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To lose a friend: the relationship between professional help and grief among close bereaved friends after the terror attack, 22 July 2011

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ABSTRACT

Background: Close friends are often an overlooked group of bereaved people. This study is based on a sub-project on young adults who experienced the loss of a close friend in the terrorist attack on Utøya, Norway, on 22 July 2011.

Objective: The aim of this longitudinal study was to explore the relationship between complicated grief reactions, the need for help, and help received after losing a close friend to a traumatic death.

Method: In total, data from 89 people (with a mean age of 21 years, 76.4% female) were collected at one or more of the four time-points: 18, 28, 40, and 102 months after the incident. Latent growth modelling was used to analyse levels of grief reactions and change over time, experienced need for help, and help received.

Results: According to the results, the bereaved friends in our study were profoundly impacted by the loss and experienced level of reactions indicating complicated grief (mean scores on the Inventory of Complicated Grief varied from 36.2 to 23.7). A need for help was related to a decrease in grief symptoms, whereas a prolonged need for help was related to no reduction or an increase in grief. Received help was not related to decrease in grief symptoms.

Conclusions: These findings underscore the need for continuous professional help, and demonstrate that the present help measures used after traumatic events may not adequately meet the needs of close bereaved friends. This emphasizes the importance of acknowledging friends as bereaved and that follow-up measures should also include this group. Finally, the study highlights the need to learn more about how professional can help bereaved friends.

Perder a un amigo: La relación entre la ayuda profesional y el duelo entre amigos cercanos en duelo tras el atentado terrorista del 22 de julio de 2011

Antecedentes: Los amigos cercanos son a menudo un grupo de afligidos que se pasa por alto. Este estudio se basa en un subproyecto sobre adultos jóvenes que experimentaron la pérdida de un amigo cercano en el ataque terrorista en Utøya, Noruega, el 22 de julio de 2011.

Objetivo: El objetivo de este estudio longitudinal fue explorar la relación entre las reacciones de duelo complicado, la necesidad de ayuda y la ayuda recibida tras perder a un amigo cercano por una muerte traumática.

Método: En total, se recogieron datos de 89 personas (con una media de edad de 21 años, siendo el 76,4% mujeres), en uno o más de los cuatro puntos temporales: 18, 28, 40 y 102 meses después del incidente. Se utilizó un modelo de crecimiento latente para analizar los niveles de reacciones de duelo y los cambios a lo largo del tiempo, la necesidad de ayuda experimentada y la ayuda recibida.

Resultados: Según los resultados, los amigos en duelo de nuestro estudio se vieron profundamente impactados por la pérdida y experimentaron un nivel de reacciones que indicaban un duelo complicado (las puntuaciones medias en el ICG variaron entre 36,2 y 23,7). La necesidad de ayuda se relacionó con una disminución de los síntomas de duelo, mientras que una necesidad prolongada de ayuda se relacionó con una ausencia de reducción o aumento del duelo. La ayuda recibida no se relacionó con la disminución de los síntomas del duelo.

Conclusiones: Estos hallazgos subrayan la necesidad de ayuda profesional continua, y demuestran que las medidas de ayuda actuales utilizadas tras sucesos traumáticos pueden no satisfacer adecuadamente las necesidades de los amigos cercanos en duelo. Esto enfatiza la importancia de reconocer a los amigos como personas en duelo y que las medidas de seguimiento también deberían incluir a este grupo. Por último, destaca la necesidad de aprender más sobre cómo los profesionales pueden ayudar a los amigos en duelo.

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Pérdida traumática; duelo; amigos; adultos jóvenes; duelo complicado reacciones; ayuda profesional

关键词

创伤性损失; 丧亲之痛; 朋友; 年轻人; 复杂性哀伤反应; 专业帮助

HIGHLIGHTS

- Young adults who experience the traumatic loss of a close friend may experience levels of grief reactions indicating complicated grief.
- The need for help reported after experiencing the loss of a close friend is high; this is also the case when some time has passed since the loss.
- Bereaved friends need more acknowledgement, and help measures after traumatic events often do not meet their need for help and follow-up after the loss.

失去朋友——2011年7月22日恐怖袭击后专业帮助与失去亲友的哀伤之间的关系

背景：亲密的朋友往往是一群被忽视的丧亲群体。本研究基于一个针对在2011年7月22日挪威于特岛恐怖袭击中失去了亲密朋友的年轻人的子项目。

目的：本纵向研究旨在探讨复杂性哀伤反应、对帮助的需求以及因创伤性死亡而失去亲密朋友后所得到的帮助之间的关系。

方法：总共收集了89人（平均年龄21岁，76.4%为女性）的数据，收集时间为事件发生后18、28、40和102个月这四个时间点中的一个或多个时间点。潜在增长模型用于分析哀伤反应的水平 and 随时间的变化、经历的对帮助的需求和接受的帮助。

结果：根据我们研究的结果，失去亲人的朋友受到了丧亲之痛和经历表明复杂性哀伤反应水平的深刻影响（ICG平均得分从36.2到23.7不等）。需要帮助与哀伤症状的减少有关，而长期需要帮助则与哀伤没有减少或增加有关。接受帮助与哀伤症状的减少无关。

结论：这些发现强调了持续专业帮助的必要性，并表明目前在创伤事件后使用的帮助措施可能不足以满足亲友的需求。这强调了承认失去亲人的朋友的重要性，并且后续措施也应包括这一群体。最后，它强调需要更多地了解专业人士如何帮助失去亲人的朋友。

1. Introduction

On 22 July 2011, Norway was struck by a terrorist attack, as a Norwegian right-wing extremist first killed eight people with a bomb planted outside the government quarter in the centre of Oslo and then continued to the island Utøya, where 69 more were shot and killed. The majority of those killed on Utøya were young adults who were participating in a summer camp for the youth division (AUF) of the Norwegian Labour Party. The terrorist attack was the deadliest attack in Norway since World War II, and for months, the terrorist attack and its aftermath occupied most of Norway's headline news.

1.1. Complicated grief after sudden and violent deaths

Following a loss, bereaved individuals often commonly experience a variety of psychological and physical difficulties and impairments, such as headaches, dizziness, cognitive impairment, rumination, depression, suicidal thoughts, anxiety, post-traumatic stress symptoms (PTSS), and alcohol abuse (Bonanno et al., 2007; Hardison et al., 2005; Kristensen et al., 2021; Zisook & Shear, 2009). There are great individual differences in the pattern and intensity of grief. It has been argued that grief should be understood as a continuum from adaptive to maladaptive, which is often characterized by fluctuations and changes over time (Kristensen et al., 2021). Complicated grief, or prolonged grief, is used to describe a process that deviates from the natural healing trajectory, and differs from normal grief reactions in terms of persistency, intensity, and the level of functional impairment (Currier et al., 2015; Kristensen et al., 2021). Core symptoms of the diagnosis of prolonged grief disorder include intense and prolonged longing after the dead, emotional pain lasting for at least 6 months, and functional impairment

(American Psychiatric Association, 2013; World Health Organization, 2018).

A meta-study (Djelantik et al., 2020) found that approximately 50% of bereaved individuals who experienced an unnatural loss may develop complicated grief symptoms, and that such symptoms are more often present after unnatural loss compared to non-violent loss (see also Lobb et al., 2010; Revet et al., 2021). In a sample of adolescents exposed to a school bus accident in Greece, one-fifth experienced high levels of grief symptoms ('persistent grief') over time (Giannopoulou et al., 2021). Another study on young adults who had lost a family member or a friend within the past 3 years to either natural or unnatural causes found that 16% of the participants met the criteria of complicated grief (Mash et al., 2014).

1.2. Importance of young adults' friendship and losing a friend

Many have argued that friendship during adolescence is of great significance (e.g. Reitz et al., 2014; Wilkinson, 2010) and that the loss of a friend may be life changing (Liu et al., 2019; Papadatou et al., 2018; Ringle & Hayden, 2000). The intensity of the reactions after the loss of a friend can be attributed to the level of emotional closeness to the deceased, and greater emotional closeness is associated with stronger grief reactions and an increased risk of complicated grief symptoms (Ackerman et al., 2007; Johnsen et al., 2021; Johnsen & Dyregrov, 2015; Papadatou et al., 2018; Servaty-Seib & Pistole, 2006). The loss of a close friend has also been associated with significantly reduced physical and mental health and overall well-being, poorer social functioning, and negative academic performance (Liu et al., 2019; Walker et al., 2011).

Bereaved adolescents and young adults are particularly vulnerable to experiencing strong reactions in response to loss due to various changes that they

undergo in the transition to adulthood, e.g. the development of identity, independence, and self-image (Coleman, 2011; Hardison et al., 2005; Ringler & Hayden, 2000; Wilkinson, 2010). Adolescents who have experienced violent or traumatic loss report feelings of shock, disbelief, depression, loneliness, anger, difficulty sleeping, feelings of emptiness, hopelessness, or vulnerability, fear of intimacy, and sometimes guilt (Giannopoulou et al., 2021). Several studies have found that females tend to report more pronounced symptoms of grief after a loss, and are at higher risk of stress and complicated grief reactions (Johnsen & Dyregrov, 2015; Kersting & Kroker, 2010; Liu et al., 2019).

Despite showing a high level of grief reactions and symptoms of distress after the loss, bereaved friends do not receive the same level of recognition and attention as other bereaved groups, such as siblings and parents (Johnsen & Dyregrov, 2015). This lack of support and acknowledgement can serve as a risk factor for long-term bereavement effects in individuals who have lost a close friend.

1.3. Young bereaved people and professional help

Bereaved adolescents and young adults may need help from several groups, including their social networks, peers with similar experiences, and healthcare services (Dyregrov, 2002, 2009; Dyregrov & Dyregrov, 2007). Following sudden and violent deaths, approximately 80–90% of bereaved people report that they do not cope alone, and they especially need help owing to factors such as lack of energy, desperation, and the surreal nature of the experienced situation (Kristensen et al., 2021). However, studies indicate that a considerable number of bereaved individuals experiencing prolonged grief or mental health problems do not seek help from help services, or do not prefer professional sources of help (Johnsen & Dyregrov, 2015; Reime et al., 2022; Tureluren et al., 2022).

Findings show that bereaved individuals often need help at an early stage, that help needs to be offered more than just once and to continue over time, and that the help should involve physical, psychological, and social care from both an individual and a family perspective (Dyregrov, 2002; Dyregrov & Dyregrov, 2007; Titlestad et al., 2020). A longer duration of help is associated with more adaptive adjustment to the loss; however, the duration of the help received is often shorter than requested and needed by bereaved adolescents (Ringler & Hayden, 2000; Tureluren et al., 2022). The European Network for Traumatic Stress (TENTS) recommends a stepped care approach as a practice following major traumatic events, focusing on identifying those at risk of developing symptoms and providing the appropriate

follow-up care, rather than a universal follow-up strategy for all those afflicted (Bisson et al., 2010). The help model implemented in Norway aligns with TENTS recommendation (The Norwegian Directorate of Health, 2012).

Following the Utøya attack, many of the bereaved reported feeling misunderstood by their helpers, and that the focus on diagnostics and lack of continuity in the follow-up made the treatment challenging (Dyregrov et al., 2015; Johnsen & Dyregrov, 2015). Studies have found that helpers often report a lack of time and resources to ensure a continuum of care, as well as inadequate training and competence in addressing complicated grief reactions (Dodd et al., 2019; Kaspersen et al., 2022). Previous findings from the Utøya study showed that the majority of bereaved friends felt unrecognized as bereaved by both professional helpers and their social network, leading them to feel excluded from the group of ‘entitled grievers’ (Johnsen & Dyregrov, 2015). Consequently, many friends had to take the initiative to seek help and establish contact with the healthcare system on their own (Johnsen et al., 2015).

1.4. Aims and objective

Research on how young adults experience the traumatic loss of a friend remains relatively limited, and there is a need for more knowledge on the grief development in this group and how to identify and support them more effectively. The aim of the present study was to explore the prevalence of grief reactions, and the relationship between grief reactions and experiences of professional help among young, bereaved friends. Understanding this may provide important information on how to provide assistance following a traumatic event and how the help should be organized. We examined the prevalence of and models of the relationships between grief reactions, the need for help, and help received over a period of 8.5 years. The research hypotheses were as follows: (1) a high need for help predicts a slower decrease in the severity of grief reactions, and (2) close bereaved friends who receive help experience a symptom reduction in their grief reactions.

2. Method

2.1. Study design

This study, focusing on close friends of those killed on Utøya on 22 July 2011, is part of a larger research project called ‘Bereaved parents, siblings and close friends after Utøya, 22.07.11’, led by the Centre for Crisis Psychology in Bergen. The research project has a longitudinal design with data collected at four different time-points: T1: 18 months (1.5 years); T2: 28 months

(approximately 2.5 years); T3: 40 months (approximately 3.5 years); and T4: 102 months (8.5 years) after the terrorist attack. To examine the research questions longitudinally, the present study is based on data collected from questionnaires at all four time-points.

2.2. Participants and procedure

The study included the bereaved of 67 out of the 69 victims who lost their lives in the Utøya attack, with the exclusion of two who were foreign citizens. Identification of family members of the deceased was done through the National Population Register in Norway based on information from public records of the victims. Each deceased person was assumed to have at least four to six close friends, and the family members were requested to invite this number of friends to the study by forwarding them an invitation to participate, with an information letter and consent form. Bereaved friends who returned the consent form were then sent the questionnaire.

The total sample of friends comprised 89 individuals, with 76 at T1, 70 at T2, 55 at T3, and 39 at T4. Table 1 presents the sociodemographic characteristics of the sample at T1. Among the participants at T1, 23.6% ($n = 21$) were men, and their ages varied from 15 to 41 years (mean = 20.8, $SD = 4.7$). The majority of the sample (93.3%) were between 17 and 29 years, with only one participant being 15 years old and five participants being over 29 years old. Therefore, the sample of friends in this study is defined as young adults (see also Mash et al., 2014).

2.3. Measures

2.3.1. Need for help and help received

Need for and received professional help were measured by the questions: 'Have you felt a need for help from professionals/emergency service after the death?'/ 'Do you have a need for professional help

now' (with answering options on a five-point scale ranging from 0 'not at all' to 4 'to a very large extent', and 5 'not relevant') and 'Have you received help from professionals/the emergency service after the death?'/ 'Do you receive help from professionals now?' (with answering options based on three values: 'not at all', 'to some extent', and 'to a large extent'). It is important to note that this study defines professional help in a broad sense and did not differentiate between help for psychological and physical challenges.

2.3.2. Complicated grief

Complicated grief was measured by using the Inventory of Complicated Grief (ICG-19) (Prigerson et al., 1995). This is a scale developed to measure maladaptive symptoms of loss experienced within the last 2 weeks. It consists of 19 items, with answers on a five-point scale ranging from 0 'never' to 4 'always'. ICG-19 has a total score from 0 to 76, where ≥ 25 indicates complicated grief. Cronbach's alpha and average interitem correlations were $\alpha = .88$ and $r = .29$ at T1, $\alpha = .92$ and $r = .37$ at T2, $\alpha = .94$ and $r = .44$ at T3, and $\alpha = .93$ and $r = .42$ at T4, indicating high internal reliability. However, some within-scale variances in the correlations were found ($SD = 0.15, 0.15, 0.16,$ and 0.16), indicating that this scale shows some heterogeneity. The Norwegian translation of ICG-19 shows good validity and reliability (Thimm et al., 2019).

2.4. Data analysis

The analysis strategy was to relate level and change in complicated grief reactions (ICG) to the predictor variables (experienced need for professional help and professional help received). Owing to the somewhat small sample size, these predictor variables were analysed in two different models. Descriptive analysis (frequency, mean, and standard deviation) was conducted with SPSS version 26. Level and change in ICG was analysed with latent growth curve (LGC) modelling (Bollen & Curran, 2006), using Mplus version 8.7 (Muthén & Muthén, 2021).

The analyses modelled the relationship between the help variables (experienced need for professional help and professional help received) and the level and change in complicated grief (ICG). The gender variable was included as a background predictor for both the help variables and the estimated grief levels. First, unconditional LGC models were tested. If a linear model did not fit the data, nonlinear models (quadratic and piecewise growth) were specified. Standard model fit measures, together with visual inspections of the models, were used in model evaluation. The criteria for model fit were: chi-squared not statistically significant, comparative fit index (CFI) and Tucker-Lewis index (TLI) $> .95$, and root mean square

Table 1. Sociodemographic characteristics of participants ($n = 89$) at T1 (18 months after the attack).

Demographic characteristics	<i>N</i>	%
Gender		
Female	68	76.4
Male	21	23.6
Age (years)		
15–23	74	83.2
24–32	11	12.4
33–41	4	4.5%
Relationship with deceased		
Friend	85	96.6
Boyfriend/girlfriend	3	3.4
Education		
Secondary school	35	43.2
College/university	18	22.2
Work	22	27.2
Other	6	7.4

error of approximation (RMSEA) $< .10$ (mediocre fit), $< .08$ (fair fit), or $< .05$ (close fit) (Wang & Wang, 2012). In the LGC models, time was fixed to baseline, and the months between the data collection time-points (T1–T4) were used as time units. The study started 18 months after the terrorist attack. Therefore, the intercept factor (starting level) in the LGC model was fixed to 0 months at T1 (18 months after the attack). Changes in the three intervals were: 18–28 months' interval (T1–T2: Slope 1), 28–40 months' interval (T2–T3: S2), and 40–102 months' interval (T3–T4: S3). With reference to T1, the intervals were: 0–10, 10–22, and 22–84 months.

Need for professional help and professional help received were analysed as time-independent variables in separate models (need for help in one model and received help in another), indicating whether the respondents experienced this across all points of time or not (step 1); and as time-specific variables in another model (step 2); reflecting the need for help and help received at the beginning and at the end of each interval. In the step 2 models with time-specific information about help, these were declared as categorical variables. The standard estimation in Mplus in these models is the Probit link function, which gives standard regression estimates and no odds ratio estimates for the relationships between gender and help. Thus, the 18 month ICG level was predicted by received help measured at T1, the change in ICG in the first interval (slope 1: 18–28 months' interval) was predicted by need for help at T1 and T2; the change in ICG in the second interval (slope 2: 28–40 months' interval) by the need for help at T2 and T3; and the change in ICG in the third interval (slope 3: 40–102 months' interval) by the need for help at T3 and T4. In this way, changes were predicted by the need for help at the beginning and end of each interval. This strategy was replicated for the 'received professional help' variable, with step 1 and 2 models. To explore qualitative differences in the predictors, these were dichotomized into having needs or not, and receiving help or not, before analysing the models. The ICG outcome was represented as a sum scale and treated as a continuous variable. The maximum likelihood with robust standard errors estimator was used, as this is robust for potential non-normality in the data, while models with categorical help variables were based on the robust weighted least squares estimator (WLSMV) (Kline, 2016).

2.5. Missing data

Because of the varying number of participants at the four time-points, there were considerable missing data in some variables. In the ICG outcome, 85%, 78%, 60%, and 44% of the data was intact at T1–T4. Similar data coverage regarding the help variables

were: 85%, 76%, 62%, and 44% (need for help); and 87%, 80%, 62%, and 43% (help received). Missingness [missing data (MD)] in outcome variables was analysed against other baseline variables from the data set. Analyses revealed relationships between MD in ICG at T2 and T3, but not T4, and the age levels of the respondents ($r = -.25$, $r = -.27$) as well as age in the deceased ($r = -.22$, $r = -.25$). Lower satisfaction with help from professional helpers at T1 was related to MD at T4 ($r = -.36$). MD at T3 and T4 were related to having participated in support groups for grievers ($r = .28$, $r = .29$). MD at T3 was related to having received support from family and friends ($r = .24$). In addition, MD at T4 was found to be related to media exposure in the first week ($r = .25$), lower levels of trying to reduce the media exposure ($r = -.29$), and experiencing media as stressful ($r = .26$). Avoidance levels (a sub-dimension in the Impact of Event Scale) was related to MD at T2 ($r = .23$). Lastly, satisfaction with help was negatively related to MD at T4 ($r = -.35$). These relationships do not support the assumption of data being missing completely at random (MCAR) (Enders, 2010).

Although several additional relationships between MD and observed variables at later measurement occasions could also exist, they were not analysed owing to the use of full information maximum likelihood (FIML) estimation. This uses all available data and assumes missingness to be randomly distributed [missing at random (MAR)] (Enders, 2010). MAR, in contrast to MCAR, allows for relationships between MD and observed variables, but assumes no relationships between missingness and the unobserved missing values. Therefore, the relationships between missingness and observed variables should not reflect systematic differences between the observed and unobserved values. Ordinary analyses, such as the *t*-test, operate under the MCAR assumption, and use listwise deletion. The predictor variables also included MD and resulted in a loss of cases analysed. To address this, the gender variable was used to make the help variables endogenous, allowing for the use of all available cases in Mplus. However, it is important to note that the assumption of missing not at random (MNAR) cannot be ruled out, as this assumption is not empirically testable (Enders, 2010). MNAR analyses, such as Diggle–Kenward and pattern-mixture models, may be used as sensitivity models (Enders, 2010), but are based on very strict statistical assumptions and demand larger sample sizes. Therefore, such models were not analysed. If the situation is MNAR, not MAR, we may have underestimated the levels of grief, particularly at the first measurement point, which may also be related to higher levels of needed and received help. In addition, there is some reason to believe that missing values at the end of the study could be lower than the observed values, as

some individuals characterized with less grief could wish to use less time thinking and reflecting on the loss and reactions and therefore drop out of the study. On the other side, individuals with higher levels of grief and needs for help could also have dropped out of the study as a consequence of exhaustion and other problems. If both these of situations were the case, the resulting trajectory of grief could be quite similar to the estimated one, but with less individual variations around the mean level. However, we are more uncertain whether changed levels in the variables would necessarily have affected the magnitude of the relationships between these variables.

2.6. Ethical considerations

The project was approved by the Regional Committees for Medical and Health Research Ethics (REK) in Norway (reference number 2018/2174/REK), and conducted in accordance with ethical standards and guidelines. Prior to participation, bereaved friends were fully informed about their rights, the project's principal purpose and implementation, as well as their rights to withdraw from the project at any time, and signed a consent form prior to participation.

3. Results

3.1. Complicated grief and help measures

Descriptive analysis showed that a considerable part of the participants had complicated grief reactions at a clinical level (see Table 2). At the continuous level, the participants' grief level decreased over time in the observed scores: T1 ($M = 36.20$, $SD = 13.63$), T2 ($M = 29.72$, $SD = 15.24$), T3 ($M = 25.25$, $SD = 16.00$), and T4 ($M = 23.67$, $SD = 14.55$). A substantial part of the participants reported a need for help 'to some extent' across all time-points (see Table 2). The need for help remained relatively stable throughout the time-points. However, the distribution of responses indicating 'not at all' and 'to a large extent' varied to some extent across time, showing fluctuations in the level of help needed. The help received decreased considerably across T1–T3. However, the level of help received remained somewhat stable from T3 to T4.

3.1.1. Level and change in complicated grief in relations to measures of help

The linear LGC model with fixed slope variance showed the estimated baseline level to be 33.76 ($SD = 13.66$, $p < .001$) and the mean slope indicated the change to be -0.24 per month ($p < .001$). This model did not adequately fit the data, as indicated by the goodness of fit statistics ($\chi^2 = 25.77$, $df = 7$, $p < .001$, $CFI = 0.87$, $TLI = 0.88$, $RMSEA = 0.17$, $RMSEA_{CI} = 0.11$ – 0.25 , $RMSEA_{p < .05} = .00$). Based on the visual

Table 2. Descriptive statistics for the variables complicated grief (Inventory of Complicated Grief), need for professional help, and received professional help for the total sample, males, and females across time-points (T1–T4).

After the incident	18 months			28 months			40 months			84 months		
	Total	Female	Male	Total	Female	Male	Total	Female	Male	Total	Female	Male
Complicated grief	76			69			53			39		
Mean (SD)	36.2 (13.6)	39.5 (12.1)	25.2 (13.6)	29.7 (15.2)	34.0 (14.3)	18.9 (14.8)	25.25 (16.0)	28.8 (15.9)	15.0 (12.1)	23.7 (14.6)	24.9 (14.6)	17.3 (13.9)
Over cut-off	82.9 (63)	91.5 (54)	52.9 (9)	63.8 (44)	73.1 (38)	35.3 (6)	47.2 (25)	57.5 (23)	15.4 (2)	38.5 (15)	42.4 (14)	16.7 (1)
Under cut-off	17.1 (13)	8.5 (5)	47.1 (8)	36.2 (25)	26.9 (14)	64.7 (11)	52.8 (28)	42.5 (17)	84.6 (11)	61.5 (24)	57.6 (19)	83.3 (5)
Need for help	76			68			55			39		
Not at all	7.9 (6)	3.4 (2)	23.5 (4)	22.1 (15)	15.7 (8)	41.2 (7)	29.1 (16)	16.7 (7)	69.2 (9)	20.5 (8)	18.2 (6)	33.3 (2)
To some extent	55.3 (42)	52.5 (31)	64.7 (11)	47.1 (32)	47.1 (24)	47.1 (8)	54.5 (30)	61.9 (26)	30.8 (4)	59 (23)	57.6 (19)	66.7 (4)
To a large extent	36.8 (28)	44.1 (26)	11.8 (2)	30.9 (21)	37.3 (19)	11.8 (2)	16.4 (9)	21.4 (9)	0 (0)	20.5 (8)	24.2 (8)	0 (0)
Received help	77			71			55			38		
Yes	54.5 (42)	61.7 (37)	29.4 (5)	40.8 (29)	48.1 (26)	17.6 (3)	23.6 (13)	28.6 (12)	7.7 (1)	26.3 (10)	28.1 (9)	16.7 (1)
No	45.5 (35)	38.3 (23)	70.6 (12)	59.2 (42)	51.9 (28)	82.4 (14)	76.4 (42)	71.4 (30)	92.3 (12)	71.7 (28)	71.9 (23)	83.3 (5)

Note: Data are shown as % (n).

pattern of change, a two-piece model with change over the two first intervals in one slope, the last interval in another slope, and a nonlinear model including a quadratic function were not found to fit the data adequately ($RMSEA = .14$ and $.16$).

The three slopes model showed the baseline level to be $Mean_{level} = 35.9$ and the changes per month in the three intervals to be $Mean_{S1}$ (18–28 months) = -0.53 ($p < .001$), $Mean_{S2}$ (28–40 months) = -0.36 ($p < .001$), and $Mean_{S3}$ (140–102 months) = -0.05 ($p = .148$). Individual differences in level and change were estimated to be $SD_{level} = 13.3$, $p < .001$ ($p < .001$), $SD_{S1} = 1.0$ ($p = .002$), $SD_{S2} = 0.2$ ($p = .161$), and $SD_{S3} = 0.2$ ($p = .005$). This model fitted the data well ($\chi^2 = 0.57$, $df = 2$, $p = .751$, $CFI = 1.00$, $TLI = 1.00$, $RMSEA = 0.00$, $RMSEA_{CI} = 0.00-0.14$, $RMSEA_{p < .05} = .80$). Although this expansion of the estimated parameters and constraints on some covariances and equal residuals was necessary to represent level and change at both mean and individual levels, this model is not very parsimonious, with only two degrees of freedom. The estimated mean level and change in ICG with 95% confidence interval is presented in Figure 1.

The relationship between S2 (40–102 months) and S3 (28–40 months) was negative ($r = -.52$, $p = .019$), suggesting that those who experienced the greatest reduction in grief levels in the S2 interval showed the least reduction or even an increase in grief levels in the S3 interval. Females were found to have a higher estimated baseline level compared to males ($b = 12.56$, $p < .001$), but not different rates of change (S1: $b = 0.22$, $p = .510$; S2: $b = -0.11$, $p = .578$, S3: $b = -0.01$, $p = .947$).

The need for help at any point in time was predicted by gender, with females being more likely to report such needs compared to males ($b = 1.70$, $p < .001$). Differentiated by the need for help at each time-point, females reported a higher need for help than males at T1 ($b = 1.20$, $p = .009$), at T2 ($b = 0.79$, $p = .023$), and at T3 ($b = 1.15$, $p = .003$), but not at T4 ($b = 0.03$, $p = .958$).

Table 3 shows that individuals who reported a need for help at any of the four time-points reported higher levels of complicated grief reactions at baseline, compared to those who did not. However, the overall need for help was not related to different rates of change in grief levels over time. When examining time-specific needs, the results confirmed that need for help 18 months after the attack (T1) was related to different levels in grief; with higher grief levels among those with needs. In this model, females were found to have higher baseline levels of grief than males. In addition, the model showed that a need for help at the start of the first interval was negatively related to change in grief levels, suggesting that those who reported a need for help experienced the greatest reduction in grief levels from their higher baseline level. However, a prolonged need for help, as measured at the end of each of the three intervals, was positively related to changes in grief level. This indicates that individuals who continued to report a need for help at the end of each interval did not experience a reduction in grief symptoms, but rather an increase in grief symptoms.

Females received more help than males ($b = 0.91$, $p = .007$). When examining the specific time-points,

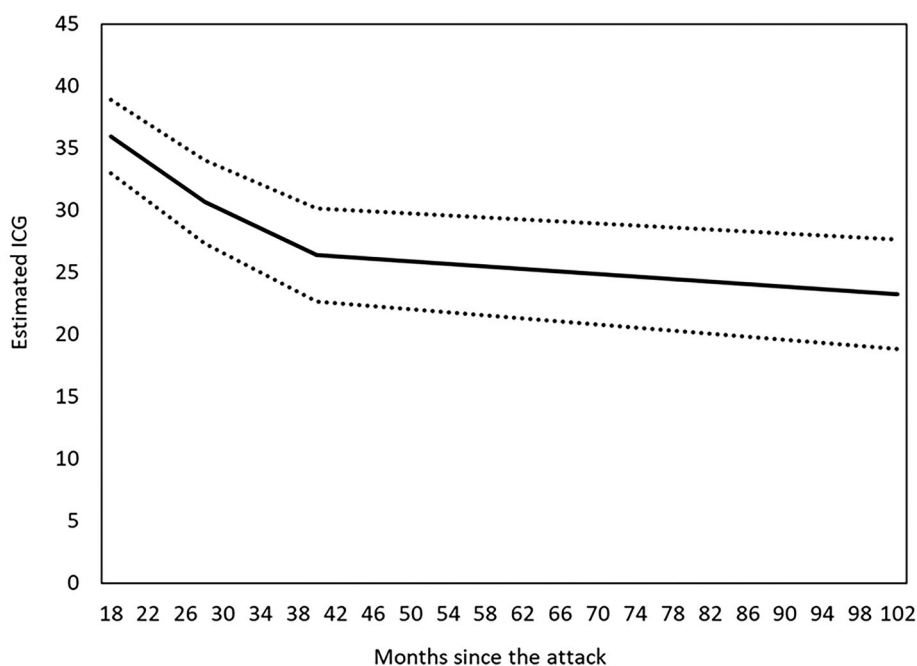


Figure 1. Model estimated mean Inventory of Complicated Grief (ICG) levels over time from based on 18, 28, 40, and 102 months after the terrorist attack. Mean \pm 95% confidence intervals are given.

Table 3. Level and changes in complicated grief predicted by professional need for and professional help received ($N = 89$).

Predictors	Model ^a	18 months after incident			18–28 months after incident			28–40 months after incident			40–84 months after incident		
		<i>b</i>	β	<i>p</i>	<i>b</i>	β	<i>p</i>	<i>b</i>	β	<i>p</i>	<i>b</i>	β	<i>p</i>
Need for help													
Help total	1												
Intercept		13.20			−0.74		.185	−0.29		.408	−0.16		.240
Need for help		6.97	0.50	.026	0.07	0.06	.683	−0.02	−0.03	.856	0.03	0.14	.435
Help intervals	2												
Intercept		25.24			−0.63		.063	−0.33		.385	0.04		.773
Help _{<i>t</i>}		4.70	0.40	.002	−0.59	−0.76	<.001	−0.15	−0.21	.399	−0.08	−0.50	.081
Help _{<i>t+1</i>}		0			0.64	0.77	.001	0.66	1.01	<.001	0.16	0.87	<.001
Help received													
Help total	3												
Intercept		25.24			−0.63		.063	−0.33		.385	0.04		.773
Help received		−0.19	−0.02	.921	−0.16	−0.16	.386	0.41	0.70	.012	−0.03	−0.12	.621
Help intervals	4												
Intercept		25.24			−0.63		.063	−0.33		.385	0.04		.773
Help _{<i>t</i>}		0.75	0.06	.689	−0.17	−0.16	.326	0.10	0.17	.436	−0.04	−0.17	.535
Help _{<i>t+1</i>}		0			0.15	0.14	.490	0.38	0.63	.043	0.06	0.29	.193

Note: *b*: unstandardized regression coefficient; β : standardized regression coefficient.

^a Models 1–4: 1: ‘Help total’ describes the need for help across all points of time; 2: ‘Help intervals’ describes the need for help at the beginning of a given interval (help_{*t*}) and at the end of a given interval (help_{*t+1*}); 3: ‘Help total’ describes the help received across all points of time; 4: ‘Help intervals’ describes the help received at the beginning of a given interval (help_{*t*}) and at the end of a given interval (help_{*t+1*}).

differentiated findings showed that females reported higher levels of received help at the two first time-points ($b = 0.86$, $p = .016$; $b = 0.81$, $p = .039$), but not at the two last time-points ($b = 0.62$, $p = .240$; $b = 0.10$, $p = .873$). Among those who received help across all time-points, they showed a smaller reduction in their grief level during the second interval, while no such differences were found in the first and third intervals. When examining the help received at each interval separately (see model 4, Table 3), it was found that individuals who continued to receive help at the end of the second interval (T2–T3: 28–40 months) were experiencing the least reduction in their grief levels. Receiving help at the beginning of each interval was not found to be statistically significantly related to the change in grief levels.

4. Discussion

The aim of the current study was to explore the relationship between young, bereaved friends’ grief reactions and experiences regarding professional help received after the loss. We hypothesized that the need for help predicted slower decrease in grief reactions, and that received help caused a reduction in grief reactions. According to the results, symptoms of complicated grief gradually decreased over time, but at a slow rate. Higher levels of complicated grief reactions at baseline were found among those who reported a need for help at any of the four time-points, but overall need for help was unrelated to different rates of change in complicated grief levels over time. However, those who still reported a need for help over time reported less decrease in grief symptoms. Receiving help over time was found to be associated with less reduction in complicated grief, but not over time.

4.1. Why do close bereaved friends have high levels of grief reactions over time?

The results indicated that bereaved friends in our sample experienced high levels of grief over an extended period of 8.5 years. These results are consistent with previous research, and high levels of grief and PTSS over time were also found in bereaved friends indirectly exposed to a traumatic traffic accident (Giannopoulou et al., 2021), and in other studies on bereaved friends (Mash et al., 2014). However, other studies did not find levels of grief to the same extent as in the present study. Experiencing post-traumatic challenges following unexpected and traumatic deaths may hinder grief processing, and increase the risk of intense, complicated, and persistent grief reactions, since they may disrupt individuals’ beliefs and confidence in themselves, in society, in the government, and in the help system (Boelen, 2020; Currier et al., 2006; Lobb et al., 2010; Pivar & Priger-son, 2004).

Although the results indicate a gradual reduction in levels of grief over time, the greatest decrease was found between 2.5 and 3.5 years after the loss. This pattern is similar to results found after the 9/11 terror attack in the USA (Neria et al., 2007). The continuous and dramatic media coverage of traumatic events can contribute to ongoing stress and serve as a constant reminder of the friends’ losses, and potentially delay the healing process (Kristensen et al., 2016; Pfefferbaum et al., 2018). When the acute shock lessens, the media coverage subsides, and the legal proceedings are completed, individuals finally have the opportunity to start the grieving process. This shift may have contributed to a greater decrease in grief level.

Continuous high levels of grief could also be explained by age and developmental stage, since young adults who experience the loss of a close friend

in traumatic circumstances may not have fully developed the necessary coping skills to deal with the challenges of such a loss (Frydenberg, 2014; Johnsen & Dyregrov, 2015). According to Servaty-Seib and Pistole (2006), the passage of time alone is not synonymous with a decrease in grief reactions in young adults, since grief reactions can manifest themselves and be expressed differently with increased maturing. In addition, when recalling the memories of the loss, the grief may feel stronger than later grief experiences. In qualitative interviews conducted with the close bereaved friends, descriptions of their relationship with the deceased indicated that the friendships were highly significant, and that losing their close friends profoundly impacted their lives (Johnsen & Dyregrov, 2015). Previous studies have also found that the level of emotional closeness to the deceased is positively associated with more pronounced grief symptoms (Neimeyer et al., 2007). The combination of high levels of grief, functional impairment, and a lack of knowledge and tools to effectively process the loss may contribute to the experience of needing external help to overcome these matters.

4.2. Need for help and help received did not relate to changes in grief symptoms

We hypothesized that a high need for help predicted a slower decrease in grief symptom severity. While the results showed that a need for help at the beginning of an interval was related to a reduction in levels of grief, those who reported a continuous need for help were not found to have the same reduction, but rather a stagnation or a small increase in grief levels. This could be attributed to various factors, including insufficient duration or quality of the help received (Dodd et al., 2019; Kaspersen et al., 2022). In addition, the results could be explained by avoidance, and consequently the lack of help-seeking behaviour, which may contribute to a slower decrease in grief symptoms (Johnsen et al., 2021).

Friends were not included in the proactive follow-up from the healthcare service to the same extent as the close families were after the Utøya attack, and the results showed under half of the sample still received help after 1.5 years (T1). Receiving help was not related to changes in grief levels, although bereaved individuals who received help at all time-points showed the least decrease in grief levels between 2.5 and 3.5 years after the terrorist attack (T2–T3). We hypothesized that friends who received help had a positive grief processing, but based on these findings this hypothesis was not supported. An explanation for the findings could also be challenges related to systemic conditions and the quality of the help given (Dodd et al., 2019; Kaspersen et al.,

2022). Based on the stepped care model, help was primarily given by helpers in the municipalities. It is conceivable that helpers in the municipalities had limited knowledge about trauma and complicated grief because their primary mandate is the promotion of health and preventive measures (Kaspersen et al., 2022; Ringard et al., 2013). More knowledge together with increased competence when it comes to complicated grief would give the helpers a more solid starting point for helping the bereaved.

When not included in the proactive follow-up, bereaved friends who still needed help had to seek help on their own initiative. Several studies have shown that bereaved people with strong grief reactions, especially adolescents, may be less likely to seek help on their own (Johnsen & Dyregrov, 2015; Tureluren et al., 2022), and wish to be offered help (Dyregrov et al., 2015; Kaspersen et al., 2022; Titlestad et al., 2020). Some barriers in regard to seeking help have been suggested to be negative attitudes toward help-seeking, a lack of trust in the healthcare service, feelings of stigmatization, and feeling that people do not believe they are entitled to receive help (Dyregrov et al., 2015; Schnyder et al., 2017). To seek, and find, suitable help requires courage, energy, and initiative (Dyregrov, 2004), and can be seen as even more demanding for friends, where the majority were met by opposition and a lack of acknowledgement from society, including professional health workers (Doka, 2002; Johnsen & Dyregrov, 2015). This may have resulted in friends' bereavement being viewed as not so important, brief, and less strong, and that they therefore did not need professional help. The low percentage of friends who received help over time may reflect the lack of acknowledgement, validation, and being recognized as bereaved, rather than the fact that they did not need help.

4.3. Females report more need for help and receive more help compared to males

The results of this study showed that females reported a higher need for help and also received more help over time, compared with males. This could be explained by different grieving patterns and tendencies (Doka & Martin, 2010), and that females are at greater risk for complicated grief reactions (Kersting & Kroker, 2010; Liu et al., 2019). One possible explanation for females' greater risk for complicated grief reactions could be a tendency to ruminate and worry more, different coping styles, and being more vulnerable to the influence of stress, compared to males (Coleman, 2011). Furthermore, previous studies have found gender differences in friendship characteristics, with females tending to have a smaller friendship network than males; however, the degree of affection, intimacy, and help is higher in females' networks compared to males' (De Goede et al., 2009).

4.4. Strengths and limitations

With the focus of the study on longitudinal information about grief development and the relationship to support and help, an important strength of this study is that it contributes with new research to a highly understudied research area in the grief field. Furthermore, increased knowledge about events like the Utøya attack and its subsequent reactions could be valuable for dealing with similar events in the future. A limitation is that the first time-point for data collection was 1.5 years after the event, and useful information about acute reactions may have been lost. This challenges the comparison with other studies that have studied complicated grief reactions closer in time to the loss. Owing to the small sample size and the chosen focus on the measures of help related to grief development, we only partially controlled for gender effects in this study and have not fully examined the interaction between gender and levels of change in grief over time. Further research is encouraged to examine this. It is also a limitation of the study that help was not defined, and that we cannot distinguish between different types of professional help that the participants needed or received. The long follow-up period is a strength of the study. However, missing data, particularly at the last measurement occasion, may give uncertain and imprecise estimates. Although four measurement occasions may increase the statistical power, the lack of information about those who did not participate at all or in some part of this study raises some uncertainties related to the representativeness of the results.

4.5. Implications of the findings

Increased knowledge about the relationship between complicated grief reactions, the need for help, and help received in bereaved friends is essential for enhancing the ability of the professional help care system to assist and support them. In addition, the presented findings may contribute to an optimized proactive help model, where bereaved friends are included and offered necessary help, if needed, after traumatic events. This could be done by increasing fundamental knowledge about trauma and grief in the healthcare service in the municipalities, as well as increasing the acknowledgement and recognition of friends as bereaved. Offering the same treatment for all bereaved individuals in need should be the aim after a traumatic event such as the Utøya attack. This would be in line with the central and main goal of the healthcare system in Norway, which is that care should be offered regardless of social status, private economy, and residence (The Ministry of Health and Care Services, 2023).

5. Conclusion

This study has shown that young adults are deeply affected by the loss of a close friend and that bereaved friends have high levels of grief over a period of 8.5 years. This calls for a broader understanding of the importance of acknowledging friends as bereaved, and finally, that follow-up measures should include friends, as well as close family.

By acknowledging the individual experiences of bereaved friends, healthcare professionals can better understand the challenges they face and how to help and support them. Developing appropriate help measures requires a understanding of how their grief develops over time and what their specific needs are, in addition to how the grief affects them and various aspects of their lives, such as their emotional well-being, relationships, and daily functioning.

Disclosure statement

No potential conflict of interest was reported by the authors.

Data availability statement

The participants in this study did not give written consent for their data to be shared publicly; therefore, owing to the sensitive nature of the research, supporting data are not available.

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