Prolonged grief disorder and its association with perceived social support and depression among university students after the death of a significant person

Al-Gamal, EA, Bin Saeed, S, Agnes, M and Long, T

http://dx.doi.org/10.3928/02793695-20181023-03

CNE
Earn Contact Hours

Open Access

Prolonged Grief Disorder and Its Relationship With Perceived Social Support and Depression Among University Students

Ekhlas Al-Gamal, PhD, MSc, RN; Shahad Bin Saeed, BSc, RN; Agnes Victor, MSc, RN; and Tony Long, PhD, MA, BSc, RN

ABSTRACT

The purpose of the current study was to examine the association between prolonged grief disorder, perceived social support, and severity of depression among Saudi Arabian university students after the death of a significant individual. A cross-sectional design was used to examine descriptive characteristics, correlational relationships, and statistical mean differences between male and female participants on prolonged grief disorder (PGD) scores in a convenience sample of Saudi Arabian college students. The Prolonged Grief Disorder-13 tool, Multidimensional Scale of Perceived Social Support, and the revised Beck Depression Inventory® were completed by 226 Saudi Arabian undergraduate students. Students reported moderate perceived social support from family, friends, and significant others. Only 13 (5.8%) individuals reported perceived support from academic staff. Students with the highest PGD scores were the least well-supported and most depressed. The need for academic staff and social workers to provide more social support to grieving students is discussed. [*Journal of Psychosocial Nursing and Mental Health Services, 57*(2), 44-51.]

Grief is a regular part of coping with loss, but for some individuals, grief is more serious. Loss is a common human occurrence, but individuals respond to it with varying degrees of grief and bereavement. Individuals grieve in different ways, for different durations, and with symptoms that range from depression to anger to avoidance. Mental health counselors are repeatedly confronted with concerns of grief, but the distinction between normal grief and *complicated grief*—a term used to include severe and atypical grief, such as prolonged grief disorder (PGD)—is not well established (Howarth, 2011).

PROLONGED GRIEF DISORDER

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*

(*DSM-5*; American Psychiatric Association, 2013) added PGD as an official psychiatric diagnosis, giving individuals experiencing debilitating grief a name for their disorder. PGD affects some individuals more commonly than others. According to an article published in *Oncology Nursing Forum*, individuals who experience PGD frequently have a positive family history of the disorder, and their first reaction to loss is shock, disbelief, and numbness (National Institutes of Health, 2017).

Evidence from the Netherlands indicates that women experience PGD more frequently than men, although some men have the disorder as well (Newson, Boelen, Hek, Hofman, & Tiemeier, 2011). However, a systematic review from Denmark suggests that caution is needed when comparing studies across countries (Lundorff, Holmgren, Zachariae, Farver-Vestergaard, & O'Connor, 2017). Usually, PGD is diagnosed approximately 6 months after the primary traumatic event, but evidence from the United States indicates that PGD is sometimes not recognized at all (Perng & Renz, 2018). Moreover, Laurie and Niemeyer (2008) revealed that African American individuals are 2.5 times more likely to have the disorder. Research conducted by the Columbia University School of Social Work estimates that approximately 10% of all bereaved individuals develop complicated grief. Although it is not clear exactly what causes persistent grief, the cause of normal grief can most commonly be attributed to the death of a loved one.

A U.S. study found that less than 10% to as many as 20% of bereaved individuals develop PGD. Several risk factors for developing PGD were identified, including a history of prior trauma or loss; a history of mood and anxiety disorders; insecure attachment style; being a caregiver for the deceased individual; a violent cause of the individual's death, such as suicide; and lack of social support (Jordan & Litz, 2014).

Prolonged Grief Disorder Among University Students

In 2013, Varga sought to determine the incidence of grief in graduate students in the United States. The focus was on the effects of grief on the individual, the forms of support that had been pursued, and the risk of PGD. Students (N = 1,575) were invited to complete an online survey relating to grief experiences. Students who had experienced significant loss (e.g., loss of a parent, immediate family member, or close friend) were also invited to respond to the Prolonged Grief Disorder Questionnaire. Approximately 25% of participants had experienced the loss of a significant individual in the previous 24 months. Various grief effects were reported, with emotional effects proving to be most significant. In general, the effects were experienced during the first 6 months following an individual's death and subsided after this point. The students sought support mostly from family and friends, and they believed this support was of crucial importance.

Considering various grief effects, Walker, Hathcoat, and Noppe (2012) conducted a study to explore the prevalence of bereavement among undergraduate students. The study also explored grief effects on educational and mental health outcomes, along with the role of closeness to the deceased individual. Results showed that motivation and concentration were significantly negatively impacted. Results indicated that the closer students were with the deceased individual, the more academic struggles they encountered due to changes in motivation and concentration.

In addition, Varga, McClam, and Hassane (2015) identified grief experiences among American and Arab female undergraduate students to compare the incidence of grief, the effects of grief, and risk of PGD. In total, 471 students (308 [65.4%] from the United Arab Emirates and 163 [34.6%] from the United States) completed a survey relating to their grief experiences. Researchers found that 181 (38.4%) of 471 students had experienced the loss of a significant individual during the previous 2 years. There were few differences between countries in incidence of PGD, relationship to the deceased individual, and cause of the individual's death (mostly illness). Various grief effects were reported. American students experienced effects related to relationships, academics, physical well-being, religion/spirituality, and outlook on life more frequently than Arab students. Arab students experienced more loss of sleep and reported emotional and mood elements of grief more frequently than U.S. students. The few cases of PGD (n = 10, 5.52%) were mostly among Arab individuals. The reason for these differences may lie in the relative cultural and religious facets of life in the two countries, with attendant expectations of expressing grief or otherwise.

Moreover, Eckerd, Barnett, and Jett-Dias (2016) compared the severity of grief and its predictors in equivalent groups of college students who reported having experienced the death of an individual (n = 146) or a pet (n = 211) in the previous 2 years. The group that had experienced the death of an individual showed higher grief severity scores. The degree of closeness to the deceased individual was by far the strongest predictor of severity of grief in both groups, emphasizing the central importance of this factor in planning grief counseling.

Cupit, Servaty-Seib, Tedrick Parikh, Walker, and Martin (2016) conducted a study among undergraduate college students in the grieving process using mixed methods to observe how students managed the grief process with the challenging demands of college. Study participants were college students attending one of two public rural universities in the Midwest, with a total of 950 students at a regional broad university and a research demanding institution. Quantitative findings revealed closeness to the deceased individual as a key positive predictor of mental health and

academic difficulties and positive associations between changes in peer relationships and mental health difficulties. Qualitative findings showed that closeness to the deceased individual was associated with a greater sense of purpose in the college experience after their death, and findings suggested that institutions and their faculty should encourage and exhibit more sensitivity about grief issues.

Furthermore, PGD could affect the decision-making process. Fernández-Alcántara et al. (2016) evaluated group differences in emotional decision-making tasks, assessing and comparing decisions of participants who tend to make decisions under risk and individuals who prefer to decide intuitively. *Decisions under risk* are defined as those in which the outcome is not known with certainty. When making a decision under risk, individuals can make a list of all possible outcomes and assign probabilities to the various outcomes. An assessment was made of different components of executive function in grief among 38 college students in the University of Granada, Spain who had experienced the death of a loved one. Students were divided into two groups based on the intensity of their symptoms. Considering each participant's level of education and emotional variables, symptoms of grief predicted a substantial variance in individuals' performance in the decision-making task.

...Institutions and their faculty should encourage and exhibit more sensitivity about grief issues.

A review conducted by German researchers (Doering & Eisma, 2016) to establish the context of complicated grief in the *DSM-5* and the *International Statistical Classification of Diseases and Related Health Problems* revealed conflict over the view of complicated grief as a psychiatric disorder. Research on cognitive-behavioral therapy (CBT) for grief concluded that, despite the common practice of prescribing medication for bereaved individuals, the evidence base for the effectiveness of prescribing medications was less than convincing. CBT (whether direct or internet-based) was shown to be more efficacious in treating complicated grief (Hamdan-Mansour, Puskar, & Bandak, 2009).

Depression

Few studies have been conducted to assess PGD and depression. A study in the Netherlands by Boelen, Reijntjes, Djelantik, and Smid (2016) to identify PGD and depression found that participants' negative attitude toward grief was the sole variable that predicted PGD. Participants (N = 245) had faced the death of a loved one due to several reasons, including suicide (49%), accidents (47.3%), and homicide (3.7%). Latent class analysis was applied to establish three categories of participants: predominantly PGD–class (39.2%), combined PGD/depression–class (35.5%), and resilient–class (25.3%). This analysis could guide new interventions for the relevant subgroups of bereaved individuals.

Support

An Australian study (Bartik, Maple, Edwards, & Kiernan, 2013) showed that the social circle of peers that is central to young adults' normal lives can become disrupted by the suicide of a friend or another student. The importance of support from friends, significant others, and professors at universities has been reported in previous studies (Lin, Lee, Lin, & Rong, 2014). In a study conducted in China, Lin et al. (2014) reported that any unresolved conflicts facing survivors around age 20 further complicate their grief. Based on their report, Lin et al. (2014) conducted a study to outline approaches of handling grief among university undergraduate students experiencing bereavement. The study was conducted to assess an action plan that would allow students to deliver mutual peer support, increase awareness about bereavement, and prevent suicide contagion (i.e., the increase in suicide among individuals exposed to the suicide of a close relative or friend) among students on campus who had lost a classmate to suicide. Results suggest that support from peers, faculty members, and professionals can have positive effects on grieving students in a school context.

Currently, there are neither accurate statistics nor published research studies available on PGD among university students in the Saudi Arabian population. This lack of data led to the genesis of the current study, which is specifically about the Saudi Arabian population and seeks to gain insight into the country's status in the growing global concern of PGD. Accordingly, the current study investigated PGD among undergraduate college students at King Saud Bin Abdulaziz University for Health Sciences (KSAU-HS) in Saudi Arabia, examining its correlation with depression and social support.

METHOD

A cross-sectional design was used to examine descriptive characteristics, correlational relationships, and statistical mean differences between male and female participants on PGD scores in a convenience sample of Saudi Arabian college students.

Setting and Participants

The current study was conducted at KSAU-HS in Riyadh, Saudi Arabia.

Study participants were college students at KSAU-HS. All undergraduate students were included if they were registered in the second semester of the 2016-2017 academic year, had experienced the death of a significant individual at least 6 months before the study, and agreed to participate. Students who had graduated and those who had completed their academic requirements but were in the internship year were excluded.

Convenience sampling was used. Using G*power software (Faul, Erdfelder, Buchner, & Lang, 2009), the sample size for correlation analysis was computed for an alpha of 0.05, power of 0.8, and a relatively medium effect size of 0.3. At least 134 participants were needed; therefore, to compensate for anticipated incomplete questionnaires, 250 students were invited to participate.

Ethical Considerations

Written ethical approval was obtained from the ethics committee at the College of Nursing at KSAU-HS as well as King Abdullah International Medical Research Ethics Committee. Researchers ensured confidentiality of the students. Each participant was given an identification code. Moreover, participants were assured of their right to withdraw at any time, and the voluntary nature of participation was emphasized. All questionnaires were stored securely in a locked filing cabinet in a locked room with access restricted to the principal researcher (E.A.-G.). There was a risk of emotional distress associated with the sensitivity of the topic. Participants had the right to decline to answer any questions or even the entire questionnaire. The researcher informed participants of their right to discontinue the interview at any time if psychological stress becomes intense, and arrangements were made to refer participants to counselors and a social worker with expertise in psychological distress counseling if needed. There was no academic or financial incentive for participants.

Instruments

Demographic data included age, gender, marital status, parental status, employment status, working hours, family income, social support of friends, social support of significant others, support of professors or other academic professionals, academic score, academic program, academic credit hours, and current university level.

The Prolonged Grief Disorder-13 (PG-13) tool has been used widely to identify clinical levels of PGD symptoms in research. It is a short instrument of 13 statements about grief-related thoughts and behaviors, with five response options indicating different levels of symptom severity. For example, one question is: "In the past month, how often have you felt yourself longing and yearning for the person you lost?" (1 = *not at all*; 5 = *several times a day*). It has shown good internal consistency reliability (Cronbach's alpha = 0.9, test–retest reliability coefficient = 0.8) and criterion validity (Prigerson et al., 2009). A score of 32 was considered a diagnostic cut-off point for PGD (Prigerson et al., 2009).

The revised Beck Depression Inventory® (BDI) comprises 21 items to measure depressive symptoms and attitudes (Beck & Steer, 1978), such as pessimism, insomnia, social withdrawal, and indecisiveness. Items are rated on a 4-point Likert scale ranging from 0 to 3. The total scale ranges from 0 to 63, and scores are interpreted as follows: 0 to 9 (*not depressed*), 10 to 18 (*mild depression*), 19 to 29 (*moderate depression*), and 30 to 63 (*severe depression*). The cut-off point between having depression (a major depressive episode) and not having depression is a score of 10 (Beck & Steer, 1978). The Arabic version of the BDI (BDI-IA) was used in the current study and is considered valid and reliable among university students (Hamdan-Mansour et al., 2009). It has shown good internal consistency reliability (Cronbach's alpha = 0.87) and good validity.

The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet, & Farley, 1988) assesses perceptions of social support adequacy from three sources: family, friends, and significant others. The total score ranges from 7 to 84, with higher scores indicating higher perceived social support. The Arabic version of this tool was used in the current study. The internal consistency reliability (Cronbach's alpha) was 0.88 (Alzayyat, Al-Gamal, & Ahmad, 2015).

Translation. Arabic versions of these instruments were used in data collection. To retain the integrity of the original English instruments, a well-established process of back translation (Brislin, 1986) was used to translate the PG-13. Permission to use the questionnaire was obtained from the principal investigator via e-mail. One associate professor in psychiatric–mental health nursing translated the instrument from English to Arabic. Then one assistant professor in community mental health nursing back-translated this instrument to English. Finally, one lecturer checked the two English versions for similarities. After back-translation had been completed, two experts in family mental health were asked to check the appropriateness of the questionnaires to measure face validity. The experts considered the whole scale and each item, reviewing relevance, appropriateness, and completeness in scope, and finding lack of ambiguity and a good fit with the intended population. To identify potential problems with feasibility or processes, 10 students completed a pilot of the questionnaires. Minor amendments were made before proceeding to the field study.

Data Collection

After obtaining research ethics approval, researchers contacted the associate dean of student affairs in each college at KSAU-HS. After securing access, researchers explained the study to the professors and instructors, and set a plan for data collection during or after their class sessions. Professors introduced the researcher and then left the classroom. Researchers introduced the study and distributed the invitation letter and student information

TABLE 1
STUDENTS' SPECIALTIES (*N* = 226)

Specialty	*n* (%)
Medicine	42 (18.6)
Nursing	60 (26.5)
Pharmacy	26 (11.5)
Dentistry	33 (14.6)
Applied medical science	42 (18.6)
College of Science and Health Professions	23 (10.2)

TABLE 2
DURATION OF LOSS (*N* = 226)

Duration	*n* (%)
1 day to 6 months	29 (12.8)
7 to 12 months	31 (13.7)
13 to 24 months	36 (15.9)
25 to 36 months	21 (9.3)
>36 months	109 (48.2)

sheet to students. Students willing to participate were asked to sign a consent form before participating to ensure their agreement. Students were asked to complete the Arabic versions of the questionnaires. Students could submit blank consent forms and questionnaires. Completion of study tools took 20 minutes.

Data Analysis

All responses were coded and entered using SPSS version 22. Frequency distribution was used for categorical variables and means with standard deviation for continuous variables. Descriptive analysis was used to describe the research sample and items of the questionnaires. The Pearson correlation coefficient was used to examine the relationship between the variables and selected demographics. Finally, *t* tests were used to measure differences in PGD between male and female students.

RESULTS

Demographics

The mean age of students was 20.8 (*SD* = 1.43) years, ranging from 17 to 28 years. Ninety-three (41.2%) were male and 133 (58.8%) were female. Most students (*n* = 215, 95.1%) were single. Mean monthly income of students' families was 23,200 Saudi riyals. Sixty (26.7%) students were from the nursing school, and 23 (9.7%) were from the College of Science and Health Professions. Mean grade point average (GPA) for students was 3.93 of 5, ranging from 2 to 5. Details about students' specialties are presented in **Table 1**.

Most (*n* = 96, 42.5%) students were in their fourth year of study, 84 (37.2%) were in the third year, 30 (13.3%) were in their second year, 9 (4%) were in their first year, and 7 (3.1%) were in their fifth year. Only 13 (5.8%) students reported receiving support from university academic staff. Twelve (5.4%) students reported that they were employed in a full- or part-time job, and 123 (54.4%) reported engagement in non-academic activities such as voluntary work and hobbies. The relationship of the deceased individual to the students was grandparent (*n* = 119, 52.7%), friend (*n* = 26, 11.5%), father (*n* = 24, 10.6%), uncle or aunt (*n* = 24, 10.6%), son or daughter (*n* = 18, 8%), sibling (*n* = 14, 6.2%), and mother (*n* = 1, 0.4%). Most participants (*n* = 162, 71.7%) reported the cause of death to be illness. For 109 (48%) students, the reported duration since death was >36 months. Details of duration of loss are presented in **Table 2**.

Prevalence of PGD

Using a score of 32 as a diagnostic cut-off point for PGD, the prevalence in the current study was 12%.

Depression

Many students reported a mild level of depression. The score range was 0 to 51, and the total sample mean score was 11 (*SD* = 9.62).

Perceived Social Support

The mean MSPSS score was 60.41 (*SD* = 12.3). The family support subscale (mean = 20.88, *SD* = 4.91) and significant other support subscale (mean = 20.68, *SD* = 5.0) had the highest means among all perceived social support subscale scores. The friend support subscale was ranked lowest (mean = 18.69, *SD* = 5.3). Individual items analysis of MSPSS revealed that item 11 (My family is willing to help me make decisions) was the most reported support element. The lowest reported scores were for item 7 (I can count on my friends when things go wrong) and item 8 (I can talk about my problems with my family). More details are presented in **Table 3**.

Relationship Between PGD, Depression, and Social Support

Pearson correlation was used to examine the relationship between PGD, depression, and social support at $p = 0.05$. There was a significant positive relationship between PGD and depression ($r = 0.45$, $p = 0.0005$). This relationship indicated that students with higher levels of depression experienced higher levels of PGD. Moreover, there was a significant negative relationship between total support score (and all support subscales scores) and total PGD score ($r = –0.265$, $p = 0.0005$). This relationship indicated that students with high PGD received less support.

Relationship Between PGD and Demographics

There was a significant negative relationship between PGD and family income. Students with low family income reported high PG-13 scores. However, there was no significant relationship between PGD and age or GPA. Using *t* tests, female students had greater total PGD than male students ($t = –3.731$ [224], $p = 0.0005$).

DISCUSSION

The purpose of the current study was to examine the association between PGD, perceived social support, and

TABLE 3

ITEM AGREEMENT OF MULTIDIMENSIONAL SCALE OF PERCEIVED SOCIAL SUPPORT (*N* = 226)

Item	*n* (%)		
	Disagree	Neutral	Agree
1. There is a special person who is around when I am in need.	27 (12)	41 (18.1)	157 (69.5)
2. There is a special person with whom I can share my joys and sorrows.	23 (10.2)	29 (12.8)	174 (77)
3. My family really tries to help me.	18 (8)	27 (11.9)	181 (80.1)
4. I get the emotional help and support I need from my family.	22 (9.7)	34 (15)	169 (74.8)
5. I have a special person who is a real source of comfort to me.	33 (14.6)	55 (24.3)	138 (61.1)
6. My friends really try to help me.	19 (8.4)	44 (19.5)	163 (72.1)
7. I can count on my friends when things go wrong.	59 (26.1)	73 (32.3)	94 (41.6)
8. I can talk about my problem with my family.	67 (29.6)	54 (23.9)	105 (46.5)
9. I have friends with whom I can share my joys and sorrows.	25 (11.1)	44 (19.5)	157 (69.5)
10. There is a special person in my life who cares about my feelings.	27 (11.9)	58 (25.7)	141 (62.4)
11. My family is willing to help me make decisions.	18 (8)	24 (10.6)	184 (81.4)
12. I can talk about my problems with my friends.	62 (27.4)	47 (20.8)	117 (51.8)

depression among Saudi Arabian university students after the death of a significant individual. Evidence of PGD among Saudi Arabian university students could serve as the basis for practical interventions, which may indicate the significance of PGD. Therefore, the current study was conducted to gain better understanding of PGD among university students in Saudi Arabia. The study may add to the breadth of understanding of problems in the international literature from a Saudi Arabian perspective, as well as prompt more proactive responses to student need in this population.

Bearing a Double Burden

Students who reported high PGD scores also experienced the most depression. Researchers cannot conclude a causal relationship, but the double burden on students was clear. This negative impact was aggravated by an inverse relationship between intensity of PGD and availability of support. The complex interplay between grief, depression, and support requires more investigation, but Jordan and Litz (2014) established lack of social support to be a risk factor for PGD, suggesting that it is both a precursor to and a result of disordered grief. Recognizing individuals at greater risk of PGD and depression as a result of their social situation could facilitate proactive intervention.

Absence of Peer Support

A surprising finding was that students did not have support from friends when they experienced depression as a result of grief. In other situations, peer support from friends is common when individuals may be reluctant to divulge perceived shameful or embarrassing information to parents. Although investigated in another culture, friends have been found to have a central role in supporting young adults in times of stress or difficulty (Fallon, 2010). For college and university students, it is common for friends to include colleagues in the same course or who share some classes. In a study to investigate college students' perceptions of providing support to a grieving peer, Tedrick Parikh and Servaty-Seib (2012) discovered that students saw risks to such involvement, yet also felt compelled to provide support. Having previous experience of grief personally was found to be an advantage, but students also indicated the need for a conducive environment—time and a suitable place to talk. These findings suggest that two strategies could be useful to enhance peer support in Saudi Arabian colleges and universities. First, students could receive preparation in peer support to enable them to take on the role of informal supporter when needed, which would provide them transferable skills also useful in other situations of stress or need. In addition, the college environment should be evaluated to ensure that there are times and places for students to offer support.

Adrift Within the Family

Many students struggled to talk about their problems with their families, even when they had a family history of PGD, so family members would most likely be sympathetic and understanding. Indeed, it was reported by most that their families tried to help and provided emotional support. This finding may be linked to findings of Liew and Servaty-Seib (2017) that although communication within a family may lead to overall family satisfaction, it does not exert a positive effect on individuals' reactions to grief. PGD is often linked to the closeness of the relationship to the deceased individual (Eckerd et al., 2016; Walker et al., 2012). However, family members are likely to differ in perceived closeness to another member of the family regardless of the actual relationship. It is possible that the strength of a bond between a student and a lost relative may be overlooked, and the need for support not recognized. Consequently, an encouraging approach to initial overtures is not adopted. A separate problem seems to exist, however, as students were unable to initiate discussion of their problem. Helping students broach the subject with a family member could be a key contribution of supportive services of colleges and universities, perhaps including mediation to ensure that the student's family is alerted to the need for support. Providing help for students must be seen in the light of students' current feelings of lack of support from academic and other staff, so initial work to overcome these feelings is required first.

Access to Existing Academic Support

The finding that support from academic staff was lacking suggests the need for raising awareness in student-facing staff, both academic and administrative, of the existence of PGD and associated depression, recognition of these factors, and ways that support can be offered. It is likely that supportive services, whether pastoral or counseling in nature, are already available, and the role of staff is to identify the need for these services, following up with informal support and signposting to more professional help.

In the current study, students with low family income reported high PGD. More support for such students was considered important. Ensuring this support might involve additional, specific training for relevant members of staff; reconsideration of resources (both infrastructural, such as counseling rooms, and dedicated staff time); requiring action on recognition of warning signs ("red flags"); and a formal route to referral to professional student counseling.

Unclear Picture of Gender Differences

Female students in the current study had higher PGD scores than their male counterparts, but no clear reason for this difference was seen. Given the differences in grief effects between female American and Arab students found by Varga et al. (2015), it may be that cultural issues are at play, particularly in a country such as Saudi Arabia, which is characterized by a male-dominated society. This finding will require additional investigation.

CONCLUSION

The impacts of PGD in students are pervasive and potentially debilitating. If insufficient relief is found through family support, and peer support from friends is also lacking, students experiencing PGD and associated depression seem likely to be bereft of support and therefore prone to continuation of symptoms. Strategies for universities include preparing students to support their peers, providing the context in which this support may be provided, helping students divulge their problem to their family members, alerting staff to the potential existence of a problem, and, ultimately, leading students to find effective support.

REFERENCES

Alzayyat, A., Al-Gamal, E., & Ahmad, M.M. (2015). Psychosocial correlates of internet addiction among Jordanian university students. *Journal of Psychosocial Nursing and Mental Health Services, 53*(4), 43-51. doi:10.3928/02793695-20150309-02

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.

Bartik, W., Maple, M., Edwards, H., & Kiernan, M. (2013). Adolescent survivors after suicide: Australian young people's bereavement narratives. *Crisis, 34*, 211-217. doi:10.1027/0227-5910/a000185

Beck, A.T., & Steer, R.A. (1978). *Beck Depression Inventory manual*. San Antonio, TX: Psychological Corporation.

Boelen, P.A., Reijntjes, A., Djelantik, A.A.A.M., & Smid, G.E. (2016). Prolonged grief and depression after unnatural loss: Latent class analyses and cognitive correlates. *Psychiatry Research, 240*, 358-363. doi:10.1016/j.psychres.2016.04.012

Brislin, R.W. (1986). The wording and translation of research instrument. In W.J. Lonner & J.W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137-164). Thousand Oaks, CA: Sage.

Cupit, I.N., Servaty-Seib, H.L., Tedrick Parikh, S., Walker, A.C., & Martin, R. (2016). College and the grieving student: A mixed-methods analysis. *Death Studies, 40*, 494-506. doi:10.1080/07481187.2016.1181687

Doering, B.K., & Eisma, M.C. (2016). Treatment for complicated grief: State of the science and ways forward. *Current Opinion in Psychiatry, 29*, 286-291. doi:10.1097/YCO.0000000000000263

Eckerd, L.M., Barnett, J.E., & Jett-Dias, L. (2016). Grief following pet and human loss: Closeness is key. *Death Studies, 40*, 275-282. doi:10.1080/07481187.2016.1139014

Fallon, D. (2010). Accessing emergency contraception: The role of friends in the adolescent experience. *Sociology of Health & Illness, 32*, 677-694. doi:10.1111/j.1467-9566.2010.01237.x

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160. doi:10.3758/BRM.41.4.1149

Fernández-Alcántara, M., Pérez-García, M., Pérez-Marfil, M.N., Catena-Martínez, A., Hueso-Montoro, C., & Cruz-Quintana, F. (2016). Assessment of different components of executive function in grief. *Psicothema, 28*, 260-265. doi:10.7334/psicothema2015.257

Hamdan-Mansour, A.M., Puskar, K., & Bandak, A.G. (2009). Effectiveness of cognitive-behavioral therapy on depressive symptomatology, stress and coping strategies among Jordanian university students. *Issues in Mental Health Nursing, 30*, 188-196. doi:10.1080/01612840802694577

Howarth, R.A. (2011). Concepts and controversies in grief and loss. *Journal of Mental Health Counseling, 33*, 4-10. doi:10.17744/mehc.33.1.900m56162888u737

Jordan, A.H., & Litz, B.T. (2014). Prolonged

grief disorder: Diagnostic, assessment, and treatment considerations. *Professional Psychology: Research and Practice*, 45, 180-187. doi:10.1037/a0036836

Laurie, A., & Neimeyer, R.A. (2008). African Americans in bereavement: Grief as a function of ethnicity. *Omega, 57,* 173-193. doi:10.2190/OM.57.2.d

Liew, C.H., & Servaty-Seib, H.L. (2017). College student grief, grief differences, family communication, and family satisfaction. *Death Studies, 42*, 228-238. doi:10.1080/07481187.2017.1334014

Lin, F.-Y., Lee, T.-Y., Lin, H.-R., & Rong, J.-R. (2014). Supporting bereaved undergraduates during their journeys through grief. *International Journal of Research in Social Sciences, 3*(7), 1-7.

Lundorff, M., Holmgren, H., Zachariae, R., Farver-Vestergaard, I., & O'Connor, M. (2017). Prevalence of prolonged grief disorder in adult bereavement: A systematic review and meta-analysis. *Journal of Affective Disorders, 212,* 138-149. doi:10.1016/j.jad.2017.01.030

National Institutes of Health. (2017, April 20). *Grief, bereavement, and coping with loss (PDQ®)–health professional version*. Retrieved from www.cancer.gov/cancertopics/pdq/supportivecare/bereavement/HealthProfessional

Newson, R.S., Boelen, P.A., Hek, K., Hofman, A., & Tiemeier, H. (2011). The prevalence and characteristics of complicated grief in older adults. *Journal of Affective Disorders, 132*, 231-238. doi:10.1016/j.jad.2011.02.021

Perng, A., & Renz, S. (2018). Identifying and treating complicated grief in older adults. *Journal for Nurse Practitioners, 14,* 289-295. doi:10.1016/j.nurpra.2017.12.001

Prigerson, H.G., Horowitz, M.J., Jacobs, S.C., Parkes, C.M., Aslan, M., Goodkin, K.,... Maciejewski, P.K. (2009). Prolonged grief disorder: Psychometric validation of criteria proposed for *DSM-V* and ICD-11. *PLoS Medicine,* 6(8), e1000121.

Tedrick Parikh, S.J., & Servaty-Seib, H.L. (2012). College students' beliefs about supporting a grieving peer. *Death Studies 37*, 653-669. doi:10.1080/07481187.2012.684834

Varga, M.A. (2013). *A study of graduate student grief and prolonged grief disorder* (Doctoral dissertation). Retrieved from https://trace.tennessee.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=2820&context=utk_graddiss

Varga, M.A., McClam, T.M., & Hassane, S. (2015). Grief experiences among female American and Arab undergraduate college students. *Omega, 72*, 165-183. doi:10.1177/0030222815574834

Walker, A.C., Hathcoat, J.D., & Noppe, I.C. (2012). College student bereavement experience in a Christian university. *Omega*, 64, 241-259.

Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52*, 30-41.

Dr. Al-Gamal is Associate Professor, Psychiatric and Mental Health Nursing, School of Nursing, The University of Jordan, Amman, Jordan; Dr. Al-Gamal is also Associate Professor, and Ms. Victor is Lecturer, Psychiatric and Mental Health Nursing, College of Nursing, King Saud bin Abdulaziz University for Health Sciences, Al Ahsa; and Ms. Saeed is Staff Nurse, King Abdulaziz Medical City, National Guard Health Affairs, Riyadh, Saudi Arabia; and Dr. Long is Professor of Child and Family Health, School of Health & Society, University of Salford, Salford, England.

The authors have disclosed no potential conflicts of interest, financial or otherwise.

Address correspondence to Ekhlas Al-Gamal, PhD, MSc, RN, Associate Professor, Psychiatric and Mental Health Nursing, School of Nursing, The University of Jordan, and Associate Professor, Psychiatric and Mental Health Nursing, College of Nursing, King Saud bin Abdulaziz University for Health Sciences, Ministry of National Guard Health Affairs, P.O. Box 2477, Al Ahsa, Saudi Arabia 31982; e-mail: gamale@ksau-hs.edu.sa.

Received: March 5, 2018
Accepted: July 6, 2018
doi:10.3928/02793695-20181023-03