

Bereavement and Post-Traumatic Growth: The Role of Religious Coping, Cognitive Processes and Social Support



BY

SYED AZIZ UD DIN

Dr. Muhammad Ajmal

NATIONAL INSTITUTE OF PSYCHOLOGY

Centre of Excellence

Quaid-i-Azam University

Islamabad-Pakistan

2022

Bereavement and Post-Traumatic Growth: The Role of Religious Coping, Cognitive Processes and Social Support

BY
SYED AZIZ UD DIN

A dissertation submitted to

Dr. Muhammad Ajmal

NATIONAL INSTITUTE OF PSYCHOLOGY

Centre of Excellence

Quaid-i-Azam University

Islamabad-Pakistan

In partial fulfillment of the requirement for the degree of

DOCTOR OF PHILOSOPHY

IN

PSYCHOLOGY


2022

Author's Declaration

I (Syed Aziz Ud Din) hereby state that my Ph.D thesis titled **"Bereavement And Post-Traumatic Growth: Role Of Religious Coping And Social Support"** is my own work and has not been submitted previously by me for taking any degree from this University (Quaid-i-Azam University, Islamabad) or anywhere else in the country.

At any time if my statement is found to be incorrect even after my Graduate the university has the right to withdraw my Ph.D degree

Syed Aziz Ud Din

Signature: 

Dated .

Plagiarism Undertaking

I (Syed Aziz Ud Din) solemnly declare, that research work presented in the thesis titled "**Bereavement and Post-Traumatic Growth: Role Of Religious Coping, Cognitive Processes And Social Support**" is solely my research work with no significant contribution from any other person. Small contribution/help wherever taken has been duly acknowledged and that complete thesis has been written by me.

I understand the zero tolerance policy of the HEC and University (Quaid-i-Azam University, Islamabad) towards plagiarism. Therefore, I as an author of the above titled thesis declare that no portion of my thesis has been plagiarized and any material used as reference is properly referred/cited.

I undertake that if I am found guilty of any formal plagiarism in the above titled thesis even after the award of the Ph.D degree, the University reserves the right to withdraw/revoke my Ph.D degree and that HEC and the University has the right to publish my name on the HEC/University Website on which names of students are placed who submitted plagiarized thesis.

Student/Author's Signature: 

Name: Syed Aziz Ud Din

Turnitin Originality Report

DEREAVEMENT AND POST TRAUMATIC GROWTH THE ROLE OF RELIGIOUS COPING, COGNITIVE PROCESSES AND SOCIAL SUPPORT by Syed Aziz Uddin Agha

File: DRSM (DRSM L)

- Processed on 04-Sep-2020 09:57 PKT
- ID: 1379434932
- Word Count: 31476

Similarity Index: 13%

Similarity by Source:

Internet Sources: 7%

Publications: 10%

Student Papers: 4%

Sources:

Focal Person (Turnitin)
Quaid-I-Azam University
Islamabad

Director
National Institute of Psychology
Centre of Excellence
Quaid-I-Azam University,
Islamabad

- 1% match (publications)
"Comprehensive Guide to Post-Traumatic Stress Disorders", Springer Science and Business Media LLC, 2016
- 1% match (Internet from 17-Oct-2018)
http://ama-assn.org/doi/pdf/10.1093/ajph/2018.108.1088
- < 1% match (Internet from 19-Sep-2019)
https://scholar.uoi.edu/cgi/viewcontent.cgi?amp=Zotero%3Afile%3A51108&context=etd
- < 1% match (Internet from 30-Apr-2020)
https://www.researchgate.net/publication/341111111/figure/fig1/AS:631641474014111@1588234444444
- < 1% match (Internet from 11-Apr-2019)
https://www.researchgate.net/publication/331111111/figure/fig1/AS:631641474014111@1588234444444
- < 1% match (student papers from 20-Dec-2017)
Submitted to Higher Education Commission Pakistan on 2017-12-20
- < 1% match (publications)
Carmin, C. F., Romito, F., Galati, and M. Manno. Post-Traumatic Growth in the Italian Population of Long-Term Care for Dementia Patients. Post-Traumatic Growth in Long-Term Care for Dementia: Stress and Habits, 2013.
- < 1% match (Internet from 22-May-2009)
http://www.researchgate.net/publication/331111111/figure/fig1/AS:631641474014111@1588234444444
- < 1% match (publications)
Carmin, C. F., Romito, F., Galati, and M. Manno. Post-Traumatic Growth in the Italian Population of Long-Term Care for Dementia Patients. Post-Traumatic Growth in Long-Term Care for Dementia: Stress and Habits, 2013.
- < 1% match (publications)
Carmin, C. F., Romito, F., Galati, and M. Manno. Post-Traumatic Growth in the Italian Population of Long-Term Care for Dementia Patients. Post-Traumatic Growth in Long-Term Care for Dementia: Stress and Habits, 2013.
- < 1% match (Internet from 05-Sep-2019)
https://www.researchgate.net/publication/331111111/figure/fig1/AS:631641474014111@1588234444444

Certificate of Approval

This is to certify that the research work presented in this thesis, entitled "Bereavement and Post-traumatic Growth: The Role of Religious Coping, Cognitive Processes and Social Support" was conducted by Mr. Syed Aziz-ud-Din Agha under the supervision of Prof. Dr. Muhammad Anisul Haque

No part of this thesis has been submitted anywhere else for any other degree. This thesis is submitted to the..... (Name of Department of the University)..... in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Field of (Subject Name)..... Department of National Institute of Psychology University of: Quaid-i-Azam University, Islamabad

Student Name: Syed Aziz-ud-Din Agha

Signature: 

Examination Committee:

a) External Examiner 1: Name
(Designation & Office Address)

Signature: 

Prof. Dr. Muhammad Tahir Khalid
Dean, Shifa Tameer-i-Millat University
Islamabad

b) External Examiner 2: Name
(Designation & Office Address)

Signature: 

Prof. Dr. Muhammad Jahanzeb Khan
V.C. FATA University, Kohat

c) Internal Examiner: Name
(Designation & Office Address)

Signature: 

Prof. Dr. Muhammad Anisul Haque
Professor

Supervisor Name: Prof. Dr. M. Anisul Haque

Signature: 

Name of Dean/HOD: Prof. Dr. Rubina Haq

Signature: 

Office of the Ethics Committee
National Institute of Psychology
Center of Excellence
Quaid-e-Azam, University, Islamabad

Certificate of Approval

It is certified that the research project entitled Bereavement and
post-Traumatic Growth: Role of Religious Coping,
Cognitive processes and Social Support.

submitted by Mr/Ms Syed Aziz Ud Din under the supervision
of Prof. /Dr. Anis ul Haque is approved from ethics committee.

Chair: Ethics Committee

Date: _____

Member: Ethics Committee

_____ (Dr. Isam Nazki)

Date: _____

Member: Ethics Committee

_____ (Dr. Aisha Zubair)

Date: _____

**BEREAVEMENT AND POST-TRAUMATIC GROWTH: THE
ROLE OF RELIGIOUS COPING, COGNITIVE PROCESSES AND
SOCIAL SUPPORT**

BY

SYED AZIZ-UD-DIN AGHA

Approved by



Prof. Dr. Muhammad Anis-ul-Haque
Supervisor

External Examiners



Prof. Dr. Muhammad Tahir Khalily
External Examiner



Prof. Dr. Muhammad Jahanzeb Khan
External Examiner



Prof. Dr. Rubina Hanif
Director, NIP

CERTIFICATE

Certificated that Ph.D Dissertation titled "Bereavement And Post-Traumatic Growth: Role Of Religious Coping, Cognitive Processes And Social Support" prepared by Mr. Syed Aziz Uddin has been approved for submission to Quaid-i-Azam University, Islamabad.



Dr. Anis Ul Haque

Supervisor

**BEREAVEMENT AND POST-TRAUMATIC
GROWTH: THE ROLE OF RELIGIOUS COPING,
COGNITIVE PROCESSES AND SOCIAL SUPPORT**

"What doesn't kill me makes me stronger" – Nietzsche

CONTENTS

List of Tables	i
List of Figures	iv
List of Appendices	v
Acknowledgment	vi
Abstract	vii
Chapter I: Introduction	1
Bereavement, Grief and Mourning, and Trauma	5
Factors related to bereavement	9
Post-Traumatic Growth	10
Post-traumatic Growth and other similar Concepts	12
Post-traumatic Growth and Distress	13
Theoretical Perspectives on Post-Traumatic Growth.	15
Post-traumatic Growth in Context of Non-Western Cultures.	17
Cognitive Processes of Assimilation and Accommodation	19
Religious Coping	20
Positive religious coping	22
Negative religious coping	23
Social Support	23
Types and sources of social support	24
Satisfaction with social support	24
Relationship Between the Study Variables	25
Relationship of Bereavement and Post traumatic Growth	25
Relationship of Adverse Experiences, Religious Coping, and Post-traumatic Growth	26
Relationship of Adverse Experiences, Cognitive processes and Post-traumatic Growth	27
Relationship of Adverse Experiences, Social Support, and Post-traumatic Growth	29
Relationship of Circumstantial and Demographic Variables with Bereavement	30

and Post-traumatic Growth	
Rationale	1
Proposed Conceptual Framework for the Present study	39
Chapter II: Method	40
Problem Statement	40
Research Design	40
Study-I	42
Objectives	42
Phase I: Translation and Pre-testing of the instruments.	42
Phase II: Pilot Study	44
Sample	44
Instruments	45
Procedure	46
Results of Pilot Study	47
Discussion Study-I	76
Chapter III : Study-II (Main Study)	79
Objectives	79
Hypotheses	79
Sample	81
Instruments	84
Consent Form	84
Demographic Information Sheet	84
Translated Version of Core Bereavement Items	85
Translated Version of Brief-RCOPE	85
Translated Version of Integration of Stressful Life Events Scale	86
Translated Version of Social Support Questionnaire- Short Form	86
Translated Version of Post-traumatic Growth Inventory-SF	87
Operational definitions	87
Procedure of Data Collection	89
Chapter IV: Results	90
Mediation Analyses of Parallel Multiple-Mediator Model	110

Summary of the Results	122
Chapter V: Discussion	124
Theoretical and Applied Significance of the Study	156
Limitations and Suggestions for Future researches	159
Conclusion	161
References	163
Appendices	

List of Tables

Table 1	Descriptive statistics and Alpha reliability coefficients of Pilot Study ($N = 260$)	47
Table 2	Item-total correlations and corrected item-total correlations for Core Bereavement Items($N = 260$)	48
Table 3	Item-total correlations and corrected item-total correlations of Images and Thoughts subscale of Core Bereavement Items ($N = 260$)	49
Table 4	Item-total correlations and corrected item-total correlations for Acute Separations subscale of Core Bereavement Items ($N = 260$)	50
Table 5	Item-total correlations and corrected item-total correlations for Grief subscale of Core Bereavement Items ($N = 260$)	51
Table 6	Item-total correlations and corrected item-total correlations for Brief-RCOPE ($N = 260$)	52
Table 7	Item-total correlations and corrected item-total correlations for Positive Religious Coping of Brief-RCOPE ($N = 260$)	53
Table 8	Item-total correlations and corrected item-total correlations for Negative Religious Coping of Brief-RCOPE ($N = 260$)	54
Table 9	Item-total correlation and corrected item-total correlation for Integration of Stressful Life Events Scale (Cognitive Coping Scale) ($N = 260$)	55
Table 10	Item-total correlation and corrected item-total correlation for Accommodation aspect of Integration of Stressful Life Events Scale ($N = 260$)	56
Table 11	Item-total correlation and corrected item-total correlation for Assimilation aspect of Integration of Stressful Life Events Scale ($N = 260$)	57
Table 12	Item-total correlation and corrected item-total correlation for Social Support Questionnaire – Short Form ($N = 260$)	58
Table 13	Item-total correlation and corrected item-total correlation for Post-traumatic Growth Inventory – Short Form ($N = 260$)	59
Table 14	Standardized Factor loadings by Confirmatory Factor Analysis of Core Bereavement Items ($N = 260$)	61
Table 15	Model Fit Indices for translated version of Core Bereavement Items ($N = 260$)	62

Table 16	Standardized Factor loadings by Confirmatory Factor Analysis of Positive and Negative Religious Coping of Brief- RCOPE ($N = 260$)	64
Table 17	Model Fit Indices Values for translated version of Positive and Negative Religious Coping for Brief-RCOPE Scale ($N = 260$)	65
Table 18	Standardized Factor loadings by Confirmatory Factor Analysis of Accommodation and Assimilation aspects of Integration of Stressful Life Events Scale ($N = 260$)	67
Table 19	Model Fit Indices for translated version of Accommodation and Assimilation aspects of Integration of Stressful Events Scale ($N = 260$)	68
Table 20	Standardized Factor loadings by Confirmatory Factor Analysis of Social Support Questionnaire-Short Form ($N = 260$)	70
Table 21	Model Fit Indices Values for translated version of Social Support Questionnaire-Short Form ($N = 260$)	71
Table 22	Standardized Factor loadings by Confirmatory Factor Analysis of Post-traumatic Growth Inventory-Short Form ($N = 260$)	72
Table 23	Model Fit Indices for Translated of Post-Traumatic Inventory Values version Growth Short Form ($N = 260$)	73
Table 24	Correlations between the variables in Pilot Study ($N = 260$)	75
Table 25	Demographic characteristics and frequencies of Main Study sample ($N = 401$)	82
Table 26	Descriptive Statistics and Alpha reliability coefficients of the Study variables ($N = 401$)	90
Table 27	Correlations of scores between Bereavement, Positive religious coping, Negative religious coping, Accommodation, Assimilation, Satisfaction with Social Support, and Post-traumatic growth ($N = 401$)	91
Table 28	Mean differences by gender of participants on study variables ($N = 401$)	93
Table 29	Mean differences on study variables by gender of deceased ($N = 401$)	94
Table 30	Mean differences on study variables by family system ($N = 401$)	95
Table 31	Mean differences on study variables by nature of death ($N = 401$)	96
Table 32	Differences across age groups in relation to study variables ($N =$	98

	401)	
Table 33	Post-hoc Analysis on study variables by Age of the respondents ($N = 401$)	99
Table 34	Differences across ethnicity in relation to study variables ($N = 401$)	100
Table 35	Post-hoc Analysis on study variables by ethnicity ($N = 401$)	101
Table 36	Differences across relationship status in relation to study variables ($N = 401$)	102
Table 37	Post-hoc Analysis on study variables by relationship status ($N = 401$)	103
Table 38	Differences across level of education in relation to study variables ($N = 401$)	105
Table 39	Post-hoc Analysis on study variables by education level of the respondents ($N = 401$)	106
Table 40	Differences across occupation in relation to study variables ($N = 401$)	107
Table 41	Post-hoc Analysis on study variables by occupation ($N = 401$)	108
Table 42	Hierarchical Regression Analyses of predictors of Post-traumatic Growth ($N = 401$)	109
Table 43	Indirect relationship of Bereavement with Post-traumatic Growth through Positive religious coping ($N = 401$)	112
Table 44	Indirect relationship of Bereavement with Post-traumatic Growth through Negative religious coping ($N = 401$)	114
Table 45	Indirect relationship of Bereavement with Post-traumatic Growth through Accommodation ($N = 401$)	116
Table 46	Indirect relationship of Bereavement with Post-traumatic Growth through Assimilation ($N = 401$)	118
Table 47	Indirect relationship of Bereavement with Post-traumatic Growth through Social Support ($N = 401$)	120

List of Figures

Figure 1	Stages of Grief Process	9
Figure 2	Proposed Conceptual Framework for the Present Research	39
Figure 3	Research Design of the Present Research.	41
Figure 4	Measurement model for translated version of Core Bereavement Items. (V1 = Images and thoughts; V2 = Acute Separation; V3 = Grief).	63
Figure 5	Measurement model for translated version of Positive and Negative Religious Coping of Brief-RCOPE. (Spir1 = Positive religious coping; Spir2 = Negative religious coping)	66
Figure 6	Measurement model for Accommodation and Assimilation aspects of Integration of Stressful Life Events Scale. (C. Cop1 = Accommodation; C.Cop2 = Assimilation)	69
Figure 7	Measurement model for translated version of Social Support Questionnaire-Short Form.	71
Figure 8	Measurement model for translated version of Posttraumatic Growth Inventory-Short Form.	74
Figure 9	Diagram for M1 (Positive religious coping) in the parallel multi-mediator model.	113
Figure 10	Diagram for M2 (Negative religious coping) in the parallel multi-mediator model.	115
Figure 11	Diagram for M3 (Accommodation) in the parallel multi-mediator model.	117
Figure 12	Diagram for M4 (Assimilation) in the parallel multi-mediator model.	119
Figure 13	Diagram for M5 (Social Support) in the parallel multi-mediator model.	121

LIST OF APPENDICES

Appendix -A	Country Profile
Appendix -B	Permission for Core Bereavement Items (CBI)
Appendix -C	Permission for Religious Coping- Short Version (Brief-RCOPE)
Appendix-D	Permission for Integration of Stressful Life Events Scale (ISLES)
Appendix -E	Permission for Social Support Questionnaire (SSQ6)
Appendix -F	Permission for Post-traumatic Growth Inventory-Short Form (PTGI-SF)
Appendix -G	Original Core Bereavement Items (CBI)
Appendix -H	Original Religious Coping- Short Version (Brief-RCOPE)
Appendix -I	Original Integration of Stressful Life Events Scale (ISLES)
Appendix -J	Original Social Support Questionnaire (SSQ6)
Appendix -K	Original Post-traumatic Growth Inventory-Short Form (PTGI- SF)
Appendix -L	Urdu Consent Form/ Demographic Sheet
Appendix M -	Translated Version of Core Bereavement Items (CBI)
Appendix -N	Translated Version of Religious Coping- Short Form (Brief-RCOPE)
Appendix -O	Translated Version of Integration of Stressful Life Events Scale (ISLES)
Appendix -P	Translated Version of Social Support Questionnaire – Short Form (SSQ6)
Appendix -Q	Translated Version of Post-traumatic Growth Inventory-Short Form (PTGI-SF)

ACKNOWLEDGMENTS

All praise to Allah Almighty, the most beneficent and most merciful. I feel grateful to some respectable and beloved people for helping me in some way to accomplish this work successfully. I deeply feel thankful to my research supervisor, Dr. Muhammad Anis ul Haque, who supervised me throughout in a manner that was more like a torch bearer. He guided me where I was in need of guidance; he encouraged me where I felt down; and he taught me where I lacked understanding.

I pray for my deceased father who kept giving me his ``PRESENCE`` whenever I needed it as a son. I thank my mother for her prays (*Dua*) which always provided me the divine shadow and sustained me protected.

And of course, I thank my family who sacrificed a lot to let me continue my PhD. Indeed, no words are sufficient enough to this contribution as family. And finally I don't want to forget to cordially thank faculty members, fellow students and non-teaching staff of NIP who at different times provided me with the help and support that I needed.

Indeed, everything gets accomplished with Will of Allah, and He provides His help through some benevolent and considerate souls on earth. I was helped by Allah through the kind souls that I have mentioned above. I present my very sincere gratitude to all of them and pray to Allah to bless them with more honor, happiness, peace, and success.

Syed Aziz Ud Din

ABSTRACT

The purpose of the present research was to investigate the nature of relationship between bereavement and post-traumatic growth from the conceptual viewpoint of organismic valuing process theory, and the role of religious coping, cognitive processes and social support in this relationship. In addition, group differences on bereavement and Post-traumatic growth were explored based on circumstantial factors (nature of death and time since death) and demographic characteristics of the participants and the deceased including gender, age, family system, relationship status, ethnicity, education level and occupation. The research was completed in two independent studies i.e. Study-I and Study-II. The study-I was related to the adaptation and validation of instruments in local context and exploring the initial trends in the data whereas, study-II was conducted to test the stated hypotheses. The study was conducted on a sample of bereaved parents and spouses who were taken from Baluchistan province of Pakistan. Participants were included in the study only if not more than 24 months had passed since the death of their child or spouse. Adapted Urdu versions of Core Bereavement Items (Burnett et al., 1997), Brief-RCOPE (Pargament et al., 1998), Integration of Stressful Life Events (Holland et al, 2010), Social Support Questionnaire6 (Sarason et al, 1987), and Post-traumatic Growth Inventory-Short Form (Cann et al., 2010) along with a demographic sheet were used to collect the required data. Translation process was carried out through using procedure of Back-translation design. Results of study-I provided sufficient evidence for the psychometric properties of the translated scales. Relationship between the study variables showed that bereavement was inversely correlated with accommodation, assimilation and post-traumatic growth; whereas positively

correlated with positive religious coping, negative religious coping and satisfaction with social support. Positive religious coping, accommodation, assimilation and satisfaction with social support were positively correlated with post-traumatic growth; whereas negative religious coping was negatively correlated with post-traumatic growth. The question of indirect relationship between bereavement and post-traumatic growth was addressed by running parallel multi-mediator analyses (five mediators) through Macro Process on SPSS (22 Version). Results showed that accommodation significantly mediated the bereavement and post-traumatic growth relationship; whereas positive and negative religious coping, assimilation and satisfaction with social support did not mediate this relationship in the multiple mediator design. Results of the analyses through independent t-test and One-Way ANOVA showed that death of son and husband resulted in comparatively more intense bereavement experience; Sudden and violent deaths as compared to expected deaths led to more intense bereavement experience; however no significant difference was observed in post-traumatic growth on the basis of nature of the death; no significant gender differences were found on satisfaction with social support. Male gender reported higher post-traumatic growth; and participants living in nuclear family reported more intense bereavement experience; whereas participants living in joint family reported higher post-traumatic growth; no significant difference was observed in bereavement experience intensity and post-traumatic growth between different age groups; and no significant difference in study variables was observed between various ethnic communities except for Hazara ethnic community who reported significantly more intense bereavement experience as compared to other ethnic communities in Baluchistan. Significant differences were observed on bereavement, cognitive

processes and post- traumatic growth in relation to education level and occupation of the participants. Limitations of the present study are also highlighted and suggestions for future research are mentioned.

Chapter I

Introduction

What else can be more traumatic than the pain of losing a child or a life partner to death? Parkes (2013) has described such death as a tragic experience that most of us will ever have to face in our lives. According to Levy (2019) the experience of losing some one loved is common and it can happen at any stage of life. Chow (2010) has stated that death of a loved one means loss of everything for some individuals. To reflect on such a loss it may be rightly said that only the wearer knows where the shoe pinches which means only the bereaved parents and spouses can feel the true nature and intensity of such pain caused by the death of a child or spouse. Death is, indeed, an inevitable fact of human life. Mroz and Bluck (2018) put it this way:

We all face the deaths of loved ones in our lives. We all carry loved ones with us in memory. Immediately following a loss, one need to both emotionally comprehend the death and navigate the changes it brings to daily life (pp. 161,162).

Losing a dear one to death is an incident that impacts life and self of the bereaved heavily. Though, there are personal, situational and cultural variations, usually death of a loved one results in serious emotional and psychological sufferings for the bereaved family members. Therefore, such loss is a major incident of life (Eckholdt, Watson & O'Connor, 2017; Lev-Ari & Levi-Belz, 2019) with implications for mental health of the bereaved individuals.

For parents, death of their child can result in a trauma irrespective of the age of the child as literature indicates that attachment between child and mother develops

when the baby is yet not born (Yarcheski, Mahon, Yarcheski, Hanks & Cannella, 2009) and death breaks down this attachment. Similarly, death of the child deprives fathers of their attachment and death of life partner deprives the bereaved spouses of their attachment which they had developed in course of life. Consequently, the display of traumatic feelings and reactions in bereaved parents and spouses is expected. Studies mention such losses as damaging experiences with multiple unhealthy outcomes (Znoj, 2005). The literature has documented reports of extreme distress and constant sadness among mothers in response to death of their babies (Waugh, Keimle, & Slade, 2018). There are also evidences that spousal bereavement is associated with multi-faceted adverse effects including negative psychological consequences (e. g., Spahni, Morselli, Perrig-Chiello, & Bennett, 2014) as spousal bereavement is also a major negative life event (Eckholdt et al., 2017).

Therefore, serious negative psychological consequences come to mind when we think of the effects of traumatic adversity such as death of a loved one (Gerrish, Dyck & Marsh, 2009). The emotional pain caused by death of a loved one can either break or make the bereaved individual stronger. Psychological outcomes of a traumatic event vary from individual to individual (Naik & Khan, 2019). With reference to bereavement experience, the studies have reported high probability of experiencing complicated grief among bereaved individuals because of the difficulty in resolving the grief (Sveen, Pohlkamp, Kreicbergs, Maarten, & Eisma, 2019). Bogensperger and Lueger-Schuster (2014) have rightly stated that experiencing death of a dear one exposes the bereaved to the question of human existence.

In fact, we develop mental frameworks about various aspects of the world in the course of life and traumatic incidents result in a blow to these mental frameworks

(Hamilton, Greenberg, Pyszczynski, & Cather, 1993). Arnedo, Sánchez, Sumalla, and Casellas-Grau, (2019) have mentioned that any event which has the potential to shatter our core beliefs is associated with negative effects and positive changes.

As mentioned, experiencing the negative symptoms is common for trauma survivors and these symptoms normally fade away with passage of time (Rothbaum, Foa, Riggs, Murdock & Walsh, 1992). Some of the survivors develop resilience and post-traumatic growth (Foa & Riggs, 1995; Solomon & Dekel, 2007). However, some of trauma survivors actually develop post-traumatic stress disorder (Green, 1994). Theoretical literature and empirical studies contain evidences in support of both the negative and positive outcomes of bereavement experience. As a matter of fact, most of the past studies have reported maladaptive outcomes of bereavement experience such as prolonged grief, post-traumatic stress disorder, and depression.

Since the emergence of positive psychology, exploring the possibility of positive outcomes has also been the focus of research. The trend of exploring growth in the aftermath of adverse events began in 1990s (Naik & Khan, 2019). Maitlis (2019) has also mentioned that growth has been the focus of research for more than two decades. According to Cadell, Rehgehr and Hemsworth (2003), initially evidence of growth was recorded by Moos and Schaefer (1986). Many studies have documented this change in focus of bereavement and trauma research from negative to positive outcomes (e. g., Helgeson, Reynolds, & Tomich, 2006; Laufer & Solomon, 2010). Numerous studies have now documented reports of positive and adaptive outcomes of bereavement and other adverse experiences.

In literature, the positive and adaptive outcomes are referred to through different terminologies such as post-traumatic growth, benefit finding, hardiness,

stress-related growth, positive changes and many others. The term post-traumatic growth is considered as a more appropriate term to refer to the adaptive outcomes of adverse events and this term has been more prevalent in research. Post-traumatic growth implies adaptive transformations in the aftermath of adversity (Maitlis, 2019).

Review of the past research on bereavement makes two things very clear: (a) post-traumatic growth is not a natural outcome of bereavement experience, rather it possibly occurs as a result of struggle with bereavement or any other similar extremely stressful event; (b) occurrence of post-traumatic growth does not indicate elimination of the distress caused by bereavement. Bereavement and distress can exist simultaneously. Past research has indicated that some cognitive processing of bereavement experience is inevitable for the occurrence of post-traumatic growth. In fact, each new experience needs to be organized into the cognitive schemas that the person already holds. Organismic valuing theory of adversarial growth (Joseph & Linley, 2005) has proposed that out of the cognitive processes, positive accommodation of bereavement experience is the process which results in post-traumatic growth.

In addition, past studies have also indicated relationship of other coping mechanisms (religious coping and coping through social support) with post-traumatic growth. Coping refers to mental and behavioral strategies which are used to handle adverse events and their outcomes (Lazarus & Folkman, 1984). There are evidences of religious coping strategies and social support coping being related with post-traumatic growth. Relying on religion in handling difficult times is vastly reported in past research since long (e. g., Pargament, Smith, Koenig & Perez, 1998). Spirituality (a closely related phenomenon with religion) not only facilitates well-

being, but it also helps in coping with adverse events, and comprehending (making sense of) the adverse experience (Ardelt, & Eichenberger, 2008; Miller, McConnel, & Klinger, 2007; O'Connor, Guilfoyle, Breen, Mukhardt, & Fisher, 2007; Pargament, Van Haitsma, & Ensing, 1995). Studies have reported association of spirituality with decreased distress and enhanced adaptive changes with passage of time (Schaefer, Blazer, & Koenig, 2008).

The literature has also documented observations that circumstantial factors and characteristics of bereaved individuals also influence the possibility and intensity of any given outcome of bereavement experience. Nature of death, time since death, gender and age of bereaved/deceased, relationship status of bereaved with deceased, ethnicity, and family system, education level and occupation are some of the important factors that are considered to be important in the context of possible bereavement outcomes.

Bereavement, Grief, Mourning, and Trauma

Bereavement occurs as result of death of a significant other. It is the objective experience of losing a loved one as Sanders (1989) puts it that bereavement is an objective fact and an experiential state which the bereaved person realizes after the loss. It is individual specific, penetrating and typical experience which has to be cognitively processed in a way that incorporates into the overall picture of life (Naef, Ward, Mahrer-Imhof, & Grande, 2013). Bereavement is described by American Psychological Association Dictionary of Psychology (APA, 2015) as a psychological state that results from death of a significant other. It is further added that bereaved

individual may experience distress; and not every bereaved individual talks about this suffering to others.

A related concept is grief which is used synonymously with bereavement. Carlsson and Nilsson (2007) have mentioned that grieving process is characterized by physical and psychosocial responses. Grief is described as the experience of agony which is caused by death of dear one and it is viewed as being different from bereavement and mourning. According to the dictionary description, grief is typically characterized by distress, anxiety of separation, being stuck in past, and anxiousness about future. It is further described that grief intensity varies with the type of bereavement and intense bereavement has the potential of leading to serious physical and psychological negative effects. It is noted that grief is not always openly expressed (APA, 2015).

Mourning is another related concept which refers to the cultural patterns used for expressing grief. APA dictionary of psychology (APA, 2015) has stated that mourning implies the expression of feelings associated with grief and it occurs both at the time of death incident and thereafter. Most of the feelings expressed in mourning resemble symptoms of depression but they fade away with time and are not usually viewed pathological.

Another related concept is psychological trauma which is an invisible wound that bereaved individuals suffer. APA dictionary (2015) describes trauma as an intense experience characterized by feelings of helplessness, fear and blow to the existing adaptive schemas. Trauma can occur as a result of either man-made adversities such as rape and murder or a natural calamity such as an earthquake.

Bereavement is a traumatic experience for many if not for everyone because death of a loved one is not less than any traumatic event. Death of a significant other creates intense enough grief for many bereaved parents and spouses that meet the conditions of a trauma that are mentioned in the above description. However, the intensity of bereavement experience differs from person to person, from situation to situation and from culture to culture. Research in Pakistan has reported that ways of expressing grief and intensity of grief vary across individuals (Suhail, Jamil, Oyebode, & Ajmal, 2011).

Besides other factors, intensity of attachment with deceased and dependence on deceased for need satisfaction, influence the nature and severity of bereavement and its outcomes. An individual going through the experience of bereavement is known as being in grief. It is an individual specific and nonlinear phenomenon. Grief is life-long process to resolve for some individuals; a matter of years and months for others; and a matter of days and weeks for some people. A grounded theory approach study in Pakistan by Suhail and colleagues observed extreme fear, anxiety, and shock as initial reactions to bereavement in a sample of Pakistani adult Muslims bereaved of significant relative (Suhail et al., 2011). Literature has documented more risk of complicated grief in bereaved parents, particularly in parents who are bereaved by violent causes (e.g., Keese, Currier, & Neimeyer, 2008; Wijngaards-de Meij et al., 2005). According to Prigerson et al. (1995) complicated/prolonged grief is one in which extreme symptoms last over six months of period; whereas, in non-complicated grief intensity fades away with passage of time and bereaved persons adjust to the loss (Znoj, 2005).

Grief process involves different phases. It goes through these phases before it completes and resolves. Whether the grief process leads to recovery of normal life, or complications in terms of mental health, depends upon many factors including the coping styles and environmental factors. Successfully resolved grief is termed as normal grief and difficulty in effectively dealing with sufferings of grief is termed as prolonged or complicated grief which is indicated to be related with other mental health issues.

The stages of grief cannot be segregated rigidly because they are overlapping in nature. The shock phase in grief process is characterized by denial and disbelief and it may last for few days or weeks. Accepting the loss is too much of a psychological and emotional blow, consequently the bereaved reacts to the loss with denial. Socio-cultural rituals related with grieving and support from significant others facilitate passing through this shock. The grief process switches over to acute mourning phase as the bereaved consciously accepts the reality of the loss. The bereaved individuals experience extreme distress and helplessness which are caused by the thoughts of separation from the deceased in this stage. The state of consciously experiencing the loss varies from person to person in terms of duration. It may last for weeks, for months and years; even it may last for the whole life for some bereaved individuals. Bereaved individuals who reach the restitution phase complete the grief process successfully as they feel now being able to let the mourning go and take the initiative of focusing on new relationships and take a new start for normal life.

The Stages of Grief (The stages may overlape)

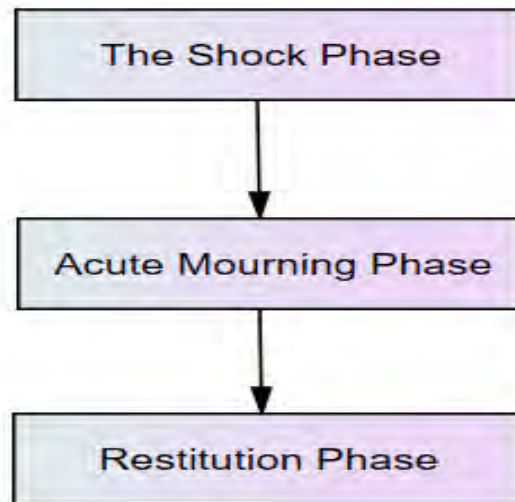


Figure 1. Stages of Grief Process

Factors related to bereavement. As mentioned earlier, there is no uniformity in intensity and outcome of bereavement experience across individuals, families, situations, and cultures. Observations (of the researcher in Pakistani society) in life show that that the nature of death is critical. A death caused by illness is not as painful and shocking as a death by murder or bomb blast. A death of an infant is not as distressing as a death of a son who is young and only bread earner for the parents and the spouse. Similarly, initial days of bereavement appear to be more distressing and emotionally painful as compared to the days after a year of bereavement.

It has also been observed (by the researcher in society of Pakistan) that bereaved individuals feel consoled and comparatively in control of the adverse situation by practicing religious rituals and receiving social support. In this regard it is

not misplaced to state that factors related to circumstances in which death incident occurs, characteristics of bereaved individuals, time since death, and type of coping used appear to influence the intensity of bereavement and probability of positive or negative outcomes.

Post-Traumatic Growth

It refers to the adaptive outcome of any adverse experience including bereavement. This is a construct of positive psychology and studies have viewed growth through the perspective of Tedeschi and Calhoun (1996). The term post-traumatic growth was coined by Tedeschi and Calhoun (1996) and since then the term is prevalent in the literature. Growth is understood both as a process and an outcome (Walter & Bates, 2012). As a process, growth helps in escaping the negative effects of traumatic event through distorting some aspects of the event (Maercker & Zoellner, 2004). This notion of post-traumatic growth being a process aimed at blocking the trauma related emotions is also supported by Park (1999) who argued that the absence of negative association of growth with distress indicates that individuals reporting growth are involved in distorting the adverse effects of trauma.

Post-traumatic growth is viewed by Zoellner and Maercker (2006) as recovery from trauma and personal growth of the individual. Bachem and colleagues have importantly stated that growth should be viewed as constellation of adaptive transformations (Bachem et al, 2018). The presence of five distinct domains (a. perception of better relations with others; b. new possibilities in life; c. enhanced personal strengths; d. increased appreciation of life; e. and spiritual betterment) on Post Traumatic Growth Inventory is an indication of this perspective that growth is a

constellation of adaptive changes reflected in various aspects of bereaved individual's life.

According to Calhoun, Cann, Tedeschi and McMillan (2000), post-traumatic growth is a significant positive change which people report in the context of their coping with the adversities such as bereavement. It is now widely accepted notion that growth implies the adaptive changes that occur as outcome of dealing with adverse event (Tedeschi & Calhoun, 2004). From Janoff-Bulman (2006) perspective, reconstruction of the shattered schemas is termed as growth. Besides individual level, growth can also be experienced at a collective and community level (Włodarczyk, Basabe, Páez, Villagrán & Reyes, 2014).

Facets of growth include (a) perception of better relations with others; (b) new possibilities in life; (c) enhanced personal strengths; (d) increased appreciation of life; (e) and spiritual betterment (Tedeschi & Calhoun, 1996). These facets are reflected in enhanced confidence, empathy and esteem; closer relationships and easier communication with others; and more attention to the present moment along with increased spirituality (Arnedo & Casellause-Grau, 2015).

Moreover, research has also indicated certain other characteristics of growth reporting individuals which include being judicious and more accommodating to extremities of life; being more mature and having higher self-esteem; being more patient, tolerant, empathic and courageous; being more spiritual and religious; and having heightened awareness about existence (Affleck, Tennen, & Rowe, 1991; Calhoun & Tedeschi, 1998b ; Edmonds & Hooker, 1992; Schaefer & Moos, 2001; Yalom & Lieberman, 1991).

The literature has indicated that extremity of negative events is critical for post-traumatic growth (Zoellner & Maercker, 2006), which means less stressful events may not yield ground for growth. Reports of growth have been documented in aftermath of a variety of adverse events which range from bereavement and war to natural disasters and terminal disease such as cancer (Barakat, Aldelfer, & Kazak, 2006; Colville & Cream, 2009; Engelkemeyers & Marwit, 2008). With reference to time of growth occurrence, there is a divided opinion about how long it takes for growth to occur. Tedeschi and Calhoun have stated that growth is a lengthy process; whereas Frazier, Conlon, and Glaser, (2001) have observed that growth is reported even after two weeks of bereavement.

Post-traumatic growth and other similar concepts. There are various concepts which appear to be quite similar in meaning to the concept of post-traumatic growth. These concepts include stress-related growth (Park, Cohen, & Murch, 1996), adversarial growth (Joseph & Linley, 2005), benefit finding (Affleck & Tennen, 1996) and thriving (Carver, Scheier, & Weintraub, 1989). Only post-traumatic growth conceptually represents accurately the post-trauma positive changes as (a) a possible outcome (and not as a coping mechanism) of extremely adverse events, (b) as actual adaptation and not illusions, and (c) as a psychological experience that may last concurrently with distress. Post-traumatic growth is a phenomenon that goes beyond the coping mechanisms whereas concepts of resilience, hardiness, optimism and sense of coherence, imply characteristics of an individuals that may help in dealing with adversities (Tedeschi & Calhoun, 2004).

There is a fundamental difference between post-traumatic growth and concept of resilience. The former refers to perception and occurrence of adaptive changes that may not have been present before the adverse event whereas, the later refers to the restoration of pre-trauma state (Cardenas-Castro, Martínez, & Abarca, 2016). Post-traumatic growth implies experience of every psychologically adaptive change that occurs while struggling with the life challenges (Joseph & Linley, 2008; Tedeschi & Calhoun, 2004). In fact, we view every aspect of our lives in the light of our core beliefs (Janoff-Bulman, 1992). The spirit of post-traumatic growth is the damage to the core beliefs by the traumatic event (Janoff-Bulman, 2006) and the struggle to reconstruct these beliefs (Taku, Calhoun, Tedeschi, Gil-Rivasv, Kilmer, Cann, 2007; Triplett, Tedeschi, Cann, Calhoun, & Reeve, 2012). According to Khanna and Greyson, (2015), growth implies an improved psychological state that is beyond the pre-trauma state.

Post-traumatic growth and distress. It is important to note that distress is a natural experience in adversities: The more severe the adversity, the greater the distress. Research has indicated that extremely stressful events can lead to growth (e.g., Tedeschi & Calhoun, 1995, 2004). Occurrence of growth does not in any way mean a decrease in psychological distress (Calhoun, Tedeschi, Cann, & Hanks, 2010), and severity of stress appears to be pre-requisite for growth as growth happens to be the outcome of struggling with extremely distressful events (Calhoun & Tedeschi, 2006). Post-traumatic growth concept has been described by its profounders as a positive psychological change experienced as a result of the struggle with highly challenging life circumstances (Tedeschi, & Calhoun, 2004). It is in this context that

understanding of the growth and distress relation appears important and valuable. It is one of the most debated relations in post-traumatic growth literature (Hall, Saltzman, Canetti, & Hobfoll, 2015). Important questions are (a) whether growth means absence of distress; (b) whether growth and distress happen to be concurrent; or (c) whether there is no relation between the two phenomena at all? To answer these questions, three possible patterns to the growth and distress relation have been documented in the literature.

Some studies have indicated negative association of growth with distress (e. g., Frazier et al., 2001) and hence considering them two sides to the same coin (Dekel, Ein- Dor, & Solomon, 2012). In contrast, other studies have reported positive association between the two phenomena. For example, Solomon and Dekel (2007) have reported that more distress leads to more growth. A meta-analytic review has also reported positive association of post-traumatic growth with post-traumatic stress disorder (Hall et al, 2015). In a sample of young Iraqi war survivors living in Turkey, Kilic, Magruder, and Koryurek (2015) observed positive association of PTSD symptoms with growth.

However, past studies have also reported that growth is independent of distress as no significant association of growth with distress was observed (e. g., Joseph, Williams, & Yule, 1993; Smith, Samsa, Ganz, & Zimmerman, 2014). Very few studies have supported this view. A study by Bayer-Topilsky, Itzhaky, Dekel, and Marmor (2013) reported non-significant association of growth with distress. Widows, Jacobsen, Boot- Jones, and Fields (2005) reported the coexistence of post-traumatic growth and distress.

In a sample of Australian ambulance personnel, Ragger, Hiebler-Ragger, Herzog, Kapfhammer, and Unterrainer, (2019) observed that growth and distress are independent of each other and they can coexist in the aftermath of critical incidents. In a study, mothers, who were bereaved by death of neonatal babies, reported some experience of growth along with the ongoing distress (Waugh, Kiemle & Slade, 2018). The organismic valuing process theory of growth through adversity (Joseph & Linley, 2005) also postulates growth and distress as independent of each other.

Though, few studies have explored distress and growth relationship (Laufer & Solomon, 2010), review of the extant literature shows that there are mixed findings on the relation between growth and distress (Hungerbuehler, Vollrath, & Landolt, 2011). Different studies have reported different findings about this relation that include (a) positive relationship (Jaarsma, Pool, Sanderman, & Ranchor, 2006); Cadell et al, 2003), (b) negative relationship (Sawyer, Ayers, & Field, 2010; Frazier et al., 2001), (c) curvilinear relationship (Kleim & Ehlers, 2009), and (d) no relationship at all (Widows et al., 2005). These words summarize the relationship between growth and distress very appropriately which state that growth is possible to happen (a) in the absence of post- traumatic stress or (b) they can exist simultaneously (Folkman, 2008; Zoellner, Rabe, Karl, & Maercker, 2008).

Theoretical Perspectives on Post-Traumatic Growth

There are two prominent theoretical perspectives that explain the phenomenon of post-traumatic growth. These include Functional Descriptive Model (Tedeschi & Calhoun, 1995) and the organismic valuing process theory of growth through adversity (Joseph & Linley, 2005, 2008). Both of these perspectives postulate the idea

of core assumptions as conceived by Janoff-Bulman (1992). Organismic valuing process theory of growth through adversity (Joseph & Linley, 2005) is originated from client-centered approach and suggests that individuals have intrinsic motivation for reconstructing their world views in a way that is helpful to their innate tendency of becoming self-actualized. In other words, people develop world views through their course of life, and any given traumatic event shatters these world views and results in distress which in turn triggers cognitive processes (automatic and deliberate) to rebuild these world views in order to cognitively and emotionally manage the traumatic event and its effects. Coping techniques, circumstantial factors such as nature of death and demographic characteristics of the bereaved influence the cognitive processing of the traumatic event.

The organismic valuing process theory of growth through adversity argues that growth and distress are independent of each other and they are not the ends of a bipolar continuum. The literature has indicated that PTSD symptoms can be decreased through assimilation and accommodation processes. Search for positive reappraisal leads to decreased PTSD symptoms and growth (Walter & Bates, 2012). Growth is experienced when trauma related information is positively accommodated; however, negative accommodation results in psychopathological outcomes.

Important to consider are the given assumed outcomes of bereavement experience or any other traumatic experience in this theory. The organismic valuing process theory postulates three possible outcomes to any traumatic event such as bereavement. First, if bereavement experience is incorporated into already existing world views, it restores the pre-trauma psychological state. This assimilative processing of bereavement experience helps bereaved individual in comprehending or

making sense of the loss but it also keeps the individual comparatively more vulnerable to negative effects of future adversities; Second, if bereavement is negatively appraised and the existing world views are mal- adaptively restructured for dealing with the loss, this negative accommodative processing of bereavement experience will lead to psychopathology and distress; Third, if the bereavement is positively appraised and existing world views are redeveloped in the light of post-bereavement realities, this positive accommodative processing of loss will lead to post-traumatic growth.

The idea of the above mentioned possible outcomes to trauma is a prominent characteristic of organismic valuing process theory (Joseph & Linley, 2005). Both quantitative and qualitative studies have indicated evidences in support of this theory and it provides interesting ground for more research (see Joseph, 2009; Payne, Joseph, & Tudway 2007; Ransom, Sheldon, & Jacobsen, 2008).

Post-Traumatic Growth in the Context of Non-Western Cultures

The occurrence of post-traumatic growth is dependent upon the coping struggles with extremely stressful events. For example, according to the extant literature appraisal of a given adversity and the adopted cultural practices in times of adversity are valuable considerations for understanding the possible psychological outcomes of the adversity. Past research has examined cultural variations in grief related rituals and the way a death of a close one is viewed. A focus group study by Lobar, Youngblut and Brooten (2006) noted certain similarities in bereavement and grief related practices across cultures and religions. The similarities were observed in

beliefs about death, perception of ceremonies after death and the influence of culture and religion on practices surrounding the death.

Culture and religion provide broader frame within which beliefs about every aspect of life are acquired. The way bereavement is perceived and reacted to is influenced by culture and religion and the literature provides evidences in this regard. For example, a review study by Bernardi, Engelbrecht and Jobson (2018) indicated the role of culture in cognition and they mentioned that culture influences the way an experience is appraised. In the present research, it is important to mention that there are particular and unique rituals and practices regarding death which are specific to Pakistani society.

Funeral and condolence (called *Tadfeen* and *Fatiha* in Urdu language); grief reactions; coping styles, and the socioeconomic support provided to the bereaved individual(s) are all largely determined by local culture and Islamic values. Studies conducted with Pakistani population have indicated more inclination of people toward religion in Pakistani society and its influence on the bereavement related rituals and grief reactions (Suhail et al., 2011).

Most of the studies on post-traumatic growth are conducted in western cultures (Kashyap & Hussain, 2018) and the post-traumatic construct is also theoretically rooted in western culture. Measurement tools of post-traumatic growth are originally developed and validated in western populations. Comparatively fewer studies have focused and validated this construct in non-western populations. Therefore, operationalization of the post-traumatic growth and validation of Post-traumatic Growth Inventory need to be addressed in research with populations other than western countries.

Cognitive Processes of Assimilation and Accommodation

Cognitive perspective in psychology postulates that it is not the event rather belief and perception about the event that determine the consequences of the event in human life. Studies have reported the role of cognitive processes in determining the consequences of any adverse event including bereavement. For example, study by Cann, Calhoun, Tedeschi, Triplett, Vishnevsky and Lindstrom (2010) indicated the important role of cognitive processes in determining the effects of adverse events on human life.

The cognitive processes, referred to in the present study, are assimilation and accommodation. Literature on growth mentions the role and difference between the assimilation process and accommodation process in the aftermath of adverse events. Arnedo and Casellause-Grau (2015) have argued that assimilation happens to be the immediate process after adverse event occurs, however, this may not be taken as rigid sequence between assimilation and adverse event.

Traumatic incidents (as mentioned earlier) render blow to the existing belief system of the individual and therefore the traumatic experience is not easily incorporated. The psychological consequences of a traumatic incident depend upon how the traumatic experience is cognitively processed. When traumatic experience is molded in a way to incorporate it into the existing belief system, it is known as assimilation. It is the management of traumatic event by incorporating it into the already developed world views. Molding of the existing belief system in order to adjust the traumatic experience without distorting the experience is known as accommodation. In accommodative processing, existing understanding of the world is adaptively changed to adapt to new information in the context of the traumatic experience.

As Arnedo and Casellause-Grau (2015) put it that assimilation is the alteration of interpretation of the trauma related experience in order to incorporate it into the already developed schemas and accommodation is alteration of the held schemas in order to adjust the trauma related experience. The person may change the perception of the given experience (assimilation) in order to match it with the existing world views, or the existing world views may be changed in accordance with the trauma related information (accommodation).

Positive reappraisal of traumatic event (positive accommodation) is linked with adaptive outcomes (Stein, Folkman, Trabasso, & Christopher-Richards, 1997), negative appraisal is linked with pathological outcomes of bereavement (Capps & Bonanno, 2000), and assimilation leads to pre-trauma functioning and positive accommodation leads to post-traumatic growth. However, negative accommodation results in psychopathological implications as negative appraisals have been associated with increased grief.

Religious Coping

Religion is the last resort (in opinion of the researcher) for many in times of pain and adversity. Use of religious coping techniques is a common practice in every society. Religion is reported to have impact on the relationship of adversity and the experience of post-traumatic growth (Tedeschi & Calhoun, 1996). Alleviation of distress and emotional comfort are sought in religiosity in stressful times. Religion helps in handling traumatic circumstances and helps in comprehending the loss of a loved one. People also find security and hope in religion by attributing the incidents to the will of Almighty Allah and letting the consequences to be determined by the divine plan.

Coping through religious approach occurs both at individual and collective level. Bereaved individuals independently involve in religious cognitive processing of the traumatic experience through prayers (*Namaz*), recitation (*Tilawat*), prays (*D`ua*) and remembering Allah (*Tasbeehat*). Religious rites of various kinds are also performed together by bereaved individuals, their relatives, neighbors and friends. Religious rituals provide facilitation for availability of social support since many people gather around the bereaved for consolation following a traumatic event.

A systematic review by Shaw, Joseph and Linley (2005) has reported that religious coping is most of the times beneficial in the aftermath of adversity. It has reported positive association of religiosity with adverse events and positive association of religious coping with growth. This positive association of religiosity with adverse events can be understood through the following words. Religion can provide a means by which individuals seek to comprehend and cope with life.

Attachment theory (Bowlby, 1969, 1982) provides a significant psychological framework for conceptualizing religious experiences and practices. Kirkpatrick (2005) maintained that attachment or a personal relationship or belief in God reflect a dynamic process. During time of distress/bereavement, when one may more actively seek God's availability, certain religious behaviors may become more frequent. Many people turn to religious sources, as beliefs about God, religious activities and rituals. These sources increase the capacity to predict outcomes.

Important aspect of religious coping techniques is that they also impact the appraisal of traumatic situations. Religion helps mainly in appraising adverse events (Munsoor, 2019). As Pargament et al. (1998) reported that perceiving God as having the power to change the fate and circumstances of the individual gives the sense of strength and support to the bereaved to tackle the stressful situation. They further

observed that self-esteem and feelings of control of the bereaved individual are increased by searching for the meaning of life, developing connection with God and revisiting the patterns of coping. McIntosh and Spilka, (1990) also reported that people who offer prayers and call for the benevolently held belief that these prayers and prays can change their circumstances and consequently enabling them to manage adversity.

Moreover, the perception that Divine power is in control of everything facilitates experience of high self-esteem, stress related growth and spiritual growth, sense of coherence, meaning making and increased well-being (Jenkins & Pargament, 1995; Mullen, Smith, & Hill, 1993; Tarakeshwar & Pargament, 2001).

It is important to mention that the literature has recorded both positive and negative role of religion in struggling with adversities (Pargament, Koenig & Perez, 2000). The classification of positive and negative religious coping helps in comprehending the supportive and obstructive role of religion in times of extreme distress.

Positive religious coping. Positive religious coping refers to the use of religion in a way that provides emotional comfort in distress, stronger link with the Creator and helps in finding adaptive interpretation of the traumatic experience (Pargament, et al., 1998). People struck by death of significant other or any other adversity appraise the incident as the will of Almighty and stay patient and seek help for alleviating the pain and seek control through religious behavioral techniques such as offering prayers, recitation and charity. Developing strong bonds with the Almighty and strengthening spiritual bonds remain the priority of the individuals in

times of crisis. Considering the incident as the will of Almighty provides emotional relief and that facilitates adjustment to the post-traumatic circumstances.

Negative religious coping. Not every individual uses positive religious coping. Some people react to traumatic sufferings negatively in terms of negative interpretation of the adverse event. The thoughts of being punished by the Almighty; being guilty of doing wrong and consequently left alone by the Almighty; and the feeling that the Almighty is annoyed are some dominant aspects of negative religious coping.

Negative religious coping refers to the use of religion in a way that triggers further distress, sense of guilt and being punished (Fallot & Heckman, 2005; Pargament, et al., 1998). This approach worsens the emotional pain and distress. It triggers further sense of helplessness and makes it difficult to deal with the trauma and make sense of it. This approach keeps the individual uneasy with a sense of lack of control on the circumstances. Past literature is supportive of increase in the possibility of maladaptive outcomes and decrease in adaptive outcomes such as post-traumatic growth by using negative religious coping.

Satisfaction with Social Support

The researcher has observed that providing and receiving social support in hard times is a hallmark of every society and that of collectivistic societies such as Pakistan in particular. Meeting the bereaved family/individuals immediately following the traumatic incident for consolation and staying with them are some of the very common practices in Pakistani society. Social support refers to the interactions and relationships that are aimed at offering help, care, and sense of

connectedness (Hobfoll & Stokes, 1988). In other words, social support refers to the comfort, caring, regard and help available to a person from other person or group. It may be in tangible, emotional, relationship or informative form.

Social support does not benefit the receiver if it is not extended with wisdom as it is very delicate in nature in terms of its impacts. Explaining the delicacy of social support, McIlwraith (2001) noted that sometimes bereaved person is not given time to express the feelings about the deceased person and the bereaved is provided with constant care for too long without allowing the space to the bereaved to develop a sense of taking initiative of restarting the life. Such social support does not do well to the bereaved in terms of recovery and coping with the adversity in healthy way. Social support is healthy if it provides the bereaved with opportunity to express and accept the feelings of emotional distress.

According to Schroevers, Helgeson, Sanderman, and Ranchor (2010), one prominent variable in post-traumatic growth research is social support. The literature has documented for quite some time that social support is an important factor with reference to growth (e.g., Schaefer & Moos, 1998).

Types and sources of social support. Sarason et al. (1991) classifies social support in the forms of generalized social support and specific social support. The former is the one that is extended in normal life conditions conveying a sense of connectedness and care. The later refers to support provided in a given stressful event in the form of encouragement, required information or some materialistic assistance.

Sources of social support originate from the relationship network of the individual and the given culture and community. These sources can include life partners, relatives, friends, neighbors, and colleagues. Close relationships such as

partners, parents, and close friends are great source of social support in a variety of stressful situations (Cobb, 1976).

Satisfaction with social support. Importantly, number of available relatives and friends in times of crisis, and the quality of support provided by them, are two different aspects of social support. It is possible that with very few people around the bereaved parent or spouse may feel much supported and vice-versa. Satisfaction of the bereaved with the available social support is important. Literature also refers to this query about social support and it is noted that social support can be effective way of coping with hard times if the available support matches the need of the bereaved individuals (e. g., McIlwraith, 2001; Wills & Fegan (2001).

Relationships Between the Study Variables

Relationship of bereavement and post traumatic growth. Possibility of growth in the context of bereavement and other adversities is largely documented in extant literature (e.g., Engelkemeyers & Marwit, 2008; Gamino, Sewell, & Easterling, 2000; Michael & Cooper, 2013). The concept of growth while experiencing adversity is existent since long, however, attention of researchers and mental health practitioners has been recently shifted in this direction (Dekel, Mandl, & Solomon, 2011). With this change in focus in researches, many studies have documented reports of growth following bereavement and other adversities (e.g., Braun & Berg, 1994; Calhoun & Tedeschi, 1998b; Frantz, Farrell & Trolley, 2001; Rosenblatt, 2000; Swanson, Pearsall- Jones, & Hay, 2002).

Though traumatic experiences such as bereavement have the potential of serious psychological sufferings (Hungerbuehler et al., 2011), there have been reports

of adaptive changes in those individuals who struggle with such traumatic events (Joseph and Linley, 2008). Znoj (2005) has noted that people report growing stronger in the context of coping with adversities. A study by Carlsson and Nilsson (2007) has also reported the possibility of growth after bereavement. Even studies have documented reports of growth in mothers after death of their neonate babies (e. g., Waugh, Kiemle & Slade, 2018). The experience of growth has been reported in survivors of range of negative events which include disaster, war, cancer, and bereavement (Engelkemeyers & Marwit, 2008; Colville & Cream, 2009; Barakat et al., 2006; Joseph & Linley, 2005).

Relationship of adverse experiences, religious coping, and post-traumatic growth. Research findings regarding impact of religious coping in negative life events have been documented widely since long (e. g., Koenig, 1995, Pargament, 1997). Studies have noted that those who are bereaved by death of their loved ones come close to religion (Hays & Hendrix, 2008; Oyebode & Owens, 2013). Kearns et al (2019) examined influence of increased spirituality on post-traumatic growth one year after surgery in a sample of nonemergency cardiovascular patients and observed positive association of spiritual well-being with post-traumatic growth.

In view of Meyerson, Grant, Carter, and Kilmer (2011) the impacts of religious coping in traumatic events have been explored in many studies but the nature and strength of this impact is yet to be determined, as people may use different patterns of religious coping with different psychological outcomes. Literature has documented use of both positive and negative religious coping techniques in coping with adversities (Pargament, 1997). Many studies have observed the positive impact

of religious coping (e.g., Tarakeshwar et al, 2006). Other studies have also reported multifaceted positive impacts of religious coping in stressful times (Miller et al., 2007; O'Connor et al. 2007; Pargament et al. 1995; Ardel et al. 2008).

A review study (Shaw, Joseph & Linley, 2005) has reported that religious coping is beneficial most of the time in the aftermath of adversity. According to Schaefer et al. (2008) many studies have reported negative link of spirituality with distress and positive link with growth over time. A study in Pakistan (Jibeen, Mahfooz, & Fatima, 2017) has reported that religion yields positive effects as it serves as a coping strategy. Studies have shown that trauma survivors who use religion as coping source tend to experience growth after their trauma (Askay & Magyar-Russell, 2009).

Some studies (e.g., Tedeschi & Calhoun, 1996) view religion as moderating factor which influences the adverse effects and possible occurrence of growth after the trauma. Munsoor (2019) draws attention to the religion as a source of cognitive coping due to its role in making sense of traumatic events. McIntosh (1995) had also suggested this cognitive aspect of religion which colors a person's views and perceptions about self and the world around.

Relationship of adverse experiences, cognitive processes and post-traumatic growth. Past research has documented role of cognitive processes in struggling with adverse events such as bereavement (e.g. Cann et al., 2010). Model of growth in the context of grief (Calhoun et al., 2010) points to major role of cognitive processing in reconciling the pre-trauma and post-trauma schemas (as cited

by Calhoun et al., 2010; Cann et al., 2010). Park and colleagues documented positive association of cognitive coping with growth (Park et al., 1996).

Extremely stressful events shake the basic worldviews developed by the person (Hamilton et al., 1993). Cognitive coping techniques are used to make meaning out of the stressful event - assimilate the event with pre-trauma worldview (Parkes, 1997). The underlying thread of growth is the blow rendered by trauma to the existing schemas of the person and the triggered cognitive efforts to rebuild these schemas (Taku et al., 2007; Triplett et al., 2012). Evidence is documented in the literature that quest for positive meaning is linked with growth (Walter & Bates, 2012; Thombre, Sherman, & Simonton, 2010). Hammer et al (2018) examined role of cognitive processing in adversity in a sample of Para sports athletes and observed that deliberate processing in reconstruction of shattered world views is critical for occurrence of growth.

In fact, we understand the world around us on the basis of schemas that we have developed in course of life. Janoff-Bulman (1992) refers to these schemas as core beliefs. Losing a son or spouse to death gets us to the fundamental question of our existence (Bogensperger & Lueger-Schuster, 2014). Though the objective circumstances are important (Gerrish et al, 2009), reappraisal of the traumatic event plays more critical role in determining the subsequent reactions (Currier, Holland, & Neimeyer, 2006). Past studies (e.g., Joseph & Linley, 2006; Sumalla, Ochoa, & Blanco, 2009) have indicated that growth occurs when the traumatic experience such as bereavement is positively accommodated. A study following 9/11 attack showed positive association of cognitive restructuring with growth (Butler et al., 2005).

Relationship of adverse experiences, satisfaction with social support, and post-traumatic growth. Bereaved individuals receive good deal of social support (Carlsson & Nilsson, 2007). Past studies have shown that social support significantly predicts post-traumatic growth following adversities (e.g., Bozo, Gundogdu, & Buyukasik-Colak, 2009; Thornton & Perez, 2006). Social environment which is conducive to receiving and sharing trauma-related information is reported to play important role in making sense of the trauma and occurrence of growth (Tedeschi & Calhoun, 2004). The literature has documented that support provided by the family is also associated with experience of greater post-traumatic growth (Schroevers et al., 2010). On the other hand, it has been noted in past studies that lack of the appropriate social support is one of the reasons behind complicated grief in normal conditions (McIlwraith, 2001).

Wills and Fegan (2001) have mentioned that social support is effective only when it is provided according to the need of the recipient. With regard to gender differences in receiving support in hard times, empirical studies have noted that men tend to get support from their spouse; whereas, women tend to get support from other sources too (Klauer & Winkeler, 2002; Knoll & Schwarzer, 2002). In another study, Rzeszutek (2017) has also observed higher need for support among female participants as compared to male participants.

Relationship of Circumstantial and Demographic Variables with Bereavement and Post-traumatic Growth. Objective circumstantial factors are critical to understand with reference to loss (Gerrish et al, 2009). For example, Holland, Currier, and Neimeyer (2006) have reported that length of bereavement is

not significantly linked with either growth, or sense-making and abnormal grief. Grief reactions are more intense in bereavement caused by sudden death (Suhail et al, 2011) and the recovery process is comparatively slow in bereavement caused by violent death. As compared to spouses, bereaved parents are more vulnerable to complicated grief particularly in case of violent death (Keese et al., 2008; Wijngaards-de Meij et al., 2005). Providing the bereaved with more information and visiting the site of death facilitates cognitive processing of the traumatic experience (Kristensen, Weisaeth & Heir, 2012).

Some studies have found no meaningful gender and age related differences on post-traumatic growth (e.g., Taku, Kilmer, Cann, Tedeschi & Calhoun, 2012). However, other studies have observed that females report greater post-traumatic growth (e.g., Swickert & Hittner, 2009; Weiss, 2002). A study conducted by Vishnevsky, Cann, Calhoun, Tedeschi, and Demakis (2010) has also observed reports of greater post-traumatic growth in females. In a sample of Pakistani population, Suhail et al, (2011) found that females reported greater psychological distress and were more shocked by the death of their life partner as compared to males. Studies in western cultures also show that death of a male spouse is more distressing for the counterpart (e.g., Kaunonen, Paivi, Paunonen, & Erjanti, 2000). Death of spouse is considered to be more distressing because of the limited future options (Parkes, 1997).

Rationale

The spirit and genesis of the present research can be described in the underlying messages of the view of Bachem et al, (2018) who noted that though the focus of health and clinical psychology has been the negative impacts of adversities,

positive psychology has drawn attention to the possibility of psychological benefits of adversities. Kállay has (2015) signified the possibility of growth with a precaution in the following words that:

The potential to grow in the aftermath of crisis has been recorded for very long time and the chances that it could really happen exist. Nevertheless, it should not be taken at its face value, and more importantly, its possibility should not determine research to consider that every situation should determine growth in everybody (p. 8).

The concept of gain in adversities has been long existent and recorded in philosophical and religious literature as famous English saying goes that *sweet are the uses of adversities*. Mangelsdorf (2020) stated that development of growth in traumatized individuals is of great importance for the said individuals and for contribution to the clinical work.

Until recently, the bulk of theoretical literature and empirical studies was about maladaptive and negative outcomes of negative life events. However, the focus has shifted towards exploring the positive outcomes of bereavement and other stressful events and many studies have documented reports of growth as a consequence of coping with these adversities (see Braun & Berg, 1994; Calhoun & Tedeschi, 1998b; Dekel et al., 2011; Engelkemeyers & Marwit, 2008; Frantz et al., 2001; Gamino et al., 2000; Helgeson et al., 2006; Joseph & Linley, 2008; Laufer & Solomon, 2010; Michael & Cooper, 2013; Rosenblatt, 2000; Swanson et al., 2002; Tedeschi & Calhoun, 2004). Recently, Su, Chow, Yen, and Chuang (2019) observed reports of posttraumatic growth in 51.7 % of a sample of burn survivors in Taiwan two years after their burn.

As mentioned earlier, traumatic events can lead to serious psychological and emotional problems. Chow (2010) observed that some bereaved people even lose all future goals. Perhaps, therefore, exploring negative outcomes of traumatic events has been the focus of majority of the researches in past. In this regard, for people who experience extremely stressful events, vulnerability to a range of psychological problems has been recorded which include complicated grief, depression disorder and many more (see Hungerbuehler et al., 2011; Kreicbergs, Valdimarsdóttir, Onelöv, Henter & Steineck, 2004; Rogers, Floyd, Seltzer, Greenberg & Hong, 2008). In a recent study, Sveen et al. (2019) also reported higher vulnerability for complicated grief among bereaved individuals. Starcevic (2019) indicated towards the critical role of available coping styles and contextual factors in dealing with trauma.

Interest in exploring possibility of positive effects (growth) in the aftermath of adversities has been gaining attention and this trend has lasted for around more than two decades (Maitlis, 2019). This focus toward exploring growth in context of adversities has been in place since 1996 (Naik & Khan, 2019). Now it is reported widely and frequently that people going through extremely stressful events can develop certain positive changes- known as post-traumatic growth - which indicate improved psychological functioning as compared to pre-trauma functioning (Hirooka, Fukahori, Akita, & Ozawa, 2016; Munsoor, 2019).

Reports of this adaptive transformation known as post-traumatic growth has been recorded in aftermath of a number of adverse events which range from loss of a dear one to experience of serious illness (see Barakat et al., 2006; Colville & Cream, 2009; Engelkemeyers & Marwit, 2008). In a recent study Barrett-Bernstein, Wurz &

Brunet (2019) observed reports of post-traumatic growth in adolescent and young cancer survivors in Canada.

In stressful situations, such as losing dear one to death, people resort to religion as a way of coping. Rituals of prays, recitation of holy book, charity (*Sadqaat*) and attending religious sermons become the central part of bereaved individuals. Many studies have investigated religious coping strategies (positive and negative) as predictors of post-traumatic growth. Past studies have also explored resorting to religion in adversities (e.g., Pargament, 1997; Pargament et al., 1998). In this regard, evidence is reported in the literature about the contributing role of religion in difficult times (see Ardel et al. 2008; Miller et al. 2007; O'Connor et al. 2007; Pargament et al. 1995).

Facilitation in meaning making has been reported as a major role of religion (Munsoor, 2019). Religion also helps in dealing with distress (e.g., Jibeen, Mahfooz, & Fatima, 2017). Therefore, a negative association between spirituality and distress and positive association between spirituality and growth has been reported in many studies (e.g., Askay & Magyar-Russell, 2009; Calhoun & Tedeschi, 1999; Schaefer et al. 2008).

In a recent study (Stelzer, Palitsky, Hernandez, Ramirez & O'Connor, 2019) the relevance of religion and spirituality was noted in the context of bereavement. Davis et al (2019) cited Prati and Pietrantonio (2009) and mentioned in the light of meta-analytic findings that positive religious coping, positive reappraisal coping, and general religiousness were strongly associated with growth. It was in the light of above mentioned evidences from the past studies and the observation of prevalent use of religion in coping with adversities in Pakistani society, the role of positive and negative religious coping was explored in the present study.

Emergence of post-traumatic growth as a construct of positive psychology has been central in triggering the boost in research on possible positive outcomes of adverse events. Exploring post-traumatic growth as outcome of bereavement in the present study was motivated by the interest in shifting the paradigm of inquiry in mental health field from pathological notions to positive psychology approach. The reasons behind this interest were the conceptual assumptions of organismic valuing process theory about the possible occurrence of post-traumatic growth and the role of assimilative and accommodative processes with reference to the post-traumatic growth in the aftermath of adversities. Choosing to explore mediating role of assimilation and accommodation processes in relationship of bereavement and post traumatic growth in the present study was also motivated by the interest in testing the assumptions of organismic valuing process theory.

Studies have shown positive association of sense-making (i.e. assimilation of bereavement experience) and positive reappraisals of traumatic event (i.e. positive accommodation of bereavement experience) with growth (see Holland et al., 2006). Positive association has been reported between growth and factors related to assimilation and accommodation (Zoellner & Maercker, 2006). Positive reappraisals of traumatic events and religious practices have been documented as the most relevant variables with reference to understanding post-traumatic growth (e.g., Cárdenas-Castro, Faúndez-Abarca, Arancibia-Martini, & Ceruti-Mahn, 2017).

The literature has noted cognitive processes and coping strategies as major factors with reference to post-traumatic growth (Kolokotroni, Anagnostopoulos & Tsikkinis, 2014). Other studies have also observed importance of the cognitive processing with reference to occurrence of growth (Neimeyer, 2011). Kristensen, Dyregrov, & Dyregrov (2018) observed that cognitive processing and developing

comprehension of the holistic picture of the loss is important for processing the loss. Zhang, Xu, Yuan and An (2018) also indicated the importance of cognitive processes in post-traumatic growth. A study reported that facilitation of cognitive coping with reference to making meaning can yield adaptive psychological outcomes in cancer patients (Lee, Cohen, Edger, Laizner, & Gagnon, 2006)

Receiving social support from significant others in difficult times is a common practice in Pakistani society. As an expression of emotional support, bereaved individuals are frequently visited and consoled by relatives, neighbors and friends. It was against this background that in addition to cognitive processes and religious coping, role of social support was assessed in the present study. Kolokotroni et al (2014) in their review found positive association between social support and growth in cancer survivors. Many other past studies have recorded social support as precursor of growth and quality of attachment as determinant of the psychological consequences of loss (e.g., Bozo et al., 2009; Neria & Litz, 2003; Schroevers et al., 2010; Thornton & Perez, 2006). Chen and colleagues also reported family support as predictor of post-traumatic growth (Chen et al, 2019).

Circumstantial and demographic variables have also been explored with reference to bereavement experience and post-traumatic growth in the present study. These variables included gender and age, nature of death, time since death, family system, ethnicity, education level, and occupation. Past studies have reported mixed findings about gender differences and age related differences on post-traumatic growth. Some studies have observed females reporting greater post-traumatic growth and younger age being significantly related to post-traumatic growth (e.g., Hungerbuehler et al., 2011; Swickert & Hittner, 2009; Weiss, 2002).

A review study by Kolokotroni et al (2014) reported association of young age with growth in female cancer survivors. Some other studies have also reported positive correlation of post-traumatic growth with females (Morris, & Shakespeare-Finch, 2011; Senol-Durak, 2007) and younger age (Morris, & Shakespeare-Finch, 2011). In a sample of breast cancer patients, Chen et al (2019) found age and years of education as predictors of post-traumatic growth.

How long it takes for post-traumatic growth to occur after bereavement is a question that is not clearly answered by past studies. Tedeschi and Calhoun (2004) considered growth as a lengthy process; some studies have observed that growth is reported even weeks after bereavement (e.g., Frazier et al., 2001). In another study no significant association of time since death with sense-making, and growth was found (Holland et al., 2006). Past studies show that parents as compared to spouses are more vulnerable to complicated grief (e.g., Keese et al., 2008; Wijngaards-de Meij et al., 2005). No clear evidence was found in extant literature about the variables such as familysystem, ethnicity, and occupation with reference to post-traumatic growth.

Not all cultures see bereavement through the same eye. Moreover, post-traumatic growth phenomenon and reports of post-traumatic growth are not exactly the same across cultures. Studies have observed that there are variations across cultures and religions with reference to grief related rituals (e.g., Lobar et al., 2006). Pakistani society is characterized by its unique cultural and religious rituals of Islam and studies also have documented the religious distinctiveness of Pakistani society (e.g., Suhail et al, 2011).

Socio-political conditions, law and order conditions and level of violence in our society are all the sources of different adversarial events that involve deaths of people. Incidents of expected and unexpected deaths are directly or indirectly caused

by these typical conditions of current Pakistani society. The province of Baluchistan (Pakistan) has been the victim of terrorist incidents of bomb blasts, target killing, and kidnapping for ransom since long. The province has been vulnerable to, and has witnessed, frequent natural disasters of earthquake, floods and droughts in its different parts. Incidents of road accidents are also a constant adversity in the province due to various reasons including fragile roads infrastructure. Death through illness is also not a lesser adversity as majority of the people across the province do not have access to even minimum standard health services. Consequently, death incidents are frequent in almost all parts of the province. Hence, bereavement by natural and violent causes is a commonly observed phenomenon of life in Baluchistan.

Many studies on growth following bereavement have been conducted. However the findings of those studies cannot be generalized to Asian and specifically Pakistani culture. Studies with Pakistani population are very few with reference to bereavement and growth. The present study is an effort in this direction through investigating the nature of relationship of bereavement with post-traumatic growth through religious coping, cognitive processes and social support.

In spite of the reported pathological consequences and possible occurrence of post-traumatic growth through adversities, research on bereaved parents is relatively rare (Rogers et al., & Hong, 2008). Mathews and Marwit (2004) have also noted that parental bereavement is less focused in researches as compared to spousal bereavement. Similarly, not enough researches have been conducted on spousal bereavement. Realization of the mental health implications of bereavement for parents and spouses as main pillars of a family institution, and awareness of the missing

link between therapeutic practices in Pakistan and use of techniques that could facilitate post-traumatic growth laid the basis for the present study.

In brief, significance of the present study may be justified mainly on the following grounds: (a) past literature has overwhelmingly focused on examining the negative (psychopathological) outcomes of traumatic experiences while leaving the possibility of adaptive outcomes such as post-traumatic growth as an untapped area/ or under explored area in bereavement research; (b) there has been lack of indigenous researches both on bereavement and post-traumatic growth, particularly studies, that examine these phenomena in a sample of bereaved parents and spouses across ethnic identity; (c) it included both natural, and sudden/and violent deaths as cause of bereavement ; (d) it explored important socio-demographic variables with reference to the study variables (e) it realized the need for validation of measures of bereavement, religious coping, satisfaction with social support and post-traumatic growth in population of Baluchistan, Pakistan; (f) it encompassed the need for validation of post-traumatic growth construct in Pakistani culture; (g) it realized the need for empirical examination of assumptions about assimilation and accommodation postulated by organismic valuing process theory of Growth through Adversity; and (h) it was an initiative for empirically testing the role of widely prevalent practices of religious coping and social support coping strategies in dealing with bereavement in Pakistan.

Proposed Conceptual Framework for the Present Study

The following diagram depicts the conceptual framework of the present study which shows that it is a parallel multi-mediator design mainly focusing on indirect relationship between bereavement and post-traumatic growth through

positive religious coping, negative religious coping, accommodation, assimilation, and satisfaction with social support.

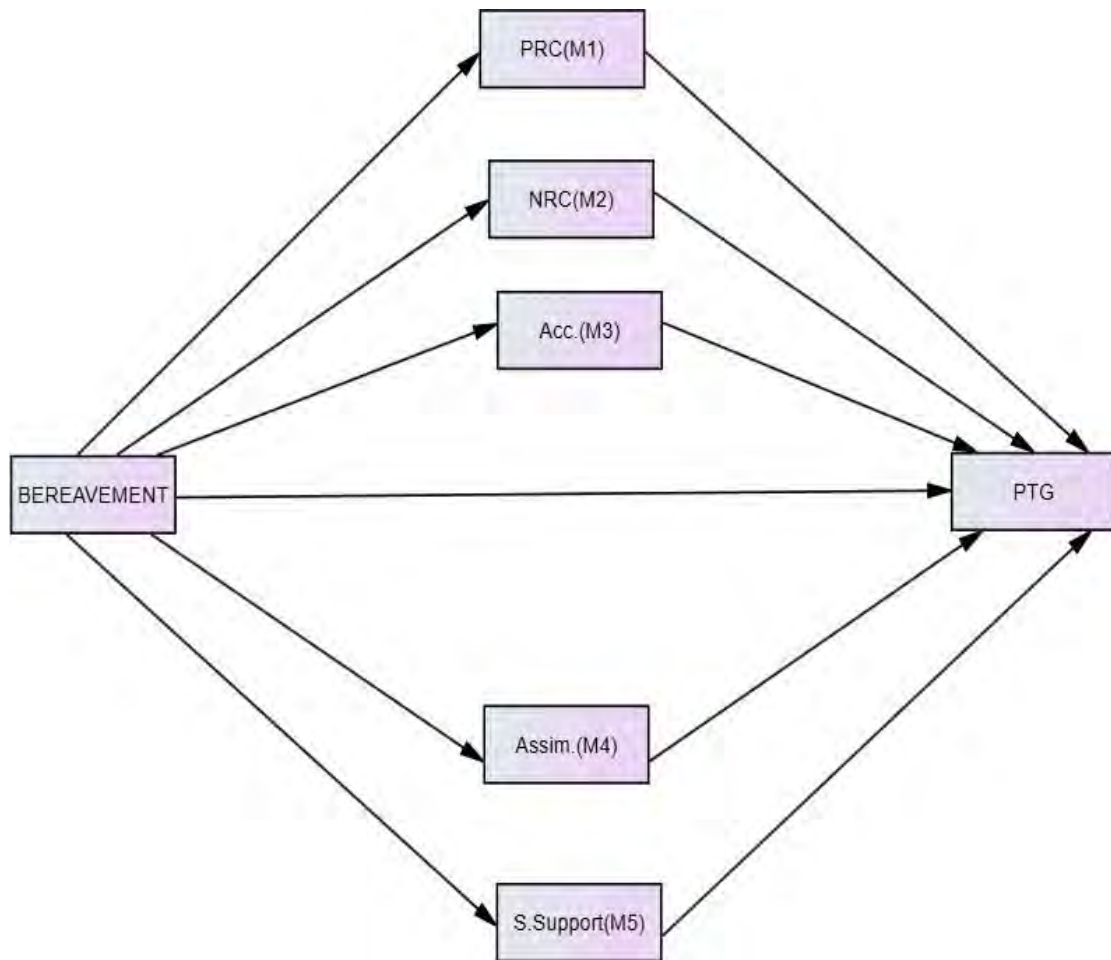


Figure 2. Proposed Conceptual Framework for the Present Research

Chapter II**Method****Problem Statement**

Main purpose of the present research was to examine the relationship between bereavement and post-traumatic growth and the mediating role of religious coping (positive and negative religious coping, cognitive processes (accommodation and assimilation) and satisfaction with social support in this relationship. In addition, group differences on study variables were explored based on circumstantial factors (i.e. nature of death and time since death) and demographic characteristics of the participants and the deceased including gender, age, relationship status, family system, ethnicity, education level and occupation.

Research Design of the Present Study

The present research used cross-sectional design and it was completed in two independent parts. The Study-I was undertaken to translate and validate the instruments in local context and Study-II was the main study which was aimed at hypotheses testing. Figure-2 below shows the details of the research design.

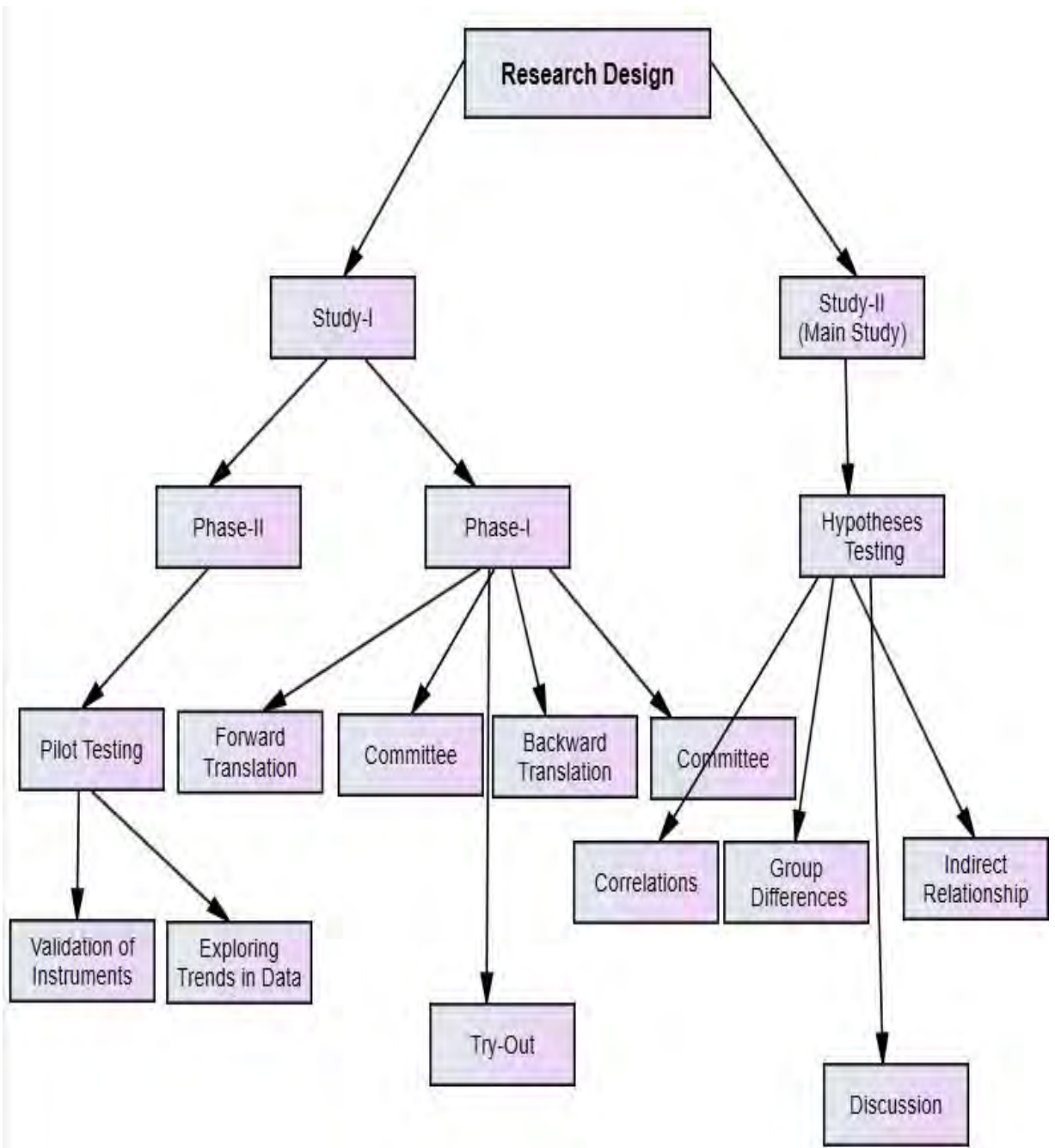


Figure 3. Research Design of the Present Research.

Study-I

This part of the research includes the objectives, method, results and discussion of Study-I.

Objectives

The objectives of Study-I were to translate and validate the selected instruments to be used in the main study (Study-II) and to examine the pattern of relationships between the study variables. It was conducted in two phases.

Phase-I: Translation and Pre-testing of the Instruments

Back-translation design, the most popular design (Hambleton, 2005), was used in the present study. Translation from source language (English) into target language (Urdu) was carried out by six M.Phil/Ph.D scholars independently at National Institute of Psychology, Quaid-i-Azam University. These Urdu translations were synthesized into a single draft of Urdu translation by a another four member expert panel (Four Ph.D Scholars in Psychology) after thorough consideration of each item of the scales and their instructions in the context of words selection, sentence structure, understandability of the language.

The Urdu draft of the scales finalized by the panel was given to another six bilingual individuals for translating it back into the English language. These six back translators were M.Phil. /Ph.D. scholars from various disciplines (Anthropology, Psychology, Pakistan Studies and Sociology) at Quaid-i-Azam University. A panel of three Ph.D. scholars in psychology examined and compared the back

translated version with the original English version scales in terms of their equivalence.

In addition to translation, some changes were also made to the scales as discussed and suggested by the expert committee. These changes were about the instructions for all the scales, values assigned to response options, certain words/terms used in the scales. Instructions for each individual scale were developed in committee stage in accordance with the present study variables and sample. Values for response options on the original scales of Core Bereavement Items and Brief-R COPE ranged from 1-4. These values were adapted from 1-4 to 0-3. At committee stage it was observed that Item No. 2 of Integration of Stressful Life Events Scale (original version statement: *“I have made sense of this event”*; adapted version statement: *“Mei Es Sadmey Ko Samajh Chuka Hun”*) could not convey clear meaning and hence failed to tap clear responses. The committee suggested exclusion of this item from the scale for main study analyses after empirical evaluation.

It was also noted that the pronoun for the deceased on the bereavement scale was not very much appropriate term with the local population as it is an English language alphabet. However, the committee agreed upon retaining the same pronoun because instead using some local name may by chance have coincided with the actual name of deceased and would result in offending the feelings of the participants. First response option for items No 8 to 17 was *“a lot of the time”*; for item No’s 1, 4, and 6 was *“continuously”*; and for items No’s 3, 5, and 7 on the original scale was *“always”* and last three response options were the same for all the items. The committee suggested to retain Urdu word *“Musalsal”* (continuously) for all the items including item No’s 3, 5, and 7 to avoid ambiguity.

On religious coping scale word “Church” in item No.12 was replaced by “place of worship” (*Ebaadat ki jaga*) in translated version to make it neutral word with reference to religious affiliation of the participants. It was decided by the committee as the word church is used to denote the place of worship for Christian community only.

Through this procedure Urdu version of the scales was prepared. This version was pre-tested on a sample of 20 bereaved parents and spouses to assess its suitability and comprehension for the target population and to uncover problems that go unidentified by the translators. After the pre-testing, the translated versions of the scales were empirically evaluated in pilot study to address their psychometric properties in a sample of 260 bereaved parents and spouses.

Phase-II: Pilot Study

Objectives of the pilot study were to address the psychometric properties of the translated Urdu version scales, and also to explore the direction and strength of relationships between the study variables.

Sample. Data for the pilot testing were collected with self-reported instruments from 260 bereaved parents and spouses that included 145 female and 115 male; 135 parents and 125 spouses. Age of the sample ranged from 20 to 90 years with mean age of 45.20 and standard deviation of 14.57. The participants were taken from Quetta, Mastung, Pishin, Loralai, Chaman, and Noshki districts of Baluchistan province and included all ethnic communities residing in the province. Inclusion criteria were based on (a) A child (children) died of either natural causes or sudden death, (b) length of bereavement had not exceeded 24 months period, (c) in the case of parents who had been bereaved, were alive, and willing to take part in the study.

Instruments. The following instruments were used in adapted version for pilot testing.

Core Bereavement Items Scale. This scale was originally developed by Burnett, Middleton, Raphael, & Martinek (1997), and translated in phase- I. The scale has 17 items. Response options to each statement range from *Never* (0) to *Continuously* (3). Total score on the scale is obtained by adding together the 17 items with potential score range from 0-51, and alpha reliability coefficient of .94. The scale has three subscales – Images and thoughts; Acute separation and; Grief.

Brief R-COPE. It was originally developed by Pargament et al. (1998) and translated in phase-I of the present study. It consists of positive and negative religious coping subscales with 14 items in total, and seven items for each subscale respectively. Response options range from *Not at all* (0) to *a great deal* (3). Scores for Positive Religious Coping subscale is obtained by adding items No's 1 to 7 with potential score range from 0-21, and alpha reliability of .70. Scores for Negative Religious Coping subscale is obtained by adding items No's 8 to 14 with potential score range from 0-21, and alpha reliability of .74.

Integration of Stressful Life Events Scale. It is originally a 16-items scale developed by Holland, Currier, Coleman, & Neimeyer (2010) and translated in phase-I of the study. It has five point response options which range from *Strongly Agree* (1) to *Strongly Disagree* (5). Score for accommodation subscale (named Footing in the World on the scale) is obtained by adding together items No's 1, 3, 5, 7, 9, 11, 12, 13, 14, 15, and 16 (scores range = 11-55). Score for Assimilation subscale (named Comprehensibility on the scale) is obtained by adding together items No's 4, 6, 8, and 10 (score range = 4-20, alpha = .56).

Social Support Questionnaire – Short Form. It was originally developed by Sarason, Sarason, Shearin, and Pierce (1987) and translated in phase-1. It has 6 items and response options range from *‘very dissatisfied’* (1) to *‘very satisfied’* (6). It has no subscales and no reverse item. Potential score range is from 6-36, with alpha reliability of

.88. This scale deals with the degree of satisfaction of the recipient with the social support. The second part of the scale was used in the present study as the objective of the present research focused at level of satisfaction with the social support.

Post-traumatic Growth Inventory-Short Form. It is a 10-items scale originally developed by Cann, Calhoun, Tedeschi, Taku, Vishnevsky, Triplett, & Danhauer (2010) and translated by Aziz (2012). It has six-point response options which are *‘I did not experience this change as a result of my crisis’* (0) to *‘I did experience this change to a very great degree’* (5) with potential score range of 0-50 and alpha coefficient of .79.

Procedure. The participants were approached at their residence or workplace for obtaining data from them. Their consent was taken before the scales were given to them to complete. Those who agreed to participate in the study completed the scales. All the participants were ensured that their data would only be used for the present research purposes and that they could refuse to complete the scales if they felt uneasy during responding to the statements of the scales. Each participant completed the scales independently and individually.

Results of the pilot study. The data were analyzed by using SPSS Version 22. To address the psychometric properties of the translated versions, item-total correlations, factor analysis, reliability analysis and inter-scale correlations were conducted.

Table 1

Descriptive statistics and Alpha reliability coefficients of Pilot Study (N = 260)

Variables	Items	M	SD	α	Score Range		Skewness	Kurtosis
					Potential	Actual		
Bereavement	17	33.63	11.02	.94	00-51	1-51	-.58	-.04
PRC	7	16.57	3.79	.70	00-21	1-21	-.95	.81
NRC	7	4.85	4.21	.74	00-21	00-21	.84	.36
Accom.	11	31.93	9.65	.87	11-55	11-55	.16	-.48
Assim.	5	14.16	3.75	.56	5-25	5-24	.21	-.29
S. Support	6	30.32	7.81	.88	6-36	6-36	-1.84	2.82
PTG	10	27.47	9.15	.79	00-50	1-49	.005	-.26

Note. PRC = Positive religious coping; NRC = Negative religious coping; Accom. = Accommodation; Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG = Post-traumatic Growth

Table 1 indicates mean, standard deviation, range of actual and potential scores, alpha reliability coefficients. Results show that the values of skew are within acceptable range. Cronbach's alpha reliability coefficient values range from .56 to .94. Except the assimilation scale, the values for all other scales are either at .70 or above.

Table 2*Item-total correlations and corrected item-total correlations for Core Bereavement**Items(N = 260)*

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.12	.89	.74**	.71
2	2.03	.90	.77**	.74
3	2.11	.90	.74**	.70
4	2.08	.92	.73**	.69
5	2.04	.90	.76**	.72
6	1.84	.95	.68**	.63
7	1.73	1.05	.62**	.56
8	2.27	.89	.74**	.70
9	2.12	.89	.76**	.72
10	1.88	.96	.71**	.67
11	1.52	1.02	.62**	.56
12	1,74	1.04	.68**	.62
13	1.89	.92	.72**	.68
14	1.88	.99	.75**	.70
15	1.77	.96	.75**	.71
16	1.92	.87	.74**	.71
17	1.65	.99	.73**	.69

** $p < 0.01$

Table 2 shows mean, standard deviation, item-total correlations, and corrected item-total correlations for each item and it shows that there is consistency of each individual item with the total score of the scale. All individual items correlation coefficient values vary from .62 to .75. All values are significant with p value $< .01$.

Table 3

Item-total correlations and corrected item-total correlations of Images and Thoughtssubscale of Core Bereavement Items (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.12	.89	.81**	.73
2	2.03	.90	.82**	.75
3	2.11	.90	.80**	.72
4	2.08	.92	.80**	.72
5	2.04	.90	.82**	.74
6	1.84	.95	.73**	.62
7	1.73	1.05	.64**	.50

** $p < 0.01$

Table 3 shows that there is a significant positive relationship of all individual items with its total subscale score. Significance level was at $p < 0.01$.

Table 4

Item-total correlations and corrected item-total correlations for Acute Separation subscale of Core Bereavement Items (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
8	2.27	.89	.75**	.61
9	2.12	.90	.80**	.68
10	1.88	.96	.77 **	.62
11	1.52	.1.02	.71**	.52
12	1.74	1.05	.78**	.62

** $p < 0.01$

Table 4 shows that all items are significantly positive correlated with the total scale scores. All the coefficient values are well above the acceptable range and all values are significant with p value $< .01$.

Table 5

Item-total correlations and corrected item-total correlations for Grief subscale of CoreBereavement Items (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
13	1.89	.92	.75**	.61
14	1.88	.99	.81**	.68
15	1.77	.96	.83**	.72
16	1.92	.87	.80**	.69
17	1.65	.99	.80**	.67

** $p < 0.01$

Table 5 shows descriptive statistics and item-total correlations for Grief subscale. Each individual item is significantly positively correlated with its total scale scores indicating the internal consistency of the items in the scale.

Table 6

Item-total correlations and corrected item-total correlations for Brief-RCOPE (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.47	.91	.39**	.22
2	2.60	.81	.40**	.26
3	2.42	.91	.35**	.18
4	2.20	.95	.32**	.14
5	2.01	1.00	.29**	.09
6	2.56	.83	.28**	.12
7	2.36	.90	.30**	.13
8	.57	.92	.32**	.14
9	.90	1.03	.48**	.30
10	1.05	1.10	.55**	.37
11	.67	1.02	.43**	.25
12	.58	.90	.48**	.33
13	.82	1.08	.34**	.14
14	.41	.85	.40**	.25

** $p < 0.01$

Table 6 shows that there is significant positive relationship of all individual items with total scale score although the magnitude of relationship is from low to moderate.

The corrected item-total correlations are very low in magnitude. As the scale is two dimensional i.e. one consisting of items of positive religious coping and the other one of negative religious coping, therefore dimension wise item-total correlation in the following table 7 and table 8 are the appropriate one and reflect the true effectiveness of items.

Table 7

Item-total correlations and corrected item-total correlations for Positive Religious Coping of Brief-RCOPE (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.47	.91	.61**	.42
2	2.60	.81	.68**	.54
3	2.42	.91	.65**	.47
4	2.20	.95	.64**	.46
5	2.01	1.00	.53**	.30
6	2.56	.83	.57**	.39
7	2.36	.90	.50**	.30

** $p < 0.01$

Table 7 indicates descriptive statistics and item-total correlation for positive religious coping subscale. All individual items show significant positive correlation with the total subscale scores.

Table 8

Item-total correlations and corrected item-total correlations for Negative Religious Coping of Brief-RCOPE (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
8	.57	.92	.58**	.41
9	.90	1.03	.68**	.52
10	1.05	1.10	.71**	.54
11	.67	1.02	.64**	.47
12	.58	.90	.71**	.58
13	.82	1.08	.48**	.26
14	.41	.85	.59**	.44

** $p < 0.01$

Table 8 depicts the item-total correlation values for negative religious coping subscale. All the seven items are significantly positively associated with total score of this scale indicating the internal consistency of the items. The significance level is at $p < 0.01$.

Table 9

Item-total correlation and corrected item-total correlation for Integration of Stressful Life Events Scale (Cognitive Coping Scale) (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.60	1.28	.72**	.67
2	3.12	1.34	.12*	.02
3	2.99	1.27	.44**	.36
4	2.65	1.20	.65*	.69
5	3.38	1.30	.57**	.49
6	2.83	1.28	.61**	.54
7	2.87	1.41	.73**	.67
8	2.42	1.30	.76**	.72
9	2.82	1.32	.77**	.73
10	2.59	1.29	.47**	.39
11	3.52	1.22	.49**	.41
12	2.86	1.27	.78**	.74
13	2.79	1.28	.66**	.60
14	2.92	1.38	.72**	.66
15	2.98	1.35	.73**	.67
16	2.10	1.27	.48**	.40

** $p < 0.01$

Table 9 shows that all the sixteen items are significantly correlated with the total test scores, however the value for item No. 2 is very low ($r = .12$) which is though significant, but quite low in magnitude.

Table 10

Item-total correlation and corrected item-total correlation for Accommodation aspect of Integration of Stressful Life Events Scale (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.60	1.28	.72**	.65
3	3.00	1.27	.46**	.35
5	3.38	1.30	.57**	.47
7	2.87	1.41	.73**	.64
9	2.82	1.32	.78**	.71
11	3.52	1.22	.52**	.42
12	2.86	1.27	.79**	.74
13	2.79	1.28	.69**	.62
14	2.92	1.38	.73**	.66
15	2.98	1.35	.76**	.69
16	2.10	1.27	.49**	.38

** $p < 0.01$

Table 10 shows descriptive statistics and item-total correlations for Accommodation subscale (named Footing in the World on scale). All items are internally consistent and significantly positively related with the total scores on the scale. The values of coefficient range from .49 to .79.

Table 11

Item-total correlation and corrected item-total correlation for Assimilation aspect of Integration of Stressful Life Events Scale (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
2	3.12	1.34	.32**	-.02
4	2.65	1.20	.67**	.44
6	2.83	1.35	.66**	.39
8	2.42	1.30	.77**	.56
10	2.59	1.29	.60**	.32

** $p < 0.01$

Table 11 shows a significant positive relationship of all items of Assimilation subscale (named Comprehensibility on scale) with its total scale scores. However, the corrected item-total correlation of item No. 2 is negative and very low in magnitude.

Table 12*Item-total correlation and corrected item-total correlation for Social Support**Questionnaire – Short Form (N = 260)*

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	4.53	2.18	.74**	.61
2	4.66	2.19	.68**	.52
3	4.60	2.27	.77**	.64
4	4.96	1.96	.79**	.69
5	4.92	1.95	.78**	.67
6	5.12	1.77	.79**	.70

** $p < 0.01$

Table 12 shows that there is a significant positive relationship of all individual items with total scores of the scale. Results of the item-total correlation and corrected item-total correlation endorse the internal consistency of all the six items.

Table 13

Item-total correlation and corrected item-total correlation for Post-traumatic GrowthInventory – Short Form (N = 260)

Item No.	<i>M</i>	<i>S.D</i>	Item-total correlation	Corrected item-total correlation
1	2.33	1.50	.49**	.36
2	2.85	1.73	.71**	.60
3	3.08	1.55	.72**	.62
4	2.97	1.46	.49**	.36
5	2.43	1.50	.57**	.44
6	1.88	1.72	.57**	.42
7	2.62	1.47	.64**	.54
8	3.82	1.37	.53**	.42
9	2.81	1.61	.66**	.54
10	2.65	1.62	.52**	.37

** $p < 0.01$

Table 13 depicts the descriptive statistics and item-total correlation for Post-traumatic Growth Inventory-Short Form. All individual items are significantly positively associated with the total test scores with coefficient values ranging from 0.49 to 0.72.

Validation of the Instruments

This analysis was conducted to provide evidence of construct validity of the translated instruments in Urdu language. Confirmatory Factor Analysis (CFA) was used to address the factor structure of all the translated instruments by using AMOS Version

21. The model's overall fitness can be calculated through a number of available tests and each test has different assumptions in terms of sample, estimate procedures, complexity of model, normality of the data, or combination of these. The present study has used these fit indices to evaluate model fit including Chi-square test, Goodness of fit-index, Comparative fit-index, and Root mean square error of approximation, with lower and higher limits of the 90% confidence interval.

As the Chi-square ratio is sensitive to small differences, therefore, it can be misleading for large sample. It is therefore recommended and suggested that Chi-square should not be interpreted as test statistics- it should be interpreted as good or bad fit of model in which small Chi-square value indicates good fit or vice versa. RMSEA is considered as most informative and descriptive fit indices (Diamantopoulos & Siguaw, 2000). In this study, cut-limits of CFI ($\geq .95$) and RMSEA ($\geq .06$) were applied as recommended by Cabera-Nguyen (2010). Another most commonly used fit index known as Goodness of fit (GFI). It ranges from 0 to 1. If the value of GFI is negative or greater than one it indicate that probably data do not fit the model, for this study the value of greater than .90 is considered as acceptable fit (Hu & Bentler, 1995).

Table 14*Standardized Factor loadings by Confirmatory Factor Analysis of Core**BereavementItems (N = 260)*

Item No	Standardized Factor Loading		
	Factor 1	Factor 2	Factor 3
Br 1	.76		
Br 2	.80		
Br 3	.75		
Br 4	.75		
Br 5	.78		
Br 6	.68		
Br 7	.52		
Br 8		.71	
Br 9		.75	
Br 10		.74	
Br 11		.73	
Br 12		.78	
Br 13			.71
Br 14			.75
Br 15			.74
Br 16			.73
Br 17			.75

The above table (Table 14) depicts the standardized factor loadings for Urdu translated version of Core bereavement items. All items were retained in the model

because of their loadings which are $\geq .30$. The factor loadings ranged from .52 to .80, .71 to .78, and .71 to .75 for F1 = Image & thought, F2 = Acute separation), and F3 = Grief respectively.

Table 15

Model Fit Indices for translated version of Core Bereavement Items (N =260)

	χ^2 (df)	GFI	IFI	CFI	SRMR	RMSEA
Model 1	252.02(116)	0.89	0.94	0.94	0.04	0.06
Model 2	232.25(115)	0.95	0.95	0.95	0.04	0.06

Note. GFI = Goodness of Fit Index; CFA – Comparative Fit Index; IFI = Incremental Fit Index;

SRMR; Standardized Root Mean Square; RMSEA; Root Mean Square Error of Approximation

Table 15 indicates model fit indices for Urdu translated version of Core Bereavement Items. Model fit indices were not good for the default model (Model 1). To obtain a good model fit modification was applied, which included adding covariance between the error terms of items of same subscale. This step is based on the assumptions that since items of a subscale measure the same underlying construct, so items within one dimension share error variance. Model 2, which is obtained after applying modification is the good model fit with χ^2 (df) =232.25 (115) and the value of CFI= 0.95, IFI= 0.95, and RMSEA=0.06.

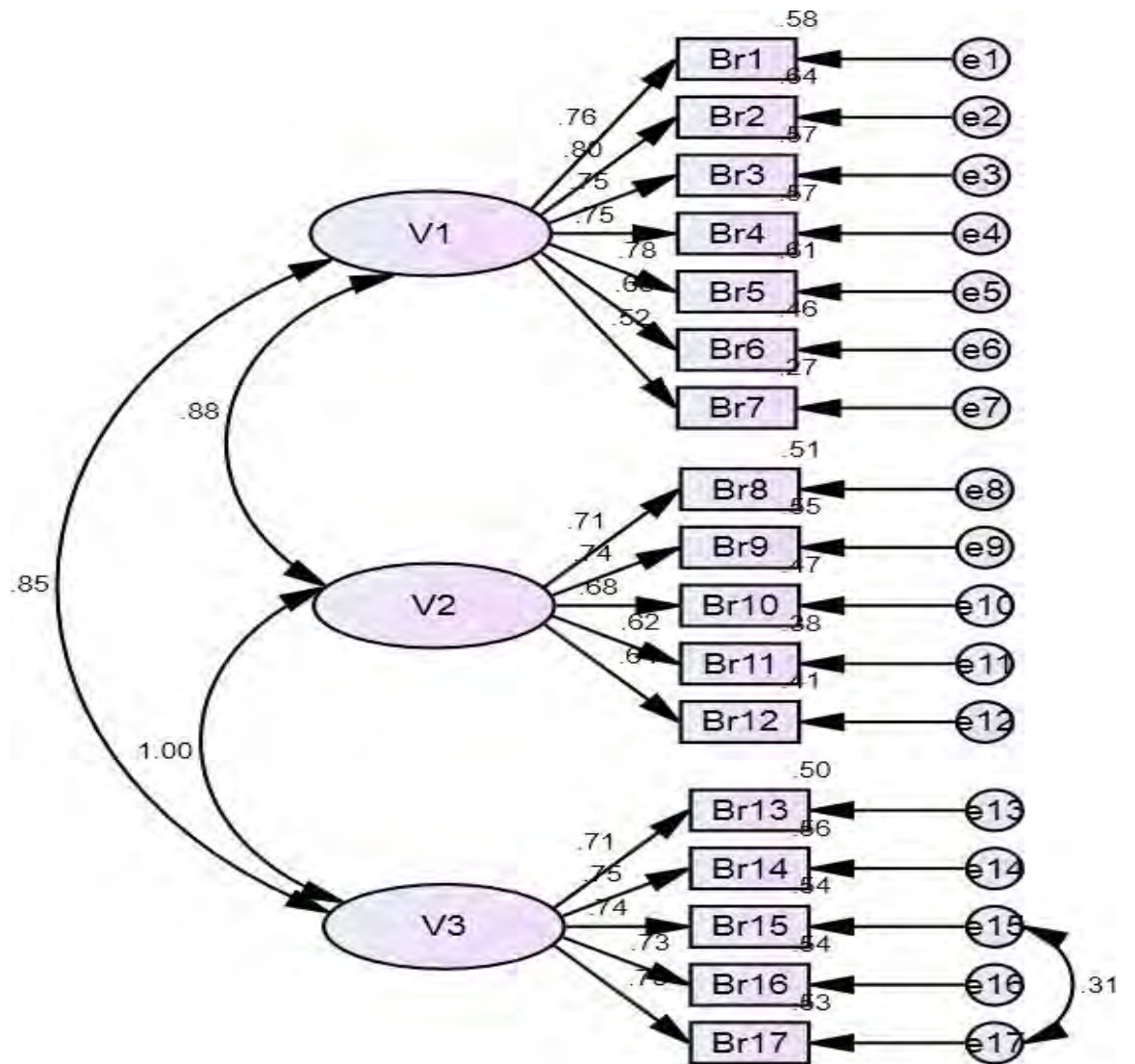


Figure 4. Measurement model for translated version of Core Bereavement Items.

(V1 =Images and thoughts; V2 = Acute Separation; V3 = Grief).

Table 16

Standardized Factor loadings by Confirmatory Factor Analysis of Positive and Negative Religious Coping of Brief-RCOPE (N = 260)

Item No	Standardized Factor Loading	
	Factor 1	Factor 2
RC 1	.61	
RC 2	.84	
RC 3	.54	
RC 4	.47	
RC 6	.49	
RC 8		.62
RC 9		.58
RC 10		.53
RC 11		.54
RC 12		.72
RC 14		.57

Table 16 shows the factor structure of translated version of Brief-RCOPE with items loadings on their respective factors indicating that all items have factor loadings equal or greater than .30 except for items 5, 7 and 13.

Table 17

Model Fit Indices Values for translated version of Positive and Negative Religious Coping for Brief-RCOPE Scale (N = 260)

	χ^2 (df)	GFI	IFI	CFI	SRMR	RMSEA
Model 1	120.25(43)	0.95	0.92	0.92	0.05	0.06
Model 2	57.24	0.98	0.98	0.98	0.04	0.03

(40)

Note. GFI = Goodness of Fit Index; CFA – Comparative Fit Index; IFI = Incremental Fit Index; SRMR; Standardized Root Mean Square; RMSEA; Root Mean Square Error of Approximation

Table 17 shows model fit indices of translated version of Brief-RCOPE. Default model indices indicate that it was unacceptable. To achieve goodness of fit, three modifications were added in model 2.

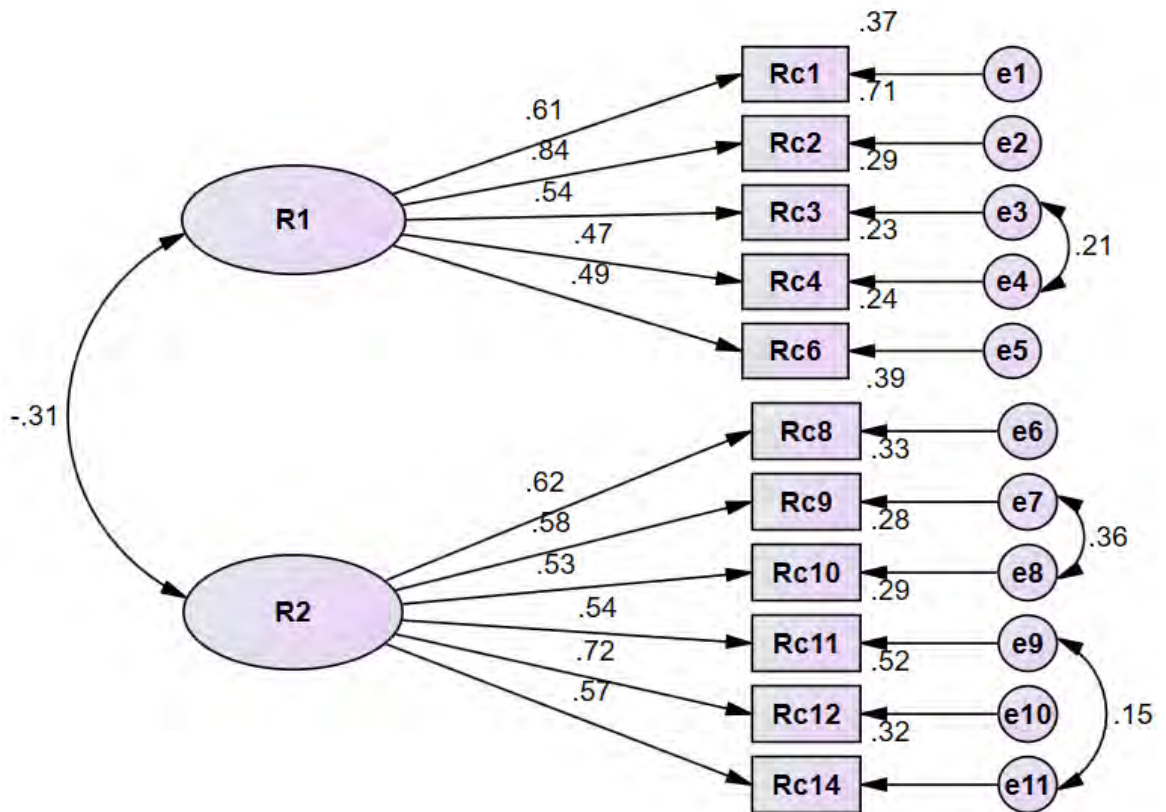


Figure 5. Measurement model for translated version of Positive and Negative Religious Coping of Brief-RCOPE. (Spir1 = Positive religious coping; Spir2 = Negative religious coping)

Table 18

Standardized Factor loadings by Confirmatory Factor Analysis of Accommodation and Assimilation aspects of Integration of Stressful Life Events Scale (N = 260)

Item No	Standardized Factor Loading	
	Factor 1	Factor 2
CP 1	.72	
CP 4		.63
CP 5	.58	
CP 6		.61
CP 7	.72	
CP 8		.81
CP 9	.80	
CP 10		.49
CP 11	.55	
CP 12	.80	
CP 13	.70	
CP 14	.77	
CP 15	.75	
CP 16	.50	

Table 18 depicts the standardized factor loadings of CFA for Urdu translated version of Integration of stressful life events scale. All items, except item No. 2 and 3 were retained in the model because of their loadings being in acceptable range and above .35.

Table 19

Model Fit Indices for translated version of Accommodation and Assimilation aspects of Integration of Stressful Events Scale (N = 260)

	χ^2 (df)	GFI	IFI	CFI	SRMR	RMSEA
Model 1	281.05(76)	0.91	0.93	0.93	0.04	0.08
Model 2	167.36(66)	0.95	0.96	0.96	0.03	0.06

Note. GFI = Goodness of Fit Index; CFA – Comparative Fit Index; IFI = Incremental Fit Index; SRMR; Standardized Root Mean Square; RMSEA; Root Mean Square Error of Approximation

Table 19 shows values of indices which indicate that goodness of fit could not be achieved in the model 1 for translated version of Integration of Stressful Life Events Scale. To achieve goodness of fit, Item No. 2 and 3 were dropped and modifications were added in model 2 which included adding covariance between error terms of same subscale on the basis of assumption that items of a subscale measure same underlying construct and shared error variance. Model 2, which is obtained after applying modification is relatively the good fit model with χ^2 (df) = 167.36 (66) and the value of CFI= 0.96, IFI= 0.96 and RMSEA= 0.06.

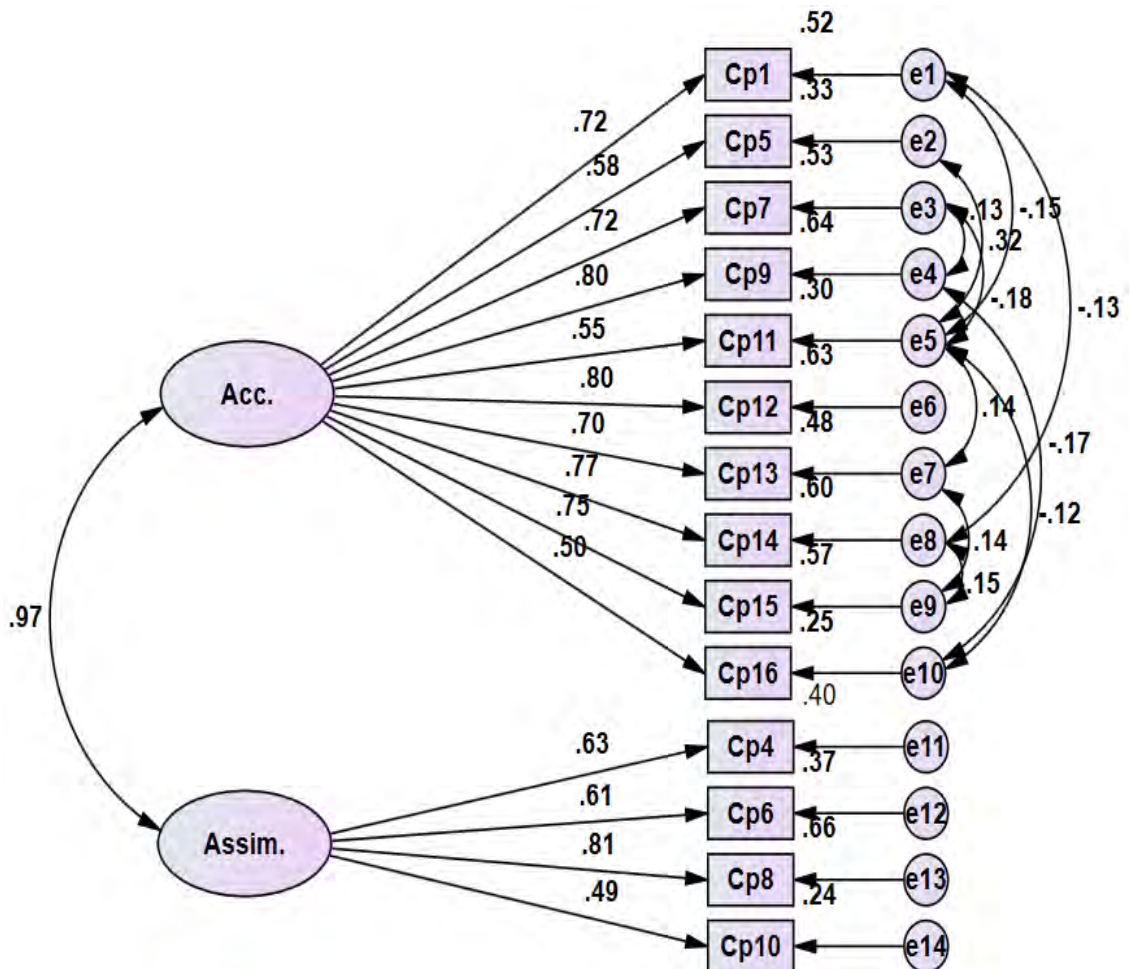


Figure 6. Measurement model for Accommodation and Assimilation aspects of Integration of Stressful Life Events Scale. (C. Cop1 = Accommodation; C.Cop2 = Assimilation)

Table 20

Standardized Factor loadings by Confirmatory Factor Analysis of Social Support Questionnaire-Short Form (N = 260)

Item No	Standardized Factor Loading
SSQ 1	.69
SSQ 2	.77
SSQ 3	.76
SSQ 4	.81
SSQ 5	.71
SSQ 6	.79

The table 20 shows factor loading for the Urdu translated version of Social Support Questionnaire-short form. All loadings ranged from 0.69 to 0.81 and were well above the acceptable range and support the single factor structure of this scale. Hence, all the items were retained for further analyses.

Table 21

Model Fit Indices Values for translated version of Social Support Questionnaire-ShortForm (N = 260)

	χ^2 (df)	GFI	IFI	CFI	SRMR	RMSEA
Model 1	65.39(9)	0.92	0.93	0.93	0.05	0.15
Model 2	64.39(4)	0.99	0.99	0.99	0.05	0.04

Note. GFI = Goodness of Fit Index; CFA – Comparative Fit Index; IFI = Incremental Fit Index; SRMR; Standardized Root Mean Square; RMSEA; Root Mean Square Error of Approximation

Table 21 shows unacceptable fit of the model for the translated version of Social Support Questionnaire in the default model. Though all six items were retained on the scale but four modifications were added to the model to obtain good fit of the model for the translated version of the scale.

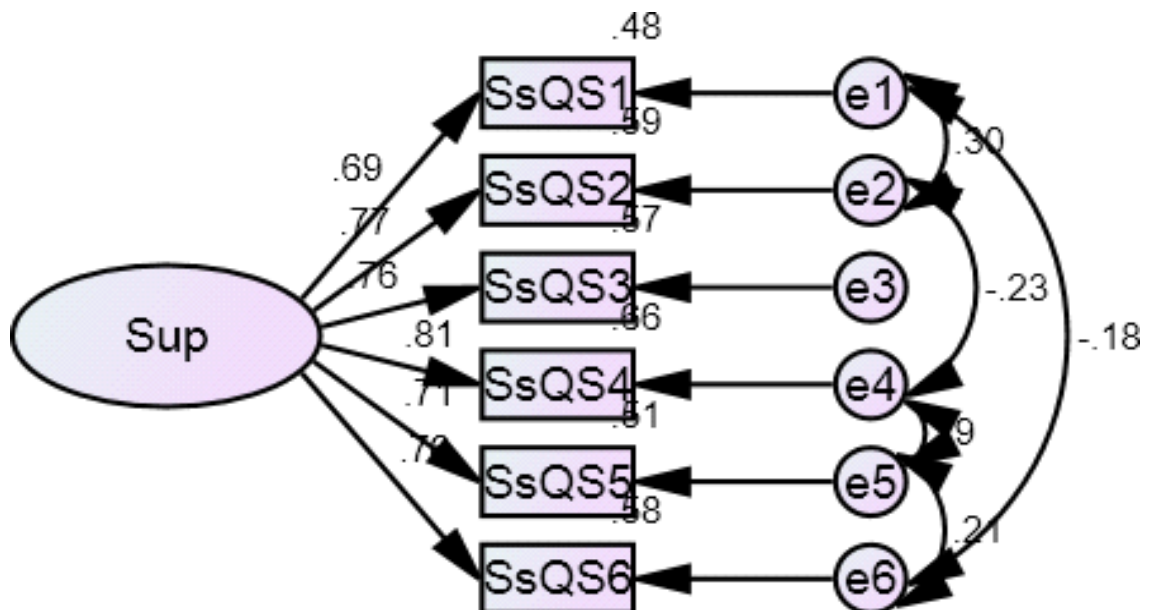


Figure 7. Measurement model for translated version of Social Support Questionnaire-Short Form.

Table 22

Standardized Factor loadings by Confirmatory Factor Analysis of Post-traumatic Growth Inventory-Short Form (N = 260)

Item No	Standardized Factor Loading
Gr 1	.37
Gr 2	.60
Gr 3	.62
Gr 4	.46
Gr 5	.51
Gr 6	.40
Gr 7	.59
Gr 8	.49
Gr 9	.56
Gr 10	.42

Table 22 indicates the factor loadings for the translated version of Post-traumatic Growth Inventory-Short Form. As shown in the above table, all the items loaded on a single factor with loading values in the acceptable range. This endorsed the uni-dimensionality of the scale and all the items were retained for analyses in the main study.

Table 23

Model Fit Indices for Translated of Post-Traumatic Inventory Values version Growth Short Form (N = 260)

	$\chi^2(df)$	GFI	IFI	CFI	SRMR	RMSEA
Model 1	150.28(35)	0.89	0.80	0.80	0.07	0.11
Model 2	70.04(29)	0.95	0.93	0.92	0.05	0.06

Note. GFI = Goodness of Fit Index; CFA – Comparative Fit Index; IFI = Incremental Fit Index; SRMR; Standardized Root Mean Square; RMSEA= Root Mean Square Error of Approximation

Table 23 presents the model fit indices for the Urdu translated version of Post-traumatic Growth Inventory Short Form. Model 1 represent model fit indices for original model which were lower than acceptable threshold. To obtain an acceptable model fit modifications were applied, which included adding covariance between errors of the scale. Model 2 with $\chi^2 (df) = 70.04$ is relatively adequate fit model with value of CFI=0.92, IFI= 0.93 and RMSEA=0.06.

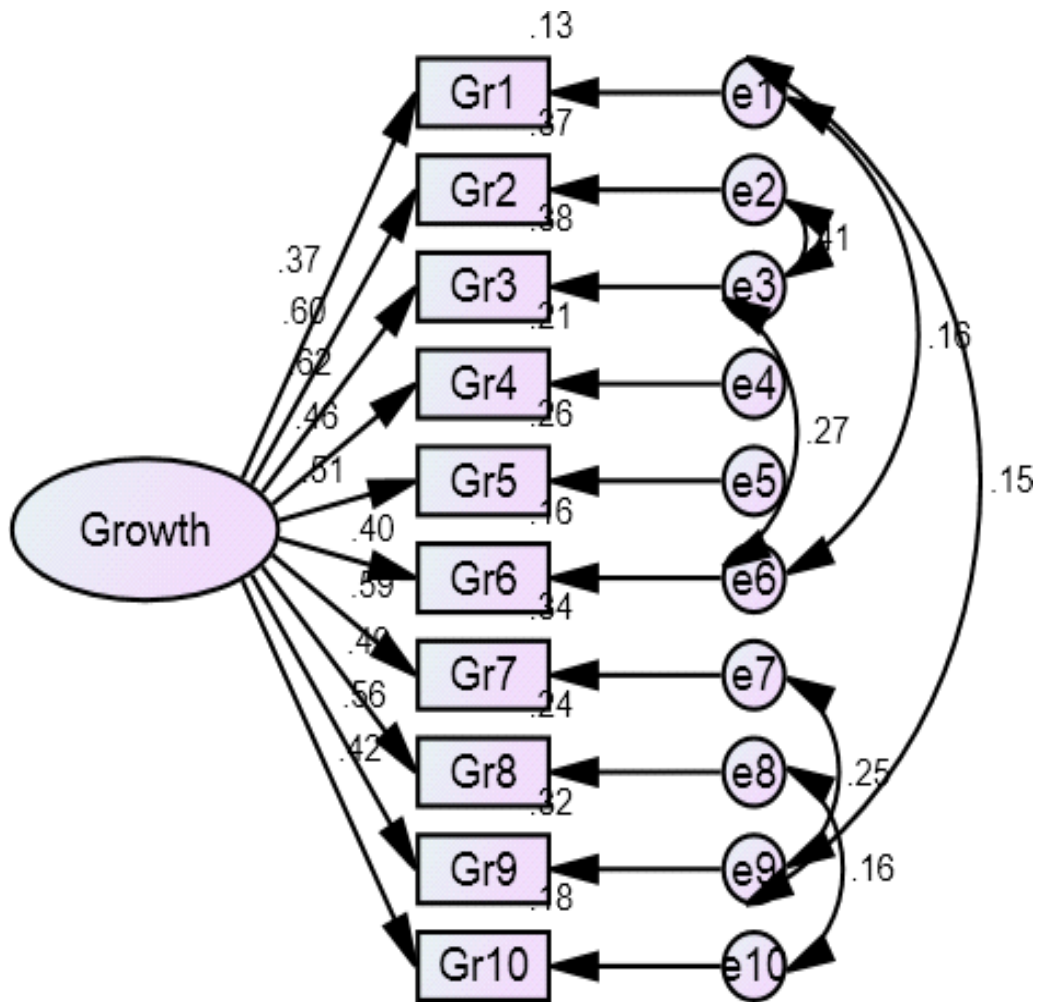


Figure 8. Measurement model for translated version of Posttraumatic Growth Inventory-Short Form.

Table 24*Correlations between the variables in Pilot Study (N = 260)*

Variables	1	2	3	4	5	6	7
1. Bereavement	-	.06	.13*	-.44**	-.38**	.09	-.24**
2. PRC		-	-.22**	.08	.07	.06	.32**
3. NRC			-	-.16**	-.18**	-.07	-.11
4. Acc.				-	.77**	.04	.42**
5. Assim.					-	.04	.37**
6. S.Support						-	.08
7. PTG							-

Note. PRC= Positive religious coping; NRC=Negative religious coping; Acc. = Accommodation;

Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG = Post- traumatic growth.

* $p < .05$; ** $p < .01$

Table 24 indicates the patterns of relationship between the study variables and it is evident that most of the patterns of relationships are in the expected directions. Results indicate significant negative association of bereavement with accommodation, assimilation and post-traumatic growth and significant positive association with negative religious coping. Relationship of bereavement with positive religious coping and satisfaction with social support is positive but non-significant and low in magnitude. There is a significant positive association of positive religious coping, accommodation and assimilation with post-traumatic growth. Relationship of both negative religious coping ($r = -.11$) and satisfaction with social support ($r = .08$) with post traumatic growth is also low in magnitude.

Discussion Study-I

The objective of Study-I was the translation and adaptation of instruments in the local context that was to be used in the main study i.e. Study-II; and to examine the pattern of relationship among the study variables. This study was conducted in two phases, first phase of this part of the study consisted of translation and pretesting of the instruments as the selected scales were originally developed in English language in western context, whereas the second phase was to empirically evaluate these translated versions of the scales and to address their psychometric properties.

The translation process was completed through back-translation design in which one or more translators adapt a test from the source language to the target language. Different translators take the adapted test (in the target language) and adapt it back to the source language. Then, the original and the back-translated versions of the test are compared and judgments are made about their equivalence. All the stages and their requirements were adhered to the best maximum possible level in order to ensure appropriate translation of these scales which could address the cultural sensitivities for the sample of the current research.

Some important considerations executed in adaption process were followed. Instructions for each individual scale were developed in the committee stage in accordance with the present research variables and sample. It is important to note that values for response options on the original scales of Core Bereavement Items and Brief-RCOPE ranged from 1-4. These values were adapted from 1-4 to 0-3.

It was done so in consultation with the expert committee members to avoid confusion in understanding the interpretation of the Questionnaire scores. During data collection and at committee stage it was observed that Item No 2

of Integration of Stressful Life Events (original version statement: ``I have made sense of this event``; adapted version statement: ``*Mei Es Sadmey Ko Samajh Chuka Hu*``) could not convey clear meaning and hence failed to depict unambiguous responses. The committee suggested considering exclusion of this item from the scale after empirical evaluation. The findings of item-total correlation and confirmatory factor analysis in phase-II supported the suggestion and view point of the committee for exclusion of this item.

In Core Bereavement Items scale it was also noted that the symbol (X) for the identity of the deceased was not very much appropriate term with the local population as it is an English language alphabet. However, after thorough discussion it was agreed upon to retain the symbol (X) because using some noun could possibly coincide with the actual name of some deceased and lead to unintentionally reactivation of grief of the given bereaved participant(s). The committee suggested to retain Urdu word ``*Musalsal*`` (continuously) for all the items including item No 3, 5, and 7 to avoid ambiguity for the sample of the study whereas, on religious coping scale word ``Church`` in item No 12 was replaced by ``place of worship`` (``*Ebaadat ki jaga*`` in adapted version) to make it neutral word with reference to religious affiliation of the sample. It was decided so in the committee because the word church is used to denote the place of worship for Christian community only.

Phase-II was devoted to empirically evaluate the translated scales and exploring the patterns of relation of the variables. Item-total correlation and corrected item-total correlations were conducted to examine the effectiveness of individual items within each scale. In addition, confirmatory factor analysis was also run on the scales in order to evaluate the construct validity of the scales. The alpha

reliabilities value for scores on all the scales were above the accepted value of .70 except for subscale of assimilation (.56). First, it might be due to small number of items i.e. only five items; secondly, it might have been because of the presence of item No 2 which was weakly correlated ($r = .12$) with the total score of the scale.

In confirmatory factor analysis this item No 2 was apparent as a dysfunctional item. The second reason proved right as the alpha reliability increased to .68 after deletion of this item. Structure of the scale with the given subscales was endorsed by the results of the confirmatory factor analysis which showed—though significant chi square—goodness of fit of the model. It was indicated by the fact that values of important indices fell in the acceptable range after addition of certain modifications in model two. Significance of the chi-square was ignored it is believed to be sample sensitive and because the value for ratio to degree of freedom was obtained below two for each scale. Overall, the findings are supportive that the scores on Urdu adapted versions are valid and reliable measures to be used in main study.

Chapter III

Main Study

Study-I was followed by Study-II or main study with the following objectives

Objectives

1. To investigate the bereavement and post-traumatic growth relationship
2. To examine the mediating role of religious coping, cognitive processes and satisfaction with social support in bereavement and post-traumatic growth relationship.
3. To explore group differences on the study variables by gender of the participants and the deceased, age of participants, nature of death (sudden/expected), time since death, relationship status with the deceased, family system, ethnicity, and education level and occupation of the participants.

Hypotheses

To test the objectives following hypotheses were formulated.

- H: 1. Bereavement is negatively associated with post-traumatic growth.
- H: 2. Bereavement is negatively associated with positive religious coping.
- H: 3. Bereavement is positively associated with negative religious coping.
- H: 4. Bereavement is positively associated with accommodation.
- H: 5. Bereavement is positively associated with assimilation.
- H: 6. Bereavement is negatively associated with satisfaction with social support.

- H: 7. Positive religious coping is positively associated with post-traumatic growth.
- H: 8. Negative religious coping is negatively associated with post-traumatic growth.
- H: 9. Accommodation is positively associated with post-traumatic growth.
- H: 10. Assimilation is negatively associated with post-traumatic growth.
- H: 11. Satisfaction with social support is positively associated with post-traumatic growth.
- H: 12. Positive religious coping mediates the bereavement and post-traumatic growth relationship.
- H: 13. Negative religious coping mediates the bereavement and post-traumatic relationship.
- H: 14. Accommodation mediates the bereavement and post-traumatic growth relationship.
- H: 15. Assimilation mediates the bereavement and post-traumatic growth relationship.
- H: 16. Satisfaction with social support mediates the bereavement and post-traumatic growth relationship.
- H: 17a. Female participants would report more intense bereavement as compared to male participants.
- H: 17b. Female participants would report greater post-traumatic growth as compared to male participants.
- H: 18. Unexpected death results in more intense bereavement as compared to expected death.

H: 19. Parents would experience more intense bereavement as compared to spouses.

Sample

A total of 401 participants took part in the main study. It included 203 bereaved parents and 198 bereaved spouses. There were 127 males and 229 females who took part in the study. Age range of the sample was 20 - 90 years. Mean age was 46.66 with standard deviation of 14.98. A blend of purposive convenience and snowball sampling techniques was used to select the participants. Inclusion criteria were (a) the parents/spouse had lost child/life partner to death; (b) the bereavement period had not exceeded a period of 24 months; and (c) both parents were alive and willing to take part in the study. Single parents were not included in the study (because the study purpose was to assess bereavement and post-traumatic growth in both father and mother in response to death of the same child) and those parents and spouses whose bereavement had lasted for more than 24 months were also not included in the study. The participants completed the self-reported scales individually and independently either at residence or at their workplaces. Table 25 presents detailed description of the sample.

Table 25*Demographic characteristics and frequencies of Main Study sample (N = 401)*

Variable	Characteristic	Frequency	(%)
Age	Up to 35 years	117	29.2
	36-50 years	137	34.2
	51-65 years	100	24.9
	66-85 years	43	10.7
	Above 85 years	4	1.0
Gender (Respondent)	Female	229	57.1
	Male	172	42.9
Ethnicity	Pashtoon	159	39.7
	Balochi	71	17.7
	Brahvi	47	11.7
	Hazara	32	8.0
	Others	92	22.9
Family System	Joint	263	65.6
	Nuclear	137	34.2
Age (Deceased)	Below one year	37	9.2
	Up to 5 years	17	4.2
	Up to 10 years	17	4.2
	11-20 years	49	12.2
	21-30 years	83	20.7
	31-40 years	71	17.7
	41-50 years	38	9.5
	51-60 years	38	9.5
	61-70 years	31	7.7
Above 70 years	20	5.0	

Continued...

Variable	Characteristic	Frequency	(%)
Gender	Female	126	31.4
	Male	275	68.6
(Deceased)			
Relationship	Son	142	35.4
Status	Daughter	61	15.2
	Husband	134	33.4
	Wife	64	16.0
Nature of death	Expected	195	48.6
	Unexpected	206	51.4
Time since death	Up to 3 months	48	12.0
	Up to 6 months	44	11.0
	Up to 9 months	35	8.7
	Up to 12 months	70	17.5
	Up to 18 months	41	10.2
	Up to 24 months	163	40.6

The above table indicates that larger group of the participant was from 36 – 65 years age group (almost 59%) followed by participant in age group of up to 35 years (29.2%). The sample consisted of more females (57.1%) than males (41.9). The majority of the participants lived in joint family system (65.6%) as compared to nuclear family system (34.2%) as Joint family system is still a prevalent practice across Baluchistan. A large number of participants were housewives (47.6%), others belonged to personal business (22.9%) and government services (17.5%). Most of the participants were bereaved by deaths of young loved ones. Almost 38% of the deceased were in 31-40 years age group and 12.2% were in 11-20 years age group. The deceased were largely male (68.6%) as compared to female which indicates more death incidents of male as compared to female.

Instruments

Scales that were adapted in Study-I were used in the main study. The scales included Urdu adapted version of Core Bereavement Items Scale (Burnett et al., 1997), Brief R-COPE (Pargament et al., 1998), Integration of Stressful Life Events Scale (Holland et al. 2010), Social Support Questionnaire-Short Form (Sarason et al., 1987), and Post-traumatic Growth Inventory-Short Form (Cann et al., 2010). The scales along with Consent Form and Demographic Sheet were used in a single booklet form. Detailed description of these scales is given below.

Consent form. Adherence to ethical considerations was given special attention in the present study. Participants` consent was taken on an informed consent form and that form also mentioned the purpose of the present research. It was clarified to each participant that he/she could withdraw from the study anytime if they felt so during completion of the scales. They were also assured that the data obtained from them would only be used for the present research purposes and would be kept strictly confidential. (See Appendix-L)

Demographic Information Sheet. A demographic information sheet was constructed to obtain information about gender, age, mother language, family system, education, occupation, and relationship status with the deceased, nature of death, the length of bereavement along with the age and gender of the deceased. (See Appendix-L)

Translated Version of Core Bereavement Items. Urdu adapted version of Core Bereavement Items scale was used to assess bereavement in the present study. This scale was originally developed by Burnett et al., (1997), and adapted in study-I. The scale has 17 items. There is no reverse item on the scale. Response options to each statement range from *Never* (0) to *Continuously* (3). Total score on the scale is obtained by adding together the 17 items with score range from 0 to 51. The alpha reliability coefficient for the original scale was .84 to .90. The internal consistency reliability of scores for the present sample is .95.

Though the scale has three subscales – Images and thoughts, Acute Separation, and Grief, the present research has used the total scores of the scale for this study as the objective of the present research was to assess relationship of bereavement with post-traumatic growth as a single phenomenon but not the components of post-traumatic growth. (See Appendix-M)

Translated Version of Brief-RCOPE. Urdu adapted version of Brief-RCOPE was used to assess positive and negative religious coping. It was originally developed by Pargament et al. (1998), and translated and adapted in Study-I. It consists of positive and negative religious coping subscales with 11 items in total; five items for Positive Religious Coping and six items for Negative Religious Coping. Response options range from *Not at all* (0) to *A great deal* (3). Score for Positive Religious Coping subscale is obtained by adding items number 1, 2, 3, 4, and 6 with score ranging from 0 to 15, and alpha reliability coefficient of .76 for the present sample. Score for Negative Religious Coping subscale is obtained by adding items number 8, 9, 10, 11, 12, and 14 with score ranging from 0 to 18, and alpha reliability for the

present sample is .78. Alpha reliability coefficient for the original subscales of positive religious coping and negative religious coping was .87 to .90 and .69 to .81 respectively. (See Appendix-N).

Translated Version of Integration of Stressful Life Events Scale. Urdu adapted version of this scale was used for assessing cognitive processes of assimilation and accommodation. The scale assesses the extent to which a traumatic experience is managed through accommodative process or assimilative process. It is originally a 16-items scale developed by Holland et al. (2010) and translated and adapted in Study-I. Two items i.e. Item No. 2 and 3 were excluded for analysis in the main study on the basis of pilot study findings which indicated that they were not effective items. It has five point response options which range from *Strongly Agree* (1) to *Strongly Disagree* (5). Score for accommodation subscale (named Footing in the World on the scale) is obtained by adding together items number 1, 5, 7, 9, 11, 12, 13, 14, 15 and 16 with an alpha reliability coefficient of .90 for the present sample and potential score range was 1 - 50. Score for assimilation subscale (named Comprehensibility on the scale) is obtained by adding together items No. 4, 6, 8, and 10 with an alpha reliability of .73 for the present sample and potential score range of 1 - 20. Alpha reliability coefficient for the original subscales of accommodation and assimilation subscale was .93 to .94 and .80 to .85 respectively. (See Appendix-O).

Translated Version of Social Support Questionnaire-Short Form. Urdu adapted version of Social Support Questionnaire-6 was used to assess satisfaction

with social support in the present study. It was originally developed by Sarason et al., (1987), and adapted in the study-1. It has six items. Response options range from ‘_very dissatisfied’ (1) to ‘_very satisfied’ (6). It has no subscales and no reverse item. Score range is from 6 to 36, with alpha reliability coefficient of .91 for the present sample. It is designed to assess the degree of satisfaction of the recipient with the available social support. The present study used the Questionnaire according to the objective to focus the level of satisfaction with the social support. (See Appendix-P).

Translated Version of Post-Traumatic Growth Inventory-Short Form.

Urdu adapted version of PTGI-SF was used to assess post-traumatic growth. It is originally developed by Cann et al., (2010) and translated by Aziz (2012). The adapted version is a 10 items scale with six point response options which are ‘*I did not experience this change as a result of my crisis*’ (0) to ‘*I did experience this change to a very great degree*’ (5) with score range of 0 - 50 and alpha reliability coefficient of .83 for the scores on present sample. Though the scale has five factors but the present study has used it as a single dimensional scale. Alpha reliability coefficient for the original 10 items scale was .85 to .89. (See Appendix-Q).

Operational Definitions

The variables of study are defined as follows.

Bereavement. Bereavement refers to the objective experience of loss caused by death of a dear one such as child or spouse. Higher score on Core Bereavement Items Scale indicates greater intensity of bereavement experienced by the bereaved parent or spouse and lower score indicates lower intensity of bereavement.

Post-traumatic growth. Post-traumatic growth refers to the transformational changes that trauma survivors may experience as a consequence of struggling with the trauma. High score on PTGI-SF indicates greater level of post-traumatic growth experienced by the bereaved parent or spouse and low scores indicates lower level of post-traumatic growth.

Positive religious coping. A higher score on positive religious coping subscale of Brief-RCOPE indicates a greater use of positive religious coping and low score indicates less use of the positive religious coping.

Negative religious coping. A higher score on negative religious coping subscale of Brief-RCOPE indicates a greater use of negative religious coping and low scores indicates less use of negative religious coping.

Accommodation. Accommodation refers to the rebuilding of the shattered cognitive schemas (worldviews) as a result of dealing with the traumatic event. Higher score on accommodation subscale (*named Footing in the World on the scale of ISLES*) indicate more accommodative processing of the traumatic event and lower score shows that less accommodative processing is involved in the processing of the traumatic event.

Assimilation. Assimilation refers to the sense making or managing to restore the pre-trauma cognitive schemas (worldviews) by avoiding accepting the post-trauma realities rather distorting the trauma related information and feelings to incorporate the traumatic experience into the existing schemas. Higher scores on assimilation subscale (*named Comprehensibility on the scale of ISLES*) indicate more assimilative processing involved in coping with the traumatic event and lower score shows that less assimilative processing is involved in cognitively incorporating the traumatic experience.

Satisfaction with Social Support. Social support refers to the assistance extended to the bereaved in the form of physical presence, saying consoling and supportive words, provision of required information, conveying a sense of connectedness/care/and security or provision of some kind of financial and other tangible and concrete help to the trauma survivors. Obtaining high score on Social Support Questionnaire-6 indicates more satisfaction of the recipient with the social support and lower score indicates less satisfaction with social support.

Procedure of Data Collection

The participants were approached at their residence or workplace for obtaining data from them. Data were obtained through a set of scales with attached informed consent form and demographic sheet. Data were collected from July, 2017 to March, 2018 and the response rate was 95%. The participants were told that that research was voluntary. Further, it was stressed that they could withdraw during completion of the Questionnaire at any period of time and their data would be kept confidential. Their consent was taken before the scales were given to them to complete. Those who agreed to participate in the study completed the scales. All the participants were assured that their data would only be used for the research purposes. Each participant completed the scales independently and individually.

Chapter IV

Results

In the light of the study objectives, different statistical analyses including correlations, test of differences and mediation analyses were conducted by using the method of ordinary least squares path analysis (OLS) through Model 4 of Hayes Macro PROCESS in SPSS (Version 22). The preliminary analysis regarding the descriptive information and reliabilities for all the variables are provided in the following table.

Table 26

Descriptive Statistics and Alpha reliability coefficients of the Study variables (N = 401)

Variables	Items	M	SD	Total α (F/M)	Score	Range		Skew	Kurt
						Potential	Actual		
Bereavement	17	32.43	11.79	.95 (.94/.94)	00-51	00-51	-.59	-.16	
PRC	5	12.11	3.09	.73 (.72/.73)	00-15	00-15	-1.08	.53	
NRC	6	4.18	4.12	.78 (.79/.76)	00-18	00-18	.95	.27	
Acc.	10	29.65	9.59	.90 (.88/.91)	10-50	10-50	.14	-.53	
Assim.	4	10.88	3.83	.72 (.71/.73)	4-20	4-20	.34	-.32	
S.Support	6	30.74	7.96	.91 (.92/.90)	6-36	6-36	-1.93	2.97	
PTG	10	28.23	9.88	.83 (.82/.83)	00-50	1-50	.03	-.34	

Note: PRC = Positive religious coping 5 items; NRC = Negative religious coping 6 items; Acc. = Accommodation; Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG = Post-traumatic Growth Inventory –Short Form 9 items; Total α (F/M) = Alpha reliability coefficient for scores on total sample and separately for Female ($n = 229$) and Male sample ($n = 172$).

Table 26 shows the descriptive statistics for all the main study variables and the corresponding alpha coefficients. The alpha values for all variables ranged from .72 to .95 for total sample and .71 to .94 for female and .73 to .94 for male respondents respectively, depicting that all measures of present study were sufficiently reliable for the measurement of constructs. The values of skewness are in acceptable range which are ± 1.96 and indicate that the data are normally distributed.

Mean score on the bereavement variable (M 32.43) shows that majority of the respondents have reported high intensity of bereavement experience (indicating negative skewness of the responses and the SD shows that individual responses were 11 point away from the mean score.

Table 27

Correlations of scores between Bereavement, Positive religious coping, Negative religious coping, Accommodation, Assimilation, Satisfaction with Social Support, and Post-traumatic growth (N = 401)

Variables	1	2	3	4	5	6	7
1. Bereavement	-	.01	.20**	-.55**	-.49**	.01	-.38**
2. PRC		-	-.26**	.15**	.08	.16**	.30**
3. NRC			-	-.25**	-.25**	-.15**	-.24**
4. Acc.				-	.79**	.11*	.53**
5. Assim.					-	.09	.46**
6. 6.S.Support						-	.10*
7.PTG							-

Note. PRC = Positive religious coping; NRC = Negative religious coping; Acc. = Accommodation;

Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG= Post traumatic Growth.

* $p < .05$; ** $p < .01$

Table 27 is illustrative of the correlations between the study variables. The scores of correlation fall between -1.00 and +1.00 (Warner, 2013). Results show that bereavement is significantly negatively associated with accommodation, assimilation, and post-traumatic growth. A significant positive relationship is also indicated between bereavement and negative religious coping, whereas weak and non-significant, association of bereavement with positive religious coping and social support is indicated.

Similarly, results show that positive religious coping, accommodation, assimilation, and social support have significant positive association with post-traumatic growth, though the relationship of social support with post-traumatic growth is relatively low in magnitude. Further, negative religious coping is significantly negatively associated with post-traumatic growth.

Table 28*Mean differences by gender of participants on study variables (N = 401)*

Variables	Female(n = 229)		Male (n = 172)		CI 95%				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i> (399)	<i>p</i>	<i>LL</i>	<i>UL</i>	<i>Cohen`s d</i>
Bereavement	34.41	11.26	29.78	11.99	3.96	.000	2.32	6.92	.39
PRC	16.48	4.14	16.59	3.95	-.26	.79	-.91	.69	-.02
NRC	4.75	4.57	5.24	4.72	1.05	.29	-1.41	.43	.11
Acc	30.49	9.21	35.43	10.65	-4.96	.000	-6.89	-2.98	-.49
Assim	10.27	3.61	11.70	3.98	-3.74	.000	-2.17	-.67	-.37
S.Support	30.94	7.95	30.47	8.01	.60	.55	-1.09	2.07	.06
PTG	26.32	9.53	30.76	9.80	-4.56	.000	-6.35	-2.52	-.45

Note. *CI* = Confidence Interval; *LL* = Lower Limit; *UL* = Upper Limit; PRC = Positive religious coping; NRC = Negative religious coping; Acc. = Accommodation; Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

An independent samples t-test was conducted to examine mean differences based on gender of participants with respect to bereavement, post-traumatic growth, cognitive processes, religious coping and satisfaction with social support. Results displayed in Table 28 indicate that there are significant mean differences of scores on bereavement, accommodation, assimilation and post-traumatic growth, whereas non-significant differences on positive religious coping, negative religious coping, and satisfaction with social support. Results show that females reported significantly more intense bereavement as compared to males. Males reported significantly greater use

of accommodation and assimilation processes and greater experience of post-traumatic growth as compared to females.

Table 29

Mean differences on study variables by gender of deceased (N = 401)

Variables	Female (n = 126)		Male (n = 275)		CI 95%				
	M	SD	M	SD	t(399)	p	LL	UL	Cohen's d
Bereavement	29.52	12.70	33.76	11.12	-3.38	.001	-6.69	-1.77	.66
PRC	16.53	4.00	16.53	4.09	.002	.99	-.86	.86	.00
NRC	4.94	4.78	4.97	4.57	-.05	.95	-1.02	.95	.00
Acc.	36.08	10.15	31.03	9.76	4.75	.000	2.96	7.14	-.23
Assim.	11.62	4.30	10.54	3.56	2.64	.008	.27	1.89	.27
S.Support	30.46	7.97	30.86	7.98	-.47	.64	-2.09	1.28	-.05
PTG	31.00	9.40	26.96	9.85	3.86	.000	1.98	6.09	.41

Note. CI = Confidence Interval; LL = Lower Limit; UL = Uper Limit; PRC = Positive religious coping; NRC= Negative religious coping; Acc. = Accommodation; Assim. = Assimilation; S. Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

Group differences were also examined based on the gender of the deceased. Results show that significant mean differences were found only for bereavement, accommodation, assimilation and post-traumatic growth, whereas no significant differences were indicated with reference to religious coping patterns and satisfaction with social support. Findings indicate that the death of male (son and husband)

lead to significantly more intense bereavement and death of female (daughter and spouse) triggering significantly more use of accommodation and assimilation and greater experience of post-traumatic growth.

Table 30

Mean differences on study variables by family system (N = 401)

	Joint		Nuclear		t(399)	p	CI 95%		Cohen's d
	(n = 263)		(n = 137)				LL	UL	
	M	SD	M	SD					
Bereavement	31.35	11.72	34.58	11.66	-2.62	.009	-5.66	-.81	-.27
PRC	16.54	3.96	16.51	4.27	.06	.94	-.81	.87	.00
NRC	4.80	4.50	5.30	4.90	-.101	.31	-1.45	.46	.11
Acc.	32.73	9.98	32.24	10.37	.45	.64	-1.60	2.58	.04
Assim.	11.09	3.68	10.43	4.06	1.64	.10	-.13	1.45	.17
S.Support	30.71	7.94	30.74	8.06	-.03	.95	-1.68	1.662	-.00
PTG	29.16	9.73	26.45	10.00	2.62	.009	.67	4.76	.27

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; PRC = Positive religious coping; NRC= Negative religious coping; Acc = Accommodation; Assim =Assimilation; S.Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

Independent sample t-test was conducted to explore group differences on study variables based on family system of the participants. No significant differences were found on study variables except for the bereavement and post-traumatic growth.

Results (Table 30) show that participants living in nuclear family reported significantly more intense bereavement, while those who were living in joint family reported significantly greater experience of post-traumatic growth.

Table 31

Mean differences on study variables by nature of death (N = 401)

	Expected		Unexpected		t(399)	p	CI 95%		Cohen's d
	(n = 195)		(n = 206)				LL	UL	
	M	SD	M	SD					
Bereavement	30.46	11.76	34.29	11.53	-3.28	.001	-6.11	-1.53	-.32
PRC	16.55	4.10	16.51	4.02	.11	.91	-.75	.84	.01
NRC	4.28	4.44	5.61	4.74	-2.92	.004	.224	-.43	.29
Acc.	34.10	10.08	31.21	10.03	2.87	.004	.91	4.86	.28
Assim.	11.36	3.85	10.42	3.77	2.46	.01	.18	1.68	.24
S.Support	30.52	8.11	30.93	7.85	-.51	.61	-1.97	1.15	-.05
PTG	29.11	9.68	27.39	10.02	1.74	.08	-.22	3.65	.17

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; PRC = Positive religious coping; NRC= Negative religious coping; Acc. = Accommodation; Assim. =Assimilation; S. Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

Table 31 depicts group differences on study variables with reference to nature of death. Results indicate that unexpected (and violent) death triggered significantly more intense bereavement and more use of negative religious coping. Expected death

appears to trigger more accommodation and assimilation processes. Important to mention is the absence of any statistically significant differences on reports of post-traumatic growth by the participants based on nature of death. Similarly, no significant difference was reported on positive religious coping and satisfaction with social support.

Table 32*Differences across age groups in relation to study variables (N = 401)*

Variables	Age Categories												F	p	η
	G1		G2		G3		G4		G5						
	(n = 117)		(n = 137)		(n = 100)		(n = 43)		(n = 04)						
	M	SD	M	SD	M	SD	M	SD	M	SD					
Bereavement	33.18	11.63	32.29	12.19	30.92	11.75	33.74	11.36	38.25	4.34	.91	.45	.009		
PRC	16.91	3.95	16.58	4.01	16.22	4.11	15.95	4.38	17.50	4.35	.34	.84	.007		
NRC	16.54	4.47	15.75	4.65	16.24	4.49	15.06	5.59	17.50	1.29	1.15	.33	.01		
Acc.	31.34	10.06	32.24	10.30	34.42	9.92	34.39	9.29	18.00	5.77	3.58	.007	.03		
Assim.	10.17	3.40	10.81	4.10	11.63	3.92	11.51	3.61	8.50	3.10	2.65	.03	.02		
S. Support	30.87	7.94	30.77	7.84	31.31	6.92	29.65	9.77	23.00	14.89	1.28	.27	.01		
PTG	29.32	9.93	28.21	9.30	27.86	10.47	27.06	10.00	18.75	8.46	1.46	.21	.01		

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; S. Support = Satisfaction with Social Support; PRC = Positive religious

coping; NRC = Negative religious coping; Acc. = Accommodation; Assim. = Assimilation; PTG = Post-traumatic Growth; G1 = < 35 Years; G2 = 36-50 Years; G3 = 51-65 Years; G4 = 66-85 Years; G5 ≥ 85 Years.

One-way analysis of variance (ANOVA) was carried out to examine the mean differences on study variables with reference to age groups. No significant differences were observed except for accommodation and assimilation as depicted in Table 32. Age group of 51-65 years of age reported significantly higher use of both the cognitive processes in dealing with their bereavement experience.

Table 33

Post-hoc Analysis on study variables by Age of the respondents (N = 401)

Variables	Age group	Age group	Mean	CI 95%		
				Differences		
	(I)	(J)	(I-J)	SE	LL	UL
Acc.	Above 85 years	51 - 65	-15.05*	4.83	-28.29	-1.80
		66 - 85	-15.03*	4.95	-28.60	-1.45
Assim.	Up to 35 years	51 – 65	-1.45*	.51	.03	2.87

In Table 33 Post-hoc Tukey test shows that respondents in age group of 51-65 years and 66-85 years reported more use of accommodation process as compared to respondents in age group of 85 years and above. Similarly, the results show that respondents in age group of 51-65 years reported more use of assimilative processing of their bereavement experience as compared to the respondents in age group of up to 35 years.

Table 34*Differences across ethnicity in relation to study variables (N = 401)*

	Pashtoon		Balochi		Brahvi		Hazara		Others		<i>F</i>	<i>p</i>	η
	<i>(n = 159)</i>		<i>(n = 71)</i>		<i>(n = 47)</i>		<i>(n = 32)</i>		<i>(n = 92)</i>				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Bereavement	31.24	10.99	33.35	12.89	33.80	11.11	39.56	10.30	30.56	12.21	4.31	.002	.04
PRC	16.29	3.76	17.22	3.85	16.76	3.77	17.65	3.00	15.89	4.97	2.47	.04	.01
NRC	15.62	4.37	15.67	5.62	15.87	4.75	16.25	4.26	17.08	4.31	1.68	.15	.01
Acc	33.35	8.99	32.40	10.28	31.57	10.48	30.56	10.67	32.73	11.55	.97	.42	.007
Assim	11.10	3.39	10.33	4.08	10.74	3.47	9.78	4.09	11.36	4.36	1.54	.18	.01
S.Support	30.34	8.14	30.61	7.75	30.87	7.92	30.34	9.58	31.57	7.35	.39	.81	.004
PTG	29.42	8.44	27.32	10.17	25.85	10.98	27.25	8.32	28.42	11.62	1.50	.19	.01

Note. PRC = Positive Religious Coping; NRC = Negative Religious Coping; Acc. = Accommodation; Assim. = Assimilation; S.Support = Satisfaction with Social Support; PTG = Post-traumatic Growth; Hazara = (Persians living in Baluchistan)

Ethnicity based mean group differences were also investigated through One-way ANOVA. The ethnic groups included Pashtoon, Baloch, Brahvi, Hazara and others categories within the province. The results (Table 34) show that a significant difference was only observed for bereavement and positive religious coping variables and the Hazara community reported significantly more intense bereavement as compared with other ethnic communities in Baluchistan.

Table 35

Post-hoc Analysis on study variables by ethnicity (N = 401)

Variables	Ethnic	Ethnic	Mean	CI 95%		
	group	group	Differences			
	status					
	(I)	(J)	(I-J)	SE	LL	UL
Bereavement	Persian	Pashtoon	8.31**	2.24	2.16	14.48
		Others	8.99**	2.38	2.47	15.52

In Table 35 Post-hoc Tukey test shows that Persian Speaking (Hazara) respondents reported statistically significantly more intense bereavement as compared to Pashtoon respondents and respondents of the others category.

Table 36*Differences across relationship status in relation to study variables (N = 401)*

	Son		Daughter		Husband		Wife				η
	(n = 142)		(n = 61)		(n = 134)		(n = 64)				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>P</i>	
Bereavement	33.76	11.36	30.60	13.60	34.13	10.65	27.60	11.86	5.79	.001	.04
PRC	16.59	3.90	16.22	4.11	16.54	4.26	16.65	3.99	.31	.81	.001
NRC	5.44	4.54	5.78	5.5.20	4.38	4.52	4.32	4.39	2.44	.06	.01
Acc.	31.84	10.18	35.24	9.79	30.32	9.24	36.59	10.70	6.73	.000	.05
Assim.	10.76	3.49	11.34	4.61	10.29	3.62	11.93	4.00	3.05	.02	.02
S.Support	30.63	8.02	30.86	7.62	31.11	8.06	3.04	8.13	.26	.85	.002
PTG	27.98	10.11	30.57	9.67	26.05	9.51	31.09	9.33	5.27	.001	.03

Note. PRC = Positive religious coping; NRC = Negative religious coping; Acc. = Accommodation; Assim. = Assimilation; S.Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

One-way between groups NOVA was conducted to explore the mean group differences on study variables by status of relationship with deceased. Results in Table 36 showed that death of husband and son triggered significantly more intense bereavement, while the death of son and wife lead to greater experience of post-traumatic growth. Results also show that death of daughter and wife result in more use of accommodation and assimilation processes by the bereaved father and husband. Results show no significant differences on religious coping and satisfaction with social support based on relationship status.

Table 37

Post-hoc Analysis on study variables by relationship status (N = 401)

Variables	Relationship		Mean Differences	SE	CI 95%	
	status	Status			LL	UL
	(I)	(J)	(I-J)			
Bereavement	Son	Wife	6.15**	1.74	1.66	10.66
	Husband	Wife	6.52**	1.76	1.98	11.97
Acc.	Son	Wife	-4.74**	1.51	-8.60	-.90
	Daughter	Husband	4.91**	1.53	.97	8.87
	Wife	Husband	6.26***	1.50	2.38	10.15
Assim.	Husband	Wife	-1.64*	.58	-3.14	-.15
PTG	Daughter	Husband	4.51*	1.50	.64	8.39
	Husband	Wife	-5.03**	1.45	-8.85	-1.22

Note. CI = Confidence Interval; LL = Lower Limit; UL = Upper Limit; Acc. = Accommodation;

Assim = Assimilation; PTG = Post-traumatic Growth

* $p < .05$; ** $p < .01$

In Table 37 Post-hoc Tukey test shows that parents bereaved by death of son, and spouses bereaved by death of husband, reported significantly greater bereavement respectively. The results showed that male parents and male spouses differed significantly from female parents and female spouses on the use of accommodation process to handle the bereavement experiences; male spouses also reported significantly greater use of assimilation process; and male parents and male spouses reported significantly higher post-traumatic growth as compared to their counterparts.

Table 38*Differences across level of education in relation to study variables (N = 401)*

Var.	Education Level																		F	P	η^2
	L1		L2		L3		L4		L5		L6		L7		L8						
	(n=178)	(n=35)	(n=27)	(n=47)	(n=24)	(n=38)	(n=48)	(n=04)													
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD					
Br.	34.99	9.85	34.77	12.00	24.56	12.40	31.40	13.06	32.29	12.27	30.32	13.56	28.44	12.03	31.75	13.59	4.37	.000	.26		
PRC	12.16	2.79	12.62	3.12	12.03	3.53	11.51	3.84	12.25	3.11	12.31	3.04	11.85	3.24	13.00	2.82	.52	.81	.09		
NRC	4.67	4.25	5.42	4.92	4.00	3.79	3.38	3.26	2.83	3.70	3.84	4.16	3.47	3.91	2.00	3.36	1.86	.07	.17		
Acc.	27.66	8.05	31.82	9.63	32.48	9.83	30.40	10.99	28.45	13.43	31.15	10.76	32.18	8.93	33.50	10.47	2.54	.01	.20		
Assi.	10.12	3.32	11.34	3.36	12.44	4.46	11.45	4.03	10.83	4.76	11.03	4.76	11.83	3.62	11.00	4.69	2.33	.02	.20		
S. S	30.84	8.11	29.77	9.12	31.30	6.52	30.30	8.87	31.75	7.85	31.71	6.12	29.98	8.12	30.25	4.78	.31	.94	.07		
PTG	23.20	7.90	29.17	10.12	28.11	9.06	27.74	10.10	24.00	10.95	28.60	9.20	28.56	8.22	29.75	13.32	4.43	.000	.28		

Note. Var. = Variables; Br. = Bereavement; PRC = Positive religious coping; NRC = Negative religious coping; Acc. = Accommodation; Assi. =

Assimilation; S.S = Satisfaction with Social Support; PTG = Post-traumatic Growth; L1 = Up to primary; L2 = Up to middle; L3 = Up to matriculation; L4 =

Intermediate; L5 = Graduation; L6 = Master/equivalent; L7 = MPhil/MS/PhD.

Analysis of variance (ANOVA) was conducted to explore the mean group differences on the study variables by level of education which indicated significant differences on bereavement, cognitive processes and post-traumatic growth. The results (Table 38) showed that uneducated participants reported higher intensity of bereavement while the participants with more education reported more involvement in cognitive processing and they reported higher experience of post-traumatic growth. Results showed no significant mean differences on religious coping and satisfaction with social support based on level of education of the participants.

Table 39

Post-hoc Analysis on study variables by education level of the respondents (N = 401)

Variables	Education	Education	Mean Differences	CI 95%		
	Level	Level		SE	LL	UL
	(I)	(J)				
Bereavement	Uneducated	Up to middle	10.43*	2.36	3.22	17.64
		MA/MSc	6.55*	1.86	.87	12.23
PTG	Uneducated	Up to primary	-5.91*	1.77	-11.33	-.51
		MA/MSc	-5.77*	1.56	-10.53	-1.01

In Table 39 Post-hoc Tukey test shows that uneducated respondents reported statistically significantly more intense bereavement experience as compared to respondents with up to middle level of education and MA/MSc level of education. Respondents with primary level of education and MA/MSc level of education reported greater post-traumatic growth as compared to uneducated respondents.

Table 40*Differences across occupation in relation to study variables (N = 401)*

	Occupations														F	P	η
	Pb/S		Pr/S		H/W		S/E		Lab		Others						
	(n = 70)		(n = 13)		(n = 191)		(n = 92)		(n = 09)		(n = 25)						
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD					
Bereavement	29.31	11.95	26.77	12.70	34.69	11.36	32.13	10.64	35.33	4.61	27.08	15.35	4.34	.001	.22		
PRC	12.44	3.10	11.30	3.35	12.00	3.16	11.84	3.05	12.66	3.27	13.19	2.46	1.21	.30	.12		
NRC	3.57	4.22	4.23	4.45	4.16	4.09	4.66	3.78	5.22	5.28	3.92	4.75	.69	.63	.09		
Acc.	31.27	10.87	36.23	9.84	27.86	8.66	29.86	9.41	32.22	8.39	33.46	10.64	4.05	.001	.22		
Assim	11.31	4.41	13.54	4.52	10.30	3.62	10.83	3.48	10.89	3.33	12.85	3.71	3.78	.002	.21		
S. Support	30.54	7.78	28.62	10.74	31.32	7.49	29.93	8.68	29.67	9.83	31.27	7.17	.64	.66	.09		
PTG	27.40	9.85	29.69	10.06	23.92	8.58	27.17	8.41	27.88	9.17	28.57	11.32	3.41	.005	.20		

Note. Pb/S= Public sector; Pr/S = Private sector; H/W = House Wife; S/E = Self-employed; Lab = Labourer; PRC = Positive religious coping; NRC = Negative religious coping; Acc. = Accommodation; Assim. = Assimilation; S.Support = Satisfaction with Social Support; PTG = Post-traumatic Growth.

One-way between groups ANOVA was conducted to explore the mean group differences on study variables in relation to occupation of the participants. Results (Table 40) show that the participants who were laborers by profession and those participants who were house-wives reported significantly higher intensity of bereavement. The Participants who were employees in private organizations reported more involvement in cognitive processing (both accommodation and assimilation) of their loss and they also reported comparatively higher experience of post-traumatic growth. The Results indicated no significant differences on religious coping and satisfaction with social support based on occupation of the participants.

Table 41

Post-hoc Analysis on study variables by occupation (N = 401)

Variables	occupation	occupation	Mean	CI 95%		
				Differences		
	(I)	(J)	(I-J)	SE	LL	UL
Bereavement	HouseWife	Public Sector	5.37*	1.61	.75	9.99
		employee Other	7.60*	2.41	.69	14.52
Acc.	Private sector	HouseWife	8.36*	2.70	.63	16.10
Assim.	HouseWife	Public sector	-3.23*	1.08	-6.33	-.14
		Other	-2.54*	.78	-4.80	-.28

In Table 41 Post-hoc Tukey test shows that Housewife respondents reported greater more intense bereavement and more use of assimilative processing of their bereavement experience as compared to respondents who were belonged to public sector and other occupations. Respondents who were employed in private sector

organizations reported more use of accommodative processing of their bereavement experience as compared to housewives respondents.

Table 42

Hierarchical Regression Analyses of predictors of Post-traumatic Growth (N = 401)

	Post-traumatic Growth				
	Model 1		Model 2		95 % CI
	B	β	B	β	
Constant	27.34***		11.50**		[22.62 – 32.05]
Age	-1.25**	-.13	-1.33**	-.14	[-2.18 – -.31]
Gender	4.63***	.23	2.36**	.12	[2.67 – 6.58]
F.S	-2.37*	-.11	-1.92*	.09	[-4.38 – -.37]
Ethnicity	.09	-.01	-.03	-.006	[-.51 – .69]
Br.			-.10*	-.11	[-.17 – -.01]
S.Support			.02	.01	[-.07 – .11]
Assim.			.30*	.11	[.03 – .63]
Acc.			.33***	.32	[.18 – .47]
PRC			.74***	.23	[.47 – . 1.00]
NRC			-.09	-.04	[-.29 – .11]
R ²		.08		.40	
F		8.35***		25.91***	
ΔR^2				.32	
ΔF				34.76***	

Note: F.S = Family System; Br. = Bereavement; S. Support = Satisfaction with Social Support; Assim. = Assimilation; Acc. = Accommodation; PRC = Positive religious coping; NRC = Negative religious coping. *P = < .05, **P = < .01, *** P = < .001.

Table 42 shows the results of the hierarchical regression analyses in which the demographic variables (age of participants, gender of participants, family system, and

ethnicity) were entered in first step and bereavement, satisfaction with social support, assimilation, accommodation, positive religious coping, and negative religious coping were entered in the equation in second step. The demographic variables were coded as follow. Age: group 1 = up to 35 years, Group 2 = 36-50 years, group 3 = 51 – 65 years, group 4 = 66 – 85 years, group 5 = above 85 years; Gender: Female = 1, Male = 2; Family system: Joint Family = 1, Nuclear Family = 2; Ethnicity: Pashtoon = 1, Balochi = 2, Brahvi = 3, Hzara = 4, Others = 5.

The results of the first step showed that the first four predictors explained 8 % of the variance ($R^2 = .08$) in post-traumatic growth which was significantly different from zero ($F(4, 395) = 8.35, p < .000$). After entry of bereavement, satisfaction with social support, cognitive processes (accommodation and assimilation) and religious coping (positive and negative religious coping) at step 2, the total variance explained by the model as a whole was 40%. The introduction of bereavement, satisfaction with social support, cognitive processes and religious coping explained additional 32% variance in Post-traumatic growth, after controlling for age, gender, family system and ethnicity of the respondents ($\Delta R^2 = .32; (F(10,389) = 25.91, P < .000)$). Age, gender and family system were statistically significant whereas ethnicity was non-significant. Bereavement, accommodation, assimilation and positive religious coping were significant whereas, satisfaction with social support, and negative religious coping were non-significant predictors of post traumatic growth.

Mediation Analysis of Parallel Multiple Mediator Model

Mediation analyses are aimed at identifying the mechanism and process involved in a relationship of the given variables. It is aimed at identifying whether the

variable(s) explain the relationship of the given variables as hypothesized in the current research.

According to Andrew F. Hayes (2013) in a parallel multiple mediator model X influences outcome variable Y directly and also indirectly through two or more mediators, with the condition that no mediator causally influences another. He explains that the salient feature of parallel multiple mediator is the fact that no mediator is modeled as influencing another mediator in the model and this feature makes different from serial multiple mediator model of mediation. As a principle, number of mediators can be included in a parallel multiple mediator model in accordance with the number of cases in one's model, moreover, it also depends on how many variables a researcher plans to measure as mediators and even up to seven mediators can be included in a parallel model of mediation (Hayes, 2013, Pp.125, 126).

PROCESS macro (Hayes, 2013) was used to investigate the mediating role of cognitive processes (accommodation & assimilation), religious coping (positive & negative) and satisfaction with social support in the relationship of bereavement and post-traumatic growth. The rationale behind opting for the multiple mediator model (instead of individual mediator models) was the search for true mediator(s) among the hypothesized mediators. The purpose of using PROCESS macro is the logic that it uses regression analysis instead of covariance in order to calculate the mediating effect and it has several effect sizes along with Sobel test on which mediation effect can be interpreted and verified. The detailed description of the models is given below.

Table 43

Indirect relationship of Bereavement with Post-traumatic Growth through Positive religious coping (N = 401)

Antecedent		Consequent						
		M(PRC)			Y(PTG)			
		β	SE	P	β	SE	P	
Bereavement	a	.003	.013	.78	c'	-.12	.03	.006
					ab	.0027	.01	.79
M(PRC)					b	.66	.12	.000
Constant	iM	11.99	.45	.000	iY	8.01	2.90	.006
		$R^2 = .0002$				$R^2 = .36$		

F (1,399) = .073,

F(6,394) = 36.71,

Note. M (PRC) = Positive religious coping; Y (PTG) = Post-traumatic Growth.

$p = .78$ $p = .000$

Results show the mediation analysis in which bereavement does not indirectly influence the post-traumatic growth through its effect on positive religious coping. However, bereavement influenced post-traumatic growth independent of its effect on positive religious coping ($c' = -.12$ $p < .01$) resulting in non-acceptance of the mediating role of positive religious coping in bereavement and post-traumatic growth relationship (H: 12). Though persons with high scores on bereavement had high religious coping, but it was statistically non-significant ($\beta = .003$). As can be seen in Table 39 and figure 8, indirect effect is just a marginal one (.0027) and this model explains only little (.0002, $p = .78$) of variance in post-traumatic growth domain. Bias-corrected bootstrap confidence interval for the indirect effect ($ab = .0027$) based

on 5,000 bootstrap samples was not above zero (-.014, .023). Sobel test was also non-significant for the indirect effect ($P = .62$) as indicated in the following figure.

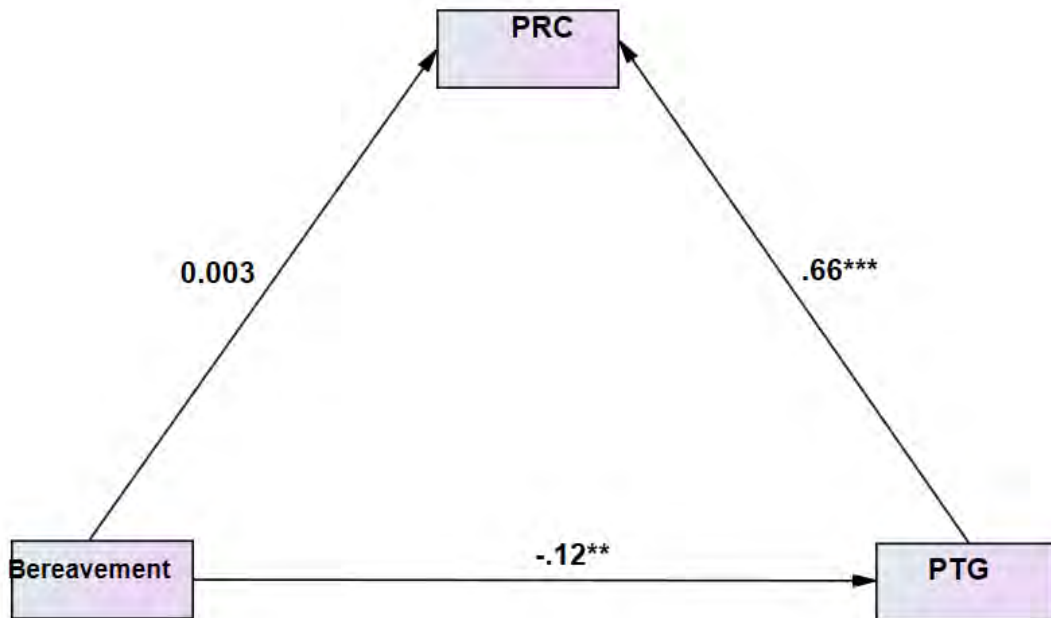


Figure 9. Diagram for M1 (Positive religious coping) in the parallel multi-mediator model.

Total effect ($B = -.32.13$, $CI\ 95\% = -.39, -.24$)

Indirect effect ($B = .0027$, $CI\ 95\% = -.014, .023$)

Table 44

Indirect relationship of Bereavement with Post-traumatic Growth through Negative religiouscoping (N = 401)

		Consequent						
		M(NRC)			Y(PTG)			
Antecedent		β	SE	P		β	SE	P
Bereavement	a	.072	.017	.000	c'	-.12	.03	.006
					ab	-.006	.008	.40
M(NRC)					b	-.08	.09	.38
Constant	iM	1.82	.59	.002	iY	8.01	2.90	.006
				$R^2 = .043$	$R^2 = .36$			
				$F(1,399) = 17.98,$	$F(6,394) = 36.71,$			
				$p = .000$	$p = .000$			

Note. M (NRC) = Negative religious coping; Y (PTG) = Post-traumatic Growth.

Results for the mediating role of negative religious coping (M2) indicate non-acceptance of H: 13. As shown in Table 44 and figure 10, bereavement does not influence post-traumatic growth through its effect on negative religious coping. Indirect effect of bereavement on post-traumatic growth is non-significant. Bias-corrected bootstrap confidence interval for the indirect effect ($ab = -.006$) based on 5,000 bootstrap samples contained zero ($-.025, .008$). Sobel test was also non-significant for the indirect effect ($p = .74$). This model explained 4.3% variance in post-traumatic growth domain as presented in the following figure.

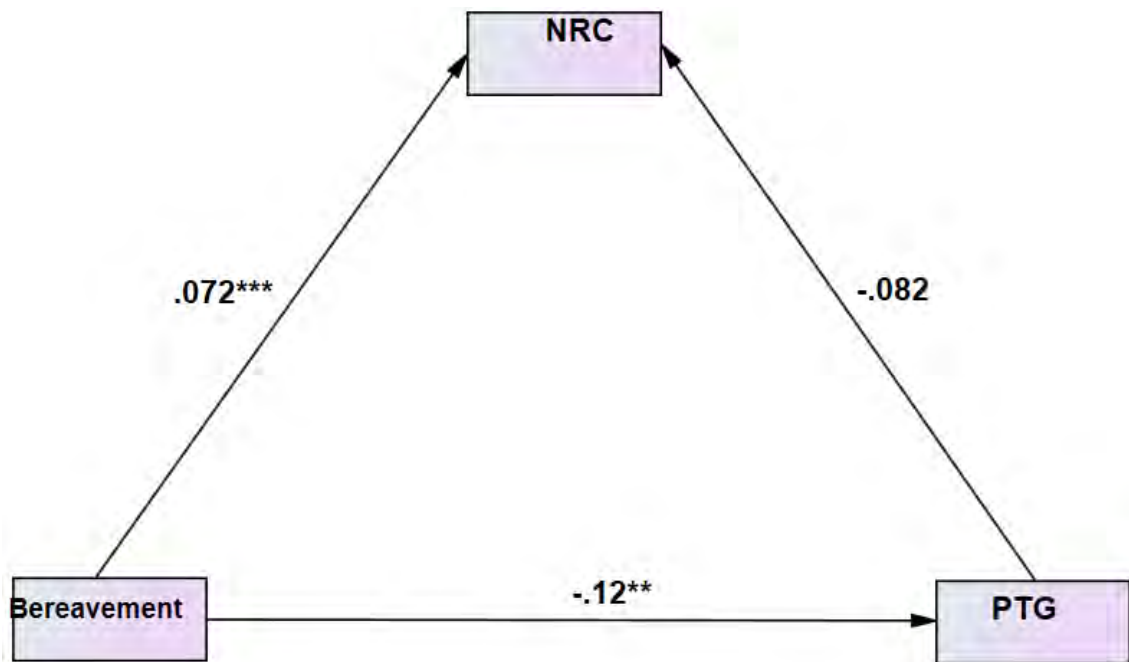


Figure 10. Diagram for M2 (Negative religious coping) in the parallel multi-mediator model.

Total effect (B = -.32.13, CI 95% = -.39, -. 24)

Indirect effect (B = -.006, CI 95% = -.025, .008)

Table 45

Indirect relationship of Bereavement with Post-traumatic Growth through Accommodation (N =401)

Antecedent		Consequent						
		M(Acc.)			Y(PTG)			
		β	SE	P	β	SE	P	
Bereavement	a	-.45	.03	.000	c'	-.12	.03	.006
					ab	-.15	.03	.000
M(Acc.)					b	.33	.06	.000
Constant	iM	44.32	1.68	.000	iY	8.01	2.90	.006
				$R^2 = .30$				$R^2 = .36$
				$F(1,399) = 178.50,$				$F(6,394) = 36.71,$
				$P = .000$				$P = .000$

Note. M (Acc) = Accommodation; Y (PTG) = Post-traumatic Growth.

Table 45 shows the results of parallel mediation analysis in which bereavement indirectly influenced the post-traumatic growth through its effect on accommodation process. As shown in Table 45 and figure 11, indirect effect ($ab = -.15$) is statistically significant that indicates acceptance of H:14. This model explains 30% of variance in post-traumatic growth domain. Bootstrap confidence interval was above zero (-.21, -.083) and Sobel test was also significant ($P = .001$) as presented in the following figure.

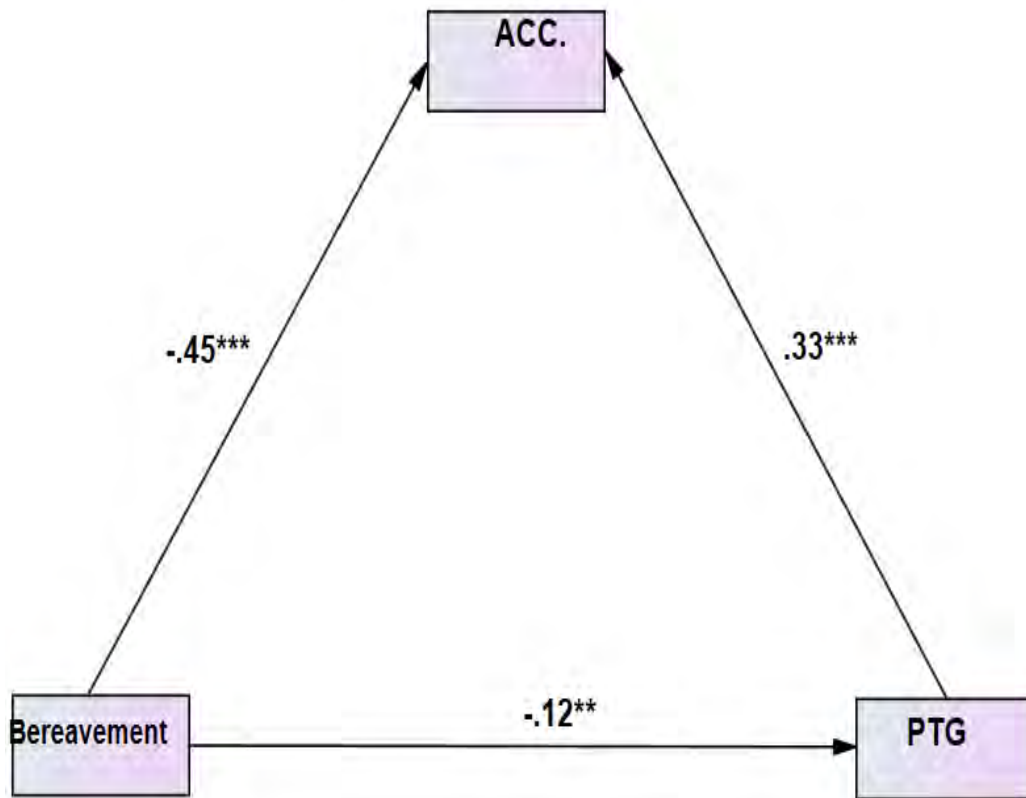


Figure 11. Diagram for M3 (Accommodation) in the parallel multi-mediator model.

Total effect (B = $-.32.13$, CI 95% = $-.39$, $-.24$)

Indirect effect (B = $-.15$, CI 95% = $-.21$, $-.093$)

Table 46

Indirect relationship of Bereavement with Post-traumatic Growth through Assimilation (N =401)

Antecedent		Consequent						
		M (Assim.)			Y(PTG)			
		β	SE	p		β	SE	P
Bereavement	a	-.16	.01	.000	c'	-.12	.03	.006
					ab	-.041	.02	.08
M (Assim.)					b	.27	.15	.07
Constant	iM	16.09	.01	.000	iY	8.01	2.90	.006
				$R^2 = .24$	$R^2 = .36$			
				$F(1,399) = 128.76,$	$F(6,394) = 36.71,$			
				$P = .000$	$P = .000$			

Note. M (Assim) = Assimilation; M(Y (PTG) = Post-traumatic Growth.

Results for the mediating role of assimilation (M4) indicate non-acceptance of the H: 15. Table 46 and figure 12 show that bereavement did not influence post-traumatic growth through its effect on assimilation process. However, bereavement influenced post-traumatic growth independent of its effect on assimilation. Bootstrap confidence interval contained zero (-.099, .002) and Sobel test was also non-significant ($P = .15$). The model explains 24% of the total variance in post-traumatic growth domain as shown in the following figure.

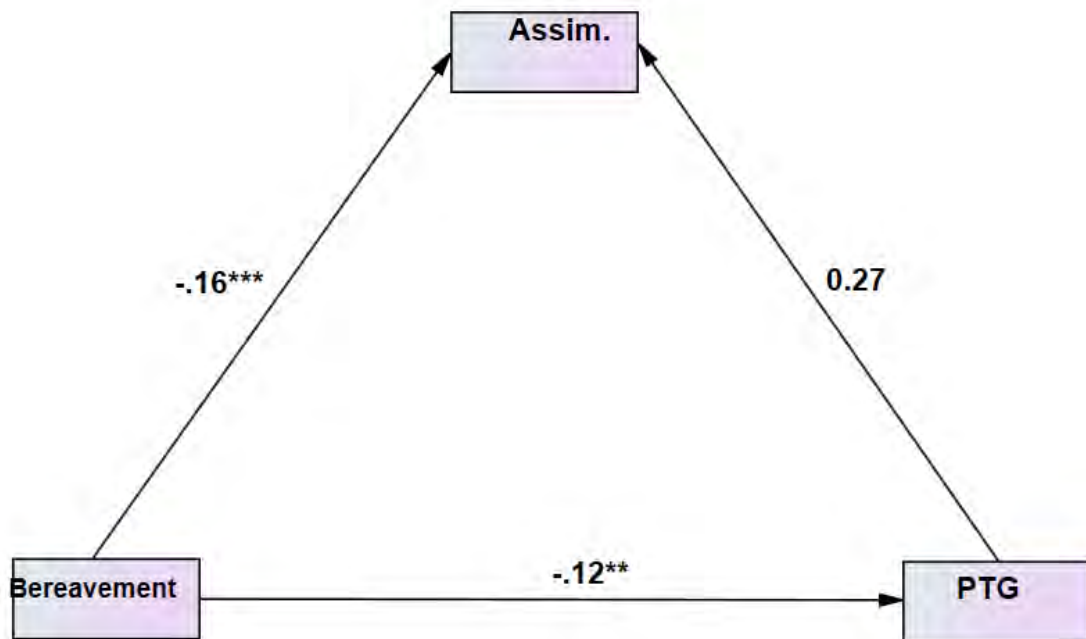


Figure 12. Diagram for M4 (Assimilation) in the parallel multi-mediator model.

Total effect (B = -.32.13 CI 95% = -.39, -. 24)

Indirect effect (B = -.041, CI 95% = -.099, .002)

Table 47

Indirect relationship of Bereavement with Post-traumatic Growth through Social Support (N =401)

Antecedent	M(S.Support)			Y(PTG)				
	β	SE	P	β	SE	P		
Bereavement	a	.009	.03	.78	c'	-.12	.04	.002
					ab	.0002	.001	.92
M(S.Support)					b	.25	.05	.70
Constant	iM	30.44	1.16	.000	iY	8.01	2.90	.006
$R^2 = .0002$				$R^2 = .36$				
$F(1,399) = .073,$				$F(6,394) = 36.71,$				
$P = .78$				$P = .000$				

Note. M (S.Support) = Social Support; Y (PTG) = Post-traumatic Growth.

Table 47 displays results of the fifth mediator of the present study. The results in above table and figure 13 indicate that indirect effect of bereavement on post-traumatic growth through its effect on social support was non-significant ($ab=.0002$, $p=.92$). Bias corrected bootstrap confidence interval for the indirect effect include zero (-.0021, .0056) and the Sobel test is also non-significant ($P = .88$). This model explains only .0002 % of the total variance in post- traumatic domain as shown in the following figure.

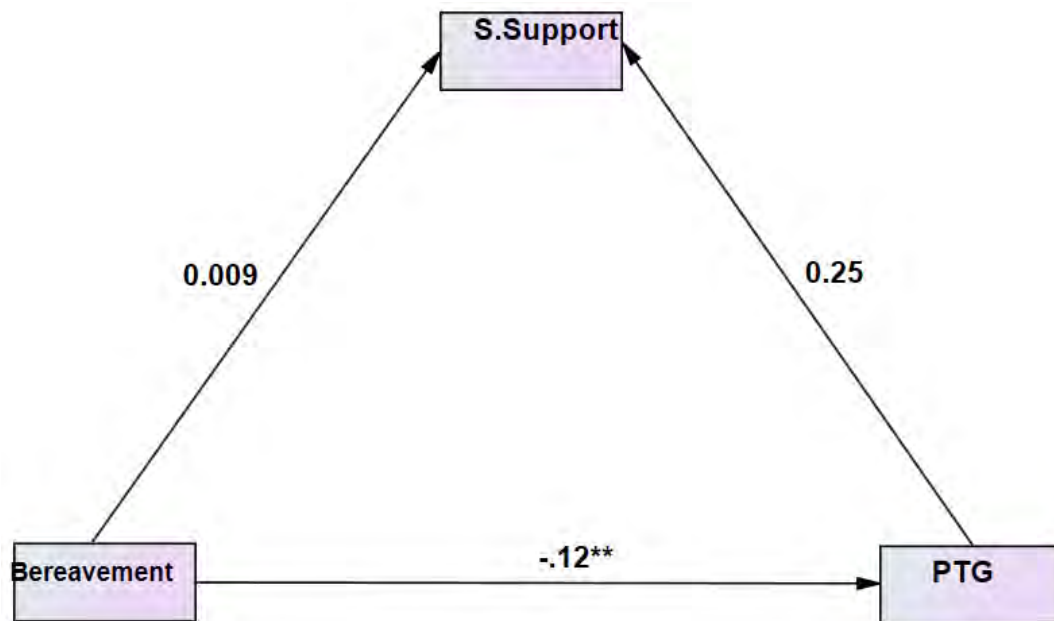


Figure 13. Diagram for M5 (Social Support) in the parallel multi-mediator model.

Total effect (B = -.32.13, CI 95% = -.39, -. 24)

Indirect effect (B = .0002, CI 95% = -.0021, .0056)

Summary of the Results

Hypotheses	Accepted/ Not Accepted
H:1. Bereavement is negatively associated with post-traumatic growth.	Accepted
H:2. Bereavement is negatively associated with positive religious coping.	Not Accepted
H:3. Bereavement is positively associated with negative religious coping.	Accepted
H:4. Bereavement is positively associated with accommodation.	Not Accepted
H:5. Bereavement is positively associated with assimilation.	Not Accepted
H:6. Bereavement is negatively associated with satisfaction with social support.	Not Accepted
H:7. Positive religious coping is positively associated with post-traumatic growth.	Accepted
H:8. Negative religious coping is negatively associated with post-traumatic growth.	Accepted
H:9. Accommodation is positively associated with post-traumatic growth.	Accepted
H:10. Assimilation is negatively associated with post-traumatic growth.	Not Accepted

H:11. Social support is positively associated with post-traumatic growth.	Accepted
H:12. Positive religious coping mediates the bereavement and post-traumatic growth relationship.	Not Accepted
H:13. Negative religious coping mediates the bereavement and post-traumatic relationship.	Not Accepted
H:14. Accommodation mediates the bereavement and post-traumatic growth relationship.	Accepted
H:15. Assimilation mediates the bereavement and post-traumatic growth relationship.	Not Accepted
H:16. Social support mediates the bereavement and post-traumatic growth relationship.	Not Accepted
H:17a. Female participants would report more intense bereavement as compared to male participants.	Accepted
H:17b. Female participants would report greater post-traumatic growth as compared to male participants.	Not Accepted
H:18. Unexpected death results in more intense bereavement as compared to expected death.	Accepted
H:19. Parents would experience more intense bereavement as compared to spouses.	Partially Accepted

Chapter IV**Discussion**

The aim of the present research was to examine the relationship between bereavement and post-traumatic growth and the mediating role of religious coping (positive and negative religious coping), cognitive processes (accommodation and assimilation) and satisfaction with social support in this relationship. In addition, group differences on bereavement, post-traumatic growth and the other study variables were explored based on circumstantial factors (nature of death and time since death) and socio-demographic characteristics of the participants and the deceased (gender, age, relationship status, family system, ethnicity, education level and occupation).

The research was completed in two independent studies i.e. Study-I and Study-II. The study- I was related to the adaptation of and validation of instruments in local context that would be used in main study i.e. study-II. Study-II was conducted to test the stated hypotheses. It was a correlational study with cross-sectional design. Sample was taken from different parts of Baluchistan (Pakistan). Baluchistan is the largest province of Pakistan in terms of geography and the smallest province in terms of its population. The province has been faced with rampant terrorist attacks and natural disasters of earthquake, floods and drought from time to time. It also seriously lacks in availability of minimum health care in general and mental health care in particular across the province. (*See Appendix-A for the Country Profile*)

Data were collected from 401 participants on self-reported scales. Sample of the bereaved parents and spouses was not easily accessible in Baluchistan for a number of reasons such as (a) the conservative cultural customs regarding accessing and interacting with bereaved individuals in general and with bereaved women in

particular; and (b) because of the painful nature of bereavement phenomenon on which data were to be obtained from the bereaved participants. The sample for the present research was recruited by a mixed technique of purposive convenience and snowball sampling.

It is worth mentioning that in the following discussion, hypotheses No. 1 to 11 relate to the first objective; hypotheses No. 12 to 16 relate to the second objective; and hypotheses No. 17 to 19 relate to the third objective in the current study. Discussion on the additional findings in the end of this section also relate to the third objective of the present research.

Direct Relationships

H: 1. Bereavement is negatively associated with post-traumatic growth.

Findings of the present research showed negative relationship of bereavement with post- traumatic growth. This finding is in line with the past studies as many studies have reported that bereavement as an adverse event results in various psychological sufferings. For example Suhail et al., (2011) reported anxiety, depression and other symptoms of psychological sufferings as first reaction to bereavement. In the aftermath of bereavement some individuals go through only uncomplicated and normal grieving process which normally resolves with passage of time (Znoj, 2005), however, some bereaved individuals are more likely to experience complicated/prolonged grief (Keese et al., 2008; Wijngaards-de Meij et al., 2005).

The researcher could not find a single study that had recorded evidence of positive relationship between bereavement and post-traumatic growth. Rather, the empirical literature is abundant with reports of maladaptive outcomes of bereavement

and other similar extremely stressful events (see (Hungerbuehler et al., 2011; Kreicbergs et al., 2004; Rogers et al., 2008). With reference to bereavement and post-traumatic growth relationship, the present research findings (supported by numerous past studies) indicated to two important points about bereavement research. First, traditional inclination toward exploring pathological outcome of bereavement (and other traumatic events) is also reinforced by the empirical findings in favor of the link between pathological outcomes and traumatic events. Second, there is no direct link between bereavement (and other such stressful events) and post-traumatic growth.

Possible explanation to the finding of negative relationship between bereavement and post-traumatic growth in the present research sample and consistent reports of the negative relationship in the past studies is the fact that negative events impact adversely. Secondly, any extraordinary adverse event such as death of a dear one renders serious blow to psychological, emotional, physical, and social aspects of human health and life. These events by default are adverse and have the potential to result in maladaptive outcomes as reported in the past literature.

However, indirect relationship between stressful events such as bereavement and post-traumatic growth is well supported by sufficient evidences in the literature (e. g., Engelkemeyers & Marwit 2008; Gamino et al., 2000; Michael & Cooper, 2013). Possibility of post-traumatic growth has been reported as an outcome of bereavement only as a result of struggling with bereavement or any other extremely stressful event. In other words, the literature has consistently reported that bereavement does not inherently result in post-traumatic growth rather the outcome of bereavement experience depends upon how bereaved individual handles the stressful

experience (see Engelkemeyers & Marwit, 2008; Gamino et al., 2000; Michael & Cooper, 2013).

The quest to explore possibility of link between stressful events and positive changes such as post-traumatic growth is worth devoting time and sources. The present research and all other such studies that have identified some mechanisms of indirect relationship between bereavement and post-traumatic growth are important steps towards changing the paradigm in

bereavement research and therapeutic practices with bereaved individuals. The coping mechanisms documented in many studies refer to the cognitive, religious and social support coping strategies that are used to deal with bereavement and other extremely stressful events.

H: 2. Bereavement is negatively associated with positive religious coping.

H: 3. Bereavement is positively associated with negative religious coping.

Religion is a common coping tool in hard times across societies and particularly in societies like Pakistan. This is perhaps because human beings turn to Divine Creator (Allah) for help and patronage whenever faced with an overwhelming life event. This is largely recorded in the literature across societies and time. For example, studies have reported that people in crises tend to resort to religion and spirituality (e. g., Hays & Hendrix, 2008; Jibeen et al., 2017; Koenig, 1995; Meyerson et al., 2011; Munsoor, 2019; Oyebode & Owens, 2013; Pargament, 1997; Stelzer et al., 2019).

Based on the review of the empirical literature (e g., Askay & Magyar-Russell, 2009; Kearns et al., 2019; McIntosh & Spilka, 1990; Mullen et al., 1993; Pargament

et al., 1998; Park, Smith, Lee Mazure, McKee & Hoff, 2017; Tarakeshwar & Pargament, 2001), in the present research it was assumed that more involvement in positive religious coping would be associated with less intensity of bereavement (H: 2); and it was assumed that more involvement in negative religious coping would be associated with more intensity of bereavement (H: 3). The findings provided strong support to the H: 3, however, the present research findings indicated evidence against the H: 2. Though the value of correlation coefficient for bereavement and positive religious coping relationship is very low and non-significant ($r = .014$, $p = > .05$), yet the direction of the relationship is positive and this in contradiction with the formulated hypothesis.

The findings about the positive religious coping was completely unexpected and in contrast to the widely documented reports in literature. Past studies have reported that positive religious coping is associated with lower level of distress (Gerber, Boals, & Schuettler, 2011; Mesidor & Sly, 2019; Park, Holt, Christie, & Williams, 2018; Schaefer et al., 2008). Park et al. (2017) also reported positive religious coping negatively associated with distress.

The finding about negative religious coping was in line with the findings of other studies. Literature has documented that negative religious coping is associated with more distress (Abu- Raiya, Pargament, & Mahoney, 2011; Ano & Vasconcelles, 2005; Leaman & Gee, 2011; Mesidor & Sly, 2019; Park et al., 2018). Statistically significant relation of negative religious coping with bereavement intensity was observed by Stelzer et al. (2019) in a sample of bereaved parents and spouses. Park et al (2017) observed positive association of negative religious coping with PTSD symptoms.

Two possible explanations to the unexpected finding about the bereavement and positive religious coping relationship appear to be relevant. First, though bereaved parents and spouses reported to be involved in religious coping, it appears that they involved in it as a traditional religious ritual and cultural norm in Pakistani society without internalizing it as a coping resource, therefore, they could not experience the lowering of grief intensity through the use of positive religious coping. Second, it is possible that, while seeking mercy and seeking to strengthen relation with Allah, bereaved parents and spouses felt comfortable in consciously experiencing the distress of losing child/life partner. This tendency to consciously experience the grief and express the grief related feelings before Allah appear to be a possible reason of increased intensity of grief at the time of involvement in positive religious coping.

The distinction in positive and negative religious coping strategies is understandable on the basis of (a) individual related factors, (b) society related factors and (c) death related factors. Whether an individual perceives his/her trauma as punishment from Allah (God) or perceives it as a test of his/her faith and seeks help from Allah, depends upon the level of religiosity of the individual and the individual's belief system about life. The practices and rituals of a given society influence the way bereaved individuals interpret the death of a loved one.

In Pakistani society, death is mostly attributed to destiny and Will of Allah and this belief is largely held and supported in the society which encourages positive religious coping as a source of dealing with distress, and discourages negative religious coping as something that invites displeasure of Allah. Hence, even if an individual involves in negative religious coping, it escalates the distress and prevents

positive reframing of the belief system. However, sometimes the nature of death is so sudden and violent that the resultant severity of emotional pain triggers thoughts of being punished or being abandoned by Allah, which then further adds to the distress instead of reducing it, whereas some bereaved individuals surrender to the trauma and seek guidance from the Divine Force (Allah).

H: 4. Bereavement is positively associated with accommodation.

H: 5. Bereavement is positively associated with assimilation.

The assumption of positive relationship of bereavement with accommodation and assimilation was not supported by the results of the present research. The Relevance of cognitive processes with bereavement and other stressful events is largely documented in past studies (e.g., Bogensperger & Lueger-Schuster, 2014; Calhoun et al., 2010; Cann et al., 2010; Hammer et al., 2018; Joseph & Linley, 2005; Parkes, 1998). The fourth and fifth hypotheses in the present study were formulated in the light of conceptual notions of Organismic Valuing Process Theory of Growth through Adversity (Joseph & Linley, 2005), which holds that traumatic events challenge our existing schemas and cognitive processes of assimilation and accommodation are subsequently activated to cognitively process the trauma related experience.

Human beings come across numerous experiences in daily life. Many of the experiences match the already stored experiences. However, some experiences happen to be inconsistent with the existing ones. Such experiences call for more than routine mental processing to organize them in the existing experiences. The mental processing in the context of stressful events is relevant and central both for managing

the resultant distress and making sense or meaning out of the event. Though the intrusive thoughts about the stressful event are mostly automatic in nature, however, subsequently deliberate processing of the event begins either in the assimilation form or accommodation form.

The present research findings have revealed that more intensity of bereavement is associated with less deliberate processes of assimilation and accommodation. These findings indicate non-acceptance of H: 4 and H: 5. This is an important finding as it contradicts the assumptions of organismic valuing process theory and it goes in contrast with the findings reported in other studies (e. g., Cann et al., 2010). The findings also contradict the notion of Januff-Bulman (1992) which held that extremely stressful events shatter our existing schemas and triggering of cognitive processing by such stressful event is integral part of revisiting the shattered schemas.

It is important to underline that both assimilation and accommodation are deliberate processes which are used to cognitively manage the bereavement experience. Intrusive thoughts after bereavement are automatic in nature and they continue to occur whereas, deliberate and voluntary cognitive processing of any traumatic events begins when the bereaved individual has become prepared to consciously go through the cognitive management of painful experience of loss. The finding of the present study that higher bereavement intensity was associated with lower assimilative and accommodative processing indicates to the possibility that bereaved parents and spouses avoided switching over to deliberate processing of the loss experience because of the painful nature of the experience.

The more painful the experience is, the more it emotionally burdens the individual. Perhaps therefore, in case of more intense bereavement bereaved participants involved in less assimilative and accommodative processing of bereavement. This explanation can also be supported by another finding of the present study about gender differences on bereavement and cognitive processes. These findings indicated that females reported more intense bereavement but less involvement in the cognitive processes whereas, males reported lesser intensity of bereavement but higher involvement in the cognitive processes.

H: 6. Bereavement is negatively associated with satisfaction with social support.

Providing social support to bereaved individuals and families is a very common practice and hallmark of Pakistani society. The support is provided both in tangible and intangible forms. The idea behind such support is always to alleviate the distress of the bereaved and help them pass through the hard time. Studies have documented this trend of providing social support to bereaved individuals also in western context (see Carlsson & Nilsson, 2007). Moreover, past studies have indicated positive effects of social support on health (Allen, Balfour, Bell, & Marmot, 2014; Holt-Lunstad, Smith, Baker, Harris, & Stephenson, 2015).

Against this background, the present research assumed that more satisfaction with social support would be associated with less intensity of bereavement. This assumption was not supported by the results (H: 6). However, it was observed that, though positive in direction, the strength of relationship between bereavement and satisfaction with social support was very low ($r = .014$, $p = > .05$). This finding is in contradiction with reports of past studies. For example Past studies have indicated that

lack of proper social support is linked with more probability of complicated grief (see McIlwraith, 2001). Findings reported by Waugh et al. (2018) are very relevant to consider who observed that “Care was experienced as most helpful when it was responsive to individual needs and ongoing difficulties, even many years later”.

A possible explanation for this pattern of relationship is the fact that in times of crises, it is not the amount of support received rather it's the quality of the support that matters. In other words, social support is of benefit to the distressed and bereaved if it matches the needs of the bereaved individual. No matter how large support is available to the bereaved if it does not meet the psychosocial and emotional needs of the bereaved, it will not alleviate the distress. As Wills and Fegan (2001) observed that social support can serve its purpose when it is tailored according to the needs of the distressed person.

Finding of the present research indicates to the unfortunate feature of our society that custom of providing social support to the bereaved is widely observed but it is practiced only as ritual rather than a societal mechanism for strengthening the coping capability of the bereaved. Two reasons are apparent behind this hollowness of the widely observed practices of providing support in our society. First, practices of helping and visiting the bereaved have been inherited by communities from their elders and forefathers as a social norm without paying much attention or cautious effort to understanding the psychological and emotional benefits of this support. Second, largely, people in Baluchistan (Pakistan) are not educated enough to evaluate and understand social support norms and practices at an abstract level of their implications. This indicates to the need of imparting awareness in this regard to the masses in Pakistani society through psychosocial education at large level.

H: 7. Positive religious coping is positively associated with post-traumatic growth.

H: 8. Negative religious coping is negatively associated with post-traumatic growth.

The present research findings indicated positive religious coping is associated with more post-traumatic growth and negative religious coping is negatively associated with post-traumatic growth in bereaved parents and spouses. These findings provided support to the stated hypotheses of the present study. Past studies have documented reports of association between religious coping and post-traumatic growth and the findings of the present study are similar to those reported in past studies. Past studies have indicated the role of cognitive processes in relation of religious coping with post-traumatic growth (Bosson, Kelley, Jones, 2012). This provides support for the notion that religious coping helps in managing a trauma by facilitating the search for meaning in the trauma context. Studies have reported different outcomes for these two patterns of religious coping.

For example studies have observed positive religious coping as precursor to post- traumatic growth (see Abu-Raiya et al., 2011; Askay & Magyar-Russel, 2009; Gerber et al., 2011; Mesidor & Sly, 2019; Schaefer et al., 2008); whereas, association of negative religious coping has been widely reported with higher distress and other negative outcomes (see Abu- Raiya et al., 2011; Ano & Vasconcelles, 2005; Leaman & Gee, 2011; Mesidor & Sly, 2019).

As mentioned earlier, bereaved individuals resort to their religion to seek help in tackling their hard times. Practicing certain religious rituals underlie the religious

beliefs of the bereaved individual and bereavement related perceptions. It is therefore important to understand that whether a bereaved individual (or any distressed person) appraises the loss of loved one as a natural phenomenon of life and attributes it to the will of Allah (God), or perceives it as punishment for his/her sins by Allah, depends on the perception of the bereaved about the death. Positive religious coping means the individual attributes the event to the will of Allah and seeks His mercy. Attributing the event to the displeasure and wrath of Allah feeling abandoned by Allah is said to be negative religious coping. An individual involves in positive or negative religious coping in struggling with the loss of loved one influence the psychological outcomes of bereavement event.

H: 9. Accommodation is positively associated with post-traumatic growth.

H: 10. Assimilation is negatively associated with post-traumatic growth.

The present research findings provided support for H: 9 but showed no evidence in support of the H: 10. In the present research it was assumed that assimilation would be negatively associated with post-traumatic growth.

The results showed positive association between assimilation and post traumatic growth. The results indicated that both accommodation and assimilation were positively associated with post-traumatic growth in bereaved parents and spouses. Association between cognitive processing of traumatic experience and its consequent outcomes is largely explored in past studies.

It is believed that any extraordinary experience triggers cognitive processes which in turn determine the fallout of the given experience. In addition to intrusive

rumination, bereaved individuals also involve in deliberate cognitive processing of their trauma at some point in their bereavement period. Cardenas-Castro, Martinez and Abaraca (2016) have observed that coping with trauma through positive reappraisal and deliberate cognitive processing facilitate post-traumatic growth. In present study, it was hypothesized (H: 9) that accommodative processing of bereavement experience would be positively associated with post-traumatic growth. The findings supported this assumption.

As mentioned earlier, this assumption was derived from organismic valuing process theory of growth through adversity. Hence, this finding provided support for the notion of the organismic valuing process theory. Empirical studies have also indicated that positive reappraisal of traumatic event is linked with positive changes (e.g., Butler et al., 2005; Walter & Bates, 2012). It is important to understand that accommodative processing implies the quest for positive meaning in the context of trauma and cognitive restructuring of existing schemas in the light of post-trauma life. This shows that when bereaved parents and spouses deliberately reshape the cognitive map of their life in order to adjust with the painful reality of loss and take the initiative of restarting the life, it increases the possibility of adaptive outcomes for them.

Another deliberate process is assimilation. In the light of organismic valuing process theory, it was assumed in the present research (H: 10) that assimilation would be negatively associated with post-traumatic growth. The counterintuitive finding of the present research revealed positive association between assimilation and post-traumatic growth resulting in non-acceptance of the hypothesis. This is very

interesting in the light of organismic valuing process theory to understand that assimilation refers to no change in the existing schemas yet it was observed to be positively associated with post-traumatic growth. In other words, when bereaved parents and spouses involve in assimilative processing, they actually try to make sense of their trauma by distorting/ignoring some aspects of the trauma related information for themselves in order to fix the experience of loss without restructuring the existing schemas.

Organismic valuing process theory does not postulate any relation of assimilation with post-traumatic growth. The finding of the present research is an addition to the empirical literature and an evidence for the organismic valuing process theory which emphasizes link only between positive accommodation (positive reappraisal) and post-traumatic growth.

A possible explanation for the difference between the present research finding and the assumption of organismic valuing process theory is the perception of bereaved parents and spouses about positive changes. Firstly, it is possible that those participants who used assimilative processes in coping with their loss experience were unaware of how they had cognitively ignored or distorted some aspects of their loss related realities and were pleased with the skipping of more serious psychological sufferings. They might have reported that they now felt stronger and appreciative of life because they had skipped treatment for their trauma and being labeled as mentally ill. Secondly, in Pakistani society it is often believed to be of worth and pride to show oneself as strong as possible in the face of even serious traumas, that's why, participants might have reported growth or positive changes in spite of not accepting the reality of loss internally.

H: 11. Satisfaction with Social support is positively associated with post-traumatic growth.

Social support, among many other coping strategies, is one of the important and widely used coping strategies for dealing with variety of stressful events including bereavement. This is because many studies have documented beneficial effects of social support for health (e. g., Allen et al., 2014; Holt-Lunstad et al., 2015). Social support has also been studied as an important variable with reference to post-traumatic growth. In the light of the past literature (e. g., Aliche et al., 2019; Drapeau et al., 2019; Mesidor & Sly, 2019), positive association was assumed between satisfaction with social support and post-traumatic growth (H:11) in the present research.

The findings of the present research supported this hypothesis with relatively low but significant correlation coefficient ($r = .10$, $p = <.01$). This finding is in line with findings reported by past studies. For example Aliche et al. (2019) found reports of social support significantly positively associated with post-traumatic growth in a sample of young adult survivors of terror attack in Nigeria. Similar positive association was observed by Drapeau et al. (2019) in a sample of suicide-bereaved adults. Mesidor & Sly (2019) also documented significant positive relation of social support with post-traumatic growth.

Many other studies (e. g., Bozo et al., 2009; Schroevers et al., 2010; Smith et al., 2014; Senol-Durak, 2013; Senol-Durak & Durak, 2018; Thornton & Perez, 2006) have also provided evidences of social support as predictor of post traumatic growth. In a sample of Somali refugees in Hungary, Kroo and Nagy (2011) observed positive association of social support with post- traumatic growth. However, in a study of

arthritis patients, it was observed that not receiving but providing support was positively associated with post-traumatic growth (Sörensen, Rzeszutek, & Gasik, 2019). This is very interesting finding which possibly implies that if bereaved individuals try to provide support to other bereaved individuals, it can facilitate occurrence of growth in them as well.

The finding of the present research and that of other studies indicate to an important point that social support - in addition to alleviation of distress – possibly impacts the way traumatic experience is appraised. In other words, appropriate social help also facilitates in cognitively resolving the traumatic experience and finding meaning out of it (see Tedeschi & Calhoun, 2004). This possibility makes sense because physical presence of family, friends and relatives and their encouraging words and gestures of care allow the bereaved parents and spouses to somehow retain the positive frame of mind and hope for something good along with the distress that they go through.

Indirect Relationships

H: 12. Positive religious coping mediates the bereavement and post-traumatic growth.

H: 13. Negative religious coping mediates the bereavement and post-traumatic growth relationship.

It was hypothesized in the present research that positive religious coping (H: 12) and negative religious coping (H: 13) would mediate the bereavement – post-traumatic growth relationship. These hypotheses were formulated on the basis of the

evidences of association between adverse events and religious coping strategies; and evidences about association between religious coping strategies and positive changes in the aftermath of adverse events.

Rajandram, Jenewein, McGrath, and Zwahlen (2010) conducted a review study and reported findings of positive association of spirituality and religion with post-traumatic growth across studies. However, the findings of the present research did not provide any evidence of the mediating role of positive and negative religious coping in relationship between bereavement and post-traumatic growth which resulted in non-acceptance of the hypotheses (H: 12 and H:13). It is important to note that extant literature has reported the relationship of religious coping with traumatic events and post-traumatic growth, but so far no study has yet explored the mediating role of religious coping in relation between bereavement and post-traumatic growth.

These findings indicate to the need for further research on examining the question of why religious coping strategies do not explain the mechanism of the bereavement and post- traumatic growth relationship in spite of its reported association with both bereavement and post- traumatic growth. Two possible explanations seem relevant for the findings about mediating role of positive and negative religious coping in the present research.

First, positive religious coping and bereavement relationship might be involving some cognitive mechanism or contextual moderators that call for further empirical inquiry; second, negative religious coping is linked with more distress but less growth, which possibly implies that bereaved parents and spouses involved in negative religious coping and experienced distress but the intensity of the distress was not extreme enough that could shatter their existing worldviews and consequently no

cognitive restructuring was triggered which is essential for the post-traumatic growth to occur.

It is pertinent to understand that some studies have reported possibility of moderating role of religious coping in traumatic events (e. g., Tedeschi & Calhoun, 1996) and some have also mentioned that the nature of the impact of religious coping is yet to be determined (see Meyerson et al., 2011). This warrants further empirical investigation of religious coping strategies with reference to bereavement (and other stressful events) and post-traumatic growth across samples and cultures.

H: 14. Accommodation mediates the bereavement and post-traumatic growth relationship.

H: 15. Assimilation mediates the bereavement and post-traumatic growth relationship.

Besides other coping strategies, cognitive coping techniques play an important role in dealing with bereavement experience. Past studies have documented importance of cognitive processes in dealing with traumatic events (e.g., Cann et al., 2010). The literature indicates that role of cognitive processing is integral in determining the outcome of bereavement and other extremely stressful events. For example Anderson et al., (2019) observed positive association between positive reappraisal and post-traumatic growth in a sample of conflict related sexual violence survivors from Bosnia and Herzegovina. Wulandari, Poerwandari and Basri (2019) noted that developing new world views through struggle with trauma is the spirit of post- traumatic growth. Post-traumatic growth occurs as outcome of bereavement only when the bereavement experience is positively accommodated as postulated in

organismic valuing process theory of growth through adversity (Joseph & Linley, 2005).

Mediating role of accommodation (H: 14) and assimilation (H: 15) were assumed in the present research in the context of organismic valuing process theory of growth through adversity and on the basis of correlational patterns of these variables with bereavement and post-traumatic growth in pilot testing of the present study. When tested statistically in the multiple-mediator model, accommodation got supportive evidence as significant and complementary mediator, but no evidence was observed in favor of assimilation as mediator. These findings are important with reference to organismic valuing process theory and other extant literature related to cognitive and positive psychology. Acceptance of H: 14 is the empirical validation of the assumption of organismic valuing process theory in sample of the present study, which holds that traumatic events lead to growth only when the shattered existing schemas are rebuilt in the light of post- trauma realities.

Empirical studies have also frequently reported that positive reappraisal of traumatic event (positive accommodation) is linked with growth. In other words, organismic valuing process theory and empirical studies (e.g., Butler et al., 2005; Currier et al., 2006; Joseph & Linley, 2005; Sumalla et al., 2009; Walter & Bates, 2012) have mentioned that when the survivors of trauma rebuild their worldviews in the light of post-trauma realities and accept the traumatic related information instead of distorting it, post-traumatic growth occurs. Rajandram et al. (2010) conducted a review study on coping strategies and post-traumatic growth. They observed that many studies had identified positive coping strategies to be important in the

development of post-traumatic growth, especially benefit finding and meaning making.

Assimilation is described as restoration of the pre-trauma schemas by distorting the trauma-related information or ignoring some aspects of trauma reality in order to incorporate it in the existing schemas. It is important to mention that this process does not tend to develop new world views, hence by definition, it contradicts with the post-traumatic growth which is in principle the development of new world views. The assumption about mediation role of assimilation found no support in the findings of the present research leading to the non-acceptance of H: 15. It is pertinent to note that organismic valuing process theory is silent about the association of assimilation with post-traumatic growth.

Past studies have used a concept of sense-making or meaning making to refer to assimilation and have reported positive association of meaning making with post-traumatic growth (Mazor, Gelkopf, Mueser & Roe, 2016). Sense-making or meaning making implies different meaning from the concept of positive restructuring or positive reappraisal. Managing the traumatic experience cognitively without reshuffling the existing world views is referred to as sense-making (assimilation); whereas rebuilding the shattered world views by accepting the reality of loss and taking new start in life as an adaptive measure is referred to as positive restructuring or positive reappraisal (positive accommodation).

The findings of the present research about mediating role of accommodation and assimilation contribute to the existing literature significantly. This contribution is multi-faceted:

- (a) It validates the notion of the organismic valuing process theory about positive accommodation being the sole mechanism through which post-traumatic growth occurs; (b) it adds to the organismic valuing theory by providing empirical evidence of positive association between assimilation and post-traumatic growth;
- (c) It adds to the organismic valuing theory by providing empirical evidence that assimilation, though positively associated with post-traumatic growth, does not explain the mechanism of bereavement and post-traumatic growth relationship;
- (d) it provides yet another empirical evidence to the existing empirical literature about the widely reported role of cognitive processes in adaptation to adverse events such as death of loved ones; and (e) it provides evidence about the difference in role of specific cognitive processes (accommodation and assimilation) in coping with bereavement in bereaved parents and spouses.

Further research is required in future to explore the mechanisms involved in assimilation and post-traumatic growth relationship in order to find out more empirical evidences for any possibility of using assimilation as therapeutic technique to facilitate post-traumatic growth in bereaved persons and survivors of other traumas. Finding of the positive correlation between assimilation and post-traumatic growth in the present research is a promising indication and encouraging sign in this direction.

H: 16. Satisfaction with social support mediates the bereavement and post-traumatic growth relationship.

It was hypothesized in the present research that satisfaction with social support would mediate the relationship of bereavement and post-traumatic growth. In Pakistan, observations in daily life show that social support is used as a common coping style in times of crisis across ethnic communities. Past studies have reported use of social support in coping with traumatic events ((Drapeau et al., 2019; Mesidor & Sly, 2019) and relationship of social support with post- traumatic growth (Aliche et al., 2019; Rajandram et al., 2010).

Results of correlations in pilot testing of the present research also indicated relationship between satisfaction with social support and bereavement and post-traumatic growth. The extant literature did not indicate any evidence about mediating role of social support in bereavement and post- traumatic growth relationship.

The hypothesis about mediating role of satisfaction with social support was formulated in the light of the documented reports of its relationship with bereavement and post- traumatic growth and the use of social support as routine coping technique in our society. However, the findings of the present research did not support this hypothesis.

To interpret the finding about H: 16 in the present research accurately, it is important to understand that correlation coefficient of satisfaction with social support with bereavement was positive in direction and very weak in magnitude ($r = .014$, $p > .05$); whereas, correlation coefficient between satisfaction with social support and post-traumatic growth, though positive and significant ($r = .10$, $p = < .05$) was not

strong in strength. Keeping in mind the reported findings of the past studies and the indications of association of satisfaction with social support with bereavement and post-traumatic growth in the present sample, the following explanations seem relevant.

First, the relationship of social support as a coping strategy with bereavement and post-traumatic growth is not as simple as it might appear, there might be some other factors such as personality traits, demographic characteristics or some cognitive mechanism that might be influencing this relationship. Second, it might be the question of appropriateness of the available social support for the bereaved parents and spouses. A support tailored in way that matches needs of the bereaved will be possibly more helpful in facilitating the positive resolution of bereavement experience in terms of cognitive coping which makes space for occurrence of post-traumatic growth. Future researches focusing on examination of factors possibly involved in influencing the role of social support in traumatic events and growth can be of significant value.

Group Differences Based on Circumstantial and Demographic Variables

H: 17a. Female participants would report more intense bereavement as compared to male participants.

In the light of review of extant literature (e. g., Polatinsky & Esprey, 2000; Wago, Byrkjedal, Sinnes, hystad, & Dyregrov, 2017; Zhoua, Lianga, Tong & Liu, 2019), the hypothesis was formulated that female participant would report greater intensity of bereavement as compared to male participants. The findings in the

present research supported the hypothesis and reports of greater intensity of bereavement among female participants were observed.

This finding of the present study is in line with extant literature. For example, Wago and colleagues documented reports of greater bereavement intensity in mothers who were bereaved by death of their child (Wago et al, 2017). In a survey of earthquake female survivors in four countries, Zhoua et al (2019) reported more vulnerability to distress among women. However, a study by Polatinsky and Esprey (2000) found poor evidence of gender differences in bereavement experience. The finding of the present study and those of past studies may be explained in the light of the commonly held perception in Pakistani society (as the researcher understands) that female in the status of mother, daughter, sister or spouse holds more subtleness, care and affection. Against this background, the finding about higher reports of bereavement intensity in female participants is understandable.

H: 17b. Female participants would report greater post-traumatic growth as compared to male participants.

The findings of the present study showed that males reported more post traumatic growth as compared to females. Extant literature presents mixed findings about gender differences on post-traumatic growth. A study with students in Gaza has recorded reports of greater post- traumatic growth experience in males as compared to females (Thabet, Elhelou, & Vostanis, 2015). This study of Gaza provides an empirical support to the finding of the present study. Zhoua et al (2019) indicated reports of lower post-traumatic growth in female survivors of earthquake.

Some studies have recorded reports of more post-traumatic growth in female as compared to male (Smith et al., 2014; Swickert et al., 2009; Vishnevsky, Cann, Calhoun, Tedeschi, & Demakis, 2010; Weiss, 2002). Aslam and Kamal (2019) have also recorded reports of higher post-traumatic growth in female participants of their study in the context of earthquake in Pakistan. Aliche et al. (2019) in a sample of terror attack survivors in Nigeria observed reports of higher post-traumatic growth in females. In a meta-analysis study, Vishnevsky et al. (2010) also observed females reporting greater experience of post-traumatic growth as compared to males. However, study by Taku et al. (2012) found no significant differences by gender and age groups on post-traumatic growth. In India, Tandon and Mehrotra (2016) also did not find differences on post-traumatic growth across gender.

These mixed findings about gender differences on post-traumatic growth show that occurrence of growth after adversity is not gender specific rather it varies from person to person, and from sample to sample across adversities and across cultures.

H: 18. Unexpected death results in more intense bereavement as compared to expected death.

It was hypothesized that sudden and violent death would be associated with more intensity of bereavement as compared to expected death – death through illness. The notion that sudden and violent death triggers more distress is a very common understanding. Human beings see things in life in terms of predictability on the basis of the cognitive schemas that humans develop in course of life. Any sudden and overwhelming event does not fit into these schemas and leaves human psychologically confused and emotionally distressed.

The findings of the present study provided support to H: 18. Past studies have also reported similar findings (e. g., Suhail et al., 2011). It was observed in a study by Lichtenthal et al. (2011) that participant bereaved by sudden and violent death were facing difficulty in making sense of their loss as compared to those bereaved by natural deaths.

Two factors that appear to escalate the intensity of bereavement in case of sudden death are (a) the unanticipated happening, and (b) the helplessness of the deceased; whereas, death through some chronic illness – though painful – prepares the bereaved gradually for the loss and hence the intensity remains lower (manageable) as compared to that caused by sudden and violent death.

H: 19. Parents would experience more intense bereavement as compared to spouses.

It was assumed that parents would experience greater intensity of bereavement as compared to bereaved spouses (H: 19). It was hypothesized on the basis of past studies (Keesee et al., 2008; Wijngaards-de Meij et al., 2005) and on the basis of common perception in Pakistanisociety that a bereaved spouse does have the choice to choose a new life partner but the parents don't have any alternative for the loss of their son/daughter relationship, hence, parents are perceived to experience more intensity of bereavement as compared to a bereaved spouses.

Findings of the present research partially did not support this hypothesis because the results showed greater mean score for bereavement experience caused by husband's death as compared to son or daughter death. However, these results show greater mean scores for bereavement caused by son and daughter's death respectively

as compared to wife's death. Post-hoc analysis on relationship status also showed that death of husband and son results in significantly more intense bereavement respectively compared to death of wife and daughter.

This finding needs to be interpreted by accounting for the gender of the bereaved and deceased. Careful look at the results show that in case of bereavement caused by death male (husband and son), female bereaved spouse and bereaved parent report experience of more intense bereavement. It reveals that difference on bereavement intensity with reference to relationship status with deceased is overlapped by the gender of the deceased. In other words, no matter whether the bereaved is parent or spouse, if the bereaved is female, she reports greater intensity of bereavement and vice versa.

Additional Findings on Some Demographic Variables

In addition to the above hypotheses, the study variables were assessed in relation to other socio-demographic characteristics of the participants to address the relevant objectives of the present study.

Exploring the study variables with reference to time since death were important objectives in the present study. It was expected that intensity level of bereavement would be greater in initial stage after the death and this intensity would decrease as more time passes. Similarly, it was expected that post-traumatic experience would increase as more time passes after the death. Analysis of variance (ANOVA) and post-hoc analysis did not support both of these expectations in the present study. Results of variance analysis (ANOVA) showed that there were no

significant mean differences based on time since death in the intensity of bereavement and level of post-traumatic growth experienced by a bereaved parents or spouses.

Drapeau et al. (2019) in their study of suicide-bereaved adults found time since loss being positively associated with post-traumatic growth and also positively associated with social support but very weakly. Su et al. (2019) observed reports of post-traumatic growth in 51.7 % of a sample of burn survivors in Taiwan two years after their burn. Rahmani et al. (2012) examined post-traumatic growth in Iranian cancer patients and found that time passed since patients were informed of their cancer diagnosis had no significant correlation with the PTGI scores. Holland et al. (2006) observed no significant association of time since death with growth, sense-making and abnormal grief. In another study (Lichtenthal et al., 2011) no association of time since loss was observed with religious coping scores on Integration of Stressful Life Events Scale.

One of the possible explanations for these findings may be that what intensity of bereavement a parent and spouse experiences also depends on factors such as how intimate the parents and spouses were in attachment with the deceased and to what extent they were emotionally, economically, and socially dependent upon the deceased. There can be other factors as well that could play role in determining level of bereavement intensity after death of a child or spouse, so only time factor may not determine the level of intensity of bereavement. The same reasons may also apply to non-significant differences on post-traumatic growth experiences and other variables.

Assessing group differences on study variables based on age, family system, ethnicity, education level and occupation were also part of the objectives of the present study. Findings in current study indicated no significant mean differences on

the study variables by age groups except for the age group of 51-65 which reported comparatively greater use of accommodation and assimilation processes in dealing with traumatic experience. Levy (2019) reported that age was observed to be positively associated with bereavement intensity in a sample which included participants of 50 years of age and above. A study by Cordiva et al. (2007) observed association of young age with greater post-traumatic growth in a sample of breast cancer. Taku et al. (2012) found no significant differences by age groups on post-traumatic growth. Aliche et al. (2019) noted that there were no reports of significant relationship between age and post-traumatic growth.

Vishnevsky et al. (2010) reported positive association of female age with post-traumatic growth; whereas, Vanhooren, Leijssen and Dezutter. (2018) reported negative association of age. Rahmani et al. (2012) also reported significant negative association of age with post-traumatic growth in cancer patients in Iran. In a study of young Iraqi war survivors living in Turkey, kilic et al. (2015) found significant negative association of female age with post-traumatic growth but positive and non-significant association of male age was observed. Study by Taku et al. (2012) found no significant differences by age groups on post-traumatic growth. Tandon and Mehrotra (2016) found no association between age and post-traumatic growth among cancer patients in India. Mohammadi, Esmaeli and Foni (2019) in a review study of intestinal cancer patients observed no significant difference in use of religious coping strategies in both genders. Baral and Bhagawati (2019) found that religious coping was found to be significantly high in elderly adults survivors compared to their counterparts in a sample of earthquake survivors.

The above evidences from past studies of different samples and different countries along with the finding of the present study indicate that the pattern of differences on bereavement, post-traumatic growth and other study variables are not fixed around any specific age limit. Rather, it is revealed that differences on these variables may be influenced but the impact of age in this regard varies from sample to sample.

It was revealed in the findings of the present study that participants who lived in nuclear family system reported significantly more intense bereavement as compared to those who lived in joint family system; however, greater post-traumatic growth was reported by the participant who lived in joint family system in comparison to those who lived in nuclear family system. This is very interesting finding when viewed with reference to the notion that greater distress facilitates occurrence of growth. If residents of nuclear families reported more intensity of bereavement then should be expected to report higher growth as well, and the residents of joint families reporting lower intensity of bereavement should be expected to report lower level of growth but the finding indicates otherwise. This indicates to a very promising possibility in distress and post-traumatic growth research that moderate level of distress can also sometimes lay ground for growth. However, further research is required to ascertain the true mechanisms that could explain these differences on bereavement intensity and growth on the basis of family system.

In the present study, no significant mean differences were found with reference to ethnicity of the participants except for one significant difference on bereavement variable. Participants of Hazara ethnic community reported significantly

more intense bereavement as compared to all other participants. The reports of comparatively more intense bereavement in Hazaza ethnic community may be attributed to two possible reasons which are (a) a number of sudden deaths of this ethnic group in terrorist attacks in recent past and (b) excessive media coverage to the tragic incidents of this community deaths in terrorist attacks as compared to media coverage of similar tragic deaths of other local communities as result of terrorist attacks in Baluchistan and across Pakistan.

With reference to mean group differences in relation to education, the present study findings indicated that significant mean differences on bereavement, accommodation, assimilation and post traumatic growth. Participants with higher level of education reported comparatively greater post-traumatic growth. This finding is similar to findings of some other studies (e.g., Rahmani et al., 2012). Some past studies found that education level was not associated with post-traumatic growth (Aliche et al, 2019; Sörensen et al., 2019); whereas, a study by Vanhooren et al. (2018) found negative association of education level with post- traumatic growth. Moreover, the present study indicated significant differences on cognitive processes but a study by Lichtenthal et al. (2011) found no significant differences on Integration of Stressful Life Events Scale scores in relation to education level. Regarding differences on use of religious coping, the present study revealed no significant differences. However, in Nepal, Baral and Bhagawati (2019) found that significantly high use of religious coping in illiterate survivors of earthquake.

Variations in reports on the study variables with reference to participants' education level indicate that education does influence the level of bereavement and

growth and involvement in a given coping style but the nature of this impact of education on these variables needs to be further explored.

In relation to occupation, group differences on study variables were explored and the findings indicated significant differences on bereavement, cognitive processes and post-traumatic growth. Participants who were laborer and those participants who were housewives reported greater intensity of bereavement comparatively. Private sector employees reported comparatively more involvement in cognitive process and they also reported comparatively higher experiences of post-traumatic growth. Past studies have reported that employment status is not related to post-traumatic growth (see Aliche et al., 2019).

Though past studies do not provide clear evidences of occupation based differences on bereavement, growth and the other variables of this study, however, the findings of the present study may be explained this way that since laborers and housewives both appear to be living life with comparatively more restricted environment and less space for participating in other spheres of life, therefore, the bereavement intensity gets more escalated in their context. In relation to society of Balochistan this explanation seems more understandable and relevant. Higher reports of involvement in cognitive processing and greater growth among private sector employees might be explained through the fact of such employees' life that the private sector employees remain active both physically and mentally due the organizational working culture and that they have to manage the stresses of their personal lives in order to be remain available for the tasks of their organizations. Therefore, the participants who were employed in private sector organizations reported comparatively more use of cognitive coping and resultantly higher growth.

Theoretical and Applied Significance of the Study

The present study, like any other research, has implications for theory and practice in the socio-cultural and mental health context of Pakistan, specifically Baluchistan province.

1. The present research translated and empirically validated the scales used for assessing the study variables. This renders a very significant contribution for the futures research related to trauma as the present research makes availability of scales in Urdu language which were not available earlier in particular Core Bereavement Items (Burnet et al., 1997) and Brief-RCOPE (Pargament et al., 1998).
2. Another very important theoretical contribution of the present research is to organismic valuing process theory of growth through adversity (Joseph & Linley, 2005) through its findings about (a) association of accommodation and assimilation with post-traumatic growth, and (b) mediating role of accommodation and assimilation in bereavement and post-traumatic growth relationship. The present research findings provided evidence regarding the link of accommodation with post-traumatic growth and its role as mediator which is postulated by the organismic valuing process theory. The organismic valuing theory is vague about the relationship of assimilation with post-traumatic growth and the theory also does not view assimilation as a mediator in relationship of bereavement with post-traumatic growth. The present research findings provided empirical evidence that assimilation is not a mediator (as postulated by the theory) however, the findings provide evidence of significant relationship of assimilation with post-traumatic growth.

3. The present research offers another important theoretical contribution to the existing literature through its findings about mediating role of positive religious coping, negative religious coping and satisfaction with social support. Though the literature has mentions of association of these variables with bereavement and post-traumatic growth, yet there has been noevidence in the literature whether these variables have any role in relationship of bereavement with post-traumatic growth as its outcome. Findings of the present research provide empirical evidence for these variables that they do not play role mediator when tested in a parallel multiple-mediator model. However, when tested as alone mediator, positive religious coping appears to be a significant mediator in bereavement and post- traumatic growth relationship.
4. Theoretically, an important implication of the present research is its findings about mean group differences on the study variables. Many past studies have documented reports of greater post-traumatic growth in females but the present research revealed males reporting greater post-traumatic growth. Literature notes (a) sudden/violent death leading to more intense bereavement; (b) living in nuclear family is linked with more intensity of bereavement; (c) living in joint family is linked with reports of greater post- traumatic growth; and (d) time since death is not linked with post-traumatic growth. Findings of the present research have endorsed all the above evidences of the past studies.
5. Past Studies have documented either no meaningful difference with reference to age or younger age has been reported positively associated with post-traumatic growth, the present research found no significant differences across

age groups on bereavement, religious, coping, social support and post-traumatic growth.

6. The present research renders empirical evidence to the existing literature that no significant mean group differences with reference to ethnicity exist on the variables studied in the current study except for the bereavement variable on which Persian participants reported statistically significant and higher intensity of bereavement.
7. Applied implication of the present research findings has the following three possible aspects.
 - (a) Mental health practitioners, policy making departments/organizations, and communities in general can be made alert and sensitized about viewing the holistic picture of traumas and coping mechanisms in the socio-cultural and religious context of this society.
 - (b) The research provided evidence of religious coping, cognitive coping and satisfaction with social support coping of being helpful in adaptively dealing with traumatic experiences such as bereavement. In the view of the researcher the existing therapeutic practices in Pakistan with reference to dealing with bereavement and other traumas in local context are extremely polarized and mutually confrontational. These practices are operating in complete isolation from each other as psychiatrists are relying solely on medication, religious scholars relying on their own paradigm, community relying on its ritualistic but sometime counter-productive approach.

In Pakistan practicing psychologists are rare. The practicing psychologists are neither consulted nor weighed by the community and other mental health related professionals to lack of awareness about psychological therapeutic approaches and lack of official patronage for psychological therapeutic approach. The present research findings draw attention to the need of therapeutic practices that are inclusive of psycho-socio-religious considerations along with the medication.

- (c) The present research can be helpful to family institution and community in general to consider whether the provided social support is according to the need of the bereaved individual(s) or not; and whether the adopted religious approach is helping in going through the grief process in healthy way or not.

Limitations and Suggestions for Future Research

The present research has some limitations which are highlighted below.

1. One of the limitations of the present research is the nature of cross-sectional design. With cross-sectional study findings it may not be examined whether the relationship patterns between the study variables will change over time. A longitudinal design would be appropriate for exploring possibility of changes in relationships between the study variables due to temporal factor. Future studies should include the temporal factor with reference to bereavement and post-traumatic research and carry out longitudinal researches. Thus a longitudinal design would clarify the question of whether the relationship

between bereavement and post-traumatic growth changes in different points of time or not.

2. Sample of the research included bereaved parents and spouses. Inclusion criterion was restricted to two years of bereavement. Future studies should include participants with longer duration of bereavement. A sample that also includes other family members, relatives, and friends of deceased would not only help in understanding variations in experience of bereavement and post-traumatic growth across relationships but would also broaden the scope of generalizability of the findings.
3. The present research included participants only from Baluchistan province. This feature limits the generalizability of the present study findings. It is suggested for future research that including data from other parts of the country would also improve the external validity of the studies.
4. The present research has employed quantitative approach to explore relationship between bereavement, post-traumatic growth and the mediator variables. Qualitative approach in the future can also be an interesting way of exploring these relationships in the local context. Moreover, a qualitative approach would help in tapping aspects of the bereavement and post traumatic growth that may not have been reported on a self-reported Questionnaire.

Conclusion

The primary aim of the present research was investigating the nature of direct and indirect relationship between bereavement and post-traumatic growth. Positive religious coping, negative religious coping, accommodation, assimilation and social support were examined as mediators of this relationship through using parallel multiple-mediator model. Exploring group differences was also an important aim of the research.

Findings from the research have supported that bereavement is negatively associated with post- traumatic growth. Findings revealed that bereavement is negatively associated with accommodation and assimilation and positively associated with negative religious coping. Findings revealed weak negative relationship of bereavement with positive religious coping and positive relationship with social support. The findings confirmed positive association of positive religious coping, accommodation and social support with post-traumatic growth. The findings gave evidence of positive association of assimilation with post-traumatic growth.

The findings provided support for accommodation as complementary mediator between bereavement and post-traumatic growth. However, the findings did not show any evidence of mediating role for religious copings, assimilation and social support in the multiple-mediator model. The findings showed reports of more intense bereavement in female gender and reports of more post-traumatic growth in male gender. The findings revealed more intense bereavement triggered by sudden/violent death. Nuclear family residents reported more intense bereavement and joint family resident reported greater post-traumatic growth. On the basis of age (except for age group of 51-65 on accommodation assimilation), and ethnicity no significant

differences were revealed in the present study. The instruments used to measure the variables of interest in the present study were adapted and is available in Urdu language for future research.

References

- Abu-Raiya, H., Pargament, K. I., & Mahoney, A. (2011). Examining coping methods with stressful interpersonal events experienced by Muslims living in the United States following the 9/11 attacks. *Psychology of Religion and Spirituality*, 3(1), 1–14. doi:10.1037/a0020034
- Affleck, G., & Tennen, H. (1996). Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *Journal of Personalized Medicine*, 64(4), 899-922. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-6494.1996.tb00948.x>.
- Affleck, G., Tennen, H., & Rowe, J. (1991). *Disorders of human learning, behavior, and communication. Infants in crisis: How parents cope with newborn intensive care and its aftermath*. Springer-Verlag Publishing. <https://doi.org/10.1007/978-1-4612-3050-2>
- Aliche, J. C., Ifeagwazi, C. K., Onyishi, I. E., & Mefoh, P. C. (2019). Presence of meaning in life mediates the relations between social support, posttraumatic growth, and resilience in young adult survivors of a terror attack. *Journal of Loss and Trauma*, 24(2).1-14. doi: 10.1080/15325024.2019.1624416
- Allen, J., Balfour, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *International Review of Psychiatry*, 26(4), 392–407. doi:10.3109/09540261.2014.928270
- Anderson, K., Delić, A., Komproe, I., Avdibegović, E., Ee, E. V., & Glaesmer, H. (2019). Predictors of posttraumatic growth among conflict-related sexual

- violence survivors from Bosnia and Herzegovina. *Conflict and Health*, 13(1), 23. <https://doi.org/10.1186/s13031-019-0201-5>
- Ano, G. G., & Vasconcelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*, 61(4), 461–480. doi:10.1002/jclp.20049
- Ardelt, M., Ai, A. L., & Eichenberger, S. (2008). In search for meaning: The differential role of religion for middle-aged and older persons diagnosed with life-threatening illness. *Journal of Religion, Spirituality & Aging*, 20(4), 288–312.
- Arnedo, C. O., & Casellas-Grau, A. (2015) Positive psychotherapy in cancer: Facilitating posttraumatic growth in assimilation and accommodation of traumatic experience`. In: C. R. Martin, V. R. Preedy, & V. B. Patel (Eds.), *The comprehensive guide to post-traumatic stress disorders*. Springer. doi: 10.1007/978-3-319-08613-2_77-1
- Arnedo, C. O., Sánchez, N., Sumalla, E. C., & Casellas-Grau, A. (2019). Stress and growth in cancer: Mechanisms and psychotherapeutic interventions to facilitate a constructive balance. *Frontiers in Psychology*, 10, 177. doi: 10.3389/fpsyg.2019.00177
- Aslam, N., & Kamal, A. (2019). Assessing positive changes among flood affected individuals: Translation and validation of posttraumatic growth inventory - short form. *Pakistan Journal of Medical Research*, 58(2), 59.
- Askay, W. S., & Magyar-Russell, G. (2009). Post-traumatic growth and spirituality in burn recovery. *International Review of Psychiatry*, 21(6), 570–579. doi.10.3109/09540260903344107

- Aziz, S. (2012). *Psychiatric morbidity, posttraumatic growth, work and social adjustment among earthquake survivors extricated from under the rubble* (Unpublished M.Sc Research Report). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Bachem, R., Mitreuter, S., Levin, Y., Stein, J. Y., Xiao, Z., & Solomon, Z. (2018). Longitudinal development of primary and secondary posttraumatic growth in aging veterans and their wives: Domain-specific trajectories. *Journal of Traumatic Stress, 31*, 730–741. doi: 10.1002/jts.22331
- Barakat, L. P., Aldelfer, M. A., & Kazak, A. E. (2006). Posttraumatic growth in adolescent survivors of cancer and their mothers and fathers. *Journal of Pediatric Psychology, 31*(4):413-9.
- Baral, I. A., & Bhagawati, K. C. (2019). Posttraumatic stress disorder and coping strategies among adult survivors of earthquake, Nepal. *BMC Psychiatry, 19*(1), 118. <https://doi.org/10.1186/s12888-019-2090-y>.
- Barrett-Bernstein, M., Wurz, A., & Brunet, J. (2019). Posttraumatic growth and its correlates among survivors of adolescent and young adult cancer: A brief report. *Journal of Psychosocial Oncology, 38*(2), 228-34. doi: 10.1080/07347332.2019.1664702
- Bayer-Topilsky, T., Itzhaky, H., Dekel, R., & Marmor, Y. N. (2013). Mental health and posttraumatic growth in civilians exposed to ongoing terror. *Journal of Loss and Trauma, 18*, 1–21. doi: 10.1080/15325024.2012.687325
- Bernardi, J., Engelbrecht, A., & Jobson, L. (2018). The impact of culture on cognitive appraisals: Implications for the development, maintenance, and treatment of

- posttraumatic stress disorder. *Clinical Psychologist*, 23(2), 91-102.
<https://doi.org/10.1111/cp.12161>
- Bogensperger, J., & Lueger-Schuster, B. (2014). Losing a child: Finding meaning in bereavement. *European Journal of psychotraumatology*, 5(10). doi: 10.3402/ejpt.v5.22910
- Bosson, J. V., Kelley, M. L., & Jones, G. N. (2012). Deliberate cognitive processing mediates the relation between positive religious coping and posttraumatic growth. *Journal of Loss and Trauma*, 17(5), 439-451.
- Bozo, O., Gundogdu, E., & Buyukasik-Colak, C. (2009). The moderating role of different sources of perceived social support on the dispositional optimism--posttraumatic growth relationship in postoperative breast cancer patients. *Journal of Health Psychology*, 14(7), 1009-1020. doi: 10.1177/135910530934229514/7/1009
- Braun, M. J., & Berg, D. H. (1994). Meaning reconstruction in the experience of parental bereavement. *Death Studies*, 18, 105-129.
- Brewin, C. R., & Holmes, E. A. (2003). Psychological theories of posttraumatic stress disorder. *Clinical Psychology Review*, 23(3), 339-376.
- Burnett, P., Middleton, W., Raphael, B., & Martinek, N. (1997). Measuring core bereavement phenomena. *Psychological Medicine*, 27(01), 49-57.
- Butler, L. D., Blasey, C. M., Garlan, R. W., et al. (2005). Posttraumatic growth following the terrorist attacks of September 11, 2001: Cognitive, coping, and trauma symptom predictors in an internet convenience

sample. *Traumatology*, *11*, 247-67.

<http://dx.doi.org/10.1177/153476560501100405>

Cabrera-Nguyen, P. (2010). Author guidelines for reporting scale development and validation results. *Journal of the Society for Social Work and Research*, *1*(2), 99-103.

Cadell, S., Rehgehr, C., & Hemsworth, D. (2003). Factors contributing to posttraumatic growth: A proposed structural equation model. *American Journal of Orthopsychiatry*, *73*(3), 279-287.

Calhoun, L. G., Cann, A., Tedeschi, R. G., & McMillan, J. (2000) A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress*, *13*(3). 521-7. doi: 10.1023/A:1007745627077

Calhoun, L. G. & Tedeschi, R. G. (1998b). Posttraumatic growth: future directions. In R. G. Tedeschi, C. L. PARK, & L. G. Calhoun, (Ed.). *Posttraumatic growth: Positive changes in the aftermath of crisis* (pp. 215-238). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Calhoun, L. G., & Tedeschi, R. G. (2006). The foundations of posttraumatic growth: An expanded framework. In L. G. Calhoun & R. G. Tedeschi (Eds.), *The handbook of posttraumatic growth: Research and practice* (pp. 1-23). Mahwah, NJ: Lawrence Erlbaum.

Calhoun, L. G., Tedeschi, R. G., Cann, A., & Hanks, E. A. (2010) Positive outcomes following bereavement: Paths to posttraumatic growth. *Psychologica Belgica*, *50*, 125–143.

- Cann, A., Calhoun, L. G., Tedeschi, R. G., Taku, K., Vishnevsky, T., Triplett, K. N., & Danhauer, S. C. (2010). A short form of the Posttraumatic growth inventory. *Anxiety, Stress, & Coping, 23*(2), 127-137.
- Cann, A., Calhoun, L. G., Tedeschi, R. G., Triplett, k. n., Vishnevsky, t., & Lindstrom, C. M. (2010) Assessing posttraumatic cognitive processes: The event related rumination inventory. *Anxiety, Stress, & Coping, 24*(2) 137- 156. doi: 10.1080/10615806.2010.529901
- Capps, L., & Bonanno, G. A. (2000). Narrating bereavement: Thematic and grammatical predictors of adjustment to loss. *Discourse Processes, 30*(1), 1–25. https://doi.org/10.1207/S15326950dp3001_01
- Cardenas-Castro, M., Faúndez-Abarca, X., Arancibia-Martini, H., & Ceruti-Mahn, C. (2017) The relationship between posttraumatic growth and psychosocial variables in survivors of state terrorism and their relatives. *Journal of Interpersonal Violence, 36*(1-2), 428-447. doi:10.1177/0886260517727494
- Cardenas-Castro, M. C., Martínez, M. A., & Abarca, X. F. (2016). Deliberate rumination and positive reappraisal as serial mediators between life impact and posttraumatic growth in victims of state terrorism in Chile (1973-1990). *Journal of Interpersonal Violence. 34*(3), 545-561. doi: 10.1177/0886260516642294
- Carlsson, M. E., & Nilsson, I. M. (2007) Bereaved spouses' adjustment after the patient's death in palliative care. *Palliative and Supportive Care, 5*, 397–404. doi: 10.1017/S1478951507000594

- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of Personality and Social Psychology*, *56*(2), 267-83.
- Chen, H. M., Chen, V. C. H., Hsiao, H. P., Weng, Y. P., Hsu, Y. T., Weng, J. C., ... Chen, Y. L. (2019). Correlations and correlates of post-traumatic growth and post-traumatic stress symptoms in patients with breast cancer. *Neuropsychiatric Disease and Treatment*, *15*, 3051–3060.
- Chow, M. (2010). The role of hope in bereavement for Chinese people in Hong Kong. *Death Studies*, *34*(4), 330-350.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*(5), 300–314. <https://doi.org/10.1097/00006842-197609000-00003>
- Colville, G., & Cream, P. (2009). Post-traumatic growth in parents after a child's admission to intensive care: maybe Nietzsche was right? *Intensive Care Medicine*, *35*(5), 919-23. doi: 10.1007/s00134-009-1444-1
- Cordova, M. J., Giese-Davis, J., Golant, M., Kronenwetter, C., Chang, V. & Spiegel, D. (2007). Breast cancer as trauma: Posttraumatic stress and posttraumatic growth. *Journal of Clinical Psychology in Medical Settings*, *14*, 308–319.
- Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2006). Sense-making, grief, and the experience of violent loss: Toward a mediational model. *Death Studies*, *30*, 403-428.
- Davis, E. B., Tongeren, D. R. V., McElroy-Heltzel, S. E., Davis, D. E., Rice, K. G., Hook, J. N.,... Lemke, A. W. (2019). Perceived and actual posttraumatic growth in religiousness and spirituality following disasters. *Journal of Personality*, *89*(1), 68-83. doi: 10.1111/jopy.12537

- Dekel, S., Ein-Dor, T., & Solomon, Z. (2012). Posttraumatic growth and posttraumatic distress: A longitudinal study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 4(1), 94–10.
- Dekel, S., Mandl, C., & Solomon, Z. (2011). Shared and unique predictors of posttraumatic growth and distress. *Journal of Clinical Psychology*, 67(3), 241—252. doi:10.1002/jclp.20747
- Diamantopoulos, A. and Siguaaw, J.A. (2000). *Introducing LISREL*. London: Sage Publications.
- Drapeau, C. W., Lockman, J. D., Moore, M. M., & Cerel, J. (2019). Predictors of posttraumatic growth in adults bereaved by suicide. *Crisis*, 40(3), 196–202 .
<https://doi.org/10.1027/0227-5910/a000556>
- Eckholdt, L., Watson, L., & O'Conno, M. (2017). Prolonged grief reactions after old age spousal loss and centrality of the loss in post loss identity. *Journal of Affective Disorders*. 227, 338-344. <https://doi.org/10.1016/j.jad.2017.11.010>
- Edmonds, S., & Hooker, K. (1992). Perceived changes in life meaning following bereavement. *Omega*, 25, 307-318.
- Engelkemeyers, S. M., & Marwit, S. J., (2008). Posttraumatic growth in bereaved parents. *Journal of Traumatic Stress*, 21(3), 344-6.
<https://onlinelibrary.wiley.com/doi/pdf/10.1002/jts.20338>
- Fallot, R. D., & Heckman, J. P. (2005). Religious/spiritual coping among women trauma survivors with mental health and substance use disorders. *The Journal of Behavioral Health Services & Research*, 32(2), 215-226.
- Foa, E. B., & Riggs, D. S. (1995). Posttraumatic stress disorder following assault: Theoretical considerations and empirical findings. *Current Directions in*

Psychological Science, 4(2), 61–65. <https://doi.org/10.1111/1467-8721.ep10771786>

- Folkman, S. (2008). The case for positive emotions in the stress process. *Anxiety, Stress, and Coping*, 21(1), 3-14.
- Frantz, T. T., Farrell, M., & Trolley, B. (2001). Positive outcomes of losing a loved one. In R. Neimeyer (Ed.), *Meaning reconstruction and the experience of loss* (pp. 191-209). Washington, DC: American Psychological Association.
- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology*, 69(6), 1048–1055.
- Gamino, L. A., Sewell, K. W., & Easterling, L.W. (2000). Scott and White Grief Study--phase 2: toward an adaptive model of grief. *Death Studies*, 24(7), 633-60. doi: 10.1080/07481180050132820
- Gerber, M. M., Boals, A., & Schuettler, D. (2011). The unique contributions of positive and negative religious coping to posttraumatic growth and PTSD. *Psychology of Religion and Spirituality*, 3(4), 298–307. doi:10.1037/a0023016
- Gerrish, N., Dyck, M. J., & Marsh, A. (2009). Post-traumatic growth and bereavement. *Mortality*, 14(3), 226-244. doi: 10.1080/13576270903017032
- Green, B. L. (1994). Psychosocial research in traumatic stress: An update. *Journal of Traumatic Stress*, 7(3), 341-362.
- Hall, B. J., Saltzman, L. Y., Canetti, D. & Hobfoll. S. E. (2015) A longitudinal investigation of the relationship between posttraumatic stress symptoms and posttraumatic growth in a cohort of Israeli Jews and Palestinians during

ongoing violence. *PLoS ONE* 10(4), e0124782.
doi:10.1371/journal.pone.0124782 .

Hambleton, R. K. (2005). Issues, designs, and technical guidelines for adapting tests into multiple languages and cultures. In R. K. Hambleton, P. F. Merenda, & C. D. Spielberger (Eds.), *Adapting educational and psychological tests for cross-cultural assessment* (pp. 3-38). Mahwah, NJ: Lawrence Erlbaum.

Hamilton, J., Greenberg, J., Pyszczynski, T., & Cather; C. (1993). A Self-Regulatory Perspective on Psychopathology and Psychotherapy. *Journal of Psychotherapy Integration*. 3(3). 205–248. doi: 10.1037/h0101173

Hammer, C., Podlog, L., Wadey, R., Galli, N., Forber-Pratt, A. J., & Newton, M. (2019). Cognitive processing following acquired disability for para sport athletes: A serial mediation model. *Disability and Rehabilitation*, doi: 10.1080/09638288.2018.1563639

Hayes, A. F. (2013). *Introduction to mediation, moderation and conditional process analysis*. New York: Guilford Press.

Hays, J. C., & Hendrix, C. C. (2008). The role of religion in bereavement. In M. S. Stroebe, R. O. Hansson, H. Schut, & W. Stroebe (Eds.), *Handbook of bereavement research and practice: Advances in theory and intervention* (pp. 327–348). Washington, DC: American Psychological Association.

Helgeson, V. S., Reynolds, K. A., & Tomich, P. L. (2006). A meta-analytic review of benefit finding and growth. *Journal of Consulting and Clinical Psychology*, 74, 797–816.

Hirooka, K., Fukahori, H., Akita, Y., & Ozawa, M. (2016). Posttraumatic growth among Japanese parentally bereaved adolescents: A web-based survey.

American Journal of Hospice & Palliative Medicine, 1(7), doi:
10.1177/1049909115627776

- Hobfoll, S. E., & Stokes, J. P. (1988). The process and mechanics of social support. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, & B. M. Montgomery (Eds.), *Handbook of personal relationships: Theory, research and interventions* (p. 497–517). John Wiley & Sons.
- Holland, J. M., Currier, J. M., Coleman, R. A., & Neimeyer, R. A. (2010). The integration of stressful life experiences scale (ISLES): Development and initial validation of a new measure. *International Journal of Stress Management*, 17(4), 325.
- Holland, J. M., Currier, J. M., & Neimeyer, R. A. (2006). Meaning reconstruction in the first two years of bereavement: The role of sense-making and benefit-finding. *OMEGA*, 53(3) 175-191.
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227–237. doi:10.1177/1745691614568352
- Hu, L.-T., & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (p. 76–99). Sage Publications, Inc.
- Hungerbuehler, I., Vollrath, M. E., & Landolt, M. A. (2011). Posttraumatic growth in mothers and fathers of children with severe illnesses. *Journal of Health Psychology* 16(8) 1259–1267. doi: 10.1177/1359105311405872

- Jaarsma, T. A., Pool, G., Sanderman, R., & Ranchor, A. V. (2006). Psychometric properties of the Dutch version of the posttraumatic growth inventory among cancer patients. *Psychooncology* 15(10), 911-920. doi: 10.1002/pon.1026
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. The Free Press, New York, NY.
- Janoff-Bulman, R. (2006). Scheme-change perspectives in post-traumatic growth. In L. G. Calhoun & R. G. Tedeschi (Eds.), *Handbook of post-traumatic growth: Research and practice* (pp. 81–99). New York: Lawrence Erlbaum Associates.
- Jenkins, R. A., & Pargament, K. I. (1995). Religion and spirituality as resources for coping with cancer. *Journal of Psychosocial Oncology*, 13, 51–74.
- Jibeen, T., Mahfooz, M., & Fatima, S. (2017). Spiritual transcendence and psychological adjustment: The moderating role of personality in burn patients. *Journal of Religion and Health*, 57(5), 1618-1636. doi: 10.1007/s10943-017-0484-z
- Joseph, S. (2009). Growth following adversity: Positive psychological perspectives on posttraumatic stress. *Psihologijske Teme*, 18(2), 335-344.
- Joseph, S., & Linley, P. A. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology*, 9, 262-280. doi:10.1037/1089-2680.9.3.262
- Joseph, S., & Linley, P. A. (2006). Growth following adversity: Theoretical perspectives and implications for clinical practice. *Clinical Psychology Review*, 26(8), 1041-1053. doi:10.1016/j.cpr.2005.12.006

- Joseph, S., & Linley, P. A. (2008). Psychological assessment of growth following adversity: A review. In S. Joseph & P. A. Linley (Eds.), *Trauma, recovery, and growth: Positive psychological perspectives on posttraumatic stress* (pp. 21-36). Hoboken, NJ: Wiley.
- Joseph, S., Williams, A., & Yule, W. (1993). Changes in outlook following disaster: The preliminary development of a measure to assess positive and negative responses. *Journal of Traumatic Stress, 6*, 271–280.
- Kállay, E. (2015). *Posttraumatic growth: A brief review*. Retrieved from <https://www.researchgate.net/publication/267206263>.
- Kashyap, S., & Hussain, D. (2018). Cross-cultural challenges to the construct “posttraumatic growth”. *Journal of Loss and Trauma, 23*(1), 51-69. <https://doi.org/10.1080/15325024.2017.1422234>
- Kaunonen, M., Päivi, A. K., Paunonen, M., & Erjanti, H. (200). Death in the Finnish family: Experiences of spousal bereavement. *International Journal of Nursing Practice, 6*(3), 127-34. doi: 10.1046/j.1440-172x.2000.00189.x
- Kearns, N. T., Becker, J., McMinn, K., Bennett, M. M., Powers, M. B., ... Edgerton, J. (2019). Increased spiritual well-being following cardiovascular surgery influences one-year perceived posttraumatic growth. *Psychology of Religion and Spirituality*. Advance online publication. <http://dx.doi.org/10.1037/rel0000291>
- Keesee, N. J., Currier, J. M., & Neimeyer, R. A. (2008). Predictors of grief following the death of one's child: The contribution of finding meaning. *Journal of Clinical Psychology, 64*(10), 1145–1163.

- Khanna, S., & Greyson, B. (2015). Near-death experiences and posttraumatic growth. *The Journal of Nervous and Mental Disease*, 203, 749-755. doi:10.1097/NMD.0000000000000362.
- Kılıc, C., Magruder, K. M., & Koryurek, M. M. (2016). Does trauma type relate to posttraumatic growth after war? A pilot study of young Iraqi war survivors living in Turkey. *Transcultural Psychiatry*, 53(1), 110-123.
- Klauer, T., & Winkeler, M. (2002). Gender, mental health status, and social support during a stressful event. In G. Weidner, M. Kopp, & M. Kristenson (Eds.), *Heart disease: Environment, stress, and gender. NATO Science Series, Series I: Life and Behavioural Science*, (Vol. 327, pp. 223–236). Amsterdam: IOS Press.
- Kleim, B., & Ehlers, A. (2009). Evidence for a curvilinear relationship between posttraumatic growth and posttrauma depression and PTSD in assault survivors. *Journal of Traumatic Stress*, 22(1), 45–52. doi: 10.1002/jts.20378
- Knoll, N., & Schwarzer, R. (2002). Gender and age differences in social support: A study of East German migrants. In G. Weidner, M. Kopp, & M. Kristenson, (Eds.), *Heart disease: Environment, stress, and gender* (pp. 198-210). Amsterdam: IOS Press.
- Koenig, H. G. (1995). Religion and older men in prison. *International Journal of Geriatric Psychiatry*, 10(3), 219-130. <https://doi.org/10.1002/gps.930100308>
- Kolokotroni, P., Anagnostopoulos, F., & Tsikkinis, A. (2014). Psychosocial factors related to posttraumatic growth in breast cancer survivors: A review. *Women & Health*, 54(6), 569-592, doi: 10.1080/03630242.2014.899543.

- Kreicbergs, U., Valdimarsdóttir, U., Onelöv, E., Henter, J. I., & Steineck, G. (2004). Anxiety and Depression in Parents 4–9 Years after the Loss of a child owing to a malignancy: A population-based follow-up. *Psychological Medicine*, *34*, 1431–1441.
- Kristensen, P., Dyregrov, K., & Dyregrov, A. (2018). Can visiting the site of death be beneficial for bereaved families after terror? A qualitative study of parents' and siblings' experiences of visiting Utøya Island after the 2011 Norway terror attack. *European Journal of Psychotraumatology*, *8*(6). doi:10.1080/20008198.2018.1463795
- Kristensen, P., Weisaeth, L., & Heir, T. (2012). Bereavement and mental health after sudden and violent losses: A Review. *Psychiatry Interpersonal & Biological Processes*, *75*(1), 76-97. doi: 10.1521/psyc.2012.75.1.76.
- Kroo, A., & Nagy, H. (2011). Posttraumatic growth among traumatized Somali refugees in Hungary. *Journal of Loss and Trauma*, *16*(5), 440-458.
- Laufer, A., & Solomon, Z. (2010). Posttraumatic growth in Israeli Jews. In T. Weiss & R. Berger (Eds.), *Posttraumatic growth and culturally competent practice* (pp. 1–14). Hoboken, NJ: Wiley.
- Lazarus, R. S., & Folkman, S. (1984). *Stress: Appraisal, and coping*. New York: Springer. <https://doi.org/10.1007/978-1-4419-1005-9>
- Leaman, S. C., & Gee, C. B. (2011). Religious coping and risk factors for psychological distress among African torture survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, *4*, 457–465. doi:10.1037/a0026622

- Lee, N. V. Cohen, S. R. Edgar, N. L., Laizner, N. A. M., & Gagnon, N. A. J. (2006). Meaning- making and psychological adjustment to cancer: Development of an intervention and pilot results. *Oncology Nursing Forum*, 33(2), 291-302. doi: 10.1188/06.ONF.291-302.
- Lev-Ari, L., & Levi-Belz, Y. (2018). Interpersonal theory dimensions facilitate posttraumatic growth among suicide-loss survivors: An attachment perspective, *Death Studies*, 43(9), 582-590. doi: 10.1080/07481187.2018.1504351
- Levy, K. (2019). Use of the Core Bereavement Items in adults aged 50 and older: A psychometric evaluation. *American Journal of Hospice*, 37(7), 527-53. doi: 10.1177/1049909119888181
- Lichtenthal, W. G., Burke, L. A., & Neimeyer, R. A. (2011). Religious coping and meaning- making following the loss of a loved one. *Counseling and Spirituality*, 30, 113-135.
- Lobar, S. L., Youngblut, J. M., & Brooten, M. (2006). Cross-cultural beliefs, ceremonies and rituals surrounding death of a loved one. *Pediatric Nursing*, 32, 44–50.
- Maercker, A., & Zoellner, T. (2004). The Janus face of self-perceived growth: Towards a two component model of posttraumatic growth. *Psychological Inquiry*, 15(1), 41-48.
- Maitlis, S. (2019) *Annual review of organizational psychology and organizational behavior*.
- Mangelsdorf, J. (2020). Posttraumatic growth. *Z Psychodrama Soziom.* 19, 21–33. <https://doi.org/10.1007/s11620-020-00525-5>

- Mathews, L. T., & Marwit, S. J. (2004). Examining the assumptive world views of parents bereaved by accident, murder, and illness. *OMEGA*, 48(2), 115-136.
- Mazor, Y., Gelkopf, M., Mueser, K. T., & Roe, D. (2016). Posttraumatic growth in psychosis. *Frontiers in Psychiatry*, 19(7), 202. doi: 10.3389/fpsy.2016.00202
- McIlwraith, H., (2001). *Coping with bereavement*. Oneworld Publications.
- McIntosh, D. N. (1995). Religion as schema, with implications for the relation between religion and coping. *The International Journal for the Psychology of Religion*, 5(1), 1–16.
- McIntosh, D. N., & Spilka, B. (1990). Religion and physical health: The role of personal faith and control beliefs. *Research in the Social Scientific Study of Religion*, 2, 167–194.
- Melissa M. Kelley & Keith T. Chan (2012) Assessing the role of attachment to God, meaning, and religious coping as mediators in the grief experience, *Death Studies*, 36(3), 199-227, doi: 10.1080/07481187.2011.553317
- Mesidor, J. K., & Sly, K. F. (2019). Religious coping, general coping strategies, perceived social support, PTSD symptoms, resilience, and posttraumatic growth among survivors of the 2010 earthquake in Haiti. *Mental Health, Religion & Culture*, 22(2), 130-143, doi: 10.1080/13674676.2019.1580254
- Meyerson, D. A., Grant, K. E., Carter, J. S., & Kilmer, R. P. (2011). Posttraumatic growth among children and adolescents: A systematic review. *Clinical Psychology Review*, 31(6), 949-64. doi: 10.1016/j.cpr.2011.06.003
- Michael, C., & Cooper, M. (2013). Post-traumatic growth following bereavement: A systematic review of the literature. *Counselling Psychology Review*, 28(4).

- Miller, J. F., McConnel, T. R., & Klinger, T. A. (2007). Religiosity and spirituality: Influence on quality of life and perceived patient self-efficacy among cardiac patients and their spouses. *Journal of Religion and Health, 46*(2), 299–313.
- Mohammadi, M., Esmaeili, R., & Fani. M. (2019). Review of the correlation between religion coping strategy and quality of life in intestine cancer in patients with Ostomy. *Journal of Advanced Pharmacy and Education Research, 9*(S2), 111-116.
- Morris, B. A., & Shakespeare-Finch, J. (2011). Cancer diagnostic group differences in posttraumatic growth: Accounting for age, gender, trauma severity, and distress. *Journal of Loss and Trauma, 16*(3), 229-242.
- Mroz, E. L., & Bluck, S. (2018). The loss of a loved one: Remembering the life and the dying days. In Gibson F. (Ed.), *Reminiscence, life review, and life story work: International perspectives* (pp. 162–179). London, England: Jessica Kingsley Publishers
- Mullen, P. M., Smith, R. M., & Hill, E. W. (1993). Sense of coherence as mediator of stress for cancer patients and spouses. *Journal of Psychosocial Oncology, 11*, 23-46.
- Munsoor, H. S. (2019). *God in times of adversity: A mixed-methods study investigating the relationship between religious coping and identification on the trauma appraisals and world assumptions of Muslim refugees/asylum seekers*. (Doctoral Thesis). University of Wolverhampton
- Naef, R., Ward, R., Mahrer-Imhof, R., & Grande, G. (2013). Characteristics of the bereavement experience of older persons after spousal loss: An integrative review. *International journal of nursing studies, 50*(8), 1108-1121.

- Naik, A. R., & Khan, S. H. (2019). Posttraumatic growth: An overview. *International Journal of Advance and Innovative Research*, 6(4).
- Neimeyer, R. A. (2011). Reconstructing meaning in Bereavement. *Rivista di Psichiatria*. 46(5-6), 332-6. doi: 10.1708/1009.10982
- Neria, Y., & Litz, B. T. (2003). Bereavement by traumatic means: The complex synergy of trauma and grief. *Journal of Loss and Trauma*, 9, 73-87.
- O'Connor, M., Guilfoyle, A., Breen, L., Mukhardt, F., & Fisher, C. (2007). Relationships between quality of life, spiritual well-being, and psychological adjustment styles for people living with leukaemia: An exploratory study. *Mental Health, Religion & Culture*, 10(6), 631– 647. doi:10.1080/13674670601078221
- Oyebode, J. R., & Owens, R. G. (2013). Bereavement and the role of religious and cultural factors. *Bereavement Care*, 32(2), 60–64. doi:10.1080/02682621.2013.812828
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford Press.
- Pargament, K. I., Feuille, M., & Burdzy, D. (2011). The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religion*. 2, 51-76. doi:10.3390/rel2010051
- Pargament, K. I., Koenig, H. G., & Perez, L. M. (2000). The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*, 56(4), 519- 543.

- Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion*, 37(4), 710-724. doi: 10.2307/1388152
- Pargament, K. I., Van Haitsma, K., & Ensing, D. S. (1995). Religion and coping. In M. Kimble, S. McFadden, J. Ellor, & J. Seeber (Eds.), *Aging, spirituality, and religion: A handbook* (pp. 47–68). Minneapolis: Fortress Press.
- Park, C. L. (1999). The roles of meaning and growth in the recovery from posttraumatic stress disorder. In A. Maercker, M. Schutzwohl, & Z. Solomon (Eds.), *posttraumatic stress disorder: A lifespan developmental perspective* (pp. 249-264), Hegrefe & Huber, Seattle, WA.
- Park, C. L., Cohen, L. H., & Murch, R. L. (1996). Assessment and prediction of stress-related growth. *Journal of Personality*, 64(1), 71-105.
- Park, C. L., Holt, C. L., Le, D., Christie, J., & Williams, B. R. (2018). Positive and Negative Religious Coping Styles as Prospective Predictors of Well-Being in African Americans. *Psychology of Religion and Spirituality*, 10(4), 318–326. doi:10.1037/rel0000124
- Park, C. L., Smith, P. H., Lee, S. Y., Mazure, C. M., McKee, S., & Hoff, R. (2017). Positive and negative religious/spiritual coping and combat exposure as predictors of posttraumatic stress and perceived growth in Iraq and Afghanistan Veterans. *Psychology of Religion and Spirituality*, 9(1), 13–20. doi:10.1037/rel0000086
- Parkes, C. M. (1997). Bereavement and mental health in the elderly. *Reviews in Clinical Gerontology*, (7) 47–53.

- Parkes, C. M. (2013) *Love and loss: The roots of grief and its complications*. Routledge.London. doi: 10.4324/9780203086148
- Payne, A. J., Joseph, S., & Tudway, J. (2007). Assimilation and accommodation processes following traumatic experiences. *Journal of Loss and Trauma*, 12(1), 75-91.
- Polatinsky, S., & Esprey, Y. (2000). An assessment of gender differences in the perception of benefit resulting from the loss of a child. *Journal of Traumatic Stress*, 13(4), 709-18. doi: 10.1023/A:1007870419116
- Prigerson, H., Maciejewski, P., Newsom, J., Reynolds, C., Frank, E., ... Miller, M. (1995). The inventory of complicated grief: A scale to measure certain maladaptive symptoms of loss. *Psychiatry Research*, (59),65–79.
- Ragger, K., Hiebler-Ragger, M., Herzog, G., Kapfhammer, H. P., & Unterrainer, H. F. (2019). Sense of coherence is linked to posttraumatic growth after critical incidents in Austrian ambulance personnel. *BMC Psychiatry*, 19, 89. <https://doi.org/10.1186/s12888-019-2065-z>
- Rahmani, A., Mohammadian, R., Ferguson, C., Golizadeh, L., Zirak, M., & Chavoshi, H. (2012). Posttraumatic growth in Iranian cancer patients. *Indian Journal of Cancer*, 49(3). doi: 10.4103/0019-509X.104489
- Rajandram, R. K., Jenewein, J., McGrath, C. P. J., & Zwahlen, R. A. (2010). Posttraumatic growth: A novel concept in oral cavity cancer care?. *Oral Oncology*, 46, 791–794. doi:10.1016/j.oraloncology.2010.08.010
- Ransom, S., Sheldon, K. M., & Jacobsen, P. B. (2008). Actual change and inaccurate recall contribute to posttraumatic growth following radiotherapy. *Journal of Consulting and Clinical Psychology*, 76, 811-819.

- Rogers, C. H., Floyd, F. J., Seltzer, M. M., Greenberg, J., & Hong, J. (2008) Long-term effects of the death of a child on parents' adjustment in midlife. *Journal of Family Psychology, (22)*, 203–211.
- Rosenblatt, P. C. (2000). Parents talking in the present tense about their dead child. *Bereavement Care, 19*, 35-38.
- Rothbaum, B. O., Foa, E. B., Riggs, D. S., Murdock, T., & Walsh, W. (1992). A prospective examination of post-traumatic stress disorder in rape victims. *Journal of Traumatic Stress, 5*, 455-475.
- Rzeszutek, M. (2017). Social support and posttraumatic growth in a longitudinal study of people living with HIV: The mediating role of positive affect. *European Journal of Psychotraumatology, 8*(1). doi: 10.1080/20008198.2017.1412225
- Sanders, C. M. (1989). *Grief: The mourning after. Dealing with adult bereavement*. New York: John Willey & Sons.
- Sarason, B. R., Pierce, G. R., Shearin, E. N., Sarason, I. G., Waltz, J. A., & Poppe, L. (1991). Perceived social support and working models of self and actual others. *Journal of Personality and Social Psychology, 60*(2), 273–287. <https://doi.org/10.1037/0022-3514.60.2.273>
- Sarason, I. G., Sarason, B. R., Shearin, E. N., & Pierce, G.R. (1987). A brief measure of social support: Practical and theoretical implications. *Journal of Social and Personal Relationships, 4*(4), 497-510.
- Sawyer, A., Ayers, S., & Field, A. P. (2010). Posttraumatic growth and adjustment among individuals with cancer or HIV/AIDS: A meta-analysis. *Clinical Psychology Review, 30*, 436–47.

- Schaefer, F. C., Blazer, D. G., & Koenig, H. G. (2008). Religious and spiritual factors and the consequences of trauma: A review and model of the interrelationship. *International Journal of Psychiatry & Medicine*, 38(4), 507–524.
- Schaefer, J. A., & Moos, R. H. (1998). The context for posttraumatic growth: Life crises, individual and social resources, and coping. In R. G. Tedeschi, C. L. Park, & L. G. Calhoun (Eds.), *The LEA series in personality and clinical psychology. Posttraumatic growth: Positive changes in the aftermath of crisis* (p. 99–125). Lawrence Erlbaum Associates Publishers.
- Schaefer, J. A., & Moos, R. H. (2001). *Bereavement experiences and personal growth*. In M. S. Stroebe, R. O. Hansson, W. Stroebe, & H. Schut (Eds.), *Handbook of bereavement research: Consequences, coping, and care* (pp. 145–167). American Psychological Association.
<https://doi.org/10.1037/10436-006>
- Schroevers, M. J., Helgeson, V.S., Sanderman, R., & Ranchor, A. V. (2010). Type of social support matters for prediction of posttraumatic growth among cancer survivors. *Psychooncology*, 19(1), 46-53. doi: 10.1002/pon.1501
- Senol-Durak, E. (2007). *Environmental and individual resources, perception of the event, cognitive processing and coping as factors leading to posttraumatic growth among the survivor of myocardial infarction patients and their spouses*. (Doctoral Thesis). Middle East Technical University.
- Senol-Durak, E. (2013). Stress related growth among diabetic outpatients: role of social support, self-esteem, and cognitive processing. *Social Indicators Research*, 118(2), 729-739.

- Senol-Durak, E., & Durak, M. (2018). Posttraumatic growth among Turkish older adults with diabetes. *Journal of Aging and Long-term Care, 1*(2), 55-63. doi: 10.5505/jaltc.2018.36844
- Shaw, A., Joseph, S., & Linley, P. A. (2005). Religion, spirituality, and posttraumatic growth: A systematic review. *Mental Health, Religion & Culture, 8*(1), 1-11.
- Smith, S. K., Samsa, G., Ganz, P. A., & Zimmerman, S. (2014). Is there a relationship between posttraumatic stress and growth after a lymphoma diagnosis? *Psycho-Oncology, 23*, 315–321 doi: 10.1002/pon.3419 PMID: 2412336
- Solomon, Z., & Dekel, R. (2007). Posttraumatic stress disorder and posttraumatic growth among Israeli ex-pows. *Journal of Traumatic Stress, 20*(3), 303-312.
- Sörensen, J., Rzeszutek, M., & Gasik, R. (2019). Social support and post-traumatic growth among a sample of arthritis patients: Analysis in light of conservation of resources theory. *Current Psychology*. <https://doi.org/10.1007/s12144-019-0131-9>
- Spahni, S., Morselli, D., Perrig-Chiello, P., & Bennett, K. M. (2015). Patterns of psychological adaptation to spousal bereavement in old age. *Gerontology, 61*, 456–468. doi: 10.1159/000371444
- Starcevic, A. (2019). Introductory Chapter: Psychological Trauma. In book: Psychological Trauma. <http://dx.doi.org/10.5772/intechopen.89519>
- Stein, N., Folkman, S., Trabasso, T., & Richards, T. A. (1997). Appraisal and goal processes as predictors of psychological well-being in bereaved caregivers. *Journal of Personality and Social Psychology, 72*(4), 872-84. doi: 10.1037//0022-3514.72.4.872

- Stelzer, E. M., Palitsky, R. Hernandez, E. N., Ramirez, E. G., & O'Connor, M. F. (2019). The role of personal and communal religiosity in the context of bereavement, *Journal of Prevention & Intervention in the Community*. doi: 10.1080/10852352.2019.1617523
- Suhail, K., Jamil, N., Oyebode, J. R., & Ajmal, M. A. (2011). Continuing bonds in bereaved Pakistani Muslims: Effects of culture and religion. *Death Studies*, 35(1), 22-41. doi; 10.1080/07481181003765592
- Sumalla, E. C., Ochoa, C., & Blanco, I. (2009). Posttraumatic growth in cancer: Reality or illusion? *Clinical Psychology Review*, 29, 24–33.
- Su, Y.-J., Chow, C.-C., Yen, C.-I., & Chuang, S.-S. (2019). Posttraumatic growth among burn survivors 2 years after the 2015 Formosa Fun Coast Water Park explosion in Taiwan. *Psychological Trauma: Theory, Research, Practice, and Policy*. Advance online publication. <http://dx.doi.org/10.1037/tra0000458>
- Sveen, J., Pohlkamp, L., Kreicbergs, U., & Maarten, C., & Eisma, M. C. (2019). Rumination in bereaved parents: Psychometric evaluation of the Swedish version of the Utrecht Grief Rumination Scale (UGRS). *PLoS ONE*, 14(3). doi: [org/10.1371/journal](http://dx.doi.org/10.1371/journal)
- Swanson, P. B., Pearsall-Jones, J. G., & Hay, D. A. (2002). How mothers cope with the death of a twin or higher multiple. *Twin Research*, 5, 1-9.
- Swickert, R., & Hittner, J. (2009). Social support coping mediates the relationship between gender and posttraumatic growth. *Journal of Health Psychology*, 14(3), 387–393. <https://doi.org/10.1177/1359105308101677>

- Taku, K., Calhoun, L. G., Tedeschi, R. G., Gil-Rivas, Kilmer, R. P., & Cann, A. (2007). Examining posttraumatic growth among Japanese university students. *Anxiety, Stress, & Coping, 20*(4), 353-367. doi:10.1080/1061 5800701295007
- Taku, K., Kilmer, R. P., Cann, A., Tedeschi, R. G., & Calhoun, L. G. (2012). Exploring posttraumatic growth in Japanese youth. *Psychological Trauma: Theory, Research, Practice, and Policy, 4* (4), 411-419.
- Tandon, S., & Mehrotra, S. (2016). Posttraumatic growth and its correlates in an Indian setting. *The International Journal of Indian Psychology, 4*(1), 69.
- Tarakeshwar, N., & Pargament, K. I. (2001). Religious coping in families of children with autism. *Focus on Autism and Other Developmental Disabilities, 16*(4), 247– 260. <https://doi.org/10.1177/108835760101600408>
- Tarakeshwar, N., Vanderwerker, L. C., Paulk, E., Pearce, M. J., Kasl, S. V., Prigerson, H. G. (2006). Religious coping is associated with the quality of life of patients with advanced cancer. *Journal of Palliative Medicine, 9*, 646–657. doi: 10.1089/jpm.2006.9.646
- Tedeschi, R.G., & Calhoun, L.G. (1995). *Trauma and transformation: Growing in the aftermath of suffering*. Thousand Oaks, CA: Sage.
- Tedeschi, R.G., & Calhoun, L.G. (1996). The post-traumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Post-Traumatic Stress, 9*(3), 455–471.
- Tedeschi, R. G., & Calhoun, L. G., (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*(1), 1-18.

- Thabet, A. A. M., Elhelou, M. W., & Vostanis, P. (2015). Exposure to war traumatic experiences, post traumatic growth and resilience among university students in Gaza. *American Journal of Advanced Medical Sciences, 1*(1), 1-8.
- Thombre, A., Sherman, A. C., & Simonton, S. (2010). Posttraumatic growth among cancer patients in India. *Journal of Behavioural Medicine, 33*(1), 15-23. doi: 10.1007/s10865-009-9229-0
- Thornton, A. A., & Perez, M. A. (2006). Posttraumatic growth in prostate cancer survivors and their partners. *Psych oncology, 15*(4), 285-296. doi: 10.1002/pon.953
- Triplett, K. N., Tedeschi, R. G., Cann, A., Calhoun, L. G., & Reeve, C. L. (2012). Posttraumatic growth, meaning in life, and life satisfaction in response to trauma. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(4), 400–410. <https://doi.org/10.1037/a0024204>
- Vanhooren, S., Leijssen, M., & Dezutter, J. (2018) Coping strategies and posttraumatic growth in Prison. *The Prison Journal, 1*(20). doi: 10.1177/0032885517753151
- Vishnevsky, T., Cann, A., Calhoun, L. G., Tedeschi, R. G., & Demakis, G. J. (2010). Gender differences in self-reported posttraumatic growth: A meta-analysis. *Psychology of Women Quarterly, 34*, 110-120.
- Wago, S. S., Byrkjedal, I. K., Sinnes, H. M., Hystad, S. W., & Dyregrov, K. (2017). Social support and complicated grief: A longitudinal study on bereaved parents after the Utøya terror attack in Norway. *Scandinavian Psychologist, 4*(10). doi: org/10.15714/scandpsychol.4.e10

- Walter, M., & Bates, G. (2012). Posttraumatic growth and recovery from post-traumatic stress disorder. In V. Olisah (Ed.), *Essential notes in psychiatry* (pp. 143-186). Manhattan, NY: InTech.
- Warner, R. M. (2013). *Applied statistics: From bivariate through multivariate techniques* (2nd ed.). City, ST: Sage.
- Waugh, A., Kiemle, G., & Slade, P. (2018). Understanding mothers' experiences of positive changes after neonatal death. *European Journal of Psychotraumatology*, *9*(1). doi:10.1080/20008198.2018.1528124
- Waugh, A., Kiemle, G., & Slade, P. (2018). What aspects of post-traumatic growth are experienced by bereaved parents? A systematic review. *European journal of Psychotraumatology*, *16*, *9*(1). doi: 10.1080/20008198.2018.1506230
- Weiss, T. (2002). Posttraumatic growth in women with breast cancer and their husbands: An intersubjective validation study. *Journal of Psychosocial Oncology*, *20*, 65-80.
- Widows, C. M., Jacobsen, P. B., Boot-Jones, M., & Fields, K. K. (2005). Predictors of posttraumatic growth following bone marrow transplantation for cancer. *Health Psychology*, *24*(3), 266–273. doi: 10.1037/0278-6133.24.3.266
- Wijngaards-de Meij, L., Stroebe, M., Schut, H., Stroebe, W., van den Bout, J., van der Heijden, P., ... Dijkstra, I. (2005). Couples at risk following the death of their child: Predictors of grief versus depression. *Journal of Consulting and Clinical Psychology*, *73*(4), 617–623.
- Wills, T. A., & Fegan, M. F. (2001). Social networks and social support. In A. Baum, T. A. Revenson, & J. E. Singer (Eds.), *Handbook of health psychology* (pp. 209-234). Mahwah: Lawrence Erlbaum Associates.

- Włodarczyk, A., Basabe, N., Páez, D., Villagrán, L., & Reyes, C (2014). Individual and collective posttraumatic growth in victims of natural disasters: A multidimensional perspective. <http://dx.doi.org/10.1080/15325024.2017.1297657>
- Wulandari, S., Poerwandari, E., K., & Basri, A., A. (2019). The journey of finding meaning in life: posttraumatic growth experience in notable Holocaust survivors. *Advances in Social Science, Education and Humanities Research*, 229. doi: 10.2991/iciap-18.2019.36
- Yalom, I. D., & Lieberman, M. A. (1991). Bereavement and heightened existential awareness. *Psychiatry: Interpersonal and Biological Processes*, 54(4), 334–345.
- Yarcheski, A., Mahon, N., Yarcheski, T., Hanks, M., & Cannella, B. (2009). A meta-analytic study of predictors of maternal foetal attachment. *International Journal of Nursing Studies*,(46) 708–715.
- Zhang, Y., Xu, W., Yuan, G., & An, Y. (2018). *The relationship between posttraumatic cognitive change, posttraumatic stress disorder, and posttraumatic growth among Chinese adolescents after the Yancheng tornado: The mediating effect of rumination. frontiers in psychology.* <https://doi.org/10.3389/fpsyg.2018.00474>
- Zhoua, Y., Lianga, Y., Tong, H., & Liua, Z. (2019). Patterns of posttraumatic stress disorder and posttraumatic growth among women after an earthquake: A latent profile analysis. *Asian Journal of Psychiatry*. <https://doi.org/10.1016/j.ajp.2019.10.014>

- Znoj, H. (2005). Bereavement and posttraumatic growth. In Calhoun, L. G., and Tedeschi, R. G. (Ed.), *Handbook of posttraumatic growth: Research and practice*. Routledge. Retrieved from <https://www.taylorfrancis.com/books/e/9781315805597/chapters/10.4324/9781315805597-17>
- Zoellner, T., Rabe, S., Karl, A., & Maercker, A. (2008). Posttraumatic growth in accident survivors: openness and optimism as predictors of its constructive or illusory sides. *Journal of Clinical Psychology, 64*(3), 245-63. doi: 10.1002/jclp.20441
- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology - a critical review and introduction of a two component model. *Clinical Psychology Review, 26*, 626–53.

Country Profile

Pakistan is located in the northwestern part of the South Asian subcontinent. It is bordered by Iran on west, Afghanistan on the northwest, China on the northeast, India on the east, and Arabian Sea on the south. It has a profound of blend landscapes varying from plains to desert, forests, and plateaus with Himalaya's ranges in the north. Pakistan population is estimated at 220.9 million and area of 796,095 km² (311,000 sq. mi.) Baluchistan province of Pakistan is the largest province in terms of land area and least populated with 12.34 million but the richest province in natural resources. Its provincial capital and largest city is Quetta, which is multi-ethnic and multilingual city. Baluchistan is situated on the Baluchistan plateau in the south and west and constitutes approximately 44% of the total area of Pakistan. It is bordered with Iran in the west, Afghanistan and the Khyber Pukhtunkhwa to the north, Punjab and Sindh province in the east while its south is bordered by the Arabian Sea. The major ethnic groups in the province are Baluch and Pashtoon while other ethnic communities are Brahui, Hazaragi, Sindhi, Punjabi, Saraiki and Persians. The population density here is very low due to the mountainous terrain and scarcity of water. This province is largely underdeveloped with poor health and education facilities. Access to health care and education in Baluchistan province, particularly for women and children is extremely limited. Literacy rate in Baluchistan is the lowest in the country. The overall female literacy rate in the province is 26 percent and male is 37 percent. It currently stands at 41 percent whereas, the literacy rate in other provinces of the country i.e. Punjab, Sindh and Khyber Pukhtunkhwa are 62, 55 and 53 percent respectively. More than three decades of so called Afghan war and War on Terrorism has

brought huge destruction and severely affected the social, political and economic life of this province.

Permission for Core Bereavement Items

RE: Message regarding "The development of a scale to measure core bereavement phenomena [Abstract]" [Index x](#)

Paul Burnett <p.burnett@qut.edu.au>
to Azizohd14@gmail.com p.edu.pk ▾

Wed, May 6, 2015, 4:53 AM

Scale is attached.

Permission is given to use it with due citation.

Thanks

Paul

Professor Paul C Burnett, Dean of Research and Research Training

Queensland University of Technology (CRICOS 00213J)

Level 4, 88 Musk St KELVIN GROVE QLD 4059

Phone: (07) 3138 1303 Mob: 0418 248 134 Email: p.burnett@qut.edu.au

Publications: http://eprints.qut.edu.au/view/person/Burnett_Paul.html

Permission for Brief-RCOPE

Kenneth I Pargament <kpargam@bgsu.edu>

ⓧ Sep 6, 2015, 5:30 AM ☆ ↶ ⋮

to me ▾

Dear Aziz:

Here is a copy of the RCOPE and manual as well as a copy of the shorter version -- the Brief RCOPE. Let me know if you have any questions about it.

Sincerely,

Kenneth I. Pargament, Ph. D.

Professor

Department of Psychology

Bowling Green State University

Bowling Green, OH 43403

Author, *Spiritually Integrated Psychotherapy: Understanding and Addressing the Sacred*, Guilford Press, 2007

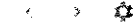
Editor-in-Chief, *APA Handbook of Psychology, Religion, and Spirituality* (Vols. 1 and 2), APA Press, 2013

Permission for Integration of Stressful Life Events Scale

jason

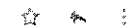


13 of 25



Jason Holland (jmholland@gmail.com)

Sat, Nov 28, 2015, 1:21 AM



to me

Hello Aziz,

Yes, I believe the subscales of the ISLES can be used to assess assimilative and accommodative processes in bereavement. Specifically, the "Comprehensibility" subscale would tap more into assimilative processes, and the "Footing in the World" subscale would measure accommodative processes. I've attached the original validation study that makes these points. Also, if you are needing an Arabic translation of the measure, it can be found here:

http://www.jasonholland.com/Holland_Professional_Website/Assessment_Tools_files/ISLES%20for%20translation_FINAL_ARABIC.docx

Please let me know if I can be of further assistance

Best

Jason

© 2015 Jason Holland. All rights reserved.
This document is the property of Jason Holland. It is not to be distributed or used for any other purpose without his written permission.
Jason Holland
11/28/2015

Holland, Carter, Co.,

Permission for Social Support Questionnaire-Short Form (SSQ6)

irwin

X



1 of 13



(no subject)

inbox x



Irwin Sarason <sarason@u.washington.edu>

Sat, Oct 31, 2015, 10:16 AM



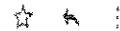
to me

Permission granted.
Irwin Sarason

Sent from my iPhone

Aziz <azizphd14@u.washington.edu>

Mon, Nov 2, 2015, 9:56 PM



to irwin bcc: Azizphd14

Thanks indeed
Regards

Sent from my iPhone

...

Permission for Post-traumatic Growth Inventory-Short Form (PTGI-SF)

AZIZ

110, OCT 24, 2015, 7:09 PM

Dear sirmadam Greetings of the day I am currently doing PhD at National Institute of Psychology, Quai I Azam University, Islamabad, Pakistan. Professor Dr. ...

Posttraumatic Growth <posttraumaticgrowth@uncg.edu>

Mon, Nov 2, 2015, 12:52 AM

to me

Hello Aziz,

Attached you will find a translation of the full-scale PTGI in Urdu, though not the short form. I am also sending an attachment with all of our English-language scales including the PTGI-SF, so you will be able to see the items that are used in the short form version. We hope this will be helpful to you! Thank you for your interest.

Warm regards,

Posttraumatic Growth Research Center

UNC Charlotte

Department of Psychology

9201 University City Blvd

Charlotte, NC 28226-3001 USA

Lawrence G. Calhoun <calhoun@uncg.edu>

Richard B. Tedeschi <tedeschi@uncg.edu>

Anna Barni <barni@uncg.edu>

www.uncg.edu

<http://www.ncslifedgementalhealth.com/bio/center.html> (970) 415-6450

Original Core Bereavement Items (CBI)

A Images and thoughts

- 1 Do you experience images of the events surrounding 'x's' death?
- 2 Do thoughts of 'x' come into your mind whether you wish it or not?
- 3 Do thoughts of 'x' make you feel distressed?
- 4 Do you think about 'x'?
- 5 Do images of 'x' make you feel distressed?
- 6 Do you find yourself preoccupied with images or memories of 'x'?
- 7 Do you find yourself thinking of reunion with 'x'?

B Acute separation

- 8 Do you find yourself missing 'x'?
- 9 Are you reminded by familiar objects (photos, possessions, rooms etc.) of 'x'?
- 10 Do you find yourself pining for/yearning for 'x'?
- 11 Do you find yourself looking for 'x' in familiar places?
- 12 Do you feel distress/pain if for any reason you are confronted with the reality that 'x' is not present/not coming back?

C Grief

- 13 Do reminders of 'x' such as photos, situations, music, places etc. cause you to feel longing for 'x'?
- 14 Do reminders of 'x' such as photos, situations, music, places etc. cause you to feel loneliness?
- 15 Do reminders of 'x' such as photos, situations, music, places etc. cause you to cry about 'x'?
- 16 Do reminders of 'x' such as photos, situations, music, places etc. cause you to feel sadness?
- 17 Do reminders of 'x' such as photos, situations, music, places etc. cause you to feel loss of enjoyment?

Questions B8-12 and C13-17 were rated on a four-point scale where the options were, 'A lot of the time []', 'Quite a bit of the time []', 'A little bit of the time []', 'Never []'. For Questions A1, A2, A4 and A6, the first option was 'Continuously []'. For questions A3, A5, and A7 the first option was 'Always []'. The latter three options were the same for all questions.

Original Religious Coping Scale (Brief-RCOPE)

The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what the item says. *How much or how frequently.* Don't answer on the basis of what worked or not – just whether or not you did it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

1 – Not at all

2 – Somewhat

3 – Quite a bit

4 – A great deal

(+) 1. Looked for a stronger connection with God.	1	2	3	4
(+) 2. Sought God's love and care.	1	2	3	4
(+) 3. Sought help from God in letting go of my anger.	1	2	3	4
(+) 4. Tried to put my plans into action together with God.	2	3	4	
(+) 5. Tried to see how God might be trying to strengthen me in this situation.	1	2	3	4
(+) 6. Asked forgiveness for my sins.	1	2	3	4
(+) 7. Focused on religion to stop worrying about my problems.	1	2	3	4
(-) 8. Wondered whether God had abandoned me.	1	2	3	4

(-) 9. Felt punished by God for my lack of devotion.	1	2	3	4
(-) 10. Wondered what I did for God to punish me.	1	2	3	4
(-) 11. Questioned God's love for me.	1	2	3	4
(-) 12. Wondered whether my church had abandoned me.	1	2	3	4
(-) 13. Decided the devil made this happen.	1	2	3	4
(-) 14. Questioned the power of God.	1	2	3	4

(+) Positive religious coping items

(-) Negative religious coping items

Original Integration of Stressful Life Events Scale (ISLES)

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. Since this event, the world seems like a confusing and scary place.	1	2	3	4	5
2. I have made sense of this event.	1	2	3	4	5
3. If or when I talk about this event, I believe people see me differently.	1	2	3	4	5
4. I have difficulty integrating this event into my understanding about the world.	1	2	3	4	5
5. Since this event, I feel like I'm in a crisis of faith.	1	2	3	4	5
6. This event is incomprehensible to me.	1	2	3	4	5
7. My previous goals and hopes for the future don't make sense anymore since this event.	1	2	3	4	5
8. I am perplexed by what happened.	1	2	3	4	5
9. Since this event happened, I don't know where to go next in my life.	1	2	3	4	5
10. I would have an easier time talking about my life if I left this event out.	1	2	3	4	5
11. My beliefs and values are less clear since this event.	1	2	3	4	5
12. I don't understand myself anymore since this event.	1	2	3	4	5
13. Since this event, I have a harder time feeling like I'm part of something larger than myself.	1	2	3	4	5
14. This event has made me feel less purposeful.	1	2	3	4	5
15. I haven't been able to put the pieces of my life back together since this event.	1	2	3	4	5
16. After this event, life seems more random.	1	2	3	4	5

Original Social Support Questionnaire - Short Version (SSQ6)

1. Whom can you really count on to be dependable when you need help?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied	3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied
--------------------	----------------------	------------------------	---------------------------	-------------------------	-----------------------

2. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied	3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied
--------------------	----------------------	------------------------	---------------------------	-------------------------	-----------------------

3. Who accepts you totally, including both your worst and your best points?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied	3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied
--------------------	----------------------	------------------------	---------------------------	-------------------------	-----------------------

4. Whom can you really count on to care about you, regardless of what is happening to you?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied	3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied
--------------------	----------------------	------------------------	---------------------------	-------------------------	-----------------------

5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

No one	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6 - very satisfied	5 - fairly satisfied	4 - a little satisfied	3 - a little dissatisfied	2 - fairly dissatisfied	1 - very dissatisfied
--------------------	----------------------	------------------------	---------------------------	-------------------------	-----------------------

Original Post-traumatic Growth Inventory Short Form (PTGI-SF)

Indicate for each of the statements below the degree to which this change occurred in your life as a result of your crisis [or researcher inserts specific descriptor here], using the following scale.

0= I did not experience this change as a result of my crisis.

1= I experienced this change to a very small degree as a result of my crisis.

2= I experienced this change to a small degree as a result of my crisis.

3= I experienced this change to a moderate degree as a result of my crisis.

4= I experienced this change to a great degree as a result of my crisis.

5= I experienced this change to a very great degree as a result of my crisis.

1. I changed my priorities about what is important in life. (V)
2. I have a greater appreciation for the value of my own life. (V)
3. I am able to do better things with my life. (II)
4. I have a better understanding of spiritual matters. (IV)
5. I have a greater sense of closeness with others. (I)
6. I established a new path for my life. (II)
7. I know better that I can handle difficulties. (III)
8. I have a stronger religious faith. (IV)
9. I discovered that I'm stronger than I thought I was. (III)
10. I learned a great deal about how wonderful people are. (I)

Urdu Consent Form and Demographic Sheet



ہدایات:

میں قومی ادارہ نفسیات، قائد اعظم یونیورسٹی اسلام آباد میں پی۔ ایچ۔ ڈی کا طالب علم ہوں۔ میں اس تحقیق کے ذریعے یہ معلوم کرنے کی کوشش کر رہا ہوں کہ گھر کے کسی فرد کے وفات کے صدمے کا باہمی گھر والوں پر نفسیاتی طور پر کیا اثرات پڑتے ہیں۔ آپ سے لی گئی معلومات صرف اسی تحقیق کے لئے استعمال ہوں گی اور یہ معلومات کسی بھی صورت میں کسی دوسرے فرد یا ادارے کو نہیں دی جائے گی۔ آپ سے گزارش کی جاتی ہے کہ اس سوانح کے جوابات دینے میں تعاون کریں اور اگر آپ جو بات دینے کے لئے راضی ہیں تو سوالوں کو سمجھنے کے اس کے جوابات دیں۔

کوائف

نام: _____ آپ کی عمر: _____
 جنس: _____ مادری زبان: _____
 مذہب: _____ خاندان: _____ مشترکہ: _____ علیحدہ: _____
 پیشہ: _____ تعلیم: _____
 فوت ہونے والے کی عمر: _____ فوت ہونے والے کی جنس: _____ مرد: _____ عورت: _____
 فوت ہونے والا شخص آپ کا کیا لگتا تھا: _____ بیٹا/بیٹی/بیوی/شوہر
 فوت ہونے کی وجہ: _____ حادثہ/بیماری/زلزلہ/سیلاب/دھماکہ/قتل/خودکشی/اول کا دورہ/ریاکوئی اور وجہ تھی تو وہ لکھیں
 فوت ہونے والے شخص کی وفات کو کتنا عرصہ ہوا ہے: _____
 فوت ہونے والے شخص کی ازدواجی حیثیت کیا تھی؟ شادی شدہ/غیر شادی شدہ/بیوہ/رنڈ وہ
 اس صدمے کے بعد آپ نے کبھی ماہر نفسیات (Psychiatrist/Psychologist) سے اپنا بیچیک اپ کروایا ہے؟ جی ہاں/نہیں
 اس صدمے سے پہلے کسی آپ نے ماہر نفسیات (Psychiatrist/Psychologist) سے اپنا بیچیک اپ کروایا تھا؟ جی ہاں/نہیں
 کیا آپ جتنی سکون یا نیند والی گولیاں کھاتے ہیں۔ جی ہاں/نہیں
 اگر ہاں تو کتنے عرصے سے: _____

Translated Version of Core Bereavement (CBI)

مندرجہ ذیل سوالات آپ کے اس تجربہ سے متعلق ہے جو کہ عرصہ پہلے آپ کے بیٹے/بچی/شوہر/بیوی کے وفات کی وجہ سے آپ کو ہوا جس کا نام ان سوالات میں 'X' کی علامت سے ظاہر کیا جائیگا۔

نمبر شمار	بیانات	مستقل	زیادہ تر وقت	کبھی کبھار	کبھی نہیں
1.	کیا 'X' کی وفات سے متعلق واقعات کے تصور آپ کے ذہن میں آتا ہے؟	3	2	1	0
2.	کیا آپ کے چاہنے تہ چاہنے کے باوجود 'X' سے متعلق خیالات آپ کے ذہن میں آتے ہیں؟	3	2	1	0
3.	کیا 'X' کے خیالات آپ کو تنجیدہ کر دیتے ہیں؟	3	2	1	0
4.	کیا آپ 'X' کے بارے میں سوچتے ہیں؟	3	2	1	0
5.	کیا 'X' کے تصورات (images) آپ کو تنجیدہ کر دیتے ہیں؟	3	2	1	0
6.	کیا آپ اپنے آپ کو 'X' کے تصورات یا اداوں میں گھرا ہوا پاتے ہیں؟	3	2	1	0
7.	کیا آپ 'X' سے دوبارہ ملنے کے بارے میں سوچتے ہیں؟	3	2	1	0
8.	کیا آپ 'X' کی کمی محسوس کرتے ہیں؟	3	2	1	0
9.	کیا 'X' کی شناسا (Familiar) اشیاء، (تصوریں، زیر استعمال چیزیں، کمرے وغیرہ) آپ کو اکل یاد دلاتی ہیں؟	3	2	1	0
10.	کیا آپ دکھ سے 'X' کی آرزو کرتے ہیں؟	3	2	1	0
11.	کیا آپ شناسا جگہوں پر 'X' کو تلاش کرتے ہیں؟	3	2	1	0
12.	کیا آپ رنج محسوس کرتے ہیں اگر کسی وجہ سے آپ کو اس حقیقت کا سامنا کرنا پڑے کہ اب 'X' واپس نہیں آئے گا؟	3	2	1	0
13.	کیا 'X' کی یاد دلانے والی اشیاء، (تساویہ، حالات، موسیقی، جگہوں وغیرہ) آپ کو 'X' کی فوٹوش محسوس ہوتی ہے؟	3	2	1	0
14.	کیا 'X' کی یاد دلانے والی اشیاء، (تساویہ، حالات، موسیقی، جگہوں وغیرہ) آپ کو 'X' کی فوٹوش محسوس ہوتی ہے؟	3	2	1	0
15.	کیا 'X' کی یاد دلانے والی اشیاء، (تساویہ، حالات، موسیقی، جگہوں وغیرہ) آپ کو اس کے لئے روتے ہیں؟	3	2	1	0
16.	کیا 'X' کی یاد دلانے والی اشیاء، (تساویہ، حالات، موسیقی، جگہوں وغیرہ) آپ کو اس محسوس کرتے ہیں؟	3	2	1	0
17.	کیا 'X' کی یاد دلانے والی اشیاء، (تساویہ، حالات، موسیقی، جگہوں وغیرہ) آپ کو زندگی کا مزہ (enjoyment) ختم ہو گیا ہے؟	3	2	1	0

Translated Version of Religious Coping Scale (Brief-RCOPE)

مندرجہ ذیل سوالات آپ کی زندگی میں ہونے والے موت کے صدمے سے نمٹنے کے طریقہ کار کے بارے میں ہیں۔ ہم یہ جاننا چاہتے ہیں کہ بیان میں ذکر کئے گئے طریقہ کار کو آپ نے کس حد تک استعمال کیا۔ جو جواب آپ کے لحاظ سے زیادہ موزوں ہو اس پر دائرہ لگائیں۔

نمبر شار	بیانات	بالکل بھی نہیں (0)	کچھ حد تک (1)	بالکل توڑا سا (2)	بہت حد تک (3)
1.	آپ نے کبھی خدا سے مضبوط رابطہ کی طلب کی	0	1	2	3
2.	آپ نے خدا کی محبت اور رحم کو طلب کیا۔	0	1	2	3
3.	اپنے غم سے کوڑا کھل یاد رکھنے کیلئے آپ نے خدا کی مدد طلب کی۔	0	1	2	3
4.	اپنے ارادوں پر آپ نے خدا کی رضا کے مطابق عمل کرنے کی کوشش کی۔	0	1	2	3
5.	آپ نے یہ دیکھنے کی کوشش کی کہ خدا اس صورت حال میں مجھے کس طرح مضبوط کرنا چاہتا ہے۔	0	1	2	3
6.	آپ نے اپنے غم سے ہونے والی معافی طلب کی۔	0	1	2	3
7.	اپنی مشکلات پر پریشان ہونے سے بچنے کے لئے آپ نے مذہب پر وہیمان (توجہ) دیا۔	0	1	2	3
8.	آپ کو کبھی کمان ہوا کہ کیا خدا نے آپ کو چھوڑ دیا ہے۔	0	1	2	3
9.	آپ کو محسوس ہوا کہ آپ کی لگن میں کمی کی وجہ سے خدا نے آپ کو سزا دی۔	0	1	2	3
10.	آپ نے غور کیا کہ آپ نے ایسا کیا کیا کہ خدا نے آپ کو سزا دی۔	0	1	2	3
11.	آپ کو اپنے لئے خدا کی محبت پر شبہ ہوا۔	0	1	2	3
12.	آپ کو یہ کمان ہوا کہ آپ کی عبادت گاہوں نے آپ کو چھوڑ دیا ہے۔	0	1	2	3
13.	آپ اس نتیجے پر پہنچے کہ یہ واقعہ شیطان کی وجہ سے ہوا ہے۔	0	1	2	3
14.	آپ نے خدا کی طاقت پر سوال اٹھایا۔	0	1	2	3

Translated Version of Integration of Stressful Life Events Scale (ISLES)

نیچے دیئے گئے بیانات آپ کو کچھ عرصہ پہلے پیش آنے والے صدمے سے متعلق ہے۔ براے مہربانی بتائیں کہ آپ ان بیانات سے کس حد تک متعلق ہیں یا نہیں ہیں۔

نمبر شمار	بیانات	کامل طور پر متعلق	کامل طور پر غیر متعلق	تعلق	تعلق نہ ہو	تعلق نہ ہو	تعلق
1	اس صدمے کے بعد یہ دنیا مجھے الجھارینے والی اور خوفناک چل گئی ہے۔	5	4	3	2	1	
2	میں اس صدمے کو کبھی بھول سکتا ہوں۔	5	4	3	2	1	
3	اگر کبھی یا جب بھی میں اس صدمے کا ذکر کروں تو مجھے لگتا ہے کہ لوگوں کا رویہ مجھ سے بدل جاتا ہے۔	5	4	3	2	1	
4	مجھے اپنی زندگی کے تصور، سوچ اور اس صدمے میں مطابقت پیدا کرنے میں مشکل پیش آ رہی ہے۔	5	4	3	2	1	
5	اس صدمے کے بعد سے مجھے ایسا لگتا ہے جیسے میں عقیدے کے لحاظ سے تذبذب رہے یا یقینی کا شکار ہوں۔	5	4	3	2	1	
6	یہ صدمہ میری سمجھ سے باہر ہے۔	5	4	3	2	1	
7	مستقبل کے حوالے سے میرے جو بھی مقاصد اور امیدیں تھیں وہ اب اس صدمے کے بعد کوئی معنی نہیں رکھتی۔	5	4	3	2	1	
8	جو وہ اس کی وجہ سے میں الجھن میں ہوں۔	5	4	3	2	1	
9	اس صدمے کے بعد سے مجھے نہیں معلوم کہ میں اب زندگی میں کہاں جاؤں۔	5	4	3	2	1	
10	اگر میں اس صدمے کو ایک طرف رکھوں تو میرے لئے زندگی کے بارے میں بات کرنا برا آسان ہوگا۔	5	4	3	2	1	
11	اس صدمے کے بعد سے میرا عقیدہ اور میرے اقدار تیز و واضح ہیں۔	5	4	3	2	1	
12	اس صدمے کے بعد سے میں خود کو سمجھ نہیں پا رہا۔	5	4	3	2	1	
13	اس صدمے کے بعد مجھے یہ سمجھنا مشکل لگتا ہے کہ میں اپنی بات سے باخبر کونسی ہوں۔	5	4	3	2	1	
14	اس صدمے کی وجہ سے مجھے اپنی زندگی میں مقصد نظر نہیں آتا۔	5	4	3	2	1	
15	اس صدمے کے بعد سے میں اپنی زندگی کی وجہ سے جو کرنے میں ناکام رہا ہوں۔	5	4	3	2	1	
16	اس صدمے کے بعد مجھے ایسا لگتا ہے کہ زندگی میں کچھ بھی کہیں بھی ہو سکتا ہے۔	5	4	3	2	1	

Translated Version of Social Support Questionnaire (SSQ6)

مندرجہ ذیل سوالات ان لوگوں کے بارے میں ہیں جو آپ کو مدد فراہم کرتے ہیں۔ ہر سوال کے دو حصے ہیں۔
کے نام لکھئے جن پر آپ مدد کے لئے بھروسہ کر سکتے ہیں۔ اس شخص کا نام یا رشتہ لکھئے۔ دوسرے حصے میں نشانہ
حد تک مطمئن نہیں۔ اگر آپ کو کسی قسم کی مدد نہیں مل رہی تو 'کوئی نہیں' پر نشان لگائیں۔

1. جب آپ کو مدد کی ضرورت ہوتی تو آپ کس پر انحصار کرتے ہیں۔

(0) کسی پر نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

اس صورت حال میں ان تمام لوگوں سے ملنے والی مدد سے آپ کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

2. جب آپ دباؤ و کشیدگی کی صورت حال میں ہوں تو کس کو اس قابل سمجھتے ہیں کہ اس کی مدد آپ کو سکون د

(0) کسی کی نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

آپ اس مدد سے کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

3. آپ کے خیال میں کون کون لوگ ہیں جو آپ کو آپ کی خوبیوں اور خامیوں کے ساتھ قبول کرتے ہیں۔

(0) کوئی بھی نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

آپ ان لوگوں سے کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

4 آپ کس کو اس قابل سمجھتے ہیں کہ وہ ہر حالت میں آپ کا خیال رکھتے ہیں۔

(0) کسی کو نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

آپ ان سے کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

5 آپ کس کو اس قابل سمجھتے ہیں کہ جب آپ عام طور پر مایوس ہوتے ہیں تو وہ آپ کو اچھا محسوس کرنے میں مدد کرتے ہیں۔

(0) کسی کو نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

ان لوگوں سے ملنے والی مدد سے آپ کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

6 جب آپ پریشان ہوتے ہیں تو آپ کس کو اس قابل سمجھتے ہیں کہ وہ آپ کو دلگاہ سے نکلنا سیکھنے میں مدد کرتے ہیں۔

(0) کسی کو نہیں (1) (2) (3)

(4) (5) (6)

(7) (8) (9)

ان لوگوں سے ملنے والے اوقات سے آپ کس حد تک مطمئن ہیں۔

بہت غیر مطمئن (1) کسی حد تک غیر مطمئن (2) تھوڑا غیر مطمئن (3)

تھوڑا مطمئن (4) کسی حد تک مطمئن (5) بہت مطمئن (6)

Appendix-Q

Translated Version of Post-traumatic Growth Inventory Short Form (PTGI-SF)

اس سوالنامے میں کچھ بیان لکھے ہوئے ہیں۔ آپ ہر بیان کو غور سے پڑھیں اور اس کے سامنے دئے گئے نمبرز 0, 1, 2, 3, 4, 5 میں سے جو جواب آپ کے لئے مناسب ہوں اس کے گرد دائرہ لگادیں۔ جواب دیتے وقت اس بات کو ذہن میں رکھیں کہ موت کے اس صدمے کے بعد آپ کے اندر کس قدر تبدیلی آئی ہے۔

نمبر شمار	بیانات	بالکل نہیں	بہت کم	کسی حد تک	درمیانے درجے تک	کافی حد تک	بہت زیادہ
1	زندگی میں کیا اہم ہے اس کے لئے میں نے اب اپنی ترجیحات بدل دی ہیں۔	0	1	2	3	4	5
2	میرے لئے اپنی زندگی کی بہت اہمیت ہے۔	0	1	2	3	4	5
3	میں اپنی زندگی میں بہتر کام کرنے کی صلاحیت رکھتا رہ سکتا ہوں۔	0	1	2	3	4	5
4	میں روحانی معاملات کو زیادہ اچھی طرح سے سمجھنے لگی ہوں۔	0	1	2	3	4	5
5	میں اپنے آپ کو دوسروں کے زیادہ قریب سمجھنے لگی ہوں۔	0	1	2	3	4	5
6	میں نے اپنی زندگی کے لئے نیا راستہ چن لیا ہے۔	0	1	2	3	4	5
7	میں اچھی طرح جانتی رہا ہوں کہ میں مشکلات کو حل کر سکتی رہتا ہوں۔	0	1	2	3	4	5
8	میرا مذہب عقیدہ زیادہ پختہ ہو گیا ہے۔	0	1	2	3	4	5
9	مجھے لگتا ہے کہ میں اپنی سوچ سے بھی زیادہ مضبوط ہوں۔	0	1	2	3	4	5
10	میں نے اچھی طرح جان لیا ہے کہ لوگ بہت اچھے ہوتے ہیں۔	0	1	2	3	4	5