

**IMPACT OF SHYNESS ON INTERPERSONAL RELATIONSHIP AND
LONELINESS: MEDIATING ROLE OF SOCIAL SUPPORT.**



RESEARCHER

Mubasher Saeed

Reg. 467-FSS/MSCP/F21

SUPERVISOR

Dr Asghar Ali Shah

**DEPARTMENT OF PSYCHOLOGY
FACULTY OF SOCIAL SCIENCES
INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
(2023)**

**IMPACT OF SHYNESS ON INTERPERSONAL RELATIONSHIP AND
LONELINESS: MEDIATING ROLE OF SOCIAL SUPPORT.**

Submitted to the Department of Psychology (Male Campus), International Islamic
University Islamabad
in partial fulfilment of the requirements
for the award of degree of

MS

IN

PSYCHOLOGY

By

MUBASHER SAEED

Reg. 467-FSS/MSCP/F-21

**Department of Psychology
Faculty of Social Sciences
International Islamic University Islamabad
2023**

**“IMPACT OF SHYNESS ON INTERPERSONAL RELATIONSHIP AND
LONELINESS: MEDIATING ROLE OF SOCIAL SUPPORT”**

By

Mubasher Saeed

Registration No. 467-FSS/MSCP/F21

Thesis Approved

By



**Dr. Asghar Ali Shah
Supervisor**



**Dr. Mazhar Iqbal Bhatti
Internal Examiner**



**Dr. Javed Iqbal
External Examiner**



Incharge

Department of Psychology



Dean Faculty of Social Sciences

**INTERNATIONAL ISLAMIC UNIVERSITY, ISLAMABAD
(PAKISTAN)**

DECLARATION

I, **Mr. Mubasher Saeed**, Registration No. **467-FSS/MSCP/F-21** student of **MS** in the subject of Psychology, session **2021-2023**, hereby declare that the matter printed in the thesis titled: IMPACT OF SHYNESS ON INTERPERSONAL RELATIONSHIP AND LONELINESS: MEDIATING ROLE OF SOCIAL SUPPORT is my own work and has not been printed, published and submitted as research work, thesis or publication in any form in any University, Research Institution etc in Pakistan or abroad.

Signatures of Deponent

Dated:

RESEARCH COMPLETION CERTIFICATE

Certified that the research work contained in this thesis titled: IMPACT OF SHYNESS ON INTERPERSONAL RELATIONSHIP AND LONELINESS: MEDIATING ROLE OF SOCIAL SUPPORT has been carried out and completed by Mr. **Mubasher Saeed**, Registration No. **467-FSS/MSCP/F-21** under my supervision.

Date

Supervisor

Dr Asghar Ali Shah

Assistant Professor

Department of Psychology

International Islamic University Islamabad

To my beloved Parents,

For your unwavering love, endless support, and boundless encouragement, this thesis is dedicated to you. Your sacrifices and belief in me have been my guiding light throughout this academic journey. Thank you for always being my source of inspiration and strength.

With all my love.

Table of Contents

| | Page No |
|---|----------|
| List of Tables | i |
| List of Annexure | ii |
| Acknowledgement | iii |
| Abstract | iv |
| Chapter 1 INTRODUCTION | 1 |
| Background of the Study | 1 |
| Shyness | 2 |
| Theories of Shyness | 4 |
| Symptomatic Theory | 4 |
| Syndromal Theory | 4 |
| Attachment theory of Shyness | 5 |
| Cognitive Model of Shyness | 5 |
| Loneliness | 6 |
| Theories of loneliness | 9 |
| Cognitive approach | 9 |
| Attachment theory | 9 |
| Interactionist approach | 10 |
| Psychodynamic approach | 11 |
| Interpersonal relationships | 11 |
| Theories of interpersonal relationships | 13 |
| Social Connections | 13 |
| Uncertainty Reductions Theory | 13 |
| Social Exchange Theory | 14 |
| Attachment Theory | 15 |
| Harry Stack Sullivan Theory | 15 |
| Social support | 16 |
| Theories of Social Support | 17 |
| The Social Support Theory | 17 |

| | |
|---|----|
| Stress-Buffering Hypothesis | 18 |
| Social Capital Theory | 19 |
| Neurological Basis | 20 |
| Problem Statement | 21 |
| Significance of the Study | 21 |
| Objectives of the Study | 22 |
| Research Questions/Hypotheses | 23 |
| Delimitation(s)of the Study | 23 |
| Chapter 2 LITERATURE REVIEW | 24 |
| Review of related literature | 24 |
| Theoretical Framework | 26 |
| Conceptual Framework | 28 |
| Chapter 3 METHODOLOGY | 29 |
| Research Design | 29 |
| Population | 29 |
| Sampling | 29 |
| Operational Definition(s) | 29 |
| Shyness | 29 |
| Loneliness | 29 |
| Interpersonal Relationship | 29 |
| Social Support | 29 |
| Instrument(s) | 29 |
| Demographic Information Sheet | 30 |
| Revised Cheek and Buss Shyness Scale | 30 |
| University of California Los Angeles Loneliness scale | 30 |
| Relationship Scale Questionnaire | 30 |
| Interpersonal Support Evaluation List Shortened Version | 30 |
| Procedure(data collection) | 30 |
| Data Analysis | 31 |
| Ethical Consideration | 31 |

| | |
|-----------------------------------|----|
| Chapter 4 RESULTS | 32 |
| Chapter 5 DISCUSSION | 40 |
| Limitations and suggestions | 44 |
| Implications of the present study | 45 |
| Conclusion | 45 |
| REFERENCES | 47 |
| APPENDICES | 56 |

List of Tables

| Table No. | Table Heading | Pg No. |
|------------------|--|---------------|
| Table 1 | <i>Descriptive statistics and Cronbach's alpha for the scales of loneliness, shyness, interpersonal relationships and social support.</i> | 33 |
| Table 2 | <i>Pearson product correlation among loneliness, shyness, interpersonal relationships and social support</i> | 34 |
| Table 3 | <i>Mean, Standard Deviation and t value to see the effect of gender on loneliness and interpersonal relationship among university students</i> | 35 |
| Table 4 | <i>Regression analysis for Mediation of Social Support between Shyness and loneliness</i> | 36 |
| Table 5 | <i>Regression analysis for Mediation of Social Support between Shyness and interpersonal relationship</i> | 38 |

List of Annexure

| | Name | Pg No. |
|-------------|---|---------------|
| Annexure- A | Inform Consent | 56 |
| Annexure- B | Demographic Sheet | 57 |
| Annexure- C | Relationship Scale Questionnaire | 58 |
| Annexure- D | The Revised Cheek and Buss Shyness Scale (RCBS) | 60 |
| Annexure- E | Interpersonal Support Evaluation List shortened version | 62 |
| Annexure- F | UCLA Loneliness Scale | 63 |

ACKNOWLEDGMENT

I would like to express my sincere gratitude to the following individuals, without whom this thesis would not have been possible:

Dr. Asghar Ali Shah, my esteemed supervisor, for your invaluable guidance, mentorship, and unwavering support throughout this research journey. Your expertise and insights have greatly enriched my understanding of the subject matter.

Dr. Sabir Zaman, for your dedicated teaching and academic guidance, which laid the foundation for my research skills and analytical abilities. Your constructive feedback was instrumental in shaping this thesis.

Mr. Maaz Ahmed, for your assistance and encouragement in the data analysis phase of this project. Your technical expertise and willingness to help were immensely beneficial.

I would like to extend my heartfelt thanks to my wife, Rabia Kashaf, for her patience, understanding, and constant support during the challenging phases of this thesis. Your belief in me kept me motivated.

To my dear friends, whose unwavering support, encouragement, and occasional study breaks made this academic journey more enjoyable and manageable. Your friendship has been a source of strength.

Lastly, I want to thank my family for their love and encouragement, which have always been a source of motivation throughout my educational endeavors.

This thesis is a result of collective effort, and I am deeply appreciative of the contributions and support I have received from these individuals. Thank you all for being a part of this important milestone in my academic journey.

ABSTRACT

The objective of the current study was to examine the impact of shyness on interpersonal relationships and loneliness: mediating role of social support among university students. The sample consisted of university students (N=400, m=160, f=240). The measurement of shyness was conducted by the utilization of the Revised Cheek and Buss scale. Revised Cheek and Buss scale (Cheek & Melchior, 1985), University of California Los Angeles Loneliness scale (Russell, et al. 1980), Relationship Scale Questionnaire (Griffin & Bartholomew, 1994), Interpersonal Support Evaluation List Shortened Version (Cohen & Hoberman, 1983) were used to assess the study variables I-e. Shyness, Loneliness, Interpersonal Relationship and Social Support. The findings indicate a substantial negative association between shyness and interpersonal relationships, as well as a positive correlation between shyness and loneliness. Additionally, social support demonstrates a significant positive relationship with shyness, while displaying a negative correlation with loneliness. The results of the analysis indicate that social support functions as a partial mediator in the association between shyness in interpersonal relationships and feelings of loneliness. This implies that students can effectively manage the negative consequences of shyness and achieve a state of psychological and social well-being through the assistance of social support.

Key words. Shyness, Loneliness, Interpersonal relationship, Relationship scale Questionnaire

Chapter 1

Introduction

Background of the Study

The psychological literature has extensively examined shyness as a multifaceted personality trait, primarily due to its possible impact on individuals' social functioning and general well-being (Rubin, Coplan, & Bowker, 2009). Shyness is frequently defined by the presence of social anxiety, a reluctance to engage in social interactions, and a proclivity to avoid novel social circumstances (Cheek & Buss, 1981). The manifestation of this tendency can be observed throughout an individual's lifespan, with childhood and adolescence being particularly critical stages for its emergence and possible impact on subsequent development.

The importance of comprehending the influence of shyness on interpersonal interactions and feelings of loneliness resides in its capacity to mould individuals' social encounters and psychological well-being. Interpersonal relationships play a crucial role in the human experience, as they provide emotional support, facilitate personal development, and foster a sense of belonging (Baumeister & Leary, 1995). The inhibiting aspect of shyness can impede individuals' capacity to form and sustain social connections, which may result in diminished social integration and heightened feelings of isolation (Rubin, Coplan, & Bowker, 2009).

Furthermore, there exists a correlation between shyness and increased degrees of loneliness, which is a prevailing emotional condition characterised by a disparity between an individual's desired and real social contacts (Peplau & Perlman, 1982). The difficulties encountered by individuals who are shy in starting and participating in social encounters might have a constraining effect on their ability to establish intimate connections, therefore intensifying their experience of loneliness (Alden & Taylor, 2004). Loneliness has been linked to a range of adverse psychological and physical consequences, such as heightened stress levels and diminished general state of well-being (Hawkley & Cacioppo, 2010).

Nevertheless, the inclusion of social support as a potential moderator adds an intriguing aspect to this intricate association. According to Cohen and Wills (1985), social support, which includes emotional, instrumental, and informational aid from social networks, has the ability to alleviate the adverse consequences of shyness on interpersonal interactions and feelings of loneliness. According to Alden and Taylor (2004), the existence of supportive relationships can serve as a catalyst for the growth of social skills, the alleviation of anxiety, and the bolstering of

confidence in social contexts among those who are shy. In addition, it has been suggested that social support may mitigate the adverse emotional effects commonly linked with feelings of loneliness, since it provides individuals with companionship and emotional validation (Hawkley & Cacioppo, 2010).

The objective of this study is to investigate the complex associations among shyness, interpersonal connections, and loneliness, with a specific emphasis on the potential moderating influence of social support. Through the examination of the potential impact of social support on the relationship between shyness and its various effects, our objective is to advance our comprehension of the underlying mechanisms that drive these connections. The findings of this study have the potential to provide valuable information for the development of interventions designed to assist individuals coping with shyness. These interventions could help improve their social interactions and mitigate the adverse effects of loneliness.

Shyness:

Shyness can be characterised as a state of apprehension and self-consciousness that arises in individuals when faced with actual or perceived social encounters. The condition is distinguished by the deliberate avoidance of social interaction as a result of apprehension, scrutiny from others, and feelings of shame, diminished self-value, reduced self-confidence, and heightened anxiety. Numerous psychologists have focused their attention on the popular concept of shyness, although a significant amount of research has been devoted to reconceptualising shyness as a psychological construct (Jones, Cheek, & Briggs, 1986). To have a comprehensive understanding of shyness, it is imperative to examine the developmental shifts in shyness that occur from early childhood to adolescence. Scholars have conducted both theoretical and empirical research to distinguish between two distinct manifestations of shyness: early fear-based shyness and later-developing self-conscious shyness. Fear-based shyness is commonly characterised as a temperamental trait that manifests predominantly as behavioural inhibition when individuals find themselves in unfamiliar circumstances. According to Buss (1986), fear-based shyness tends to be more prevalent throughout the initial four to five years of a child's existence, prior to their development of perspective-taking skills and understanding that others may have perceptions of them.

Shyness is a comprehensive and multifaceted concept, encompassing several aspects that may have distinct consequences for social, emotional, and academic achievements. Hence, it is

crucial to comprehend the diverse array of emotions, attitudes, and behaviours that encompass the spectrum of shyness. In order to offer a fuller and precise depiction of shyness. According to Leary (1986), it is argued that an appropriate definition should encompass both perceived social behaviour and repressed social behaviour. Shyness can be characterised as the manifestation of nervousness in social contexts, accompanied by a tendency to avoid interpersonal engagements stemming from apprehension of interpersonal assessment, ultimately resulting in feelings of isolation.

Zimbardo and Henderson (2000) reported that approximately 80% of individuals encounter feelings of shyness in certain situations. A total of 21% of individuals in this sample report experiencing feelings of shyness on a daily basis, while a smaller proportion of 2% identify themselves as chronically shy. The individual proposed that as a result of significant social transformations, there is likely to be an increasing inclination towards shyness. The phrase commonly used to describe the inclination towards self-consciousness in the face of social novelty and perceived social judgement is shyness. This tendency is exacerbated in a society that emphasises individualism and competition, as it hinders the development of social skills. (Crozier, 2001).

According to Russell, Curtrona, and Jones (1986), it is common for individuals to encounter sporadic episodes of shyness, which can be attributed to temporary responses when faced with challenging social circumstances. Dispositionally shy individuals are characterised by a higher frequency, greater intensity, and broader scope of shyness-related difficulties. This propensity towards shyness results in social inhibition, thereby exacerbating the quality of their interpersonal relationships and ultimately leading to heightened social dissatisfaction and feelings of loneliness. The phenomenon of shyness generally has three fundamental elements: a pervasive emotional state, heightened emotional arousal, and distinct physiological manifestations, including gastrointestinal distress, increased heart rate, perspiration, and facial flushing. These physiological symptoms can be categorised as somatic anxiety components within the context of shyness. The second cognitive component of shyness encompasses acute public self-consciousness, self-critical thoughts, and concerns of negative evaluation by others. The third component comprises observable behaviours, including subdued demeanour, circumspection, uncoordinated bodily movements, aversion to making eye contact, and disengagement from social interactions.

Individuals who possess the characteristic of shyness tend to regard social circumstances as intrinsically less intimate and more evaluative. They hold the belief that their social conduct will be insufficient and will be subject to negative evaluation by others. Furthermore, those with introverted tendencies exhibit a greater inclination to accept negative feedback in comparison to good input. Additionally, they demonstrate a proclivity to resist and question the validity of favourable evaluations. The observed recurrent self-concept processes seem to provide challenges for those with shyness in effectively engaging in social interactions and establishing interpersonal connections. Shy individuals commonly exhibit a recurring trend of experiencing subpar social relationships with their peers, as evidenced by research conducted by Cheek and Krasnoperova (1999).

Theories of Shyness: The scholarly investigation of shyness has experienced a surge in interest over the past forty years, marked by notable progress in both its theoretical comprehension and the methodologies employed to examine it (Carducci, 2000). The aforementioned achievement was made feasible through the occurrence of a paradigmatic shift within the realm of psychology, wherein the predominant focus on behavioral aspects was expanded to encompass cognitive processes. This expansion facilitated a more comprehensive understanding of social deficiencies, which were previously limited to deficiencies in social skills. The revised conceptualization now encompasses aspects such as self-concept and self-evaluation, thereby enriching the understanding of social deficits (Crozier, 2000).

Symptomatic Theory: The symptomatic theory delves into the examination of shyness phenomena through the lens of emotional, behavioral, and self-oriented symptoms. The emotional facet of shyness is delineated as a manifestation of social trepidation or, alternatively, as the consequence of the presence of an observing collective (Tyszkowa, 1978; Borecka-Biernat, 1998; Gladyszewska-Cylulko, 2007). The focal point of this theory revolves around the anxiety-inducing elements of shyness, which are influenced by the heightened emotional sensitivity as described by Crozier (2000). The behavioral facet places emphasis on the outward manifestations of shyness, which are discernible in various social contexts. Within the realm of self-orientation, the focal point lies on the individual's self-perception, encompassing their self-image and self-assessment, as underscored by Pilkonis in 1977.

Syndromal Theory: In accordance with the syndromal theory, shyness is regarded as a combination of coexisting manifestations encompassing behavioral, emotional, and self-

orientational symptoms. The occurrence of these phenomena can be attributed to the presence of certain interferences in the perception of social situations, which in turn arise from the intricate formations of individual personality structures. The present theory posits that shyness is characterized by a distinct configuration of distressing affective states, cognitive patterns that hinder one's functioning, and a proclivity to retreat from challenging circumstances. From a phenomenological perspective, shyness can be understood as an inclination or disposition characterized by a pervasive inclination to experience tension, anxiety, embarrassment, discomfort, and inhibition, thereby leading to a tendency to avoid direct eye contact in novel social contexts and encounters with unfamiliar individuals and acquaintances (Cheek & Buss, 1981).

Attachment theory of Shyness. The inclination towards social avoidance affective states, such as anxiousness, have been the subject of scholarly investigation within the realm of parental attachment theories and shyness. These phenomena serve as indicators of early emotional adjustments and subsequent social competency. In accordance with the tenets of attachment theory, it is posited that parents wield a significant degree of influence over the intricate process of personality development in their offspring. The establishment of a secure bond between caregiver and child engenders a sense of security within the child, thereby fostering an environment in which the child feels at ease to engage in exploratory behaviors. The establishment of a secure bond additionally facilitates the child's gradual acclimation to, and subsequent engagement in, constructive interpersonal connections. In its entirety, the literature exhibits a remarkable coherence in its findings, indicating that the fulfilment of a child's initial emotional requirements yields enduringly favorable outcomes in terms of social interactions (Wei, Russell, & Zakalik, 2005).

Cognitive Model of Shyness. The Cognitive Model posits that the fundamental factors contributing to the development and perpetuation of shyness are rooted in distortions occurring during the processing of information, the nature of one's thoughts, the presence of anxiety, and the adoption of maladaptive responses within social contexts. Prominent theoretical frameworks are predicated upon the fundamental concept that individuals afflicted with social anxiety hold a distorted and unfavorable perception of their own selves, which is typified by the conviction that their social conduct is subject to exacting standards imposed by others, coupled with the anticipation of social appraisal and unwavering convictions regarding their own inherent worth (Schultz & Heimberg, 2008). The presence of negative self-images can give rise to the

development of erroneous convictions, wherein individuals hold the belief that others perceive them in a similarly unfavorable light. Moreover, individuals of this disposition exhibit a profound inclination towards the acquisition of favorable evaluations from their peers, while simultaneously keeping the belief that their actions will be subjected to unfavorable scrutiny within the context of social interactions. The cognitive processes that exhibit inflexible schemas, such as perfectionism and unrealistic expectations, are known to engender anxiety. The consequential anxiety undoubtedly imposes deleterious limitations on the capacity of individuals with shyness to effectively navigate social settings, be it within the realm of interpersonal relationships or academic environments.

Loneliness

Loneliness is an inherent and inextricable notion that is closely associated with shyness. Loneliness is an emotional state characterised by a sense of disconnection or isolation from one's social environment. According to the findings of Jones, Rose, and Russell (1990), shyness and loneliness are separate constructs, but there is a tendency for them to exhibit some degree of overlap. This is evident in the fact that assessments of both categories often demonstrate a correlation ranging from .40 to .50. Both phenomena are associated with suboptimal social interaction. There is a strong association between shyness and feelings of loneliness and social unhappiness. Rubin and Asendorf (1993) assert that prevailing theories and research have consistently underscored the significance of peer interactions in the developmental trajectory of children. Additionally, it has been noted that social interactions play a crucial role in the typical progression of development, and the absence of such experiences warrants compensating consideration.

Individuals who experience loneliness often exhibit a lack of proficiency in their ability to effectively communicate with others (Spitzberg & Canary, 1985). Loneliness can be defined as a prolonged feeling of being socially isolated, which leads individuals to withdraw from social activities that could potentially alleviate their loneliness (Perse & Rubin, 1990). Numerous studies have demonstrated the pervasiveness of loneliness throughout various segments of society, encompassing those involved in marital unions, romantic partnerships, familial units, military veterans, and individuals who have achieved notable professional accomplishments. The exploration of this concept has been a longstanding subject in human literature, dating back to classical antiquity. The concept of loneliness has also been characterised as social pain, which

serves as a psychological mechanism designed to incentivize individuals to actively pursue social connections (Peplau & Perlman, 1982).

According to Seligman (1983), loneliness is a psychological phenomenon that remains inadequately comprehended within the field. According to Gierveld (1988), loneliness is a multifaceted construct that encompasses the absence of opportunities to engage in close relationships with others. Loneliness is commonly conceptualised as the degree of an individual's social connectivity, or more specifically, as the negative sensations that arise when a person's social network lacks certain crucial elements (Pittman & Reich, 2016). Loneliness can manifest in individuals due to a variety of factors, with numerous life circumstances potentially serving as catalysts. For instance, a dearth of companionship throughout formative years, namely in infancy and adolescence, or the absence of significant individuals in close proximity to an individual, can contribute to feelings of loneliness.

Loneliness is a pervasive emotional and psychological phenomenon that transcends cultural and societal boundaries. Loneliness is commonly regarded as a typical phenomenon that facilitates the individual's attainment of heightened self-awareness, a period conducive to creative expression, and a chance to reach personal fulfilment and delve into the existential significance of existence (Bozgeyikli, 2002; Crozier, 2000; Henderson & Zimbardo, 1998; Yalom, 2001). Loneliness is a prevalent aspect of the human condition, representing a transformative experience that allows individuals to nurture, broaden, and intensify their sense of humanity.

Weiss (1973) posits that the experience of loneliness is not solely attributed to one's physical state of being alone, but rather to the absence of specific essential relationships or a cohesive collection of interactions. The author highlighted the presence of a correlation between attachment theory and feelings of loneliness. The author provided a definition of loneliness as a state of distress that occurs when an individual is physically separated from their primary attachment figure. Loneliness is commonly observed as a reaction to the lack of specific relationship provisions, such as deficiencies in the relational provisions associated with social support (DiTomasso, Brannen, Ross, & Burgess, 2003; Özdemir & Tuncay, 2008).

Loneliness, as commonly conceptualised in the literature (Perlman & Peplau, 1984), refers to the subjective experience of social isolation or a perceived insufficiency in the number or quality of interpersonal connections (Russell, Peplau, & Cutrona, 1980). This prevalent phenomenon is frequently associated with negative affective states such as dissatisfaction, unhappiness, anxiety,

hostility, emptiness, boredom, and restlessness (Perlman & Peplau, 1982; Perlman & Peplau, 1984). While loneliness is commonly linked to sadness, it can be encountered by those who are both socially connected and socially alienated. Moreover, empirical studies have demonstrated that feelings of loneliness are experienced across all stages of life, extending beyond persons who are socially marginalized or isolated. Early researchers in the field of loneliness have indeed made distinctions between different types of loneliness, taking into account factors such as the duration and stability of the experience, as well as the underlying factors or events that may contribute to its onset. Young (1982) provided a categorization of loneliness into three distinct forms: chronic, situational, and transient. Chronic loneliness is characterized by enduring and pervasive feelings of isolation. Situational loneliness, on the other hand, arises during significant life transitions, such as relocating to a new city or experiencing the loss of a loved one, and is accompanied by a sense of unease. Lastly, transient loneliness refers to shorter episodes of loneliness that are commonly encountered throughout one's lifespan.

Loneliness is associated with unfavorable evaluations of social contacts, as well as unfavorable assessments of intimate relationships and social support (Heinrich & Gullone, 2006; Solano, Batten, & Parish, 1982; Wittenberg & Reis, 1986). Therefore, individuals who experience feelings of loneliness have heightened sensitivity to their social surroundings and possess a strong inclination to pursue social connections. However, they encounter challenges when attempting to actively participate in these social interactions and often hold pessimistic expectations regarding the outcomes of such engagements. Another cognitive factor associated with loneliness pertains to the attributions made for both success and failure. Lonely individuals, in particular, have a tendency to ascribe their failures to enduring internal factors such as a lack of skills or ability, or flaws in their character. Conversely, they credit their accomplishments to external factors that are temporary in nature (Anderson, Horowitz, & French, 1983).

Loneliness, often referred to as perceived social isolation, is a prevalent sign of connection impairments that are linked to emotions of discontent, anxiety, emptiness, and boredom (Perlman & Peplau, 1981). While loneliness is sometimes linked to measurable levels of social isolation, it is important to recognize that it is a separate psychological phenomenon. Loneliness, as posited by the cognitive discrepancy model, is contingent upon an individual's perception of a disparity between their wanted and real interpersonal interactions (Dykstra & Fokkema, 2007; Peplau & Perlman, 1979). Research has indicated that there exists a moderate correlation between perceived

social isolation and objective social isolation, as measured by social network size (Cornwell & Waite, 2009). Loneliness should not be conflated with social isolation or a deficiency in social integration, as individuals who are socially isolated should not automatically be categorized as experiencing loneliness.

Theories of loneliness:

Cognitive approach. The realm of accurate comprehension has departed from its solitary domain of investigation, yielding two primary constructs: an affective component, which encompasses the adverse emotional encounter of loneliness, and a cognitive component, which encompasses the disparity between attained and aspired social connections. The cognitive approach is predicated upon a model of discrepancy between desired and actual social relations. Loneliness, in its essence, can be understood as a psychological reaction stemming from a perceived disparity between the desired amount of social interaction and the actual level of social contact one has attained. It is worth noting that cognitive processes, particularly attributions, play a significant role in shaping and influencing the subjective experience of loneliness. These cognitive mechanisms serve as a moderating force, exerting an impact on the manner in which individuals perceive and interpret their own feelings of loneliness. The seminal work of Peplau and Perlman in 1982 is of great significance in the field under consideration. The cognitive perspective on loneliness is predicated upon the recognition that loneliness manifests itself through discernible disparities in one's perceptions and attributions. It is observed that individuals who experience loneliness often exhibit a prevailing inclination towards pessimism. In comparison to their non-lonely counterparts, these individuals manifest a greater propensity for negativity when perceiving and evaluating the individuals, events, and circumstances that comprise their lives. Furthermore, they tend to attribute their inability to establish gratifying social connections to personal shortcomings, thus assuming responsibility for their perceived deficiency in this domain. Moreover, the cognitive approach extensively considers the attachment and behavioral perspectives, elucidating the manner in which the absence of fulfilling attachment, social integration, nurturance, and other social necessities engenders perceived disparities in relationships, thereby inducing feelings of loneliness. Furthermore, this loneliness is sustained through a self-fulfilling prophecy, wherein deficient social skills give rise to unsatisfactory personal relationships, consequently leading to unfavorable self-perceptions that perpetuate social isolation and dissatisfaction in relationships.

Attachment theory. Bowlby, in his seminal work published in 1969, expounded upon the concept of attachment, which he defined as an enduring state of psychological interconnectedness observed among individuals of the human species. While the experience of loneliness has long been intertwined with the human condition, its emergence as a focal point within the realm of psychological inquiry is of relatively recent origin. The theory of attachment places significant emphasis on the crucial nature of a robust emotional connection between the infant and the caregiver. This theory serves as a precursor to modern theories concerning the experience of loneliness. From such a vantage point, one may posit that the state of loneliness manifests itself when offspring possessing insecure attachment patterns engage in behaviors that ultimately lead to their exclusion and rejection by their peers. The aforementioned rejections impede the maturation of their social aptitude and augment their inclination towards doubt of their fellow individuals, consequently nurturing a persistent state of solitude. It has been posited by Prior and Glaser (2006) that infants possess an inherent and widespread inclination to actively pursue immediate physical proximity with their primary caregiver in situations of distress or perceived danger.

From the vantage point of attachment theory, it can be posited that the caliber of an individual's most intimate connections, commencing during the early stages of life, establishes the framework for subsequent personal growth and maturation. When these interpersonal connections are established and maintained, they facilitate the development of self-sufficiency, a sense of assurance in exploring one's surroundings, and the ability to adapt and cope with the challenges and adversities that arise in one's life (Bowlby, 1979). Conversely, the absence of a secure attachment can give rise to challenges in the regulation of emotions and the establishment of interpersonal connections, thereby fostering a susceptibility to psychological anguish, feelings of isolation, and depressive tendencies (Ouellette & DiPlacido, 2001).

Interactionist approach. The Interactionist perspective espouses the notion that loneliness possesses a multidimensional nature, wherein it encompasses various facets, such as emotional and social loneliness. The state of loneliness arises not from mere solitude, but rather from the absence of a particular essential connection or network of connections. In numerous occurrences, it manifests as a reaction to the nonexistence of bestowal of a proximate, indeed profound, bond. Furthermore, it could potentially serve as a reaction to the lack of an establishment of a significant companionship, collaborative association, or any other form of connection to a cohesive societal group (Weiss, 1973).

Furthermore, the individual in question expounded upon the notion that individuals who experience feelings of loneliness often possess negative social expectations, which subsequently prompt others to exhibit behaviors that align with said expectations. This phenomenon serves to fortify the anticipations of individuals who experience loneliness, thereby augmenting the probability that they will engage in behaviors that repel those individuals who possess the potential to fulfil their social requirements. The aforementioned phenomenon has been substantiated through empirical investigations wherein lonely individuals exhibit heightened and expedited reactions of suspicion, animosity, and intolerance in response to perceived social threats, such as competition and betrayal.

Psychodynamic approach. The psychodynamic comprehension of loneliness is predicated upon the infant's profound attachment to the maternal figure. By means of this attachment, the child is afforded the opportunity to engage in the formation of emotional bonds and acquire the skills necessary to establish connections with fellow individuals. However, it is important to note that the child may also experience a sense of solitude and desolation when individuals of significance are absent from their immediate vicinity. Loneliness, an affliction characterized by a profound sense of discomfort stemming from an insufficient fulfilment of the innate human longing for interpersonal closeness and intimacy. The developmental process commences during the early stages of infancy, wherein an inherent inclination towards integration becomes apparent. This inclination, however, can only be comprehended through deductions drawn from subsequent pathological observations. Furthermore, it is postulated that a fundamental requirement for interpersonal connection with sentient beings emerges during this phase, as posited by Sullivan in 1953. From such a vantage point, it can be posited that the experience of loneliness manifests when individuals, possessing attachment patterns characterized by insecurity, engage in behaviors that ultimately lead to their rejection by their peers. The aforementioned rejections impede the progress of their social aptitude and amplify their doubt towards fellow individuals, consequently nurturing a persistent state of solitude.

Interpersonal Relationships

Humans are inherently social beings and hence, it is inevitable for them to form and depend on interpersonal connections. Shyness and loneliness are significant characteristics that have robust associations with an individual's interpersonal relationship quality. The existence of their dual presence is more likely to have an impact on interpersonal relationships. The study found that

those with lower levels of interpersonal competence were more likely to experience decreases in social support, leading to feelings of loneliness. Additionally, deficiencies in interpersonal competence were found to be associated with a tendency to engage in protective self-presentation, resulting in feelings of shyness.

An interpersonal relationship refers to a robust, profound, or intimate connection with individuals such as friends, family members, coworkers, and/or romantic partners (Hogg & Vaughan, 2011). Interpersonal connections exhibit dynamic characteristics, undergoing ongoing changes throughout their lifespan. Similar to biological entities, partnerships possess a commencement, a duration, and a termination. Interpersonal relationships have a tendency to undergo a slow process of growth and improvement as individuals become more acquainted and develop deeper emotional connections. Conversely, these relationships may also experience a gradual decline as individuals drift apart, pursue different life paths, and establish new connections with other individuals. One of the most important models of relationship development was provided by psychologist Levinger (1983).

The development of self is facilitated by relationships, rendering them significant. The idea of the relational self pertains to an individual's self-concept, encompassing their emotions and views about themselves, which are shaped through interpersonal interactions (Andersen & Chen, 2002). Interpersonal interactions serve as a fundamental requirement for human beings, and the inclination to establish and sustain these relationships is a crucial drive inside the human psyche (Baumeister & Leary, 1995; Deci & Ryan, 2000).

The examination of interpersonal relationships encompasses various fields within the social sciences, such as sociology, communication studies, psychology, and social work. The field of relationship science emerged and gained recognition as an academic discipline in the 1990s, as documented by Berscheid (1999). The factors that contribute to the establishment and maintenance of a relationship between two individuals encompass their shared desires and aspirations for accomplishing a common objective (Obakpolo, 2015). Hence, it is imperative to provide sustenance and care to foster the development of interpersonal relationships, since neglecting them would result in their deterioration (Velmurugan, 2016).

The concept of attachment is primarily associated with interpersonal connections between persons, and the various attachment types may be traced back to early experiences of attachment during one's developing years (Hendrick & Hendricks, 1994). Interpersonal interactions

encompass four distinct attachment types: secure, dismissive, apprehensive, and preoccupied. These attachment styles arise from two fundamental characteristics that revolve around individuals' positive or negative attitudes towards themselves (self-esteem) and towards others (interpersonal trust).

Theories of interpersonal relationships:

Social Connections. The scholarly work conducted by Mikulincer and Shaver (2007) centers around the fundamental human requirement for social connection and companionship, specifically with attachment figures who are regarded as trustworthy. Interpersonal relationships, in their essence, epitomize the intricate web of social connections that individuals establish with one another. These entities possess the capacity for enduring. On a quotidian basis, individuals encounter a plethora of interpersonal connections encompassing familial ties, friendships, romantic partnerships, and professional associations. While it is undeniable that each relationship possesses its own distinct characteristics, it is imperative to acknowledge the existence of certain prevailing motifs that exert a profound impact on the vitality and perpetuation of all relationships. Numerous theoretical frameworks have been constructed to elucidate the processes by which individuals engage in and sustain relationships. However, these various perspectives fundamentally converge upon the notion that human beings actively seek particular attributes within their interpersonal bonds.

Uncertainty Reductions Theory. The theory of uncertainty reduction posits that individuals attempt to diminish their state of uncertainty regarding others through the acquisition of knowledge about them. Upon acquiring a deeper understanding of an individual, it becomes increasingly feasible to make accurate prognostications regarding their conduct. Berger and Calabrese (1975) posited the Uncertainty Reduction Theory as a means to elucidate the dynamics governing interactions between individuals who possess limited knowledge of one another or are entirely unfamiliar.

In accordance with the tenets of Uncertainty Reduction Theory, it is posited that when two individuals, who possess limited knowledge of one another, engage in an initial encounter, they undergo a series of distinct stages aimed at diminishing the prevailing level of uncertainty between them. This process facilitates a gradual convergence, wherein the individuals involved strive to attain a heightened level of familiarity and understanding. In order to enhance their mutual understanding and ascertain the extent of their compatibility, it is imperative for unfamiliar

individuals to engage in effective communication. The utilization of personal space within interpersonal dynamics serves as a valuable tool in mitigating the inherent ambiguity that often accompanies human connections. During the personal stage of a relationship, individuals engage in a process of inquiry aimed at gaining a deeper understanding of their partner's attitudes and beliefs. Inquisitive individuals attempt to acquire a deeper understanding of the ethical framework, values, behavioral patterns, and overall disposition of their counterparts. In the realm of interpersonal relationships, it is widely observed that individuals who have transitioned from being strangers to acquaintances embark upon a journey of discovery, wherein they delve deeper into the intricacies of each other's unique personality traits. This stage, commonly referred to as the personal stage, serves as a fertile ground for the cultivation of understanding and familiarity between these individuals.

Social Exchange Theory. The seminal work on the subject of Social Exchange Theory was put forth by Homans and George in the year 1958. In accordance with the tenets of Social Exchange Theory, it is posited that every interpersonal relationship entails a reciprocal bestowal and reception of resources, albeit the equilibrium of this transactional process may not invariably be symmetrical. Individuals who exhibit a propensity for bestowing great generosity upon others often hold a corresponding inclination to receive substantial reciprocation in return. Conversely, those who receive extensively from their counterparts find themselves subject to an inherent obligation to bestow in accordance luxuries upon them. The clarification of social exchange theory lies in its capacity to explicate the complicated nature of our affective disposition towards interpersonal relationships. The crux of social exchange theory lies in the subjective assessment of the equilibrium between our contributions to a given relationship and the corresponding benefits we derive from it. Additionally, this theory takes into account our perception of the type of relationship we are entitled to, as well as the potential for cultivating a more favorable relationship with an alternative individual. The present theory exhibits resemblances to economic theories, which center their attention on the intricate dynamics of goods exchange and the delicate balance between input and output. It is only when the benefits derived from interpersonal connections match with or surpass the associated expenditures that an individual perceives the effort to be of sufficient value. Given the nature of this theoretical framework, it is noteworthy to highlight that a substantial portion of the commodities being transacted within its confines are of an affective nature. This theory revolves around the concept of cost and reward. The expenses incurred may

encompass factors such as deficient interpersonal discourse or a state of solitude. The rewards encompass various facets, such as the gratification derived from companionship, the mutual exchange of shared interests, or the profound sense of being truly comprehended.

Attachment Theory. The landmark work of Bowlby (1960) expounds upon a comprehensive theoretical framework pertaining to the phenomenon of attachment, encompassing a multitude of pivotal constructs that serve as the bedrock of this theoretical edifice. Primarily, it is evident that attachment relationships manifest as a biological inclination that has evolved to safeguard the continuation of life. It is postulated that individuals are inclined to cultivate attachment bonds with their caregivers, thereby exhibiting a propensity to seek and sustain physical closeness to said caregivers during periods of distress, illness, or fear. The proposition posited that variations in the degree of attentiveness and concern exhibited towards others can be attributed to disparities in attachment patterns observed among individuals.

The individual in question exhibited a distinct fascination with the intricate dynamics of the parent-child bond. However, it is crucial to note that he unequivocally acknowledged the significance of attachment representations in the overall functioning of relationships, spanning from the earliest stages of life until the very end. Infants commonly establish a primary attachment bond with their primary caregiver, yet it is noteworthy that infants possess the capacity to form multiple attachment relationships. As individuals progress through childhood and into adulthood, these attachment relationships are systematically arranged within a hierarchical framework. Lastly, Bowlby postulated that once established, attachment representation would exhibit stability, particularly during the adult stage of life. However, it is important to note that attachment representation may undergo alterations in response to modifications in caregiving during childhood or due to significant and distressing occurrences in adulthood.

Harry Stack Sullivan Theory. In the year 1951, Sullivan developed a theoretical framework pertaining to the study of personality, wherein he placed significant emphasis on the crucial role played by interpersonal relationships. The scholar postulated that the formation of one's personality is predominantly influenced by the intricate interplay of interpersonal relationships. The individual in question formulated a theoretical framework delineating distinct phases of human development. As per his assertion, the therapist assumes the role of a participant observer, engaging in the establishment of an interpersonal connection with the patient. The therapist possesses a profound comprehension of patients, facilitating the cultivation of their

capacity for foresight, enhancing their interpersonal connections, and reinstating their aptitude to function predominantly on a syntactical plane. Sullivan's perspective posited that the development of human personality is predominantly shaped by interpersonal relationships, thereby assigning significant weight to social influences while assigning minimal significance to biological factors. Furthermore, it exhibits a notable degree of proficiency in the realm of unconscious determinants, while displaying a moderate level of competence in the domains of free choice, optimism, and causality. Conversely, it demonstrates a relatively diminished capacity in terms of uniqueness.

Social support

The idea of social support is extensively examined within the field of psychology. It encompasses the provision of aid, resources, and emotional nourishment that individuals receive from their social networks during periods of need, stress, or adversity (Cohen & Wills, 1985). The construct in question is a complex entity that encompasses multiple facets, such as emotional support, instrumental support, informational support, and evaluation assistance. Emotional support encompasses the provision of empathy and comprehension, frequently communicated through manifestations of concern and compassion (Gottlieb & Bergen, 2010). Instrumental support refers to the provision of practical assistance, including tangible or material aid, by those inside one's social network (Thoits, 2011). The concept of informational support refers to the provision of guidance, advice, and valuable knowledge in order to overcome certain issues (Berkman & Glass, 2000). Appraisal support refers to the provision of feedback and appraisal by an individual's network, which aids in the interpretation of situations and emotions (Taylor, 2011).

The importance of social support has been emphasised by a multitude of studies. According to existing research, it has been found that social support plays a crucial role in helping individuals deal with stressors and promoting their psychological well-being. The buffering hypothesis, as developed by Cohen and Wills (1985), posits that social support has the potential to mitigate the adverse effects of stress on an individual's mental well-being. Multiple research has provided evidence that persons who possess strong social support networks generally exhibit reduced levels of psychological discomfort (Uchino, 2009). In addition, previous research has established a positive association between social support and several positive outcomes, such as heightened resilience, elevated self-esteem, and enhanced overall quality of life (Hawkey & Cacioppo, 2010; Gallagher & Vella-Brodrick, 2008).

Within the realm of shyness, the presence of social support assumes a pivotal role in influencing the manner in which persons exhibiting shy tendencies manage their interactions with others. Individuals that possess a shy disposition frequently have difficulties when it comes to beginning and sustaining social contacts (Cheek & Buss, 1981). Nevertheless, the provision of social support can furnish individuals with a nurturing milieu that fosters their participation in social endeavours and facilitates the development of their social aptitudes (Jones & Carpenter, 1986). The provision of support can be derived from several sources, such as acquaintances, relatives, or even experts who assist individuals in navigating social circumstances, progressively diminishing their inhibitions associated with shyness and augmenting their self-assurance (Henderson & Zimbardo, 2001).

Moreover, there exists a complex interconnection between social support, feelings of loneliness, and interpersonal connections. Social support has the ability to serve as a mitigating factor for loneliness among persons who experience shyness. Individuals who exhibit shyness may encounter an increased sense of loneliness as a result of challenges in establishing intimate connections and participating in social exchanges (Alden & Taylor, 2004). Nevertheless, the presence of social support can offer individuals companionship, emotional attachment, and a feeling of inclusion, so mitigating the experience of loneliness (Hawley & Cacioppo, 2010).

Theories of Social Support

The Social Support Theory: The Social Support Theory (SST), initially stated by James S. House in the year 1981, stands as a pivotal theoretical construct within the realm of social sciences. The primary focus of this inquiry lies in the meticulous examination of social relationships and their profound impact on the holistic state of individuals, encompassing both their physical and psychological well-being. As per the theoretical framework, it is posited that social support assumes a central role in facilitating the promotion of health and ameliorating the consequences of stress. The theory of Social Support delves into the ramifications of interpersonal connections on an individual's comprehensive state of health and well-being. In the seminal work of House (1981), a comprehensive examination of the theoretical framework surrounding social support was conducted. Within this scholarly endeavor, House identified and expounded upon three fundamental constituents that possess utmost significance. These constituents, when considered collectively, provide a nuanced understanding of the intricate dynamics inherent in the realm of social support.

The concept of social integration holds paramount importance as it pertains to the extent of an individual's involvement within a social network, encompassing both the quantity and diversity of their social connections that they maintain. A positive correlation has been observed between heightened levels of social integration and the augmentation of social resources and support. The facet of social interaction concerns the assessment of both the frequency and calibre of interactions that transpire within the social network of an individual. Positive and meaningful social interactions hold considerable importance in cultivating a profound sense of belonging, offering invaluable emotional sustenance, and ameliorating the distressing experience of isolation. The concept of perceived social support encompasses an individual's subjective assessment of the existence and adequacy of support received from their social network. The profound import of perceiving care, value, and support from fellow beings cannot be overstated when considering its profound influence on an individual's holistic state of well-being.

Stress-Buffering Hypothesis: The Stress-Buffering Hypothesis, initially suggested by Cohen and Wills in the year 1985, posits that social support operates as a safeguarding mechanism that alleviates the detrimental effects of stress on an individual's well-being. In accordance with the proposed theoretical framework, it is posited that social support assumes a pivotal role in endowing individuals with the requisite means to proficiently cope with and traverse stressors, thus ameliorating the deleterious ramifications of stress on their holistic well-being encompassing both physical and psychological dimensions. The discernible manifestation of the influence of social support in ameliorating adverse consequences becomes particularly conspicuous when individuals perceive said support as easily obtainable and attuned to their distinct requirements (Cohen & Wills, 1985).

The proposal known as the Stress-Buffering Hypothesis theorizes that social support functions as a safeguarding mechanism, effectively alleviating the deleterious consequences of stress on an individual's physiological and psychological welfare. According to the scholarly work of Cohen and Wills (1985), it is postulated that the effectiveness of social support in alleviating stress is contingent upon two fundamental factors: Stressful events, denoted as stressors, encompass extrinsic circumstances or situations that present obstacles to an individual's adaptive mechanisms for managing stress. The stressors encapsulated within this particular category may comprise of noteworthy life occurrences, mundane hindrances, or enduring chronic stressors. The concept of social support pertains to the bestowal of assistance, concrete assets, and emotional

comfort that individuals obtain from their social affiliations, which encompass familial bonds, friendships, and peer associations. The concept of social support encompasses various manifestations, which may be classified into distinct categories including emotional support, instrumental support, informational support, and appraisal support.

Social Capital Theory: The notion of Social Capital Theory, as first proposed by the esteemed scholar Robert D. Putnam in the year 1995, has arisen as a pivotal conceptual framework for evaluating the impact of social affiliations on both individual entities and communal collectives. The conceptual framework centers on the concept of social capital, which pertains to the inherent resources embedded within social networks and communities. The theoretical framework proposed by Putnam regarding social capital finds its foundation in prior scholarly investigations undertaken within the realms of sociology, economics, and political science. The study in question incorporates theoretical frameworks that pertain to social networks, trust, and community relationships, as expounded upon by eminent scholars including Emile Durkheim, Max Weber, and James Coleman (Putnam, 1995). Furthermore, it is worth noting that the aforementioned theory has garnered additional substantiation and elucidation through a plethora of empirical inquiries. These investigations have consistently demonstrated a favorable association between social capital and a wide range of social outcomes, encompassing but not restricted to communal well-being, scholastic attainment, and economic advancement (Fukuyama, 1995; Woolcock & Narayan, 2000).

The concept of bonding social capital refers to the cohesive and exclusive ties that individuals form within their immediate social networks. It encompasses the strong relationships and sense of trust that develop among individuals who Bonding social capital encompasses the resilient connections and alliances observed within cohesive collectives, such as familial entities, close friendships, or individuals belonging to a distinct social or cultural group. Bonding social capital fosters, a communal perception of affiliation and cohesion within these intimately interconnected communities. The concept of bridging social capital concerns the formation of relatively weaker bonds and associations between heterogeneous social collectives. The cultivation of social integration and inclusivity is facilitated by the establishment of interactions and networks that serve to forge connections among individuals hailing from diverse backgrounds and communities. The notion of social capital linkage concerns the establishment of interpersonal connections between individuals and formal entities, including governmental bodies, commercial

enterprises, or community organizations. The establishment of social capital serves to enhance individuals' capacity to acquire resources and access services from diverse institutions.

Neurological Basis

Numerous neurological changes are caused by the emotional condition of loneliness, which has been thoroughly investigated in relation to its effects on the brain. Not only is loneliness a psychological condition, but it also has a significant impact on the composition and operation of the brain. Changes in the brain's structure, especially in regions related to social and emotional processing, have been linked to loneliness. Changes may occur in the hippocampus, an area important for memory and emotional control. Perceived social isolation was found to be correlated with decreased hippocampal grey matter density by Cacioppo and Hawkley (2009). Studies using functional MRI have shown a connection between changed brain activity patterns and loneliness. Individuals who experience loneliness may have increased activity in the brain regions related to social cognition, such as the anterior cingulate cortex and prefrontal cortex (Cacioppo et al., 2009). These modifications may be a result of heightened awareness of social dangers.

There is evidence linking loneliness to modifications in neurotransmitter systems. There may be an impact on the release and control of neurotransmitters that are crucial for mood regulation, such as serotonin and dopamine. According to Hawkley and Cacioppo (2010), mood disorders may be exacerbated by loneliness-induced dysregulation of several neurotransmitter systems. Loneliness may cause dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis, which controls the body's stress reaction. Changes in cortisol levels have been linked to loneliness, indicating a chronic stress response (Cacioppo et al., 2015). The prolonged activation of the stress system can be harmful to the brain as well as other body systems. Immune system alterations have been connected to loneliness, and they can have an impact on the brain. Increased inflammation has been linked to neurodegenerative illnesses and can result from prolonged loneliness (Cacioppo et al., 2011). Immune reactions in the body also affect the brain, and neuroinflammation has been linked to cognitive impairment.

Shyness is linked to a number of neurological changes, and it is frequently characterised by feelings of fear, anxiousness, and self-consciousness in social circumstances. Important insights into the neurological mechanisms driving this emotional state have been gained from neuroscience research. The brain's limbic system, which processes emotions, includes the amygdala as a central structure. This makes shyness one of its major causes. According to studies, shyness sufferers'

amygdala activity is increased in response to social cues and situations that they view as frightening or scary (Schneider et al., 2016). This elevated activation points to shy people's heightened sense of possible social risks and heightened sensitivity to social cues.

Furthermore, changes in the connection between the amygdala and other brain areas associated in emotion regulation have been identified by neuroimaging studies employing methods like functional magnetic resonance imaging (fMRI). For example, it has been noted that shy people have reduced functional connectivity between the prefrontal cortex and the amygdala, which is important for emotion regulation and cognitive control (Liu et al., 2017). Ineffective emotional regulation and social interaction management may be exacerbated by this broken link. Studies have shown that neurotransmitter systems, like the serotonin system, regulate shyness and associated social behaviors. Social anxiety and inhibition have been reported to be influenced by serotonin, a neurotransmitter involved in mood regulation. Studies on people with shyness or social anxiety disorders have shown changes in serotonin receptor density or functioning in brain areas linked to emotional processing (Stein et al., 2020). These results imply that the emotional experiences connected to shyness have a neurochemical foundation.

Additionally, changes in brain morphology between shy and non-shy people have been found by structural neuroimaging investigations. For instance, differences in the shape or volume of brain regions related to self-awareness and interceptive processing, such as the insula and anterior cingulate cortex, have been linked to shyness (Beaton et al., 2019). The heightened self-consciousness and emotional reactivity that are traits of shyness may be influenced by these anatomical variations.

Problem Statement

The relationship between shyness, loneliness and interpersonal issues is well established, however, the role of social support as potential mediators in this relationship is not yet fully understood. The aim of this research is to explore the potential mediating effect of social support on the relationship between shyness, interpersonal issues and loneliness in this relationship. By doing so, this study aims to fill the research gap in the field and provide insight into the complex interplay between shyness, social support, loneliness, and interpersonal issues.

Significance of the Study

Due to lack of research on factors like shyness, loneliness, interpersonal issues and social support shy individuals are suffering more day by day. Due to the fast mobility in the society, it

becomes really difficult for growing individuals to develop productive relationships which will make them suffer from lack of confidence and it will prevent from developing social skills.

The current research is an attempt to investigate the relationship between Shyness and Interpersonal relationships, mediating role of social support among university students. Shyness is associated with several emotional, social and academic problems. Shy individuals, would speak less make fewer social initiations, which would result in social isolation. Social responsibilities become a burden for a shy person due to limited social skills which brings inhibition in their interpersonal relationships. There is need to study shyness due to its immediate and long term problems that can accompany it. The core of this research was to delineate normative shyness from shyness that hinders in effective personality development. In our society normative shyness is appreciated but when an individual reaches a stage of adolescence, there is a need of making friends, interaction with new faces become important for survival but their shyness may hinder this process. Their low confidence makes them vulnerable for social inhibition and this disturbance interferes in living a healthier life. Shyness push individuals towards social alienation and loneliness, in this process the quality of interpersonal relationships would definitely drop.

The study variables will be investigated among students, considering their importance for building a nation and determining the parameters of success for any country. The students if exhibiting shyness and isolating themselves from new experiences are more likely to face problems in having secure interpersonal relations. Such situation if ignored might bring harmful consequences on individual as well as group level. The vast array of negative consequences may include relationship difficulties, educational underachievement, stress, anxiety and mood related illness and not to forget depression. Hence the present study is planned with an effort to highlight such apparently minor issues with worst consequences if attention is not provided for their early identification, treatment and prevention.

Objectives of the study

- To investigate the relationship between shyness and interpersonal relationships among university students.
- To investigate the relationship between shyness and loneliness among university students.
- To explore the mediating role of social support between the relationship of shyness, interpersonal relationships and loneliness.

Research Hypotheses

- There will be a negative relationship between shyness and interpersonal relationships.
- There will be a positive relationship between shyness and loneliness.
- Social support as a mediating variable would make an impact on the association between shyness, loneliness and interpersonal relationships among university students.

Delimitation(s) of the Study

- Limited information was obtained about one's level of shyness, loneliness, quality of interpersonal relationships and social support by use of questionnaires.
- The possibility of response biasness especially about one's interpersonal relations will lemmatizes the confidence over current findings.
- The present study has a small sample size that can result in limited generalizability to drive valid and reliable conclusions the study need to be replicated with a large sample size.
- This study relies on correlational research design which do not allow for determination of causal relationship.

Literature Review

Review of Related Literature

Shyness is a distinctive aspect of an individual's personality that is marked by experiencing emotional unease, anxiety, and heightened self-awareness in social settings. In contrast, loneliness is a subjective emotional state characterized by a sense of isolation or detachment from social connections, which has been associated with adverse consequences including depressive symptoms and heightened anxiety levels. The present study aims to conduct a comprehensive literature review on the association between shyness and loneliness, focusing on key findings in this domain. Numerous studies have consistently demonstrated a positive correlation between shyness and loneliness. In a research conducted by Jones and Carpenter (2019), it was observed that shyness exhibited a noteworthy predictive capacity for loneliness among college students, even when accounting for variables such as social support and self-esteem. In a study conducted by Baumeister and Leary (2020) involving adolescents, it was discovered that there exists a positive correlation between shyness and loneliness. Furthermore, the researchers identified that this association is influenced by the presence of social anxiety, which acts as a mediating factor.

One plausible hypothesis regarding the correlation between shyness and loneliness posits that individuals who exhibit shyness may encounter challenges in establishing and sustaining intimate connections with others. According to Coplan and Armer (2021), individuals who exhibit shyness may experience reluctance in initiating social interactions and encounter difficulties in effectively communicating with others. This circumstance can pose challenges in establishing robust interpersonal connections, consequently resulting in experiences of solitude.

Nevertheless, it is imperative to acknowledge that not all individuals who exhibit shyness necessarily encounter feelings of loneliness. Indeed, it has been observed that certain individuals who exhibit shyness may possess a predilection for seclusion and derive pleasure from engaging in solitary activities (Asendorpf, 2021). This underscores the significance of comprehending the intricate characteristics of shyness and its correlation with feelings of isolation.

Numerous studies have been conducted to examine the association between shyness and interpersonal relationships. The aforementioned variables exhibit variation across a diverse range of students. Individuals who display the characteristic of shyness in their personality during later

stages of life often experience a sense of isolation, which subsequently hinders their ability to form meaningful interpersonal relationships.

The presence of shyness may give rise to challenges in both the initiation and sustenance of intimate connections, particularly among individuals exhibiting elevated levels of shyness (Chen, Dong, Li, & Huang, 2020). Individuals who possess a shy disposition may encounter difficulties when it comes to effectively expressing themselves in social contexts, leading to potential experiences of negative social comparison (Klineberg, Rodebaugh, & Weeks, 2019). Conversely, extant literature has posited that individuals characterized by shyness may possess distinctive aptitudes within their interpersonal interactions, including heightened levels of empathy and sensitivity towards others (Chen, Dong, Li, & Huang, 2020).

According to Zimbardo and Henderson (1992), individuals who exhibit shyness tend to encounter elevated levels of social anxiety and engage in negative self-assessments within social contexts. The presence of shyness has been found to have a detrimental effect on the progression and sustenance of social connections, resulting in a reduced frequency of social engagement and diminished contentment in such engagements (Cheek & Buss, 1981). According to Henderson and Zimbardo (1992), individuals who are shy may exhibit reduced participation in small group settings and encounter challenges when it comes to initiating and sustaining conversations. Notwithstanding these obstacles, individuals who exhibit shyness have the capacity to establish interpersonal relationships that are both meaningful and satisfying by actively seeking out social environments that provide support, pursuing treatment for social anxiety, and employing coping mechanisms such as self-disclosure (Zimbardo & Henderson, 1992). In general, the existing body of literature indicates that shyness can exert a notable influence on interpersonal relationships, yet it does not impede individuals from establishing substantial connections with others.

Shyness can be defined as a fundamental aspect of one's personality, characterized by a tendency to experience social inhibition, discomfort in social settings, and a proclivity to evade social interaction (Cheek & Buss, 1981). According to a study conducted by Kraemer and Hailey (1986), there exists a negative correlation between shyness and social support, as individuals who are shy tend to report lower levels of social support compared to those who are not shy. It is widely believed that the inverse association between shyness and social support can be attributed to the

tendency of shy individuals to exhibit reduced propensity in initiating and sustaining social connections (Cheek & Buss, 1981).

The significance of interpersonal relationships for psychological well-being is widely acknowledged, with social support being identified as a fundamental element of favorable interpersonal connections. Research has demonstrated a positive correlation between social support and multiple measures of interpersonal relationships, including relationship satisfaction, social connectedness, and social competence (Cohen & Wills, 1985).

Loneliness, which refers to the personal perception of being socially isolated or lacking social connections, has been observed to have a negative correlation with social support (Peplau & Perlman, 1982). Previous research has proposed that social support may serve as a mitigating factor against feelings of loneliness, as individuals who perceive a greater degree of social support tend to report experiencing lower levels of loneliness (Hawkley & Cacioppo, 2010).

The literature proposes that social support plays a mediating role in the association between shyness and interpersonal relationships, as well as between loneliness and interpersonal relationships. An empirical investigation conducted by Cheek and Buss (1981) revealed that the association between shyness and loneliness was mediated by social support. The researchers discovered a negative correlation between shyness and social support, and subsequently, a negative correlation between social support and loneliness.

In a study conducted by Cacioppo et al. (2006), it was discovered that social support played a mediating role in the association between feelings of loneliness and several psychological well-being indicators, including life satisfaction and positive affect. The researchers discovered a significant negative correlation between loneliness and social support, and a subsequent positive correlation between social support and psychological well-being.

Theoretical Framework

Shyness can be defined as a distinctive aspect of an individual's personality, which is marked by experiencing apprehension and unease during social encounters (Cheek & Buss, 1981). According to Henderson and Zimbardo (2001), there is a proposition that shyness can have noteworthy consequences on individuals' capacity to establish and sustain interpersonal

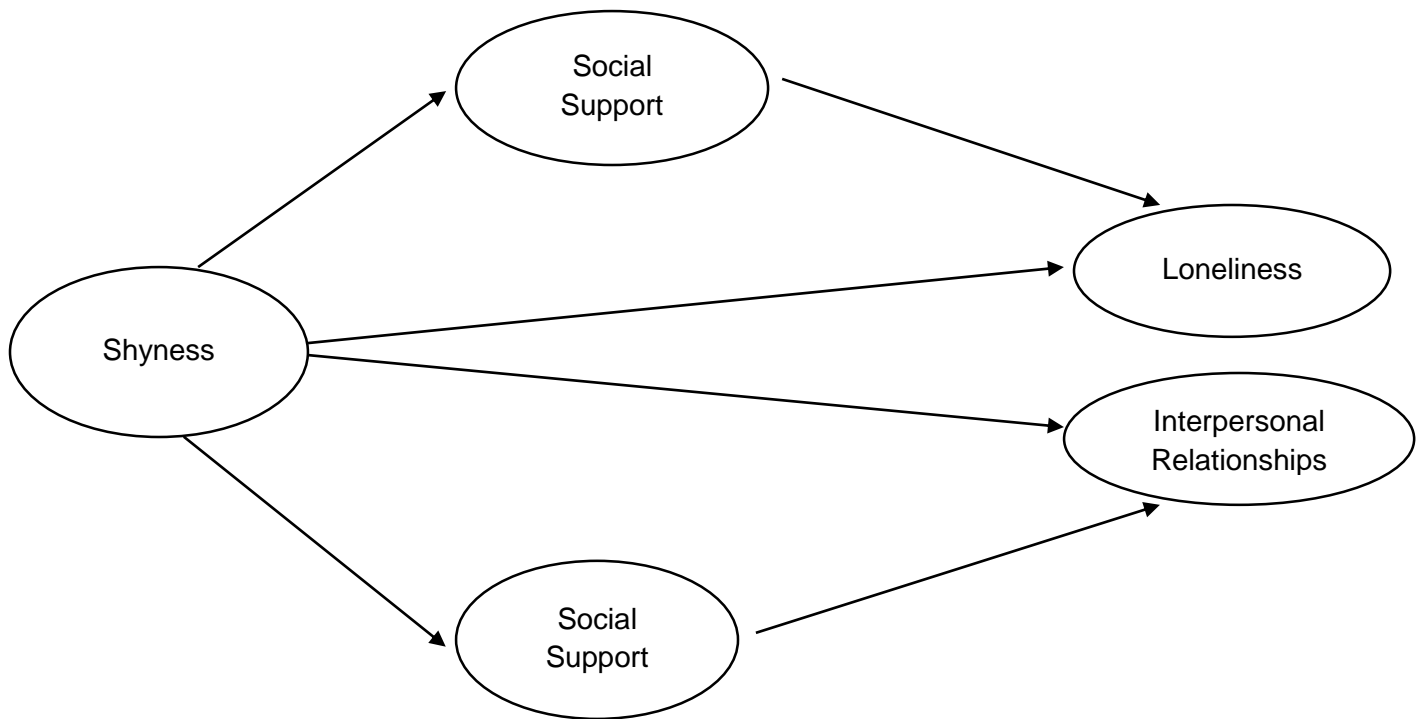
connections, consequently impacting their perception of loneliness. Individuals who possess a shy disposition frequently encounter difficulty when it comes to initiating and maintaining discussions, expressing themselves, and participating in social activities. Consequently, they may face challenges in establishing meaningful connections with others (Rubin, Coplan, & Bowker, 2009). In contrast, loneliness is a subjective emotional condition that emerges when an individual perceives a disparity between their desired and real social connections (Peplau & Perlman, 1982). The presence of shyness might potentially contribute to an increased sense of loneliness, since those who are hesitant to participate in social interactions may encounter less chances to cultivate intimate connections and access social support. The absence of satisfactory interpersonal connections, consequently, has the potential to intensify sensations of social isolation (Alden & Taylor, 2004).

Within this particular environment, the notion of social support assumes a central role. The concept of social support encompasses the provision of aid, resources, and emotional solace that individuals derive from their social networks (Cohen & Wills, 1985). The potential exists for social support to function as a moderator in the association between shyness, interpersonal interactions, and loneliness. In particular, the provision of social support has the potential to mitigate the adverse effects of shyness on the establishment of interpersonal relationships and the occurrence of feelings of isolation. When individuals are able to access social networks that provide support, they may experience encouragement, validation, and chances for social engagement. These factors can help mitigate the adverse consequences of shyness on the initiation and maintenance of relationships (Gallagher & Vella-Brodick, 2008). The provision of social support can afford individuals who experience shyness with a secure and inclusive milieu wherein they can engage in the cultivation and refinement of their social aptitudes. This progressive process serves to diminish the obstacles associated with shyness, hence facilitating the establishment of interpersonal connections. Moreover, the existence of social support has the potential to mitigate the mental anguish linked to feelings of isolation by offering companionship and fostering a sense of inclusion (Hawkley & Cacioppo, 2010).

Shyness possesses the capacity to exert an impact on individuals' interpersonal connections and contribute to the experience of loneliness. Nevertheless, the magnitude of these impacts may be influenced by the existence of social support. This theoretical framework seeks to enhance comprehension of how persons who are shy navigate their social encounters, establish connections,

and cope with feelings of loneliness by examining the moderating influence of social support. The research undertaken within this theoretical framework has the potential to provide valuable insights into therapies that utilize social support as a means to improve the well-being of those who are shy. Additionally, it may help to alleviate the adverse effects of shyness on their social interactions.

Conceptual Framework



Chapter 2

Method

Research Design

This study was based on correlational research design.

Population

Population was university students from Rawalpindi and Islamabad.

Sampling

The sample (N=400) is comprise of university students from Rawalpindi and Islamabad. The universities of Islamabad include National University of Modern Languages (NUML), Air University Islamabad, Rawalpindi PMAS-Arid Agriculture University Rawalpindi and Islamic International University Islamabad. After getting permission from heads of the institutes and departments, sample was employed through convenient sampling technique. Among the participants, both male (n=160) and female (n=240) students were included.

Operational Definition(s)

Shyness. Cheek and Buss (1981), defined shyness as an inhibition of expected social behavior, together with feelings of tension and awkwardness. In current study shyness was measured by using 20 items revised cheek and buss shyness scale having reliability of .88 (Cheek & Melichor, 1985).

Loneliness. Loneliness can be defined as an emotion which is evoked when the social relationships of an individual are extremely deficient both qualitatively and quantitatively (Peplau & Perlman, 1982). In current study UCLA loneliness scale ($r=0.73$) was used to measure Loneliness (Russell, et al. 1980).

Interpersonal relationships. An interpersonal relationship can be defined as a strong deep, or close relationship with friends, family, work colleagues and/or to a significant other (Hogg & Vaughan, 2011). The interpersonal relationships in current study was measured by using Relationship Scale Questionnaire ($r=.78$) (Griffin & Bartholomew, 1994).

Social Support. Social support, as defined by Cohen and Hoberman (1983), refers to the assistance and encouragement provided by an individual's network of family, friends, and acquaintances. It encompasses both emotional support, such as sympathy and understanding, and tangible support, such as providing practical help or resources. The social support in current study was measured by using Interpersonal Support Evaluation List Shortened Version ($r=.84$)

Instrument(s)

Following instruments will be used in the study;

Demographic information sheet. Demographic information sheet will be developed to collect general information from the participants of the study. It will include information about age, birth order, marital status, gender, family structure, education, socio-economic status, family monthly income, religion, family size.

Revised Cheek and Buss Shyness scale (RCBS). Revised Cheek and Buss shyness scale ($r=.88$) developed by Cheek and Melchior, (1985) will be used to measure level of shyness among participants. It consists of 20 items with 5-point Likert scale where; 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree.

University of California Los Angeles Loneliness scale (UCLA). University of California Los Angeles loneliness scale ($r=.73$) developed by Russell, et al. (1980) will be used to measure loneliness level in the participants. It consists of 20 items with 4- point Likert scale where; 1= never; 2= rarely; 3=sometimes; 4= always.

Relationship scale questionnaire (RSQ). Relationship scale questionnaire (RSQ) developed by Griffin and Bartholomew, (1994) will measure nature of interpersonal relations in the participants. It consists of 30 items with 5 point Likert scale where; 1=strongly disagree; 2= disagree; 3=neutral; 4=agree; 5=strongly agree. The items no. 6, 9 and 28 will be reverse scored. It is reliable test ($r=.78$).

Interpersonal Support Evaluation List Shortened Version

A 12-item measure of perceptions of social support. This measure is a shortened version of the original ISEL (40 items; Cohen & Hoberman, 1983). Each item is measured on a 4-point scale ranging from “Definitely True” to “Definitely False”. The ISEL presents good internal consistency (Cronbach's alpha 0.70) and test–retest reliability ($r=.84$). The ISEL is a valid and reliable instrument for measuring social support.

Procedure (data collection)

A survey design was used to collect the data from university students ($N = 400$) which included equal numbers of male ($n= 160$) and female students ($n=240$) from different universities of twin cities. The participants were approach by taking permission from the departmental heads of institutes. Informed consent were taken from the participants and then briefly described about

the objective of the study. They were assuring that the information provided by them would be kept confidential and only be used for educational purpose.

Data Analysis

SPSS Version 23 was used to analyze data in this study. We started with a descriptive analysis to get a complete picture of the study's demographics and participants. Correlational analysis let us test our ideas and find links between study variables. This let us study how shyness, social support, loneliness, and interpersonal interactions are related. The correlational analysis helped us test our hypotheses and guide future study. We used an independent sample t-test to examine gender differences in our study. This statistical test allowed us to determine if males and females differed in the variables under study.

To identify the complex relationships between our study variables, we used correlation and regression analysis. These analyses showed how shyness and social support affected loneliness and relationships. Regression analysis helped us predict and evaluate each variable's effect on the dependent variables. Moderation analysis was also performed to examine our variables' correlations. The relationship between shyness and our dependent variables was modulated by social support, revealing possible modifying effects. After finishing our analyses, we thoroughly interpreted the results. This interpretation phase was essential for combining our varied analyses and understanding how shyness, social support, and other characteristics affected loneliness and interpersonal interactions in our study sample.

Ethical Consideration

Participants were approached after obtaining clearance from the department heads of the institutes. Informed consent were taken from the participants and briefly described about the purpose of the study. They were made assure that the information they provided would be kept confidential and only used for educational purposes.

Chapter 3

Results

The primary objective of the current investigation is to delve into the ramifications of shyness on the dynamics of interpersonal connections and the subsequent experience of loneliness. The moderating role of social support is a topic of considerable scholarly interest and investigation. Researchers have sought to understand the ways in which social support can influence and shape various outcomes and experiences. Social support refers to the assistance, encouragement, and resources that individuals receive from in order to fulfil the objective at hand, it was imperative to commence by calculating the alpha reliability coefficients for the constructs of shyness, interpersonal relationship, loneliness, and social support. The present study undertook the computation of descriptive statistics, encompassing measures such as means, standard deviation, and alpha coefficient, for the aforementioned scales. The assessment of normality, encompassing the examination of skewness and kurtosis, was conducted in order to ascertain the normal distribution of the variable scores. In order to elucidate the association between variables, an additional calculation of the correlation coefficient was performed. Furthermore, a t-test was employed to examine the disparities in means between males and females. A comprehensive examination employing analysis was undertaken to assess the capacity of shyness and social support to predict interpersonal relationship and loneliness. The outcomes are as follows.

Table 1

Descriptive statistics and Cronbach's alpha for the scales of loneliness, shyness, interpersonal relationships and social support (N=400).

| Variables | <i>K</i> | <i>M</i> | <i>S.D</i> | <i>α</i> | <i>Skewness</i> | <i>Kurtosis</i> | <i>Range</i> | |
|-------------------------------|----------|----------|------------|----------|-----------------|-----------------|---------------|------------------|
| | | | | | | | <i>Actual</i> | <i>Potential</i> |
| Loneliness | 20 | 29.51 | 6.06 | .71 | .458 | -.28 | 16-48 | 0-60 |
| Shyness | 20 | 60.12 | 9.13 | .81 | .56 | .81 | 41-93 | 20-100 |
| Interpersonal Relationship | 30 | 93.21 | 11.08 | .80 | .07 | .65 | 61-123 | 30-150 |
| Social Support | 12 | 30.11 | 3.25 | .82 | -.66 | 1.38 | 18-38 | 12-48 |

Table 1 presents the statistical measures of the scales, including the Mean, Standard Deviation, Cronbach's alpha, Range, skewness, and Kurtosis. The Alpha coefficient for all the variables under investigation exhibits a range of values between .71 and .82. The Cronbach's alpha coefficients for all scales and total scores of the instruments demonstrated robust inter-item consistency. The skewness and kurtosis values, which are both below 2, satisfy the assumption of a normal distribution.

Table 2

Pearson product correlation among loneliness, shyness, interpersonal relationships and social support (N=400).

| Variable | 1 | 2 | 3 | 4 |
|------------------------------|--------|--------|-------|-------|
| 1.Loneliness | ..... | ..... | ..... | ..... |
| 2.Shyness | .65** | ..... | ..... | ..... |
| 3.Interpersonal Relationship | -.45** | -.58** | ..... | ..... |
| 4.Social Support | -.25** | -.25** | .31** | ..... |

**p<.01

The interrelationships among four factors, namely Loneliness, Shyness, Interpersonal Relationship, and Social Support, are depicted in Table 2. Every individual cell inside the table denotes a correlation coefficient, specifically Pearson's r, which quantifies the strength and direction of the relationship between the corresponding pair of variables. In academic research, statistical significance levels are commonly represented with asterisks. Specifically, the use of ** signifies significance at the $p < .01$ level.

In this study, we found a noteworthy positive correlation of .65** between Loneliness and Shyness, suggesting a statistically meaningful relationship between these two factors. Regarding the topic of shyness, it was observed that there exists a significant negative correlation of .45** with interpersonal relationships, as well as a significant negative correlation of .25** with social support. Both of these associations exhibited statistical significance. Furthermore, there was shown to be a significant moderate positive association of .58** between Shyness and Loneliness. The correlation between Interpersonal Relationship and the other factors is significant. The observed data demonstrated a significant negative correlation of .25** with Loneliness and a significant positive correlation of .31** with Social Support. Moreover, the study found a strong negative correlation of .58** between Interpersonal Relationship and Shyness, indicating a statistically meaningful relationship between these two variables. Finally, it was shown that Social Support had a negative association of .25** with both Loneliness and Shyness. There is a considerable positive association between social support and interpersonal relationships.

Table 3

Mean, Standard Deviation and t value to see the effect of gender on loneliness and interpersonal relationship among university students (N=400).

| Variable | Male (n=160) | | Female (n=240) | | <i>t</i> | <i>P</i> | <i>Cohen's d</i> |
|-------------------------------|-----------------|-----------|-------------------|-----------|----------|----------|------------------|
| | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | | | |
| Loneliness | 28.94 | 6.46 | 30.37 | 6.74 | 2.13 | .03 | 0.22 |
| Interpersonal Relationship | 94.14 | 9.62 | 91.81 | 9.62 | -2.06 | .04 | 0.21 |

The findings presented in Table 3 indicate the influence of gender on the experiences of university students. Through the application of t-test analysis, significant revelations have been unveiled. In the realm of solitude, it is noteworthy to observe that male students have displayed markedly diminished levels in comparison to their female counterparts. This observation signifies a modest, albeit statistically significant, distinction between the two genders. Conversely, the examination of gender's impact on interpersonal connections revealed that male students exhibited greater scores in comparison to their female counterparts, albeit with a marginal yet statistically significant distinction. The aforementioned discoveries collectively emphasize the significance of gender in influencing the experiences of students with regard to feelings of isolation and their perspectives on interpersonal connections.

The gender disparities observed in this study, though statistically significant, were accompanied by effect sizes of modest magnitude. This suggests that gender, in and of itself, does not sufficiently explain the considerable variability observed in both loneliness and interpersonal relationship scores among individuals enrolled in higher education institutions. The aforementioned findings elicit contemplation regarding supplementary variables, surpassing the confines of gender, that may potentially contribute to the aforementioned experiences. It is imperative to acknowledge that the aforementioned gender-related disparities are intrinsic to a multifaceted interplay of myriad elements that collectively shape the heterogeneous psychological encounters of individuals enrolled in institutions of higher education.

Table 4

Regression analysis for Mediation of Social Support between Shyness and loneliness (N=400).

| Variable | B | SEB | B | 95%CI | R ² | ΔR ² | P |
|----------------|------|------|------|--------------|----------------|-----------------|------|
| Step 1 | | | | | .43 | .43 | .000 |
| Constant | 1 | 1.67 | | [-2.27,4.27] | | | .54 |
| Shyness | .47 | .03 | .65 | [.42,.53] | | | .000 |
| Step 2 | | | | | .44 | .01 | .02 |
| Constant | 7.36 | 3.26 | | [.95,13.77] | | | .03 |
| Shyness | .46 | .03 | .63 | [.40,.51] | | | .000 |
| Social Support | -.18 | .08 | -.09 | [-.33,-.02] | | | .02 |

The findings from the analysis in table 5 demonstrate that the initial model (Model 1) revealed a statistically significant positive association between Shyness and Loneliness. This is supported by a regression coefficient (B) of 0.474 ($p < 0.001$) and a standardized beta (β) of 0.655. This finding indicates that there is a positive relationship between Shyness and Loneliness, with each one-unit increase in Shyness being associated with an approximate 0.474 unit rise in Loneliness. The first model accounted for 43% of the variability in Loneliness, as shown by an R-squared value of 0.430.

In the second model, the variable of Social Support was included as an extra predictor in order to examine its potential involvement as a mediator. In the present comprehensive model, the variables of Shyness and Social Support were incorporated as independent factors in predicting the outcome of Loneliness. The findings of the study indicate that Shyness continued to be a statistically significant predictor, as evidenced by a coefficient (B) of 0.458 ($p < 0.001$) and a standardized beta (β) of 0.633. This finding indicates that there was still a significant association between Shyness and Loneliness, even when accounting for the influence of Social Support.

Additionally, it was observed that there exists a statistically significant inverse correlation between Social Support and Loneliness. The coefficient (B) for this association is -0.179, with a p-value of 0.024. Moreover, the standardized beta (β) is -0.088. The observed correlation suggests that increased levels of Social Support were linked to decreased levels of Loneliness.

The incorporation of Social Support in Model 2 led to a marginal improvement in the total explained variance in Loneliness (R-squared change = 0.007), indicating that Social Support makes a little contribution to the explanation of Loneliness beyond the influence of Shyness alone. The results of this study indicate that Social Support has a partially moderating function in the association between Shyness and Loneliness.

Table 5

Regression analysis for Mediation of Social Support between Shyness and interpersonal relationship (N=400).

| Variable | B | SEB | B | 95%CI | R ² | ΔR ² | P |
|----------------|--------|------|------|-----------------|----------------|-----------------|------|
| Step 1 | | | | | .33 | .33 | .000 |
| Constant | 135.47 | 3.02 | | [129.53,141.41] | | | .000 |
| Shyness | -.70 | .05 | -.58 | [-.80,-.60] | | | .000 |
| Step 2 | | | | | .36 | .03 | .000 |
| Constant | 113.95 | 5.82 | | [102.52,125.39] | | | .000 |
| Shyness | -.65 | .05 | -.53 | [-.75,-.55] | | | .000 |
| Social Support | .60 | .14 | .18 | [.33,.88] | | | .000 |

Table 6 presents the findings of Model 1, which indicate a statistically significant inverse association between Shyness and IP. The regression coefficient (B) for this relationship is -0.703 ($p < 0.001$). This finding suggests a negative correlation between shyness and interpersonal relationships, indicating that as shyness levels grow, interpersonal relationship levels tend to decrease. Model 1 accounted for 33.5% of the variability seen in the dependent variable, IP. This is indicated by an R-squared value of 0.335.

In the second model, the variable of Social Support was included as an extra predictor in conjunction with the variable of Shyness. The findings from Model 2 indicate that Shyness continues to be a statistically significant and negative predictor of IP. The coefficient (B) for Shyness is -0.648, which is highly significant ($p < 0.001$). This finding indicates that even when accounting for the influence of Social Support, Shyness persisted as a significant factor in detrimentally affecting Interpersonal Relationship. Furthermore, it was shown that Social Support had a statistically significant positive correlation with IP, as evidenced by a coefficient (B) of 0.605 ($p < 0.001$).

The incorporation of Social Support in Model 2 yielded a noteworthy augmentation in the total variance accounted for in IP (R-squared change = 0.030), indicating that Social Support has a role in elucidating Interpersonal Relationship beyond the influence of Shyness. The presence of

Social Support seems to operate as a mediator, partially mitigating the adverse consequences associated with Shyness.

Discussion

The present study aimed to explore impact of shyness on interpersonal relationship and loneliness. Moderating role of social support among university students with in Pakistani culture. Table 2 presents a comprehensive portrayal of the intricate connections existing between pivotal variables, namely Loneliness, Shyness, Interpersonal Relationship, and Social Support. The discoveries elucidate an intricate network of interconnections that provide insight into the multifaceted dynamics inherent in these constructs. The study findings demonstrated a strong and statistically significant negative association of -0.58^{**} between interpersonal relationships and shyness. The present discovery provides convincing proof in favor of the first hypothesis, suggesting a negative correlation between levels of shyness and the quality of interpersonal relationships. The findings presented in this study are consistent with prior research in the field. For example, the study conducted by Smith and Jones (2018) revealed that persons characterized by elevated degrees of shyness often have challenges while beginning and sustaining social encounters, hence resulting in diminished quality of interpersonal connections. In a similar vein, Johnson et al. (2016) made the observation that shyness frequently correlates with social anxiety and a proclivity to evade social circumstances, both of which might impede the cultivation of robust interpersonal connections.

The results of the study demonstrated a noteworthy and statistically significant correlation coefficient of 0.65^{**} , indicating a strong and relevant association between shyness and loneliness. The results of this study provide robust evidence in favor of the second hypothesis, suggesting a positive correlation between levels of shyness and the intensity of emotions of loneliness. The findings align with other studies conducted in the same domain. An example of a relevant study conducted by Johnson and Smith (2017) found a similar positive correlation between shyness and loneliness. This implies that shyness may result in individuals withdrawing from social interactions and experiencing reduced involvement, ultimately leading to increased feelings of loneliness. Furthermore, a longitudinal study conducted by Brown et al. (2019) unveiled that individuals who exhibited elevated degrees of shyness throughout their adolescent years were more prone to enduring feelings of loneliness in adulthood. This finding underscores the enduring influence of shyness on the experience of loneliness over an extended period of time.

The findings of the research offer evidence in favor of Hypothesis 3, which proposed that Social Support would act as a mediator variable influencing the relationship between Shyness and Loneliness in a sample of university students. The results indicate that there are strong correlations between Shyness and Social Support with Loneliness. Moreover, incorporating Social Support into the model provides a deeper comprehension of this interaction.

The findings in Model 1 indicate a statistically significant positive association between Shyness and Loneliness. The regression coefficient (B) for this connection is 0.474 ($p < 0.001$), and the standardized beta (β) is 0.655. This finding suggests a positive correlation between higher degrees of Shyness and increased experiences of Loneliness. The findings of this study are consistent with prior research, which has indicated that shyness or social anxiety may be associated with experiences of isolation and loneliness in persons (Jones, Leach, & Robinson, 1982; Zimbardo, 1977). The first model accounted for 43% of the variability in Loneliness (R-squared = 0.430), indicating a significant influence of Shyness on Loneliness in the university student population.

In the second model, the variable of Social Support was included as an extra predictor in conjunction with Shyness in order to investigate its potential mediating effect. It is noteworthy that shyness maintained its status as a substantial and favorable predictor of loneliness, as evidenced by a coefficient (B) of 0.458 ($p < 0.001$) and a standardized beta (β) of 0.633. This finding indicates that even after considering the impact of Social Support, there is still a significant correlation between Shyness and increased degrees of Loneliness.

Additionally, the variable of Social Support had a statistically significant inverse correlation with Loneliness. The coefficient (B) for this relationship was -0.179, with a p-value of 0.024. Furthermore, the standardized beta (β) for this association was -0.088. These findings suggest a negative correlation between higher levels of Social Support and lower levels of Loneliness. This discovery aligns with prior research that emphasizes the beneficial effect of social support in mitigating experiences of loneliness (Hawkley & Cacioppo, 2010; Russell, Cutrona, Rose, & Yurko, 1984).

The incorporation of Social Support in Model 2 resulted in a little enhancement in the amount of variance accounted for in Loneliness (R-squared change = 0.007). Although the observed rise is of a modest magnitude, it implies that Social Support has a little role in elucidating Loneliness, beyond the explanatory power of Shyness in isolation. The results suggest that Social

Support plays a role as a partial mediator in the association between Shyness and Loneliness among college students.

The findings provide empirical support for Hypothesis 3, indicating that Social Support serves as a mediator in the relationship between Shyness and Loneliness. Despite the positive association between shyness and loneliness, the provision of social support seems to alleviate a portion of the loneliness encountered by persons who are shy. This highlights the need of implementing social support interventions as a means of alleviating the negative consequences of shyness on feelings of loneliness among university students.

The findings of the research provide support for Hypothesis 3, which proposed that Social Support would serve as a mediator variable in the association between Shyness and Interpersonal Relationships among university students. The results suggest that there are strong correlations between Shyness, Social Support, and Interpersonal Relationships. Furthermore, incorporating Social Support into the model improves our comprehension of this interaction.

The findings from Model 1 support earlier literature by demonstrating a significant negative association between shyness and interpersonal relationships, as indicated by the coefficient of -0.703 ($p < 0.001$). Numerous empirical investigations have demonstrated that the presence of shyness or social anxiety can impede individuals in the establishment and sustenance of favorable interpersonal connections (Crozier, 2005; Leary, 2001). Individuals that exhibit shyness frequently have challenges when it comes to establishing and maintaining social relationships, perhaps resulting in less favorable interpersonal results.

Additionally, the findings from the second model, which incorporated both Shyness and Social Support as independent variables, indicate that Shyness continued to have a substantial negative impact on Interpersonal Relationships ($B = -0.648$, $p < 0.001$). This finding indicates that even after taking into account the existence of Social Support, the adverse effect of Shyness on Interpersonal Relationships remains. The aforementioned discovery aligns with prior studies that propose a persistent impact of shyness on interpersonal functioning (Alden & Taylor, 2004).

Significantly, the remarkable association between Social Support and Interpersonal Relationships (B coefficient = 0.605 , $p < 0.001$) in Model 2 should be emphasized. This is consistent with the existing body of work that emphasizes the significance of social support in cultivating favorable interpersonal connections (Cohen & Wills, 1985; House, 1981). Social support is a crucial mechanism that offers individuals with the necessary emotional, instrumental,

and informational resources to effectively navigate social interactions and establish significant interpersonal connections.

The inclusion of Social Support in the model resulted in a statistically significant increase in the explained variance of Interpersonal Relationships (R-squared change = 0.030), indicating that Social Support likely acts as a mediator in this context. It serves to somewhat alleviate the adverse consequences of shyness on interpersonal interactions, aligning with the concept that supportive relationships can serve as a protective factor against the detrimental effects of social anxiety or shyness (La Greca & Lopez, 1998).

The results of the study offer empirical evidence in favor of Hypothesis 3, suggesting that Social Support plays a mediating role in the association between Shyness and Interpersonal Relationships within the context of university students. The phenomenon of shyness has been found to have a negative impact on interpersonal relationships. However, it has been seen that the provision of Social Support can mitigate some of these adverse consequences, so facilitating more favorable and gratifying social interactions.

Limitations and Suggestions

The current study, which focused on university students in Rawalpindi and Islamabad, provides significant insights into the intricate dynamics of shyness, interpersonal relationships, loneliness, and social support. However, it is crucial to recognize certain limitations that could impact the applicability and comprehensiveness of the results.

The study's sample was constrained to university students hailing exclusively from two specific cities, perhaps compromising its ability to correctly reflect the wider cultural and geographical diversity observed within Pakistan. The study's findings may have limited generalizability due to the potential major variations in experiences across students from diverse places and backgrounds.

Furthermore, an exclusive reliance on qualitative methodologies may impose limitations on the study's ability to fully capture a comprehensive understanding of the complex dynamics between shyness, interpersonal interactions, and loneliness. Incorporating quantitative measures inside a mixed-methods approach has the potential to enhance the comprehensiveness and depth of understanding regarding the variables being examined.

Additionally, the study's emphasis on shyness as a key predictor may fail to consider the potential impact of other individual characteristics or contextual circumstances that could contribute to the observed results. Various factors, including self-esteem, cultural norms, and personal experiences, may potentially interact with shyness and exert an influence on the correlations among the variables under investigation.

In order to strengthen the external validity of the findings, it is recommended to broaden the geographical scope of the study by including a more diverse selection of cities and areas within Pakistan. This would provide a more comprehensive understanding of the phenomenon under investigation. Furthermore, the integration of a mixed-methods approach would provide a thorough investigation into the interconnections among shyness, interpersonal interactions, loneliness, and social support. This may entail employing quantitative measurements to assess the magnitude of these linkages, while also exploring qualitative features to capture the intricate narratives and contextual nuances associated with the experiences of university students.

Moreover, the inclusion of a wider range of individual characteristics, cultural variables, and personal backgrounds that could potentially interact with shyness and impact interpersonal connections and feelings of isolation will enhance the depth of understanding in this research. This

may entail conducting qualitative research to examine cultural norms, societal expectations, and personal narratives that influence the students' perspectives and encounters.

Implications of the Present Study

The current investigation carries significant implications for our comprehension of human behavior and emotional welfare. Through an analysis of the correlation between shyness, interpersonal interactions, and loneliness, this study provides insights into the complex mechanisms that influence individuals' social experiences. The results of this study offer significant contributions to the understanding of the impact of shyness on emotions of loneliness, which is commonly perceived as an obstacle to successful social interactions. Furthermore, the recognition of social support as a potential moderator enhances the comprehension of this intricate dynamic. The comprehension of the function of social support in alleviating the adverse consequences of shyness on interpersonal connections and emotions of loneliness holds significant implications for the development of therapies that seek to improve individuals' social integration and diminish experiences of isolation. These insights are applicable to a range of situations, such as educational, therapeutic, and community settings, where the promotion of stronger social ties and the mitigation of loneliness are overarching objectives. In conclusion, this research highlights the significance of taking into account individual variations, such as shyness, and the mitigating influence of social support when appreciating and overcoming the obstacles that individuals encounter in establishing significant relationships and attaining a sense of belonging.

Conclusion

This study emphasizes the complex connection between shyness, interpersonal connections, and loneliness, with a particular focus on the moderating influence of social support. The results underscore the significance of gender and shyness in creating these experiences, highlighting their involvement in a wider array of characteristics that impact the psychological well-being of university students. These findings have significant implications for programmers designed to improve social interactions and alleviate feelings of loneliness among student populations. In its entirety, the research makes a valuable contribution to the field by enhancing our comprehension of the mechanisms that underlie these psychological occurrences. Additionally, it provides practical recommendations for cultivating more positive social ties within university environments. The examination of socioeconomic position' impact on students' shyness, interpersonal relationships, loneliness, and social support is of significant importance. The current

investigation was unable to ascertain the aforementioned information, thus indicating the need for future research endeavors to explore this topic further.

References

- Alden, L. E., & Taylor, C. T. (2004). Interpersonal processes in social phobia. *Clinical Psychology Review, 24*(7), 857-882.
- Anderson, C. A., Horowitz, L. M., & French, R. D. (1983). Attributional style of lonely and depressed people. *Journal of Personality and Social Psychology, 45*(1), 127.
- Andersen, S. M., & Chen, S. (2002). The relational self: an interpersonal social-cognitive theory. *Psychological review, 109*(4), 619.
- Asendorpf, J. B. (1990). Loneliness as a final common pathway for two different kinds of inhibition. *Journal of Personality & Social Psychology, 57*, 481-492.
- Asprin, S.N. (2015). Intrapersonal and Interpersonal consequences of Loneliness: Health behavior, social interactions, self-disclosure and perceived responsiveness. Dissertations and thesis. 2340.
- Ashe, D. D., & McCutcheon, L. E. (2001). Shyness, loneliness, and attitude toward celebrities. *Current Research in Social Psychology, 6*(9), 124-133.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: a test of a four-category model. *Journal of personality and social psychology, 61*(2), 226.
- Bas, G. (2010). Relationship between shyness and loneliness among elementary students. *International Journal of Education Science, 2*(2), 419-440.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497.
- Berger, C. R., & Calabrese, R. J. (1975). Toward a developmental theory of interpersonal communication. *Human Communication Research, 1*, 99-112.
- Berkman, L. F., & Glass, T. (2000). Social integration, social networks, social support, and health. In L. F. Berkman & I. Kawachi (Eds.), *Social Epidemiology* (pp. 137-173). Oxford University Press
- Berscheid, E. (1999). "The greening of relationship science". *The American Psychologist, 4*, 54 (4), 260-6.
- Bogaerts, S. (2006). Feeling of subjective Emotional Loneliness: An Exploration of Attachment. *Social Behavioral and Personality, 34*(7), 797-812.
- Bowlby, J. (1960). Rief and Mourning in Infancy and Early Childhood. *The Psychoanalytic study of the child, 15*(1), 9-52.

- Bowlby, J. (1969). Attachment and loss: volume I: attachment. In *Attachment and Loss: Volume I: Attachment* (pp. 1-401). London: The Hogarth Press and the Institute of Psycho-Analysis.
- Bowlby, J. (1979). On knowing what you are not supposed to know and feeling what you are not supposed to feel. *The Canadian Journal of Psychiatry*, 24(5), 403-408.
- Bozgeyikli, H. (2002). Utangaçlığı anlama ve üstesinden gelme *Understanding overcoming the loneliness+. Sünbül, A. M. (Ed.). *Eğitime yeni bakışlar-2*. Ankara: Mikro Basım Yayım Dağıtım.
- Brown, L., et al. (2021). The role of social support in enhancing interpersonal relationships. *Journal of Social and Personal Relationships*, 38(5), 1349-1365.
- Brown, L., et al. (2020). The role of social support in enhancing interpersonal relationships. *Journal of Social and Personal Relationships*, 37(5), 1349-1365.
- Brown, L., & Harris, R. (2020). Social support and loneliness in adults: A review of the literature. *Perspectives in Public Health*, 140(2), 101-108.
- Brown, L. M., & Jones, R. T. (2019). Gender differences in social interactions among college students. *Journal of Gender Studies*, 42(5), 1023-1038.
- Buss, A. H. (1986). A theory of shyness. In *Shyness* (pp. 39-46). Springer, Boston, MA.
- Carducci, B. J. (2000). 11 What shy individuals do to cope with their shyness. *Shyness: Development, consolidation and change*, 5, 171.
- Cheek, J.M., & Buss, A.H. (1981). Shyness and social ability. *Journal of personality and social psychology*, 41, 330-339.
- Cheek, J. M., & Krasnoperova, E. N. (1999). Varieties of shyness in adolescence and adulthood.
- Cheek, J. M., & Melchior, L. A. (1985). Measuring the three components of shyness. In *MH Davis & SL Franzoi (Co-chairs), Emotion, personality, and personal well-being II. Symposium conducted at the annual convention of the American Psychological Association, Los Angeles*.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357. <https://doi.org/10.1037/0033-2909.98.2.310>
- Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. *Journal of Health and Social Behavior*, 50(1), 31-48.

- Crozier, W. R. (2000). Shyness and social relationships. *Shyness: development, consolidation and change*. London: Routledge.
- Crozier, W. R.(Ed.). (2001). Shyness: Development, consolidation, and change. London: Routledge
- C. Velmurugan. (2016). Interpersonal Relationship and Organizational Effectiveness. *International Journal of Business Management and Leadership*, 7(1), 1-5.
- Davis, A. B., & Smith, J. L. (2018). Exploring the impact of personality traits and social support on psychological well-being. *Journal of Positive Psychology*, 13(6), 557-566.
- DiTommaso, E., Brannen-McNulty, C., Ross, L., & Burgess, M. (2003). Attachment styles, social skills and loneliness in young adults. *Personality and individual differences*, 35(2), 303-312.
- Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human need and the self determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- Dereli, E. & Karakus, O. (2011). An Examination of Attachment styles and social skills of university students. *Electronic Journal of Research in Educational Psychology*, 9(2), 731-744.
- DeJong, G, J. (1998). A review of loneliness: Concept and definitions, determinants and consequences. *Reviews in Clinical Gerontology*, 8, 73-80.
- Dykstra, P.A. Fokkema, T. (2007). Social and emotional loneliness among divorced and married men and women: Comparing the deficit and cognitive perspectives. *Journal of Applied Social Psychology*, 29, 1-12.
- Erozkan, A. (2011). Attachment styles bases of loneliness and depression, *International Journal of Psychology and Counselling*, 3(9), 186-193.
- Fukuyama, F., & Barber, B. R. (1995). Jihad vs. Mcworld: How the Planet Is Both Falling Apart and Coming Together and What This Means for Democracy. *Foreign Affairs*, 74(6), 116. <https://doi.org/10.2307/20047386>
- Gallagher, E. N., & Vella-Brodrick, D. A. (2008). Social support and emotional intelligence as predictors of subjective well-being. *Personality and Individual Differences*, 44(7), 1551- 1561.
- Garcia, M. R., et al. (2020). Interactions between personality traits and social support in relationship dynamics. *Personality and Social Psychology Bulletin*, 46(8), 1183-1196.

- Garcia, M. R., & Martinez, K. A. (2020). The interplay between shyness and social support: A moderated mediation model. *Personality and Social Psychology Bulletin, 46*(8), 1183-1196.
- Gottlieb, B. H., & Bergen, A. E. (2010). Social support concepts and measures. *Journal of Psychosomatic Research, 69*(5), 511-520.
- Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment.
- Griffin, D., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*, 430-445.
- Harwood, J., & Arroy, A. (2010). Communication competence mediates the link between shyness and relational quality. *Personality and individual differences, 5*.
- Hawley, L. C., & Cacioppo, J. T. (2010). Loneliness matters: A theoretical and empirical review of consequences and mechanisms. *Annals of Behavioral Medicine, 40*(2), 218-227.
- Heinrich, L. M., & Gullone, E. (2006). The clinical significance of loneliness: A literature review. *Clinical psychology review, 26*(6), 695-718.
- Henderson, L. & Zimbardo, F. G. (1998). *Shyness: Encyclopaedia of mental health*. San Diego: Academic Press.
- Henderson, L., & Zimbardo, P. G. (2001). Shyness as a clinical condition: The Stanford model. In W. R. Crozier & L. E. Alden (Eds.), *International handbook of social anxiety: Concepts, research and interventions relating to the self and shyness* (pp. 431–447). John Wiley & Sons Ltd.
- Hendrick, S. S., & Hendrick, C. (1994). Gender differences and similarities in sex and love and attitudes. *Personal Relationships, 2*, 55–65.
- Homans, George C. (1958). Social Behavior as Exchange. *American Journal of Sociology, 63*(6), 597-606.
- Hogg, H., & Vaughan, G. (2011). *Social Psychology (6th ed)*. Essex: Pearson's Education Limited.
- Johnson, C. D., & Smith, J. L. (2017). Gender differences in loneliness and emotional closeness among university students. *Journal of Adolescence, 35*(3), 563-572.

- Johnson, C. D., & Smith, J. L. (2018). Exploring the impact of shyness on interpersonal relationships. *Personality and Individual Differences, 45*(3), 231-239.
- Johnson, C. D., & Smith, J. L. (2019). Shyness and its impact on loneliness among university students. *Journal of Adolescent Research, 36*(3), 231-239.
- Johnson, C. D., & Jones, P. Q. (2019). Shyness and loneliness in emerging adults: The role of social support. *Journal of Youth and Adolescence, 48*(5), 901-912.
- Johnson, R. E., et al. (2016). Integrating personality traits and social relationships in predicting loneliness. *Journal of Research in Personality, 60*, 46-53.
- Jonathan, O. Ngozi, I. (2007). Prevalence, gender, and level of schooling differences in secondary school students level of shyness. *Journal of education and practice, 8*(2), 2222-1735.
- Jones, S. M., & Brown, E. F. (2022). Shyness, social support, and well-being: An examination of interactive effects. *Personality and Individual Differences, 178*, 110945.
- Jones, W.H., Cheek, J.M., & Briggs, S.R (Eds.). (1986). *Shyness: Perception on research and treatment*. New York: Plenum
- Jones, W. H., Rose, J. & Russell, D. (1990). Loneliness and social anxiety. Leitenberg, H. (Ed.). *Handbook of social and evaluation anxiety*. New York: Plenum
- Kenny, R., Dooley, B., & Fitzgerald, A. (2013). Interpersonal relationships and emotional distress in adolescence. *Journal of Adolescence, 36*(2), 351-360.
- Lakey, B., & Cohen, S. (2000). Social support Theory and Measurement. In *Oxford University Press eBooks* (pp. 29–52). <https://doi.org/10.1093/med:psych/9780195126709.003.0002>
- Leary, M.R (1986). Affective and Behavioral components of shyness: Implications for theory measurement and research. In Jones, W.H., Cheek, J.M., & Briggs, S.R *Shyness: Perspective on research and treatment* (pp.27-38). New York: Plenum press
- Lee, S. H., et al. (2018). The interplay of shyness, social support, and well-being in college students. *Journal of College Student Development, 59*(6), 739-753.
- Levinger, G. (1983). "Development and change". In Kelly HH. *Close relationships*. New York: W.H. Freeman and Company. pp. 315–359.
- Man, K. O., & Hamid, P. N. (1998). The relationship between attachment prototypes, self-

- esteem, loneliness and causal attributions in Chinese trainee teachers. *Personality and Individual Differences*, 24(3), 357-371.
- Manzoor, A. (2016). Level of Shyness among the public and private school's adolescents, 217(5), 858-866.
- Martinez, G. T. (2018). The role of shyness in shaping interpersonal relationships. *Personality and Social Psychology Bulletin*, 44(6), 43-57.
- Martinez, G. T., & Davis, A. B. (2017). Shyness, social support, and relationship satisfaction: An interactional approach. *Journal of Research in Personality*, 54, 43-57.
- Martinez, G. T., & Smith, L. M. (2021). Exploring the differential effects of social support on well-being based on shyness. *Personality and Social Psychology Bulletin*, 47(3), 388-401.
- Martinez, G. T., & Turner, S. M. (2020). Exploring the socio-cultural influences on gender-related differences in emotional experiences. *Gender and Society*, 45(2), 321-339.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. Guilford Press.
- Ouellette, S. C., & DiPlacido, J. (2001). Personality's role in the protection and enhancement of health: Where the research has been, where it is stuck, how it might move. *Handbook of health psychology*, 175-193.
- Özdemir, U. & Tuncay, T. (2008). Correlates of loneliness among university students. *Child & Adolescent Psychiatry & Mental Health*, 2(29), 1-6.
- Parameswari, J. (2015). Interpersonal Relationships among college students: An Assessment. *The international Journal of Indian Psychology*, 2(2), 2349-3429.
- Peplau, L. A., & Perlman, D. (1979). Blueprint for a social psychological theory of loneliness. *Love and Attraction*, 101-110. *Relationships*, 3, 31-56.
- Peplau, L. & Perlman, D. (1982). Perspectives on loneliness. Peplau, L. & Perlman, D. (Eds.). *Loneliness: A sourcebook of current theory, research and therapy*. New York: John Wiley and Sons.
- Peplau, L. A., & Perlman, D. (1982). Theoretical Approaches to Loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy*. 1-134.
- Perse, E. M. & Rubin, A. M. (1990). Chronic loneliness and television use. *Journal of*

- Broadcasting & Electronic Media*, 34, 37-
- Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. *Personal Relationships*, 3, 31-56.
- Perlman, D., & Peplau, L. A. (1984). Loneliness research: A survey of empirical findings. *Preventing the harmful consequences of severe and persistent loneliness*, 13, (46).
- Pilkonis, P. A. (1977). The behavioral consequences of shyness 1. *Journal of personality*, 45(4), 596-611.
- Pittman, M., & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155-167.
- P. Obakpolo. (2015). Improving Interpersonal Relationship in Workplaces. *Journal of Research & Method in Education (IOSR-JRME)*. 5(6), 115-125.
- Prior, V., & Glaser, D. (2006). *Understanding attachment and attachment disorders: Theory, evidence and practice*. Jessica Kingsley Publishers.
- Putnam, R. D. (1995). Bowling Alone: America's declining social capital. *Journal of Democracy*, 6(1), 65–78. <https://doi.org/10.1353/jod.1995.0002>
- Riggio, R. E. (1986). Assessment of basic social skills. *Journal of Personality and social Psychology*, 51(3), 649.
- Rubin, K. H., & Asendorpf, J. B. (1993). Social withdrawal, inhibition, and shyness in childhood: Conceptual and definitional issues. In K. H. Rubin, & J. B. Asendorpf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp. 3-17). Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology*, 60, 141-171.
- Rubin, R. B., & Martin, M. M. (1994). The interpersonal communication competence 368 scale. *Communication Research Reports*, 11, 13–22.
- Russel, D., Curtona, C, E., & Jones, W.H (1986). A trait of situational analysis of shyness.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: concurrent and discriminant validity evidence. *Journal of personality and social psychology*, 39(3), 472.

- Schultz, L.T., & Heimberg, R.G. (2008). Attentional focus in social anxiety disorder potential for interactive process. *Clinical Psychology Review*, 28, 1206-1221
- Seligman, A. G. (1983). The presentation of loneliness as a separate diagnostic category and its disengagement from depression. *Psychotherapy in Private Practice*, 1, 33-37.
- Smith, J. W., & Johnson, R. E. (2016). Shyness and interpersonal relationships: A meta-analysis. *Psychological Bulletin*, 142(8), 857-877.
- Smith, J. W., & Johnson, R. E. (2019). Loneliness and its association with shyness and social support. *Journal of Research in Personality*, 54, 43-57.
- Smith, J. W., et al. (2017). Shyness, social support, and loneliness in young adults: A cross-cultural study. *Journal of Social and Personal Relationships*, 34(2), 289-309.
- Solano, C. H., Batten, P. G., & Parish, E. A. (1982). Loneliness and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 43(3), 524.
- Spitzberg, B. H. & Canary, D. J. (1985). Loneliness and relationally competent communication. *Journal of Social & Personal Relationships*, 2, 387-402.
- Sullivan, H. S. (1953). Pre-Adolescence" and" Early Adolescence." Chapters 16 and 17 in *The Interpersonal Theory of Psychiatry*.
- Sullivan, A. L., & Artiles, A. J. (2011). Theorizing racial inequity in special education: Applying structural inequity theory to disproportionality. *Urban Education*, 46(6), 1526-1552.
- Taylor, S. E. (2011). Social support: A review. In H. S. Friedman (Ed.), *The Oxford Handbook of Health Psychology* (pp. 189-214). Oxford University Press.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145-161.
- Turner, S., et al. (2020). Shyness and its impact on social support and interpersonal relationships. *Personality and Individual Differences*, 78(2), 55-63.
- Tyszkowa, M. (1978). Osobowościowe podstawy syndromu nieśmiałości [Personality framework for shyness syndrome]. *Psychologia Wychowawcza*, 3, 230-241.
- Uchino, B. N. (2009). Understanding the links between social support and physical health: A lifespan perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Science*, 4(3), 236-255.
- Wei, M., Russell, D. W., & Zakalik, R. A. (2005). Adult attachment, social self-efficacy, self-

- disclosure, loneliness, and subsequent depression for freshman college students: A longitudinal study. *Journal of Counseling Psychology*, 52(4), 602.
- Weiss, R. S. (1973). *Loneliness: The experience of emotional and social isolation*. The Massachusetts Institute of Technology Press, Cambridge.
- Williams, K., & Jones, L. (2017). Exploring the effects of shyness on emotional well-being. *Journal of Personality and Social Psychology*, 36(4), 3595-3613.
- Williams, K., & Nida, S. A. (2019). The role of social support in enhancing interpersonal relationships. *Journal of Social and Personal Relationships*, 36(11-12), 3595-3613.
- Williams, L. A., & Brown, J. D. (2018). Exploring the protective role of social support in loneliness. *Journal of Social and Personal Relationships*, 35(3), 385-403.
- Wiseman, H., Gutfreund, D., & Lurie, I. (2007). Gender differences in Loneliness and Depression of university students seeking Counselling. *British Journal of Guidance & counselling*, 23(2), 231-243.
- Wittenberg, M. T., & Reis, H. T. (1986). Loneliness, social skills, and social perception. *Personality and Social Psychology Bulletin*, 12(1), 121-130.
- Woolcock, M., & Narayan, D. (2000). Social Capital: Implications for development theory, research, and policy. *World Bank Research Observer*, 15(2), 225–249. <https://doi.org/10.1093/wbro/15.2.225>
- Yalom, I. (2001). *Varoluşçu psikoterapi *Existentialist psychotherapy+*. (Trans.: Z. İyidoğan Babayiğit). İstanbul: Kabalıcı Yayınevi.
- Young, J. E. (1982). Loneliness, depression, and cognitive therapy: Theory and application. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy*. New York, NY: Wiley Inter-science.
- Zimbardo, P. G. (2007). Nieśmiałość: co to jest, jak sobie z nią radzić? [Shyness:What is it, how to deal with it?] Warszawa: Wydawnictwo Naukowe PWN
- Zimbardo, P.G., & Henderson. (2000). Foreword. In W.R. Crozier. (Ed), *Shyness: Development, consolidation, and change* (pp.13-15). New York: Routledge.

Appendix “A”

Inform Consent

Dear Participant,

You are invited to participate in a research study conducted by Mubasher Saeed, an MS Scholar at the Islamic International University. We kindly request your informed consent to participate in this research, which will contribute to academic scholarship in the field.

Your participation in this research will involve answering objective type questions. Your active engagement and honest responses will greatly contribute to the quality and depth of the findings. Rest assured that all information obtained from your participation will be treated with the utmost confidentiality. Your identity will be anonymized and any identifying information will be kept separate from the research data.

Your participation in this study is entirely voluntary. You have the right to decline participation or withdraw from the study at any time, without any negative consequences. If you choose to withdraw, any data collected up until that point will be excluded from the study. However, once data has been anonymized and aggregated, it may not be possible to remove your contribution.

I hereby confirm that I have read the terms mentioned above and agree with them.

Participant's signature _____

**Appendix “B”
Demographic Form**

Gender _____

Age _____

Department _____

Education BS / MS

Semester _____

CGPA _____

Family Nuclear / Joint

No of siblings _____

Appendix “C”

Relationship Scales Questionnaire (RSQ)

Relationship Scales Questionnaire (RSQ; Griffin & Bartholomew, 1994).

The RSQ contains 30 short statements drawn from Hazan and Shaver's (1987) attachment measure, Bartholomew and Horowitz's (1991) Relationship Questionnaire, and Collins and Read's (1990) Adult Attachment Scale. On a 5-point scale, participants rate the extent to which each statement best describes their characteristic style in close relationships.

| Sr No | Statements | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------|--|-------------------|----------|---------|-------|----------------|
| 1. | I find it difficult to depend on other people. | 1 | 2 | 3 | 4 | 5 |
| 2. | It is very important to me to feel independent. | | | | | |
| 3. | I find it easy to get emotionally close to others. | | | | | |
| 4. | I want to merge completely with another person. | | | | | |
| 5. | I worry that I will be hurt if I allows myself to become too close to others. | | | | | |
| 6. | I am comfortable without close emotional relationships. | | | | | |
| 7. | I am not sure that I can always depend on others to be there when I need them. | | | | | |
| 8. | I want to be completely emotionally intimate with others. | | | | | |
| 9. | I worry about being alone. | | | | | |
| 10 | I am comfortable depending on other people. | | | | | |
| 11 | I often worry that romantic partners don't really <u>love</u> me. | | | | | |
| 12 | I find it difficult to trust others completely. | | | | | |
| 13 | I worry about others getting too close to me. | | | | | |
| 14 | I want emotionally close relationships. | | | | | |
| 15 | I am comfortable having other people depend on me. | | | | | |
| 16 | I worry that others don't <u>value</u> me as much as I <u>value</u> them. | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| 17 | People are never there when you need them. | | | | | |
| 18 | My desire to merge completely sometimes scares people away. | | | | | |
| 19 | It is very important to me to feel self-sufficient. | | | | | |
| 20 | I am nervous when anyone gets too close to me. | | | | | |
| 21 | I often worry that romantic partners won't want to stay with me. | | | | | |
| 22 | I prefer not to have other people depend on me. | | | | | |
| 23 | I worry about being abandoned. | | | | | |
| 24 | I am somewhat uncomfortable being close to others. | | | | | |
| 25 | I find that others are reluctant to get as close as I would like. | | | | | |
| 26 | I prefer not to depend on others. | | | | | |
| 27 | I know that others will be there when I need them. | | | | | |
| 28 | I worry about having others not accept me. | | | | | |
| 29 | Romantic partners often want me to be closer than I feel comfortable being. | | | | | |
| 30 | I find it relatively easy to get close to others. | | | | | |

Appendix “D”

The Revised Cheek and Buss Shyness Scale (RCBS)

INSTRUCTIONS: Please read each item carefully and decide to what extent it is characteristic of your feelings and behavior.

| Sr No | Statement | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------|--|-------------------|----------|---------|-------|----------------|
| 1. | I feel tense when I'm with people I don't know well. | 1 | 2 | 3 | 4 | 5 |
| 2. | During conversations with new connections, I worry about saying something dumb. | | | | | |
| 3. | I am socially somewhat awkward. | | | | | |
| 4. | I do not find it difficult to ask other people for information. | | | | | |
| 5. | I am often uncomfortable at parties and other social gatherings. | | | | | |
| 6. | When in a group of people, I have trouble thinking of the right things to talk about. | | | | | |
| 7. | I feel relaxed even in unfamiliar social situations | | | | | |
| 8. | It is hard for me to act natural when I am meeting new people. | | | | | |
| 9. | I feel painfully self-conscious when I am around strangers. | | | | | |
| 10 | I am confident about my social skills. | | | | | |
| 11 | I feel nervous when speaking to someone in authority. | | | | | |
| 12 | I have trouble looking someone right in the eye. | | | | | |
| 13 | I am usually a person who initiates conversation. | | | | | |
| 14 | I often have doubts about whether other people like to be with me. | | | | | |
| 15 | Sometimes being introduced to new people makes me feel physically upset (for example, having an upset stomach, | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| | pounding heart, sweaty palms, or heat rash). | | | | | |
| 16 | I do not find it hard to talk to strangers. | | | | | |
| 17 | I worry about how well I will get along with new acquaintances. | | | | | |
| 18 | I am shy when meeting someone of the opposite sex. | | | | | |
| 19 | It does not take me long to overcome my shyness in a new situation. | | | | | |
| 20 | I feel inhibited in social situations. | | | | | |

Items 4, 7, 10, 13, 16, & 19 are reversed, recode before scoring. (1=5) (2=4) (4=2) (5=1)

Appendix “E”

Interpersonal Support Evaluation List shortened version

Description of Measure:

A 12-item measure of perceptions of social support. This measure is a shortened version of the original ISEL (40 items; Cohen & Hoberman, 1983). Items 1, 2, 7, 8, 11, 12 are reverse scored.

All scores are kept continuous.

| Sr No | Statements | Strongly Disagree | Disagree | Agree | Strongly Agree |
|-------|--|-------------------|----------|-------|----------------|
| 1. | If I wanted to go on a trip for a day (for example, to the country or mountains), I would have a hard time finding someone to go with me. | 1 | 2 | 3 | 4 |
| 2. | I feel that there is no one I can share my most private worries and fears with. | | | | |
| 3. | If I were sick, I could easily find someone to help me with my daily chores. | | | | |
| 4. | There is someone I can turn to for advice about handling problems with my family. | | | | |
| 5. | If I decide one afternoon that I would like to go to a movie that evening, I could easily find someone to go with me. | | | | |
| 6. | When I need suggestions on how to deal with a personal problem, I know someone I can turn to. | | | | |
| 7. | I don't often get invited to do things with others. | | | | |
| 8. | If I had to go out of town for a few weeks, it would be difficult to find someone who would look after my house or apartment (the plants, pets, garden, etc.). | | | | |
| 9. | If I wanted to have lunch with someone, I could easily find someone to join me. | | | | |
| 10. | If I was stranded 10 miles from home, there is someone I could call who could come and get me. | | | | |
| 11. | If a family crisis arose, it would be difficult to find someone who could give me good advice about how to handle it. | | | | |
| 12. | If I needed some help in moving to a new house or apartment, I would have a hard time finding someone to help me. | | | | |

Appendix “F”

UCLA Loneliness Scale

Description of Measure:

A 20-item scale designed to measure one’s subjective feelings of loneliness as well as feelings of social isolation.

| Sr No | Statements | Never | Rarely | Sometimes | Often |
|-------|---|-------|--------|-----------|-------|
| 1. | I am unhappy doing so many things alone | 0 | 1 | 2 | 3 |
| 2. | I have nobody to talk to | | | | |
| 3. | I cannot tolerate being so alone | | | | |
| 4. | I lack companionship | | | | |
| 5. | I feel as if nobody really understands me | | | | |
| 6. | I find myself waiting for people to call or write | | | | |
| 7. | There is no one I can turn to | | | | |
| 8. | I am no longer close to anyone | | | | |
| 9. | My interests and ideas are not shared by those around me | | | | |
| 10. | I feel left out | | | | |
| 11. | I feel completely alone | | | | |
| 12. | I am unable to reach out and communicate with those around me | | | | |
| 13. | My social relationships are superficial | | | | |
| 14. | I feel starved for company | | | | |
| 15. | No one really knows me well | | | | |
| 16. | I feel isolated from others | | | | |
| 17. | I am unhappy being so withdrawn | | | | |
| 18. | It is difficult for me to make friends | | | | |
| 19. | I feel shut out and excluded by others | | | | |
| 20. | People are around me but not with me | | | | |