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Loneliness and shyness from the perspective of emotion regulation

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Abstract


Research aim: Loneliness and shyness are two of our increasing psychological problems today. It is considered important to understand how emotion regulation dimensions affect these two problem areas, as one of the main factors underlying our psychological problems. In this study, it was aimed to determine how both intra and interpersonal emotion regulation strategies and difficulties in emotion regulation predict loneliness and shyness.

Method: For this aim, it was carried out with the participation of 462 people (58.4% women and 41.6% men; Range:18-69; Mage: 28.08) from two different countries, Turkey (51.5%) and Pakistan (48.5%). It is quantitative research and descriptive and relational analyzes were made.

Findings: When the findings were examined, it was found that difficulties in emotion regulation predicted both loneliness and shyness. In terms of emotion regulation strategies, while 'expressive suppression' and 'social modelling' predicts loneliness; 'expressive suppression' and 'enhancing positive affect' seem to predict shyness. It was found that other emotion regulation strategies did not predict statistically significantly. In addition, the findings obtained according to the relevant demographic variables (according to gender, country, being in a romantic relationship, having a child/children) and emotion regulation strategies were discussed in the context of the relevant literature.

Conclusions: As a result of the study, it was seen that there are emotion regulation types and strategies associated with loneliness and shyness.

Keywords: loneliness, shyness, interpersonal emotion regulation, intrapersonal emotion regulation, emotion regulation difficulties

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Introduction

It is thought that loneliness and shyness, which today's people frequently experience, are related to emotion regulation. Particularly, some people unintentionally experience and display more negative emotions, which alters their perspective on life and leads them to believe they are shy and alone. The ability to accurately perceive, evaluate, and express emotion as well as the capacity to access and generate feelings when they support thought, understand emotion and emotional knowledge, and regulate emotions in order to encourage emotional development are all components of emotional regulation, which mediates the relationship between loneliness and shyness (Ashe & McCutcheon, 2001; Zhao et al., 2012). Social network characteristics basically, our ability to process emotional data appropriately and effectively to solve both interpersonal and intrapersonal issues influence loneliness based on personal criteria. Particularly, shyness, should make one less socially attractive or inclined to make friends, or they may just have an influence on inappropriate social actions, leading to unsatisfactory and unhappy social encounters. Because their social networks are weak, shy people, for example, are more likely to experience loneliness in a new social context (Berges & Augusto, 2007; Lopes et al., 2003).

It is crucial to evaluate loneliness and shyness from the perspective of adult emotional control in order to comprehend emotional deficits and how emotional growth might be achieved. A psychological state known as loneliness, which is defined as the agony of feeling alone, is marked by a strong sense of helplessness and emptiness, a loss of control, and a sense of personal threat (Preece et al., 2021). According to studies, loneliness can result in more severe physical and mental health issues like internet addiction, suicidal thoughts, and substance abuse. Additionally, loneliness appears to be connected to internalizing symptoms such depression in both adults and adolescents, anxiety, and social anxiety (Cacioppo et al., 2006; Sündermann et al., 2014; Velotti et al., 2021). A person is said to be lonely when they have a subjective lack of social connections, either in terms of quantity or quality (Diehl et al., 2018). Weiss (1973) implied that social loneliness and emotional loneliness are two distinct types of loneliness. Lack of a network of social relations leads to social loneliness. Instead of experiencing emotional loneliness, such as could happen after a partner's death or divorce, a person experiences social loneliness when they are not socially integrated, such as into a group of friends with related interests. Because the satisfaction of the demand for emotional loneliness cannot serve as a counterbalance for social loneliness and vice versa, it is necessary to investigate both types of loneliness separately. According to Luhmann and Hawkley (2016), the developmental trajectory is more U-shaped, with young adults reporting the highest loneliness, tracked by a second peak in older age groups.

Loneliness heightens the risk of heart illness, mortality, anxiety, chronic depression, dementia, and suicidal thoughts due to its negative influence on one's physical and psychological health (Cacioppo et al., 2006; Hayley et al., 2017; Holt-Lunstad et al., 2015). Empirical research revealed that loneliness increased the risk of stroke and dementia by 30% and 50%, respectively (Donovan & Blazer, 2020). Hospital visits were also more likely when people were lonely (Gers-Emersan & Jayawardhana, 2015) lowers standard of living (Musich et al., 2015), and mortality (Holwerda et al., 2016) among the older population. Additionally, a meta-analysis showed that loneliness among older persons raises the risk of all-cause mortality by 26% (Cacioppo et al., 2006). Previous research has shown that sociodemographic factors like gender, advanced age, and unemployment are related to people's feelings of loneliness during the epidemic (Cohen-Mansfield et al., 2016; Von Soest et al., 2020). Loneliness can be worsened by a number of conditions, involving poor physical and spiritual health, anxiety, and hopelessness (Barnett et al., 2019; Beutel et al., 2017). In addition, chronic illnesses and functional constraints have been linked to a higher level of loneliness in persons (Kuwert et al., 2014; Luhmann et al., 2016; Von Soest et al., 2020).

Shyness has been linked to loneliness on numerous reasons (Heinrich & Gullone, 2006). Cheek (2021) related shyness is depicted as a tendency to withdraw and feel uncomfortable in social situations Shyness is a substantial component of social relationships since it is defined by the anxiety

one experiences during social meetings and as the suppression of interpersonal acts owing to concerns about interpersonal assessments. Many research from many cultures have proven its link to predict loneliness (Ashe & McCutcheon, 2001; Baş, 2010; Bian & Leung, 2015; Erözkan, 2009; Zhao et al., 2012). Jackson et. al. (2002) discovered that even after controlling for potential processes (performance and social support), they still observed a substantial and direct correlation between shyness and loneliness, with shyness being a significant predictor of loneliness. In light of this, it may be important to address the relationship between shyness and loneliness among people and to explore the factors that influence these two conditions.

Shyness is seen to be a behavior that exacerbates a person's issues. There is element of fear, which is universal and unaffected by culture (Weiner & Craighead, 2010). Inhibitions brought on by shyness make it difficult to build strong relationships with others and accomplish professional goals (Henderson et al., 2014). Although social anxiety is prevalent, excessive social anxiety can be damaging and have a negative impact on a person's ability to interact with others and their perception of their own achievement (Fitts et al., 2009; Koydemir & Demir, 2008; Piko et al., 2017). Shy people prefer to establish their own identities, and they will monitor and control their appearance to present a reserved demeanor to others. People who are aware of their shyness regulate their own emotions and public perceptions to protect their autonomy. Shy persons are aware of their limited social skills. As a result, they shy away from social interaction, and many of them live alone (Jackson et al., 2002). Additionally, shy people find it challenging to engage with others and are more prone to have negative opinions about both themselves and other people. This results in loneliness as they fail to regulate their emotions affectively (Zhao et al., 2012). Thus, if active emotion regulation does not mediate in shyness it leads to socially withdrawn behaviors. So, role of emotional regulation is significant both in loneliness and shyness behaviors.

Emotional regulation refers to the use of individual and social techniques to manage our or others' feelings (Hofmann et al., 2016). The acceptance of adaptive techniques by a person to control adversely high levels of intense emotions is known as emotion regulation (Leahy et al., 2011). Emotion regulation skills include: (a) One should be able to maintain self-control and act in agreement with their anticipated aim when faced with unfavorable feelings. In order to realize personal objectives and situation-based needs, one should also try employ situationally relevant emotional management practices to adjust emotional reactions as expected. The lack of these skills highlights how apparent emotional management issues are. Because the person finds it difficult to describe internal sensations and avoids social connection, emotional management problems lead to loneliness, and eventually the phenomenon of shyness slowly takes hold. The person becomes uninterested and reticent in forming relationships with others. The emotional and mental health of an individual depend on reducing and preventing loneliness (Nicolaisen & Thorsen, 2017). An individual's ability to adjust to life significantly depends on their capacity to create wholesome and stable interactions. Building healthy relationships involves all of these factors like feelings, emotions, cognitions, behaviors, and bodily responses and one of these factors feelings is remarkably crucial (Koçak, 2005). Emotions help to promote social engagement, decision-making, and memory improvement. Even while everyone experiences loneliness, some people may be more prone to it if they are presented with new social difficulties or other difficulties in their daily lives (Cacioppo et al., 2006; Lim et al., 2020). Shyness and loneliness go hand in hand. People who are shy and lonely struggle to control their emotions. According to previous research, shy persons are more likely to use passive rather than active coping mechanisms to manage their emotions. Physical ease seeking and passive waiting are two sedentary behaviors that are linked to shyness. In response to fear, shy persons use fewer positive coping mechanisms. Due to greater emotional receptivity, shy persons may struggle harder to control their emotions. Additionally, emotionally charged situations are more likely to make timid people react by avoiding risks (Morales et al., 2015). Finally, there is indication that shyness is allied with internalizing coping, which is personal emotional regulation, which comprises nerve-wracking, pondering, self-pitying, and self-accusing; all of which signify amplified

risk of anxious and depressive symptomatology (Coplan et al., 2013). However, if these beneficial emotions are felt strongly for a protracted period, they may be harmful to the person. Emotion regulation techniques must be used to avoid the negative effects of emotions (Werner & Gross, 2010).

A lack of emotional awareness, an inability to identify and differentiate between emotional responses, difficulty confessing an emotional response, difficulty taking goal directed action, a deficiency of positive emotion regulation approaches, and inability to control emotions are six factors that add to difficulty with emotion regulation (Gratz & Roemer, 2004). These specific qualities are likely to be problematic for those who have difficulty managing their emotions. Furthermore, Gratz and Roemer (2004) argued that focusing on the management of emotional reactions rather than their acceptance could confuse processes that undermine regulation with those that support it. Some conceptualizations of emotion control therefore emphasize the significance of accepting and valuing emotional reactions (Cole et al., 1994; Linehan, 1993). In line with this, researchers have proposed that the propensity to feel negatively in response to one's own emotional reactions is maladaptive and is linked to more difficulty regulating one's emotions (Cole et al., 1994; Hayes et al., 1999).

It is also thought that one of the things influencing people's interpersonal tendencies is their ability to control interpersonal emotions. The socialization process in humans depends on the ability to control emotions. Comparatively, Eisenberg et al. (2000) hypothesized that social interaction influences how people regulate their emotions. People can particularly exploit their social components of emotion management (Williams et al., 2018). Interpersonal emotion regulation is the way through which people manage their emotions when engaging with others (Hofmann et al., 2016). People make strong social support and bond with others and share their negative emotions (Berscheid, 2003; Rimé, 2009), and making others feel at ease is crucial for lowering someone's bad emotions (Niven, Totterdell, & Holman, 2009). The best way to deal with issues with emotion regulation is to maintain goal-oriented behaviors, restrict extreme behavior in response to unpleasant feelings, and think about adaptable emotion regulation techniques (Gratz & Roemer 2004; Neuman et al., 2010).

Importance of Study and Purpose

This current study is attempted to enlighten loneliness and shyness from the perspective of emotional regulation. It was aimed primarily to examine how shy and lonely people have difficulty understanding, identifying, accepting, regulating, and controlling their emotions in order to act in an appropriate manner. As part of maturation process, people take on various roles, responsibilities, and changes and form both intimate and social relationships. In addition to the behavioral and cognitive changes brought on by social interaction and growth, emotional alterations are also observed. It is important to know specific thoughts and feelings which trigger the most negative emotions, leading to loneliness and shyness behaviors in individuals because emotions are hardest to tolerate. When the literature is surveyed, research that examined loneliness and emotion regulation simultaneously are Internalizing symptoms during corona virus (Velotti et al., 2021), Family function and hope (Yun et al., 2021), food addiction (Tatsi et al., 2019), drug abuse (Nikmanesh et al., 2015), experiential avoidance (Shi et al., 2016). Since rare studies have examined the problems of emotion regulation and loneliness together when the literature is studied, demonstrating that these variables are related to each other (Eres et al., 2021; Mauss et al., 2004; Saruhan & Yüksel, 2021). While emotional regulation and shyness studies with these variables were observed, social adjustment (Hipson et al., 2019), romantic relationship along with quality and wellbeing (Rowell & Coplan, 2013), mediating role of loneliness (Tekin, 2017). Further association of shyness and loneliness with social support and self-esteem was found (Zhao et al., 2012). Current study was led to fill in gaps as loneliness and shyness in perspective of emotional regulation was rarely focused. In line with intent, this research will help to know what behaviors or adaptive coping strategies are helpful to counter maladaptive feelings. It will help to learn how these emotions affect in the short and long term along with underlying beliefs about self, others, or life in general that tend to perpetuate the negative cycles most strongly.

Conversely, this research will aid to know what thoughts and beliefs individual must assist in regulating the relevant emotion (positive or negative). To be aware of both core and outer needs, one must be aware of the messages that are transmitted through those emotions. For developmental advancement and a higher quality of life, it is necessary to look into the loneliness and shyness components that individuals in Turkey and Pakistan experience in relation to their problematic emotional regulation. It is observed to be very considerable to pilot research on how problems in emotion regulation affects a person's loneliness and social awkwardness. This study is important in terms of the psychological response and the suggestions that can be brought in this respect according to the results of the research. In order to achieve this goal, answers to the following questions were sought:

1. Is there a significant relationship between loneliness, shyness, and emotion regulation?
2. Do loneliness, shyness and emotion regulation differ significantly between demographic variables (gender, country-wise, romantic status and having children)?
3. Do the scores of difficulties in emotion regulation substantially calculate the loneliness and shyness?
4. Do the emotion regulation strategies significantly predict the loneliness and shyness scores?

Method

Settings and Participants

The study group of this research consists of 462 participants aged 18 and over from two different countries, Turkey (51.5%) and Pakistan (48.5%). First of all, The University Institutional Review Board granted the required approval in order to carry out this study and gather data. (Decision number: 2022/486, decision date: 29.12.2022). Then, the data collection tools to be used in the research were transferred to Google forms and the data collection process was started online. Participants were reached using convenient sampling method. The data collection process was completed between 1-30 January 2023.

Analyzes were carried out on data obtained from people aged 18-69 ($M_{age}: 28.08$), 58.4% women and 41.6% men. Analyzing the participant's demographic information reveals that 0.2% are literate, 1.1% primary school, 1.7% secondary school, 5.8% high school, 57.1% university and 34% postgraduate. In addition, the participants reported that they perceived their socio-economic status as 14.1% high, 80.7% medium and 5.2% low.

Type of study and the Variables

This research, which was designed on the basis of a quantitative design, is a descriptive and correlational research. The dependent variables of the study are loneliness and shyness. While the independent variables in the descriptive analysis were gender, country, being in a romantic relationship, having a child/children; in the regression analysis, intrapersonal and interpersonal emotion regulation sub- strategies and difficulties in emotion regulation constitute the independent variable.

Data Collection and Measures

Since this study was conducted by collecting data from two different countries, different forms of the same scales were used while collecting data. While the original English forms were used for the data collected from Pakistan, the Turkish-adapted forms were used for the data collected from Turkey.

UCLA Loneliness Scale

The UCLA Loneliness Scale is the most extensively used tool for assessing general loneliness in research. Russell's third revision, from 1996, was employed in this study. This 20-item self-report questionnaire uses a 4-point Likert scale to measure both one's subjective feelings of social

isolation and loneliness. A high score on the scale implies a significant level of loneliness. The scale, which has a one-dimensional factor structure, has been subjected to reliability analyses on a variety of samples, including teachers, students, nurses, elderly individuals, etc. Cronbach's alpha coefficients were estimated to range between .89 and .94. Demir (1989) investigated the reliability and validity of the scale using a Turkish adaptation was found to be .94.

The Revised Cheek and Buss Shyness Scale (RCBS)

The RCBS (Cheek, 1983), a 13-item self-report and unifactorial measure of shyness, is based on the original 9-item measure of sociability and shyness (Cheek & Buss, 1981). The scale assesses both behavioral inhibition and discomfort in public/social anxiety. The 5-point Likert-type scale generates a score that ranges from 13 to 65. A high score signifies a high degree of shyness. The scale's internal consistency coefficient was calculated to be .90. In this study, the Turkish version created by Koydemir and Demir (2005) was employed. The scale's single factor structure was kept in the Turkish translation, and a .91 internal consistency reliability coefficient was determined.

Emotion Regulation Questionnaire (ERQ)

The ERQ scale, initiated by Gross and John in 2003, assesses people's inclinations for two fundamental emotion regulation techniques: "Cognitive Reappraisal" and "Expressive Suppression." These two techniques are a part of the process model, which is interpreted as Gross's theory for how individuals can adjust their own emotions. This scale is a self-report scale of the 7-point Likert type with a total of 10 items. In the reliability analysis of the scale's original form, the Cronbach alpha coefficients for cognitive reappraisal were .79, while for expressive suppression were .73. In the Turkish adaptation, which was completed by Aka and Gençöz (2014), the Cronbach alpha coefficients for the cognitive reappraisal were .85 and for expressive suppression were .78.

Interpersonal Emotion Regulation Questionnaire (IERQ)

The IERQ was developed by Hofmann et al. (2016) to determine how much people are dependent on others to control their emotions. The scale, which has 20 items is based on 5-point Likert scale, along with 4 sub-dimensions. Dimensions include: "Social Modeling," "Soothing," "Enhancing Positive Affect," and "Perspective Taking." The Cronbach's alpha coefficients for the sub-dimensions were .91, .89, .87, and .85, respectively. In the reliability analysis of the scale's original form. Koç et al. (2019) translated the scale into Turkish. It can be seen that the scale's Cronbach's alpha coefficients are .87, .86, .81, and .77, respectively. This scale also yields reliable results for the Turkish version.

Difficulties in Emotion Regulation Scale-Short Form (LESSON-16)

Gratz and Roemer (2004) formed the 36-item self-report scale, which is the DERS scale's first original version. Afterwards, the Difficulties in Emotion Regulation Scale (DERS-16) was revised by Bjureberg et al. (2016). The 16 items in this revised version measure the following aspects of difficulties in regulating emotions: nonacceptance of negative emotions, inability to engage in goal-directed behaviors when distressed, difficulties controlling impulsive behaviors when distressed, limited access to emotion regulation strategies perceived as effective, and lack of emotional clarity. The total scores on the DERS-16, a 5-point Likert-type scale, can range from 16 to 80, with higher scores indicating higher levels of emotion dysregulation. The entire scale has a Cronbach alpha coefficient of .92. The Cronbach's alpha for the Turkish version modified by Yiğit and Guzey Yiğit (2019) was determined to be .92, indicating that it is a valid measurement tool.

Table 1

The Cronbach's alpha (α) coefficients as a result of the reliability analysis of the scales in this study

Scales	Original Form	Turkish Form
1. Loneliness	.91	.86
2. Shyness	.77	.93
<i>Intrapersonal Emotion Regulation</i>		
3. Cognitive Reappraisal	.81	.72
4. Expressive Suppression	.68	.69
<i>Interpersonal Emotion Regulation</i>		
5. Social Modelling	.77	.87
6. Soothing	.78	.78
7. Perspective Taking	.74	.80
8. Enhancing Positive Affect	.78	.84
9. Difficulties in Emotion Regulation	.93	.94

When the Cronbach's alpha coefficients in Table 1 are examined, it can be said that the scales used in this study make reliable measurements.

Process

The SPSS 25 package program was used to evaluate the data, while 95% confidence interval and .05 significant level was used as the foundation for inferring the research's conclusions.

Additionally, the Eta Square value (η^2), which depicts the strength of the independent factors' influence over the dependent variable, was looked at. Cohen's (1988) value ranges were used as a guide when interpreting the value ranges as $.01 \leq \eta^2 < .06$ small effect; $.06 \leq \eta^2 < .14$ medium effect; and $.14 \leq \eta^2$ large effect.

Firstly, the data set was evaluated in terms of normality, multicollinearity and singularity problem, and independence of errors, which are necessary prerequisites for regression analysis. In Table 2, the results of the descriptive statistics are provided, together with the Pearson's Product-Moment Correlation Coefficient between the variables. According to Tabachnick and Fidell (2013), the data that were discovered to be between +1.5 and -1.5 were assumed to be normally distributed. Likewise, parametric tests were used for analysis. Also, the correlation coefficients ($r < .90$) between the variables, the values that should be in the form of $VIF < 10$ and $TV > .10$ of the data set were assessed and there was no evidence of multicollinearity problem. The Durbin-Watson coefficient, which should be between 1.5 and 2.5 indicates the errors were independent of each other, was calculated as 1.981.

Table 2

The Relationships Between Loneliness, Shyness, Inter/Intra-personal Emotion Regulation and Difficulties in Emotion Regulation and Descriptive Statistics

Scales	1	2	3	4	5	6	7	8	9
1. Loneliness	1								
2. Shyness	.47**	1							
<i>Intrapersonal Emotion Regulation</i>									
3. Cognitive Reappraisal	.08	.07	1						
4. Expressive Suppression	.16**	.09	.68**	1					

Interpersonal Emotion Regulation

5. Social Modelling	-.11*	-.09*	.29**	.18**	1				
6. Soothing	.01	-.05	.17**	.09	.61**	1			
7. Perspective Taking	-.08	-.10*	.28**	.13**	.69**	.63**	1		
8. Enhancing Positive Affect	-.03	-.13**	.29**	.30**	.60**	.58**	.48**	1	
9. Difficulties in Emotion Regulation	.49**	.47**	.06	.05	.14**	.22**	.07	.16**	1
<i>X</i>	40.65	34.42	17.32	14.68	16.05	14.68	14.27	18.56	44.18
<i>SS</i>	11.39	10.96	5.43	4.89	4.88	4.89	4.63	5.10	14.57
<i>Skewness</i>	.46	.19	-.21	.00	-.15	.00	.03	-.62	.07
<i>Kurtosis</i>	-.10	-.26	-.29	-.50	-.51	-.50	-.43	-.33	-.50

*p<.05, **p<.01

Finally, it was agreed that the data set was suitable for using parametric tests and performing regression analysis. In order to test whether the dependent variables of the study differ according to the relevant demographic variables, independent samples t-test analyzes were performed, while multiple linear regression analysis was performed for the main research problem.

Findings**Findings on Demographic Variables**

Demographic variables considered in this study were, gender, country, being in a romantic relationship and having child. Table 3 describes the results of the T-test for these variables.

Table 3

Independent Samples T-test Table Depending on Gender, Country, being in a Romantic Relationship and having a Child/Children

Variables	Groups	N	<i>X</i>	<i>SS</i>	<i>Df</i>	<i>t</i>	<i>p</i>	η^2
Loneliness	Gender				460	3.23	.001**	.02
	Female	270	42.08	11.19				
	Male	192	38.64	11.39				
	Country				422.01	1.95	.052	.008
	Turkey	238	41.66	9.93				
	Pakistan	224	39.58	12.69				
	Being in a romantic relationship				460	-5.05	.000**	.05
	Yes	244	38.18	10.77				
	No	218	42.41	11.45				
	Having a child/children				460	-4.28	.000**	.04
Yes	143	37.36	10.23					
No	319	42.13	11.58					
Shyness	Gender				460	1.89	.059	.008
	Female	270	35.23	10.87				
	Male	192	33.28	11.01				
	Country				426.26	-1.61	.105	.006
	Turkey	238	33.62	20.41				
	Pakistan	224	35.26	19.29				

Being in a romantic relationship		460	-4.71	.000**	.05
Yes	244	32.20	10.62		
No	218	36.90	10.82		
Having a child/children		322.24	-3.38	.001**	.02
Yes	143	32.03	9.55		
No	319	35.49	11.39		

*p<.05, **p<.01

Table 3 shows that there was a significant gender difference in the individuals' levels of loneliness. ($t=3.23$, $p<.05$), despite there was no significant difference in the levels of shyness ($t=1.89$, $p>.05$). When looked between groups, it is seen that women ($\bar{X}=42.08$) feel lonelier than men ($\bar{X}=38.64$). The effect size coefficient (η^2) of this difference was calculated as .02, which is small effect. When we look at the country variable, there was no significant difference between Turkish and Pakistani individuals for both loneliness and shyness ($p>.05$).

A significant difference was found between those who answered *yes* to the question of "being in a romantic relationship" and those who said *no* in terms of both loneliness ($t=-5.05$, $p<.05$) and shyness ($t=-4.71$, $p<.05$). Individuals without a romantic relationship seem to feel both lonely ($\bar{X}=42.41 > \bar{X}=38.18$) and shy ($\bar{X}=36.90 > \bar{X}=32.20$) at a higher level. The effect size coefficient (η^2) of this statistically significant difference in terms of being in a romantic relationship variable was calculated as .05 (for both variables), which is small effect.

Finally, having a child creates a significant difference in both levels of loneliness ($t=-4.28$, $p<.05$) and shyness ($t=-3.38$, $p<.05$) of individuals. It can be said that having a child decrease both loneliness ($\bar{X}=37.36 < \bar{X}=42.13$) and shyness ($\bar{X}=32.03 < \bar{X}=35.49$) levels of individuals. When the effect size coefficient of this significant difference was calculated, the coefficient for loneliness (η^2) was calculated as .04, and the coefficient for shyness (η^2) was calculated as .02, which are small effect.

Indicators of Loneliness and Shyness

Two multiple linear regression analyses were carried out to investigate the predictive status of inter/intra-personal emotion regulation as well as challenges in emotion control variables for loneliness and shyness. Table 4 displays the acquired results.

Table 4

Inter/Intra-personal Emotion Regulation and Difficulties in Emotion Regulation variables as indicators of Loneliness and Shyness

Variables	Loneliness				Shyness			
	B	IF	β	t	B	IF	β	t
Constant	25.331	2.396		10.572	23.363	2.338		9.995
Cognitive Reappraisal	-.049	.085	-.032	-.578	.063	.083	.042	.751
Expressive Suppression	.449	.115	.214**	3.896	.237	.113	.117**	2.107
Social Modelling	-.458	.142	-.196**	-3.230	-.118	.138	-.052	-.852
Soothing	.129	.134	.055	.967	-.008	.130	-.004	-.062
Perspective Taking	.031	.145	.013	.216	-.033	.142	-.014	-.235
Enhancing Positive Affect	-.203	.120	-.091	-1.685	-.478	.117	-.223**	-4.081
Difficulties in Emotion Reg.	.397	.032	.509**	12.593	.378	.031	.503**	12.290
Fit values	R= .551		R ² = .304		R= .533		R ² = .284	
	F _(7, 454) = 28.267**		ΔR^2 = .293		F _(7, 454) = 25.777**		ΔR^2 = .273	

*p<.05, **p<.01

It is seen that the regression equation obtained as a result of the analysis for the prediction of loneliness is significant according to the result of the analysis of variance ($F_{(7, 454)} = 28.267, p < .05$). It was found that 30% ($R^2 = .304$) of the variance in the loneliness levels of the participants was explained by the variables of inter/intra-personal emotion regulation and difficulties in emotion regulation. Standardized regression coefficients (β) and significance values (p) of independent variables were examined. As a result, it was found that while expressive suppression ($\beta = .214; p < .05$) and difficulties in emotion regulation ($\beta = .509; p < .05$) predicted loneliness positively and significantly, social modeling ($\beta = -.196; p < .05$) predicted it negatively. When the order of importance of the predictor variables on loneliness is evaluated, they are listed as difficulties in emotion regulation ($\beta = .509$), expressive suppression ($\beta = .214$) and social modeling ($\beta = -.196$), respectively. It was determined that other variables were not significant predictors ($p > .05$).

It is seen that the regression equation obtained as a result of the analysis for the prediction of shyness, which is another dependent variable, is significant according to the result of the analysis of variance ($F_{(7, 454)} = 25.777, p < .05$). It was found that 28% ($R^2 = .284$) of the variance in the loneliness levels of the participants was explained by inter/intra-personal emotion regulation and difficulties in emotion regulation variables. Standardized regression coefficients (β) and significance values (p) of independent variables were examined. As a result, it was found that while expressive suppression ($\beta = .117; p < .05$) and difficulties in emotion regulation ($\beta = .503; p < .05$) predicted shyness positively and significantly, enhancing positive affect ($\beta = -.223; p < .05$) predicted it negatively. When the order of importance of the predictor variables on shyness is evaluated, they are listed as difficulties in emotion regulation ($\beta = .503$), enhancing positive affect ($\beta = -.223$) and expressive suppression ($\beta = .117$), respectively. It was determined that other variables were not significant predictors ($p > .05$).

Discussion

The goal of this study was to investigate loneliness and shyness through the lens of emotional regulation. The correlation and regression analysis of emotion regulation with loneliness and shyness was examined. Furthermore, it was explored whether loneliness, shyness, and emotion regulation differed significantly according to demographic characteristics. The analysis results revealed that loneliness differed by gender, confirming the notion that there is a large gender difference in loneliness. Gender differences in loneliness are commonly understood, and evidence suggests that women, regardless of age, report more loneliness than men (Nicolaisen & Thorsen, 2014; ONS, 2018; Pinguart & Sörensen, 2001), and present study supports and acknowledges the concept of gender variations in loneliness. It is expected that women will report feeling lonely to a greater extent than males (Victor & Yang, 2012). Furthermore, Nolen-Hoeksema and Rusting (2000) discovered that women today, as opposed to past generations, are more eager to research, acknowledge, and explain experiences such as loneliness. However, when loneliness was studied, men were found to be lonelier than women (Aartsen & Jylhä, 2011), which contradicted our findings. In an attempt to elucidate gender differences, Ang (2016) maintained that women have a significant preference for socialization, whereas men prefer control and competition. In accordance with this viewpoint, females tend to create more cohesive relationships and remain close to their social relationships, resulting in less loneliness than males. In contrast, some research reported no significant gender differences in adult loneliness (Anderson, 2010; Singh & Misra, 2009), while Wang et al. (2011) found that loneliness is more common in older men than women. Beutel et al. (2017) discovered that loneliness was more prevalent in women who lived alone and without children.

In addition, currently the cognitive basis of the shyness is also emphasized with respect to gender. Cognitive model believes and accepts that shyness outcomes primarily from negative attribution patterns of problems associated with social interactions. The incidence of experiencing the shyness is similar in young women and men. Akhila & Sannet (2020) found no difference of gender on shyness which is in accordance with our study that hypothesized there is no significant difference of gender in predicting shyness. Recently, trends have been changed. Women are not

stereotypically very shy, and men are more often confess to feeling shyness, which is contrary to the conventional image of maleness and a comprehensive estimate of the display of the shyness shows that women's and men's actions still remains under a strong effect of gender stereotypes and results in weak social skills with a propensity to keep undesirable emotions in, a lack of impulsiveness, indirect and unreceptive submissive coping strategies (Mandal, 2008).

Loneliness and shyness are faced by all human beings at some moment of lives, regardless of one's culture, ethnicity and country (Van Staden & Coetzee, 2010). Culture does, nevertheless, play an essential role when it happens to how we acknowledge and understand the world. People follow different insights and different coping strategies for loneliness and shyness while being part of any specific culture or country. In any country, cultural values may influence how loneliness and shyness work. In terms of attachment to adjustment outcomes, cultural values are expected to be characterized in social attitudes regarding loneliness and shyness. Unlike present study, there are considerable differences in loneliness (Heu et al., 2019; Lykes & Kimmelmeier, 2014) and shyness experiences of people belonging to different cultures (Elizabeth & Patricia, 1990; Yiu et al., 2020) which can be ascribed to an expression of the individual's relationship with the other, and how people's socialization vary among cultures. Following, the current study revealed, loneliness and shyness factors had no significant effect on the results in terms of different cultures (Pakistan and Turkey) which may be because of basic emotional feelings of shyness and loneliness that are not unique to any one culture or country.

Loneliness and shyness influences how people connect to others. Important construct related here is attachment style that individuals develop about themselves and about others. According to theories of attachment, these working models are developed in early age and are shaped by experiences in later ages. These models impact prospects about attachment figures in future experiences, as they are helpful in detecting security, trust, loneliness and shyness into adult relationships (Collins & Feeney, 2004; Egeci & Gencoz, 2006). However, attachment styles are not unchangeable; individuals report different attachment and preferences in various relationships based on their personal prospects (Baldwin et al., 1996). When these expectations are not fulfilled or trustworthy, people become socially isolate and start living alone. Essentially, shy individuals narrated that they are less satisfied with their current romantic relationship, and so far, they are still remaining in it and sometimes they are living relationship but are lonely inside and their satisfaction level may help to clarify the different reasoning behind their insights (Scholz, 2008). Likewise, a conflict is created between what we imagine it to be and what our romantic partner deceptively sees in it and relational hopelessness occur and we are no longer believed of as positively as before, we experience frustration, reluctance, and loneliness (Keller, 2000). DeWall et al. (2010) described ideal romantic relationship as a situation where both individuals support each other. When emotions changes, when one is not valued, it leads to their feeling overlooked, unacknowledged, and thus results in distance from partner. Unwillingness and hesitancy to stay in a relationship with a partner are key risk factors for both social separation and loneliness. When one is not as important as they once were, it results in loneliness and hopelessness (Franklin & Tranter 2008; Lauder et al., 2004; Relationships Australia, 2011).

Further, results based on current study revealed individuals with children have decrease level of loneliness and shyness. There is no direct evidence-based literature available. Despite the fact that loneliness develops during times of parental evolution and is most common in young adults who are having children and getting least support, sharing and responsibility from opposite partner. Parents sometimes cannot cope up with life challenges or could not meet demands of their children usually experience loneliness and various issues. However, being a parent has been recognized as a big life experience that alters regular activities, and the changes in loneliness experienced throughout the transition to parenting have been described as not consistent. Unlike the current study, Buecker et al. (2020) discovered reduced levels of loneliness throughout the early years of parenting and subsequently increased levels of chronic loneliness over time. Moreover, Loneliness can also be

influenced by one's relationship state. Usually, normal notion is the people having no children might develop loneliness. For example, adults without children reported high rates of social isolation. Moreover, there was no such literature found showing individuals with children have any level of shyness.

Loneliness has an impact on people's ability to regulate their emotions. It is critical for a person to understand whether the strategy he is using to regulate his emotions is effective or not. Most of the time, lonely persons use unhelpful emotion regulation tactics (expressive suppression) and rely the least on healthy emotion regulation procedures (cognitive reappraisal) without the assistance or advice of a counselor (Hawkey et al., 2009; Kearns & Creaven, 2017; Marroquín et al., 2016).

Preece et al. (2021) discovered that loneliness increases with difficulties in emotional regulation, with greater use of unhealthy negative emotional regulation techniques like expressive suppression and catastrophizing, and less use of positive healthy emotion regulation techniques like cognitive reappraisal which is consistent with the current study's findings that narrated the same. Individual differences in emotion regulation have an impact on loneliness. Emotional understanding and sub factors of difficulties in emotion regulation are correlated with loneliness (Eres et al., 2021; Nikmanesh et al., 2015). In assistance with current study hypothesis, Yıldız (2016) predicted that the levels of loneliness in young people grew as their internal and external dysfunctional regulation levels increased. Similarly, Şeremet (2019) explored the role of difficulties in emotion regulation as a moderator in the link between attachment and loneliness and discovered a positive correlation between loneliness and the difficulties in emotion regulation variable. This study's result is in accordance with our present findings. Further studies maintained same positive correlation of difficulties in emotion regulation with loneliness (Glenn & Klonsky, 2009; Qualter et al., 2010; Salsman & Linehan, 2012). Moreover, current study revealed social modeling has negative but significant relationship with loneliness. Literature revealed same findings that loneliness is the result of dissatisfaction with the quantity and quality of social modeling. Social environment in which people live comprising negative attitudes and values of the people affect person's thinking and incline them to more loneliness (Burholt et al., 2017; Lopes et al., 2003).

Finally, current study predicted expressive suppression and dysfunction in emotional regulation increases with increase in level of shyness. Literature supported our findings. Cheek & Buss (1981) believed that the refusal to participate in social activities is one of the most visible signs of shyness. Shyness occurs in social interactions, causing the individual to repress feelings and emotions, and the person's outer presentation is usually disordered. According to Salovey and Mayer (2002), emotional ability is a psychological predisposition that aids in the formation of social relationships. Interpersonal relationships are harmed when emotions are not properly managed. According to Schutte et al. (2001), emotional regulation has a closer association with social abilities, and if the individual avoids contacts with unexpected people and social relationships, he will acquire shyness and hesitation, which generates fear or tension, resulting in stress. You need to learn controlling your emotions as you interact with more individuals. Shyness is only reduced via socialization.

Conclusion, limitations and future suggestions

This study emphasizes that this data does not, at least theoretically, represent the general population; rather, it represents people who are eager to express their emotions. Contrary to earlier studies, the data gathered from two countries (Pakistan and Turkey) established are indicative of the complete range of distinctive vs collectivistic cultures. It is important to highlight that data is true even if the sample is not representative of the whole populations of the individual countries.

The study has two main ramifications. First, we have contributed significantly to theory by demonstrating, that Loneliness, Shyness and emotion regulation, are all related, as well as that different emotion regulation deficiencies are related to loneliness and shyness people. Understanding the various elements that influence whether or not someone is lonely, and shy is crucial because loneliness and shyness may be a pervasive psychological state. The study's second implication is that

individuals with significant stress and anxiety may benefit from therapies that target emotion regulation as a target variable to lessen loneliness and shyness levels. What is effective for one individual might not be effective for another. As a result, various interventions can be used to target loneliness and shyness when it is known which aspect of emotion regulation skill relates to loneliness and shyness. In the present study, we have demonstrated that people who experience loneliness and shyness have trouble recognizing and comprehending their feelings. The study's limitations must be acknowledged. Firstly, it was impossible for us to confirm that participants didn't also fit the bill for other mental health conditions, such as social anxiety. To be sure, we collected demographic samples and used valid tested instruments to assess symptom intensity. Secondly, we employed a cross-sectional approach to explore the relationships between loneliness, shyness, and emotional regulation. We must look at these linkages across time to completely comprehend causal relationships. Therefore, additional research is required to ascertain the track and directivity of variations through interval. Ultimately, despite doing several imputations for missing data, more research is needed to replicate the study that can assess datasets with missing data. More research that can assess datasets with all data present is required. More research with larger, more comprehensive datasets is needed to confirm that deficiencies in intra and inter emotion regulation methods are associated with higher levels of loneliness and shyness.

In this theory, it is assumed that residents of a specific nation have adapted to its cultural norms and way of life and may thus be considered to constitute a representative sample of that culture. For instance, considering the cultural representation of the two samples, it is anticipated that the variable dimensions differ between the two samples. This might be a naive approach because, as we all know, individual differences are evident in all cultural contexts, and there is a chance that the country's presumed collectivistic sample is more individualistic in nature. This is especially true given how big Turkey is and how some parts of it may be moving toward a more individualistic way of life. This claims that because Pakistan is home to a variety of religions, each has its own culture and so has different cultural expectations.

Usability of the study results

Results from the current study can offer important information about the recognized relationships between shyness, loneliness, emotional regulation and a number of factors. The knowledge can be particularly helpful in terms of counseling techniques, as counselors and other professionals may use it to direct their work with reserved university students. Additional research should examine additional moderating factors, such as cultural traditions that might create a contradiction in how gender behaviors appear. Additionally, there is a clear study gap about how young adults from various cultures experience loneliness, shyness and emotional regulation. This study aims to advance the field of loneliness, shyness and emotional regulation research by elaborating on the idea that general levels of loneliness, shyness and emotional regulation may vary between individualistic and collectivistic cultures (Heu et al., 2019; Lykes & Kimmelmeier, 2014). By examining how young adults in two distinct cultures experience respective emotions and feelings, this study aims to advance our understanding of the topic.

Our research drawbacks lead to few suggestions. The family environment, societal structure, and social environment all contribute to person's experiences, and expressing emotional responses. It is thus believed that expanding the sample by considering the possible effects of various demographic variables will yield more meaningful and explanatory findings with respect to relationship of emotion regulation with loneliness and shyness. Furthermore, it is considered that taking into account characteristics of interpersonal connections such as emotional and social acknowledgement, along with awareness and perception will aid in recognizing issues with emotion regulation. Moreover, adding qualitative study findings to quantitative study results will deepen the study's conclusions and boost its explanatory power. For those who are feeling socially emotionally alone and shy, practitioners might plan seminars that are centered on emotion control. To prevent

and improve loneliness, group sessions centered on learning positive coping skills might be planned along with management of emotions. The results of the studies on loneliness and issues with emotion control can be debated in learning set ups as part of therapeutic and beneficial programs. Specifically in the psychology departments of academies, so that psychoeducational studies on emotional behaviors and challenges can be carried out. This research has certain limitations in terms of the self-reporting type scales that were used because data was collected from non-clinical sample but for detailed investigation longitudinal and qualitative research can support the results obtained in this research. Besides, a clinical sample may be used for further study.

REFERENCES

- Aartsen, M., & Jylhä, M. (2011). Onset of loneliness in older adults: Results of a 28-year prospective study. *European Journal of Ageing*, 8(1), 31-38. <https://doi.org/10.1007/s10433-011-0175-7>
- Aka, B. T., & Gençöz, T. (2014). Perceived parenting styles, emotion recognition, and emotion regulation in relation to psychological well-being. *Procedia-Social and Behavioral Sciences Journal*, 159, 529–533. <https://doi.org/10.1016/j.sbspro.2014.12.418>
- Akhila, K. V., & Sannet, T. (2020). A study on shyness and psychological well-being among young adults. *International Journal of Research and Review*, 7(10), 103-107.
- Anderson, G. O. (2010). *Loneliness among older adults: A national survey of adults 45+*. AARP. <https://doi.org/10.26419/res.00064.001>
- Ang, C. S. (2016). Types of social connectedness and loneliness: The joint moderating effects of age and gender. *Applied Research Quality Life*, 11, 1173–1187. <https://doi.org/10.1007/s11482-015-9428-5>
- Ashe, D. D., & McCutcheon, L. E. (2001). Shyness, loneliness, and attitude toward celebrities. *Current Research in Social Psychology*, 6(9), 124-133.
- Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effects. *Journal of Personality and Social Psychology*, 71(1), 94–109. <https://doi.org/10.1037/0022-3514.71.1.94>
- Barnett, M. D., Moore, J. M., & Archuleta, W. P. (2019). A loneliness model of hypochondriasis among older adults: The mediating role of intolerance of uncertainty and anxious symptoms. *Archives of gerontology and geriatrics*, 83, 86–90. <https://doi.org/10.1016/j.archger.2019.03.027>
- Baş, G. (2010). An investigation of the relationship between shyness and loneliness levels of elementary students in a Turkish sample. *International Online Journal of Educational Sciences*, 2, 419-440.
- Berges, B. M., & Augusto, J. M. (2007). Exploring the relationship between perceived emotional intelligence, coping, social support and mental health in nursing students. *Journal of Psychiatric and Mental Health Nursing*, 14, 163–171. <https://doi.org/10.1111/j.1365-2850.2007.01059.x>
- Berscheid, E. (2003). The human's greatest strength: Other humans. In L. G. Aspinwall & U. M. Staudinger (Eds.), *A psychology of human strengths: Fundamental questions and future directions for a positive psychology* (pp. 37–47). American Psychological Association. <https://doi.org/10.1037/10566-003>
- Beutel, M. E., Klein, E. M., Brähler, E., Reiner, I., Jünger, C., Michal, M., Wiltink, J., Wild, P.S., Münzel, T. M., Lackner, K. J., & Tibubos, A. N. (2017). Loneliness in the general population: Prevalence, determinants, and relations to mental health. *BMC Psychiatry*, 17(97). <https://doi.org/10.1186/s12888-017-1262-x>
- Bian, M., & Leung, L. (2015). Linking loneliness, shyness, smartphone addiction symptoms, and patterns of smartphone use to social capital. *Social Science Computer Review*, 33(1), 61-79. <https://doi.org/10.1177/0894439314528779>
- Bjureberg, J., Ljótsson, B., Tull, M. T., Hedman, E., Sahlin, H., Lundh, L. G., Bjärehed, J., DiLillo, D., Messman-Moore, T., Gumpert, C. H., & Gratz, K. L. (2016). Development and validation of a brief version of the Difficulties in Emotion Regulation Scale: The DERS-16. *Journal of psychopathology and behavioral assessment*, 38(2), 284–296. <https://doi.org/10.1007/s10862-015-9514-x>
- Buecker, S., Denissen, J. J. A., & Luhmann, M. (2021). A propensity-score matched study of changes in loneliness surrounding major life events. *Journal of Personality and Social Psychology*, 121(3), 669–690. <https://doi.org/10.1037/pspp0000373>
- Burholt, V., Windle, G., Morgan, D. J., & CFAS Wales team (2017). A social model of loneliness: The roles of disability, social resources, and cognitive impairment. *The Gerontologist*, 57(6), 1020–1030. <https://doi.org/10.1093/geront/gnw125>

- Kelek, S., Awan, E. A., & Koç, M. (2024). Loneliness and shyness from the perspective of emotion regulation. *Journal of Human Sciences*, 21(3), 215-233. doi:[10.14687/jhs.v21i3.6394](https://doi.org/10.14687/jhs.v21i3.6394)
- Cacioppo, J. T., Hughes, M. E., Waite, L. J., Hawkley, L. C., & Thisted, R. A. (2006). Loneliness as a specific risk factor for depressive symptoms: Cross-sectional and longitudinal analyses. *Psychology and aging*, 21(1), 140-151. <https://doi.org/10.1037/0882-7974.21.1.140>
- Cheek, J. (2021). *The Revised Cheek and Buss Shyness Scale (RCBS 13) 1983 document*. <https://doi.org/10.13140/RG.2.2.18841.75363>
- Cheek, J. M., & Buss, A. H. (1981). Shyness and sociability. *Journal of Personality and Social Psychology*, 41(2), 330-339. <https://doi.org/10.1037/0022-3514.41.2.330>
- Cheek, J.M. (1983). *The Revised Cheek and Buss Shyness Scale*. Unpublished Manuscript, Wellesley College, Wellesley.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates Publishers.
- Cohen-Mansfield, J., Hazan, H., Lerman, Y., & Shalom, V. (2016). Correlates and predictors of loneliness in older adults: A review of quantitative results informed by qualitative insights. *International psychogeriatrics*, 28(4), 557-76. <https://doi.org/10.1017/S1041610215001532>
- Cole, P. M., Michel, M. K., & Teti, L. O. (1994). The development of emotion regulation and dysregulation: A clinical perspective. *Monographs of the Society for Research in Child Development*, 59(2-3), 73-100.
- Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, 87(3), 363-383. <https://doi.org/10.1037/0022-3514.87.3.363>
- Demir, A. (1989). Validity and reliability of the UCLA Loneliness Scale. *Turkish Journal of Psychology*, 7(23), 14-18. <https://hdl.handle.net/11511/81352>
- DeWall, C. N., MacDonald, G., Webster, G. D., Masten, C. L., Baumeister, R. F., Powell, C., Eisenberger, N. I. (2010). Acetaminophen reduces social pain: Behavioral and neural evidence. *Psychol. Sci.* 21, 931-937. <https://doi.org/10.1177/0956797610374741>
- Diehl, K., Jansen, C., Ishchanova, K., & Hilger-Kolb, J. (2018). Loneliness at universities: Determinants of emotional and social loneliness among students. *International Journal of Environmental Research and Public Health*, 15(9), 1865. <https://doi.org/10.3390/ijerph15091865>
- Donovan, N. J., & Blazer, D. (2020). Social isolation and loneliness in older adults: Review and commentary of a national academies report. *The American Journal of Geriatric Psychiatry: Official Journal of The American Association for Geriatric Psychiatry*, 28(12), 1233-1244. <https://doi.org/10.1016/j.jagp.2020.08.005>
- Egeci, I. S., & Gencoz, T. (2006). Factors associated with relationship satisfaction: Importance of communication skills. *Contemporary Family Therapy*, 28, 383-391. <https://doi.org/10.1007/s10591-006-9010-2>
- Eisenberg, N., Fabes, R. A., Guthrie, K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology*, 78(1),136-57. <https://doi.org/10.1037//0022-3514.78.1.136>
- Elizabeth, M. G., & Patricia., B. C. (1990). The co-cultural experience of shyness: A comparison of the friendship networks of black communicators and white communicators. *Howard Journal of Communications*, 2(3), 262-275. <https://doi.org/10.1080/10646179009359719>
- Eres, R., Lim, M. H., Lanham, S., Jillard, C., & Bates, G. (2021). Loneliness and emotion regulation: Implications of having social anxiety disorder. *Australian Journal of Psychology*, 1-11. <https://doi.org/10.1080/00049530.2021.1904498>
- Erözkan, A. (2009). The predictors of loneliness in adolescents. *Elementary Education Online*, 8(3), 809- 819. <http://ilkogretim-online.org.tr>
- Fitts, S. D., Sebbly, R. A., & Zlokovich, M. S. (2009). Humor styles as mediators of the shyness-loneliness relationship. *North American Journal of Psychology*, 11(2), 257-272.
- Franklin, A. & Tranter, B. (2008). *Loneliness in Australia* [Paper no. 13]., Housing and Community Research Unit. Retrieved from <https://apo.org.au/sites/default/files/resource-files/2008/12/apo-nid4070-1140601.pdf>
- Gerst-Emerson, K., & Jayawardhana, J. (2015). Loneliness as a public health issue: The impact of loneliness on health care utilization among older adults. *American Journal of Public Health*, 105(5), 1013-19. <https://doi.org/10.2105/AJPH.2014.302427>
- Glenn, C. R., & Klonsky, E. D. (2009). Emotion dysregulation as a core feature of borderline personality disorder. *Journal of Personality Disorders*, 23(1), 20-28. <https://doi.org/10.1521/pedi.2009.23.1.20>

- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348–362. <https://doi.org/10.1037/0022-3514.85.2.348>
- Hawkey, L. C., Thisted, R. A., & Cacioppo, J. T. (2009). Loneliness predicts reduced physical activity: Cross-sectional & longitudinal analyses. *Health Psychology*, 28(3), 354–363. <https://doi.org/10.1037/a0014400>
- Hayes, S. C., Strosahl, K., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An experiential approach to behavior change*. Guilford Press.
- Hayley, A. C., Downey, L. A., Stough, C., Sivertsen, B., Knapstad, M., & Overland, S. (2017). Social and emotional loneliness and self-reported difficulty initiating and maintaining sleep (DIMS) in a sample of Norwegian university students. *Scandinavian Journal of Psychology*, 58(1), 91-99. <https://doi.org/10.1111/sjop.12343>
- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical Psychology Review*, 26(6), 695-718. <https://doi.org/10.1016/j.cpr.2006.04.002>
- Henderson, L., Gilbert, P., & Zimbardo, P. (2014). Shyness, social anxiety, and social phobia. In S. G. Hofmann & P. M. DiBartolo (Eds.), *Social anxiety: Clinical, developmental, and social perspectives* (pp. 95–115). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-394427-6.00004-2>
- Heu, L. C., Van Zomeren, M., & Hansen, N. (2019). Lonely alone or lonely together? A cultural-psychological examination of individualism–collectivism and loneliness in five European countries. *Personality and Social Psychology Bulletin*, 45(5), 780–793. <https://doi.org/10.1177/0146167218796793>
- Hipson, W. E., Coplan, R. J., & Séguin, D. J. (2019). Active emotion regulation mediates links between shyness and social adjustment in preschool. *Social Development*, 28(4), 893-907. <https://doi.org/10.1111/sode.12372>
- Hofmann, S. G., Carpenter, J. K., & Curtiss, J. (2016). Interpersonal Emotion Regulation Questionnaire: Scale development and psychometric characteristics. *Cognit Ther Res*, 40 (3), 341-356. <https://doi.org/10.1007/s10608-016-9756-2>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227-237. <https://doi.org/10.1177/1745691614568352>
- Holwerda, T. J., Van Tilburg, T. G., Deeg, J. H., Schutter, N., Van, R., Dekker, J., Stek, M. L., Beekman, T. F., & Schoevers, R. A. (2016). Impact of loneliness and depression on mortality: Results from the longitudinal ageing study Amsterdam. *The British Journal of Psychiatry*, 209(2), 127–34. <https://doi.org/10.1192/bjp.bp.115.168005>
- Jackson, T., Fritch, A., Nagasaka, T., & Gunderson, J. (2002). Towards explaining the association between shyness and loneliness: A path analysis with American college students. *Social Behavior and Personality: An International Journal*, 30(3), 263-270. <http://dx.doi.org/10.2224/sbp.2002.30.3.263>
- Kearns, S. M., & Creaven, A. M. (2017). Individual differences in positive and negative emotion regulation: Which strategies explain variability in loneliness? *Personality and Mental Health*, 11(1), 64–74. <https://doi.org/10.1002/pmh.1363>
- Keller, S. (2000). How do I love thee? Let me count the properties. *Am. Philos. Q.*, 37, 163–173. <https://www.jstor.org/stable/20009994>
- Coplan, R. J., Rose-Krasnor, L., Weeks, M., Kingsbury, A., Kingsbury, M., & Bullock, A. (2013). Alone is a crowd: Social motivations, social withdrawal, and socioemotional functioning in later childhood. *Developmental Psychology*, 49(5), 861–875. <https://doi.org/10.1037/a0028861>
- Koç, M. S., Türküler-Aka, B., Doğruyol, B., Curtiss, J., Carpenter, J. K., & Hofmann, S. G. (2019). Psychometric properties of the Turkish version of the Interpersonal Emotion Regulation Questionnaire (IERQ). *Journal of Psychopathology and Behavioral Assessment*, 41(2), 294-303. <https://doi.org/10.1007/s10862-019-09732-3>
- Koçak, R. (2005). Duygusal ifade eğitimi programının üniversite öğrencilerinin aleksitimi ve yalnızlık düzeylerine etkisi [The effect of an emotional expression education program on alexithymia and

- loneliness levels]. *Turkish Psychological Counseling and Guidance Journal*, 3 (23), 29-45. <https://dergipark.org.tr/tr/pub/tpdrd/issue/21444/229862>
- Koydemir, S., & Demir, A. (2005). *Reliability and validity of 13-item Cheek and Buss Shyness Scale*. Unpublished manuscript, Middle East Technical University.
- Koydemir, S., & Demir, A. (2008). Shyness and cognitions: An examination of Turkish university students. *The Journal of Psychology*, 142(6), 633-644. <https://doi.org/10.3200/JRLP.142.6.633-644>
- Kuwert, P., Knaevelsrud, C., & Pietrzak, R. H. (2014). Loneliness among older veterans in the United States: Results from the national health and resilience in veterans' study. *The American Journal of Geriatric Psychiatry*, 22(6), 564-9. <https://doi.org/10.1016/j.jagp.2013.02.013>
- Lauder, W., Sharkey, S., & Mummery, K. (2004). A community survey of loneliness. *Journal of Advanced Nursing* 46:88-94. <https://doi.org/10.1111/j.1365-2648.2003.02968.x>
- Leahy, R. L., Tirch, D., & Napolitano, L. A. (2011). *Emotion regulation in psychotherapy: A practitioner's guide*. Guilford Press.
- Lim, M. H., Eres, R., & Vasan, S. (2020). Understanding loneliness in the twenty-first century: An update on correlates, risk factors, and potential solutions. *Social Psychiatry and Psychiatric Epidemiology*, 55, 793-810. <https://doi.org/10.1007/s00127-020-01889-7>
- Linehan, M. M. (1993) *Cognitive-behavioral treatment of borderline personality disorder*. The Guilford Press.
- Lopes, P. N., Salovey, P., & Straus, R. (2003). Emotional intelligence, personality, and the perceived quality of social relationships. *Personality and Individual Differences*, 35, 641-658. [https://doi.org/10.1016/S0191-8869\(02\)00242-8](https://doi.org/10.1016/S0191-8869(02)00242-8)
- Luhmann, M., & Hawkey, L. C. (2016). Age differences in loneliness from late adolescence to oldest old age. *Developmental psychology*, 52(6), 943-59. <https://doi.org/10.1037/dev0000117>
- Lykes, V. A., & Kemmelmeier, M. (2014). What predicts loneliness? Cultural difference between individualistic and collectivistic societies in Europe. *Journal of Cross-Cultural Psychology*, 45(3), 468-490. <https://doi.org/10.1177/0022022113509881>
- Mandal, E. (2008). Shyness and gender. Physical, emotional, cognitive, behavioral consequences and strategies of coping with shyness by women and men of different gender identity. *The New Educational Review*, 14, 259-273.
- Marroquín, B., Czamanski-cohen, J., Weihs, K. L., & Stanton, A. L. (2016). Implicit loneliness, emotion regulation, and depressive symptoms in breast cancer survivors. *Journal of Behavioral Medicine*, 39(5), 832-844. <https://doi.org/10.1007/s10865-016-9751-9>
- Mauss, I., Wilhelm, F., & Gross, J. (2004). Is there less to social anxiety than meets the eye? Emotion experience, expression, and bodily responding. *Cognition and Emotion*, 18(5), 631-642. <https://doi.org/10.1080/02699930341000112>
- Morales, S., Perez-Edgar, K., & Buss, K. (2015). Attention biases towards and away from threat mark the relation between early dysregulated fear and the later emergence of social withdrawal. *Journal of Abnormal Child Psychology*, 43(6), 1067-1078. <https://doi.org/10.1007/s10802-014-9963-9>
- Musich, S., Wang, S. S., Hawkins, K., & Yeh, C. S. (2015). The impact of loneliness on quality of life and patient satisfaction among older, sicker adults. *Gerontology and Geriatric Medicine*, 1, 2333721415582119. <https://doi.org/10.1177/2333721415582119>
- Neuman, A., Van Lier, P., Gratz, K. L., & Koot, L. M. (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the Difficulties in Emotion Regulation Scale. *Assessment*, 17(1), 138-49. <https://doi.org/10.1177/1073191109349579>
- Nicolaisen, M., & Thorsen, K. (2014). Loneliness among men and women a five-year follow-up study. *Aging & Mental Health*, 18(2), 194-206. <https://doi.org/10.1080/13607863.2013.821457>
- Nicolaisen, M., & Thorsen, K. (2017). What are friends for? Friendships and loneliness over the lifespan-from 18 to 79 years. *International Journal of Aging & Human Development*, 84(2), 126-158. <https://doi.org/10.1177/0091415016655166>
- Nikmanesh, Z., Kazemi, Y., & Khosravi, M. (2015). Role of feeling of loneliness and emotion regulation difficulty on drug abuse. *International Journal of Medical Toxicology and Forensic Medicine*, 5(4), 185-91. [https://doi.org/10.22037/ijmtfm.v5i4\(Autumn\).8744](https://doi.org/10.22037/ijmtfm.v5i4(Autumn).8744)
- Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotion*, 9(4), 498-509. <https://doi.org/10.1037/a0015962>

- Kelek, Ş., Awan, E. A., & Koç, M. (2024). Loneliness and shyness from the perspective of emotion regulation. *Journal of Human Sciences*, 21(3), 215-233. doi:[10.14687/jhs.v21i3.6394](https://doi.org/10.14687/jhs.v21i3.6394)
- Nolen-Hoeksema, S., & Rusting, C.L. (2000). Gender differences in well-being. In D. Kahneman, E. Diener & N. Schwartz (Eds.), *Well-being: The foundations of hedonic psychology*. Russell Sage Foundation.
- Office for National Statistics. (2018). What characteristics and circumstances are associated with feeling lonely? <https://www.ons.gov.uk/2018-04-10/pdf>.
- Piko, B. F., Prievara, D. K., & Mellor, D. (2017). Aggressive and stressed? Youth's aggressive behaviors in light of their internet use, sensation seeking, stress and social feelings. *Children and Youth Services Review*, 77, 55–61. <https://doi.org/10.1016/j.childyouth.2017.04.007>
- Pinquart, M., & Sörensen, S. (2001). Influences on loneliness in older adults: A meta-analysis. *Basic and Appl. Social Psych.*, 23, 245-266. <https://doi.org/10.1207/153248301753225702>
- Preece, D. A., Goldenberg, A., Becerra, R., Boyes, M., Hasking, P., & Gross, J. J. (2021). Loneliness and emotion regulation. *Personality and Individual Differences*, 180. <https://doi.org/10.1016/j.paid.2021.110974>
- Qualter, P., Brown, S. L., Munn, P., & Rotenberg, K. J. (2010). Childhood loneliness as a predictor of adolescent depressive symptoms: An 8-year longitudinal study. *European Child & Adolescent Psychiatry*, 19(6), 493–501. <https://doi.org/10.1007/s00787-009-0059-y>
- Relationships Australia. (2011). Issues and concerns for Australian relationships today: Relationships Indicators Survey 2011. <https://relationships.org.au/wp-content/uploads/RA-Rel-Ind-2011-report.pdf>
- Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review. *Emotion Review*, 1, 60-85. <https://doi.org/10.1177/1754073908097189>
- Rowell, H. C., & Coplan, R. J. (2013). Exploring links between shyness, romantic relationship quality, and well-being. *Canadian Journal of Behavioural Science*, 45(4), 287-295. <https://doi.org/10.1037/a0029853>
- Russell, D. W. (1996). UCLA Loneliness Scale (Version 3): Reliability, validity, and factor structure. *Journal of Personality Assessment*, 66(1), 20–40. https://doi.org/10.1207/s15327752jpa6601_2
- Salovey, P., Mayer, J. D. and Caruso, D. (2002). The positive psychology of emotional intelligence. In C. R. Snyder, & S. J. Lopez (Eds.). *Handbook of positive psychology* (pp. 159-171). Oxford University Press.
- Salsman, N. L., & Linehan, M. M. (2012). An investigation of the relationships among negative affect, difficulties in emotion regulation, and features of borderline personality disorder. *Journal of Psychopathology and Behavioral Assessment*, 34(2), 260-267. <https://doi.org/10.1007/s10862-012-9275-8>
- Saruhan, V., & Yüksel, M. (2021). An investigation of social and emotional loneliness in young adults in terms of difficulties in emotion regulation. *Research on Education and Psychology*, 5(1), 102-117. <https://dergipark.org.tr/en/pub/rep/issue/63330/938684>
- Scholz, J. (2008). *Shyness and attachment in dating relationship. distinguishing shyness from fearful avoidant attachment: the investment model in dating relationships*. [Master's thesis, University of Manitoba Winnipeg]. <http://hdl.handle.net/1993/21542>
- Schutte, N. S., Malouff, J. M., Bobik, C., Coston, T. D., Greeson, C., Jedlicka, C., Rhodes, E., & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of Social Psychology*, 141(4), 523–536. <https://doi.org/10.1080/00224540109600569>
- Şeremet, A. (2019). *The role of emotion regulation in the relationship between insecure attachment and loneliness* [Unpublished master thesis]. Anadolu University.
- Shi, R., Zhang, S., Zhang, Q., Fu, S., & Wang, Z. (2016). Experiential avoidance mediates the association between emotion regulation abilities and loneliness. *Plos one*, 11(12), 1-11. <https://doi.org/10.1371/journal.pone.0168536>
- Singh, A., & Misra, N. (2009). Loneliness, depression and sociability in old age. *Industrial Psychiatry Journal*, 18(1), 51–55. <https://doi.org/10.4103/0972-6748.57861>
- Sündermann, O., Onwumere, J., Kane, F., Morgan, C., & Kuipers, E. (2104). Social networks and support in first-episode psychosis: Exploring the role of loneliness and anxiety. *Soc Psychiatry Epidemiol*, 49(3)59– 66. <https://doi.org/10.1007/s00127-013-0754-3>
- Tabachnick, B., & Fidell, L. (2013). *Using Multivariate Statistics* (6th ed.). Pearson.
- Tatsi, E., Kamal, A., Turvill, A., & Holler, R. (2019). Emotion dysregulation and loneliness as predictors of food addiction. *Journal of Health and Social Sciences*, 4(1), 43-58. <https://doi.org/10.19204/2019/mtnd5>
- Tekin, E. G. (2017). Shyness and subjective well-being: The mediating role of loneliness. *Ceskoslovenska psychologie*, 61(4), 321-330.
- van Staden, W. (C. W.), & Coetzee, K. (2010). Conceptual relations between loneliness and culture. *Current Opinion in Psychiatry*, 23(6), 524-529. <https://doi.org/10.1097/YCO.0b013e32833f2ff9>

- Velotti, P., Zobel, B. S., Rogier, G., Tambelli, R., & Castellano, R. (2021). Loneliness, emotion dysregulation, and internalizing symptoms during coronavirus disease 2019: A structural equation modeling approach. *Front. Psychiatry*, 11. <https://doi.org/10.3389/fpsy.2020.581494>
- Victor, C. R., & Yang, K. (2012). The prevalence of loneliness among adults: A case study of the United Kingdom. *The Journal of Psychology*, 146(1-2), 85-104. <https://doi.org/10.1080/00223980.2011.613875>
- Von Soest, T., Luhmann, M., Hansen, T., & Gerstorf, D. (2020). Development of loneliness in midlife and old age: Its nature and correlates. *Journal of Personality and Social Psychology*, 118(2), 388-406. <https://doi.org/10.1037/pspp0000219>
- Wang, G., Zhang, X., & Wang, K., Li, Y., Shen, Q., Ge, X., & Hang, W. (2011). Loneliness among the rural older people in Anhui, China: Prevalence and associated factors. *International Journal of Geriatric Psychiatry*, 26(11), 1162–1168. <https://doi.org/10.1002/gps.2656>
- Weiner, I. B., & Craighead, W. E. (2010). *The Corsini encyclopedia of psychology* (Vol. 4). John Wiley & Sons
- Weiss, R. S. (1973). *Loneliness: The Experience of Emotional and Social Isolation*. The MIT Press.
- Werner, K., & Gross, J. J. (2010). Emotion regulation and psychopathology: A conceptual framework. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 13–37). The Guilford Press.
- Williams, W. C., Morelli, S. A., Ong, D. C., & Zaki, J. (2018). Interpersonal emotion regulation: Implications for affiliation, perceived support, relationships, and well-being. *Journal of Personality and Social Psychology*, 115(2), 224–254. <https://doi.org/10.1037/pspi0000132>
- Yiğit, I., & Guzey Yiğit, M. (2019). Psychometric properties of Turkish version of Difficulties in Emotion Regulation Scale-Brief Form (DERS-16). *Current Psychology*, 38, 1503-1511. <https://doi.org/10.1007/s12144-017-9712-7>
- Yıldız, M. A. (2016). Multiple mediation of emotion regulation strategies in the relationship between loneliness and positivity in adolescents. *Education and Science*, 41(186), 217-231. <http://dx.doi.org/10.15390/EB.2016.6193>
- Yiu, W. Y. V., Choi, J. H., & Chen, X. (2020). Shyness and adaptation across cultures. In Schmidt, L. A., Poole, K. L. (Eds), *Adaptive Shyness* (pp. 201–218). Springer.
- Yun, P., Xiaohong, H., Zhongping, Y., & Zhujun, Z. (2021). Family function, loneliness, emotion regulation, and hope in secondary vocational school students: A moderated mediation model. *Front Public Health*, 9, 722276. <https://doi.org/10.3389/fpubh.2021.722276>
- Zhao, J., Kong, F., & Wang, Y. (2012). Self-esteem and humor style as mediators of the effects of shyness on loneliness among Chinese college students. *Personality and Individual Differences*, 52(6), 686–690. <https://doi.org/10.1016/j.paid.2011.12.024>