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GRIEF, POST-TRAUMATIC STRESS AND POST-TRAUMATIC GROWTH AMONG BEREAVED FAMILIES DUE TO COVID-19

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Abstract

The aim of the current research was to investigate the nature of relationships among grief, post-traumatic stress and post-traumatic growth. Mean group differences on study variables based on circumstantial factors and demographic characteristics of the participants and the deceased including gender were inquired. A sample of 331 participants above 16 years, who had lost family members, near relative and close friends due to Covid-19, were selected. Translation process of scale, prolonged grief scale was carried out through back-translation design. Adapted Urdu versions of prolonged grief scale (Prigerson et al., 2021), post-traumatic stress disorder Checklist-DSM-5 (Weathers et al., 2013) and post-traumatic growth inventory-short form (Cann et al., 2010), along with a demographic sheet were used. Translation process of prolonged grief scale was carried out through back-translation design.

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The results showed that grief was positively significantly correlated with post-traumatic stress and significantly negatively correlated with post-traumatic growth; post-traumatic stress had significantly negatively correlated with post-traumatic growth. Results of t-test showed that females had significantly more intense grief and post-traumatic stress, whereas males reported greater experience of post-traumatic growth. Result also showed that there were significantly more grief and post-traumatic stress, where death of male occurred. Limitations of the current study were also highlighted and suggestions for future research are mentioned.

Key Words*: grief, post-traumatic stress, bereaved*

Introduction

People have fundamental beliefs about the world that have been developed and validated over many years of experience and insight knowledge. Janoff-Bulman (1992) categorizes three core beliefs that shape our views about the external world "the universe is kind, the universe is eloquent, and I am worthwhile" (p. 6). These beliefs support an individual's psychological health and provide him with direction in directing his routine life. These presumptions work together to give someone a sense of realism, meaning, or purpose in life (Janoff-Bulman, 1989). There are some life-threatening incidents, catastrophic events that upend these worldviews referred to as traumatic. They vigorously contest and loss of assumptive worlds can occur (Kaufman, 2002). An untimely death of a loved one, a serious injury, or experiencing a pandemic is an example of such occurrences. For people who have lived happy, fulfilling lives, such events are especially devastating. These people also tend to have very strong,

positive assumptions, so when those assumptions fall apart, it can be more distressing (Brewin & Holmes, 2003). This pandemic is also characterized as psychological trauma according to the preceding description. The International Epidemiology Association (IEA) describes a pandemic as “an epidemic that transcends international borders, spreads widely, and typically affects a huge number of individuals” (Kelly, 2011, p. 540). These epidemics are typically accompanied by uncertainty, perplexity, and a strong urge (World health organization [WHO], 2010).

The WHO designated COVID-19 as a global pandemic on March 11, 2020. The WHO referred to the SARS-CoV-2 illness as COVID-19, an acronym for "coronavirus disease 2019." Every nation has been impacted by this pandemic. Numerous aspects of life have been negatively impacted (i.e., physical health, mental health, job status, education mode, childcare, social restrictions, media exposure, etc.) (Duckering, 2022). Most of the studies has engrossed chiefly on the physical aspects of the pandemic COVID-19, e.g., failures of the respiratory system, strokes, inflammatory side effects, organ failure, demise, and undetermined chronic health conditions (McIntosh et al., 2020). Although it makes sense that physical health comes first during a pandemic, the impact of the COVID-19 pandemic and the actions that followed on mental health have also been major causes for concern (Gruber et al., 2020). The body of knowledge regarding the virus's impacts has been steadily growing, however there is a paucity of data regarding the psychological effects of having the virus. Due to the virus's recent emergence, there aren't many peer-reviewed studies, but reputable health organizations have gathered information on its psychological effects. For instance, the Kaiser Family Foundation

discovered associations between COVID and suicidality, grief, despair, and distress (Panchal et al., 2020).

This pandemic has produced a grieving nation by taking the lives of almost 50,000 people in the United States alone, as well as nearly 200,000 people worldwide (Horn, 2020). The country had to deal with some type of loss, often numerous losses, as a result of COVID-19, whether people are mourning the loss of a loved one, facing unemployment, or forgoing everything from a special event to their daily routine (Wallace et al., 2020). Grief appears to be the main result of COVID-19 in these turbulent times, where loss can present itself in many ways (Bertuccio & Runion, 2020).

Experiencing negative symptoms is common for trauma survivors and these symptoms normally fade away with passage of time (Rothbaum et al., 1992). Some of the survivors develop resilience and PTG (Foa & Riggs, 1995; Solomon & Dekel, 2007). However, some trauma survivors develop post-traumatic stress disorder (Green, 1994). Theoretical literature and empirical studies contain evidence in support of both the negative and positive outcomes of bereavement experience. In fact, most of the past studies have reported maladaptive outcomes of bereavement experience such as prolonged sorrow, PTSD, and depression.

Although this COVID-19 infection can cause psychological anguish and have a significant negative influence on patients' lives, it can also result in beneficial improvements and PTG, which is a positive psychological adjustment to difficult life situations. The following positive changes were seen after the COVID-19 pandemic: (1) A reconsideration of their life priorities, which included developing a deeper appreciation for life and reassessing their values and objectives, (2) Better relationships with their

friends and family and a higher readiness to lend a helping hand outside of their own social circles, and (3) Perceived improvements in themselves, such as personal development and a greater understanding of the value of their health (Sun et al., 2021).

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 & Linley, 2008). Znoj (2014) 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 (Waugh et al., 2018). The growth experience has been documented in survivors of range of negative actions which include disaster, war, cancer, and bereavement (Engelkemeyers & Marwit, 2008; Colville & Cream, 2009; Barakat et al., 2006; Joseph & Linely, 2005).

The current study focused on grief and PTS among bereaved families and moved toward Post traumatic growth after this traumatic incident happened to them.

Objectives

- To investigate grief, PTS, and its relationship with PTG.
- To explore group differences on the study variables

Hypotheses

- Grief is negatively associated with post-traumatic growth.
- Grief is positively associated with post-traumatic stress.
- Post-traumatic stress is negatively associated with post-traumatic growth.

- Female participants will have more grief as compared to male participants.
- Female participants will have more more post-traumatic stress as compared to male participants.
- PTG will be high in male participants as compared to female participants.
- Grief and PTS will be more by the death of male as compared to female.

Methodology

The aim of the present study was to analyze the association among Grief, PTS and PTG. Group differences on study variables were also explored based on circumstantial factors and demographic characteristics of the participants and the deceased including gender, age, ethnicity, education level and occupation.

Research Design

It was cross-sectional research aimed to explore the relationship among study variables.

Instruments.

Demographic Information Sheet

A demographic information sheet was created to get information about gender, age, ethnicity, family system, education, occupation, COVID-19 victim, and relationship status with the deceased, time since death along with the age, gender, and marital status of the deceased.

Prolonged Grief Scale-13 Revised (PG-13R)

Prigerson et al. (2009) created the initial Prolonged Grief (PG-13) scale, which was later updated by Prigerson et al. (2021). Phase 1 involved translating the scale through back-translation design. It was created to

assess the frequency and severity of prolonged grief symptoms (such as longing for the deceased, feeling emotionally numb or detached from others, and believing that a part of oneself perished with the deceased). It has 10 items. Response options to each statement range from ‘Not at All (1) to ‘Overwhelmingly (5). Total score on the scale is obtained by adding together the 10 items with potential score range from 10-50, and alpha reliability coefficient is .93.

Post-traumatic Stress Disorder Checklist (PCL-5)

This checklist was developed by (Weathers et al., 2013) and translated by Azeem and Kiran (2022). It evaluates the discomfort brought on by the PTSD described in the DSM-5-TR. The 20 items on this scale range from "Not at All" (zero) to "very" (four) in terms of symptoms brought on by their loss. The PCL-5 showed .95 internal consistency, which is outstanding.

Post-traumatic Growth Inventory-Short Form

This 10 items inventory was originally created by Cann et al. (2010) and translated by Aslam (2013). This scale evaluates personal growth in the following domains: perception of an increased individual strength, appreciation of life, realizing the new possibilities in life, associating with others, and a deep sense of being. Participants rated themselves to a degree of change they had experienced after a trauma. It has six response options, with a possible score range of 0 to 50 and an alpha coefficient of .79. The possibilities range from "I did not experience this change" (zero) to "I did experience this change to a very large degree."

Sample

Data were collected on self-reported instruments from 331 bereaved family members, spouses, near relatives and close friends. Out of these 331 individuals 184 were males and 147 were females. Sample ranged from 16 to 66 years of age with mean of 33.94 and standard deviation of 10.99. The participants were taken from all the four provinces, Kashmir and Gilgit Baltistan and included all ethnic communities. Inclusion criteria were based on (a) A family member, near relative or very close friend had died due to COVID-19, (b) length of bereavement had not exceeded 36 months period, (c) age is more than 15 years, (d) educational qualification more than middle, (e) should understand Urdu language and the individuals voluntarily agree to take part in the study.

Procedure

The Participants were approached through personal contacts and social media (through online). Link for online Google form were send through WhatsApp's, Facebook, and give instruction to share and forward this Google form to other families, they know faced the same situation. On the first page, they were updated about the nature, purpose and scope of the study, informed consent was also attached. 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 survey by closing the Google form without completing if they felt uneasy during responding to the statements of the scales. Those who accepted the participation will move to the next section which is the main research questionnaire booklet. It took about 20 minutes to finish the complete survey. In the end a thanks note

was written for the participant for giving their valuable time and cooperation.

Ethical Considerations

- Adherence to ethical considerations was given special attention in the present study.
- Covid-19 SOPs were followed in data collection (where physically data collection was done)
- Privacy and confidentiality of participants were assured.
- Keeping in mind the mental state of bereaved family members, Psychological Defusing was done (where necessary)

RESULTS

In the light of study objectives and hypotheses, different statistical analysis was run on the data collected, including correlation and tests of differences by using IBM SPSS 28 version.

Table 1

Psychometric properties for scales (N = 331)

Scales	*M*	*SD*	Score Range	Cronbach's α
PG-13R	33.28	8.02	11-49	.92
PCL-5	30.17	14.0	01-66	.94
PTGI-SF	20.03	10.0	03-41	.91

Note. PG-13R = Prolonged Grief Scale 13 Revised, PCL-5 = PTCD Checklist DSM-5, PTGI-SF = Post-traumatic Growth Inventory-Short Form.

Results of table 1 showed psychometrics properties for the scales. The Cronbach's α value for all the Scales were above .90 (>.80) which

indicates high internal consistency, and reliability for the measurement of constructs.

Table 2

Descriptive statistics and correlation for main study variables (N = 331)

	Variables	*M*	*SD*	*1*	*2*	*3*
1.	Grief	33.28	8.02	-	.82**	-.45**
2.	PTS	30.17	14.93		-	-.48**
3.	PTG	20.03	10.08			

Note. PTS = Post-traumatic Stress, PTG = Post-traumatic Growth. ***p* < .01.

Results showed that grief is significantly positively associated with PTS (r = .82, p < .01) whereas significantly negatively associated PTG (r = -.45, p < .01). Likewise, PTS has significant negative association with PTG (r = -.48, p < .01).

Table 3

Regression coefficient of grief and post-traumatic stress on post-traumatic growth (N = 331)

Variables	*B*	*SE*	*t*	*P*	*95% CI*
Constant	33.71	2.01	16.15	.001	[29.60, 37.81]
Grief	-.21	.09	-2.23	.027	[-.40, -.03]
PTS	-.22	.05	-3.82	.001	[-.33, -.11]

Note, PTS = Post-traumatic Stress. ***$p < .001$. *$p < .05$.

Table 3 showed the impact of grief and PTS on PTG in Bereaved families. The R^2 value of .24 indicated that the predictors described 24% variance in the outcome variable with F (2, 328) = 51.47. $p < .001$. The findings indicated that grief ($\beta = -.19$, $p < .05$) and PTS ($\beta = -.32$, $p < .001$) negatively predicted PTG.

Table 4

Mean differences by gender of participants on study variables (N = 331)

Variables	Male *(n = 184)*		Female *(n = 147)*				
	M	*SD*	*M*	*SD*	*t (329)*	*p*	*Cohen`s d*
Grief	30.26	7.21	37.06	9.33	-7.48	.000	-.83
PTS	24.15	12.35	37.71	14.49	-9.19	.000	-1.02
PTG	24.23	8.91	14.78	8.96	9.56	.000	1.06

Note. PTS = Post-traumatic Stress, PTG = Post-traumatic Growth. ***$p < .001$.

Results in the table 4 showed significant mean differences of scores on all the scales. It was found that females reported significantly more intense grief and PTS as compared to males. Whereas, males were reported having significantly greater experience of PTG as compared to females.

Table 5

Mean differences by gender of deceased on study variables (N = 331)

Variables	Male *(n = 271)*		Female *(n = 60)*				
	M	*SD*	*M*	*SD*	*t (329)*	*p*	*Cohen`s d*
Grief	33.88	8.70	30.55	9.23	2.65	.008	.38
PTS	30.87	15.06	27.00	14.03	1.83	.069	.26
PTG	19.55	10.38	22.20	8.34	-1.85	.066	-.26

Note. PTS = Post-traumatic Stress, PTG = Post-traumatic Growth. *$p < .05$.

Table 5 displays the result based on gender of deceased, it showed that there were significantly more grief, PTS, and more intrusive rumination where death of male occurred due to COVID.

Discussion

The aim of the current study was to explore the relationship among grief, PTS, and PTG. In addition, mean group differences on grief, PTS and PTG were explored based on circumstantial factors (nature of death and time since death), socio demographic characteristics of the participants and the deceased (age, gender, education, occupation, birth order, ethnicity, family system, socio economic status, relationship with deceased)

It was hypothesized that grief has a significant negative relationship with PTG. This finding was well supported by sufficient evidence in the literature (e. g., Engelkemeyers & Marwit 2008; Gamino et al., 2000;

Michael & Cooper, 2013). Possibility of PTG has been reported as outcome of grief after the death only as result of struggling with bereavement or any other extremely stressful event. In other words, literature has consistently reported that bereavement does not inherently result in PTG the outcome of bereavement experience depends upon how bereaved individual manages the stressful experience (see Engelkemeyers & Marwit, 2008; Gamino et al., 2000; Michael & Cooper, 2013).

Finding of the present study showed positive relationship of grief with post-traumatic stress. This finding is in the line with the previous researches as many studies have reported that grief as an adverse event result in various psychological sufferings, Suhail et al. (2011) reported anxiety, depression, and other symptoms of psychological sufferings as first reaction to the bereavement. In the aftermath of bereavement some individuals go through only uncomplicated and normal grieving process which normally resolves within days (Znoj, 2014); however, other bereaved individuals are more likely to experience complicated/prolonged grief (Keesee et al., 2008; Wijngaards-de Meij et al., 2005).

There was limited literature about the evidence of positive relationship between Grief and PTG. Rather, empirical literature is abundant with reports of maladaptive outcomes of bereavement and other similar extremely stressful events (Hungerbuehler et al., 2011; Kreicbergs et al., 2004; Rogers et al., 2008). With reference to grief and post traumatic growth relationship, the present study 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) has not only been triggered by

common sense but also reinforced by the empirical findings in favour of the link between pathological outcomes and traumatic events. Second, there is no direct link between Grief and posttraumatic growth.

PTSD, among other psychological problems, can arise after a loved one passes away, especially if the loss was severe and unexpected like COVID-19 (Keyes et al., 2014). In the present study it was hypothesized that grief is positively associated with PTS. These findings were relevant with the past researches. In a study, Keyes et al. (2014) noted that, "unexpected death was associated consistently with elevated odds of new onsets of PTSD, panic disorder, and depressive episodes at all stages of the life course."

In the current study it was hypothesized that female participants reported more PTS as compared to male participants. Past studies also found that same findings. Norris et al. (2002) based on forty-nine articles demonstrated that almost forty-six studies (94 percent) showed that female population were more adversely affected, regardless of whether they were adults, adolescents, or children, or whether the traumatic event was a technological disaster, natural disaster, or an event of mass violence. Moreover, girls and women were at least twice as vulnerable as boys and Men. The only exception was abusing alcohol (Gleser et al., 1981; North et al., 1994).

It was hypothesized that PTG was high in male participants as compared to female participants. Past researches have diverse findings Some studies found higher growth for women (Joseph & Regel, 2017; Laufer & Solomon, 2010; Vishnevsky et al., 2010) and few other studies reported higher rate for male (Kimhi et al., 2011; Wolchik et al., 2009).

Theoretical and Applied Significance of the Present Study

The current study, like any other researches, has implications for theory and practice in the sociocultural and mental health context of Pakistan.

- The present study offers important theoretical contribution to the existing literature through its findings.
- This study will be beneficial for counselors and family therapists in better understanding the bereavement process due to loss by COVID-19.
- Mental health practitioners and policy makers can be made alert and sensitized about viewing the holistic picture of traumas (Covid-19).
- Psychologists in practice are rare and the practicing psychologists are neither consulted nor weighed by the community and other mental health related professionals. The present study findings draw attention to the need for therapeutic practices that are inclusive of mental health considerations for bereaved families along with medication.
- The present study can be helpful to family institutions and society in general to consider rationality in addition to good intentions in resorting rumination particularly in Covid-19 era.

Limitations and Suggestions for Future Research

The current study has some limitations which are highlighted below.

- One of the limitations of the current study is the nature of cross-sectional design. With cross-sectional study results, it may not be analysed whether the relationship patterns among the study variables will change over time. A longitudinal design would be appropriate for exploring the possibility of changes in relationships between the study variables due to temporal factor.

Future researches should include the temporal factor with reference to grief, PTS and PTG and carry out longitudinal researches.

- When we study on grief and PTS, we mostly ignore the children. they are also affected by the death of their beloveds. Purposive sampling has been used in current research so future researches must include children as samples for innovative results.
- A quantitative approach has been used in this study to investigate relationship among study variables. For future researchers' qualitative approach can be an interesting way of exploring these relationships in the local context.
- The data was collected through online mode due to COVID-19 SOPs. So, there would be some limited information in that data due to online mode. Future researches must collect data in person for better results.

Conclusions

The primary aim of the present study was examining the nature of relationship between grief, PTS, and PTG. Exploring group mean differences was also an important aim of this study.

Findings of the study have supported that grief and PTS are negatively associated with PTG. The findings showed reports of more Grief and PTS in female gender and reports of more PTG in male gender. The instrument used to determine the grief was translated through back-translation design and is available in Urdu language for future study.

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