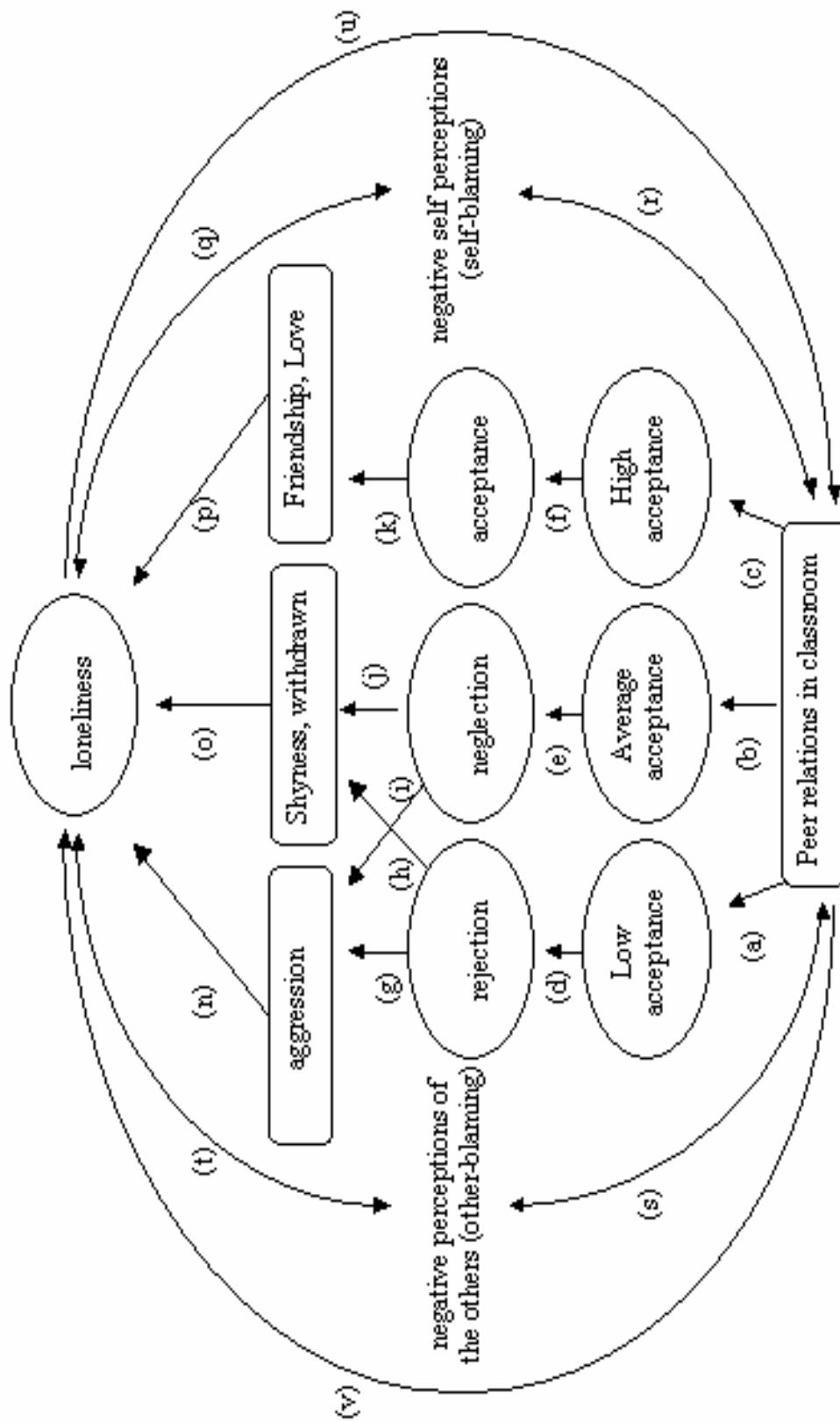
**Figure 1. A model of the relation between peer relations in classroom and loneliness**

(Path h) and all of which related positively with loneliness (Paths n and o). With average acceptance, a child may feel neglected (Path e), and that in turn, can contribute to withdrawal or shyness or aggression (Paths i and j). Certainly, these three negative social contents are correlated positively with loneliness (Paths o, n). Concerning high acceptance, an accepted child (Path f), leads to friendships, contentness, belongingness, and love (Path k). These positive social contents my be related negatively with loneliness (Path p).

Certainly, when the child attributes his feelings of loneliness to internal reasons, such as, self-blaming or feelings of misdeeds, the result would be negative self–perception; which in turn, reflect on a child's peer relationships and increase his feelings of loneliness at the same time (Paths q, r). However, when the child attributes his lacking of relationships to external reasons concerning the others, the result would be negative perception of the others including peers and increase his feelings of loneliness at the same time (Paths s, t). Such social difficulties which children may experience in their relationships with peers contribute to the loneliness experience, and distress of loneliness feelings may result in further social difficulties in children's relationships with peers again. Consequently, children become trapped within a self-perpetuating cycle, in which, difficulties in their peers relationships lead to the loneliness experience, which in turn, leads to more difficulties in peer relations and so on (Paths u, v).

During the survey of the previous research, I have found that several studies have been interested in the degree of acceptance among peers and loneliness. Most of these studies have indicated that children who were poorly accepted were more lonely than were children with high acceptance, such as, Asher, Hamel and Renshaw's study (1984), the participants of this study were 506 third through sixth grade elementary school children. The findings have revealed that children's loneliness was significantly related to their sociomatric status and that the lowest accepted–rated children reported significantly greater feelings of

loneliness and dissatisfaction than did their more accepted peers. These results are similar to the findings of (Parkhurst & Asher, 1992; Renshaw & Brown, 1992; Sletta, Valas, & Skaalyik, 1996; Youngblade, Berlin, & Belsky, 1999).

In a comparison of rejected and neglected children and their loneliness feelings, Asher & Wheeler (1985), examined loneliness within five statuses (popular, rejected, neglected, controversial, and average children) on 200 third through sixth grade children. Findings have shown that rejected children reported higher levels of loneliness than popular children and that rejected children were different significantly from the other status. Whereas, neglected children did not differ from higher status peers. These findings are consistent with Crick and Ladd's study (1993) on a sample of 338; third, fourth, fifth, and sixth grades of elementary school children. The results suggested that rejected children were more lonely than their popular, average, neglected, and controversial peers. Moreover, Cassidy and Asher (1992), have indicated that poorly accepted children reported higher levels of loneliness than did average and high acceptance children.

It should be noted that most of the previous studies concerning peer relations have concentrated mostly on the negative attitude of the peer relations, such as, rejection, neglection, aggression, or withdrawal, rather than the positive side of these peer relationships. Although considerable research with regard to peer relationships and its impact on children's feelings of loneliness have grown recently, no mentioned of interest was found with the peer relationship influences on deaf children's loneliness in spite of the effective role that peers would play in the deaf child's personality and his mental health as well. Most of the deaf individuals' social interactions may be restricted to their peers in the deaf community, as they can be more easily understood by each other. Therefore, the deaf individuals' interactions with their peers can be considered one of the contributing factors to the deaf person's loneliness. Support for this view comes from Backenroth (1993) through the results of an analysis of 59

deaf individuals' interviews; the age was ranging from 20 to 78 years old. Backenroth found that one of the reasons of loneliness feelings was negative interactions with deaf peers; this may lead the deaf individual to withdraw from the deaf community or stop from re-interns the deaf community. Unsatisfactory interactions with deaf peers may be caused by conflicts with other deaf individuals, rumours, victimization, group pressure leading to isolation, negative attitudes to other, inability in accessing the deaf community because of language or knowledge. Likewise, Murphy and Newlon (1987) found that satisfaction with peer relationships were inversely related to loneliness for deaf students in universities.

Lederberg (1993) reported that we know little about deaf children's social relationships (p.116). Some young deaf people may have rich friendships and relations, however, other deaf individuals experience social difficulties (loneliness, difficulties in establishing friendships, peers rejection). The reason of such social difficulties may be the language deficiency or the inability of the normal hearing people to adjust to their needs; hence, it would be a mistake to think that deafness is the unique factor of loneliness (Gregory, 1998. p. 163, 165, 169). Furthermore, most of the previous research has indicated that rejected children reported higher levels of loneliness feelings than did accepted children. Some researches however have revealed that not all rejected children reported loneliness and that some of acceptance children may experience loneliness (Asher, Hymel, & Renshaw, 1984; Asher, Parkhurst, Hymel, & Williams, 1990, p. 262; Margalit, 1994, p.72).

Rejection or neglection should not lead to distress of isolation and loneliness. Alienation perception, to a certain degree, may be due to one's sensitivity that he or she is being rejected or ignored and his desire in maintaining his social relationships with peers (Luftig, 1988, p. 472), or because one's actual levels of social activities do not meet his or her desired levels of activity (Archibald, Bartholomew, & Marx, 1995); this may due to other further factors in addition

to peer groups. Matters like these motivated me to investigate the interactions between parenting styles at home and peer groups in classrooms, these two factors can be considered as the strongest two factors with which children can be well influenced in childhood years.

The earlier research has relied on the negative or positive nomination questionnaire by giving the children a list including their classmates' names and asked to determine three of their classmates they like most and three of their classmates they like the least, however by using this nomination scale, some children may be abandoned from this nomination, a child on this base is not evaluated by all his classmates, there would be who is popular, and who is unpopular in the middle score. So, I have designed a new method in sociomatric evaluation, it is similar to the previous method, that is, each child would be chosen and rated by all his classmates by using ranging scale begin with the highest acceptance and ending with the least acceptance by all his peers, hence, each child can be evaluated by all his peers and his peers at the same time, can be evaluated by him.

Consequently, one of the principal aims of this study was to examine the relationship between peer relations in classroom and deaf children's loneliness.

## 1. 5. Interaction between Parental Treatment Styles and Peer Relations on Loneliness and Research Rationale

The parental treatment style inside the family context and peer relationships at the school environment can be considered as two important factors, completing each other in the child's upbringing process and his personality construction as well. The child is easily impressed by both peers and parents, and can easily also influence them. Because, a child's social life is limited between these two social contents, school may emphasize and complete what parents already provide for their child at home. Alike, parents are the teachers and caregivers after school time. Therefore, integration and consistency between these two patterns is

needed in a child's social growth, loneliness can be posited as an outgrowth of the interaction between parenting style and peer relations. There were early indications by Weiss (1973) for the effective roles of both parents and peers in a child's life "children need both friends to play with and parents to care for them" (p. 148); moreover, he viewed them as contributing factors in the existence of loneliness, when he distinguished between emotional loneliness and social loneliness, attributing emotional loneliness to the absence of a close emotional attachment (e. g., parents), and social loneliness to the absence of social network (e. g., peer relations) (p.18-19).

The important effective role played by both parents and peers in loneliness during childhood has been recently cleared through the representational model that Cassidy and Berlin (1999) drew as an application of attachment theory in understanding children's' loneliness. According to this model, there are two factors that affect children's loneliness, parents and peer relations. Parent-child
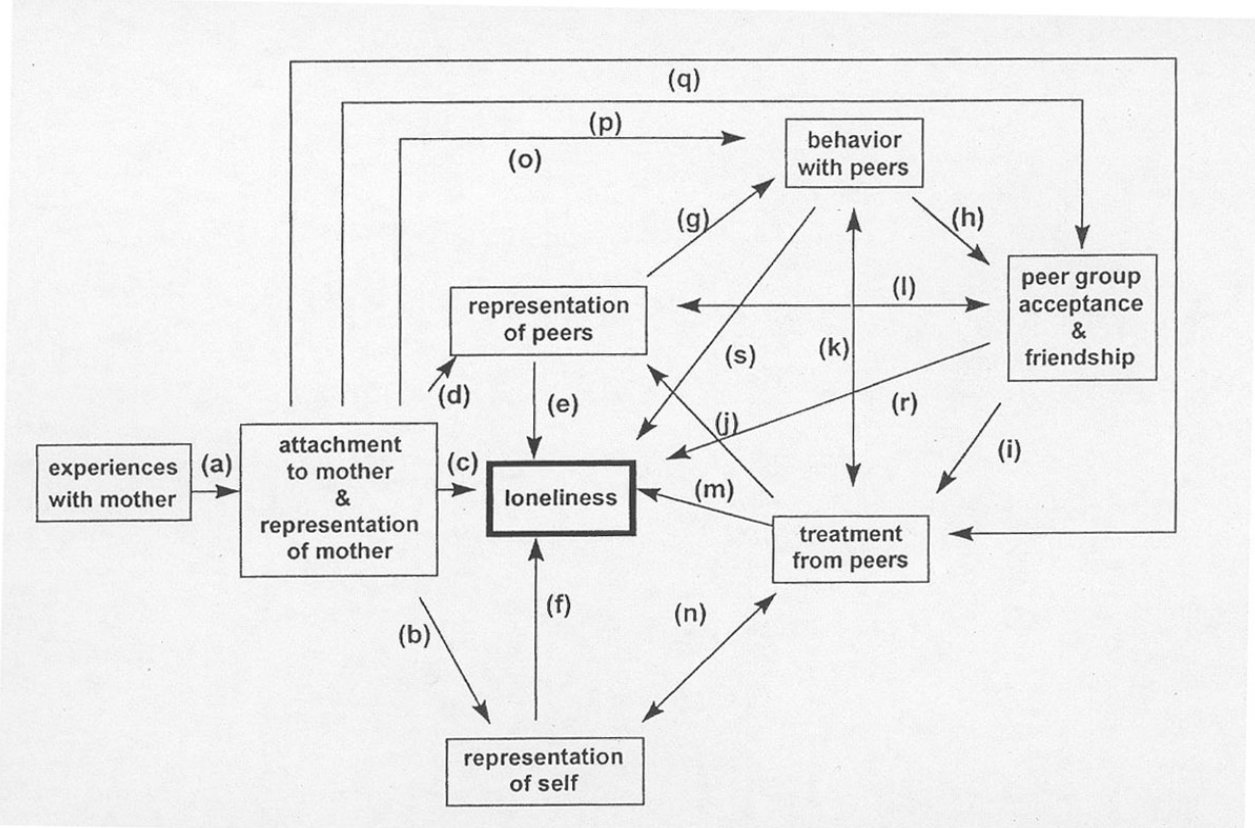


Figure 2. The representational model as an application of attachment theory in understanding children's loneliness. (In Cassidy & Berlin. 1999, p.44)

interactions during early infancy may contribute in constituting representations for this attachment figure, either it is a secure or insecure, positive or negative attachment (Figure 2, Path a).

Children generalize the representational models of parents attachment to self and to others, including peers; for example, the secure attachment of parents during infancy have been closely linked to high self esteem, and when a child is neglected or rejected, he feels worthless and of little value, whereas, when a child is loved and valued, he feels lovable and valuable. Likewise, the unwanted child is likely not only to feel unwanted by his parents, but also by anyone, and secure attachment with parents was positively correlated with the quality of their children's relations (Figure 2. Paths b, d). All representational models of parental, self, and peers, may directly contribute to children's loneliness (Figure 2, Path c, f, e). In regard to peer relation components and the connections among these components, children's representations towards their peers influence their behaviour with peers, with more negative representations associated with more negative behaviour (Path, g). This negative behaviour, in turn, contributes to being rejected by peers (Path, h). Being rejected leads to receiving negative behaviour from peers (Path, i). Receiving negative behaviour from peers, in turn, contribute to a child's negative representations of peers (path j). At the same time, the connection of attachment to three components of this model: behaviour with peers, peer group acceptance, and treatment from peers; all of which have been linked to children's loneliness (Paths s, r, and m).

In the hearing adult loneliness literature, a number of studies have demonstrated the important role of parental styles and peer relations in loneliness existence. Marcoen and Brumagne's study (1985), was designed to investigate differences in loneliness involving parents and peers. The relation between loneliness and choices of a first–comfort figure and social sensitivity as perceived by peers were also investigated. The participating children were 393 boys and girls from the fifth, seventh, and ninth grades; they were given a

loneliness scale and a sociometric measure of perceived social sensitivity. The results revealed that students who indicated both parents as their first comfort figures were the least lonely in parent-related loneliness, whereas those children who indicated friends as their first–comfort figures had the highest scores for parent-related loneliness. Students who were perceived as socially sensitive (the socially sensitive child who is a source of comfort, support, and sympathy in times of sadness and troubles) by their classmates felt less lonely in peer related loneliness. Similarly, Hojat (1982b), found that students who reported that their parents had not devoted enough time to them, or that they received less attention and love from their parents or that their parents had never understood them, have been found to be more likely to experience loneliness distress. The results also indicated that students who were not able to establish satisfactory relationships with peers during childhood were more likely to feel lonely in adulthood. Results similar to these have been obtained by Palautzian and Ellison's study (1982) of the developmental background of a sample consisting of 206 university students, males and females. Nine questions were asked regarding early childhood experiences, three items in each of three categories they were, parent-child relationships, family togetherness, and childhood peer relationships. The results indicated that the quality of parent-child relationships, the quality of remembered childhood peer relationships, and the degree of remembered family togetherness is all negatively related to loneliness on the UCLA loneliness scale.

With regard to deaf adults' loneliness, Murphy and Newlon (1987), found that satisfaction with parental and peer relationships was negatively associated with loneliness feelings in deaf university students. Furthermore, through the results of an analysis of 59 deaf individuals' interviews, ages ranged from 20 to 78 years, Backenroth (1993) found that deaf individuals' loneliness can be due to three main factors; the individual's interactions with family, the individual's interactions with peers, and the individual's interactions with situational factors.

Through my review of previous literature on loneliness, it was noted that scarce research with respect to the effects of interaction between parenting treatment style and peer relations in classroom on loneliness among children in general and deaf children in particular have been obtained. Therefore, one of the principal aims of this study is to explore the interaction between parental treatment styles (parental indulgence, strictness) and peer relations (high, average, low acceptance) on deaf children's loneliness. In addition the interaction between parental treatment styles (parental acceptance, neglection, rejection) and peer relations (high, average, low acceptance) on deaf children's loneliness. Furthermore, the influence of each factor separately. In addition, the current study is an attempt to investigate the role played by parents' promotion of their children's peer relationships in deaf children loneliness. Also, no mentioned studies were found about the difference between deaf and hearing children in loneliness; therefore, the present study is interested in the difference between deaf and hearing children in loneliness. Moreover, there is a contrast in the previous studies results about sex effect on loneliness. On the one hand, studies mentioned that there are no statistically significant differences between mean of scores of both boys and girls on the feelings of loneliness (Cheek & Busch, 1981; Cassidy & Asher, 1992; Goswick & Jones, 1981; Jones, Carpenter & Quintand, 1985; Jones, Hobbs, & Hockenburg, 1982; Kalliopuska & Lanitionen, 1991). On the other hand, some studies mentioned that there are statistically significant differences between mean of scores of both boys and girls on the feelings of loneliness (Davis & Franzoi, 1986; Franzoi & Davis, 1985; Marcoen & Brumagne, 1985; Russel, Peplau, & Cutrona, 1980; Stokes, 1986). Therefore, this study investigates the differences between deaf boy and girl children and their loneliness.

The following figure shows the design the study.
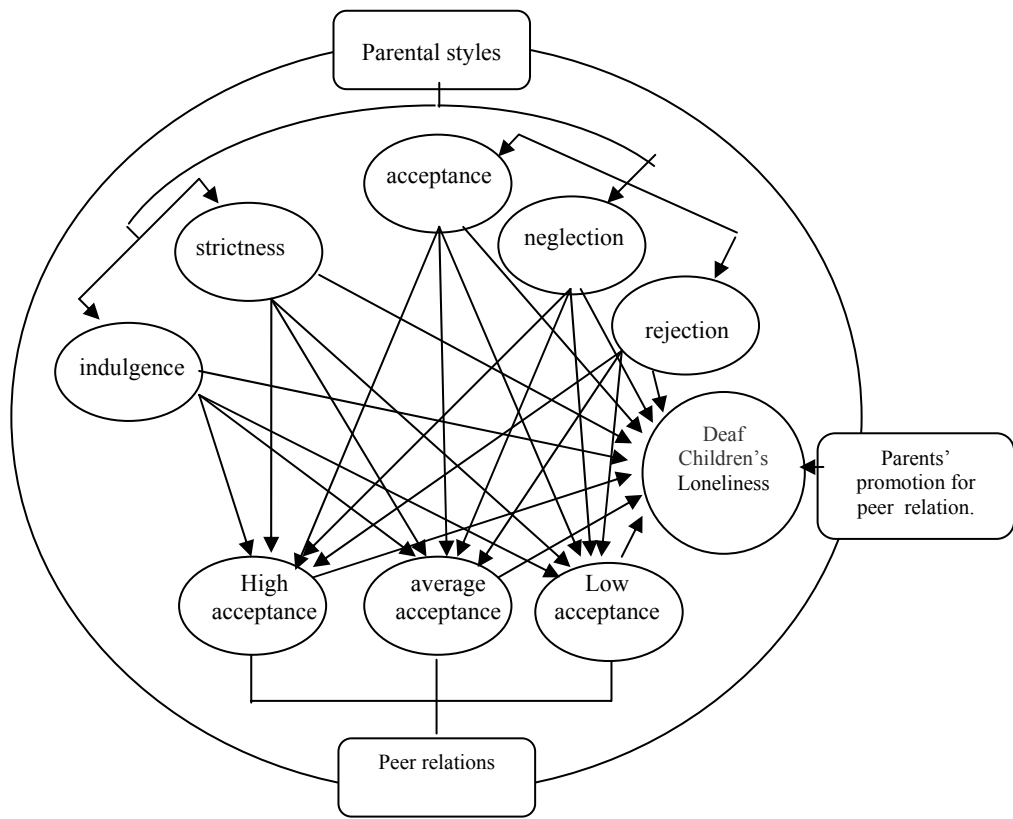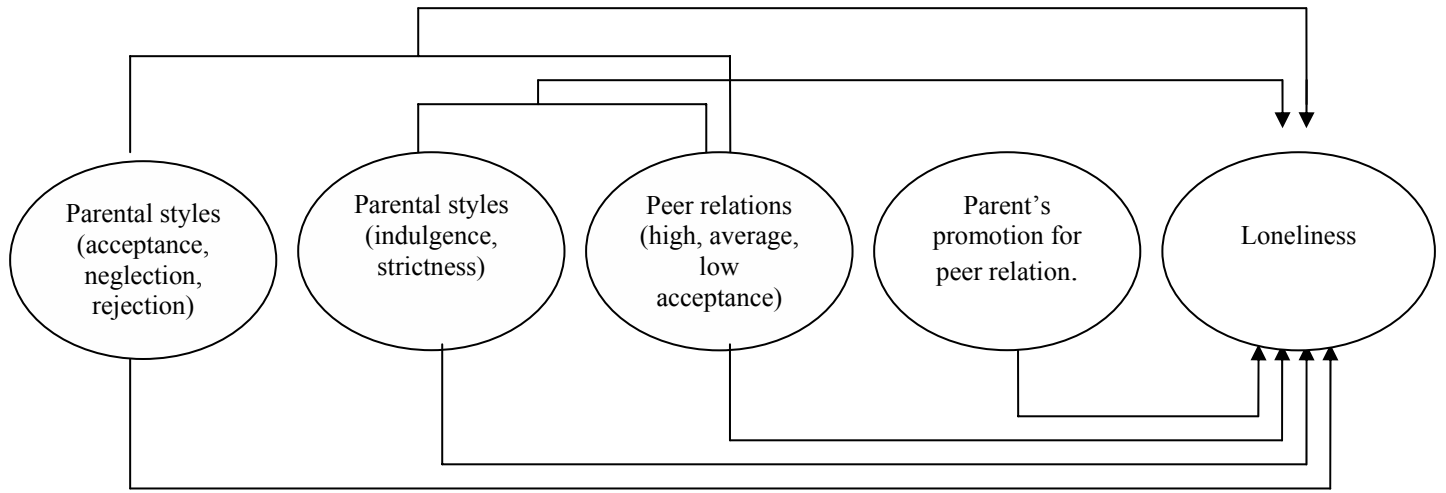
**Figure (3)**

**Design of Study**

## 1.6. Research Questions

Based on a consideration of the previous literature, the present research was designed to investigate the loneliness problem in deaf children by an attempt to answer the following questions:

1. Is there statistical significant difference in mean loneliness scores between boys and girls deaf children?

2. Is there statistical significant difference between the deaf and hearing children in mean loneliness scores?

3. Is there an association between parents' promotion of peer relations and their deaf children's loneliness?

4. Is there statistical significant differences in deaf children's loneliness mean scores according to the three types of peer groups in classroom high, average, low acceptance?

5. Is there statistical significant differences among deaf children with the the indulgence, strictness parental treatment styles in mean loneliness scores?

6. Are there statistical significant differences among mean loneliness scores of deaf children according to the parental treatment styles (acceptance, neglection, rejection)?

7. Is there statistical significant interaction between parental treatment styles (Parental indulgence, strictness), and peer relations in classroom (high, average, low acceptance) on the feelings of loneliness among deaf children?

8. Is there statistical significant interaction between parental treatment styles (parental acceptance, neglection, rejection), and peer relations in classroom (high, average, low acceptance) on the feelings of loneliness among deaf children?

# 2. METHODOLOGY

This chapter describes the subjects, instruments, procedures and the statistical treatment used to conduct this study.

## 2.1. Subject Sample

To be confirmed that the age of the used sample in this study is more appropriate, some factors have been taken into consideration:

**First:** The students would be in the final grades (fourth, fifth, sixth, and seventh grade) in elementary schools, so that, students could be well known and evaluated by each other. The participants were not in the first school grades, because, children in their first school years appeared to be experiencing early school adjustment difficulties with their peers as they are not well known or well understood by each other such adjustment difficulties may contribute to loneliness existing.

**Second**: The participants of this study would have good attention, so that, they could read and understand the questionnaire well, then, choose the answer that suite him or her.

**Third:** This period of age was intentionally chosen, as results of previous research which has shown that feelings of loneliness, in most cases are between the ages of 10 to 12 (Terrell-Deutsch, 1991). It is also in this period of age (the late childhood stage) that parents and peer group's influence is clearer and more effective in the child's life, because, infant's dealings and interactions is more probably limited between these two types (parents and peer group), because, a child can't make broader interactions with in the big society such as clubs .

**Fourth**: The entire sample is deaf children and the degree of their hearing loss ranged from 70 to 95 decibel. And all the sample children are not in residential schools, because living in residential schools may lead to more loneliness.

**Fifth**: Measuring child-peer relations is restricted on the peers inside the classroom and not the peers in the other classrooms. Although it is possible that a child who is not well liked by his peers inside his classroom may have other

friends in other classrooms. However, most of the children who are not well liked by their classmates inside their classroom are more likely to be poorly accepted in other classrooms; whereas, children who are well liked by their peers inside their classroom are well liked also in other classroom.

**Sixth**: Children whose both or a single parent are dead were left out. That is because losing both or single parent may result in more loneliness in those children, and because one of the most important variables of this research is the parental treatment styles.

**To Determine The Study Sample, These Steps Were Followed:**

**First**

Using the sociomatric measure on a sample of deaf children from fourth-through seventh-grade, in six elementary schools for the deaf children in Egypt:

(1)     Tanta elementary school for the deaf children                    (Gharbia).

(2)      Menshih Mobark elemantry school for the deaf children   (Gharbia).

(3)     Banha elementary school for the deaf children                    (Kalyaubia).

(4)     Shobra elementary school for the deaf children                    (Cario).

(5)     Alabasia elementary school for the deaf children                  (Cairo).

(6)     Helwan elementary school for the deaf children                    (Cairo).

To classify students into high, average, and low acceptance peer groups in the classroom, the sample was 415; 182 females with a mean age of 10.9, and a standard deviation of 1.49; and 233 males, with a mean age of 11.2 and a standard deviation of 1.51, during the school year 2002/2003.

After using the sociometric measurement in these schools, peer relations were determined into high, average, and low acceptance by using the standard scores for each child as presented in Table 1

Table 1

Shows the Sample Classification into High, Average, Low Acceptance

According to the Sex and School Grade.

| The School | The grade and the number of classes | High Acceptance | | Average Acceptance | | Low Acceptance | | The Total |
|---|---|---|---|---|---|---|---|---|
| | | Boys | Girls | Boys | Girls | Boys | Girls | |
| (1) Tanta | fourth    (1) | 5 | 2 | 1 | 3 | 1 | 2 | 14 |
| | fifth      (1) | 4 | 3 | 2 | 3 | 1 | 2 | 15 |
| | sixth     (1) | 3 | 2 | 3 | 1 | 1 | 2 | 12 |
| | seventh (1) | - | 4 | 2 | 2 | - | 2 | 10 |
| (2) Elmahal | fourth    (2) | 2 | 5 | 3 | 1 | 2 | 3 | 16 |
| | fifth      (2) | 3 | 7 | 4 | 4 | 2 | 3 | 23 |
| | sixth     (2) | 5 | 1 | 5 | - | 2 | 1 | 14 |
| | seventh (2) | 7 | 2 | 2 | 4 | 3 | 1 | 19 |
| (3) Banha | fourth    (2) | 2 | 7 | 5 | 2 | 3 | 3 | 22 |
| | fifth      (2) | 5 | 3 | 3 | 5 | 6 | - | 22 |
| | sixth     (2) | 5 | 1 | 2 | 4 | 3 | - | 15 |
| | seventh (3) | 11 | 4 | 8 | 2 | 6 | 1 | 32 |
| (4) Shobra | fourth    (1) | 3 | 2 | 3 | 2 | - | 4 | 14 |
| | fifth      (1) | 4 | 2 | 3 | - | 1 | 4 | 14 |
| | sixth     (1) | 1 | 4 | 1 | 3 | 2 | 2 | 13 |
| | seventh (2) | 7 | 4 | 3 | 4 | 3 | 2 | 23 |
| (5) Alabasia | fourth    (1) | 1 | 3 | 1 | 2 | 1 | 1 | 9 |
| | fifth      (1) | 3 | 2 | 4 | 1 | 4 | 2 | 16 |
| | sixth     (1) | 3 | 4 | 3 | 1 | - | 3 | 14 |
| | seventh (1) | 6 | 2 | 3 | 1 | 3 | 3 | 18 |
| (6) Helwan | fourth    (3) | 4 | 5 | 3 | 4 | - | 4 | 20 |
| | fifth      (2) | 7 | 1 | 5 | 2 | 3 | 3 | 21 |
| | sixth     (3) | 7 | 3 | 7 | - | 3 | 4 | 24 |
| | seventh (2) | 3 | 3 | 5 | 2 | 1 | 1 | 15 |
| | | 101 | 76 | 81 | 53 | 51 | 53 | |
| The Total | | 177 | | 134 | | 104 | | 415 |

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As shown in the previous table, children were classified into high acceptance (N = 177), with a mean age of 10.9 and standard deviation of 1.55; average acceptance (N = 134), with a mean age of 11.1 and a standard deviation of 1.50; and low acceptance (N = 104), with a mean age of 11.1 and a standard deviation of 1.47.

**Second:** Using The Parental Acceptance, Neglection, Rejection Questionnaire on all the deaf students (high, average, and low acceptance) to classify children inside each type of these three peer group into three parenting treatment style (acceptance, neglection, and rejection).

I have already used the two forms; form (a) pertaining to mother, and form (b) pertaining to father. However, there was high correlation between the sample children's scores (males and females). As well as, there was no significant difference between the scores of the two forms in acceptance pertaining to the mother and acceptance pertaining to the father, neglection pertaining to mother and neglection pertaining to father and rejection as well. Hence, I have calculated the acceptance scores for the two forms together and I have treated it statistically as parental acceptance and the same thing for neglection and rejection. After using this questionnaire, 18 children were excluding because their forms were not completed, and a girl from Banha School has died; thus, the sample has become 397 children divided among parental acceptance, neglection, and rejection, as shown in the following Table.

Table 2

Indicates Deaf Children Classification According to Parental
Treatment Styles into Acceptance, Neglection, Rejection Inside
Peer Group in Classrooms High, Average, Low Acceptance.

| Parental Styles / Peer Relation | Acceptance | | Neglection | | Rejection | | The Total |
|---|---|---|---|---|---|---|---|
| | Boys | Girls | Boys | Girls | Boys | Girls | |
| (1) High Acceptance | 38 | 30 | 32 | 23 | 18 | 20 | 161 |
| (2) Average Acceptance | 29 | 22 | 26 | 17 | 21 | 15 | 130 |
| (3) Low Acceptance | 23 | 17 | 18 | 16 | 14 | 18 | 106 |
| | 90 | 69 | 76 | 56 | 53 | 53 | |
| The total | 159 | | 132 | | 106 | | 397 |

As shown in the previous table, children were classified into parental acceptance (N = 159), with a mean age of 11.1 and a standard deviation of 1.42; parental neglection (N = 132) with a mean age of 11.2 and a standard deviation of 1.7; parental rejection (N = 106) with a mean age of 10.9 and a standard deviation of 1.44

**Third:** Using The Parental Strictness, Indulgence Questionnaire on a sample of deaf children (high, average, and low acceptance children) to have two types of parental treatment styles (strictness- indulgence) inside each of these three peer group types by summing each child's scores on The Parental Strictness, Indulgence Questionnaire. This questionnaire consists of 12 situations, each situation has three responses (a, b, c), ranging from a score of 1 to 3; hence, a total score on the questionnaire ranges between 12- 36, this total score would be divided into three thirds:

1- The lesser third score range    (12-20).

2- The middle third score range   (21-28).

3- The highest third score range   (29- 36).

The lesser third score refers to strictness, and the highest third score refers to indulgence, and the middle third score was left out.

I have used the two forms; form (a) pertaining to mother, and form (b) pertaining to father, and because of the high correlation between children's scores in the two forms and there were no significantly differences between the scores of the two forms, I calculated the scores of form (a) and form (b) together for each child and viewed it statistically as parental indulgence-strictness. Thus, according to the two forms, the scores have become as the following:

*The lesser third score range  (24-40) would be strictness.

*The middle third score range (41-56).

*The highest third score range (57- 72), would be indulgence.

After using The Indulgence-Strictness Questionnaire on 415 children according to the sociomatric measurement, the 153 child were defined according to the questionnaire as shown in the following Table 3; 80 children were in parental indulgence, with a mean age of 10.9 and a standard deviation of 1.47; and 73 children were in parental strictness, with a mean age of 11.1 and a standard deviation of 1.43.

Table 3

Explains Deaf Children Divisions According to the Parental Indulgence  Strictness Questionnaire Inside Peer Relations (High, Average, or Low Acceptance).

| Parental Styles / Peer Relation | Indulgence | | Strictness | | The Total |
|---|---|---|---|---|---|
| | Boys | Girls | Boys | Girls | |
| (1) High Acceptance | 15 | 15 | 15 | 12 | 57 |
| (2) Average Acceptance | 11 | 15 | 13 | 10 | 49 |
| (3) Low Acceptance | 12 | 12 | 11 | 12 | 47 |
| | 38 | 42 | 39 | 34 | |
| The Total | 80 | | 73 | | 153 |

**Fourth:** I have already used The Loneliness Scale for the Deaf Children (LSDC) on all the children who were classified into parental acceptance, neglection, rejection. 19 forms were excluding as they were not completed by the children. Therefore, the sample has become 378 child divided according to peer group in class (high, average, low acceptance), and parental treatment style (parental acceptance, neglection, rejection) as presented in Table 4.

Table 4

Shows the Sample Classification in the Loneliness Scale According to

the Sex, Peer Relation, and Parental Treatment Styles.

| Parental Styles / Peer Relation | Acceptance | | Neglection | | Rejection | | The Total |
|---|---|---|---|---|---|---|---|
| | Boys | Girls | Boys | Girls | Boys | Girls | |
| (1) High Acceptance | 32 | 27 | 30 | 22 | 18 | 19 | 148 |
| (2) Average Acceptance | 25 | 22 | 26 | 16 | 21 | 15 | 125 |
| (3) Low Acceptance | 22 | 17 | 18 | 16 | 14 | 18 | 105 |
| | 79 | 66 | 74 | 54 | 53 | 52 | |
| The Total | 145 | | 128 | | 105 | | 378 |

The Deaf Children Loneliness Scale (DCLS) was also used with 179 normal hearing sample of fourth, fifth, and sixth elementary grades in Shbin Elkoum school, 68 boys with a mean age of 10.1 and a standard deviation of .64; 111 girls with a mean age of 9.11 and a standard deviation of .76 to have a comparison between the hearing and deaf children's loneliness scores in Shbin Elkoum elementary school for the deaf. Also The Parental Promotion for Peer Relations Scale was used on 52 deaf children in Tanta elementary school for the deaf to link its scores with the loneliness scale scores of these children.

## 2.2. Measures and Instruments

This study consisted of four independent variables: peer relations in the classroom, parental promotion of peer relations, parental acceptance, negelction, rejection. Parental strictness, indulgence. And one dependent variable, that is loneliness. Consequently, the present study included five instruments: Sociometric `` Peer Nomination´´ Rating Scale (developed by the researcher); Parental Promotion of Peer's Relations Inventory (Mounts, 2000, modification by the researcher); Parental Acceptance, Neglection, Rejection Questionnaire (developed by the researcher); Parental Strictness, Indulgence Questionnaire (developed by the researcher); Deaf Children's Loneliness Scale (developed by the researcher). All the used instruments in the present study were self-report measures. Each instrument needed a class period (40 minutes) for applying.

In the following a detailed description of each instrument is provided.

## 2.2.1. Sociometric `` Peer Nomination´´ Rating Scale

The first used instrument in this study was the sociometric measure, to define children into high, average and low acceptance by using children's positive and negative nominations for their peers. Each child was given a list including all his or her classmates names and asked to rate how much he or she likes each classmate in the classroom by using a ranging scale from zero to three (See Appendix A).

*absolutely   3

*sharply     2

*somewhat   1

*never        0

For each child, scores were calculated based on the responses he or she received from both boys and girls in his classroom, to permit comparison of scores across classrooms that might be different in sizes. First, a child's score was computed as a raw score received from his peers, then, the mean and standard deviation were calculated for each classroom and the standard scores

for each child was computed by subtracting the mean for each classroom from each child's score that he received from his peers, this difference is divided by the standard deviation for each classroom:

$$\frac{\text{Child's score} - \text{mean}}{\text{Standard deviation}} = \text{Z-Score}$$

According to the standard score of nomination that each child received from his classmates, children can be divided into three groups:

1- High acceptance children: They were defined as those who received average nomination rating scores, these were a + 0.5 z-score or more above the mean for their classroom peers

2- Average acceptance children: they were defined as those who received average nomination rating scores of a + 0.5 Z-score and a – 0.5 z-score.

3- Low acceptance children: They received average nomination rating scores in the lowest third of the sample, below - 0.5.

Children were taught how to use the scale and given examples for training, it can be thought that this method of sociomatric measuring has some essential properties:

1-This way is an attempt to avoid the inconsistency with which popularity or acceptance among peers is operationally defined. Sometimes it is defined by only social acceptance or only positive nomination by giving children a list including their classmates names and asked to determine three of their classmates they like most, Sometimes it is defined by social rejection through the negative nomination, the child was given a list including his classmates names and asked to put a circle around the name of one, two, or three of his classmates he likes the least; and sometimes by work or play scores, by asking children to rate how much they would like to play or work with each classmate on a ranging one to five score. Sometimes by positive and negative nominations together, however, this measure is a ranging scale on one side the popularity and on the other side the unpopularity at the same time, by asking the child how

much he likes each classmate. This method implies all kinds of affections, like to play with, like to work with rather than negative or positive nomination only.

2- This nomination scale should decrease the likelihood of a person not being chosen because he or she was momentarily forgotten.

3- This method provides us with evidence of the child's acceptance by all of his classmates, because each child is rated by all his classmates by answering the questions, each child would be accepted or not accepted even in medium score by this ranging scale, all the children can be chosen and rated by each other.

### 2.2.2. Parental Promotion of Peer's Relations Inventory

This test was taken from The Parental Management of Peer Inventory (Mounts, 2000, PMPI), and it contains four subscales derived from 25 items:

1- Parental guidance in friendship.

2- Parental neutrality.

3- Parental prohibiting of peer relationships.

4- Parental supporting of peer relationships.

This study was dependant on the last two subscales (prohibiting and supporting of peer relationships). Prohibiting is when parents let sons know that they do not went them to associate and limit interactions with particular peers. Supporting is when parents do things such as providing an environment at home where sons can have their friends over. Originally, the four point likret-type scales were used which responses ranged from one (strongly disagree) to four (strongly agree); however, in the light of the experimental study of these two scales, some necessary changes have been done, such as:

1- An adaptation for deaf children, I have changed the four-point response scale to a two-point scale to be simplified for the deaf children, the answer would be yes or no only:

* A Yes answer has been given one score, and no answer was given two scores in prohibiting friendships.

\* A Yes answer has been given two scores, and no answer has been given one score in supporting friendships.

Hence, the high score in the scale refers to parental promotion of peer relations and conversely low score in the scale refers to parental discouragement of peer relations (see Appendix B).

**2-** Some items have been changed, such as, ``my parents encourage me to invite kids they like over to my house´´ has been changed to ``my parents encourage me to invite my friends to my house´´; `` my parents encourage me to do activities with kids they like´´ has been changed to ``my parents encourage me to do activities with kids´´ ; `` my parents support me in my activities because they like the friends I meet in them´´ has been changed to `` My parents support me in my activities with other children because I like to meet with them´ because friendship is not restricted to those children that parents like. Furthermore, item six for prohibiting friendships was omitted because it is not satisfied on any factor and it neither indicated clearly to friendship promotion or friendship prohibiting. This item was: ``my parents think that if my friends are doing bad thing, I must be doing them too´´. Thus the items became 10 items.

**Validity and Reliability of the Inventory**

For factor validity, to confirm this kind of validity, I have depended on the correlation Matrix analysis among the inventory items (appendix B) on a sample of 52 children of the fourth, fifth, sixth and seventh grades in Tanta Elementary School For the Deaf; 23 males with a mean age of 11 and a standard deviation of 1.57; 29 female with a mean age of 11 and standard deviation 1.73. According to the Extraction Method (principal components analysis, Hotling) and the Orthogonal Rotation Method (Varimax with Normalization, Kaiser), the results have indicate two extracted factors. The following table included loaded items with each factor of these two factors and each item loading amount with each factor.

Table 5

The Saturations of the First Factor Loading of

Parental Promotion of Peer's Relations Inventory

| Item Number | Factor Loading |
|:-----------:|:--------------:|
| 7 | .800 |
| 3 | .754 |
| 1 | .671 |
| 9 | .542 |
| 5 | .372 |

As presented in the previous table item seven had the highest loadings on the first factor, it was saturated with this factor at .800, then items three, one, nine and five they were loaded on the first factor at: .754; .671; .542; and .372 respectively).

This factor can be named as prohibiting of peer relationships.

Table 6

The Saturations of the Second Factor Loading of

Parental Promotion of Peer's Relations Inventory

| Item Number | Factor Loading |
|:-----------:|:--------------:|
| 6 | .758 |
| 10 | .729 |
| 2 | .627 |
| 8 | .520 |
| 4 | .444 |

As can be seen in the previous table, item six had the highest loadings on the second factor, it was loaded with the second factor at: .758, then items 10, 2, 8, 4, they were loaded with this factor at: .729; .627; .520; and .444 respectively. This factor can be named by supporting friendships.

As noted through the factor analysis, the present inventory is saturated with two factors with which Mounts (2000), the designer of the original instrument

extracted before; accordingly, it will be easy that this Arabic inventory can measure the same with English language.

**The Scale Reliability**

Test-retest reliability was used on the same sample of children after a week period of the first application; the correlation coefficient of .697 between children's scores in the first and second time was significant at .01.

## 2.2.3. Parental Acceptance, Neglection, Rejection Questionnaire (PANRQ)
**The Measure Description**

This questionnaire is designed to be used in identifying the parent-child treatment styles in the family environment through a constellation of situations which may face the child during his dealings with his parents that later shape the socialization process. This questionnaire has defined three parental treatment styles (acceptance, neglection, rejection). Two forms of this questionnaire were constructed; form (a) pertaining to mother; and form (b) pertaining to father (See Appendix C).

Several situations were built in this questionnaire, which to a considerable extent, reflect the parent-child interactions. Each situation has three responses (a, b, c). The child should read each situation and the three responses carefully and circle the letter in the answer sheet of what his mother or his father really does with him or her (see Appendix C). There is no certain order toward the responses of the situations, each parental style can be known and determined by using the answer key which is designated for this purpose (see Appendix C). Every choice has one score, and hence, the scores are summed for each style, each style can be known by collecting the scores of the responses for each child on the style and combining the responses pertaining to mother, and responses pertaining to father. The result will be the total scores of the style, then comparing all the child's scores of the three styles, the higher the score which the child gets, the more common parental treatment styles inside the family.

**The Scale Preparation Steps**

1- Recognizing the theoretical background concerning the parental treatment styles and the famous scales in this field which were profitable in preparing this scale, such as: The Children's Reports of Parental Behavior Inventory (CRPBI, Schaefer, 1965), The Child version of the Parental Acceptance-Rejection Questionnaire (Child PARQ, Rohner, 1986), The Parental Authority Questionnaire (PAQ, Buri, 1991), and The Family Environment Scale (FES. Moos & Moos, 1986).

2- Setting up the situations of the measure in the light of parental treatment style definitions, the sample characteristics, and the sample age.

3- This measure with a practical definition of the parental treatment styles generally and also practically define each of the three used styles in the scale would later be offered to a group of specialists in psychology and education to evaluate to which extent each situation is appropriate to measure parental treatment styles and, to which extent each situation is suitable for the sample age (8-12), and for the Egyptian environment.

4- Making an exploration study on a sample of deaf children in Shbin Elkoum elementary school in Egypt to be assured of the statements' clarity and children's ability to understand the situations and the included meanings and knowing the ambiguous statements. In the light of this exploration study, any needed modifications for the statements, items or situations were corrected.

5- **Determining The Scale's Reliability And Validity**

The scale psychometric properties analysis: Parental Acceptance, Neglection, Rejection Questionnaire has been applied on 98 deaf children of the fourth, fifth, sixth, and seventh grades at Shbin Elkoum Elementary School in Menofia Egypt. 56 males, with a mean age of 10 years old and a standard deviation of 1.11; 42 females with a mean age of 10 and a standard deviation of .99 .

**The Scale Validity**

Concurrent validity was used for this scale by computing the correlations between the total scores of The Parental Acceptance, Negletion, Rejection Questionnaire which I have prepared and The Parental Acceptance, Rejection Questionnaire for children (PARQ, Rohner, R. P. 1986), translated and moved to the Egyptian environment by Mamdouha Salama (1987). It was used on children in several Egyptian studies with high degree of validity and reliability. The test consists of 60 items, each item can be answered by choosing one of four responses (always, sometimes, rarely, never), the score ranged from one to four and the total score ranged between 60 to 240. A high score refers to the respondent's perception to parental ignorance, to have good correlation between Rohner's scale (PARQ) and the present scale (PANRQ); some changes have been done in the scores of (PANRQ):

1- The acceptance score  x 1

2- The neglection score  x 2

3- The rejection score    x 3

The total score, therefore, ranged between 20 to 60 (the higher score, the greater parental rejection) significant correlation was found at level .01 and the correlation coefficient between the two scales was found at .687 for  form (a) pertaining to mother, and at .672 for form (b) pertaining to father.

**The Scale Reliability**

Test-retest reliability was applied on the same respondents in one week time separation, for form (a) pertaining to mother, the correlation coefficient between the first and second test was of .784 for acceptance; .717 for neglection; and .713 for rejection. For form (b) pertaining to father, the correlation coefficient between the first and second applying was of .682 for acceptance; .712 for neglection; and .742 for rejection.

## 2.2.4. Parental Strictness, Indulgence Questionnaire (PSIQ)

This questionnaire consisted of two forms, form (a) pertaining to mother, and form (b) pertaining to father (see Appendix D); to a large extent, reflecting the parent-child interactions, each situation has three responses (a, b, c) the respondent should choose one of these three responses referring to what their mother or father really does with him or her. There is no certain order toward the responses of the situations, each parental style can be known and determined by using the answer key which is designated for this purpose (see the scoring key in Appendix D). Scores ranged from one to three, according to a designed answer key as presented in sub scores of form (a) and form (b) were summed together to be the total score of the two forms which would be divided into three thirds, the highest third score reflects indulgence, the lesser third score refers to strictness and the middle third children and their scores were left out.

**The Scale Psychometric Properties**

To be assured of the validity and reliability of the scale, I have tested the scale on 125 deaf children from fourth to seventh grade in Shbin Elkoum Elementary School for the Deaf Children; 73 males with a mean age of 10.5 and a standard deviation of 1.28; and 52 females with a mean age of 10.6 and standard deviation of 1.23.

**The Instrument Validity**

The items internal consistency was tested by using The Pearson Correlation between each item score and the total items scores (see Table 7).

Table 7

Indicates the Correlation between Each Item-to Total-Score for

The Parental Strictness, Indulgence Questionnaire for Form (A)

Pertaining to Mother, and Form (B) Pertaining to Father.

| Item Number | Item-to-Total- Score Correlation | |
| --- | --- | --- |
| | Pertaining to Mother | Pertaining to Father |
| 1 | .658 | .459 |
| 2 | .548 | .618 |
| 3 | .619 | .579 |
| 4 | .596 | .527 |
| 5 | .534 | .614 |
| 6 | .455 | .443 |
| 7 | .362 | .523 |
| 8 | .586 | .426 |
| 9 | .520 | .401 |
| 10 | .614 | .563 |
| 11 | .654 | .368 |
| 12 | .549 | .517 |

As presented in the previous table, the correlation coefficients between each item to total score were all positive at 0.01; and for form (a) the correlation coefficients of each item score to the total score were ranging between 0.362 (Crobachs Alpha = ,846), and .658 and for form (b) between 0.368 and 0.618 (Crobachs Alpha = ,725).

**The Scale Reliability**

The test-retest method was applied to compute the reliability of the scale for form (a) .799; and for form (b) .768 in a week as temporal separation, positive and significant correlations were found at 0.01.

**2. 2. 5. Deaf Children's Loneliness Scale (DCLS)**

This scale is designed to be used in measuring deaf children loneliness (8-12 years old); it consists of 23 situations that could face children in their interactions with others in their daily life. For each situation there were two possible responses (a, b). The child should choose one of these two responses after reading the situation and the two given responses carefully, one of these two responses reflect loneliness feelings and the other not (see appendix E). One score will be given to the response including loneliness feelings and a zero score to the other response. There is no certain order of the situations responses, loneliness scores can be determined through a scoring key which is designated for this purpose (see appendix E). By summing all the responses scores for each of the 23 situations, the total loneliness score for each child ranging from 0 to 23 will be created.

**The Scale Preparation Steps**

1- Reading the theoretical background concerning children's loneliness and the famous scales in this field which might be helpful in preparing this scale, such as, The Illinois Loneliness Questionnaire (ILQ; Asher et al., 1984); The Lovuain Loneliness Scale for Children and Adolescents (LLCA; Marcoen et al, 1987); Relational Provision Loneliness Question-naire (RPLQ; Hayden, 1989); and The University of California, Los Angeles Loneliness Scale (UCLA; Russell et al., 1980).

2- Setting up the situations of the measurements in the light of children loneliness definitions, sample characteristics, sample age (8-12), and the Egyptian environment.

3- Making an exploration study in Egypt on a sample of deaf children in Shbin Elkoum Elementary School to be assured of the statements' clarity and children's ability to understand the situations and the included meanings. In the light of this exploration study, only seven words were

reported difficult and the instructions were considered easy to understand and follow.

4- Determining the scale (DCLS) validity and reliability.

**The Sociomatric Analysis for (DCLS)**

To pre-test and validate the (DCLS), it was applied on a sample of 132 deaf children through fourth to seventh grades in Shbin Elkoum Elementary School, 59 females with a mean age of 10.8 and a standard deviation of 1.31; and 73 males with a mean age of 10.5 and standard deviation 1.28.

**The (DCLS) Validity**

**Two Forms of Validity Have Been Examined In the (DCLS)**

**1- Internal Consistency Validity**. The Pearson correlation between each item score and total score was used as presented in Table 8.

Table 8

Indicates the Correlation between Each Item-to

Total-Score for Deaf Children's Loneliness Scale

| Item Number | Item-to-Total- Score Correlation | Sig. | Item Number | Item-to-Total- Score Correlation | Sig. |
|---|---|---|---|---|---|
| 1 | .238 | 0.01 | 13 | .275 | 0.01 |
| 2 | .271 | 0.01 | 14 | .234 | 0.01 |
| 3 | .295 | 0.01 | 15 | .321 | 0.01 |
| 4 | .286 | 0.01 | 16 | .334 | 0.01 |
| 5 | .302 | 0.01 | 17 | .334 | 0.01 |
| 6 | .320 | 0.01 | 18 | .327 | 0.01 |
| 7 | .231 | 0.01 | 19 | .386 | 0.01 |
| 8 | .499 | 0.01 | 20 | .314 | 0.01 |
| 9 | .587 | 0.01 | 21 | .442 | 0.01 |
| 10 | .273 | 0.01 | 22 | .237 | 0.01 |
| 11 | .500 | 0.01 | 23 | .038 | n. s |
| 12 | .228 | 0.01 | 24 | .242 | 0.01 |

As seen in the previous table, all the items of (DCLS) were positive and significant at .01, the correlation coefficients of each item score to the total

score were ranging between 0.228 and ,587 (Crobachs Alpha = ,665) except situation 23, it was not statistically significant, and this situation is:

At night I would usually:

   (a) Sleep alone and feel loneliness.

   (b) I don't like to sleep alone and sleep with my brother.

**2- Concurrent Validity:** It was used by calculating the correlation between the (DCLS) total scores for each child and the loneliness scale scores prepared by Amany Abdelwahab (2000) for children. The correlation coefficient between these two scales is .618; the correlation is significant at the .01 level.

**The (DCLS) Reliability**

The test-retest method was followed on the same respondents in 10 days after the first application, the significant correlation coefficient .01, between the first and second applying was .767.


**2.3. Procedures**

After identifing the sample schools, which were selected to participate in this study. A letter signed by the researcher and the dissertation supervisor was sent to the Egyptian Missions Administration. This letter explains the purpose and nature of this study. After having the agreement Missions department in Ministry of Higher Education, and public security, and Minstry of Education as well on performance the experimental study in the Egyptian schools, the actual study implies.  Frist, Making reliability and validity for each used scale in the study. I have selected particularly Shbin Elkoum elementary school for the deaf children  to determining the scales' reliability and validity. In the light of this exploration studys, and determing the scales' reliability and validity some items, statements, and situations has been modified to be more simple for the children.

At the beginning, I have made clear that these questionnaires are not examination and that there are no right or wrong answeres. The children were ancouraged to respond in away that reflected haw they really felt inside. Also, explaning examples for each questionnair help children to understand and

answer the questionnaire well. When the children understood the answering method, the researcher read all items accompanied with sign language, and giving children time to respond each item and then move to the next item. if the children can not understand any word, item or situation, he or she would be helped.

After determineg the reliability and validity of these scales, I have begune the actual study in the six elementary schools for the deaf. The researcher visited these schools and discussed the purpose and nature of this study and the used instruments with the teachers, and I have selected two assistants from each school, to be assistants in the data collection (total 12 assistants). They are specialists in the teaching deaf children, and have an experience in teaching field at the least 10 years, and they are proficients in sign language. In addition, most of those teachers have diploma in the special education area, and participanted before with other researchers in collecting data about deaf children. Instruuctions Instruuctions for all scale given by the researcher to the assistants in the study, and all scales applied unter the researcher's supervision.

At the beginning, some children those teachers indicated that they can not participate in this study as they may not understand the task are left out.

Following this, using the sociometric measures to classify the deaf children sample into three types: high, average, and low acceptance. After that, the Parental Acceptance, Neglection, Rejection Questionnaire was used for each type of the sociometric measures to classification the children into nine types:

Table 9

Indicates Procedure 3

| Peer Relations Parental Styles | High Acceptance | Average Acceptance | Low Acceptance |
|---|---|---|---|
| Parental Acceptance | 1 | 2 | 3 |
| Parental Neglected | 4 | 5 | 6 |
| Parental Rejection | 7 | 8 | 9 |

Than, The Parental Strictness, Indulgence Questionnaire was used for each of the previous types of sociometric measures to classify the children into six types:

Table 10

Indicates Procedure 4

| Peer Relations / Parental Styles | High Acceptance | Average Acceptance | Low Acceptance |
|---|---|---|---|
| Parental Strictness | 1 | 2 | 3 |
| Parental Indulgence | 4 | 5 | 6 |

After that, The Parents' Promotion for Peer Relationships Inventory was used to study the relations between the parents' promotion for peer relations and loneliness. In the end, The Deaf Children Loneliness Scale was applied on all the samples. Finally, appropriate statistic methods were used to test the research hypothesis. These interviews and the questionnaires were applications were completed in three menthes from 01. 02. 2003 to 30. 04. 2003.

**2.4. The Statistical Treatment**

(1) Accounting the standardized z-scores for each child to classify them into peer relation to three sections: high, average, low acceptance.

(2) Using the T-test (in Hypothesis 1, 2, 5).

(3) Using correlation coefficient (in Hypothesis 3).

(4) One way analysis of variance (in Hypothesis 4, 6).

(5) Two way analysis of variance (2X3) (in Hypothesis 7).

(6) Two way analysis of variance (3X3) (in Hypothesis 8).

(7) Factor analysis to test the factor validity of The Parental Promotion of Peer's Relations Inventory.

(8) Concurrent validity to test the validity for The Parental Acceptance, Neglection, Rejection Questionnaire (PANRQ), and Deaf Children's Loneliness Scale (DCLS).

(9) Internal consistency validity to test the validity for The Parental Strictness, Indulgence Questionnaire (PSIQ), and Deaf Children's Loneliness Scale (DCLS).

(10) test-retest to test the reliability for the Parental Promotion of Peer's Relations Inventory; The Parental Acceptance, Neglection, Rejection Questionnaire (PANRQ); The Parental Strictness, Indulgence Question- naire (PSIQ); and Deaf Children Loneliness Scale (DCLS).

# 3. RESULTS AND DISCUSSION

This chapter presents all of the study results and discussions of these results as well, which contains; first, a comparison of loneliness means scores between male and female deaf children. Second, a comparison of loneliness means scores between deaf and normal hearing children. Third, the relationship between parental promotion of peer relations and loneliness. Fourth, the differences in loneliness scores among deaf children according to the peer relations in classroom (high, average, low acceptance). Fifth, differences in loneliness scores among deaf children according to parental treatment styles (indulgence, strictness). Sixth, the differences in loneliness mean scores of deaf children pursuant to parental treatment styles (acceptance, negeletion, rejection). Seventh, the interaction impact between parental styles (indulgence, strictness) and peer relations in classroom (high, average, low acceptance) on deaf children's loneliness. Eighth, the influence of interaction between parental styles (acceptance, negeletion, rejection) and peer relations in classroom (high, average, low acceptance) on the loneliness of deaf children.

## 3.1.1. Research Question 1

The first question was, Is there statistical significant differences in mean loneliness scores between boys and girls deaf children?

T-test has been used in examining this question. The result has indicated that there was no statistical significant differences between the deaf boys and girls in their feelings of loneliness; where $[t (206, 172) = 0.286, p > .5]$. The following table shows the result of this hypothesis.

Table 11

Shows the Differences in Loneliness Scores Between

Boys and Girls Deaf Children.

| Comparison Groups | N | Mean | Std. Deviation | T | Sig. |
|---|---|---|---|---|---|
| Boys | 206 | 8.18 | 4.45 | .287 | n.s. |
| Girls | 172 | 8.31 | 4.64 | | |

More specific findings were highly consistent with this result, Murphy and Newlon (1987) found that is no statistical significant differences in the mean loneliness scores between male and female hearing impaired students in universities. With regard to children (Asher, Hymel, & Renshaw, 1984; Cassidy & Asher, 1992; Parkhurst & Asher, 1992; Quay, 1992; Renshow & Brown, 1993). And regarding adolescents and adults; (Cheek & Busch, 1981; Goswich & Jones, 1981; Jackson & Cochran, 1991; Jones, Carpenter & Quintana, 1985; Jones, Freemon, & Goswich, 1981; Jones, Hobbs, & Hockenburg, 1982; Kalliopuska & Laitinen, 1991; Van Buskirk & Duke, 1991) all reported an absence of gender differences in loneliness. Some research associated with sex differences in loneliness are inconsistent with this current hypothesis result, among children (Ladd, Kochenderfer & Colemen, 1996; Marcoen & Brumagne, 1985; Rubin, Chen & Hymel, 1993); and among adolescents and adults (Avery, 1982; Borys, & Perlman, 1985; Davis & Franzoi, 1986; Franzoi & Davis, 1985; Rotenberg & Morrison, 1993; Russell, Peplau & Cutrona, 1980; Schultz & Moore, 1986) they found that males tend to be significantly lonelier than females. However, Renshaw and Brown (1992) reported that girls were more lonely than boys; furthermore, (Newcomb & Bentler, 1986; Kim, 2001; Schmidt

& Sermat, 1983; Cheng & Furnham, 2002) reported that adolescent's girls were found to be lonelier than adolescent's boys.

I have begun first with examining this hypothesis, because if sex differences between boy and girl deaf children were found, the current sample would be only males or females, each separately, or each group would be treated as an independent sample. Although most of the previous results have indicated the absence of statistically significant differences between children boys and girls in loneliness, it was important to examine the issue of sex differences in loneliness in this current research, because there were inconsistencies between the earlier results concerning the sex differences in loneliness. In addition, no interest with deaf children was found by the previous research, furthermore, it should be noted that the earlier research hasn't been in an Arabian environment which would be essentially different in culture, customs, and traditions and social roles are different between boys and girls.

This result appears to be logical, although in Arabian areas girls are forced with more restrictions and controls than boys, such as, girls are not allowed to visit or to play with their male classmates because of the Arabian costumes and traditions. However, this happens at the later stage of age – the adolescence stage, over 12 years old – not in the childhood stage, because, parents and Arabian society as well viewed them as youngsters and there is no necessity to separate boys and girls in this period. Thus, this hypothesis result may be due to the increased attention and interest toward females and the new social views to their roles.

### 3.1.2. Research Question 2

The second major question was, Is there statistical significant differences between the deaf and hearing children in mean loneliness scores?

To determine whether the deaf and hearing children differences in mean loneliness scores, t-test was performed. The results of the statistical analyses of the two groups' scores indicated that statistical significant differences were

found between deaf and hearing children's loneliness scores. The following Table presents what the results demonstrated.

Table 12

Shows the Significant Differences in Loneliness

Scores between Deaf and Hearing Children.

| Comparison Groups | N | Mean | Std. Deviation | T | Sig. |
|---|---|---|---|---|---|
| Deaf | 132 | 4.4167 | 2.8687 | 3.045 | 0.01 |
| Hearing | 179 | 3.4860 | 2.5025 | | |

As presented in the previous table, the differences in mean loneliness scores between deaf and hearing children is significant statically [t (132, 179) = 3.04, p < .1]. This difference was in favour of deaf children, since they reported higher levels of loneliness than did the normal hearing children.

This result is highly consistent with the results of Murphy and Newlon's study (1987); however, their study was designed on university deaf students. The findings revealed that deaf students were more lonely than hearing students. The current hypothesis result is also congruent with what Steinberg, Sullivan & Montoya (1999) indicated, that deaf people understand, describe, and experience loneliness entirely differently from normal hearing people and that loneliness is a common part of the deaf individual's life (p. 28). In addition, Stevens (1982) found that social isolation was the essential handicap associated with adventitious deafness. Likewise, Cooper (1976), mentioned that feelings of isolation have been reported in association with deafness.

The differences in loneliness experience scores between deaf and hearing children can be attributed to many factors, some of these factors are closely related to the one's personality, since loneliness is a subjective experience entirely different from person to person (Peplau and Perlman, 1982, p. 3). Therefore, the degree of perception with which deaf children experience

loneliness feelings may entirely differ from hearing children's perception of loneliness. It is probably that the differences in psychological, social, and individual properties among deaf and hearing children play an effective role in existing these differences between them in loneliness; hence, one of the most important reasons in which deaf children may feel more lonely than do hearing children is because deafness constantly influences a deaf child's social development, A deaf child would have less and different social interactions and communications than normal hearing children, because, deafness has been found to has several evident primary and secondary influences in children's social developing. Ledberg (1993), mentioned that one of the problems which deafness leads to is "divided attention" it refers to the fact that because of the deaf children's inability to hear sounds, they have to shift and rely on their eyes for communication with parents or peers (visual attention). When playing, deaf children have to divide their attention between the environment and receiving communication from their parents or peers. On the contrary, hearing children can use their visual attention in interacting with the environment and at the same time they use hearing-speech ability in their interactions with parents or peers. Therefore, the dividing attention problem may provide deaf children with further communication difficulties than hearing children (p. 94).

A deaf child's world appears to be more limited than a hearing child's world; that is, although most deaf children grow up in hearing families and some of them have hearing friends, most of the  deaf young people interactions and friendships are restricted to the deaf people and the deaf community (Gregory, 1998, p. 154). Support for this view comes from Backenroth (1993), where he investigated the loneliness experience in the deaf community through an interview with 59 deaf individuals. Results of these interviews indicated that 56 to 59 (95%) of the interviewers reported that they have deaf friends, however, not all of the deaf individuals experienced social satisfaction in their interactions with the deaf community where 5 to 10 % of the individual deaf people

experienced loneliness feelings within the deaf community. Furthermore, deaf individuals' limited social world through their restricted interactions with deaf peers may mostly result in decreased social skills and deficiency in developing appropriate communications with hearing children (Antia, Kreimeyer & Eldedge, 1993, p.262). In addition, a deaf child's inability for hearing sounds may make a child less commutative and interactive with people, since interactions and communications with people depends mostly on hearing speech ability. Accordingly, lacking feedback about the effective subjects and events, having less social interactions and communications with people, may in turn cause a child to have difficulties in establishing satisfactory social relationships and to be more lonely than hearing children.

Additional reasons with which we can attribute loneliness differences between deaf and hearing children is the experiential deficits from which a deaf child may suffer, such knowledge deficiencies may due to deafness itself. Kenneth & Altshuler (1974), referred to the importance of sound and mentioned that "sound convey innumerable bits of information, important and unimportant. It gives us eyes in the back of our heads, so that we monitor our surrounding world flexibly, without conscious effort or direction-discriminating the meaningful from other cues even in our sleep." (P. 368). These social knowledge deficits may probably be caused by parents, as parents may view and treat their deaf children as disabled, this view causes parents to have more restrictions and controls and provide their children with less freedom and autonomy in interactions with people. Consequently, parents may overprotect their deaf children more than hearing children as parents' biggest worry in life is their disabled child; however, parental overprotection style may deprive deaf children of social experiences that would be possible for them to acquire if they had opportunities for interactions with other people such as hearing children. Furthermore, parents of deaf children sometimes think that it is easier for them to do things for their deaf children instead of teaching or training them how to

do it, therefore, deaf children may be less skilled, and have less exposure to the outside world than hearing children; certainly, this may cause deaf children to feel more lonely than hearing children.

It should be noted that hearing parents with deaf children only use sign language when speaking to their deaf children and do not use it with other normal people; therefore, deaf children are not able to understand their parents' speaking and interacting with other people, hence, deaf children's social experiences are more likely to be limited and restricted than hearing children, since they are deprived of some social experiences and important understanding and information about the social world conveyed through speech either on the media or by parents' speaking and interactions with other people. In addition, they would be missing border deaf role models and have little experience about what it is like to be a deaf adult (Lederberg, 1993, p. 97). It is important to take into consideration that about 90% of deaf children are born into families in which both parents are hearing, another 7% of such children have one deaf parent, and about 3% have two deaf parents (Marschark, 1993, p. 5).

These social knowledge deficits from which deaf children may suffer more than hearing children result in poor understanding of the social contact rules, which in turn, leads to inappropriate representations of people and events and passivity in human interactions, certainly, this may cause deaf children to be more lonely than hearing children.

Several earlier studies have found an association between secure mother-child attachment and later loneliness feelings (Berlin, Cassidy & Belsky, 1995; Brennan, 1982; Leiderman, 1980; Peplau, Miceli & Marasch, 1982; Perlman & Peplau, 1981). Kenneth and Altschuler (1974), revealed that the normal child can often be quieted in a few weeks of age by hearing the comfortable sound of his mother's voice, later; he can be reassured by hearing his unseen mother in a nearby room through her approving and affectionate words or even tone volume (p.368). However, deaf children have less feelings of security than normal

hearing children, since they are derived of an effective mean by which they can hear and feel a mother's loving and affectionate words or sounds and feel secure during early infancy, later, this may cause a deaf child to feel more insecure than a hearing child, this feeling of insecurity may contribute to increasing loneliness feelings.

According to Cappelli et al (1995), deaf children are more likely to be rejected by their peers than hearing children. It is possible that this feeling of rejection is due to some behavioural problems experienced by deaf children as they experience great feelings of social distance, difficulty in making friendships, and poor social acceptance. Since some earlier studies demonstrated that children who were not well accepted by their peers were more lonely than children who were well accepted by peers, therefore being rejected by peers may in turn be a causative factor for deaf children to feel more lonely than normally hearing children.

Through reviewing deaf psychology literature, I have found that deaf children appear to be at risk for experiencing more psychological, social and behavioural problems than do hearing children which extensively increase their feelings of loneliness. Some of these problems are: dependence, uncertainty, anxiety, egocentrism (Manfredi, 1993, p.51), irritability, physical or verbal aggression, delinquent behaviour, impulsivity (Brubaker & Szakowski, 2000, p.14), less understanding of other reactions, low self-esteem, less accurate self-images, deficits in knowledge and skills (Marschark, 1993, p.57), depression, neurotic symptoms, and feelings of isolation and insecurity (Cooper, 1976), rigidity, emotional immaturity, and social ineptness (Lane, 1988, p.7 ).

Through applying Rokach's model (1988) of the loneliness antecedents, it is possible that differences in loneliness between deaf and hearing children can be well explained. This model indicated that the loneliness experience can be attributed to three main conceptual factors and are differentiated into 20 components. These three factors are: 1- relational deficits, 2- traumatic events,

3- character logical and development variables. The third factor contains the individual characteristics and one's susceptibility to the onset of loneliness, this factor includes two sub factors: personal shortcomings and developmental deficits. My focus will be on the first sub factor of the major third factor: personal shortcomings. This factor is composed of five components: first, fear of intimacy. That addresses the fear of being rejected and ridiculed, which cause a person not to be close to others and that may result in the loneliness experience. According to Rachford and Furth (1986), deaf children have fewer friendships than hearing children. Second, negative self-perception, that is associated with low self-esteem and a sense of failure and unworthy among deaf children. Third, social skill deficits, since social skill deficit is one of the contributing factors to loneliness feelings, deaf children are more likely to have less social skills than normal hearing children; this may be due to knowledge, language, social deficits, and difficulties in contacting other children. Fourth, illness or physical disability, certainly, deaf children have a physical disability, that is hearing and speech inability, which is one of the most important five senses in relating to the outside world. Because of their hearing and speech inability, it would be possible that they experience unsatisfactory social relationships. Fifth, aversive social experiences, that influences one's ability in relating to other people and may lead to negative attitudes towards self and people. Deaf children appear to be at risk for experiencing some negative social experience more than hearing children, such as, hearing children's refusal to play with deaf children and probably treat them as disabled children and as having less understanding.

According to this model, fear of intimacy, negative self-perception, social skills deficits, illness or physical disability, and aversive social experiences can all be considered as direct causes of loneliness, it is important to mention that deaf children are more vulnerable to experience these five antecedents than normal hearing children; therefore, they may be more lonely than hearing children.

According to the qualitative analysis of children's' talks about the loneliness experience, Hayden et al (1988) (in Hymel et al, 1999, pp. 80-106), indicated that eight different contexts for children's loneliness had been defined. These eight contexts could be composed under two types, physical separation and psychological distancing. Physical separations is precipitated by absence of important others (e.g., friends, parents, siblings ) this may be caused by loss, dislocation from a familiar interpersonal setting to one in which children would be a new comer and a temporary absence or separation from important others. Whereas, normal hearing children reported in their talks that these were causes for their loneliness, it should be noted that, deaf children may experience physical separation among people and in crowds, as a deaf child can neither hear people nor participate in their talking. The second type is the psychological distancing that can be perceived by deficits in interpersonal relationships, this type includes five contexts (conflict, broken loyalties, rejection, exclusion and being ignored). If we apply these five contexts in comparing deaf children and hearing children, it would be possible to think that deaf children are more likely to experience such contexts than hearing children especially in rejection, exclusion, and being ignored. Thus it would be logical to mention that deaf children may feel higher levels of loneliness than hearing children. Since deaf children can not express themselves verbally, they may express themselves physically, however, their expression about anger feelings may take an aggressive attitude which in turn may cause deaf children to be disliked and sometimes rejected by other people and accordingly they may feel higher levels of loneliness than hearing children.

### 3.1.3. Research Question 3

The third question was, Is there an association between the parents' promotion of peer relations and their deaf children's loneliness?

Correlation coefficient has been used in examining this question. The result has indicated that loneliness is negatively correlated with the parents' promotion

of peer relations (r = -0.64, p < 0.01).This result is inconsistent with Rotenberg's research result (1999). He has found no correlation between parents' promotion of peer relationships and loneliness in children.

The focus of this hypothesis is on the great role that parents play with their children in developing and maintaining positive relationships with peers, as well as, the effective parental influence on children's social behaviour with peers. Several researchers have suggested that the early parent-child interactions may have an effective influence on the child's later peer relations (e. g., Jacobson & Wille, 1986; Lafreniere & Sroufe, 1985; Lieberman, 1977; Pastor, 1981; Putallaz, 1987). On the basis of social behaviour being learned, parents do indeed influence their children's social and emotional development, at least during the childhood. Through the socialization processes and parent–child interactions with which parents teach their children appropriate social behaviour and social values, such as: loving, helping, cooperating with the others and altruism value; and provide them with opportunities to learn and practise effective interactions skills and responsiveness, such as: turn-taking and the way how to relating to the other people; which in turn, have been considered as contributing factors to the children's development in establishing new successful friendships, as well as, children's social competence. These satisfied social relations result in sustaining low level of loneliness, several studies have highlighted the negative association between maintaining friendships and loneliness (Asher, Hymel, & Renshow, 1984; Parker & Seal, 1996; Renshaw & Brown, 1993).

It is important to note that, within the family social context, children appear to learn and imitate their parents' interaction skills with their adult peers and their behaviours as well, and they transfer to these interactions to theirs peers. Furthermore, children's loneliness was positively associated with their parents' loneliness (e. g., Henwood & Solano, 1994; Lobdell & Perlman, 1986).

The quality of attachment between parent and child during infancy has been related to children's social behaviour and social competence on one side, and loneliness on the other side. The representational model of relations that children learn from their parents tends to be generalized to peer relations, children who have positive relationships with their parents are more likely to be successful and effective in their relationships with other people including peers, less aggressive and less withdrawn and consequently this reduces loneliness. Berlin, Cassidy & Belsky (1995), through their review of several studies, indicated that insecure infant-mother attachment is expected to contribute to poor peer relationships and social withdrawal. The insecure attachment children may have fewer opportunities to participate in satisfying social interactions and they are rejected and spend most of their time alone, all in turn, contributing to loneliness feelings (p. 93, 98); accordingly, the nature of parent-child interactions can be considered as the root of social competence, providing children with the confidence, knowledge, and experience that will be the basis of later peer relation developments.

Positive interactions between parent and child provide the child with opportunities to learn and practise effective interaction skills and responsiveness to other people. Parents can increase their children's success in peer relations by arranging their social contents, such as, visits with friends in clubs or in parties and facilitate the development of peer relationships skills, as a result of parental promotion for their children to establish new friendships and providing them with appropriate guidance for peer interactions. Certainly children will acquire new social skills and their satisfaction with peer relationships will increase and consequently reduce loneliness. So, a child's behaviour with peers can be posited as a mid-factor between parental behaviour and loneliness:

Parent behaviour ⟶ child's behaviour with peers ⟶ loneliness

Certainly positive parental promoting of peer relationships can be seen as a contributing factor in avoiding loneliness feelings by supporting children with

opportunities for developing satisfied friendships. However, I think that deaf children need this help more than hearing children, but they are in bad need of this positive parental promotion and encouragement because of their disability to communicate with the others. This is what Dunham has pointed out in his observations about loneliness and the physical handicaps, "the problem for deaf persons in the area of loneliness can come from inability to communicate with the hearing people around them, in urban areas where a number of deaf persons have congregated they have social activities in groups or clubs to counteract the problem of loneliness."(In Meyer Gaev, 1976, p. 116). Therefore, the society should include social communication opportunities for the deaf persons. They are in need of feeling accepted and having a sense of belonging; we can help in reducing their loneliness by welcoming them into the mainstream of our community activities. To ignore their needs and treat them as handicapped persons, feelings of rejection and loneliness will result (Meyer Gaew, 1976, p. 117-120).

The parents' role should not be limited only by promoting their children to establish new friendships, but also they should have certain controls on their children's peer choices and an influence on the kind of peers through some distant social characteristics, such as, social class and educational level, especially in the area of deviation and delinquency (Meeus, Osterwegel, & Vollebergh, 2002, p 95). I think this kind of parental influence in peer choices is legitimate, because they want their children to avoid the bad-mannered friends; it is parents' duty toward their children. These controls should not be understood to decrease or weaken parental promotion of peer relationships especially, if parents use these controls in the shape of advice and guidance by using convincing and not demands that should be obeyed.

### 3.1.4. Research Question 4

The fourth research question was, Are there statistical significant differences in deaf children's loneliness mean scores according to the three types of peer relations in classroom: high, average, low acceptance?

To determine whether differences between this the three types of peer relation, one way analysis of variance (ANOVA) has been used. The statistical analysis results indicated that statistical significant differences were found among mean loneliness scores of the three types of peer group in the classroom. The following table presents the results of these analyses.

Table 13

Shows the Results of One Way Analysis Of Variance for Deaf Children Loneliness Scores (High, Average, Low Acceptance).

| Source of Variation | Sum of Squares | df | Mean Square | F |
|---|---|---|---|---|
| Between Groups | 644.521 | 2 | 322.260 | 17.203*** |
| Within Groups | 5338.698 | 285 | 18.732 | |
| Total | 5983.219 | 287 | | |

*** $p < .001$.

As presented in the previous table, there are statistical significant differences between the mean scores of the three types of peer group in the classroom, [$F_{(2, 285)} = 17.203$, $p < .001$]. A follow-up Post hoc t-test (Scheffe; Bonferroni) was used to define the nature of these differences in loneliness scores of the three types of peers, as shown in Table 14.

Table 14

Shows the Significant Differences in Loneliness Scores of Deaf Children According to Peer Relations in the Classroom (High, Average, and Low Acceptance).

| Comparison Groups | Mean | Std. Deviation | T |
|---|---|---|---|
| High Acceptance | 7.4479 | 4.4340 | -.114 n.s. |
| Average Acceptance | 7.3333 | 4.3448 | |
| High Acceptance | 7.4479 | 4.4340 | 3.114*** |
| Low Acceptance | 10.5625 | 4.2023 | |
| Average Acceptance | 7.3333 | 4.3448 | 3.229*** |
| Low Acceptance | 10.5625 | 4.2023 | |

* p < .05.      ** p < .01.       *** p < .001

N 1 = N 2 = N 3 = 96

By calculating the differences between the mean scores for each two groups of the three groups: high, average, low acceptance, it is clear that no statistical significant difference was found between children's mean scores high and average acceptance within peer group in the classroom where [t (96) = 0.11, p > .05]. However, there were statistical significant differences between deaf children's mean scores high and low acceptance, the low acceptance deaf children reported higher levels of loneliness than did the high acceptance children [t (96) = 3.11, p < .001]. Also, there were statistical significant difference between the mean loneliness scores of average and low accepted deaf children, where, the low acceptance children reported higher levels of loneliness than did the average acceptance [t (96) = 3.229, p < .001].

It is clear now that there are statistical significant differences between deaf children's loneliness scores within the two types of peer groups in the class-room, high acceptance, average acceptance, and low acceptance. Results of

these analyses supported previous finding (e.g., Asher & Wheeler, 1985; Crick & Ladd, 1993; Renshow & Brown, 1992; Sletta, Valas, & Skaalvik, 1996; Youngblade, Berlin, & Belsky, 1999). However, these result unlike with The Terrell-Deutsch study results (1991) that found that there is no significant difference between popular, average and unpopular children in reported loneliness experiences.

This result seems to be logical because, children who are well accepted by peers are more likely to have more opportunities for emotional and social support. Because they are well liked by their peers and not excluded from the community activities, they learn and acquire more social skills that, in turn, enable them to adapt easily with the others, including peers. An accepted child's perception that they are well liked by peers may result in positive self-esteem and increased self–confidence and feelings of trust toward peers; such supportive provisions, can, to a considerable extent, inhibit young children's feelings of alienation and loneliness at school.

Furthermore, children who are highly accepted by their classmates are more likely to have more friends (whether friendships of quality or quantity), as it is known that friendships may directly decrease children's feelings of loneliness (Asher, Hymel, & Renshaw, 1984; Parker & Seal, 1996; Parker & Asher, 1993; Renshaw & Brown, 1992).

Friendship and peer acceptance are closely linked dimensions of children's interactions with peers; both of them provide children with social support, lack of conflict, sense of security, and self affirmation that, in turn, may inhibit the negative emotional status including loneliness distress (Burgess at al, 1999, p.113). As well, peer group acceptance in classrooms help children to satisfy their needs for belonging to a group, this sense of belonging, in turn is associated with lower loneliness.

In contrast, children who are poorly accepted by their peers are more likely to report higher levels of loneliness than better accepted children; consistent with

this finding are several researches, such as (Cassidy & Asher, 1992; Asher, Hamel & Renshaw, 1984; Parkhurst &Asher, 1992), they have suggested that lower accepted children were more lonely than higher accepted children. The previous results are consistent with what Wahl, Weinert and Huber (1984) mentioned as they indicated that isolation in classrooms results form feelings of being ignored and left out by peers and receiving little interest in peer activities. Over time, this may lead to more behavioural difficulties such as: feelings of unsecurity, fear of failure, avoidant behaviour, social withdrawal and aggressive behaviour. This in turn, may increase feelings of being left out by peers and consequently feeling of isolation (p. 150-151). Children who are not accepted by their peers are more likely to feel dissatisfied with their peer relationships and this may undermine their trust and sense of security toward their classmates, those children are more likely to be avoided by their classmates denied access to peer activities, and excluded from peer group activities; these may reduce their sense of belonging and self-esteem, that, in turn, may be an important predictor to children's feelings of alienation and loneliness. Children who are poorly accepted or rejected by their classmates tend to withdraw from peer interactions and isolate themselves from social and peer group activities in school or tend to be aggressive with their peers. Over time, these feelings of isolation, withdrawal and hatred that may accompany them, lead children to feel the distress of loneliness, thus, children become trapped within a self-perpetuating cycle.

It should be noted that, the previous results found no statistical significant differences in loneliness scores between high and average accepted deaf children [t (96) = 0.11, p > .05]. This value is not significant. This may due to the fact that those children with average acceptance have received an equal number of both positive and negative nominations and among these positive nominations, the child may have friends that make him feel less loneliness, or that low peer acceptance was received by peers for a short time and has not continued. Furthermore, those children with average acceptance could trust and depend on

their classmates whom they like more than peers whom they dislike. and because they receive an equal number of positive and negative nominations by peers, this may help in deterring blaming themselves for their inabilities for establishing new friendships or acquiring social skills, hence, they direct blaming to the others to be the reasons for their failure and their evidence for that, the positive number of nominations that they have received from their peers.

It is also important to note that, the early findings found significant differences, high–average acceptance, on one hand, and low acceptance on the other hand. The difference between high and low acceptance was [t (96) = 3.11, p < .001]. And between average and low acceptance [t (96) = 3.229, p < .001]. They were all significant statistically at a .001 level. This finding has shown that high and average acceptance are in the contrast of low acceptance, and that children who are not well accepted by their peers, are more susceptible to psychological difficulties and maladjustment, they need programs for training on social skills, these programs will be fruitful, as they will bring children out the cycle of low acceptance even if they couldn't reach a high acceptance cycle.

### 3.1.5. Research Question 5

The fifth research question was, Are there statistical significant differences among deaf children in mean loneliness scores according to the parental treatment styles of indulgence and strictness?

T-test was used in examining this hypothesis by a comparison of loneliness mean scores of deaf children with indulgent parental style and the deaf children group with a strict parental style. The results of the statistical analyses of the scores of the two groups have demonstrated that a statistical significant difference was found in loneliness mean scores between deaf children whose parents' treatment style was indulgence, and deaf children whose parents' treatment style was strictness; this difference was in favour of deaf children with

strict parents, [t (80, 73) = 2.678, p < .01]. The following table presents the results of these comparisons.

Table 15

Shows the Significant Differences in Loneliness Scores of Deaf Children According To the Parental Treatment Styles Indulgence, Strictness.

| Comparison Groups | N | Mean | Std. Deviation | T |
|---|---|---|---|---|
| Parental Indulgence | 80 | 8.1125 | 4.9401 | 2.678 ** |
| Parental Strictness | 73 | 10.1233 | 4.2848 | |

** p < .01

The current results has demonstrated that deaf children with strict parents were more lonely than deaf children with indulgent parents. This result seems to be logical, because when parents use indulgence when treating their children, it would be possible that parents provide their children with opportunities of expressing themselves, their opinions and their inner feelings, whether they were consistent or inconsistent with other people but in an acceptable manner. Those parents who were indulgent with their children were, to a large extent, democratic parents as they teach their children how to take their rights and how to do their duties in an approving way, and they are more supportive to their children's needs, emphasizing their children's sense of competence; in addition, they use advice and counselling when their children are mistaken. Children in such an indulgence climate will be able to respect other people' points of views and accept criticism received from others, they may also be able to establish successful social relations and better social skills. This may be a predictor of increasing children's sociability and reducing their loneliness.

Furthermore, parents' adaptation of an indulgence manner in their interactions with their children through allowing children to participate in making familial decisions and open discussions, may be an effective factor to prevent some social difficulties experienced by deaf children. This parenting style, on one hand, would be an earlier remedy of the child's social problems before having greater negative results; on the other hand, parental indulgence may strengthen

the parent-child relationship to be a relation based on warmth and affection rather than fear, and parents may develop self-confidence in their children as well. Moreover, parents using this fair style in interacting with their children, may support greater social support for those deaf children by regarding their children as valued and giving them more time for discussing their social problems within and outside the family context; with such parental support, deaf children may feel companionship and emotional support, consequently, deaf children may feel less lonely.

It is important to note that one of the deaf children's characteristics is that they are more likely to be rigid and stubborn in their opinions, therefore using parents democratic and indulgence styles in interaction with deaf children it may be more profitable than using a strictness style, as indulgence received from parents may deepen parent-children relationship to be more close to each other, feel more commitment to one another, and avoid more conflicts with which deaf children may be locked and incomprehensible. This in turn, leads to more loneliness. Therefore, indulgent parents may on one side, promote their children's interpersonal growth by giving them an amount of freedom and in achieving their own aims; on the other side, they support children to maintain the family system and to be obedient to the familial decisions by using convincing and counselling, not by using blind compliance.

In contrast, children with strict parents may experience negative interactions with their parents; those children are more likely to experience social withdrawal, introversion, and isolation, which may cause children to feel more lonely. According to Marcaen and Brumagne (1985), children who lack opportunities for autonomy may experience conflicts and insufficient understanding; consequently feelings of loneliness are expected to increase (p.1025).

The excessive parental fear about deaf children as they are disabled and can neither perceive danger nor protect themselves may motivate parents to sometimes be over protectors and even stricter in treating their deaf children by

using more restrictions and authorities. This may cause deaf children to be deprived of recognising and disclosing the outside world, as well as, they may be deprived of social interaction opportunities with other people, since they have less social skills, social withdrawal, and passivity in human interactions.

### 3.1.6. Research Hypothesis 6

The sixth research question was, Are there statistical significant differences among mean loneliness scores of deaf children according to the parental treatment styles of acceptance, neglection, and rejection?

To demonstrate differences in deaf children's loneliness scores into three types of the parental treatment styles of acceptance, neglection, and rejection, a one way analysis of variance (ANOVA) has been employed. The statistical analysis results of loneliness scores of the three groups of children revealed that statistical significant differences ware found among the deaf children's loneliness scores within the three groups, $[F (2, 285) = 21,772 \ p < .001]$. The following Table presents the results of these analyses.

Table 16

Shows the Results of the One Way Analysis Of Variance for Deaf Children's Loneliness According to The Parental Treatment Styles Acceptance, Neglaction, Rejection.

| Source of variation | Sum of squares | df | Mean square | F |
|---|---|---|---|---|
| Among Groups | 793.000 | 2 | 396.500 | 21.772 *** |
| Within Groups | 5190.219 | 285 | 18.211 | |
| Total | 5983.219 | 287 | | |

*** $p < .001$.

After using one way analysis of variance, Post hoc t-test (Scheffe; Bonferroni) was used to define the nature of these differences in loneliness scores among deaf children inside the three types of parental treatment styles: acceptance, neglection, rejection, as shown in the following Table.

Table 17

Shows the Significant Differences in Loneliness Scores of

Deaf Children According to the Parental Treatment Styles

Acceptance, Neglection, Rejection

| Comparaison Groups | Mean | Std. Deviation | T |
|---|---|---|---|
| Parental Acceptance | 6.2396 | 3.5056 | 2.625*** |
| Parental Neglection | 8.8646 | 4.7030 | |
| Parental Acceptance | 6.2396 | 3.5056 | 4.000*** |
| Parental Rejection | 10.2396 | 4.4974 | |
| Parental Neglection | 8.8646 | 4.7030 | 1.3750 n.s. |
| Parental Rejection | 10.2396 | 4.4974 | |

* p < .05.   ** p < .01.    *** p < .001

  N 1 = N 2 = N 3 = 96

   By calculating the difference between the mean scores of each of the two groups of the three groups: parental acceptance, neglection, rejection, it is clear that, statistical significant differences were found in loneliness mean scores between deaf children whose parents' style was acceptance, neglection; in favour of neglected deaf children. Deaf children whose parental style was neglection reported significantly higher loneliness than children whose parental style was acceptance (t = 2.625, p < .001), as shown in Table 17. As presented in the same table, a statistical significant difference was found in the  loneliness mean score of  deaf children whose parents' style was acceptance; rejection, in favour of rejected deaf children, deaf children whose parental style was rejection reported significantly higher levels of loneliness than children whose parental style  was acceptance  (t = 4.00, p < .001). However, there is no statistical

significant difference in means loneliness scores between deaf children whose parents' style was neglection and rejection (t = 1.375, p > .05).

This finding is consistent with several previous studies which indicated that early negative attachment experiences between child and parents may be a predictor for later loneliness and insecure feelings (e.g.., Berlin, Cassidy & Belsky, 1995; Brennan, 1982; Leiderman, 1980; Peplau, Miceli & Marasch, 1982; Perlman & Peplau, 1981). Results similar to these have been obtained by Davis and Franzio (1986); Franzio and Davis (1985). They have indicated that a negative association was found between parental warmth and loneliness.

This difference in loneliness scores can be attributed to the difference of the three types of parenting styles. Children whose parents interact with them in an approving way and treat them warmly may experience secure feelings and trust each other. Since family context may be considered as the first figure of a deaf child's social interactions with the outside world. Therefore, the positive parent-deaf child interactions may clearly influence the deaf child's interactions with other people outside the family environment. These positive interactions with parents my lead deaf children to establish more social relations, which in turn result in more social skills and less loneliness. On the contrary, those children rejected by their parents and whose parents tends to be censurer, punitive, critic, and disapproving, may feel that they are disliked or rejected by their parents; this feeling over time may lead those children to be aggressive in their interactions with other people. Therefore, those children are more likely to be disliked and avoided by other people or to be introverted, isolated, and socially withdrawn from other people, including parents. Since those children feel that they are disliked they cause several problems and receive continuous criticism from other people. Those children seek solitude, however, and over time this mechanism may lead to feeling lonely.

The need for affection, security, and companionship are real basic needs which parents should provide their children, a parents failure to satisfy these

needs may lead children to experience later behavioural problems, such as, fear or anxiety.

In addition, the parents who use a rejection style with their children could use this trait commonly in the parent's life, and it could even be their life style, because if parents reject their children, it could be possible they reject other people like peer. This will affect children from two sides: the first side, those parents may draw back the social friction and exchanging visits with other families, therefore they may deprive their children from interacting opportunities with the children of other families; the second side, those deaf children may learn these behaviours of rejecting people by imitating or modelling their rejecting parents, siblings, or peers in a classroom. This rejecting style leads deaf children to be trapped inside a circle of rejection and contrary rejection. Baker, Barthelemy, and Kurdekr (1993) have indicated that children's behaviour inside the classroom may be  well influenced by parents behaviours with them inside the family, and that rejected peer status in the classroom has been associated with familial factors which may support in minting these problems in the children; such as: low warmth, authoritarian, high conflict, and divorce. Moreover, some studies found that there was an association between rejection and children's social and behavioural problems, such as: social withdrawal (French & Waas, 1985), negative self concept in deaf children (Warren & Hasenstab, 1986), aggression (French & Waas, 1985; Rohner, 1986), and hyperactivity (French & Waas, 1985; King & Young, 1981). A similarity of these results has been obtained by Rohner (1986) through the several studies on the relation between parental rejection and acceptance and evaluating the child's personality. He indicated that significant positive relations have been found between parental rejecting and more individual problems, such as, emotional unresponsiveness, aggression, negative self evaluation, negative world views, and emotional instability (p. 96).

With regard to neglection, it can take several forms. Rohner (1986) mentioned

these forms: physical neglect, educational neglect, and emotional neglect (p.180-181). Furthermore, one of the neglection types which may cause loneliness is that children who live away from their parents, like children who live in residential schools. Support for this view comes from Quay (1992), who indicated that children whose both parents or single parent were at home and living with them were significantly less lonely then children living away from their parents. Furthermore, neglection may be caused by parents' divorce which has great psychological influences on the child, especially in early stages of age (Perlman & Peplau, 1981, p. 44).

Parents with deaf children may neglect training their children in social skills and providing them with advice on the social rules to interact with other people. They found that it would be easier for them to do things for their deaf children than training them to do it; this may be due to the communication difficulties with deaf children. Over time, this may result in the children's lack of social and knowledge growth, and they, consequently feel more lonely. It is important to note that when neglection comes from important people for the children like parents as they are the source of affection and protection and care providers, may have an intense feeling of being left out and neglected, and that may have great psychological influence on those children, and they are more vulnerable to feelings of loneliness.

In studying the difference between the mean scores of the three groups, it was found that the difference between acceptance on one side, and neglection and rejection on the other side was significant at a .001 level. Whereas the difference between the scores of parental neglection and parental rejection is no significant. This may due to the fact that both of them can be classified under the name of negative parent styles. Rohner (1986) using this view of parental acceptance and rejection in his "parental warmth" continuum, placed parental acceptance on an end of his continuum, and the other end is marked by rejection, he defined rejection under three types of rejection: aggression, neglect, rejection. I think

that neglection is classified under the current measure in the middle of the continuum, however it is not exactly in the middle, and it is nearer to rejection than to acceptance, because it is included under negative treatment by parents.

### 3.1.7. Research Question 7

The seventh research question was, "Is there a statistical significant interaction between parental treatment styles (parental indulgence, strictness), and peer relations in classroom (high, average, and low acceptance) on the feelings of loneliness among deaf children?

Two way analysis of variance (2x3) was used to examine this question. The results of the statistical analyses of loneliness scores for deaf children have demonstrated interaction between parental treatment styles and peer relations in classroom on the loneliness scores among deaf children. The following Table presents the results of this analysis.

Table 18. Shows the Results of the Two Way Analysis of Variance (2 x 3), Parental Treatment Styles (Indulgence, Strictness) X Peer Relation (High, Average, and Low Acceptance) for Deaf Children's Loneliness Scores.

| Source of Variation | Sun of Squares | df | Mean Square | F |
|---|---|---|---|---|
| Among Groups | 614.558 | 5 | | |
| Among Parental Styles (Indulgence-Strictness) | 86.094 | 1 | 86.094 | 4.710 * |
| Among Peer Relation (High, Average, Low Acceptance). | 408.058 | 2 | 204.029 | 11.161*** |
| Interaction between Parental Styles X Peer Relation. | 120.406 | 2 | 60.203 | 3.293* |
| Within Groups (Error). | 2413.043 | 132 | 18.281 | |
| Total | 3027.601 | 137 | | |

* p < .05.    ** p < .01.    *** p < .001

As shown in the previous table, a statistical significant interaction was found between parenting styles, indulgence, strictness, and peer relations in classroom high, average and low acceptance on deaf children's loneliness scores, where [$F (2, 132) = 3.29, p < .05$]. It was presented also in the previous Table, the signifycant influence of parental indulgence-strictness styles on loneliness scores of deaf children [$F (1, 132) = 4.71, p < .05$]. At the same table, the statistical significant influence of peer relations in classroom high, average, and low acceptance on loneliness scores of deaf children was evident where [$F (2, 132) = 11.16, p < .001$]. These results are consistent with the fourth and fifth hypotheses results. However, it is surprising to note that peers have greater influence on deaf children's scores of loneliness than parental influence where significance level of parental impact was .05, while the peer relation significance level was .001, since deaf peers are more likely to have more influence than parents on deaf children because they have the same disability. This mutual disability causes them to understand each other easily as they have the same psychological and social characteristics, and they may experience the same difficulties as well. In addition, deaf children's social world may be more restricted to the deaf people as they spend most of their time with deaf individuals experiencing mutual hobbies or activities. This view will be more evident in deaf children of hearing parents, especially if we take into consideration that more than 90% of deaf children were born to hearing parents. Therefore, if this study was applied on a sample of hearing children, the results would be the contrary of that, because parental influence would be greater than peers, the following figure shows this interaction.
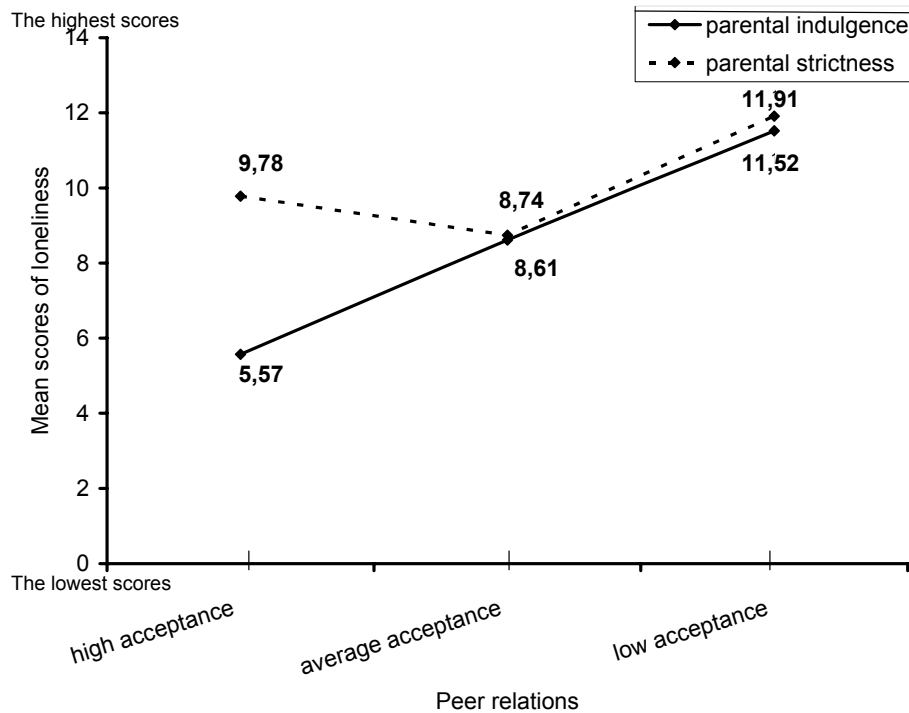
Figure 4

Mean Scores of Loneliness as Functions of Interaction Between
Parental Treatment Styles (Parental Indulgence, Strictness), And
Peer Relations in Classroom (High, Average, Low Acceptance).

The following Table presents the means and standard deviation for each of the
six groups.

Table 19

Means and Standard Deviation of Deaf Children

Loneliness Scores, for Each of the Six Groups.

| Peer Relations<br>Parental styles | High<br>Acceptance | Average<br>Acceptance | Low<br>Acceptance |
|---|---|---|---|
| Parental Indulgence | M = 5.57<br>SD = 3.87 | M = 8.61<br>SD = 5.22 | M = 11.52<br>SD = 4.09 |
| Parental Strictness | M = 9.78<br>SD = 4.08 | M = 8.74<br>SD = 3.93 | M = 11.91<br>SD = 4.32 |

Follow-up two way analysis of variance (2x3), Post hoc t-test was used to compare among six groups, to determine the nature of differences in loneliness scores. The following Table shows results the comparison between the six groups in the scores the loneliness by using Post hoc t-test.

Table 20

The Results of the Comparison between
the Loneliness Scores for Six Groups.

| Groups | 1 | 2 | 3 | 4 | 5 | 6 |
|--------|---------|------|------|------|------|---|
| 1 | | | | | | |
| 2 | 4.22 | | | | | |
| 3 | 3.04 | 1.17 | | | | |
| 4 | 3.17 | 1.04 | 0.13 | | | |
| 5 | 5.96** | 1.74 | 2.91 | 2.78 | | |
| 6 | 6.35*** | 2.13 | 3.30 | 3.17 | 0.39 | |

* p < .05.     ** p < .01.    *** p < .001.

The abbreviated variable labels used in table 20 are as follows:
1. High acceptance by peers / parental indulgence.
2. High acceptance by peers / parental strictness.
3. Average acceptance by peers / parental indulgence
4. Average acceptance by peers / parental strictness.
5. Low acceptance by peers / parental indulgence
6. Low acceptance by peers / parental strictness.

As presented in the table 19, and figure 4, loneliness mean scores for the six types of interactions were arranged as following from the highest to the lowest: low acceptance by peers / parental strictness; low acceptance from peers / parental indulgence; high acceptance by peers / parental strictness; average acceptance by peers / parental strictness; average acceptance from peers / parental indulgence; high acceptance from peers / parental indulgence (11.91 ; 11.52 ; 9.78 ; 8.74 ; 8.61 ; 5.57  respectively ). The following figure presents these comparisons.

Figure 5.

Mean Scores on Deaf Children Loneliness by Six Groups
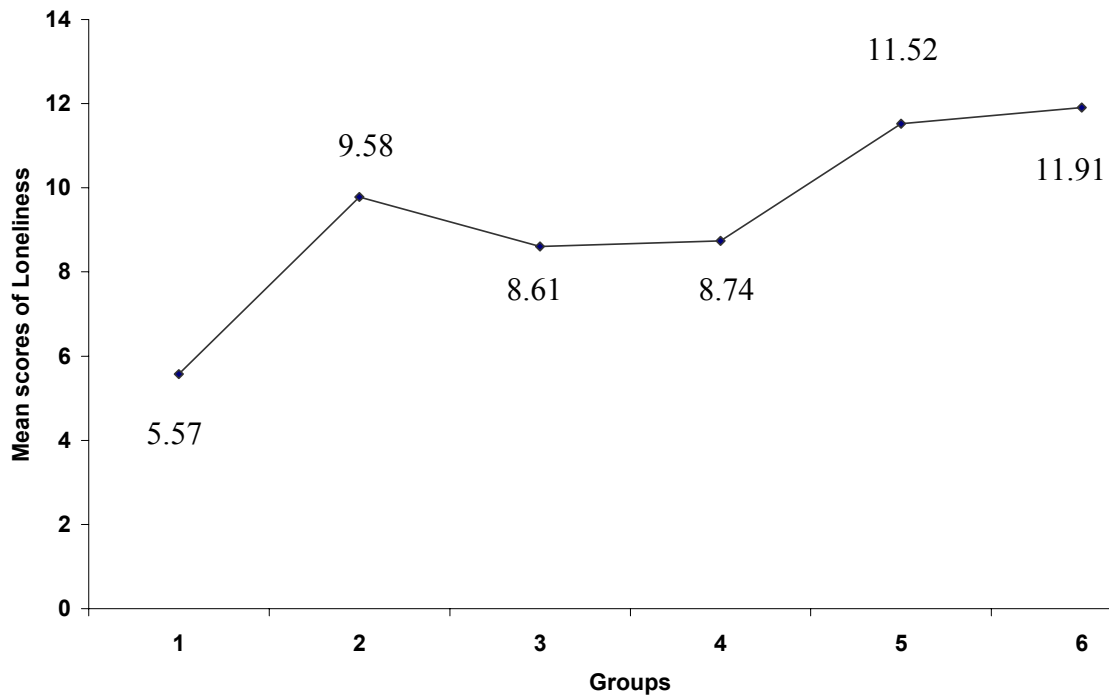


As presented in the table 20, comparisons between the high acceptance by peers / parental indulgence and the high acceptance by peers / parental strictness; average acceptance by peers / parental indulgence; average acceptance by peers / parental strictness were not significant 4.22, 3.04, and 3.17, respectively, $p > .05$. As can be seen from Table 20, comparisons between the high acceptance by peers / parental strictness and average acceptance by peers / parental indulgence; average acceptance by peers / parental strictness; low acceptance by peers / parental indulgence; low acceptance by peers / parental strictness were not significant 1.17, 1.04, 1.74, 2.13, respectively, $p > .05$. Comparisons between the average acceptance by peers / parental indulgence and average acceptance by peers / parental strictness; low acceptance by peers / parental indulgence; low acceptance by peers / parental strictness were not significant 0.13, 2.91, 3.30, respectively, $p > .05$. Comparisons between the average acceptance by peers / parental strictness and low acceptance by peers / parental indulgence; low acceptance by peers / parental strictness were not significant $t = 2.78$ and 3.17 respectively, $p > .05$. In addition, comparisons

between low acceptance by peers / parental indulgence and low acceptance by peers / parental strictness t = 0.39, p >.05. However, the comparison between high acceptance by peers / parental indulgence and low acceptance by peers / parental indulgence; low acceptance by peers / parental strictness was significant t = 5.96, p < .01; 6.35, p <.001, respectively.

Through the results of the comparison between the loneliness mean scores among the six groups of interaction by using Post hoc t-test as presented in table 20. It should be noted that the highest differences among these six groups was between deaf children who received high acceptance from peers with indulgence parents and deaf children who received low acceptance by peers in classroom with strict parents (t = 6.35, p < .001), the deaf children whose low acceptance by peers with strict parents reported higher levels of loneliness than deaf children whose high acceptance from peers with indulgence parents; And between  deaf children who received low acceptance by peers with indulgence parents reported higher levels of loneliness than children whose  received high acceptance from peers with indulgence parents (t = 5.96,   p< .001). These differences show that low acceptance received from peers and parental strictness is more effective in increasing feelings of loneliness among deaf children than high acceptance by peers with a parental indulgence style.

While deaf children who are poorly accepted by peers experience loneliness distress, a parental strictness style may result in higher levels of loneliness, this interaction may be attributed to the fact that loneliness may be a product of an interaction between the two most important social networks by which deaf children can be well influenced in childhood years, parents and their style in interacting with their deaf children, and peer relations and the quality of deaf children-peer relationships. Those parents who provide their children with some autonomy and freedom in their behaviours may promote self-dependence and self–confidence in their children when interacting with other people; in addition, the quality of deaf children-peer relationships inside the classroom, especially

when they are well accepted by their peers, they would be able to participate in peer activities, and acquire more social skills. However, positive parent-children relationships may be reflected in the children's representations of their peer relations, therefore, peers may be a source of affection and security for deaf children, such positive relationships with both parents and peers may result in increasing children's sociability and reducing their loneliness. In contrast, those children whose parents are strict and at the same time are not accepted by their peers are more likely to be socially withdrawn and aggressive in their interactions with other people; social withdrawal and aggression were found to be positively related to the loneliness experience. Overall, the parenting style and peer relations in classroom are supportive and complete each other in influencing deaf children. According to Hojat (1982b), children whose parents had not devoted enough time to them, received less attention and love from them, or their parents had never understood them, are more likely to experience loneliness distress. And the children who were not able to establish satisfactory relationships with peers during childhood years are more likely to feel lonely in adulthood. Support for these results comes from Palautzian and Fllison (1982), who indicated that the quality of parent-child relationships and the quality of childhood peer relations is all negatively related to later loneliness.

### 3.1.8. Research Question 8

Is there statistical significant interaction between parental treatment styles (parental acceptance, neglection, rejection), and peer relations in classroom (high, average, low acceptance) on the feelings of loneliness among deaf children?

To demonstrate this question, two ways analysis of variance (3x3) was used parental treatment styles (acceptance, neglection, rejection) x peer relation in classroom (high, average, low acceptance) on the deaf children loneliness scores. The following Table presents the results of these analyses.

Table 21

Shows Results of the Two Way Analysis Of Variance (3 X 3), Parental Treatment Styles (Acceptance, Neglection, Rejection), and Peer Relations (High, Average, Low Acceptance) for Deaf Children's Loneliness.

| Source of Variation | Sum of Squares | df | Mean Square | F |
|---|---|---|---|---|
| Among Groups | 1620.000 | 8 | | |
| Among Parental Styles (Acceptance, Neglection, Rejection). | 793.000 | 2 | 396.500 | 25.354*** |
| Among Peer Relation (High, Average, Low Acceptance). | 644.521 | 2 | 322.260 | 20.606*** |
| Interaction between Parental styles x Peer Relation. | 182.479 | 4 | 45.620 | 2.917* |
| Within Groups (Error). | 4363.219 | 279 | 15.639 | |
| Total | 5983.219 | 287 | | |

* p < .05.   *** p < .001.

As seen in the previous table, the results of statistical analysis of the children scores indicated interaction between parental styles (acceptance, neglection, rejection), and peer relations in classroom (high, average, low acceptance) on deaf children loneliness scores was significant statistically [F (4, 279) = 2.917, p < .05]. In the same table, there is a statistical significant influence of the parenting style, acceptance, neglection, rejection on the loneliness scores for deaf children [F (2, 279) = 25.354, p < .001]. The same table shows statistical significant influence for peer relations inside the classroom high, average and low acceptance on the loneliness scores [F (2, 279) = 20.606, p < .001]. This finding is consistent with the results of the fourth and sixth hypothesis, that a statistical significant difference was found in loneliness scores among deaf

children due to parental influence, or peer group influence. The following figure presents this interaction.

Figure 6

Mean Scores of Loneliness as Function of Interaction Between Parental Treatment Styles, Acceptance, Neglection, Rejection and Peer Relation in Classroom High, Average, Low Acceptance.
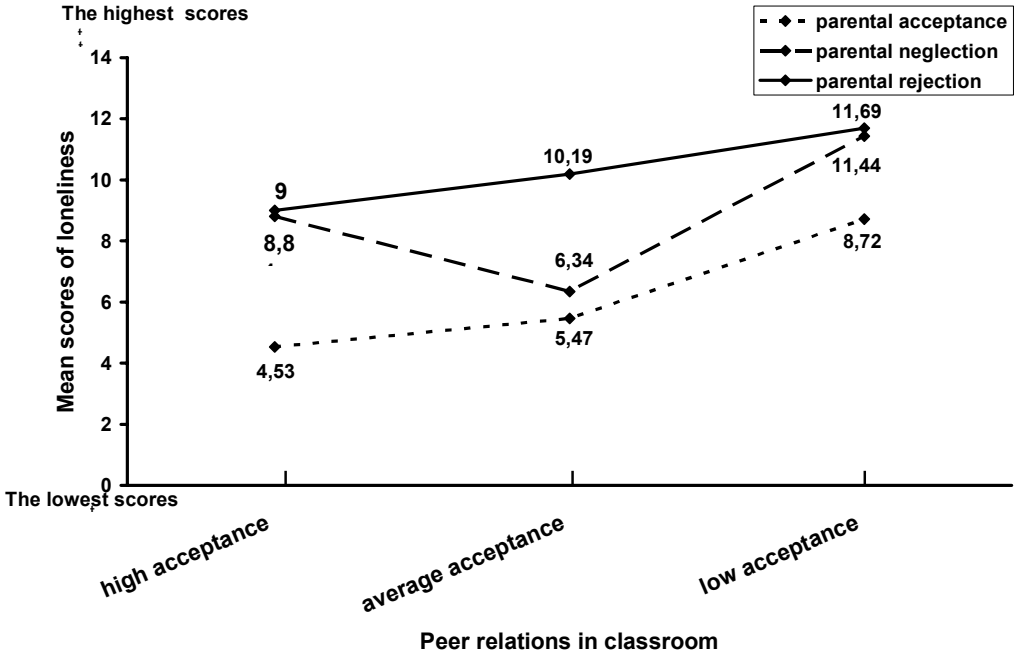


The following Table 22 presents the means and standard deviation for each of the nine groups.

Table 22

Means and Standard Deviations of Deaf Children

Loneliness Scores for Each of the Nine Groups.

| Peer Relations Parental Styles | High Acceptance | Average Acceptance | Low Acceptance |
|---|---|---|---|
| Parental Acceptance | M   = 4.53<br>SD = 2.72 | M   = 5.47<br>SD = 2.96 | M   = 8.72<br>SD = 3.39 |
| Parental Neglected | M   = 8.81<br>SD = 4.07 | M   = 6.34<br>SD = 4.21 | M   = 11.44<br>SD = 4.48 |
| Parental Rejection | M   = 9.00<br>SD = 4.80 | M   = 10.19<br>SD = 4.28 | M   = 11.53<br>SD = 4.16 |

Follow-up two way analysis of variance (3x3), Post hoc t-test was used to compare among nine groups, to determine the nature of differences in loneliness scores. The following Table presents the results the comparison between the nine groups in the scores of the loneliness by using Post hoc t-test.

Table 23

The Results of the Comparisons between Mean
Scores of Loneliness in the Nine Groups

| Groups | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|---|
| 1 | | | | | | | | | |
| 2 | 4.28** | | | | | | | | |
| 3 | 4.46** | 0.18 | | | | | | | |
| 4 | 0.93 | 3.34 | 3.53 | | | | | | |
| 5 | 1.81 | 2.47 | 2.66 | 0.87 | | | | | |
| 6 | 5.66*** | 1.37 | 1.19 | 4.72** | 3.84 | | | | |
| 7 | 4.19* | 0.92 | 0.28 | 3.25 | 2.37 | 1.47 | | | |
| 8 | 6.91*** | 2.62 | 2.44 | 5.97*** | 5.09** | 1.25 | 2.72 | | |
| 9 | 7.00*** | 2.72 | 2.53 | 6.06*** | 5.19** | 1.34 | 2.81 | 0.93 | |

\*\*\* $p < .001$.      \*\* $p < .01$.      \* $p < .05$.

The abbreviated variable labels used in table 23 are as follows:
  1. High acceptance by peers / parental acceptance.
  2. High acceptance by peers / parental neglection.
  3. High acceptance by peers / parental rejection.
  4. Average acceptance by peers / parental acceptance.
  5. Average acceptance by peers / parental neglection.
  6. Average acceptance by peers / parental rejection.
  7. Low acceptance by peers / parental acceptance.
  8. Low acceptance by peers / parental neglection.
  9. Low acceptance by peers /parental rejection.


The following figure presents these comparisons.

Figure 7

Mean Scores on Deaf Children's Loneliness by Nine Groups
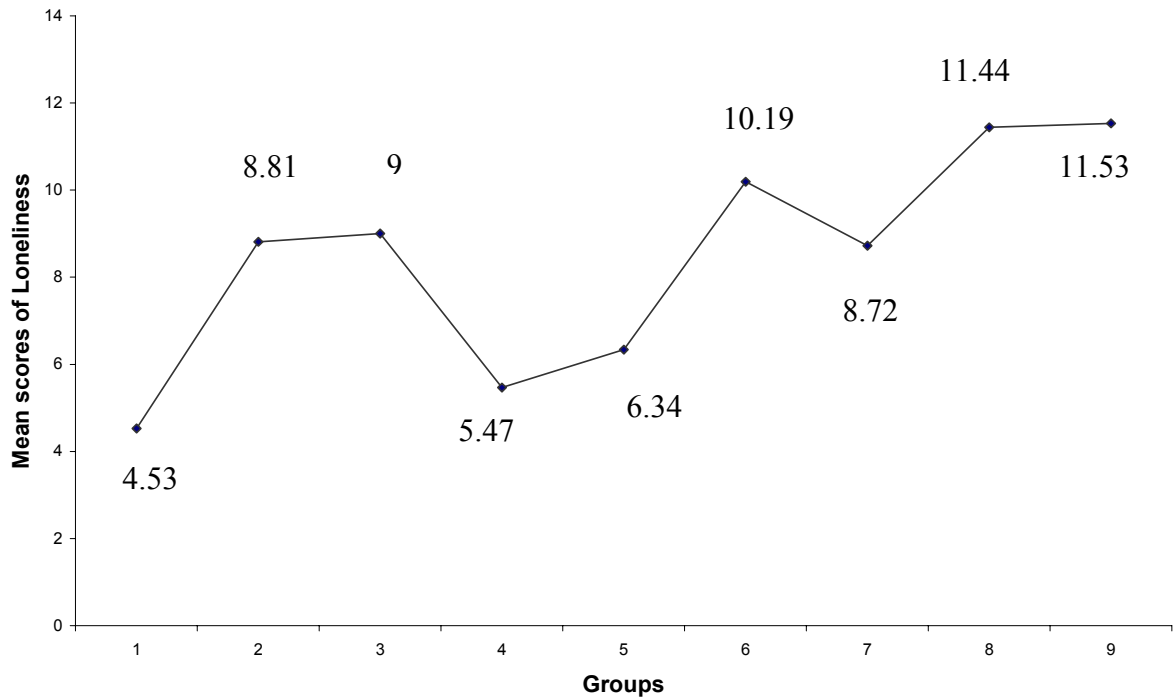


As noted in the table 22, and figure 7, the arrangement of loneliness mean scores for the nine types of interactions from the top to the bottom are as following: low acceptance by peer group / parental rejection; low acceptance by peer group/parental neglection; average acceptance by peer group/parental rejection; high acceptance by peer group/parental rejection; high acceptance by peer group/parental neglection; low acceptance by peer group/parental acceptance; average acceptance by peer group/parental neglaction; average acceptance by peer group/parental acceptance; high acceptance by peer group/parental acceptance ; 11.53; 11.44; 10.19; 9; 8.81; 8.72; 6.34; 5.47; 4.53; respectively.

Results of the differences between nine groups in loneliness scores by using Post hoc t-test as presented in in Table 23 have revealed that significant differences were found between high acceptance by peers/parental acceptance and high acceptance by peers/parental neglection t = 4.28, p < .01; high acceptance by peers/parental acceptance and high acceptance by peers/parental rejection t = 4.46, p < .01; high acceptance by peers/parental acceptance and

average acceptance by peers/parental rejection 5.66, p < .001; high acceptance by peers/parental acceptance and low acceptance by peers/parental acceptance. t = 4.19, p < .05; high acceptance by peers/parental acceptance and low acceptance by peers/parental neglection t = 6.91, p < .001; high acceptance by peers/parental acceptance and low acceptance by peers/parental rejection t = 7.00, p < .001. Deaf children whose high acceptance by peers/parental acceptance reported lower loneliness than children whose high acceptance by peers/parental neglection; high acceptance by peers/parental rejection; average acceptance by peers/parental rejection; low acceptance by peers/parental acceptance; low acceptance by peers/parental negection; low acceptance by peers/parental rejection. As can be seen from Table 23, significant differences were found between average acceptance by peers/parental acceptance and average acceptance by peers/parental rejection t = 4.72, p < .01; average acceptance by peers/parental acceptance and low acceptance by peers/parental neglection t = 5.97, p < .001; average acceptance by peers/parental acceptance and low acceptance by peers/parental rejection t = 6.06, p < .001, Deaf children whose average acceptance by peers/parental acceptance reported lower loneliness than children whose low acceptance by peers/parental neglection; low acceptance by peers/parental rejection. As noted in Table 23 significant differences were found between average acceptance by peers/parental neglection and low acceptance by peers/parental neglection t = 5.09, p < .01; average acceptance by peers/parental neglection and low acceptance by peers/parental rejection t = 5.19, p < .01, Deaf children whose average acceptance by peers/ parental neglection reported lower loneliness than children whose low acceptance by peers/parental neglection; low acceptance by peers/parental rejection.. However, other comparisons between nine groups indicated that no significant differences between these groups were found.

The significant differences in the findings have defined that the greatest of these differences was between the interacting groups at the two ends of the

continuum; whether for the parental style or for the peer group in classroom, where the  highest of the differences between the negative side group, and positive side for both continuum (parental acceptance with high acceptance by peers; in contrast of parental rejection with low acceptance by peers, where the difference scores was t = 7.00, p < .001.

This means that while deaf children experience loneliness distress through parental rejection, receiving low acceptance from peers may result in increasing loneliness. Low acceptance received from peers and parental rejection received from parents, have a greater influence in increasing deaf children loneliness than a high peer acceptance with parental acceptance.

This difference may be due to parents providing, warmth, approval, and acceptance, this may lead their children to feel a secure and trustworthy attachment with parents. Such secure parent-children attachment may lead children to develop more satisfied social relationships, support for developing these satisfactory relationships with other people including parents comes from the type of treatment received from peers in classroom, because  when the child is well liked and accepted by his peers, loneliness may be decreased. Moreover, children whose parents provide them with more attention, devote enough time to them, support, listen to their relational problems with peers, and provide them with the successful social relations rules. Consequently, parents using acceptance style with their children may influence their peer relations and loneliness experience. Children's peers relation in classroom influence their relationship with parents, as when the child is rejected by peers in a classroom, he tends to be aggressive with his parents and may be more likely to experience social and psychological maladjustment.

Belongingness needs can be satisfied through a child's relationships with parents and peers when a child is well liked and accepted by peers in classroom and by parents at home at the same time. Acceptance received from parents with non-acceptance by peers or the contrary, may influence the child's mental

health, and may lead the child to feel lonely. Some research indicated that not all peer-rejected children feel lonely and that some peer-accepted children feel lonely, this may due to the influence of other factors such as the parenting style, that is, this peer-rejected child may be well accepted by parent or vice versa.

Both parenting styles and peer relations have mutual interaction and influences, because parents are care providers, protectors, and secure givers for the child. Peers are the friends and playmates whom a child can talk with, and participate in group activities. Through parents, a child may develop more social skills by supporting him with social relationship rules and providing him with opportunities for interacting with other people. Through peers a child can train these social skills. However, child-peer relations may result in further social skills. Therefore, parents and peers play an effective role in the child's social life and one can not be substituted for the other. A lack of a satisfactory relationship with a parent may be more associated with emotional loneliness, whereas, lack in satisfactory relationships with peers may be more associated with social loneliness. These findings are consistent with the finding of Murphy and Newlon (1987) who found that satisfaction with parental and peer relationships was negatively associated with loneliness in deaf university students. Results similar to these have been obtained by Backenroth (1993) through his analysis of 59 deaf individuals' interviews; he found that a deaf individual's loneliness may due to three main factors: the family, the peers, and the situational factors.

Based on this hypothesis result, the deaf children who are well accepted by their parents and peers in classroom enjoy their life with high level of mental health, and social and psychological adjustment, and without psychological problems including loneliness.

**Implication and future research**

Loneliness is a complex problem resulting from multiple factors which overlap to contribute in the loneliness existence. These intervention factors

affect, and are affected with each other. Therefore, this study sought to identify some of these factors that play an effective role in deaf children's loneliness. This study was an attempt to study two factors: parental styles and peer relations, which were hypothesized to be factors that play an important role in deaf children's loneliness and their social and psychological adjustment as well, since a deaf child's life may be restricted between these two patterns. Negative parenting style and relational difficulties with peers in classroom may be etiological factors functionally related to deaf children's loneliness. In this study, we attempted to study the influence of each factor separately, and also the mutual influence of both these two factors on deaf children's loneliness, there is little research in peer relations effect in children's loneliness, however, rare interest with parental styles influence was found, or integration between both parent and peer influences in children's loneliness.

In addition, this study is the first attempt to investigate the loneliness experience among deaf children, despite the fact that deaf children are more vulnerable to feel lonely then their normal hearing peers. There is no mentioned interest by the earlier researchers to examine the loneliness problem in deaf children, this may due to the communication difficulties with the sample from one side, and there are no measuring instruments appropriate to this sample on the other side. Therefore, I attempted to construct new scales that are to a great extent, appropriate to deaf children's psychological and social characteristics and their age as well.

The findings of the present study indicated that there is an interaction and mutual influence of both parenting style and peer group in classroom on deaf children's loneliness scores, and that children who are well accepted by their classmates inside the classroom and have parental acceptance or indulgence style were less lonely than those children who are poorly accepted by their peers and their parental treatment style is neglection, rejection, or strictness. It was found also that there is negative correlation between parental promotion of peer

relations and deaf children's loneliness. The results revealed also that there is no difference between males and females in loneliness scores. In addition, the results indicated that deaf children reported higher levels of loneliness than did normal hearing children. These results, which to a considerable extend, may provide with much information that will be profitable in the field of children's loneliness and that contributed much to determine which positive parental styles and peer relations in classroom that sustained low levels of children's loneliness. There are some recommendations and implications to avoid or alleviate children's loneliness through some guidance and advice which may be helpful for the psychotherapy and mental health professionals, the workers in the school psychology and in education field such as teachers, psychological and social specialists, and parents and educators as well. Arising from the present study, several points in the field of children's loneliness can be taken into consideration for future research:

**First**

Designing counselling programs by holding conferences and lectures for the parents of deaf children to pay attention to the danger of the loneliness problem, and the later negative consequences of loneliness. And the early diagnosis of this problem and teaching them how to avoid their children being lonely by using the indulgence style in interacting with their deaf children and providing them with acceptance feelings. Moreover, parents should provide their children with opportunities to express their opinions and listen to their questions and provok children to participate in peer group activities and encourage them to develop relationships with other children by the parental contact and involvement with parents of other children. This may enable the child to spend more time with a friend. Furthermore, parents of deaf children should provide their children with the needed social skills to develop and maintain positive relationships with other people, including peers, which in turn may promote self confidence in their children in interacting with other people. Over time, this may

have a significant impact in reducing loneliness among deaf children. At the same time, parents should avoid rejection or strictness style in treating their deaf children, since rejection or strictness style may result in isolation or introversion. Such negative provisions certainly lead to more levels of loneliness.

This study has obtained sets of parent styles (acceptance, neglection, rejection; indulgence, strictness). However, through the review of psychology and education of deaf children it was noted that, other types of parental styles of treating deaf children have not been obtained in the present study and need to investigation in the future research, because they have great importance in understanding children's loneliness, such as: overprotection and parental intrusion and also the parent's relation with each other and the parental contact with their adult peers. In addition to the familial problems, such as: quarrelling, separation or divorce that may influence their children's behaviours, and may lead deaf child to feel lonely. Likewise, it is important to note that no research was found concerning the grandparents impact role in deaf children's loneliness, since grandparents sometimes have an effective role in bring up those children. Furthermore, children moving to a new school or to a new place, may lead them to lose their old friends and may find difficulties in developing new friendships, such areas deserve investigation in the future research.

In addition to this, the loneliness problem may be investigated in an earlier stage of age than the current sample age (the earlier childhood). This study maybe restricted only on the parent's style inside the family context including parents, siblings or neighbours through direct observation or interviews with parents and   siblings.

**Second**

Improving peer-child relationship, all the workers inside the school environment including teachers, psychological and social specialists, or school counsellors should help the introvert child to get out of his isolation by provoking him to participate in peer group activities and hobbies; this may be a

good opportunity for facilitating the social interaction with peers. Also, avoiding the competitive or individual climate among children. At the same time, enhancing the cooperation and affection among deaf children. This supportive learning environment may increase acceptance among those children and reduce rejection. Huber (1984) mentioned that the negative dimensions inside the classroom should be treated since social skills can be learned. Therefore, the results may be harmful if the school programs and curriculum's are not interested, and that educational psychology research in the social climate in school may be profitable not only in describing this climate, but also in applications and attitudes modification (p. 462-463).

Although, the current research has obtained the peer-child relationship inside the classroom, further factors with which child peer relations may be influenced have not been investigated before and should be studied in the future research, such as, the way of children's seating inside the classroom which may affect the children's relationship with each other and consequently the loneliness. Through my practical applying of the present research instrument on deaf children in schools, it was noted that children sit in rows, that may reduce child-child interaction, therefore it is possible to make a comparing study between the main ways of children sitting inside the classroom and its impact on children's loneliness, such as: sitting in circles, squares, or lines. Rather than, there is rare interest in teaching methods in classrooms and its influence on deaf children's loneliness. This important point needs to be investigated by making a comparing study on the effect of individualistic, competitive, and cooperative learning styles on deaf children's loneliness. Moreover, learning difficulties in deaf children may have an impact on loneliness feelings. All these points are fruitful areas for investigation in future studies.

Furthermore, no one can deny that a teacher has an effective role as a leader in classroom in developing loneliness feelings in children; however, there is rare interest with the teacher influence in children's loneliness. According to Durgess

et al (1999), positive relationship between the teacher and the child may support children to be more resistant to the negative interaction received from peers, and thus, are less vulnerable to loneliness feelings (p.132). Birch and Ladd's research (1997) aimed to investigate the association between teacher-child relationships and children's loneliness in school. The results indicated that children who had confliction relationships with their teacher were more lonely in school than did children with non confliction relationships with their teachers; and that children who were dependent on their teachers were more lonely than did less dependent children, that may be due to their high dependence on the classroom teacher and this may deprive them from exploring the school environment and establishing other social relationships including peer relations. Since the teacher has a great impact on the children's social and psychological adjustment in the classroom, the relationship between the teacher and deaf child and its effect on deaf child's loneliness may be an important research point especially an interaction study of the influence of parents, peers, and teachers on deaf children's loneliness.

It is important also to explore the role of the lonely person's cognitive factors, because the score of loneliness among accepted and rejected people is not equal, and some rejected persons don't feel lonely and some accepted people feel lonely. This may due to the one's sensitivity and his perceiving of acceptance or rejection or his attitudes towards the other people or perceiving discrepancy between what he wants or hopes for his social relationships and what one actually achieves.

Studying all these attitudes and their mutual influences on children's loneliness may help in developing a complete theory about all the dimensions that affect deaf children's loneliness.

**Third**

The results of the present study may help in designing counselling therapy programs for reducing level of loneliness for the children with high level of

loneliness. However, before designing these therapy counselling programs, it is important to determine the causative factors for loneliness, because, determining these contributing factors of loneliness may be profitable not only in counselling programs, but also in preventing this problem originally. This is what the current study attempted to do especially with main two factors in deaf children's life (parents and peers). This study revealed that positive relationships with both parents and peers lead to buffering children's loneliness and that parental rejection with low acceptance received from peers may be a contributing factor in increasing children's loneliness.

Rook and Peplau (1982) indicated that helping the lonely individuals sometimes involves changing the environment rather than the individual (p.374). Loneliness in deaf children may come from inability to develop social relationships or to communicate with other hearing people. Society has a great role in helping those deaf individuals to overcome their feelings of loneliness by involving them into the social activities and accepting deaf individuals as they are and by giving them an accepted place in the society (Meyer Gaev, 1976, p.114-120).

Although some counselling remedial programs have been available for loneliness, most of these programs are for adults and not specialized for children. Thus, these they programs may be inappropriate for the psychological and cognitive nature of children. Early prediction and early therapy for loneliness problems in childhood may prevent later psychological complex consequences from growing and prevent this problem to be increased. Cooperation is needed between psychology, education, and mental health scientists, as well as, the psychotherapy with parents, peers, and teachers, because a child is more related with parent, peers, and teachers than psychotherapist; therefore, success in any therapy program firstly depends on parents, peers, and teachers. This may be available by holding meetings,

conferences, or lectures to provide them with the best treating style with which loneliness level may be reduced.

**Fourth**

This research has presented some new scales for deaf children, such as, Parental Indulgence Strictness Questionnaire; Parental Acceptance Neglection Rejection Questionnaire; and Deaf Children Loneliness Scale. These new scales are more appropriate for deaf children, as they are simple and easy to administrate and they are more appropriate for the deaf child's psychological and cognitive nature. In addition, this instrument may help psychotherapists and psychologists in the early diagnosis of loneliness and parental treatment styles. Deaf children psychology is still poor in instruments specialized for deaf children; therefore, we are in need of new instruments specialized for deaf children, since most of instrument used for deaf children where used in earlier research designed for hearing children or adults.

# References

alles-Jardel, M., Fourdrinier, C., Roux, A., & Schneider, B. (2002). Parents' structuring of children's daily lives in relation to the quality and stability of children's friendships. *International Journal of Psychology*, 37, 65-73.

Andersson, L., Mullins, L. C., & Johnson, D. P. (1989). Parental intrusion versus social isolation. In M. Hojat & R. Crandall (Eds.), *Loneliness: Theory, research, and applications*. (pp. 125-134). London: Sage.

Antia, S. D., Kreimeyer, K. H., & Eldedge, N. (1993). Promoting social interaction between young children with hearing impairments and their peers. *Exceptional Children*, 60, 262-275.

Archibald, F., Bartholomew, K., & Marx, R. (1995).Loneliness in early adolescence: A test of the cognitive discrepancy model of loneliness. *Personality and Social Psychology Bulletin*, 21, 296-301.

Asher, S. R., Hymel, S., & Renshaw, P. D. (1984). Loneliness in children. *Child Development*, 55, 1456-1464.

Asher, S. R., Parkhurst, J. T., Hymel, S., & Williams, G. A. (1990). Peer rejection and loneliness in children. In. S. R. Asher & J. D. Coie (Eds.), *Peer rejection in childhood.* (pp. 253-273). New York: Cambridge University Press.

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

Avery, A. W. (1982). Escaping loneliness in adolescence: The case for androgyny. *Journal of Youth and Adolescence*, 11, 451-459.

Backenroth, G. A. (1993). Loneliness in the deaf community: A personal or an enforced choice? *International Journal of Rehabilitation Research*, 16, 331-336.

Baker, A., Barthelemy, K., & Kurder, L. (1993). The relation between fifth and

sixth graders' peer-rated classroom social status and their perceptions of family and neighbourhood factors. *Journal of Applied Developmental Psychology*, 14, 547-556.

Berlin, L. J., Cassidy, J., & Belsky, J.  (1995). Loneliness in children and infant-mother attachment: A longitudinal study. *Merrill-Palmer Quarterly*, 41, 91-103.

Bierman, K. L., & Smoot, D. L. (1991). Linking family characteristics with poor peer relations: the mediating role of conduct problems. *Journal of Abnormal Child Psychology*, 19, 341-356.

Birch, S. H., & Ladd, G. W. (1997). The teacher-chid relationship and children's early school adjustment. *Journal of School Psychology*, 35, 61-79.

Boivin, M., Poulin, F., & Vitaro, F. (1994). Depressed mood and peer rejection in childhood. *Development and psychopathology*, 6, 483-498.

Borys, S., & Perlman, D. (1985).Gender differences in loneliness. *Personality and Social Psychology Bullotion*, 11, 63-74.

Brennan, T. (1982). Loneliness at adolescence. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 269-290). New York: John Wiley.

Brubaker, R., & Szakowski, A. (2000). Parenting practices and behavior problems among deaf children. *Child and Family Behavior Therapy*, 22, 13-28.

Burgess, K. B., Ladd, G. W., Kochenderfeer, B.J., Lambert, S. F., & Birch, S. H. (1991) Loneliness during early childhood: The role of interpersonal behaviors and relationships. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in Childhood and Adolescence.* (pp. 109-134). Cambridge University Press.

Buri, J. R. (1991). Parental authority questionnaire. *Journal of Personality Assessment*, 57, 110-119.

Calderon, R., & Greenberg, M. (1993). Considerations in the adaptation of

families with school-aged deaf children. In M. Marschark & M. D. Clark. (Eds.), *Psychologial perspectiveson on deafness*. (pp. 27-47). Mahwah NJ: Lawerence Erlbaum Associates.

Galderon, R., Greenberg, M. T., & Kusche, C. A. (1991). The influence of family coping on the cognitive and social skills of deaf children. In D. S. Martin (Ed.), *Advances in cognition, education, and deafness*. (pp. 195-200). Washington: Gallaudet University Press.

Cappelli, M., Daniels, T., Durieux-Smith, A., Mcgrath, P., & Neuss, D. (1995). Social development of children with hearing impairments who are integrated into general education classrooms. *The Volta Review*, 97, 197-208.

Cassidy, J., & Asher, S. R. (1992). Loneliness and peer relations in young children. *Child Development*, 63, 350-365.

Cassidy, J., & Berlin, L. J. (1999). Understanding the origins of childhood loneliness: of attachment theory. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp. 34-55). Cambridge University Press.

Charlson, E. S., Strong, M., & Gold, R. (1991). How successful deaf teenagers experience and cope with isolation. *American Annals of the Deaf*, 137, 261-270.

Chava, Y., & Martin, D. (2002). Sibling relationships of deaf children: The impact of child and family characteristics. *Rehabilitation Psychology*, 47, 73-91.

Cheek, J. M., & Busch, C. M. (1981). The influence of shyness on loneliness in a new situation. *Personality and Social Psychology Bulletin*, 7, 572-577.

Cheng, H., & Furnham, A. (2002). Personality, peer relations, and self-confidence as predictors of happiness and loneliness. *Journal of Adolescence*, 25, 327-339.

Cooper, A. F. (1976). Deafness psychiatric illness. *British Journal of*

*Psychiatry*, 129, 216-226.

Crick, N. R., Grotpeter, J. K., & Rockhill, C. M. (1999). A social-information-processing approach to children's loneliness. In. K. J.Rotenberg., & S. Hymel (Eds.) *Loneliness in childhood and adolescence* (pp. 153-175). Cambridge University Press.

Crick, N. R. & Ladd, G. W. (1993). Children's perceptions of their peer experiences: attributions, loneliness, social anxiety, and social avoidance. *Developmental Psychology*, 29, 244-254.

Czernick, A., & Steinmeyer, E. (1974). Experience of loneliness in normal and neurotic Ss. *Archiv für Psychiatrie und Krankheiten*, 218, 141-159 (Psychological Abstract, 1974, 50, N. 7831).

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin,* 113, 487-496.

Davis, M. H., & Franzoi, L. (1986). Adolescent loneliness, self-disclosure and private self-consciousness: A longitudinal investigation, *Journal of Personality and Social Psychology*, 51, 595-608.

Deutsch, B. T. (1999). The conceptualization and measurement of childhood loneliness. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp. 11-33). Cambridge University Press.

Durgess, K. B., Ladd, G. W., Kochenderfeer, B. J., Lambert, S. F., & Birch. S. h. (1999). Loneliness during early children: the role of interpersonal behaviors and relationships. In K. J. Rotenberg., & S. Hymel (Eds.), *loneliness in childhood and adolescence*. (pp. 109-134). Cambridge University Press.

Ellison, C. W. (1978). Loneliness: A social-developmental analysis. *Journal of Psychology and Theology*, *6, 3-17.*

Franzoi, S. L., & Davis, M. H., (1985). Adolescent self–disclosure and loneliness: private self–consciousness and parental influences. *Journal of Personality and Social Psychology*, 48, 768-780.

French, D., Waas, G. (1985). Behavior problems of peer-neglected and peer-rejected elementary age children: Parent and teacher perspectives. *Child Development,* 56, 246-252.

Fromm-Reichmann, F. (1980). Loneliness. In J. Hartog, J. R. Audy, & Y. A. Cohen (Eds.), *The anatomy of loneliness* (pp. 338-361). New York: International Universities Press.

Goswick, R. A., & Jones, W. H. (1981). Loneliness, self–concept, and adjustment. *The Journal of Psychology*, 107, 237-240.

Gregory, S. (1998). Deaf young people: Aspects of family and social life. (Volume 2)  In M. Marschark & M. D. Clark. (Eds.), *Psychological perspectives on deafness*. (pp. 153-170). Mahwah NJ: Lawrence Erlbaum Associates.

Hanke, B., Huber, G. L., & Mandl, H. (1978). *Aggressiv und unaufmerksam*. München: Urban und Schwarzenberg.

Hecht, D.T., & Beum, S.K. (1984). Loneliness and attachment patterns in young adults. *Journal of Clinical Psychology*, 40, 193-197.

Henwood, P. G., & Solano, C. H. (1994). Loneliness in young children and their parents. *The Journal of Genetic Psychology*, 155, 35-45.

Hintermair, M. (2000).Children who are hearing impaired with additional disabilities and related aspects of parental stress. *Exceptional Children*, 66, 327- 332.

Hojat, M. (1982a). Loneliness as a function of selected personality variables. *Journal of Clinical Psychology*, 38, 137-141.

Hojat, M. (1982b). Loneliness as a function of parent-child and peer relation. *The Journal of Psychology*, 112, 129-133.

Hojat, M. & Crandall, R. (1989). Epilogue looking into the future. In M. Hojat & R. Crandall (Eds.), *Loneliness: theory, research, and applications*. . (pp. 271-272). London: Sage.

Huber, G. L. (1984). Social interaction als forschungsberich der pädagogischen

psychologie. In G. L. Huber., A. Krapp., & H. Mandel (Eds.), *Pädagogische psychologie als grundlage pädagogischen handelns.* (pp. 443- 498). München: Urban & Schwarzenberg.

Huber, G. L. (1994). *Individual orientation style: an overlooked determinant of integration.* Paper presented at the G.I.F. meeting on migration and immigration: Patterns of social and cultural integration – a multidisciplinary approach. Jerusalem

Hymel, S., Rubin, K., Rowden, L., & LeMare, L. (1990). Children's peer relationships: Longitudinal prediction of internalizing and externalizing problems form middle to late childhood. *Child Development*, 61, 2004- 2021.

Hymel, S., Tarulli, D., Thomson, L. H., & Terrell-Deutsch, B.T. (1999). Loneliness through the eyes of children. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp. 80-106). Cambridge University press.

Inderbityen-Pisaruk, H., Clark, M. L., & Solano, C. H. (1992).Correlates of lon- eliness in mid adolescence. *Journal of Youth and Adolescence*, 21, 151- 167.

Jackson, J., & Cochran, S. D. (1991). Loneliness and psychological distress. *The Journal of Psychology*, 125, 257-262.

Jacobson, J. L., & Wille, D. E. (1986). The influence of attachment patterns on developmental changes in peer interaction form the toddler to the presc- hool period. *Chid Development*, 57, 338-347.

Jones, W. H., & Carpenter, B. N. (1986). Shyness, social behavior and relations- hips. In W. H. Jones, J. M. Cheek., & R. Briggs (Eds.), *A sourcebook of shyness: Research and treatment* (pp. 227-238). New York: Plenum Press.

Jones, W. H, Carpenter, B. N., & Quintana, D. (1985) Personality and interpersonal predictors of loneliness in two cultures. *Journal of*

*Personality and Social Psychology*, 48, 1503-1511.

Jones, W. H. Freemon, J. E., & Goswick, R. A. (1981). The persistence of lone-liness self and other determinants. *Journal of Personality*, 49, 27-48.

Jones, W. H., Hobbs, S. A., & Hockenbury, D. (1982). Loneliness and social skill deficits. *Journal of Personality and Social Psychology*, 42, 682-689.

Kalliopuska, M., & Laitinen, M. (1991). Loneliness related to self–concept. *Psychological Reports*, 69, 27-34.

Kenneth, Z., & Altshuler, M. (1974). The social and psychological development of the deaf child: problems, their treatment and prevention. *American Annals of the Deaf,* 119, 365-379.

Kim, O. (2001). Sex differences in social support, loneliness, and depression among Korean college students. *Psychological Reports*, 88, 521-526.

King, C. A., & Young, R. D. (1981). Peer popularity and peer communication patterns: Hyperactive versus active but normal boys. *Journal of Abnormal Child Psychology*, 9, 465-482.

Ladd, G. W., Kochenderfer, B. J., & Coleman, C.C. (1996). Friendship quality as a predictor of young children's early school adjustment. *Child Development, 67,* 1103-1118.

Lane, H. (1988). Is There a (Psychology of the Deaf)? *Exceptional Children*, 55, 7-19.

Lau, S., Chan, D. W., & Lau, P. S. (1999). Facets of loneliness and depression among Chinese children and adolescents. *The Journal of Social Psych-chology*, 139, 713-729.

Lederberg, A. (1993). The impact of deafness on mother-child and peer relationships. In M. Marschark, & M. D. Clark (Eds.), *Psychologial perspectives on deafness* (pp. 93-119) Hillsdale, NJ: Lawrence Erlbaum Associates.

Leiderman, P. H. (1980). Pathological loneliness: A psychodynamic interpreta-tion. In J. Hartog., J. Audy., & Y. Cohen. (Eds.), *The anatomy of loneliness* (pp. 377-393). New York: International Universities Press.

Lieberman, A. F. (1977). Preschoolers, competence with a peer: Relations with attachment and peer experience. *Child Development*, 48, 1277-1287.

Lobdell, J., & Perlman, D. (1986). The intergenerational transmission of loneliness: A study of college females and their parents. *Journal of Marriage and the Family*, 48, 589-595.

Lafreniere, P. J., & Sroufe, L. A. (1985). Profiles of peer competence in the preschool: Interrelations between measures, influence of social ecology, and relation to attachment history. *Developmental Psychology*, 21, 56-66.

Luftig, R. L. (1988). Assessment of the perceived school loneliness and isolation of mentally retarded and nonretarded students. *American Journal on Mental Retardation*, 92, 472-475.

Manfredi, M. M. (1993). The emotional development of deaf children. In M. Marschark & M. D. Clark. (Eds.), *Psychological perspectives on deafness*. (pp. 49-63). Mahwah NJ: Lawrence Erlbaum Associates.

Marangoni, C., & Lckes, W. (1989). Loneliness: A theoretical review with impllications for measurement. *Journal of Social and Personal Relationships* .6, 93-128.

Marcoen, A., & Brumagne, M. (1985). Loneliness among children and young adolescents. *Developmental Psychology*, 21, 1025-1031.

Marcoen, A., Goossens, L., Caes, P. (1987). Loneliness in pre-through late adolescence: Exploring the contributions of a multidimensional approach. *Journal of Youth and Adolescence*, 16, 561-577.

Marcoen, A., Goossens. (1993). Loneliness, attitude towards aloneness, and solitude: age differences and developmental significance during adolescence. In S. Jackson & H. Rodriguez-Tome (Eds.), *Adolescence and its social worlds* (pp. 197-227). Hove (UK): LEA.

Margalit, M. (1994). *Loneliness among children with special needs*. New York: Springer-Verlag.

Marschark, M., & Clark, D. (1993). *Psychological perspectives on deafness*.

Hillsdale, NJ: Lawrence Erlbaum Associates.

Meeus, W., Osterwegel, A., & Vollebergh, W. (2002). Parental and peer attachment and identity development in adolescence. *Journal of Adolescence*, 25, 93-106.

Meyer Gaev, D. (1976). *The psychology of loneliness*. Chicago, IL: Adams Press.

Moore, D., & Schultz, N. R. (1983). Loneliness and adolescence: Correlations, attributions and coping. *Journal of Youth and Adolescence*, 12, 95-100.

Moos, R. ., & Moos, B. (1986). *Family environment scale manual* (2nd Ed.). Palo Alto, CA: Consulting Psychologists Press.

Moos, R. H., & Moos, B. S. (1994). *Family environment scale manual.* (3 nd ed.), Palo Alto, CA: Consulting Psychologists Press.

Moraldo, G. K. (1981). Shyness and loneliness among college man and women. *Psychological Reports*, 48, 885-886.

Mounts, N. S. (2000). Parental management of adolescent peer relationships: What are its effects on friend selection? In K. Kerns, J. Contreras, & A. Neal-Barnett (Eds.), *Family and peers: linking two social worlds* (pp. 169-193). Westport, CT: Praeger.

Mounts, N. S. (2002). Parental management of adolescent peer relationships in context: the role of parenting style. *Journal of Family Psychology*, 16, 58 - 69.

Murphy, J. S., & Newlon, B. J. (1987). Loneliness and the mainstreamed hearing impaired college student. *American Annals of the Deaf*, 132, 21-25**.**
   Nerviado, V. J., & Gross, W. F. (1976). Loneliness and locus of control for alcohol males: validity against murray need and cattell trait dimension. *Journal of Clinical Psychology*, 32, 479-484.

Newcomb, M. D., & Bentler, P. M. (1986). Loneliness and social support: A confirmatory hierarchical analysis. *Personality and Social Psychology Bulletin,* 12, 520-535.

Nurmi, J. E., Toivonen, S., & Eronen, S. ( 1997). Social strategies and lonely-
ness. *The Journal of Social Psychology*, 137, 764-777.

Page, R. M. (1990). High school size as a factor in adolescent loneliness. *High
School Journal*, Feb/ March, 150-153.

Page, R. M. (1991). Loneliness as a risk factor in adolescent hopelessness,
*Journal of Research in Personality,* 25, 189- 195.

Palautzian, R. F., & Ellison, C. W. (1982). Loneliness, spiritual well-being and
the quality of life. In L.A. Peplau & D. Perlman (Eds.), *Loneliness: A
sourcebook of current theory, research and therapy* (pp. 224-237). New
York: John Wiley.

Parker, J. G., & Asher, S. R. (1993). Friendship and friendship quality in middle
childhood: Links with peer group acceptance and feelings of loneliness
and social dissatisfaction. *Developmental Psychology*, 29, 611-621.

Parker, J. G., & Seal, J. (1996). Forming, losing, renewing, and replacing friend-
ships: Applying temporal parameters to the assessment of children's fri-
endship experiences. *Child Development*, 67, 2248-2268.

Parkhurst, J. T., & Asher, S.R. (1992). Peer rejection in middle school: subgroup
differences in behavior, loneliness, and interpersonal concerns, *Develop-
ment Psychology*, 28, 231-241.

Parkhurst, J. T., & Hopmeyer, A. (1999). Developmental change in the sources
of loneliness in childhood and adolescence: constructing a theoretical m
model. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood
and adolescence* (pp. 56-79). Cambridge University Press.

Pastor , D. (1981). The quality of mother-infant attachment and its relationship
toddlers' initial sociability with peers. *Developmental Psychology*, 17,
326-335.

Pavri, S., & Luftig, R. L. (2000). The social face of inclusive education: Are
students with learning disabilities really included in the classroom? *Prev-
enting School Failure,* 45, 8-14.

Peplau, L. A., Miceli, M., & Morasch, B. (1982). Loneliness and self-evaluation. In L. A. Peplua & D, Perman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 135-151). New York: John Wiley.

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

Perlman, D. (1989).Further reflections on the present state of loneliness research In M. Hojat & R.Crandall, (Eds,), *Loneliness: Theory, research and applications* (pp. 17-26). Newbury Park, CA: Sage.

Perlman, D., & Landolt, M. A. (1999). Examination of loneliness in children-adolescents and in adults: Two solitudes or unified enterprise? In K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence*. (pp. 325-347). Cambridge University Press.

Perlmen, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmour (Eds.), *Personal relationships: Personal relationships in disorder* (pp. 31-56) London: Academic press.

Perlman, D., & Peplau, L. A. (1982). Theoretical approaches to loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 123-134). New York: Wiley-Interscience.

Putallaz, M. (1987). Maternal behavior and children's sociometric stutus. *Child Development*, 48, 58, 324-340.

Quay, L. C. (1992). Personal and family effects on loneliness. *Journal of Applied Developmental Psychology*, 13, 97-110.

Rachford, D., & Furth, H. G. (1986). Understanding of friendship and social rules in deaf and hearing adolescents. *Journal of Applied Developmental Psychology,* 7, 391-402.

Renshaw, P. D. & Brown, P. J. (1992). Loneliness in middle childhood. *The Journal of Social Psychology*, 132, 545-547.

Renshaw, P. D., & Brown, P. J. (1993). Loneliness in middle childhood:

concurrent and longitudinal predictors. *Child Development*, 64, 1271-
1284.

Rohner, R. P. (1986). *The warmth dimension: foundations of parental
acceptance-rejection theory*. London: SAGE, Publications, Inc.

Rokach, A. (1988). Antecedents of loneliness: a factorial analysis. *The Journal
of Psychology*, 123, 369-384.

Rook, K., & Peplau, L. (1982). Perspectives on helping the lonely. In L. A.
Peplua & D, Perman (Eds.), *Loneliness: A sourcebook of current
theory, research and therapy* (pp. 351-378). New York: John Wiley.

Rotenberg, K. J. (1999). Childhood and adolescent loneliness: An introduction.
In K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and
adolescence*. (pp. 3-8). Cambridge University Press.

Rotenberg, K. J., & Morrison, A. J. (1993). Loneliness and college achievement:
Do loneliness social scores predict college drop-out? *Psychological
Reports*, 73, 1283-1288.

Rubin, K. H., Hymel, S., & Mills, R.S. (1989). Sociability and social withdrawal
in childhood: Stability and outcomes. *Journal of Personality*, 57, 237-
255.

Rubin, K. H. & Mills, R. S. (1988). The many faces of social isolation in child-
hood. *Journal of Consulting and Clinical Psychology*, 56, 916- 924.

Russel, D. (1982). The measurement of loneliness. In L. A. Peplua & D, Perman
(Eds.), *Loneliness: A sourcebook of current theory, research and therapy*
(pp. 81-104). New York: John Wiley.

Russel, D., Cutrone. C. E. Rose, J. & Yurko, K (1984). Social and emotional
loneliness: An examination of Weiss's typology of loneliness. *Journal of
Personality and Psychology,* 46, 1313-1321.

Russell, D., Peplau, L. A., & Cutrona, C. (1980). The revised UCLA loneliness
scale: concurrent and discriminant validity. *Journal of Personality and
Social Psychology*, 39, 472-480.

Russell, D., Peplau, L. A., & Ferguson, M.L. (1978). Developing a measure of loneliness. *Journal of Personality Assessment*, 42, 290-294.

Schaefer, E. S. (1965). Children's reports of parental behavior: An inventory. *Child Development*, 36, 413-424.

Schirmer, B. R. (2001). *Psychological, social, and educational dimensions of deafness*. Boston: Allyn and Bacon.

Schmidt, N., & Sermat, V. (1983). Measuring loneliness in different relationships, *Journal of Personality and Social Psychology*, 44, 1038-1047.

Schultz, N. R. & Moore, D. (1986). The loneliness experience of college students: sex differences. *Personality and Social Psychology Bulletin*, 12, 111-119.

Schultz, N. R. & Moore, D. (1989). Further reflections on loneliness research: Commentary on Weiss's assessment of loneliness research. In M. Hojat & R. Crandall (Eds.), *Loneliness: Theory, research, and applications.* (pp. 37-40).  London: Sage.

Sippola, L. K. & Bukowski, W. M. (1999). Self, other, and loneliness form a developmental perspective. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence.* (pp. 280-295). Cambridge University Press.

Sletta, O., Valas, H., & Skaalvik, E. (1996). Peer relations, loneliness, and self-perceptions in school-aged children. *British Journal of Education Psychology*, 66, 431-445.

Steinberg, A. G., Sullivan, V. J., & Montoya, L. A. ( 1999). Loneliness and social isolation in the work place for deaf individuals during the transition years A preliminary investigation. *Journal of Applied Rehabilitation Counselling*, 30, 22-30.

Stevens, J. N. (1982). Some psychological problems of acquired deafness. *British Journal of Psychiatry*, 140, 453-456.

Stokes, J. P. (1985). The relation of social network and individual difference variables to loneliness. *Journal of Personality and Social Psychology*, 48, 981-990.

Stokes, J., & Levin, I. (1986). Gender differences in predicting loneliness from social network characteristics, *Journal of Personality and Social Psychology*, 51, 1069-1074.

Strauss, C. C., Forehand, R., Smith, K. & Frame, C. L. (1986). The association between social problems of children. *Journal of Abnormal Child Psychology,* 14, 525-535.

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

Terrell-Deutsch, B. (1991). *Loneliness in popular, average status and unpopular Children*. Unpublished doctoral dissertation, University of Toronto, Toronto, Ontario, Canada.

Van Buskirk, A. & Duke, M. P. (1991). The relationship between coping style and loneliness in adolescents: Can sad passivity be adaptive? *The Journal of Genetic Psychology,* 152, 145-157.

Vernberg, E., Beery, S., Ewell, K., & Abwender, D. (1993). Parents' use of friendship facilitation strategies and the formation of friendships in early adolescence: A prospective study. *Journal of Family Psychology*, 7, 356-369.

Wahl, D., Weinert, F. E., & Huber, G. L. (1984). *Psychologie für die schlpraxis*. München: Kösel-Verlag Cmb H & Co.

Warren, C., & Hasenstab, S. (1986). Self-concept of severely to profoundly hearing impaired children. *The Volta Review*, 88, 289-295.

Waters, E., Wippman, J., & Sroufe, L. A. (1979). Attachment, positive affect and competence in the peer group: tow studies in construct validation. *Child Development*, 50, 821-829.

Weeks, D. G., Michela, J. L., Peplau, L. A. & Prag, M. E. (1980). Relation

between loneliness and depression: a structural equation analysis. *Journal of Personality and Social Psychology*, 39. 1238-1244.

Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation.* Cambridge, MA: MIT Press.

Williams, G. A., & Asher, S. R. (1992). Assessment of loneliness at school among children with mild mental retardation. *American Journal of Mental Retardation, 96, 373-385.*

Wood, L. A. (1986). Loneliness. In R. Harre (Ed.), *The social construction of emotion. (pp. 184-209).* New York: Basil Blackwell.

Woodword, H. (1988). *The solitude of loneliness*. Lexington, MA: Lexington Books.

Young, J. E. (1982). Loneliness, depression and cognitive therapy: theory and application, in L. A. Puplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 379-405). New York: Wiley-Interscience.

Youngblade, L. M., Berlin, L. J., & Belsky, J. (1999). Connections among loneliness, the ability to be alone, and peer relationships in young children. In. K. J. Rotenberg., & S. Hymel (Eds.), *Loneliness in childhood and adolescence* (pp. 135-152). Cambridge University Press.

# APPENDICES

# APPENDIX A

**Sociometric ``Peer Nomination´´ Rating Scale**

**Sociometric ``Peer Nomination´´ Rating Scale**

**Primary Data:**

| | |
|---|---|
| The name: | The school: |
| The sex   : | The class  : |
| The age   : | The date   : |

--------------------------------------------------------------------------------------------

**How much do you like to be together with this Boys and girls in school?**

| N. | Name | absolutely | sharply | somewhat | never |
|---|---|---|---|---|---|
| 1- | | | | | |
| 2- | | | | | |
| 3- | | | | | |
| 4- | | | | | |
| 5- | | | | | |
| 6- | | | | | |
| 7- | | | | | |
| 8- | | | | | |
| 9- | | | | | |
| 10- | | | | | |
| 11- | | | | | |
| 12- | | | | | |
| 13- | | | | | |
| 14- | | | | | |
| 15- | | | | | |
| 16- | | | | | |
| 17- | | | | | |
| 18- | | | | | |

# Sociometric ``Peer Nomination´´ Rating Scale Tally Matrix

**Primary Data:**

**The school:**                                **The class:**

| N. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| 1 | ◉ | | | | | | | | | | | | | | | | | |
| 2 | | ◉ | | | | | | | | | | | | | | | | |
| 3 | | | ◉ | | | | | | | | | | | | | | | |
| 4 | | | | ◉ | | | | | | | | | | | | | | |
| 5 | | | | | ◉ | | | | | | | | | | | | | |
| 6 | | | | | | ◉ | | | | | | | | | | | | |
| 7 | | | | | | | ◉ | | | | | | | | | | | |
| 8 | | | | | | | | ◉ | | | | | | | | | | |
| 9 | | | | | | | | | ◉ | | | | | | | | | |
| 10 | | | | | | | | | | ◉ | | | | | | | | |
| 11 | | | | | | | | | | | ◉ | | | | | | | |
| 12 | | | | | | | | | | | | ◉ | | | | | | |
| 13 | | | | | | | | | | | | | ◉ | | | | | |
| 14 | | | | | | | | | | | | | | ◉ | | | | |
| 15 | | | | | | | | | | | | | | | ◉ | | | |
| 16 | | | | | | | | | | | | | | | | ◉ | | |
| 17 | | | | | | | | | | | | | | | | | ◉ | |
| 18 | | | | | | | | | | | | | | | | | | ◉ |
| *T.S | | | | | | | | | | | | | | | | | | |
| *Z.S | | | | | | | | | | | | | | | | | | |

* T. S:  **Total score for each child.**
* Z. S:  **Standardized z-scores for each child.**

**Total score of the classroom:**
**Mean score of the classroom:**
**Standard deviation of the classroom:**

# APPENDIX  B

## Parental Promotion of Peers Relations Inventory

## Parental Promotion of Peers Relations Inventory

**Primary Data:**

The name:                                    The school:
The sex   :                                    The class  :
The age   :                                    The date   :

**Instructions:**

You are going to be shown some items about your parents role in your peer relations, put (X) under (Yes) if the item suites you, and put (X) under (No) if it doesn't suite you.

Thank you for your cooperation

| N. | Items | Yes | No |
|---|---|---|---|
| 1- | My parents tell me that they don't like my friends. | | |
| 2- | My parents encourage me to invite my friends to my house. | | |
| 3- | My parents tell me if they don't want me to hang around with certain kids. | | |
| 4- | My parents encourage me to do activities with kids. | | |
| 5- | My parents tell me that they don't approve of the things my friends do. | | |
| 6- | My parents help me think of ways to meet new kids. | | |
| 7- | My parents want me to be friends with kids who are good students. | | |
| 8- | My parents want me in certain activities at school, because of the kinds I'll meet in them. | | |
| 9- | My parents let me know who they want to be my friends. | | |
| 10- | My parents support me in my activities with other children because I like meeting with them. | | |

Note:
- Items 1, 3, 5, 7, and 9 were classified as prohibiting friendship. Responses to each of the items were scored from 1 to 2.
- Items 2, 4, 6, 8, and 10 were classified as supporting friendships, and items for which response order was reversed in scoring, from 2 to 1.

# Total score for parental promotion of peer relations and loneliness

The school:

| N | Name | The class | The age | Total score for parental promotion | Total score for loneliness |
|---|------|-----------|---------|-------------------------------------|-----------------------------|
| 1 | ………………………………… | ………… | ………… | ………………… | …………… |
| 2 | ………………………………… | ………… | ………… | ………………… | …………… |
| 3 | ………………………………… | ………… | ………… | ………………… | …………… |
| 4 | ………………………………… | ………… | ………… | ………………… | …………… |
| 5 | ………………………………… | ………… | ………… | ………………… | …………… |
| 6 | ………………………………… | ………… | ………… | ………………… | …………… |
| 7 | ………………………………… | ………… | ………… | ………………… | …………… |
| 8 | ………………………………… | ………… | ………… | ………………… | …………… |
| 9 | ………………………………… | ………… | ………… | ………………… | …………… |
| 10 | ………………………………… | ………… | ………… | ………………… | …………… |
| 11 | ………………………………… | ………… | ………… | ………………… | …………… |
| 12 | ………………………………… | ………… | ………… | ………………… | …………… |
| 13 | ………………………………… | ………… | ………… | ………………… | …………… |
| 14 | ………………………………… | ………… | ………… | ………………… | …………… |
| 15 | ………………………………… | ………… | ………… | ………………… | …………… |
| 16 | ………………………………… | ………… | ………… | ………………… | …………… |
| 17 | ………………………………… | ………… | ………… | ………………… | …………… |
| 18 | ………………………………… | ………… | ………… | ………………… | …………… |
| 19 | ………………………………… | ………… | ………… | ………………… | …………… |
| 20 | ………………………………… | ………… | ………… | ………………… | …………… |
| 21 | ………………………………… | ………… | ………… | ………………… | …………… |
| 22 | ………………………………… | ………… | ………… | ………………… | …………… |
| 23 | ………………………………… | ………… | ………… | ………………… | …………… |
| 24 | ………………………………… | ………… | ………… | ………………… | …………… |
| 25 | ………………………………… | ………… | ………… | ………………… | …………… |
| 26 | ………………………………… | ………… | ………… | ………………… | …………… |
| 27 | ………………………………… | ………… | ………… | ………………… | …………… |
| 28 | ………………………………… | ………… | ………… | ………………… | …………… |
| 29 | ………………………………… | ………… | ………… | ………………… | …………… |
| 30 | ………………………………… | ………… | ………… | ………………… | ……………... |

## Correlation Matrix

|         | Item 1 | Item 2 | Item 3 | Item 4 | Item 5 | Item 6 | Item 7 | Item 8 | Item 9 | Item 10 |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| Item 1  |        |        |        |        |        |        |        |        |        |         |
| Item 2  | .475   |        |        |        |        |        |        |        |        |         |
| Item 3  | .006   | .346   |        |        |        |        |        |        |        |         |
| Item 4  | .153   | .108   | .423   |        |        |        |        |        |        |         |
| Item 5  | .147   | .216   | .233   | .328   |        |        |        |        |        |         |
| Item 6  | .233   | .011   | .418   | .100   | .278   |        |        |        |        |         |
| Item 7  | .003   | .148   | .000   | .247   | .049   | .267   |        |        |        |         |
| Item 8  | .483   | .063   | .500   | .235   | .116   | .058   | .195   |        |        |         |
| Item 9  | .109   | .464   | .022   | .251   | .394   | .331   | .011   | .423   |        |         |
| Item 10 | .347   | .034   | .166   | .065   | .215   | .000   | .247   | .084   | .326   |         |

# APPENDIX C


**Parental Treatment Styles Questionnaire**
**Parental Acceptance, Neglection, Rejection Questionnaire (PANRQ)**

# (1)
## Parental Treatment Styles Questionnaire
## Parental Acceptance, Neglection, Rejection Questionnaire
## Pertaining to Mother (A)

**<u>Primary Data:</u>**

| | |
|---|---|
| The name: | The school: |
| The sex   : | The class  : |
| The age   : | The date   : |

**<u>Instructions:</u>**

You are going to be shown a new set of situations that may face you in your interactions with your mother. Each situation has three choices (a, b, c). Please read each situation and the choices carefully and then choose one from these three choices for each situation that suits what your mother really does in this or that situation. By circling the letter you choose on the answer sheet for each situation.

Remember, there is no right or wrong answers. Be as honest as you can and answer each statement the way you feel your mother really is, rather than the way you might like her to be.

If you cannot understand a word, statement, or situation, then raises your hand and you will be helped.

Now turn the page and answer each situation by putting a circle around (a, b, or c) on the answer sheet.

**Don't write on the test; write on the answer sheet only.**

After you have marked your answer for the situation, go on to the next one.

Thank you for your cooperation

| N | Items | |
|---|---|---|
| 1- | When I talk to my mother, I feel:<br>  (a) She speaks to me in a warm and loving way.<br>  (b) She isn't interested in talking with me.<br>  (c) She dislikes talking with me. | |
| 2- | When my playmates come to my home to play with me, my mother:<br>  (a) Ignores my friends and me.<br>  (b) Dislikes my friends coming and punishes me.<br>  (c) Encourages me and welcomes them. | |
| 3- | When I have a problem or am afraid of something, my mother:<br>  (a) Laughs at me and blames me.<br>  (b) Helps me in solving this problem.<br>  (c) Isn't interested in my problem and ignores it. | |
| 4- | When I do something wrong unintentionally, my mother:<br>  (a) Yells and punishes me.<br>  (b) Ignores the matter and doesn't care.<br>  (c) Understands the matter and forgives me. | |
| 5- | When my mother goes on a trip, she:<br>  (a) Likes me to be around her.<br>  (b) Wants to get away from me.<br>  (c) Is busy and doesn't take care of me. | |
| 6- | When relatives or neighbours come to visit us at home, my mother:<br>  (a) Rarely allows me to stay with them, and ignores me.<br>  (b) Allows me to stay with them, and says nice things about me.<br>  (c) Doesn't allow me to stay with them and makes me ashamed in front of them. | |
| 7- | When I succeed and get moderate scores, my mother:<br>  (a) Is really interested and praises me in front of others.<br>  (b) Neither cares nor encourages me.<br>  (c) Punishes me and makes me feel that I'm less than the other children. | |
| 8- | When there is a problem between me and my brother, my mother:<br>  (a) Ignores the matter and doesn't attend to it.<br>  (b) Punishes and blames me severely.<br>  (c) Tries to solve the problem without getting angry. | |

| N | Items | |
|---|---|---|
| 9- | When I misbehave in front of others, my mother:<br>  (a) Yells, hits, and embarrasses me in front of them.<br>  (b) Smiles and tells me what is the acceptable way and<br>     doesn't try to embarrass me.<br>  (c) Ignores what happened and doesn't tell me what is right. | |
| 10- | When my mother goes to visit one of our relatives or neighbors, she:<br>  (a) Doesn't allow me to go and tells me to stay at home alone.<br>  (b) Rarely allows me to go with her.<br>  (c) Brings me with her to play with the other children. | |
| 11- | On many occasions, I feel my mother:<br>  (a) Treats me kindly and warmly.<br>  (b) Treats me harsh and rough and always blames me.<br>  (c) Ignores me if I do something in which I deserve praise. | |
| 12- | When I ask my mother to help me in my homework, she:<br>  (a) Ignores my request and doesn't care.<br>  (b) Helps me and does her best.<br>  (c) Refuses to help me and blames me. | |
| 13- | When can't sleep, my mother:<br>  (a) Sits with me and asks me about what makes me sleepless and<br>     tries to help me.<br>  (b) Goes to sleep and neglects me.<br>  (c) Gets angry at me and asks me to go to sleep now. | |
| 14- | When I want to share in a trip with my classmates, my mother:<br>  (a) Doesn't pay attention.<br>  (b) Refuses sharing in that journey and blames me.<br>  (c) Agrees and pays the money for me. | |
| 15- | When I want to eat, my mother:<br>  (a) Refuses to get the food for me and asks me to get it myself.<br>  (b) Prepares my favorite food.<br>  (c) Isn't interested in preparing my food. | |
| 16- | When I have a cold, my mother:<br>  (a) Doesn't ask about me, and makes me feel that she dislikes me.<br>  (b) Doesn't take care of me.<br>  (c) Takes care of me, and gives me the medicine herself. | |

| 17- | When I ask my  mother to buy a new toy for me, she:<br>(a) Agrees and buys it soon.<br>(b) Refuses and blames me.<br>(c) Doesn't pay attention. | |
|---|---|---|
| 18- | When I ask my mother to have a birthday party for me, she:<br>(a) Doesn't pay attention and ignores my birthday.<br>(b) Agrees and invites my friends herself.<br>(c) Laughs at me and refuses. | |
| 19- | Normally when dealing with my mother, I feel:<br>(a) I'm wanted and accepted.<br>(b) I'm ignored and neglected.<br>(c) I'm not wanted and I'm rejected. | |
| 20 | When I ask my mother to explain something I can't understand, she:<br>(a) Ignores me and doesn't care.<br>(b) Gets angry at me and blames me.<br>(c) Explains it for me and encourages me. | |

# (2)
## Parental Treatment Styles Questionnaire
## Parental Acceptance, Neglection, Rejection Questionnaire
## Pertaining to Father (B)

**Primary Data:**

The name:                              The school:

The sex   :                              The class  :

The age   :                              The date   :

**Instructions:**

You are going to be shown a new set of situations that may face you in your interactions with your father. Each situation has three choices (a, b, c). Please read each situation and the choices carefully and then choose one from these three choices for each situation that suit what your father really does in this or that situation by circling the letter you choose on the answer sheet for each situation.

Remember, there is no right or wrong answers. Be as honest as you can and answer each statement the way you feel your mother really is rather than the way you might like him to be.

If you cannot understand a word, statement, or situation, then raises your hand and you will be helped.

Now turn the page and answer each situation by putting a circle around (a, b, or c) on the answer sheet.

**Don't write on the test; write on the answer sheet only.**

After you have marked your answer for the situation, go on to the next one.

Thank you for your good cooperation

| N | Items | |
|---|---|---|
| 1- | When I take to my father, I feel:<br>(a) He speaks to me in a warm and loving way.<br>(b) He isn't interested in talking with me.<br>(c) He dislikes talking with me. | |
| 2- | When my playmates come to my home to play with me, my father:<br>(a) Ignores my friends and me.<br>(b) Dislikes my friends coming and punishes me.<br>(c) Encourages me and welcomes them. | |
| 3- | When I have a problem or am afraid of something, my father:<br>(a) Laughs at me and blames me.<br>(b) Helps me in solving this problem.<br>(c) Isn't interested in my problem and ignores it. | |
| 4- | When I do something wrong unintentionally, my father:<br>(a) Yells and punishes me.<br>(b) Ignores the matter and doesn't care.<br>(c) Understands the matter and forgives me. | |
| 5- | When my father goes on a trip, he:<br>(a) Likes me to be around him.<br>(b) Wants to get away from me.<br>(c) Is busy and doesn't take care of me. | |
| 6- | When relatives or neighbors come to visit us at home, my father:<br>(a) Rarely allows me to stay with them, and ignores me.<br>(b) Allows me to stay with them, and says nice things about me.<br>(c) Doesn't allow me to stay with them and makes me ashamed in front of them. | |
| 7- | When I succeed and good grades scores, my father:<br>(a) Is really interested and praises me in front of others.<br>(b) Neither cares nor encourages me.<br>(c) Punishes me and makes me feel that I'm less than the other children. | |
| 8- | When there is a problem between me and my brother, my father:<br>(a) Ignores the matter and doesn't attend to it.<br>(b) Punishes and blames me severely.<br>(b) Tries to solve the problem without getting angry. | |

| N | Items | |
|---|---|---|
| 9- | When I misbehave in front of others, my father:<br>(a) Yells, hits, and embarrasses me, in front of them.<br>(b) Smiles and tells me what is the acceptable way and doesn't try to embarrass me.<br>(c) Ignores what has happened and doesn't tell me what is right. | |
| 10- | When my father goes to visit one of our relatives or neighbors, he:<br>(a) Doesn't allow me to go and tells me to stay at home alone.<br>(b) Rarely allows me to go with him.<br>(c) Brings me with him to play with the other children. | |
| 11- | On many occasions, I feel my father:<br>(a) Treats me kindly and warmly.<br>(b) Treats me harsh and rough and always blames me.<br>(c) Ignores me if I do something in which I deserve praise. | |
| 12- | When I ask my father to help me in my homework, he:<br>(a) Ignores my request and doesn't care.<br>(b) Helps me and does him best.<br>(c) Refuses to help me and blames me. | |
| 13- | When can't sleep, my father:<br>(a) Sits with me and asks me about what makes me sleepless and tries to help me.<br>(b) Goes to sleep and neglects me.<br>(c) Gets angry at me and asks me to go to sleep now. | |
| 14- | When I want to share in a trip with my classmates, my father:<br>(a) Doesn't pay attention.<br>(b) Refuses sharing in that journey and blames me.<br>(c) Agrees and pays the money for me. | |
| 15- | When I want to eat, my father:<br>(a) Refuses to get the food for me and asks me to get it myself.<br>(b) Prepares my favorite food.<br>(c) Isn't interested in preparing my favorite food. | |
| 16- | When I have a cold, my father:<br>(a) Doesn't ask about me, and makes me feel that he dislikes me.<br>(b) Doesn't take care of me.<br>(c) Takes care of me, and gives me the medicine himself. | |

| | | |
|---|---|---|
| 17- | When I ask my father to buy a new toy for me, she:<br>(a) Agrees and buys it soon.<br>(b) Refuses and blames me.<br>(c) Doesn't pay attention. | |
| 18- | When I ask my father to have a birthday party for me, he:<br>(a) Doesn't pay attention and ignores my birthday.<br>(b) Agrees and invites my friends herself.<br>(c) Laughs at me and refuses. | |
| 19- | Normally when dealings with my father, I feel:<br>(a) I'm wanted and accepted.<br>(b) I'm ignored and neglected.<br>(c) I'm not wanted and I'm rejected. | |
| 20 | When I ask my father to explain something I can't understand, he:<br>(a) Ignores me and doesn't care.<br>(b) Gets angry at me and blames me.<br>(c) Explains it for me and encourages me. | |

**Answer key to parental treatment styles questionnaire**
**Parental acceptance, neglection, rejection questionnaire**

| N | Parental acceptance-neglection-rejection | | |
|---|---|---|---|
| | acceptance | neglection | rejection |
| 1. | a | b | c |
| 2. | b | c | a |
| 3. | c | a | b |
| 4. | c | b | a |
| 5. | a | c | b |
| 6. | b | a | c |
| 7. | a | b | c |
| 8. | b | c | a |
| 9. | c | a | b |
| 10. | c | b | a |
| 11. | a | c | b |
| 12. | b | a | c |
| 13. | a | b | c |
| 14. | b | c | a |
| 15. | c | a | b |
| 16. | c | b | a |
| 17. | a | c | b |
| 18. | b | a | c |
| 19. | a | b | c |
| 20. | b | c | a |

Each situation has three responses; the child should choose one response, and each response has one score. All the scores are summed for each style (scores pertaining to mother, and scores pertaining to father), the child's scores for each contrasted styles are compared, the style which have the greater score than the other, will be the common treatment style inside the family. For example, if the acceptance scores are more common than the rejection and neglection scores, thus, parental acceptance will be the common treatment style inside the family.

# The answers key to
## Parental acceptance, neglection, rejection questionnaire
## Parental acceptance

| N | Parental acceptance | | |
|---|---|---|---|
| | (a) | (b) | (c) |
| 1. | ◯ | | |
| 2. | | ◯ | |
| 3. | | | ◯ |
| 4. | | | ◯ |
| 5. | ◯ | | |
| 6. | | ◯ | |
| 7. | ◯ | | |
| 8. | | ◯ | |
| 9. | | | ◯ |
| 10. | | | ◯ |
| 11. | ◯ | | |
| 12. | | ◯ | |
| 13. | ◯ | | |
| 14. | | ◯ | |
| 15. | | | ◯ |
| 16. | | | ◯ |
| 17. | ◯ | | |
| 18. | | ◯ | |
| 19. | ◯ | | |
| 20. | | ◯ | |

## The answers key to
## Parental acceptance, neglection, rejection questionnaire
## Parental negection

| N | Parental negection | | |
|---|---|---|---|
| | **(a)** | **(b)** | **(c)** |
| **1.** | | ◯ | |
| **2.** | | | ◯ |
| **3.** | ◯ | | |
| **4.** | | ◯ | |
| **5.** | | | ◯ |
| **6.** | ◯ | | |
| **7.** | | ◯ | |
| **8.** | | | ◯ |
| **9.** | ◯ | | |
| **10.** | | ◯ | |
| **11.** | | | ◯ |
| **12.** | ◯ | | |
| **13.** | | ◯ | |
| **14.** | | | ◯ |
| **15.** | ◯ | | |
| **16.** | | ◯ | |
| **17.** | | | ◯ |
| **18.** | ◯ | | |
| **19.** | | ◯ | |
| **20.** | | | ◯ |

# The answers key to
# Parental acceptance, neglection, rejection questionnaire
# Parental rejection

| N | Parental rejection | | |
| --- | --- | --- | --- |
| | (a) | (b) | (c) |
| 1. | | | ◯ |
| 2. | ◯ | | |
| 3. | | ◯ | |
| 4. | ◯ | | |
| 5. | | ◯ | |
| 6. | | | ◯ |
| 7. | | | ◯ |
| 8. | ◯ | | |
| 9. | | ◯ | |
| 10. | ◯ | | |
| 11. | | ◯ | |
| 12. | | | ◯ |
| 13. | | | ◯ |
| 14. | ◯ | | |
| 15. | | ◯ | |
| 16. | ◯ | | |
| 17. | | ◯ | |
| 18. | | | ◯ |
| 19. | | | ◯ |
| 20. | ◯ | | |

# The answers sheet to parental treatment styles questionnaire
## Parental acceptance, neglection, rejection questionnaire
## pertaining to mother (A)

**Primary Data:**

| The name: | | The school: |
|---|---|---|
| The sex : | | The class : |
| The age : | | The date : |

| N | Parental styles | | |
|---|---|---|---|
| | | | |
| 1. | (a) | (b) | (c) |
| 2. | (a) | (b) | (c) |
| 3. | (a) | (b) | (c) |
| 4. | (a) | (b) | (c) |
| 5. | (a) | (b) | (c) |
| 6. | (a) | (b) | (c) |
| 7. | (a) | (b) | (c) |
| 8. | (a) | (b) | (c) |
| 9. | (a) | (b) | (c) |
| 10. | (a) | (b) | (c) |
| 11. | (a) | (b) | (c) |
| 12. | (a) | (b) | (c) |
| 13. | (a) | (b) | (c) |
| 14. | (a) | (b) | (c) |
| 15. | (a) | (b) | (c) |
| 16. | (a) | (b) | (c) |
| 17. | (a) | (b) | (c) |
| 18. | (a) | (b) | (c) |
| 19. | (a) | (b) | (c) |
| 20. | (a) | (b) | (c) |

---------------------------------------------------------------------------------------------------------------
Do not mark below this line

| | | |
|---|---|---|
| acceptance | Neglection | Rejection |

Total score for

# The answers sheet to parental treatment styles questionnaire
## Parental acceptance, neglection, rejection questionnaire
## pertaining to father (A)

**Primary Data:**

| | |
|---|---|
| **The name:** | **The school:** |
| **The sex    :** | **The class   :** |
| **The age   :** | **The date   :** |

| N | Parental styles | | |
|---|---|---|---|
| | | | |
| 1. | (a) | (b) | (c) |
| 2. | (a) | (b) | (c) |
| 3. | (a) | (b) | (c) |
| 4. | (a) | (b) | (c) |
| 5. | (a) | (b) | (c) |
| 6. | (a) | (b) | (c) |
| 7. | (a) | (b) | (c) |
| 8. | (a) | (b) | (c) |
| 9. | (a) | (b) | (c) |
| 10. | (a) | (b) | (c) |
| 11. | (a) | (b) | (c) |
| 12. | (a) | (b) | (c) |
| 13. | (a) | (b) | (c) |
| 14. | (a) | (b) | (c) |
| 15. | (a) | (b) | (c) |
| 16. | (a) | (b) | (c) |
| 17. | (a) | (b) | (c) |
| 18. | (a) | (b) | (c) |
| 19. | (a) | (b) | (c) |
| 20. | (a) | (b) | (c) |

-----------------------------------------------------------------------------------------------------------------
Do not mark below this line

| | | |
|---|---|---|
| acceptance | Neglection | Rejection |

Total score for

# APPENDIX D

## Parental Treatment Styles Questionnaire
## Parental Strictness, Indulgence Questionnaire (PSIQ)

# Parental Strictness-Indulgence Questionnaire
# Pertaining to Mother (A)

## Primary Data:

The name:                                    The school:
The sex   :                                  The class  :
The age   :                                  The date   :

**………………………………………………………………………………**

## Instructions:

You are going to be shown a new set of situations that may face you in your interactions with your mother; each situation has three choices (a, b, c). Please, read each situation and the choices carefully and then choose one from these three choices for each situation that suits what your mother really does in this or that situation. Then circle the letter you choose on the answer sheet for each situation.

Remember that there is no right or wrong answer. Be as honest as you can and answer each statement the way you feel your mother really is rather then the way you might like her to be.

If you cannot understand a word, statement, or situation then raises your hand and you will be helped.

Now turn the page and answer each situation by putting a circle around (a, b, or c) in the answer sheet.

**Don't write on the test; write on the answer sheet only.**

After you have marked your answer for the situation, go on to the next one.

Thank you for your cooperation

| N | Items | |
|---|---|---|
| 1- | When my mother and me fight or argue about something, she:<br>  (a) Sees that it is my right to do what I what even if I disagree with her opinion.<br>  (b) Discusses with me to come to the right solution.<br>  (c) Insists on her opinion without discussion. | |
| 2- | When I come back late from school, my mother:<br>  (a) Asks me about the reason and asks me not to do this again.<br>  (b) Punishes me and hits me.<br>  (c) Doesn't interfere at all. | |
| 3- | When my mother gives me advice, she:<br>  (a) Sees that I must obey her without discussion.<br>  (b) Allows me to discuss the matter with her and allows me to do what is suitable.<br>  (c) Discusses and tries to convince me of her viewpoint. | |
| 4- | In my activities and hobbies, my mother:<br>  (a) Lets me do what I want, without any restriction.<br>  (b) Determines my activities and hobbies herself.<br>  (c) Gives me good advice after speaking with me. | |
| 5- | When I damage something in the house, my mother:<br>  (a) Nags and punishes me roughly.<br>  (b) Asks me not to do it again.<br>  (c) Forgives me easily. | |
| 6- | When my mother makes plans and decisions inside the family, she:<br>  (a) Talks with me about these plans.<br>  (b) Allows me to decide myself what I like.<br>  (c) Sees that I must do what she wants without discussion. | |
| 7- | When I watch TV. a lot, my mother:<br>  (a) Doesn't meddle and allows me to watch as I like.<br>  (b) Asks me to watch TV. in my free time.<br>  (c) Refuses and treats me roughly. | |
| 8- | When my mother asks me to do something, but I see it is difficult for me to do, she:<br>  (a) Helps me to do it.<br>  (b) Punishes me if I don't do.<br>  (c) Allows me to refuse. | |

| | | |
|---|---|---|
| 9- | When I want to choose my clothes myself, my mother:<br>(a) Forces her opinion on me in choosing.<br>(b) Allows me to choose it as I like.<br>(c) Discusses with me about what suits me better. | |
| 10- | What I want to choose my friends myself, my mother:<br>(a) Lets me choose my friends myself.<br>(b) Doesn't agree to let me choose my friends myself.<br>(c) Advises me in choosing my friends. | |
| 11- | When I want to arrange my study time, my mother:<br>(a) Doesn't agree to arrange my study time myself.<br>(b) Gives me a good system after speaking with me.<br>(c) Allows me to arrange my study time myself. | |
| 12- | When I lose one of my books, my mother:<br>(a) Forgives me and buys me a new one.<br>(b) Asks me to be more careful.<br>(c) Blames and punishes me. | |

# Parental Strictness, Indulgence Questionnaire
## Pertaining to Father (B)

**Primary Data:**

The name:                                    The school:
The sex   :                                    The class  :
The age   :                                    The date   :
………………………………………………………………………………..

# Instructions:

You are going to be shown a new set of situations that may face you in your interactions with your father; each situation has three choices (a, b, c). Please, read each situation and the choices carefully and then choose one from these three choices for each situation that suits what your father really does in this or that situation. For then circle the letter you choose on the answer sheet for each situation.

Remember that there is no right or wrong answer. Be as honest as you can and answer each statement the way you feel your father really is rather then the way you might like him to be.

If you cannot understand a word, statement, or situation then raises your hand and you will be helped.

Now turn the page and answer each situation by putting a circle around (a, b, or c) in the answer sheet.

**Don't write on the test; write on the answer sheet only.**

After you have marked your answer for the situation, go on to the next one.

Thank you for your cooperation

| N | Items | |
|---|---|---|
| 1- | When my father and me fight or argue about something, he:<br>  (a) Sees that it is my right to do what I what even if I disagree with his opinion.<br>  (b) Discusses with me to come to the right solution.<br>  (c) Insists on his opinion without discussion. | |
| 2- | When I come back late from school, my father:<br>  (a) Asks me about the reason and asks me not to do this again.<br>  (b) Punishes me and hits me.<br>  (c) Doesn't interfere at all. | |
| 3- | When my father gives me advice, he:<br>  (a) Sees that I must obey him without discussion.<br>  (b) Allows me to discuss the matter with him and allows me to do what is suitable.<br>  (c) Discusses and tries to convince me of his viewpoint. | |
| 4- | In my activities and hobbies, my father:<br>  (a) Lets me do what I want, without any restriction.<br>  (b) Determines my activities and hobbies herself.<br>  (c) Gives me good advice after speaking with me. | |
| 5- | When I damage something in the house, my father:<br>  (a) Nags and punishes me roughly.<br>  (b) Asks me not to it again.<br>  (c) Forgives me easily. | |
| 6- | When my father makes plans and decisions inside the family, he:<br>  (a) Talks with me about these plans.<br>  (b) Allows me to decide myself what I like.<br>  (c) Sees that I must do what he wants without discussion. | |
| 7- | When I watch TV. a lot, my father:<br>  (a) Doesn't meddle and allows me to watch as I like.<br>  (b) Asks me to watch TV. in my free time.<br>  (c) Refuses and treats me roughly. | |
| 8- | When my father asks me to do something, but I see it is difficult for me to do, he:<br>  (a) Helps me to do it.<br>  (b) Punishes me if I don't do.<br>  (c) Allows me to refuse. | |

| 9- | When I want to choose my clothes myself, my father:<br>  (a) Forces his opinion on me in choosing my clothes.<br>  (b) Allows me to choose it as I like.<br>  (c) Discusses with me about what suits me better. | |
|-----|------|--|
| 10- | What I want to choose my friends myself, my father:<br>  (a) Lets me choose my friends myself.<br>  (b) Doesn't agree to let me choose my friends myself.<br>  (c) Advises me in choosing my friends. | |
| 11- | When I want to arrange my study time, my father:<br>  (a) Determines my study times herself.<br>  (b) Gives me a good system after speaking with me.<br>  (c) Allows me to arrange my study time myself. | |
| 12- | When I lose one of my books, my father:<br>  (a) Forgives me and buys me a new one.<br>  (b) Asks me to be more careful.<br>  (c) Blames and punishes me. | |

## Answer Key to Parental Treatment Styles Questionnaire*
## Parental Strictness- Indulgence Questionnaire

| N. Items | The chosen response | | |
|---|---|---|---|
| | (a) | (b) | (c) |
| 1. | 3 | 2 | 1 |
| 2. | 2 | 1 | 3 |
| 3. | 1 | 3 | 2 |
| 4. | 3 | 1 | 2 |
| 5. | 1 | 2 | 3 |
| 6. | 2 | 3 | 1 |
| 7. | 3 | 2 | 1 |
| 8. | 2 | 1 | 3 |
| 9. | 1 | 3 | 2 |
| 10. | 3 | 1 | 2 |
| 11. | 1 | 2 | 3 |
| 12. | 3 | 2 | 1 |

* Each situation has three responses, the child should choose one response . Scores of these three responses eange form one to three. All the scores are summed for each subscale (scores pertaining to mother, and scores pertaining to father), the total scores of each parental treatment styles subscales would be divided into three thirds. The scores of the highest third contains indulgence, and the scores of less third contains strictness, the children whose scores are in the middle third are left out.

# Answer sheet (A)
## Parental Strictness-Indulgence Questionnaire
## Pertaining to Mother

**Primary Data:**

The name:                          The school:
The sex   :                        The class  :
The age   :                        The date   :

| N. Items | The chosen respones | | |
|---|---|---|---|
| | | | |
| 1. | (a) | (b) | (c) |
| 2. | (a) | (b) | (c) |
| 3. | (a) | (b) | (c) |
| 4. | (a) | (b) | (c) |
| 5. | (a) | (b) | (c) |
| 6. | (a) | (b) | (c) |
| 7. | (a) | (b) | (c) |
| 8. | (a) | (b) | (c) |
| 9. | (a) | (b) | (c) |
| 10. | (a) | (b) | (c) |
| 11. | (a) | (b) | (c) |
| 12. | (a) | (b) | (c) |

# Answer sheet (B)
## Parental Strictness-Indulgence Questionnaire
## Pertaining to Father

**Primary Data:**

The name:                          The school:
The sex   :                        The class  :
The age   :                        The date   :

| N. Items | The chosen response | | |
|---|---|---|---|
| 1. | (a) | (b) | (c) |
| 2. | (a) | (b) | (c) |
| 3. | (a) | (b) | (c) |
| 4. | (a) | (b) | (c) |
| 5. | (a) | (b) | (c) |
| 6. | (a) | (b) | (c) |
| 7. | (a) | (b) | (c) |
| 8. | (a) | (b) | (c) |
| 9. | (a) | (b) | (c) |
| 10. | (a) | (b) | (c) |
| 11. | (a) | (b) | (c) |
| 12. | (a) | (b) | (c) |

# APPENDIX E

# Deaf Children's Loneliness Scale (DCLS)

## Deaf Children's Loneliness Scale

### Primary Data:

| | |
|---|---|
| **The name:** | **The school:** |
| **The sex  :** | **The class  :** |
| **The age  :** | **The date  :** |

### Instructions:

You are going to be shown a set of situations, each situation has two choices (a, b). Please read these situations carefully and their choices and choose one from these two choices to each situation, by circling the letter you choose on the answer sheet that suits you and suits what you really do.

There are not any ``right´´ or ``wrong ´´ answers. You are just to answer what you would really do.

If you can not understand a word, question, or answer, then raises your hand and you will be helped. Remember to answer honestly about how you would act. There is no time limit, but you should answer as quickly as possible.

Thanks you for your cooperation

GO TO THE NEXT PAGE AND BEGIN

| N. | Items | |
|---|---|---|
| 1- | When we are an a trip, I feel:<br>    (a) I'm a participant on the trip's activities.<br>    (b) I'm isolated from my classmates. | |
| 2- | When I want to play in school, I feel:<br>    (a) I have no friends to play with, and that makes me sad and lonely.<br>    (b) I have friends to play with. | |
| 3- | When a classmate invites me to their birthday party:<br>    (a) I go to the party and talk to the others.<br>    (b) I don't want to go and prefer to stay at home alone. | |
| 4- | I feel that:<br>    (a) No one likes me, and that makes me feel lonely.<br>    (b) I'm well liked by the kids in my class. | |
| 5- | When we have teamwork in the class or in the school, I feel that:<br>    (a) I am in tune with the other children.<br>    (b) I am not in tune with the other children, so I work alone. | |
| 6- | When my parents ask me to go to a club, I usually:<br>    (a) Stay at home alone.<br>    (b) Go to the club and stay with the others. | |
| 7- | When some relatives or neighbours visit us, I usually:<br>    (a) Stay with them and talk together.<br>    (b) Stay alone in another place. | |
| 8- | When I stay on the playground during break, usually:<br>    (a) I find no friends or classmates to talk with and feel lonely.<br>    (b) I find many friends and classmates to talk with. | |
| 9- | I can't hear, so:<br>    (a) I like to stay with the others more time, and avoid being alone.<br>    (b) I like to stay alone. | |

| | | Items | |
|---|---|---|---|
| 10- | | When my classmates ask me to join the football team, I usually: <br>    (a)  Don't agree to join. <br>    (b)  Agree to join. | |
| 11- | | When the neighbour children come to play with me, I usually: <br>    (a)  Play with them. <br>    (b)  Stay alone and do not play with them. | |
| 12- | | When I can't understand something during the lesson, at the end of the lesson when the teacher asks us to tell him the difficult points that we didn't understand so he can repeat it for us, I feel: <br>    (a)  I can't ask him. <br>    (b)  I can ask him easily. | |
| 13- | | After the school day is finished, I feel: <br>    (a) I want to walk home alone. <br>    (b) I want to walk home with my classmates and talk together. | |
| 14- | | When the teacher asks us to make a wall-paper, I feel: <br>    (a)  I want to work with the others. <br>    (b)  I don't want to work with my classmates together, and that causes me to be lonely. | |
| 15- | | I feel that my hearing disability makes me: <br>    (a) Always enjoy playing with the others. <br>    (b) Prefer playing alone. | |
| 16- | | When I face a problem and I need help, I feel: <br>    (a) I have no friends to talk to, and that makes me feel sad and lonely. <br>    (b) I have friends to talk to. | |
| 17- | | I feel that: <br>    (a)  I'm not lonely in school. <br>    (b)  I'm lonely in school. | |

| N | Items | |
|---|---|---|
| 18- | When the teacher has a discussion in the class about something important, I feel:<br>   (a) Don't wish to participate, and that makes me feel lonely.<br>   (b) Hope to participate. | |
| 19- | When I have some difficulties in my homework and need help, I feel:<br>   (a) I have no friends to go to and ask to help me, and that makes me lonely.<br>   (b) I have friends to help me. | |
| 20- | When I think about making new friendships in the school, I feel:<br>   (a) It's easy for me to make new friendships.<br>   (b) It's difficult for me to make new friendships. | |
| 21- | When one of my classmates wants me to visit him or visit me at home, I:<br>   (a) Refuse to visit any one or let any one visit me.<br>   (b) Welcome the visit and I'm happy. | |
| 22- | When we have a party in the school I:<br>   (a) Go to the party and participate.<br>   (b) Don't go to the party to participate or go to watch, and find myself alone, that makes me feel distressed. | |
| 23- | When a new classmate comes to introduce himself to me, I:<br>   (a) Go away, because I don't want to know anyone, and I want to be alone.<br>   (b) Introduce myself to him and welcome him. | |

# Answer Key to Deaf Children's Loneliness Scale*

| Items, Nr | (A) | (B) |
|-----------|-----|-----|
| 1. | 0 | 1 |
| 2. | 1 | 0 |
| 3. | 0 | 1 |
| 4. | 1 | 0 |
| 5. | 0 | 1 |
| 6. | 1 | 0 |
| 7. | 0 | 1 |
| 8. | 1 | 0 |
| 9. | 0 | 1 |
| 10. | 1 | 0 |
| 11. | 0 | 1 |
| 12. | 1 | 0 |
| 13. | 1 | 0 |
| 14. | 0 | 1 |
| 15. | 0 | 1 |
| 16. | 1 | 0 |
| 17. | 0 | 1 |
| 18. | 1 | 0 |
| 19. | 1 | 0 |
| 20. | 0 | 1 |
| 21. | 1 | 0 |
| 22. | 0 | 1 |
| 23. | 1 | 0 |

* The situations are 23, each one has two responses. The loneliness response has one score, and non-loneliness response has a zero score. Responses for each of the 23 situations were then summed to create a total loneliness score for each child, the greater the score (maximum = 23), the greater the person's level of loneliness, and conversely, the lower the score, the greater the person's non-loneliness.

# Answer Key
## To Deaf Children's Loneliness Scale

| Items, Nr | | |
|:---:|:---:|:---:|
| 1. | | ◯ |
| 2. | ◯ | |
| 3. | | ◯ |
| 4. | ◯ | |
| 5. | | ◯ |
| 6. | ◯ | |
| 7. | | ◯ |
| 8. | ◯ | |
| 9. | | ◯ |
| 10. | ◯ | |
| 11. | | ◯ |
| 12. | ◯ | |
| 13. | ◯ | |
| 14. | | ◯ |
| 15. | | ◯ |
| 16. | ◯ | |
| 17. | | ◯ |
| 18. | ◯ | |
| 19. | ◯ | |
| 20. | | ◯ |
| 21. | ◯ | |
| 22. | | ◯ |
| 23. | ◯ | |

# Answer sheet
## To Deaf Children's Loneliness Scale*

**Primary Data:**

The name:                                  The school:
The sex   :                                  The class   :
The age   :                                  The date    :

| Items, Nr | | |
|---|---|---|
| 1. | (A) | (B) |
| 2. | (A) | (B) |
| 3. | (A) | (B) |
| 4. | (A) | (B) |
| 5. | (A) | (B) |
| 6. | (A) | (B) |
| 7. | (A) | (B) |
| 8. | (A) | (B) |
| 9. | (A) | (B) |
| 10. | (A) | (B) |
| 11. | (A) | (B) |
| 12. | (A) | (B) |
| 13. | (A) | (B) |
| 14. | (A) | (B) |
| 15. | (A) | (B) |
| 16. | (A) | (B) |
| 17. | (A) | (B) |
| 18. | (A) | (B) |
| 19. | (A) | (B) |
| 20. | (A) | (B) |
| 21. | (A) | (B) |
| 22. | (A) | (B) |
| 23. | (A) | (B) |

Do not mark below this line

Total score for loneliness:

# CURRICULUM VITAE

## *PERSONAL DATA:*

Name:                           Adel Abdelfatah Mohamed Elhageen.
Area of specialization: Assistant lecturer of Mental Hygiene, Educational
                                 Psychology Departement, Faculty of Education, Menoufia
                                 University. Egypt.
Date of Birth:             12 / 12 / 1966. Menoufia, Egypt.
Marital status:            Married and I have three children.
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## *Education*

1974-1978  :  Primary school, Menoufia, Egypt.
1979-1981  : Al-Azhar Prep School, Menoufia, Egypt.
1982-1985  : Al-Azhar secondary School, Menoufia, Egypt.
1986-1989  : (B.A) in Education & Arts, Arabic Language Department , Faculty of
                    Education, Al-Azhar University, Cairo, Egypt,  in May 1989, with general
                    grade (Excellent with Honour Rank).
1991-1993 :  Special Diploma in Education (Education and Psychology), Faculty of
                    Education, Menoufia University,  Menoufia, Egypt, with general grade (Very
                    Good).
03. 01.1998:  M.A. Degree in Education ( Mental Health), Faculty of  Education, Menoufia.
                    University, Egypt, with general grade ( Excellent).
 20.12,2004:  Ph.D. in Education, Special Educational psychology.
                    Departement of  Educational Psychology, Faculty of Education and Social
                    Science, Eberhard Karls Universität Tübingen, Germany,
                    Title of the Ph.D thesis: "Effect of Interaction  between Parental Treatment
                    Styles and Peer Relations in Classroom on the Feelings of Loneliness among
                    Deaf Children in Egyptian Schools".