

**SOCIAL INTELLIGENCE, LONELINESS, SLEEP
DISTURBANCE, AND PSYCHOLOGICAL WELL-BEING
AMONG UNDERGRADUATE DAY SCHOLAR
STUDENTS**



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03-171221-003

BAHRIA UNIVERSITY LAHOR CAMPUS

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Dedication

To my parents, whose presence has been my greatest source of strength. Their trust in me has inspired me to keep moving forward even during difficult times. I owe my accomplishments to their prayers, care, and unwavering support.

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Table of Contents

Approval for Examination	III
Author's Declaration	IV
Plagiarism Undertaking	V
Dedication	VI
Acknowledgements	VII
List of Tables	XI
List of Symbols	XII
List of Abbreviations	XIII
List of Appendices	XIV
Abstract	1
Chapter 1	2
Introduction	2
1.1 Psychological Well-Being	2
1.2 Social Intelligence	6
1.3 Loneliness	8
1.4 Sleep Disturbance	10
1.5 Rationale	13
1.6 Research Gap	14
1.7 Problem Statement	15
1.8 Objectives	17
1.9 Hypotheses	17
Chapter 2	18

Literature Review	18
2.1 Social Intelligence and Psychological Well-Being	18
2.2 Loneliness and Psychological Well-Being	22
2.3 Sleep Disturbance and Psychological Well-Being	26
2.4 Interrelationships among Social Intelligence, Loneliness, Sleep Disturbance, and Psychological Well-Being	30
2.5 Summary of the Literature Review	34
2.6 Theoretical Framework	37
Chapter 3	41
Research Methodology	41
3.1 Research Design	41
3.2 Participants	41
3.2.1 Inclusion Criteria	42
3.2.2 Exclusion Criteria	42
3.3 Measures	43
3.3.1 Informed Consent Form	43
3.3.2 Demographic Information Form	44
3.3.3 Tromso Social Intelligence Scale (TSIS)	45
3.3.4 Social and Emotional Loneliness Scale for Adults – Short Form (SELSA-S)	46
3.3.5 Insomnia Severity Index (ISI)	46
3.3.6 Mental Health Continuum – Short Form (MHC-SF)	47
3.4 Procedure	48

3.5 Statistical Analysis	50
3.6 Ethical Considerations	51
Chapter 4	53
Results	53
4.1 Table 1	53
4.2 Table 2	55
4.3 Table 3	56
4.4 Table 4	57
4.5 Table 5	59
4.6 Table 6	61
Chapter 5	63
Discussion	63
5.1 Discussion	63
5.2 Implications of the study	66
5.3 Limitations of the study	68
5.4 Recommendations	69
5.5 Conclusion	70
References	72

List of Tables

Table No.	Title	Page
Table 4.1:	Demographic Characteristics of Undergraduate Day Scholar Students	53
Table 4.2:	Descriptive Statistics and Reliability Coefficients of Study Variables	55
Table 4.3:	Pearson Correlations among Social Intelligence, Loneliness, Sleep Disturbance, and Psychological Well-Being	56
Table 4.4:	Multiple Regression Predicting Psychological Well-Being from Social Intelligence, Loneliness, and Sleep Disturbance	57
Table 4.5:	Mediation Analysis: Sleep Disturbance as a Mediator between Loneliness and Psychological Well-Being (PROCESS Model 4)	59
Table 4.6:	Gender Differences in Social Intelligence, Loneliness, Sleep Disturbance, and Psychological Well-Being (Independent Samples t-test)	61

List of Symbols

N	.....	Sample size
M	.....	Mean
SD	.....	Standard deviation
df	.....	Degrees of freedom
r	.....	Pearson product–moment correlation coefficient
B	.....	Unstandardized regression coefficient
β	.....	Standardized regression coefficient
SE	.....	Standard error
t	.....	t-statistic
F	.....	F-statistic
R	.....	Multiple correlation coefficient
R^2	.....	Coefficient of determination
p	.....	Probability value (significance level)
α	.....	Cronbach’s alpha (internal consistency reliability)
CI	.....	Confidence interval

List of Abbreviations

COVID-19	.....	Coronavirus Disease 2019
DV	.....	Dependent Variable
EWB	.....	Emotional Well-Being
IBM SPSS	.....	IBM Statistical Package for the Social Sciences
ISI	.....	Insomnia Severity Index
IRB	.....	Institutional Review Board
IV	.....	Independent Variable
MHC-SF	.....	Mental Health Continuum–Short Form
PSQI	.....	Pittsburgh Sleep Quality Index
PWB	.....	Psychological Well-Being
SELSA-S	.....	Social and Emotional Loneliness Scale for Adults–Short Form
SPSS	.....	Statistical Package for the Social Sciences
SWB	.....	Social Well-Being
TSIS	.....	Tromsø Social Intelligence Scale
VIA	.....	Values in Action

List of Appendices

Appendix A	.....	Permission Letter
Appendix B	.....	Informed Consent Form
Appendix C	.....	Demographic Information Form
Appendix D	.....	Mail of Author (TSIS)
Appendix E	.....	Mail of Author (SELSA-S)
Appendix F	.....	Mail of Author (ISI)
Appendix G	.....	Mail of Author (MHC-SF)
Appendix H	.....	Tromsø Social Intelligence Scale (TSIS)
Appendix I	.....	Social and Emotional Loneliness Scale for Adults–Short Form (SELSA-S)
Appendix J	.....	Insomnia Severity Index (ISI)
Appendix K	.....	Mental Health Continuum–Short Form (MHC-SF)
Appendix L	.....	Turnitin Similarity Index Report

Abstract

The present study examined the relationships among social intelligence, loneliness, sleep disturbance, and psychological well-being among undergraduate day scholar students in Pakistan. A cross-sectional correlational study was conducted with 300 full-time undergraduate day scholars aged 18 to 25 years, drawn from both public and private universities. Each participant completed several validated instruments: the Tromsø Social Intelligence Scale to assess social intelligence, the Social and Emotional Loneliness Scale for Adults–Short Form to gauge feelings of loneliness, the Insomnia Severity Index to measure sleep disturbances, and the Mental Health Continuum–Short Form to evaluate psychological well-being. The collected data were subjected to descriptive statistics, Pearson correlation analyses, multiple regression, and mediation testing using PROCESS Model 4.

The analyses revealed that higher levels of social intelligence were linked to better psychological well-being, while they were inversely related to both loneliness and sleep disturbances. Conversely, greater loneliness and more pronounced sleep disturbances were each associated with poorer psychological well-being. When combined, social intelligence, loneliness, and sleep disturbance accounted for a substantial portion of the variance in psychological well-being. Importantly, sleep disturbance partially mediated the relationship between loneliness and psychological well-being, suggesting that loneliness may affect well-being in part through its impact on sleep quality.

Gender comparisons showed that female students reported higher social intelligence and psychological well-being, and lower loneliness than their male counterparts, although there was no significant gender difference in sleep disturbance. These patterns underscore an integrated pathway in which social intelligence serves as a protective factor, while loneliness and sleep disturbance function as vulnerability factors and mediators in predicting psychological well-being among undergraduate day scholars. The findings point to the value of targeted interventions that enhance social skills, reduce loneliness, and improve sleep hygiene, thereby promoting mental health among commuting university students in Pakistan.