

An Investigation of the Relationship between Shyness and Loneliness Levels of Elementary Students in a Turkish Sample

Gökhan BAŞ¹

Abstract

The aim of this research is to analyse the shyness and loneliness levels of elementary students. This research has been conducted in accordance with general screening model. The sample of the research is constituted of 470 elementary students. "Revised Cheek and Buss Shyness Scale" and "University of California Los Angeles Loneliness Scale" were used in the study in order to collect data from the students. Pearson moments correlation coefficient technique, independent samples t-test and regression test have been employed for analysing the data. The significance level was taken as .05 in the research. As a result of the research, it has been found out that the shyness levels of male students were found to be higher than the female students. It has also been found out that female students feel more loneliness than male students. It was also found out that there is a positive relationship between students' shyness and loneliness levels. In order to find out the prediction level of shyness on loneliness, the regression analysis was made. According to the result of the study, shyness predicts loneliness by 2%. At the end of the research, the findings were commented under other research findings in the literature and some recommendations were put forward.

Key Words: shyness, loneliness, Turkish students, elementary level of education

Introduction

Numerous terms have been used to refer to the experience of apprehension and anxiety in social situations, including dating anxiety, speech anxiety, social anxiety, shyness, embarrassment, social phobia, shame, social inhibition, reticence, communication apprehension, introversion, stage-fright, and audience anxiety (Crozier, 2000; Leary & Kowalski, 1993; Van Dam-Baggen & Kraaimaat, 1999). Although these terms are not synonymous with one another, feeling of discomfort in social occasions and the accompanying anxiety resulting from the presence of interpersonal evaluation is the common experience of all (Buss, 1980; Schlenker & Leary, 1982). This study focused on shyness and loneliness levels of elementary students.

¹ Selcuk Univeristy Educational Sciences Department, Konya gokhan51bas@gmail.com

Shyness

Shyness has been conceptualized and defined in a number of ways, mostly being regarded as belonging to a particular category. One such category views shyness as a subjective experience which is exhibited as nervousness and apprehension in interpersonal encounters (Buss, 1980; Leary & Schlenker, 1981; Zimbardo, 1977). Buss (1980), for instance, defined shyness as an inhibition of expected social behaviour, together with feelings of tension and awkwardness. This line of definitions can be said to regard shyness as a social phenomenon, and a form of social anxiety.

Shyness has long been described as a character trait, an attitude, or a state of inhibition (Durmuş, 2007). Researchers investigating shyness have attempted to develop objective definitions of this human experience. For example, shyness has been defined as discomfort, inhibition, and awkwardness in social situations, particularly in situations with unfamiliar people (Buss, 1985) or as a tendency to avoid social interaction and to fail to participate appropriately in social situations (Durmuş, 2007; Pilkonis, 1977; Schölmerich, Broberg & Lamb, 2000).

Leary (1986) proposed that shyness is totally a social phenomenon, and that it should be defined in terms of both social anxiety and inhibition. Leary (1986) thus, defined shyness as an affective-behavioural syndrome characterised by social anxiety and interpersonal inhibition which results from the prospect or presence of others of interpersonal evaluation.

Shyness is a form of excessive self-focus, a preoccupation with one's thoughts, feelings and physical reactions. Shyness may vary from mild social awkwardness to totally inhibiting social phobia. It may be chronic and dispositional, serving as a personality trait that is central in one's self-definition. Situational shyness involves experiencing the symptoms of shyness in specific social performance situations but not incorporating it into one's self-concept. The reactions for shyness can occur at any or all of the following levels: cognitive, affective, physiological and behavioural, and may be triggered by a wide variety of arousal cues (Henderson & Zimbardo, 1998).

Shyness is virtually an unavoidable emotion, given that it is directly related to many aspects of human nature (Izard, 1972; Pilkonis, 1977). Like many other emotions, shyness is learned in social relationships, and experienced mostly in connection to others (Asendorpf, 1990). Undoubtedly, shyness is a familiar concept and experience for many of us. In fact, it is so inherent part of human life that almost everyone reported experiencing a period of shyness at certain times in his/her life, though the level of experience shows variations from one person to the other (Carducci, 1999; Bozgeyikli, 2002; Henderson & Zimbardo, 1998; Zimbardo, 1989; Zimbardo & Radl, 1981).

Various domains of difficulty have also been identified to further define the condition of shyness. Buss (1985), for example, classified two domains, fearful shy individuals versus self-conscious shy individuals. In the former group, fear of novelty and autonomic reactivity was hypothesised to be the major component. Pilkonis (1977) distinguished the privately shy from the publicly shy, wherein the privately shy were socially skilled but self doubting and uncomfortable and the publicly shy were more visibly uncomfortable and less skilled. Another sub-classification of shyness defined by Zimbardo (1977) consisted of three groups. The first group was composed of individuals who did not seek social interaction and preferred to be alone. The second group included individuals who were reluctant to approach others, was socially unskilled, and had low self-confidence. The last group comprised individuals who were confined by societal expectations and were concerned about violating these expectations.

The studies of shyness within theoretical frameworks after 1970s have contributed a lot to the understanding of the concept in a more systematic fashion, mainly after the findings pointing out its high prevalence were obtained. Several empirical investigations by researchers (Arkin, Appelman & Burger, 1980; Asendorpf, 1987, 1989; Buss, 1980; Cheek & Buss, 1981; Crozier, 1979; Jones & Russell, 1982; Leary, 1983a, 1983b) have focused on the aetiology, measurement, behavioural characteristics, social impact, and treatment alternatives for shyness. In addition, with those research attempts, great advances were achieved toward understanding how and why experience of shyness has made such a large impact on many individuals' lives.

Loneliness

Human beings are social by nature. They desire to form and maintain positive and significant interpersonal relationships. Loneliness may affect mood, social skills and sociability (Johns, Freeman & Goswick, 1981; Karaoğlu, Avşaroğlu & Deniz, 2009). All human beings feel loneliness at some point in their lives (Demir & Fışıloğlu, 1999). Although research on loneliness has increased in the past two decades, no consensus has been reached concerning a definition of the construct (Medora & Woodward, 1986), but various definitions have arisen. Seligman (1983) described loneliness as one of the most poorly understood of all psychological phenomena. DeJong-Gierveld (1988) considered loneliness multidimensional and defined it as a lack of opportunity to have a relationship with others on an intimate level. According to Peplau & Perlman (1982), loneliness is the unpleasant experience that occurs when a person's network of social relations is significantly deficient in either quality or quantity.

Loneliness is a universal emotional and psychological experience. Loneliness is also seen as a normal experience that leads the individual to achieve deeper self-awareness, a time to be creative, and an opportunity to attain self-fulfilment and to explore meaning of life (Bozgeyikli, 2002; Crozier, 2000; Hamarta, 2000; Henderson & Zimbardo, 1998; Yalom, 2001). Loneliness is also a condition of human life, an experience of humanizing which enables the person to sustain, extend, and deepen his/her humanity (Moustakas, 1961). According to Weiss (1973), loneliness is caused not by being alone but being without some definite needed relationship or set of relationships. Loneliness appears always to be a response to the absence of some particular relational provision, such as deficits in the relational provisions involved in social support (DiTomasso, et al. 2003; Özdemir & Tuncay, 2008).

However, the experience of loneliness is likewise unpleasant and distressing. Loneliness may also lead to people to submerge themselves into dependency relations, following direction, imitation, being like others, and striving for power and status (Peplau, 1982). Reading, watching TV, using the internet, doing social activities, attending parties, drinking, and also using drugs do not only signal loneliness, but these also may be some

adaptive or maladaptive coping strategies university students use to overcome this unpleasant and distressing experience – loneliness (Özdemir & Tuncay, 2008). Even with advances in technology designed to facilitate communication between people, loneliness may be on the rise. In a recent longitudinal study, Kraut, et al. (1998) observed that higher levels of use of the Internet were associated with declines in communication with family members, decreases in the size of one's social circle, and increased loneliness. Loneliness is related also to a number of negative mood states and destructive behaviour patterns. Reviews of the literature (Hansson, Jones, Carpenter & Remondet, 1986; Jones, Rose & Russell, 1990; McWhirter, 1990) have documented links between loneliness and depression, anxiety, and interpersonal hostility as well as with substance abuse, suicide, and vulnerability to health problems. Given the prevalence and the magnitude of suffering associated with loneliness, researchers and clinicians may be called upon increasingly to identify personal and interpersonal factors that increase risk for its onset and exacerbation (Jackson, Soderlind & Weiss, 2000).

Although no agreement on the definition of loneliness is available, it can be defined as an emotion which is evoked when the social relationships of an individual are extremely deficient both qualitatively and quantitatively (Deniz, Hamarta & Arı, 2005; Peplau & Perlman, 1982). Loneliness is composed of negative emotions such as trouble and distress (Jones, Freemon & Goswick, 1981; Russell, Peplau & Cutrona, 1980). Weiss (1973) pointed out the existence of a link between attachment theory and loneliness. He defined loneliness as an anxiety situation which arises when the individual is separated from his/her attachment figure.

Relationship between Shyness and Loneliness

Numerous studies have observed a robust correlation between shyness and loneliness but few have attempted to explain why this relationship exists. This study assessed the extent to which variables associated with self-presentation approaches to shyness and social support mediated the association between shyness and loneliness. Two hundred and fifty-five American college students completed self-report measures of shyness, loneliness, and expectations of rejection, interpersonal competence and close social support. A path

analysis indicated that high levels of shyness were related to features of a protective style of self-presentation (perceived deficits in interpersonal competence, heightened expectations of rejection). In turn, low levels of interpersonal competence predicted reductions in social support. Together, measures indicative of a protective self-presentation style and reductions in social support predicted increases in loneliness. However, shyness and loneliness had a significant association, even after controlling for the influence of self-presentation and social support. Findings suggest that although features of protective self-presentation and social support may partially explain the association between shyness and loneliness, shyness and loneliness are also directly related (Jackson, et al. 2002).

Although shyness and loneliness are distinct constructs, they tend to overlap, inasmuch as measures of each typically correlate (Jones, Rose & Russell, 1990). Both are linked to unsatisfactory social interaction (Jones, Rose & Russell, 1990). Loneliness has been defined as "a sense of isolation that persists over time" (Perse & Rubin, 1990, p. 37). Lonely persons tend to be deficient in communication skills (Spitzberg & Canary, 1985). In turn, these deficiencies isolate people from the very social activities that might reduce loneliness (Perse & Rubin, 1990). According to media uses and gratification theory, when needs cannot be met in more "natural" ways, people often turn to media (Katz, Gurevitch & Haas 1973; Rosengran & Windahl, 1972; Rubin & Rubin, 1985).

Measures of shyness and loneliness typically show a correlation ranging from .40 to .50 (Ashe & McCutcheon, 2001; Jones, Rose & Russell, 1990). Shyness and loneliness are reliably correlated (Ashe & McCutcheon, 2001; Jones, Rose & Russell, 1990; Sherri, Rickard & Zlokovich, 2009) but the degree to which intervening variables mediate their relationship is not clear. In one recent conceptualization, Dill & Anderson (1999) posit that shyness is typically an antecedent of loneliness and that several variables contribute to the loneliness often endured among the shy. First of all, fear and anxiety can interfere with the shy person's attempts to interact with others. Furthermore, the embarrassment and sense of failure that accompanies social interactions of the shy can lead to further avoidance.

When this pattern leads a shy person to have fewer social contacts than desired, loneliness has emerged (Jackson, et al. 2002).

Most of the researches about shyness and loneliness were conducted on university and high school students (Arı & Hamarta, 2000; Demir, 1990; Deniz, Hamarta & Arı, 2005; D'Souza, et al. 2008; Karaoğlu, Avşaroğlu & Deniz, 2009; Erözkan, 2009; Moraldo, 1981; Todd, Soderlind & Weiss, 2000). It is needed further studies to be carried out at elementary level of education since the shyness and loneliness are highly affected at earlier ages at primary and elementary level of education. In this regard, if students are educated by being social individuals from earlier ages (primary and elementary levels), they can be more social and feel less shyness and loneliness in social activities so that they can demonstrate themselves easily. According to Pancar (2009) and Yüksel (2002), academic achievement is affected by these two factors, there are studies needed to be carried out on students' shyness and loneliness levels at elementary level of education so that students can be educated in order to be more social individuals in daily life. In this regard, as Shin (2007) states, academic success is affected by students' social behaviours. On the other hand, unfortunately, cross-cultural data about shyness and loneliness are scarce. The degree, frequency, and quality of a person's shyness and loneliness will be a function, among other things, of the society in which he or she lives. In light of the growing awareness that research conducted in Western cultures does not necessarily represent the psychology of non-Western populations (Triandis, 1996). In this study the authors examined the levels of shyness and loneliness in a Eurasian country, Turkey.

The study aimed to investigate the effects of attachment styles and gender on loneliness and social skills. In this respect, the following questions were to be answered in this study:

1. Do average shyness levels of students differentiate with respect to gender?
2. Do average loneliness levels of students differentiate with respect to gender?
3. Is there a significant relationship between shyness levels and loneliness levels of students?
4. Do shyness levels of students significantly affect the average loneliness levels?

Method

Participants

In this study, the sample set of the research was taken from five elementary schools of Nigde, Turkey by the random set sampling method. Using random sampling is the best way of ensuring that the observations are independent (Karasar, 2005) and in this model, a researcher develops an accurate sampling frame according to a mathematically random procedure, and then locates the exact element that was selected for inclusion in the sample (Neuman, 2000). All data were collected by the researcher himself between December 2009 and February 2010.

The participants were 470 students (204 female and 266 male students) recruited from five different elementary schools of Nigde. Elementary school students studying in classes VI, VII and VIII were selected for the present study. None of the participants knew in advance that they would be asked questions both about shyness and loneliness. The demographic information for the sample is given in Table 1 below.

Table 1. Demographics of the sample

Class Type	Gender		Total	
	Female	Male	n	%
	n	n	n	%
6. Class	58	61	119	20.95
7. Class	56	58	114	20.07
8. Class	61	56	117	20.60
Total	204	266	470	100.00

As one looks at the Table 1 given above, it can be seen that there are 204 female and 266 male students. Of all, 43 % of the students are females and 57 % of the students are males. The distribution of classes was: (1) sixth class 31.48 %, (2) seventh class 31.91 %, (3) eighth class 36.59 %.

Instrumentation

Revised cheek and buss shyness scale (RCBS). *Revised Cheek and Buss Shyness Scale* (RCBS) is one of the most commonly employed measures of dispositional shyness (Cheek & Briggs, 1990). The original Cheek and Buss Shyness Scale (Cheek & Buss, 1981) contained 9 items. The development of the revised form aimed at improving the psychometric properties of the original scale. The revision resulted in a 13-item revised version of the original scale. There are also two other revised versions of the scale, one with 14 and the other with 20 items; however 13-item RCBS was of interest for the present study, given that it has been accepted as the most prominent measure in shyness research (Leary, 1991). The RCBS was found to be internally consistent (coefficient alpha = .90), and 45-day test-retest reliability coefficient was $r = .88$ (Cheek & Briggs, 1990). Considerable support was also reported for the validity of the scale. The convergent validity was supported via strong correlations with Social Avoidance and Distress Scale (Watson & Friend, 1969, $r = .77$), and Social Reticence Scale (Jones et al., 1986, $r = .79$). The scale also correlated with the original 9-item version ($r = .96$). Leary (1986) recommended the use of RCBS as an appropriate measure of shyness due to its inclusion of both behavioural and physiological factors. 13 items of the RCBS has been translated into Turkish by Güngör (2001). She selected seven items from the obtained response list and added them to the translated 13-item scale. As a result, she created a 20-item Shyness Scale. Güngör (2001) reported evidence for the validity of the 20-item scale after correlating it with Turkish version of *Liebowitz Social Anxiety Scale* (Eren-Gümüş, 1997). The correlation between scores on Shyness Scale and avoidance of SKDE was found to be .78. In addition, Shyness Scale and the total scores obtained from SKDE correlated highly ($r = .71$). The reliability study included a test-retest, and internal consistency methods. The test-retest reliability coefficient was reported as .83, and Cronbach alpha coefficient for internal consistency was found to be .91.

University of California Los Angeles loneliness scale (UCLA). *University of California Los Angeles Loneliness Scale* (UCLA) The UCLA developed by Russell, Peplau & Ferguson (1978), revised by Russell, Peplau & Cutrona (1980), and adapted to Turkish

participants by Demir (1990) was used to measure the loneliness levels of students. The UCLA is a 20-item Likert-type scale to measure general loneliness levels of participants. The reliability coefficient of the UCLA was calculated as .94 by the re-test method and the Cronbach's Alpha reliability coefficient of the UCLA was found as .96. The parallel form validity of the UCLA was tested with the Beck Depression Inventory and the correlation coefficient was found as .77 (Demir, 1990).

Procedure

Participants were tested in small groups, ranging in size from 15 to 25. All participants received the same description of the study. Participants were told that all responses provided were both confidential and anonymous, and that they could choose to terminate participation at any point. Participants then completed the demographics section of the questionnaire followed by *the UCLA Loneliness Scale* and *the Revised Cheek and Buss Shyness Scale*. Participants were allowed as much time as needed to complete the questionnaire, with typical completion time being 15 minutes. Upon completion, participants were given a debriefing form regarding the general purpose of the study along with the researcher's contact information should they have further questions.

Statistical Analyses

The analyses of the study included descriptive statistics, regression analysis, independent samples t-test, and Pearson correlation coefficients were employed to analyse the data obtained by inventories used in the research. The SPSS 15.0 package was used in the analyses of the data. The significance level was taken as .05 in the study.

Findings

Sub problems of the research and results of the statistical analysis performed for these sub problems are given below:

I. Comparison of shyness levels of students with respect to gender

Do average shyness levels of students differentiate with respect to gender? The shyness levels of elementary students were compared with respect to gender by t-test. A summary of statistics and their significances are given in Table 1.

Table 1. Elementary students' shyness levels in terms of gender

Gender	n	\bar{X}	Std. Dev.	t	p
Male	266	52.41	13.74	1.115	.233
Female	204	51.15	10.22		

$p > .05$

When the table above is analysed, it can be said that the shyness level of male students is $\bar{X} = 52.41 \pm 13.74$ and shyness level of female students is $\bar{X} = 51.15 \pm 10.22$ so that male students feel more shyness than female students. In order to find out the difference between these two groups, the independent samples t-test was used. The t-value was found as $t(38) = 1.115$ ($p = .233$, $p > .05$) so that a statistical significant difference was not found between these two group of students in terms of gender variable.

II. Comparison of loneliness levels of students with respect to gender

Do average loneliness levels of students differentiate with respect to gender? The loneliness levels of elementary students were compared with respect to gender by t-test. A summary of statistics and their significance are given in Table 2.

Table 2. Elementary students' loneliness levels in terms of gender

Gender	n	\bar{X}	Std. Dev.	t	p
Male	266	39.72	9.56	.564	.586
Female	204	41.66	10.48		

$p > .05$

When the Table 2 is analysed, it can be said that the loneliness level of male students is $\bar{X} = 39.72 \pm 9.56$ and loneliness level of female students is $\bar{X} = 41.66 \pm 10.48$ so that female students feel more loneliness than male students. In order to find out the difference between these two groups, the independent samples t-test was used. The t-value was

found as $t(38) = .564$ ($p = .586$, $p > .05$) so that a statistical significant difference was not found between these two group of students in terms of gender variable.

III. Relationship between shyness and loneliness levels of elementary students

Is there a significant relationship between shyness levels and loneliness levels of students? The relationships amongst shyness levels and loneliness levels of students are given in Table 3 below.

Table 3. Relationship between shyness and loneliness levels

		Shyness
Loneliness	<i>r</i>	.342

$n = 470$ $p < .001$

In order to define the relationship between elementary students' shyness and loneliness levels, the Pearson moments coefficient test was used. When the relationship between the shyness and loneliness levels of elementary students are analysed, it can be said that there is a positive statistical significant correlation ($r = .342$, $p < .001$) between students' shyness and loneliness levels.

IV. Regression analysis for the prediction of shyness for loneliness

Do shyness levels of students significantly affect the average loneliness levels? The regression analysis was performed to determine the effects of shyness on loneliness. Results given in Table 4 show the effect of shyness levels of students on their loneliness levels below.

Table 4. Regression analysis for the prediction of shyness for loneliness

Model	R	R ²	F	β	t
Loneliness	.352	.023	4.852	.342	3.066

$p < .05$

The effects of shyness on loneliness were examined by the regression analysis and the results are given in Table 4 above. The regression coefficient levels was found as $R = .352$.

Shyness level of the elementary students explain 2 % ($R^2 = .23$) of loneliness level of the students. When one looks at β (.342) and t-values ($t = 3.066$) in the analysis, it can be seen that shyness predicts loneliness in a statistical significant level ($p < .05$).

Discussion and Conclusions

According to the findings of the research, shyness levels of male students were observed to be higher than shyness levels of female students, but the difference between these two groups is not found out to be statistically significant at .05 level. The shyness levels of male students were found out to be higher than female students in studies carried out by Ashe & McCutcheson (2001), Yıldırım (2006) and Durmuş (2007). These findings in these studies correlate with the result of the current study.

According to the results obtained in the study in terms of loneliness, loneliness levels of male students were found out to be higher than loneliness levels of female students, but the difference between these two groups is not found out to be statistically significant at .05 level. This finding is similar to the findings of Arı & Hamarta (2000), Deniz, Hamarta & Arı (2005), Wittnberg & Reis (1986) and Yıldırım (2006).

It was found out that there was a statistical positive relationship between shyness levels and loneliness levels of elementary students. In studies carried out by Ashe & McCutcheson (2001), Booth & Bohnsack (1992), Booth, Bartlett & Bohnsack (1992), Sherri, Richard & Zlokovich (2009), Moraldo (1981), Jones, Rose & Russel (1990), D'Souza, et al. (2008), Dill & Anderson (1999), Yüksel (2002) and Jackson, et al. (2002), it was found a statistical relationship between shyness levels and loneliness levels of students. These findings correlate with the results of the current research. Shyness levels of students had a statistical significant effect on their loneliness levels. While a low level of shyness affects loneliness negatively, high level of shyness affects loneliness positively. Research findings showed that loneliness levels of students are affected by their shyness levels. The results of the studies carried out by Duggan & Brennan (1994), Jackson, Towson & Narduzzi (1997) and Deniz, Hamarta & Arı (2005) correlate with the results of the current study.

It is reasonable to speculate that some specific genetic factors increase vulnerability to both shyness and loneliness (Deniz, Hamarta & Arı, 2005). Furthermore, it can be said that if students are unsocial in their daily activities, they feel lonelier and face with loneliness. If students are to be social individuals, they should be educated so as to be social so that they do not feel lonely themselves because they participate actively in social organisations and activities (Deniz, Hamarta & Arı, 2005; Jones & Carver, 1991). In this regard, it can be said that according to Deniz, Hamarta & Arı (2005), Booth, Bartlett & Bohnsack (1992) and Moraldo (1981), shy students tend to be more lonely than their peers.

In this study, the relationship between shyness levels and loneliness levels of elementary students was held. More research is needed in order to generalise the findings of this research to other settings. This research cannot be generalised to other level of educational organisations. Since shyness and loneliness are universal concepts, cross-cultural studies may also be considered as future work. Further studies can be made in order to find out the relationship amongst shyness, loneliness, locus of control, self-esteem and social anxiety since the terms self-esteem and social anxiety are highly related with the terms shyness and loneliness. Furthermore, research on samples less homogeneous in age, educational level, and ethnicity would be useful for assessing the generalisability of the findings in the research.

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