RELATIONSHIP BETWEEN POSTPARTUM DEPRESSION, BODY IMAGE DISSATISFACTION, AND SOCIAL SUPPORT AMONG MOTHERS OF TWIN CITIES



by Zunaira Imran Hasni Reg. No. BSP193001

Department Of Psychology Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad July, 2023

RELATIONSHIP BETWEEN POSTPARTUM DEPRESSION, BODY IMAGE DISSATISFACTION, AND SOCIAL SUPPORT AMONG MOTHERS OF TWIN CITIES



By Zunaira Imran Hasni BSP193001

A Research Thesis submitted to the DEPARTMENT OF PSYCHOLOGY In partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN PSYCHOLOGY

> Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad July, 2023

CERTIFICATE OF APPROVAL

It is certified that the Research thesis titled "Relationship between Postpartum Depression, Body Image Dissatisfaction and Social Support among Mothers of twin cities" carried out by Zunaira Imran Hasni, Reg no. BSP193001, under the supervision of Ms. Uzma Mushtaq, Capital University of Science and Technology, Islamabad, is fully adequate, in scope and quality, as a Research Thesis for the degree of BS Psychology.

Supervisor: ------Ms. Uzma Mushtaq

Lecturer

Department of Psychology

Faculty of Management and Social Sciences

Capital University of Science & Technology, Islamabad.



RELATIONSHIP BETWEEN POSTPARTUM DEPRESSION, BODY IMAGE DISSATISFACTION, SOCIAL SUPPORT AMONG MOTHERS OF TWIN CITIES

By

Zunaira Imran Hasni

Registration # BSP193001

Supervisor

Ms. Uzma Mushtaq

Internal Examiner-I

Ms. Rabia Umer

Internal Examiner-II

Ms. Irum Noreen

1

Thesis Coordinator Ms. Irum Noreen

Head of Department Dr. Sabahat Haqqani

.Copyright © 2023 by CUST Student

All rights reserved. Reproduction in whole or in part in any form requires the prior written for requires the prior written permission of Zunaira Imran Hasni.

DECLARATION

It is declared that this is an original piece of my work, except where otherwise acknowledged in text and references, This work has not been submitted in any form of any degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in future for obtaining any degree from this or any other University or Institution.

Jugurow.

Name: Zunaira Imran Hasni

Reg no: BSP193001

June 2023

ACKNOWLEDGMENTS

First of all, I would like to praise and thank the ALLAH Almighty, for showering his blessings throughout my research and completing my research successfully.

Secondly, I would like to sincerely thank my supervisor, (Ms. Uzma Mushtaq, Ms. Irum Noreen, and Dr. Sabahat Haqqani) for their exceptional guidance, patience, and encouragement. Their expertise and commitment to academic excellence have been instrumental in shaping the direction of this research and pushing me to achieve my best.

I am also indebted to 'Capital University of Science and Technology, Islamabad faculty members; especially (**Sir. Naeem, and Dr. M Aksar**) for their insightful feedback, stimulating discussions, and unwavering support. Their collective wisdom and passion for knowledge have contributed significantly to the development of my research.

My heartfelt thanks go to the participants of this study, without whom this research would not have been possible. Their willingness to contribute their time, knowledge, and experience has enriched this study and added depth to its findings.

I show my gratitude to **Prof. Gavin Philipson, Sir. Zimet, Gregory, and Prof. Cris Evans** for permitting me to use their scales.

Lastly, I am forever grateful to my family (especially my parents) and special thanks to my friends; especially (**Rimsha Mehmood**) for their unwavering love, understanding, and encouragement throughout this endeavor, their constant support and belief in my abilities have been the driving force behind the completion of my research work.

ABSTRACT

Postpartum depression reflects the time after childbirth following a few weeks to months. Postpartum depression is a serious mental illness involving the brain, the mother's physical health, and her behavior toward her child. In this period if the mother doesn't get an accurate amount of social support she might suffer from depression symptoms and body image dissatisfaction. Body Image dissatisfaction is a negative component of body image in which the individual is having negative thoughts and perceptions related to one's body image. The relationship between postpartum depression, Body Image dissatisfaction, and Social support is specifically considered in this study. The present study aimed to explore the relationship between postpartum depression, body image dissatisfaction, and social support in mothers of twin cities. The study sample consists of 200 mothers (N=200) from different hospitals gyne wards and child health care centers in Islamabad and Rawalpindi. The research scales are Edinburgh Postnatal Depression Scale (EPDS), Body Shape Questionnaire (BSQ-16), and Multidimensional Scale for Perceived Social Support (MSPSS). The result indicates that mothers concerned with negative body image tend to suffer more from postpartum depression, or having no social support leads to depressive symptoms. Spearman's rho correlation indicates that PSS and PPD are negatively correlated $(r = -.17^{**}, p < .01)$, BID and PSS is having a significant negative correlation $(r = -.18^{**}, p < .01)$ < .05), PPD and BID positively correlated with each other (r = $.14^*$, p < .05).

Keywords; body image dissatisfaction, postpartum depression, and social support.

TABLE OF CONTENTS

Contents

CERTIFICATE OF APPROVALi
DECLARATION iv
ACKNOWLEDGMENTSv
ABSTRACTvi
LIST OF TABLES x
LIST OF FIGURES xi
LIST OF ABBREVIATIONS xii
Introduction1
Postpartum Depression
Body Image Dissatisfaction
Social Support
Literature Review
Theoretical Framework 12
Rationale14
Objective
Hypotheses 15
Method 16
Research Design

Ethical Consideration	
Population and Sample	
Inclusion Criteria	
Exclusion Criteria	
Sampling Procedure	
Measures/ Instruments	
Edinburgh Postnatal Depression Scale	
Multidimensional Scale of Perceived Social Support	
Body Shape Questionnaire	
Procedure	
Results	
Data Analysis Procedure	
Discussion	
Limitations and Suggestions	
Recommendations/ Implications	
References	
APPENDICES	
Appendix A	
(Inform Consent)	
Appendix B	

(Demographic Sheet)	. 48
Appendix C	. 49
(Support Letter)	. 49
Appendix D	. 50
Appendix E	. 52
Appendix F	. 54

LIST OF TABLES

Table 1.	
Frequencies	21
Table 2.	21
Descriptive Statistics of demographic variables	21
Table 3	22
Reliability of Scales	
Table 4	
Correlation	

LIST OF FIGURES

Figure 1. Histogram of Postpartum Depression (PPD)	24
Figure 2. Scatter and Box Plot of Postpartum Depression (PPD)	25
Figure 3. Histogram of Psychosocial Support (PSS)	25
Figure 4. Scatter and Box Plot of Psychosocial Support (PSS)	26
Figure 5. Histogram of Body Image Dissatisfaction (BID)	27
Figure 6. Scatter and Box plot of Body Image Dissatisfaction (BID)	27

LIST OF ABBREVIATIONS

PPD	Postpartum Depression
EPDS	Edinburgh Postnatal Depression Scale
BID	Body Image Dissatisfaction
BSQ-16	Body Shape Questionnaire
SS	Social Support
MSPSS	Multidimensional Scale for Perceived Social Support

Chapter I

Introduction

Globally, postpartum depression affects 15% of women yearly but it's more common in resource-restrained countries such as those associated with developed countries. Many pieces of research suggest that almost 28-63% of women in Pakistan suffered from postpartum depression (Rakshanda, 2015). Perinatal Depression is linked to biochemical, societal, and psychosomatic changes that take place in a woman's life after giving birth to a child (Awat, 2012). Postpartum Depression describes a range of physical and emotional changes in a woman's life after childbirth (Hamidreza, 2011).

The common reasons for postpartum depression in women are; poor marital relationships, lack of social support, history of psychiatric illness, and psychological issues (Azhar, 2016). Socioeconomic status also plays a major role in developing postpartum depression. Postpartum Depression (PPD) if severe can be treated through medication and counseling at its earlier stages (Roqayeh, 2015).

ICD-11 (International Classification of Disease) defines postpartum Depression as the inception of depressive symptoms which occurs in the 4-6 weeks of giving birth, and symptoms are similar to Major Depressive Disorder (MDD) which include; feeling of hopelessness, depressive mood, and loss of appetite, sleep disturbances, diminished concentration, irritability, and recurrent thoughts of death.

We've all seen pictures of a beaming mother holding her newborn baby, who is nursing without a problem as he falls into a peaceful sleep. While this idyllic representation of motherhood is beautiful, it is hardly common. Firstly, many mothers-to-be experience significant emotional problems during pregnancy (Ashraf, 2009). Many women worry that these feelings may continue or worsen after the baby is born. Some women have a very difficult labor time, and this experience can greatly affect how they feel emotionally in the following weeks or months (Allen, 2003).

Women suffering from peripartum depression are incompetent to look after themselves and give attention to their newborns. Disruption in the mother's psychological health significantly derangers mother-infant bonding, and psychological or physiological child abuse (Akram, 2018). Past research quoted that mothers with undiagnosed peripartum depression undergo substance abuse, weight problems, domiciliary problems, and suckling issues in maturation. Some women have incredibly challenging labors, which can profoundly impact how they feel emotionally for weeks or months later (Allen, 2003).

Childbirth is a customary life affair and should be a jubilant practice. Furthermost mothers go through childbirth and the postpartum period calmly and happily, but few of them see this as a period of change and disruption (Gotlib, 1998).

Postpartum Depression

The word postpartum reflects "the time before and after childbirth" following a few weeks to months. Postpartum depression is a serious mental illness involving the brain, the mother's physical health, and her behavior toward her child. The gestation period and parturition are the foremost life-changing events in a woman's life. Women go through a lot of hormonal changes during and after pregnancy. Therefore, the gestation period seems to be very risky for women because at that moment women are at high risk of developing Postpartum Depression (Akram, 2018).

According to DSM-V criteria, postpartum depression is known as peripartum depression 296.24 (F32.3) which is defined as a depressive episode with psychotic features that occurs during pregnancy as well as in the four weeks following delivery. To start, a lot of expectant moms have serious mental issues when they are pregnant. After the birth of their child, many mothers worry that these feelings might persist or get worse (Allen, 2003).

The gestation period uncovers the women to numerous aggravations. This phase stands to be unguarded for the mother's psychological health. Fosters go through a lot of physical demands from recovering after giving birth and get exhausted and unstable during the day and at night (Bibi, 2020). In early pregnancy, the majority of women may experience multiple biological and psychological changes. Postpartum depression is one of the highest prevalence in the postpartum period which begins at the 4-6 weeks of the post-natal period and follows till 1 year (Akram, 2019).

Poor maternal health during the postpartum period increases the risk of a higher level of mental health-related issues in mothers, infants, and families (Farhan, 2019).

Body Image Dissatisfaction

According to Hassler 2004, body image dissatisfaction is a subcomponent of negative body image and usually refers to holding negative thoughts or feeling about one's body image. A mismatch between one's subjective assessment of one's physique and one's ideal body image is frequently mentioned by those who are unhappy with their physical appearance (Matz, P.E, Foster, G.D, 2002).

Body image dissatisfaction is one of the important concerns in the field of mental well-being (Fallon et al, 2014). Nowadays society is full of beauty standards and when the individual fails to meet those standards this will adversely affect the mental and physical health of an individual. In the past, body image was considered a more severe issue in the West but now it's equally important in Eastern countries i.e. Pakistan (Ashfaq et al, 2008).

Body Image (BI) is the mental representation of one's body size, contour, and forms as well as feelings an individual has about her features and consistent components. Body Image refers to the perception and feelings an individual has about her body (Grogan et al, 2008).

In the postpartum period, almost all mothers gain a bit or a lot of weight which in turn led to further psychological disorders i.e. depression, low self-esteem, eating disorders, etc. Mostly female figures suffer more from body image dissatisfaction as compared to male figures. As shown in statistics almost 20-40% of women suffer from body image dissatisfaction and lower self-esteem in developed or developing countries (Frederick, 2003).

Social Support

The perception of social support is being cared for by others and having an authentic network to look at when needed, in life situations, and in catastrophic moments (Taylor, 2011). Social Support can be perceived from three different resources; family, friends, and significant others (Zimet et al, 1998). One of the reasons for having a high risk of Postpartum Depression is a lack of social support from different resources as the individual relies on the close ones for food and fulfillment of basic needs i.e. instrumental,

evaluative, and emotional support at the time of need (Santini et al, 2015). And when someone doesn't fulfill the requirement at the stated time the individual gets stressed out which hurt the mental and physical health of the individual (Siddique, 2016). The individual's interactions with the family and the support she gains from her peer environment and others not only motivate her positively but also negatively affect her life (Sarason et al, 1990). Social Support is the perception of being cared for by others and having and having a reliable network to turn to when needed. Poots in 2020 stated that having social support from friends, family and significant other is not enough but having the belief of having social support plays an important role in preventing an individual from many kinds of psychological issues i.e. Stress, Anxiety, Depression, etc. (Poots; Cassidy, 2020). Social support provides strength to the individual to cope with difficult and stressful life situations and provides an advantage to the individual to protect them from psychological distress (Aliyari, 2012).

Literature Review

A cross-sectional study was conducted in June 2012-2013 was accompanied on 148 Japanese females in the Tohoku region of Japan which shows that whenever a mother suffers from any kind of mental health-related issue in the peripartum era this will upturn the threat of a higher level of health issues in the mother, infant, and families. This research states that strain and societal care are highly related to a mother's psychological well-being as in the gestation period the mother exposes to various demands when those demands don't get fulfilled the mother faces different problems in that period (Helen, Hartley; 2013).

In March 2015; a study was conducted by Assoc. Dr. Sabri Herguner at Necmettin Erbakan University, Meram Faculty of Medicine, Department of Child and Adolescent Psychiatry, Turkey. A mix-method study was used to collect the data. The study was conducted at Meram Faculty of Medicine, Konya, Turkey. A tester of the study was mothers of newborns, who were pragmatic for the fifth-month visit and tracked up by the neonatology outpatient hospital. The sample size was 80 women (between 40 women by vaginal delivery and 40 women by caesarian delivery) between 18-35 years old. The results declare that Pearson correlation analysis that the MSPSS score was negatively correlated with EPDS and positively correlated with Motor Assessment Scale MAS score in others with Caesarian Delivery.

A correlational study was conducted in December 2015 by Clinical Psychologist Unit and Assistant Professor from Government College University, Lahore to investigate the jeopardy features for Postpartum Depression, Interpersonal relationship Anxiety, Neuroticism, and social support in mothers with Postpartum Depression. The findings also explored the hazardous features of postpartum depression and the dearth of societal sustenance as a predictor of neuroticism and apprehension. The sample comprises 100 mothers previously diagnosed with postpartum depression and was enlisted from altered hospitals by using Edinburgh Postnatal Depression Scale (EPDS). The result showed that a momentous positive association between troubled relationships with partners and relatives, lack of social care, and a mother's fear regarding pregnancy leads to a higher risk of developing different psychological disorders (Naveed, Naz; 2015).

An experimental study was conducted by Shaprio, Jolley, Hildebrandt, and Spieker in 2018, University of Washington in USA by the Department of Family and child nursing. The main drive of the research is to study the consequence of early Postpartum Depression on infant temperament. This study is a fragment of a realistic longitudinal study. The sample size was 16 mother-offspring units monitored from the eighth month of the mother's gestation through the first six months of the newborn's life. The result reveals that higher levels of Postpartum Depression directly impact infant temperament as mothers with postpartum are unable to give time to their newborn properly (Jolley, Elmore, and Car 2007)

Shahid Beheshti conducted a descriptive study in Iran at Shahid Beheshti University to check the affiliation between a father's dejection, Stress, and Supposed Societal Support in the Perinatal Period. The sample size of the study was 205 fathers who were recruited by using purposive sampling from seven healthcare centers at the 6th to 12th week of postpartum. Facts were poised using Likert-type scales i.e. Edinburgh Postnatal Depression Scale (EPDS), Perceived Stress Scale (PSS), and Multidimensional Scale for Perceived Social Support which shows that 11.7% of fathers scored more than 12 in the Edinburgh Postnatal Depression Scale which indicates depressive symptoms. The scores indicate that there is a significant positive relationship between Postpartum Depression and Perceived Stress and a negative correlation between Perceived Social Support components scores. Apparent Tension was a vital predictor of Patriarchal Peripartum depression and Supposed Shared Support can't suggestively predict Peripartum Depression. (Hasanpoor, Kamalifard, Kheiroddin, Panahi & Payan, 2014).

Johansson, Bendix, and Svensson in January 2022 conducted a qualitative study to explore parents' subsisted experiences of Perinatal Depression and Parental Stress after childbirth. Qualitative Interviews were conducted to collect the data and were analyzed by using an Interpretative Phenomenological Analysis Perspective (IPA). The result depicts that parents described experiences of meagerness, even though pater described peripheral necessities and mothers described in-house necessities as the most demanding ones. Postpartum depression seemed to cause problems in spouse relationships and both parents experience isolation and partner attachment glitches. The outcomes of the study reveal that there is a notable effect of perinatal depression and parental stress on parents' everyday lives and on partner interactions which in turn causes many destructions.

Another study was found on Postpartum with a qualitative research design. The research aimed to discover the judgments of manslayers that didn't usher to the act among mothers with postpartum depression. A phenomenological approach was used to study the issue in which mothers were requested to share their thoughts related to manslayer (infanticide). The research was accompanied in the large cosmopolitan city of Brisbane, Australia. The sample was collected using a purposive sampling design fifteen women were recruited who were already diagnosed with postpartum depression and had their babies 12 months of age. Audiotaped and comprehensive interviews were transcribed

verbatim. Thematic analysis was conducted after the first interview and data collection was continued until satiety was achieved. Six different themes were extracted from the data i.e. imagined acts of the manslayer, the experience of horror, distorted sense of responsibility, consuming negativity, keeping secrets, and managing the crisis. The findings suggest that mothers with non-psychotic features didn't disclose their thoughts of manslayer in front of caregivers comprising of general practitioners and psychoanalysts. These women were more likely to disclose their thoughts related to suicidal attempts than thoughts related to infanticide (Barr & Beck, 2008).

A study was conducted by Nancy L. Collins and colleagues in 1990 to examine the effects of prenatal social support and maternal depression in a sample of economically disadvantaged women. In conclusion, these findings demonstrate that, during a stressful life transition for many women, particularly those who are economically and socially disadvantaged, the assistance and support of others may indeed have an impact on their physical and mental health. This study is the first step toward an empirical focus on social support's interpersonal and relational aspects. Finding the complex ways in which social and personality factors interact and the mechanisms by which supportive interactions affect health is a persistent challenge. These issues are crucial to the creation of interventions aimed at enhancing the health and well-being of mothers and their infants, and they are also central to the development of theoretical models of social support that are more comprehensive.

A study was conducted by Zvolensky and Goodie in September 2010, a multichallenge evaluation was conducted to measure Perceived Stress and Anxiety in the prediction of Anxiety-related responses to multiple challenges i.e. physiological (hyperventilation), cognitive (mental arithmetic), and social (speech) challenges. Participants were selected through snowball techniques 37 non-clinical individuals were recruited. Dependent measures included self-reported anxiety, biological ambiance, pulse rate, and blood pressure in response to the challenges. Results indicate that preexperimental levels of perceived stress are more predicate than the other theoretically relevant variables of self-reported anxiety. The findings advocate that perceived stress is an important factor to consider in understanding the determinants of anxiety-related responses (Zvolensky & Goodie, 2010).

In light of previous research, a study was conducted by Javier, Calvente, Maria, and Lara; in May 2022 with a sample of 450 women from two Andalusian hospitals, a descriptive cross-sectional study was planned. Age and body image dissatisfaction scores on the Body Shape Questionnaire (BSQ) and the Edinburgh Postnatal Depression Scale (EPDS) were the quantitative variables. Marital status, self-perceived health, diet or physical activity, and delivery method were among the qualitative variables used. The symptomatology of postpartum depression was positively correlated with body dissatisfaction. As a result, the incidence of depression increased proportionately to each point of increased body dissatisfaction. Women who were more dissatisfied with their body image were more likely to be depressed because there was a correlation between the variables in the study. In conclusion, having a negative body image appears to be linked to postpartum depression.

Moreover, a cross-sectional study was conducted in the USA to administer social support as a dimension of postpartum depression including emotional, affectionate, tangible, positive social interaction, and paternal support. A significant risk factor for postpartum depression (PPD) is a lack of social support, whereas the presence of social support can mitigate PPD. Nonetheless, the connection between friendly help and PPD in racial/ethnic minority ladies is still to a great extent obscure. The objective was to investigate the significance of social support in a large and diverse group of PPD patients and controls. Members (N = 1517) were enrolled at the standard 6-week post-pregnancy visit (\pm 1-2 weeks) from four distinct short-term centers in North Carolina. Results discovered that having more social support was strongly associated with protection against PPD (MOS total score OR, 0.23; 95% CI, 0.19–0.27; p = 6.92E-90; Overall DAD score OR, 0.89; 95% CI, 0.88–0.92; p = 1.69E-29), and the impacts of social help didn't contrast when representing race/identity. Additionally, there is a significant and negative correlation between the degree of social support and the severity of PPD symptoms.

The research was conducted by Rose et; al, 2006 at Florida State University to find out the impact of body image and self-harming behavior among both genders (N= 400) with equal distribution. Body image was measured using a Body shape questionnaire (BSQ) and self-harming behavior was measured using the Self-Harm Behavior Questionnaire. The result depicts that females suffer more from body image dissatisfaction as compared to males. So, the negative impact on body image causes distress and discomfort which in turn causes multiple psychological or physiological disorders (Rose et. al; 2006).

Past literature depicts that social support is negatively correlated to the mother's psychological health as in the gestation period already women are going through a lot of physiological changes and psychological issues at that moment in life when the mother

doesn't get the desired amount of social support it had a great impact on the mental health of the mother.

Theoretical Framework

The social comparison theory was proposed by psychologist Leon Festinger in 1954. Festinger proposed this theory in his classic book "Social Comparison Processes: Theoretical and Empirical Perspectives".

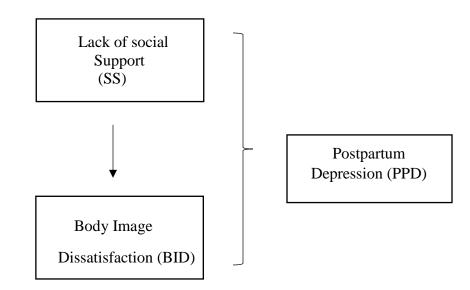
According to Social Comparison theory, Individuals have a natural tendency to evaluate themselves by comparing their abilities, opinions, and appearances to others. In the context of Postpartum Depression, new mothers may engage in upward social comparisons, comparing themselves to others whom they perceive as having a more positive body image or receiving more psychosocial support. These comparisons can lead to increased body image dissatisfaction and feeling of inadequacy, which in turn can contribute to the development or exacerbation of postpartum depression.

Body image dissatisfaction refers to negative thoughts, feelings, and evaluations related to one's own body. During the postpartum period, women often experience changes in their body shape, size, and weight which can impact their self-esteem and body image. If a new mother perceives her body negatively compared to societal ideals or peers, it can contribute to body image dissatisfaction and increase the risk of developing postpartum depression.

Social support plays a crucial role in a new mother's well-being during the postpartum period. Lack of support from partners, family members, or friends can lead to feelings of isolation and stress, which are risk factors for postpartum depression. When a woman feels unsupported or perceives that others are receiving more support,

it can further intensify her negative emotions, including body image dissatisfaction, and contribute to the development of postpartum depression.

Comparing oneself unfavorably to others, particularly in terms of body image and support, can contribute to negative emotions and psychological distress, increasing the likelihood of experiencing postpartum depression.



Rationale

The literature suggests that many studies were conducted in the clinical domain in different contexts and cultures. The studies that have been found on postpartum depression and financial issues, socioeconomic status, and hearing loss are mostly cross-sectional (Ahmed, Khan, 2016) experimental, and longitudinal studies (Bell, 2002, Jakab, 2020). However, the importance of this study is that this was to find out the relationship between postpartum depression, body image dissatisfaction, and social support among mothers of twin cities. Data will be gathered from the mothers of twin cities. When women become a mother for the first time she faces a lot of challenges in life. In Pakistan, psychology is an emerging field. There is a need to conduct our research in this way we will contribute to this field.

This research is important because this will contribute to future researchers in intervention planning for women who have symptoms related to postpartum depression, therapy planning, stress management, and communication skills training to mothers so that they can easily communicate with anyone about their problems and highlight the needs of psychologists in the gyne ward of hospitals. Also, this research will increase public awareness related to postpartum depression and the support needed for both the parents especially the mother in this crucial time.

Objective

The study was dealing with the following objective;

- 1. To find out the relationship between postpartum depression, body image dissatisfaction, and social support.
- **2.** To find out the association between body image dissatisfaction and postpartum depression among mothers of twin cities.

Hypotheses

- **H1:** There is a significant positive relationship between Body Image Dissatisfaction and Postpartum Depression among mothers of twin cities.
- **H2:** There is a significant negative relationship between social support and Postpartum Depression among mothers.
- H3: There is a negative relationship between Body Image Dissatisfaction and Social Support.

Chapter II

Method

Research Design

The correlational research design was used to find out an association between postpartum depression, body image dissatisfaction, and social support.

Ethical Consideration

The study was conducted under the supervision of the thesis supervisor of Capital University of Science and Technology. The confidentiality of the participant was highly ensured at the time of administration and after the completion of the research. Informed consent was signed before the conduct of the study by each participant and assured them that their data will only be used for research purposes.

Population and Sample

The sample size was 200 mothers, and the individuals were gathered from different hospitals (Gyne ward) in Islamabad and Rawalpindi.

Inclusion Criteria

- Mothers in the age range of 20-35 were included in the study.
- The mothers with 4-6 weeks post-delivery phase was included in the study.
- Mother's proficiency level was being able to understand psychological scales.

Exclusion Criteria

- Mothers with an already-born child with any deficit were not part of the study.
- Mothers in the age range below 20 or above 35 years weren't part of the study.
- Mothers receiving any psychiatry treatment from the last three months.

Sampling Procedure

The purposive sampling technique was used to collect the data.

Measures/Instruments

Edinburgh Postnatal Depression Scale, EPDS was developed in 1987 by Cox et al and reliability of 0.9.EPDS was designed to measure depression in the postpartum period. EPDS comprises 10 items Likert-type scale (As much as I always could to No, not at all) which consists of feelings and thoughts the mother has in the postpartum period and after the birth of a baby. The maximum score an individual can score is 30, a score greater than 10 or greater shows possible depression.

Multidimensional Scale of Perceived Social Support, MSPSS was originally designed by Zimet, Dahlem, and Farley in 1988. The reliability of the scale is 0.83. MPSS is designed to measure the perception of social support coming from 3 sources; family, friends, and significant other. This scale comprises a total of 12 items Likert scale (Very strongly disagree to very strongly agree) with 4 items for each subscale, the subscale of the family comprises 3, 4, 8, and 11 items, the friend's subscale comprises 6, 7, 9, and

12, and the subscale of significant others comprises of 1, 2, 5, and 10. For each subscale/ dimension an individual can score b/w 4-28 however for the whole scale score range is b/w 12-48.

Body Shape Questionnaire, BSQ-16 was originally developed by Dr. David J. Cooper, and Dr. Andrew R. Thompson in 1987. BSQ has demonstrated good internal consistency, indicating that the items within the questionnaire are highly correlated. Cronbach's alpha reliability of BSQ-16 is 0.96. The scale comprises 16 items on the Likert scale which start from 'never' to 'always'. BSQ is a clinical assessment tool used to measure the perception and thoughts of an individual related to one's body image. Respondents are asked to rate the extent to which each item describes how they have been feeling over the past four weeks. The items cover different aspects of body image, such as feelings of fatness, preoccupation with weight and shape, and fear of gaining weight. The higher score in the respective scale shows higher level of body image dissatisfaction.

Procedure

First of all, a support letter for data collection was issued from the thesis coordinator of the Capital University of Science and Technology, Islamabad. Then permission was taken from different hospitals (Gyne ward) admission offices to reach the participants who lived in twin cities. Briefly explain the importance and purpose of the study to the selected participants and ensure the subject that their data was only used for research purposes. Also, take their sign on informed consent which states that the participant can withdraw from the study if they think their data was not correctly used. And ensures the confidentiality of their information and that their data was only used for researcher purposes.

The participant needs to fill Consent form (which comprises all the information about the researcher, the purpose, and importance of the study and it also states that one can withdraw from the research if they think that their data isn't in safe hands), A demographic sheet which comprises of basic information (i.e. Age, Education, family type, delivery type, Job status, and Any psychiatric treatment if received) of the participant this is only for the purpose that if someone diagnosis with the stated measured issues they will get informed as soon as possible.

The responses are collected on the Likert-type scale of three different variables (to measure Postpartum Depression researcher used 'The Edinburgh Postnatal Depression Scale EPDS' permission was already taken from the original author, to measure Body Image Dissatisfaction researcher used Body Shape BSQ-16; permission was already taken from the original author, to measure Social Support researcher used Multidimensional Scale for Perceived Social Support (MSPSS); permission was already taken from the original author of the scale.

Chapter III

Results

Data Analysis Procedure

Data were analyzed using IBM-SPSS version 21. It was devoted to finding out the frequencies, descriptive statistics, scatter plots, histograms, box plots, reliability (α), normality testing, and correlation to find out the relationship between the variables.

Spearman Correlation was used to produce a simple correlation coefficient (r) and to measure the strength, and the linear relationship between the two variables.

Table 1.

Frequencies (f) and percentages (%) of demographic variables in terms of delivery type, education, family system, and job status (N = 200)

Variables	Categories	Categories f	
Delivery type			
	Normal	82	41.0
	Cesarean	118	59.0
Education			
	Matric	18	9
	Intermediate	22	11
	BS	107	53
	MS	52	26
Family system			
	Neutral Family System	82	41
	Joint Family System	118	59

Job Status

Employed	63	31.5
Unemployed	137	68.5

Note. f= *frequency,* %= *Percentage,* **no missing values*

Table 1. Shows the categories that was formed on the basis of demographic characteristics i.e. delivery type, education, family system, and job status and indicates f= frequency, and %= percentage.

Table 2.

Descriptive Statistics of demographic variables

Variables	М	Mdn	Mode	SD	Skewness	Kurtosis
1. PPD	24.06	24.00	20.00	4.67	.05	.21
2. 67 SS	55.17	60.00	70.00	19.14	64	77
3. BID	40.90	36.50	27.00	18.15	.79	01

Table 1 indicates the descriptive characteristics of the variable i.e. mean, median, mode, standard deviation, skewness, and kurtosis of the study variable. Descriptive characteristics of Postpartum Depression are; (\mathbf{M} = 24.06, \mathbf{Mdn} = 24.00, \mathbf{Mo} = 20.00, \mathbf{SD} = 4.67, \mathbf{Sk} = .05, and \mathbf{K} = .21) in this condition the stated value of skewness represents positively skewed and the tale is on the right side and the value of kurtosis represents lepto kurtic as the value is positive and below 2, for Social support are; (\mathbf{M} = 55.17, \mathbf{Mdn} = 60.00, \mathbf{Mo} = 70.00, \mathbf{SD} = 19.14, \mathbf{Sk} = -.64, and \mathbf{K} = -.77) in this condition the stated value of skewness portray as negatively skewed; the tail is flatter on the left and the value of kurtosis depicts negative kurtosis so it was stated as platy kurtic because the value was below 2, for Body Image dissatisfaction are; (\mathbf{M} = 40.90, \mathbf{Mdn} = 36.50, \mathbf{Mo} = 27.00, \mathbf{SD} =

18.15, Sk= .79, and K= -.01) in this condition the values of skewness depicts that the BID data were positively skewed and the value of kurtosis shows that it was negatively kurtic represents platy kurtic.

Table 3.

Sca	ales	Items	М	SD	α	Range		Κ	Sk	KS
						Potential	Actual			
I.	PPD	10	24.06	4.67	.80	0-30	10-27	.21	.05	.00
II.	BID	16	40.90	18.15	.92	34-204	16-98	01	.79	.00
III.	SS	12	55.17	19.14	.95	12-84	16-84	77	64	.00

Reliability of Scales

Table 2 shows Cronbach alpha (α) reliability, mean (M), standard deviation (SD), range (actual and potential), skewness, and kurtosis of the study variables. Cronbach alpha (α) indicates that the selected scale is suitable for the sample. Results indicate Cronbach alpha (α) reliabilities of the *Edinburgh Postnatal Depression Scale* EPDS i.e. (.80), *Body Shape Questionnaire* BSQ i.e. (.92), and *Multidimensional Scale of perceived social support* MSPSS i.e. (.95). To examine the descriptive statistics of the scales, mean and standard deviation were calculated. Table 2 depicts the actual and potential range of the scale, by actual range it means the score the participants scored in the opted questionnaire and potential range indicates the actual score an individual can score in the psychological scale.

Table 2 also shows the normality testing of the study variables i.e. PPD, SS, and BID. Analysis indicates that the **'Kolmogorov Smirnov (KS)'** statistic, degree of freedom

(df), and level of significance for Postpartum Depression (PPD) are; **St**=.08 df= 200, and sig.= .002 shows that the data is non-normally distributed as the value is less than the set significance value i.e. 0.05, here the value of test statistic i.e. .08 provides additional information about the shape of the distribution, for Social support (PSS) are; **St**= .14, **df**= 200, Sig =.00, value shows that the data is non-normally distributed as the value is less than 0.05 which gives the direction for the implication of non-parametric tests, and for Body Image Dissatisfaction (BID) are; **St**= .11, df= 200, Sig.= .00 indicates similarly the non-normal distribution of data.

Table 4.

Variables	Ν	1	2	3
1. PPD	200	-	17**	.14*
2. SS	200		-	18**
3. BID	200			-

Correlation

*Correlation is significant at the 0.01 level (1-tailed)

**Correlation is significant at the 0.05 level (1-tailed)

Table 3 shows the relationship between postpartum depression, body image dissatisfaction, and social support on all the study variables. Spearmen's rho correlation depicts a negative significant correlation between social support and postpartum depression ($r = -.17^{**}$, p < .01). As the level of social support decreases postpartum depression tends to increase. Likewise, postpartum depression has a significant positive relation with body image dissatisfaction ($r = .14^{*}$, p < .05). Furthermore, social support has a significant negative relationship with body image dissatisfaction ($r = .18^{**}$, p < .05)

states that when an individual gets a lower level of social support from loved ones can lead an individual in the development of body image dissatisfaction.

Figure 1.

Histogram of Postpartum Depression (PPD)

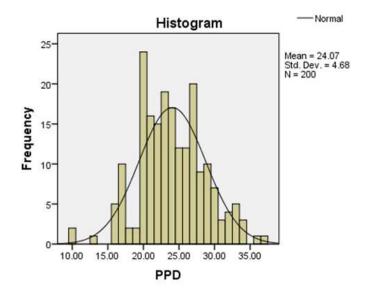
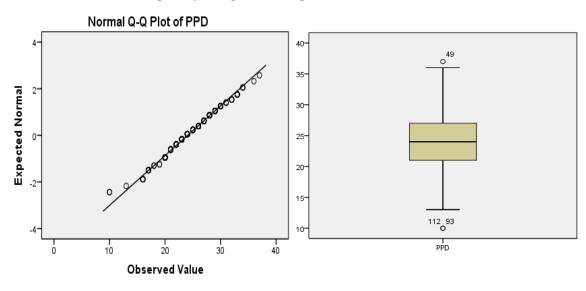


Figure 1. Indicates the histogram of (Postpartum Depression) PPD, which shows that the line begins from point 0 and ends at the same point and also creates a perfect bell shape curve which depicts that the data is normally distributed but as compared to the KS (Kolmogorov Smirnov) value i.e. 0.002 that is less than 0.05 so by considering this the data is normally distributed in nature.

Figure 2.



Scatter and Box plot of Postpartum Depression (PPD)

Figure 2. Shows that the box and Scatter plot of Postpartum Depression (PPD) shows 3 of the outliers that can affect the significance of the results. So, by considering these two figures, PPD is normally distributed.

Figure 3.

Histogram of Social support (SS)

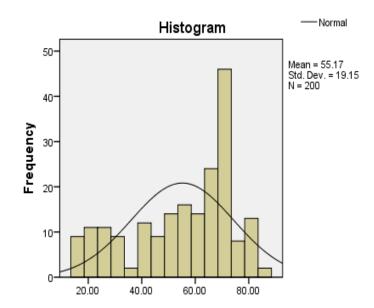
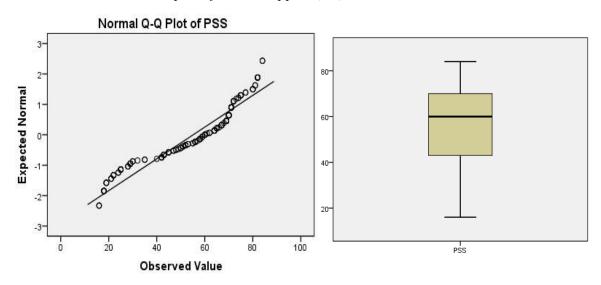


Figure 3 indicates the histogram of Social Support (PSS), which shows that the histogram starts from point 2 and ends at point 8, depicting the non-normal distribution of data and the bell shape curve exhibits the non-normal distribution of data. Also, the KS value of PSS shows the same results as the value of KS is 0.00 (p-value) showing the non-normal distribution of data as the value is below the stated KS-value i.e. 0.05.

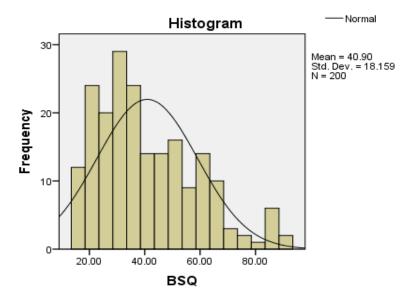
Figure 4.



Scatter and Box plot of Social support (SS)

Figure 4. Shows the scatter and box plot of social support, which indicates some of the outliers that depict that the study variables' characteristics are not normally distributed. Along with that KS value predicts the same results.

Figure 5.



Histogram of Body Image Dissatisfaction (BID)

Figure 5. Indicates the histogram of Body Image Dissatisfaction (BID), which shows that the histogram starts from point 5 and ends at point 2 which depicts the nonnormal distribution of data as it's not forming the perfect bell shape curve. Also, the KS value of BID shows the same results as the value of KS is 0.00.

Figure 6.

20

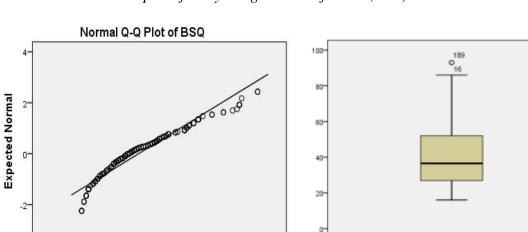
Ó

60

Observed Value

80

40



100

BSQ

Scatter and Box plot of Body Image Dissatisfaction (BID)

Figure 6. Shows the scatter and box plot of body image dissatisfaction (BID), which indicates some of the outliers in the scatter plot, and two of the outliers in the box plot, which depicts that the study variables' characteristics are not normally distributed. Furthermore, the KS value (p-value) portrays similar results.

Chapter IV

Discussion

This chapter is regarding demographic characteristics, the reliability of the scale, the relationship between the variables, and results of the stated hypothesis.

The main aim of the present study is to find out the relationship between Postpartum Depression, Body Image Dissatisfaction, and Social support. For that purpose, a few of the research protocols were followed i.e. Permission from the University, permission letters from different hospital's gyne wards, and Informed consent for the sake of permission from the participants also for letting the participants know about the purpose and importance of the study.

Demographic variables comprise the age of the participants, delivery type, education level, and family type as it has a greater impact on Mother's mental health, Job status, and psychological treatment (as it was mentioned in exclusion criteria that anyone suffering from the psychiatric problem wasn't included in the study).

The present study comprises 200 sample size which was collected using a purposive sampling technique (as data was collected on the basis of specific purpose) from different hospitals' gyne ward i.e. Islamabad, Rawalpindi. Data was collected using Likert-type scales that are psychological in nature i.e. Edinburgh Postnatal Depression Scale (EPDS) to measure postpartum depression, Body Shape Questionnaire-16 (BSQ-16) to measure body image dissatisfaction, and Multidimensional scale of perceived social support (MSPSS) to measure Social support in mothers that they are getting from three different sources i.e. friends, family, and significant others.

The reliability of the scales used in the current research was as follows; The original reliability of the scale 'Edinburgh Postnatal depression scale' was 0.9 and was used in previous Pakistani research as well (Bibi, Akram; 2002, Husain et al., 2006, Pao et al. 2019c, Dosani et al., 2022, Humayun, 2013, Hartley et al., 2017, Husain et al., 2011) and the Cronbach's alpha reliability is 0.80 of EPDS that indicates that the scale is highly suitable for the selected population, the original reliability of the scale 'Body Shape Questionnaire' BSQ-16 used to measure body image dissatisfaction the more an individual score in scale states an individual is highly concerned with his/her shape, reliability of the scale was 0.96 (Anwar, 2020, Regis et al., 2018, Khan et al., 2011, Sirang et al., 2013), it was comprised 6-items Likert scale and the Cronbach (α) reliability of BSQ is 0.92, and for the scale 'Multidimensional scale for Perceived Social Support' MSPSS was 0.83 (Rizwan, 2009, Qadir et al., 2013, Jibeen, 2015); it was comprised of 7-point Likert scale (Very strongly disagree to very strongly agree) and used to measure social support the (α) reliability of MSPSS is 0.95 which is used to assess internal consistency or reliability of the questionnaires in the selected population. It indicates the degree to which the items within the scale are correlated with each other, reflecting the internal consistency of the scale. Cronbach's alpha (α) ranges from 0 to 1, with higher values indicating greater internal consistency.

Past researchers depict that there is a positive relationship between Postpartum Depression and Body image dissatisfaction as mothers in that period gain a lot of weight that ultimately affects their physical/ mental health. This may lead to different psychological disorders when they are unable to look good in their desired outfits or society's expectations of women (Solorzano, Porciello, Violani; 2022) Hypothesis 1 (H1) was coined based on past research conducted by Marushka L. Silveira in 2015, a study was conducted on the role of body image in prenatal postpartum depression: a critical review of the literature that gives a piece of evidence that body image plays an important role in developing depression (Silveira, Ertel, Taber, Dole; 2015). That proves the first stated hypothesis i.e. there is a significant positive relationship between Body Image Dissatisfaction (BID) and Postpartum Depression. This was also proven by spearmen correlation analysis (.14*) that indicates a significant positive relationship at 0.05 level (Silveira. M, 2015).

A study was conducted in December 1994 by Dr. Mimia Cynthia, on social support and postpartum depression that indicates discrepancies between social support and postpartum depression the sample size of this study was 105 women which depicts that there is a negative relationship between these two variables. This research proves the second hypothesis that a negative relationship exists between postpartum depression and social support. This was also proven by Spearmen correlation analysis i.e. (-.17**) which depicts that there is a highly negative correlation between PPD and PSS (Cynthia. M, 1994).

The hypotheses were tested using Spearmen's rho correlation as the data were non-normally distributed (Verma, 2019). The findings of this research are consistent with past researchers specify that mothers going through the postpartum period had a greater chance of developing postpartum depression if they didn't receive the required amount of psychosocial support. The sample of this research was 200 mothers which was a bit less than the previous research and may affect the results of the study. The main objective of studying these variables was to find out the relationship between postpartum depression, body image dissatisfaction, and social support. The major significance of considering these variables is to highlight the need for psychologists in gyne wards of different hospitals in twin cities as postpartum depression can cause severe consequences if left untreated. Also, this research will help future researchers in intervention or therapy planning, stress management, and communication skills for both parents, especially social support for the mother in this crucial time as a woman is very sensitive the whole period.

Limitations and Suggestions

The current study had time constraints, and issues in generalizability due to the smaller sample size and specificity of location. When studying postpartum depression, body image dissatisfaction, and social support among mothers of twin cities, a few potential limitations were encountered i.e. **Selection Bias**: There was a section of biases in the sample, as participation in the study was voluntary participation or based on certain criteria. This results in a non-representative sample and limits the generalizability of the findings. **Self-Reporting bias**: The data was collected using psychological scales that rely on self-reporting measures, which were subject to biases such as social desirability bias or recall bias. Participants may report over-report or under-report symptoms of postpartum depression, body image dissatisfaction, and psychosocial support leading to inaccurate results.

External factors: the current study doesn't account for external factors that can influence PPD, BID, or SS. Factors such as socioeconomic factors, (Pao et al., and 2019b), cultural differences, social support networks, or previous mental health history

can all contribute to the outcomes. **Homogeneity of the sample:** the study primarily focuses on one specific demographic or population group, such as mothers within a specific age range or socioeconomic status, the findings do not apply to a more diverse population. **Potential Confounding variables:** there may be confounding variables that influence the relationship between postpartum depression, body image dissatisfaction, and psychosocial support. Failure to account for or control these variables could impact the validity of the study's findings.

The current study was a correlational research design. However; in future studies, it can be longitudinal or cross-sectional, experimental, and quasi-experimental designs can be used to study the same variable or to investigate the temporal relationship between PPD, BID, and PSS. By collecting data at multiple time points, it would be possible to examine how changes in body image dissatisfaction and psychosocial support over time are related to the development and persistence of postpartum depression. The sample size of the current study was 200 mothers as it was a pure clinical study so a purposive sampling technique was used to collect the data from different hospitals gyne wards of Islamabad and Rawalpindi. Future studies can increase their sample size for better generalizability.

Future researchers can also explore the potential mediating factors that may explain the relationship between BID, SS, and PPD. Understanding the underlying mechanism can provide insight into effective intervention strategies. Also, examine the impact of cultural factors on the study variables. Compare the experience of mothers from different cultural backgrounds within the twin cities and asses how cultural norms, values, and expectations may influence body image dissatisfaction, postpartum depression, and the availability and effectiveness of psychosocial support.

The researcher can also investigate the role of partners and family members in body image dissatisfaction, social support, and postpartum depression. Explore how partner support and involvement in the parenting process may influence the mother's body image perception and mental well-being. Consider the potential benefits of interventions involving partners and family members to enhance support and reduce the risk of PPD.

Community-based support programs; Assess the availability and accessibility of community-based support programs for mothers of twin cities. Investigate the role of support groups, educational programs, or community services in addressing BID and PPD. Examine the effectiveness of these programs and identify strategies to improve their reach and reach.

Online Support Networks; explore the use of online platforms and social media for providing psychosocial support to mothers. Investigate the influence of online communities, forums, and support groups on BID and PPD. Examine the potential benefits and drawbacks of virtual support networks and identify ways to maximize their effectiveness while addressing potential concerns.

Recommendations/Implications

The outcomes of this research will provide a base for future studies related to the study variables i.e. Postpartum Depression, Body Image Dissatisfaction, and Social Support as previously these three variables are not studied together within the twin cities of the Pakistani context. This study will help future researchers to work on intervention planning, therapy planning, and working more on the communication skills of both parents. Also, help individuals or practitioners to psycho-educate the sufferers. Results will help clinical psychologists understand mothers' problems more efficiently and effectively and help them overcome depression as timely as possible.

Some of the recommendations/ implications of the research study are;

To develop and promote an integrated healthcare approach that addresses the interplay between PPD, BID, and SS. Healthcare providers should consider screening for PPD and BID during routine postnatal check-ups and offer appropriate referrals for mental health support and BI interventions when needed.

Education and awareness; Increase awareness among healthcare providers, mothers, and the general public about the impact of BID on PPD. Provide educational materials and workshops that highlight the potential risk factors and consequences of negative body image perceptions during the postpartum period. This can help reduce stigma and promote early interventions and support.

Body-positive initiatives; Implement body-positive initiatives that aim to promote a healthy body image among mothers. These initiatives could include workshops, support groups, or online resources focused on body acceptance, self-care, and self-esteem building. By enhancing body positivity, it may be possible to reduce BID and its negative impact on physical or mental health.

Enhancing psychosocial support; Strengthen the availability and accessibility of social support programs for mothers, especially those at higher risk of PPD and BID.

This may involve increasing the number of support groups, offering counseling services, and collaborating with community organizations to create a supportive network for mothers of twin cities.

Partner and family involvement; Encourage partner and family involvement in supporting mothers during the postpartum period. Provide education and resources to partners and family members to help them better understand the challenges faced by new mothers and ways to provide effective support. Promote communication and shared responsibilities to alleviate the burden on mothers and enhance psychosocial support.

Multidisciplinary collaboration; Foster collaboration among health care providers, mental health professionals, and body image experts to develop comprehensive interventions and support programs. Integrating expertise from various disciplines leads to a more holistic approach to addressing PPD, BID, and SS.

Policy and community support; advocate for policies that prioritize maternal mental health and body image well-being. Support initiatives that enhance access to affordable mental health services, body-positive environments, and community-based support programs. Engage community leaders, policymakers, and stakeholders to raise awareness and promote positive change.

References

American Psychiatric Association. (2022). *Diagnostic and Statistical Manual of Mental Disorders, Text Revision Dsm-5-tr* (5th Ed.). Amer Psychiatric Pub Inc.

APA PsycNet. (n.d.). https://psycnet.apa.org/record/1994-17211-001

- Beck CT. Predictors of postpartum depression: an update. Nurse Res 2001Robertson E, Grace S, Wallington T, Stewart DE. Antenatal risk factors for postpartum depression: a synthesis of recent literature. *Gen Hospital Psychiatry 2004*.
- COHEN, S., & JANICKI-DEVERTS, D. (2012). Who's stressed? Distributions of Psychological Stress in the United States in Probability Samples from 1983, 2006, and 20091. *Journal of Applied Social Psychology*, 42(6), 1320–1334. <u>https://doi.org/10.1111/j.1559-1816.2012.00900.x</u>.
- Connor, K. M., Vaishnavi, S., Davidson, J. R., Sheehan, D. V., & Sheehan, K. H. (2007). Perceived stress in anxiety disorders and the general population: A study of the Sheehan stress vulnerability scale. *Psychiatry Research*, 151(3), 249–254. https://doi.org/10.1016/j.psychres.2006.11.008.
- Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987; 150: 782-6.
- Clement S. Psychological aspects of cesarean section. Best Practice Research Clinic Obstet Gynaecol 2001.
- Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987; 150: 782-6.

- Carter FA, Frampton CM, Mulder RT. Cesarean section and postpartum depression: a review of the evidence examining the link. *Psychosomatic Med 2006*.
- Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: development of the 10-item Edinburgh Postnatal Depression Scale (EPDS). *Br J Psychiatry 1987*.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. Measuring stress: A guide for health and social scientists, 10(2).
- Coskun A, Kostu B, Ercan O, Kiran H, Guven MA, Kiran G. The comparison of deliveries in the center of Kahramanmaras in 2004 and 2006. *Journal of Turkish Obstetrics and Gynecology Society 2007*; 4:168-172. (Turkish)
- DiMatteo MR, Morton SC, Lepper HS, Damush TM, Carney MF, Pearson M, Kahn KL. Cesarean childbirth and psychosocial outcomes: *a meta-analysis*. Health Psychology 1996.
- Danaci AE, Dinc G, Deveci A, Sen FS, Icelli I. Postnatal depression in Turkey: epidemiological and cultural aspects. *Soc Psychiatry Epidemiology 2002*
- Engindeniz AN, Kuey L, Kultur S. Validity and reliability of Turkish version of Edinburgh Postnatal Depression Scale. Book of Annual Meeting of Psychiatric Association of Turkey. *Turkish Psychiatric Association Press, Ankara, 1996*.
- Evans J, Heron J, Fran comb H, Oke S, Goldberg J (2001) Cohort study of depressed mood during pregnancy and after childbirth. Br Med J *323:257–260*.
- Field T (2008) Problems in infancy. In: Hersen M, Gross AM (Eds) Handbook of clinical psychology vol II: children and adolescents. Wiley, Hoboken NJ, pp 966–1011.

- Flores-Cornejo, F., Kamego-Tome, M., Zapata-Pachas, M. A., & Alvarado, G. F. (2017). Association between body image dissatisfaction and depressive symptoms in adolescents. *Revista Brasileira De Psiquiatria*, 39(4), 316–322. <u>https://doi.org/10.1590/1516-4446-2016-1947</u>.
- Gjerdingen, D., Fontaine, P., Crow, S., McGovern, P., Center, B., & Miner, M. (2009).
 Predictors of Mothers' Postpartum Body Dissatisfaction. *Women & Health*, 49(6–7), 491–504. <u>https://doi.org/10.1080/03630240903423998</u>.
- Gavin NI, Gaynes BN, Lohr KN, Meltzer-Brody S, Gartlehner G, Swinson T (2005)
 Perinatal depression: a systematic review of prevalence and incidence. Obstet
 Gynaecol 106:1071–1083 Akram, B., Ahmed, M. A., Maqsood, F., & Bibi, B. (2020)
- Hamdan, A., & Tamim, H. (2012). The Relationship between Postpartum Depression and Breastfeeding. *International Journal of Psychiatry in Medicine*, 43(3), 243–259. <u>https://doi.org/10.2190/pm.43.3.d</u>.
- Hassan HA, Evans MK. Women's Long-Term Life Experience after Pregnancy Termination for Fetal Abnormality: *Interpretive Phenomenological Study*. [Online] 2015 [Cited 2018 Sep 10].
- Husain, N., Bevc, I., Husain, M., Chaudhry, I. B., Atif, N., & Rahman, A. (2006).
 Prevalence and social correlates of postnatal depression in a low income country.
 Archives of Women's Mental Health, 9(4), 197–202.
 https://doi.org/10.1007/s00737-006-0129-9.
- Husain, N., Parveen, A., Husain, M., Saeed, Q., Jafri, F., Rahman, R. U., Tomenson, B., & Chaudhry, I. S. (2011). Prevalence and psychosocial correlates of perinatal

depression: a cohort study from urban Pakistan. Archives of Women's Mental Health, 14(5), 395–403. https://doi.org/10.1007/s00737-011-0233-3.

- Hartley, E., Hill, B., McPhie, S., & Skouteris, H. (2017). The associations between depressive and anxiety symptoms, body image, and weight in the first year postpartum: a rapid systematic review. *Journal of Reproductive and Infant Psychology*, 36(1), 81–101. https://doi.org/10.1080/02646838.2017.1396301.
- Hampel, P., & Petermann, F. (2006). Perceived stress, coping, and adjustment in adolescents. *Journal of Adolescent Health*, 38(4), 409–415. <u>https://doi.org/10.1016/j.jadohealth.2005.02.014</u>.
- Investigation of the cesarean section cases in our clinic between 2002 and 2007. Marmara Medical Journal 2009; 22:104-110.
- Johansson, M., Benderix, Y., & Svensson, I. (2020). Mothers' and fathers' lived experiences of postpartum depression and parental stress after childbirth: a qualitative study. *International Journal of Qualitative Studies on Health and Well-Being*, 15(1), 1722564. https://doi.org/10.1080/17482631.2020.1722564.
- Kathryn M. Connor, Sandeep Vaishnavi, Jonathan R.T. Davidson, David V. Sheehan, K. Harnett Sheehan,
- Kim, T. H. M., Connolly, J., & Tamim, H. (2014). The effect of social support around pregnancy on postpartum depression among Canadian teen mothers and adult mothers in the maternity experiences survey. *BMC Pregnancy and Childbirth*, *14*(1). <u>https://doi.org/10.1186/1471-2393-14-162</u>.

- Li, D., Cui, Y., Liu, Y., Zheng, Y., Zeng, Y., & Cheng, A. S. K. (2021). A Chain Mediation Model of Perceived Stress, Neuroticism, and Psychological Inflexibility on Depressive Symptoms of Chinese New Fathers. *American Journal of Men's Health*, *15*(5), 155798832110543. <u>https://doi.org/10.1177/15579883211054351</u>.
- Logsdon, M. C., & McBride, A. B. (1994). Social support and postpartum depression. *Research in Nursing &Amp; Health*, 17(6), 449–457. <u>https://doi.org/10.1002/nur.4770170608</u>.
- Logsdon, M. C., Birkimer, J. C., Simpson, T. M., & Looney, S. W. (2005). Postpartum Depression and Social Support in Adolescents. *Journal of Obstetric, Gynecologic,* & Neonatal Nursing, 34(1), 46–54. <u>https://doi.org/10.1177/0884217504272802</u>.
- Lobel M, DeLuca RS. Psychosocial sequelae of cesarean delivery: review and analysis of their causes and implications. Soc Sci Med 2007.
- Luoma I, Tamminen T, Kaukonen P, Laippala P, Puura K, Salmelin R, Almqvist F. Longitudinal study of maternal depressive symptoms and child well-being. J Am Academy Child Adolescent Psychiatry 2001.
- Mc, L., McBride, A. B., & Birkimer, J. C. (1994). Social support and postpartum depression. *Research in Nursing & Health*, 17(6), 449–457. <u>https://doi.org/10.1002/nur.4770170608</u>
- Mercan, Y., & Tari Selcuk, K. (2021). Association between postpartum depression level, social support level, breastfeeding attitude, and breastfeeding self-efficacy in early postpartum women. *PLOS ONE*, *16*(4), e0249538.
 <u>https://doi.org/10.1371/journal.pone.0249538</u>.

- Miller, L. J. (2002). Postpartum Depression. JAMA, 287(6), 762. https://doi.org/10.1001/jama.287.6.762.
- Mitchell, J. L. T. M., & Ph. D., J. E. G. S. (2022). International Journal of EMERGENCY MENTAL HEALTH, Volume 9, Number 4, FALL 2007. Chevron Publishing Corporation.
- Nylen KJ, Moran TE, and Franklin CL, O'Hara M (2006) maternal depression: a review of relevant treatment approaches for mothers and infants. *Infant Mental Health* J 27:327–343.
- O'Hara MW, Swain AM. Rates and risk of postpartum depression a meta-analysis. International Rev Psychiatry 1996.
- Pao, C., Guintivano, J., Santos, H. P., & Meltzer-Brody, S. (2019). Postpartum depression and social support in a racially and ethnically diverse population of women. *Archives of Women's Mental Health*, 22(1), 105–114. <u>https://doi.org/10.1007/s00737-018-0882-6</u>.
- Pao, C., Guintivano, J., Santos, H. P., & Meltzer-Brody, S. (2019c). Postpartum depression and social support in a racially and ethnically diverse population of women.
 Archives of Women's Mental Health, 22(1), 105–114.
 https://doi.org/10.1007/s00737-018-0882-6.
- Postpartum psychiatric disorders: Early diagnosis and management. [Online] 2015 [Cited 2018 July 14]. Available from: URL: / 3. Zhou C. Zheng W, Yuan Q, Zhang B, Chen H, Wang W, et al <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4539865</u>.

- Postpartum depression and suicidal ideation in new mothers with hearing loss: Perceived social support as a moderator, a multicenter study Zhang, Y., & Jin, S. (2016)
- Pope, C. J., & Mazmanian, D. (2016). Breastfeeding and Postpartum Depression: An Overview and Methodological Recommendations for Future Research. *Depression Research and Treatment*, 2016, 1–9. https://doi.org/10.1155/2016/4765310.
- Riesco-González, F. J., Antúnez-Calvente, I., Vázquez-Lara, J. M., Rodríguez-Díaz, L.,
 Palomo-Gómez, R., Gómez-Salgado, J., García-Iglesias, J. J., Parrón-Carreño, T.,
 & Carrasco, F. F. (2022). Body Image Dissatisfaction as a Risk Factor for
 Postpartum Depression. *Medicine-Lithuania*, 58(6), 752.
 https://doi.org/10.3390/medicina58060752.
- Reid, K., & Taylor, M. G. (2015). Social support, stress, and maternal postpartum depression: A comparison of supportive relationships. *Social Science Research*, 54, 246–262. <u>https://doi.org/10.1016/j.ssresearch.2015.08.009</u>.
- Schwab-Reese, L. M., Schafer, E. J., & Ashida, S. (2016). Associations of social support and stress with postpartum maternal mental health symptoms: Main effects, moderation, and mediation. *Women &Amp; Health*, 57(6), 723–740. https://doi.org/10.1080/03630242.2016.1181140.
- Silveira, M. L., Ertel, K. A., Dole, N., & Chasan-Taber, L. (2015). The role of body image in prenatal and postpartum depression: a critical review of the literature. *Archives* of Women's Mental Health, 18(3), 409–421. <u>https://doi.org/10.1007/s00737-015-0525-0</u>.

- Solórzano, C. S., Porciello, G., Violani, C., & Grano, C. (2022). Body image dissatisfaction and interoceptive sensibility significantly predict postpartum depressive symptoms.
 Journal of Affective Disorders, 311, 239–246. https://doi.org/10.1016/j.jad.2022.05.109q2.
- The influence of day 3 embryo cell number on the clinical pregnancy and live birth rates

 of day 5 single blastocyst transfer from frozen embryo transfer cycles. (2022,

 December
 29).

 Biomed
 Central.

 https://bmcpregnancychildbirth.biomedcentral.com/articles.
- Tol, W. A., Barbui, C., Galappatti, A., Silove, D., Betancourt, T. S., Souza, R. R., Golaz, A., & Van Ommeren, M. (2011). Mental health and psychosocial support in humanitarian settings: linking practice and research. *The Lancet*, 378(9802), 1581–1591. <u>https://doi.org/10.1016/s0140-6736(11)61094-5</u>.

The impact of social support on postpartum depression: The mediator role of self-efficacy.

- World Health Organization. (2015). International Statistical Classification of Diseases and Related Health Problems: 10th Revision (ICD-10) (2016 Revision).
- Xie, R., He, G., Koszycki, D., Walker, M., & Wen, S. W. (2009). Prenatal Social Support, Postnatal Social Support, and Postpartum Depression. *Annals of Epidemiology*, 19(9), 637–643. <u>https://doi.org/10.1016/j.annepidem.2009.03.008</u>.
- Yadav, T., Shams, R., Khan, A. F., Azam, H., Anwar, M., Anwar, T., Siddiqui, C., Abbas, K., Sukaina, M., & Ghazanfar, S. (2020). Postpartum Depression: Prevalence and Associated Risk Factors among Women in Sindh, Pakistan. *Cureus*. https://doi.org/10.7759/cureus.12216.

- Yadav, T., Shams, R., Khan, A. F., Azam, H., Anwar, M., Anwar, T. & Khan, A. (2020).
 Postpartum depression: prevalence and associated risk factors among women in Sindh, Pakistan. *Cureus*, 12(12).
- Zvolensky, M. J., Goodie, J. L., Ruggiero, K. J., Black, A. L., Larkin, K. T., & Taylor, B.
 K. (2002). Perceived Stress and Anxiety Sensitivity in the Prediction of Anxiety-Related Responding: A Multichallenge Evaluation. *Anxiety, Stress & Amp; Coping,* 15(3), 211–229. <u>https://doi.org/10.1080/1061580021000020699</u>.
- Zimet GD, Dahlen NW, Zimet SG. The multidimensional scale of perceived social support. J Pers Assess 1988.

APPENDICES

•

Appendix A

(Inform Consent)

I <u>Zunaira Imran Hasni</u> enrolled in BS Psychology at Capital University of Science and Technology. I hereby invite you to take part in my research. The title of my research is "Relationship between Postpartum Depression, Body Image Dissatisfaction, and Psychosocial Support among Mothers of twin cities."

To participate in this research; you have to fill out the questionnaires given. Your identity will be kept confidential. If you want to terminate your participation in this study you can do so with no questions being asked.

Please contact me if you have any questions related to the study,

Email: syedazunaira8411@gmail.com

Signature

Zunaira Imran Hasni

Thank You!

Date: _____

Appendix B

(Demographic Sheet)

I would like to start by asking you for some information. Please try to be as truthful as possible when answering these questions.

Demographic Information: -

Age:	
Delivery type: Normal Cesarean	
Education Level: 1) Matric 2) Intermediate 3) BS 4) MS 5)	PhD
Family System:1) Neutral family system2) Joint family system	
Job Status 1) Employed 2) Unemployed	
Treatment: Any Psychological or Psychiatric	
If any	

Appendix C

(Support Letter)



Capital University of Science and Technology Islamabad Islamabad Expressway, Kahuta Road, Zone - V, Islamabad, Pakistan Telephone :+92-(51)-111-555-666 :+92-51-4486705 Fax: :+92-(51)-4486705 Email: ::nfo@cust.edu.pk Website: ::www.cust.edu.pk

Ref. CUST/IBD/PSY/Thesis-387 February 28, 2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms. Zunaira Imran, registration number BSP193001 is a bona fide student in BS Psychology program at this University from Fall 2019 till date. In partial fulfillment of the degree, she is conducting research on "Relationship between postpartum depression, body image dissatisfaction, and psychosocial support among mother of twin cities". In this continuation, the student is required to collect data from your institute.

Considering the forgoing, kindly allow the student to collect the requisite data from your institute. Your cooperation in this regard will be highly appreciated.

Please feel free to contact undersigned, if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani Head, Department of Psychology Ph No. 111-555-666 Ext: 178 sabahat.haqqani@cust.edu.pk

Appendix D

(Edinburgh Postnatal Depression Scale)

As you are pregnant or have recently had a baby, we would like to know how you are feeling. Please check the answer that comes closest to how you have felt IN THE PAST 7 DAYS, not just how you feel today.

Here is an example, already completed.

I have felt happy:

- Ves. all the time.
- This would mean: "I have felt happy most of the time" during the past week. Yes, most of the time
- Please complete the other questions in the same way. No, not very often
- No. not at all.

In the past 7 days:

- 1. I have been able to laugh and see the funny side of things "6. Things have been getting on top of me
 - As much as I always could
 - Not guite so much now
 - Definitely not so much now
 - Not at all

I have looked forward with enjoyment to things

- As much as I ever did
- Rather less than I used to
- Definitely less than I used to
- Hardly at all
- *3. I have blamed myself unnecessarily when things went wrong
 - Yes, most of the time.
 - Yes, some of the time
 - Not very often.
 - No. never
- I have been anxious or worried for no good reason
 - No. not at all
 - Hardly ever
 - Yes, sometimes
 - Yes, very often
- *5 I have felt scared or panicky for no very good reason
 - Yes, quite a lot
 - Yes, sometimes
 - No, not much
 - No. not at all

- - Yes, most of the time I haven't been able to cope at all
 - Yes, sometimes I haven't been coping as well as usual
 - No, most of the time I have coped guite well
 - No, I have been coping as well as ever
- *7 I have been so unhappy that I have had difficulty sleeping
 - Yes, most of the time
 - Yes, sometimes
 - Not very often
 - No, not at all
- *8 I have feit sad or miserable
 - Yes, most of the time
 - Yes, quite often
 - Not very often.
 - No, not at all
- "9 I have been so unhappy that I have been crying
 - Yes, most of the time
 - Yes, guite often
 - Only occasionally
 - No. never
- *10 The thought of harming myself has occurred to me
 - Yes, quite often
 - Sometimes
 - Hardly ever
 - D Minime



Gavin PhilipsonWednesdayTo: Scotland, SelenaCc: Vikki & 1 more... >

Re: REQUEST FOR PERMISSION GRANT

Hi Susan

I don't think permission is needed if the original paper is referenced. This is what was at the bottom of the EDPS I looked at -

Please note: Users may reproduce this scale without further permission providing they respect the copyright (which remains with the British Journal of Psychiatry), quote the names of the authors and include the title and the source of the paper in all reproduced copies. Cox, J.L., Holden, J.M. and Sagovsky, R. (1987). Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. British Journal of Psychiatry, 150, 782-786.

Regards

Gavin

Appendix E

(Body Shape Questionnaire-16)

Body Shape Questionnaire (BSQ-16B)

We should like to know how you have been feeling about your appearance over the **PAST** FOUR WEEKS. Please read each question and circle the appropriate number to the right. Please answer <u>all</u> the questions.

		1	Rar	ely			
			Sometimes				
		- î.					
		÷È	1	1	1	Ver	y often
01	ER THE PAST FOUR WEEKS:	÷					
		- 8	- 12	- i -		1	Alway
1.	Have you been so worried about your shape that you have been feeling you ought to diet?	1	2		1		1000
2.	Have you been afraid that you might become fat (or fatter)?		2				
3.		1	2	3	4	5	6
4.	Have you noticed the shape of other women and felt that your own shape compared unfavourably?	1	2	3	4	5	6
5.	Has thinking about your shape interfered with your ability to concentrate (e.g. while watching television, reading, listening to conversations)?	1	2	3	4	5	6
6.	Has being naked, such as when taking a bath, made you feel fat?	1	2	3	4	5	6
7.	Have you imagined cutting off fleshy areas of your body?	1	2	3	4	5	6
8.	Have you not gone out to social occasions (e.g. parties) because you have felt bad about your shape?	1	2	3	4	5	6
9.	Have you felt excessively large and rounded?			3	4	5	6
10	Have you thought that you are in the shape you are because you lack self-control?	1	2	3	4	5	6
11	Have you worried about other people seeing rolls of fat around your waist or stomach?	1	2	3	4	5	6
12	When in company have your worried about taking up too much room (e.g. sitting on a sofa, or a bus seat)	1	2	3	4	5	6
13.	Has seeing your reflection (e.g. in a mirror or shop window) made you feel bad about your shape?	1	2	3	4	5	6
14.	Have you pinched areas of your body to see how much fat there is?	1	2	3	4	5	6
15.	Have you avoided situations where people could see your body (e.g. communal changing rooms or swimming baths)?	1	2	3	4	5	6
16.	Have you been particularly self-conscious about your shape when in the company of other people?	1		650	4	C 72	6

4		No
	-	22
	-	8

bsq@psyctc.org 1:01 pm

to me 🗸

Dear Syeda,

It looks as if you will be using the BSQ-16B in English so not changing anything so you are welcome to use it. Good luck with your work.

Pedantry forces me to say that technically it's not my scale as shortening the BSQ was my work but the items and real authorship is still with Melanie Bash (née Taylor) and her coauthors. I do this, i.e. provide the BSQ web pages and answer Emails about the BSQ, with their permission.

Very best,

Chris

On 24/02/2023 09:55, BSQ permission form wrote:

Name

Syeda Zunaira

Email

syedazunaira8411@gmail.com

If you are just contacting me about the BSQ, you only need to fill in this field, if you are :

Appendix F

(Multidimensional Scale for Perceived Social Support)

Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree Circle the "2" if you Strongly Disagree Circle the "3" if you Mildly Disagree Circle the "4" if you are Neutral Circle the "5" if you Mildly Agree Circle the "6" if you Strongly Agree Circle the "7" if you Very Strongly Agree

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7	SO
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	SO
3.	My family really tries to help me.	1	2	3	4	5	6	7	Fam
4.	I get the emotional help and support I need from my family.	1	2 2	3 3	4	5	6	7	Fam
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7	SO
6.	My friends really try to help me.	1	2	3	4	5	6	7	Fri
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7	Fri
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7	Fam
9.	I have friends with whom I can share my joys and sorrows.	1	2 2	3	4	5 5	6	7	Fri
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7	SO
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7	Fam
12.	I can talk about my problems with my friends.	1	2 2	3 3	4	5	6	7	Fri



Zimet, Gregory... 5 days ago to me ∽

Hello,

You have my permission to use the Multidimensional Scale of Perceived Social Support (MSPSS) in your research. I have attached several documents: 1. A copy of the original English version of the scale, with scoring information on the 2nd page; 2. A document listing several articles that have reported on the reliability and validity of the MSPSS (references #19, #24, and #29 all report on Urdu versions of the scale); 3. A chapter on the MSPSS; and 4. Copies of two Urdu translations and an article on the Tonsing translation (you have my permission to use either of these translations).

I hope your research goes well.

Best regards,

Greg Zimet

56

Zunaira Imran Hasni BSP193001 Plagirism

16	10	10	0
SIMILARITY INDEX	INTERNET SOLIRCES	PUBLICATIONS	O% STUDENT PAPERS
PRIMARY SCHORES			
1 WWW.Fe	esearchgate.net		2%
2 link.spr	inger.com		1%
María	Cobo-Rendón, Ya /ictoria Pérez-Vil ujica. "Perceived on Changes in tl onic Well-Being ts", Frontiers in I	lalobos, Alejan Social Suppor he Affective an of Chilean Uni	dro t and Its nd versity
Antúne Luciano Dissati	co Javier Riesco- z-Calvente, Juan o Rodriguez-Diaz sfaction as a Risk rtum Depression	a María Vázqu et al. "Body ir Factor for	ez-Lara, nage
5 e-migra	ation.ro		1 %