

Social support and complicated grief: A longitudinal study on bereaved parents after the Utøya terror attack in Norway

P psykologisk.no/sp/2017/07/e10/

In our longitudinal study, bereaved parents after the Utøya terror attack in Norway showed a decrease in levels of complicated grief with time. Fathers had lower levels of complicated grief than mothers, write Sunniva Skagen Wågø and colleagues.

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On the 22nd of July 2011, a Norwegian right-wing extremist executed two consecutive extreme and brutal terror attacks. He first detonated a car bomb in the Government Quarters of Oslo, Norway, killing eight people. Many more victims were hospitalized. The bomber then went on a killing spree on the island of Utøya, just outside of Oslo, where at the time a political youth camp with 564 participants was being held. There, the terrorist, dressed like a police officer, killed 69 people, the majority of them being under the age of 18. In addition to the people he killed, 33 people endured life-threatening injuries or were seriously harmed by the terrorist, and many more suffered psychological harm (Thoresen et al., 2012). The police arrived at the island 90 minutes after the terrorist first started his massacre. He was captured without resistance. Approximately a year later, the culprit was sentenced to imprisonment for 21 years in preventive detention, the maximum sentence possible in Norway. This devastating event went down in history as the most extreme act of terror in Norway in recent times (Thoresen et al., 2012). Against this backdrop, we aimed to investigate the importance of social support in the bereavement process among bereaved parents after the Utøya terror attack.

Complicated grief

Losing a loved one is one of the most painful and stressful events an individual can experience (Parkes & Prigerson, 2013), and the grief that follows is a universal and natural response to the death of an emotionally significant figure in one's life (Shear et al., 2011). Usually the individual affected by such loss will experience a reduction in grief symptoms over time and will manage to adjust (Kersting, Brähler, Glaesmer, & Wagner, 2011; Lichtenthal, Cruess, & Prigerson, 2004; Prigerson, 2004). However, in some cases, mourning can develop into a condition called complicated grief (Prigerson, 2004; Shear et al., 2011). Having several common

denominators (Shear et al., 2011), complicated grief is also referred to as prolonged grief (Prigerson, Vanderwerker, & Maciejewski, 2008), pathological grief (M. Stroebe et al., 2000), and traumatic grief (Prigerson & Jacobs, 2001).

Complicated grief is characterized by intense and extended mourning of the deceased that persists for six months or longer and includes significantly decreased daily functioning (Holland, Neimeyer, Boelen, & Prigerson, 2009). It is associated with, and predictive of, adverse effects on the individual's physical and mental health (Prigerson et al., 1995; Wittouck, Van Autreve, De Jaegere, Portzky, & van Heeringen, 2011), such as cancer, heart problems, high blood pressure, (Prigerson et al., 1997), suicidal ideation (Latham & Prigerson, 2004; Neria et al., 2007; Prigerson et al., 1999), and psychological maladjustment (Bonanno, Galea, Bucciarelli, & Vlahov, 2007).

When complicated grief develops after unnatural and violent deaths, there is also an increased risk of co-morbid negative mental health outcomes, such as post-traumatic stress disorder (PTSD), major depressive disorder, and anxiety disorder (Neria et al., 2007). This tendency makes it important to consider factors that can reduce the risk of developing complicated grief following traumatic bereavements.

Social support

Kaniasty and Norris (2001, p. 201) define social support as “those social interactions that provide individuals with actual assistance and embed them into a web of social relationships perceived to be loving, caring, and readily available in times of need.” This broad conceptualization describes the nature of the social interaction and emphasizes the importance of having someone available when needed. Two factors that have received an increasing amount of focus from the research field are received and perceived social support (Haber, Cohen, Lucas, & Baltes, 2007). While received social support describes the actual support an individual receives, perceived social support describes the perception that social support will be available in times of need (S. Joseph, 1999; Kaniasty & Norris, 2001). Research has indicated that perceived social support might be of special relevance (Sherbourne & Stewart, 1991).

Research has found a person's access to social support to be beneficial in the aftermath of loss (Cohen & Wills, 1985; Norris & Kaniasty, 1996), protective of negative bereavement outcomes such as complicated grief (Vanderwerker & Prigerson, 2004), and capable of accelerating recovery after stressful events (Nurullah, 2012). Furthermore, lack of social support has been found to function as a risk factor in the development of psychological distress following

bereavement (W. Stroebe & Schut, 2001; van der Houwen et al., 2010). However, research regarding the effect of social support on bereavement outcome often has inconsistent results, with some studies finding it affected by social support (Vanderwerker & Prigerson, 2004) and others not (W. Stroebe, Zech, Stroebe, & Abakoumkin, 2005).

The empirical body is characterized by inconclusive findings on how and whether social support exerts its effect after major life events. Thus, research investigating the role of social support in the trajectory of complicated grief is important. Increased knowledge in this field may shed light on the importance of optimizing social network support after bereavement. It may also guide professional advice and interventions. Such outcomes are important to reduce the chances of parental bereavement leading to complicated grief and to facilitate adjustment after the loss.

Aims of the present study

Losing someone in an event like the one experienced by the bereaved parents on the 22nd of July 2011 places the individual at special risk for psychological maladjustment in relation to his or her loss. Mode of death is considered a potent risk factor for negative bereavement outcomes, with deaths resulting from violence producing more severe grief symptoms compared to natural deaths (Currier, Holland, Coleman, & Neimeyer, 2008; Sanders, 1988; van der Houwen et al., 2010). Losing a child is also found to be an especially severe risk factor for negative bereavement outcomes such as complicated grief (Neria et al., 2007; Sanders, 1988; Stroebe & Schut, 2001). Parents bereaved of a child have been found to display greater and more intense grief reactions compared to individuals bereaved of a parent or a spouse (Neria et al., 2007).

Gender differences in grieving have also been found. In the majority of the research conducted, women have been found to have significantly higher levels of complicated grief than men (Kersting et al., 2011; Latham & Prigerson, 2004; McDevitt-Murphy, Neimeyer, Burke, Williams, & Lawson, 2012; Neria et al., 2007; Spooren, Henderick, & Jannes, 2001). Taken together, research on these risk factors suggests that the parents bereaved of their children after the terror attack on Utøya are at greater risk of experiencing symptoms of complicated grief.

With this in mind, the aim of this study is to investigate the impact of social support on levels of complicated grief over time among bereaved parents after the Utøya terror attack. Possible gender differences in complicated grief levels will also be explored. The impact of social support on complicated grief in bereaved parents will be investigated through the following research questions: Is there

a decrease in complicated grief over time? Is there an effect of social support or gender on overall complicated grief among bereaved parents? Does social support or gender influence levels of complicated grief over time? Our hypotheses are the following:

1. There will be a decrease in complicated grief symptoms over time.
2. Bereaved parents with higher levels of social support will show lower overall levels of complicated grief symptomatology compared to those with lower levels of social support.
3. Women will exhibit more overall complicated grief symptomatology compared to men.
4. Bereaved parents with higher levels of social support will show a faster acceleration in their recovery from complicated grief over time compared to those with lower levels of social support.

Methods

Procedure and participants

This paper on bereaved parents is based on a large research project called “Bereaved Parents, Partners, Children, Siblings and Friends After the Utøya Murders 22.07.11,” conducted by the Centre for Crisis Psychology in Bergen ([Dyregrov, Dyregrov, & Kristensen, 2015](#); [Dyregrov, Kristensen, Johnsen, & Dyregrov, 2015](#)). Based on public lists of the deceased and retrieval of information from the National Population Registry, bereaved parents were identified and invited to participate in the research project, which consisted of three data collection points: T1: 18 months, T2: 28 months, and T3: 40 months after the terror attack. Step-parents were located and invited as participants through information given by the biological parent. All the participants received written information about the research project and signed a consent form prior to participation. The bereaved parents completed a survey at each of the three data collection points, either on paper (63%) or online, using SurveyMonkey.com (37%).

A total of 86 unique eligible participants took part in the study at T1 ($n = 67$, 55% women), T2 ($n = 83$, 53% women), and/or T3 ($n = 76$, 54% women). There were no significant differences in the gender or age of the deceased between the biological and step-parents who chose to partake in our study ($n = 86$) and those who declined ($n = 41$). The mean age of the 86 participants was 51.6 years (Range: 39–78, SD : 6.90). In total, 41 participants were male (47.7%, M : 53.05 years, Range: 39–70, SD : 7.16) and 45 were women (52.3%, M : 50.29 years, Range: 40–78, SD : 6.45). The sample included 79 biological parents (91.9%) and a minority of

seven step-parents (8.1%). Biological parents and step-parents were considered as one sample for this study. The majority of the participants were married or cohabitants (88%). All respondents were recruited as individuals.



Our study has a longitudinal design, using data from all three data collection points during the research project. The research project has been reviewed and approved by the Regional Committee of Medical and Health Research Ethics, South/East Norway.

Measures

We used an overall survey composed of multiple questions dealing with individual and environmental aspects prior to, during, and after the terror attack. The chosen variables for our study contained items relating to demographics, current levels of support from the surrounding social network, and complicated grief symptomatology.

Crisis Support Scale – The Crisis Support Scale (CSS) is a measure of social support and was developed from a semi-structured interview on Crisis Support (Brown, Andrews, Harris, Adler, & Bridge, 1986) by S. A. Joseph, Andrews, Williams, & Yule (1992). CSS is a self-report questionnaire comprising seven items,

where respondents rate their answer on a 7-point Likert scale ranging from *never* (1) to *always* (7). The items refer to the availability of others, contact with equals, confiding in others, practical help, emotional support, feeling let down, and overall satisfaction with the received support (S. A. Joseph et al., 1992). Possible scores range from 7 to 49, and a higher score on CSS indicates a greater level of social support. The CSS has been validated through several studies (Bödvarsdóttir & Elklit, 2004; Elklit, Pedersen, & Jind, 2001; S. A. Joseph et al., 1992), indicating it to be a good instrument for assessing social support after a crisis. Due to our Norwegian sample, a Norwegian translated version of CSS was used. Cronbach's alpha for the Crisis Support Scale in the present study was T1 at .69.

Inventory of Complicated Grief – The Inventory of Complicated Grief (ICG) was developed to assess maladaptive reactions to loss (Prigerson et al., 1995). The 19-item self-report questionnaire measures complicated grief and is rated on a five-point Likert scale ranging from *never* (0) to *always* (4). The items assess feelings of disbelief, anger and bitterness, preoccupation and yearning for the deceased, avoidance, withdrawal and loneliness, difficulties accepting the loss of the deceased, and visual and auditory hallucinations. The scores can range from 0 to 76, with a clinical cut-off in the range of 25 (Prigerson et al., 1995) to 36 (Kersting et al., 2011; O'Connor, Lasgaard, Shevlin, & Guldin, 2010). In our study, we used complicated grief as a continuous variable, where higher scores on ICG indicated higher levels of complicated grief. This form of measurement demonstrated good psychometric properties (Keesee, Currier, & Neimeyer, 2008; Kersting et al., 2011; Prigerson et al., 1995) and has been shown to predict several negative long-term physiological and psychological health outcomes of bereavement (Lichtenthal et al., 2004; Prigerson et al., 1997; Szanto, Prigerson, Houck, Ehrenpreis, & Reynolds, 1997). A Norwegian translation of the original scale was used. The Cronbach's alphas for the ICG in the present sample were .85, .92, and .92 for T1, T2, and T3, respectively.

Statistical analyses

The relationships among gender, support, and complicated grief were first explored using Pearson product-moment correlation coefficients. To address our hypotheses, we used hierarchical linear modeling (HLM; Raudenbush & Bryk, 2002), interchangeably referred to as multilevel linear models, mixed models, or random coefficient models (Raudenbush, 1993; Singer & Willett, 2003). A defining feature of such models is the hierarchical structure of the data, with observations at Level 1 nested within Level 2, observation

at Level 2 nested within Level 3, and so on. When the data are longitudinal, as they are in this study, the different levels can be said to be within- (Level 1) and between- (Level 2) subjects.

We followed Singer and Willett's (2003) recommendations on model building by estimating a systematic sequence of models. The first model we estimated was an *unconditional means model*, so called because it estimates the grand mean of complicated grief across measurement points and individuals without any predictors. Next, we entered measurement point as a within-subjects, Level-1 variable in an *unconditional growth model*. This model also addressed our first hypothesis that the level of complicated grief decreases with time. To address our Hypotheses 2 and 3, gender and social support as well as cross-level interactions with measurement point were added as between-subjects, Level-2 variables to the previous unconditional growth model.

Respondents' age and place of residence (urban vs. rural) were included as covariates in the analyses. All independent variables were further re-centered to make interpretation of the HLM results easier. The continuous variables age and social support were centered on their mean value. The remaining variables were rescaled such that the value zero on measurement point represented the first measurement point, the value of zero on gender represented males, and the value of zero on place of residence represented rural areas. All analyses were performed using STATA 14.0.

Results

Table 1 presents the correlation coefficients among gender, support, and complicated grief. Gender was significantly correlated with complicated grief on T1 ($r = .36, p = .003$), T2 ($r = .41, p < .001$), and T3 ($r = .36, p = .002$), suggesting that being female is associated with higher levels of complicated grief. Complicated grief symptoms on T1 were significantly related to complicated grief symptoms on T2 ($r = .75, p < .001$) and T3 ($r = .82, p < .001$), indicating that the level of complicated grief among parents 18 months after the loss of their child is associated with levels of complicated grief 28 and 40 months after bereavement. Moreover, there was a positive correlation between complicated grief on T2 and complicated grief on T3 ($r = .82, p < .000$), suggesting that high levels of complicated grief 28 months after losing a child is related to high levels of complicated grief 40 months into the grieving process.

TABLE 1: Means, standard deviations, and inter-correlations among gender, social support, and grief ($N = 85$).

	1	2	3	4	5	Mean	SD
1. Gender	—	.36**	.41***	.36**	-.01	52% ^a	—
2. Grief T1		—	.75***	.82***	-.12	35.70	11.08
3. Grief T2			—	.82***	-.07	35.55	14.55
4. Grief T3				—	-.16	33.30	14.11
5. Support T1					—	33.19	7.69

Note. T1 = Time 1; T2 = Time 2; T3 = Time 3. Gender is scored 0 = male and 1 = female.

^a Indicates percentage women

** $p < 0.01$. *** $p < 0.001$.

Hierarchical linear modeling was next performed, starting with the unconditional means model. The unconditional means model estimated the grand mean to be 35.42 ($SE = 1.37$). This is shown as the fixed γ_{00} -coefficient in Table 2. Of primary interest in the unconditional means model are the random variance components shown at the bottom of Table 2. The variance associated with the Level-1 error is the estimated within-person variance (σ_{ϵ}^2) and was 36.84 (95% C.I. = 29.06; 46.70). The estimated Level-2, between-subject variance (σ_0^2) was 144.67 (95% C.I. = 103.63; 201.97). Single parameter tests of these two variance components resulted in $z = 8.26$, $p < .001$ for the within-person variance and $z = 5.87$, $p < .001$ for the between-subject variance. Because both variance components are statistically different from zero, they suggest that there is individual variation in complicated grief over time (Level 1) as well as unexplained variance between individuals (Level 2) in complicated grief.

TABLE 2: Results from hierarchical linear modeling predicting changes in complicated grief ($N = 85$).

Fixed effects (π_{0i})	Model 1	Model 2	Model 3	Model 4
Intercept (γ_{00})	35.42*** (1.37)	36.81*** (1.47)	30.84*** (2.42)	31.21*** (2.50)
Gender (γ_{01})	—	—	10.19*** (2.57)	9.57** (2.79)
Change trajectory (π_{1i})				
Intercept (γ_{10})	—	-1.35* (0.53)	-1.34* (0.53)	-1.69* (0.80)
Gender (γ_{11})	—	—	—	0.61 (1.06)
Random variance components				
<i>Level 1</i>				
Within-person (σ_{ϵ}^2)	36.84 (4.46)	35.12 (4.25)	35.14 (4.26)	35.10 (4.25)
<i>Level 2</i>				
Initial status (σ_0^2)	144.67 (24.63)	145.68 (24.66)	120.02 (20.76)	119.85 (20.73)
Change trajectory (σ_1^2)		6.95e-10 (3.86e-09)	4.95e-11 (2.45e-10)	1.40e-10 (6.57e-10)
Pseudo- R^2 statistics				
R_{ϵ}^2		.047	.047	.047
R_0^2			.176	.177

Note: Table entries represent unstandardized parameter estimates with standard errors in parentheses.

Model 1 = unconditional means model; Model 2 = unconditional growth model; Model 3 = multiple model with gender as the independent variable and age and residence as covariates (coefficients not shown); Model 4 = multiple model with a cross-level interaction of time and gender

R_{ϵ}^2 = the proportion within-person variability explained (by time). R_0^2 is the proportion variability in initial status explained.

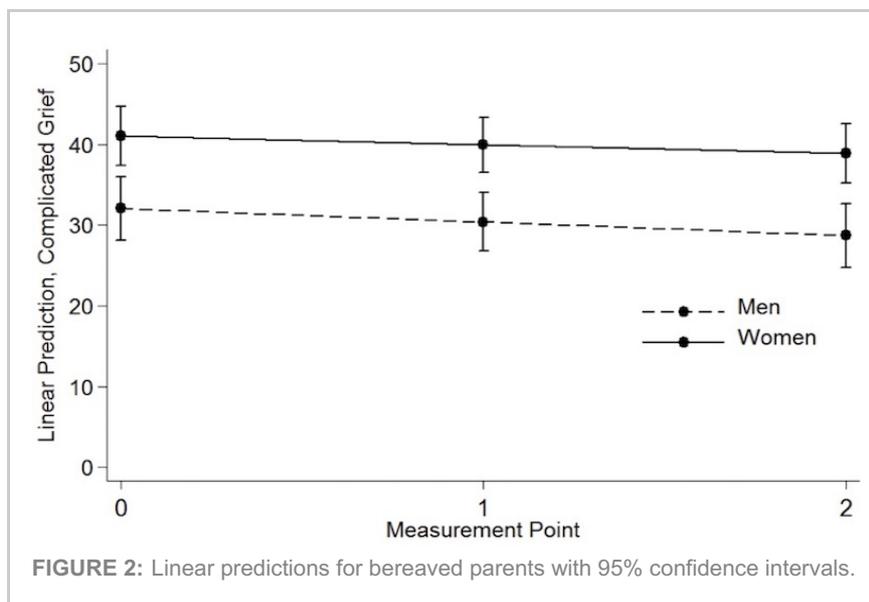
* $p < .05$. ** $p < .01$. *** $p < .001$

The results of the unconditional growth model are shown in Model 2 in Table 2. The fixed γ_{00} -coefficient of 36.81 (95% C.I. = 33.92; 39.69) is the overall level of complicated grief at the first measurement point. The γ_{10} -parameter of -1.35 suggests that the level of complicated grief decreased, on average, by 1.35 points at each measurement point. This slope parameter was found to be statistically significant (95% C.I. = -2.38; -0.32). This result supports our first hypothesis.¹ The pseudo- R_{ϵ}^2 of .047 suggests that about 5% of the within-person variance in complicated grief can be explained by the passage of time.

Next, gender was added as a predictor (Model 3 in Table 2). The respondents' age and residence (urban vs. rural) were included as covariates. Social support was not included at this point, because only 67 respondents had completed the crisis support scale at the first measurement point. Including social support as a predictor would therefore substantially decrease the sample size. The effect of gender was $\gamma_{01} = 10.19$ (95% C.I. = 5.15; 15.23) and statistically significant ($z = 3.96$, $p < .001$). Females were thus estimated to score about 10 points higher than males on complicated grief at the

first measurement point. Neither of the covariates, age ($\gamma_{02} = 0.23$, $p = .22$) or residence ($\gamma_{03} = 0.92$, $p = .72$), had statistically significant effects. The pseudo- R_0^2 of .176 suggests that 17.6% of the variability in initial grief can be explained by gender and the covariates combined.

A cross-level interaction between measurement point and gender was next included (Model 4 in Table 2), resulting in a non-significant coefficient of $\gamma_{11} = 1.53$ (95% C.I. = -0.45 ; 3.51). Taken together, the results from Model 3 and Model 4 support our third hypothesis. Females have higher levels of complicated grief at the first measurement point, and they continue to have so throughout the next two measurement points. This tendency is illustrated in Figure 1.



Social support was finally added as a predictor alongside gender. The next set of analyses is thus based on 67 respondents. Because the following analyses are not based on the exact same sample of participants, their random variance components cannot be compared with the previous variance components presented in Table 2. The effect of social support was $\gamma_{04} = -0.19$ (95% C.I. = -0.51 ; 0.129) and is not statistically significant from zero ($z = -1.17$, $p = .24$). The interaction between measurement point and social support also resulted in a non-significant coefficient ($\gamma_{14} = -0.10$; 95% C.I. = -0.23 ; 0.03). None of our hypotheses pertaining to social support therefore received support. Bereaved parents with higher levels of social support did not show lower levels of complicated grief symptomatology, and the decrease of complicated grief over time does not seem to depend on the amount of social support.

Discussion

The present study investigated the impact of social support and gender on levels of complicated grief among bereaved parents after the Utøya terror attack on the 22nd of July 2011. The results showed that there was a significant decrease in complicated grief over time. However, despite the reduction in complicated grief symptoms, high levels of complicated grief continued to exist. The high scores might be attributed to the extreme and violent event experienced and the fact that our sample consisted of parents losing their child. Both aspects have previously been linked to increased intensity of complicated grief symptoms ([Currier et al., 2008](#); [Neria et al., 2007](#)). It is also a possibility that the high levels of complicated grief three and a half years after the terror attack were maintained to some degree by public attention, such as extensive media coverage, the trial, the sentencing, the commission report, and the general public debate ([Dyregrov & Kristensen, 2016](#)).

Additionally, our results showed that women had higher levels of complicated grief at the first measurement point, and they continued to have so throughout the next two measurement points. These results are in line with previous research results, where women were often found to have higher levels of most bereavement-related symptoms than men ([Littlewood, Cramer, Hoekstra, & Humphrey, 1991](#); [Schwab, 1996](#); [Spooren et al., 2001](#); [Stinson, Lasker, Lohmann, & Toedter, 1992](#)). Although the results display that women experience more intense and prolonged grief symptoms after losing a child, they also use different coping mechanisms and strategies. It has also been proposed that results such as these reflect a cultural tendency to embrace and design measurement instruments that measure typical female displays of affect in grief. They also dismiss reactions that are more commonly expressed by men ([Doka & Martin, 2010](#)).

Contrary to our hypotheses, bereaved parents with higher levels of social support did not report lower overall levels of complicated grief or lower levels of complicated grief over time. Furthermore, our main findings revealed that social support did not accelerate recovery in our sample of bereaved parents. Our findings are supported by a large prospective study conducted by Anusic and Lucas ([2013](#)). Analysis on three longitudinal datasets provided no evidence that social support buffered the adaption to the loss of a spouse ([Anusic & Lucas, 2013](#)).

There are several possible explanations for this tendency. The study of social support is challenging due to its multifaceted nature, and previous research has indicated that various aspects of social support might affect health in ways that are only mildly related ([Haber et al., 2007](#)). The empirical literature suggests that both

perceived and received social support may be of relevance in preventing psychopathology ([Haber et al., 2007](#); [Nurullah, 2012](#)) and that research that considers this multidimensionality is important. The CSS incorporates several aspects of social support, such as received and perceived social support. However, one can argue that the CSS does not separate the potential distinct effect of these various aspects in a satisfactory manner. Therefore, it is a possibility that our measure of social support conceals differentiated effects on levels of complicated grief. Furthermore, Cronbach's alpha for the CSS on the first measurement point could, in addition, be indicative of less than optimal reliability and potentially be explanatory for our null finding.

Another explanation of why social support does not accelerate the recovery process may be found in the challenges and difficulties of friends' and family members' efforts of providing adequate support in the aftermath of such extreme and devastating deaths as those of terror killings. Family and friends might feel unsure of how to support the bereaved, and they might not dare to be as directly supportive as needed. Alternatively, they might focus on speaking about trivial things out of fear of further stressing the bereaved ([Dyregrov & Dyregrov, 2008](#)). There can also exist misconceptions regarding the intensity and duration of the grieving process and norms related to how bereaved individuals should display grief among the support providers. Such inclinations affect how support systems respond to the bereaved individuals ([Wortman & Lehman, 1985](#)). Misconceptions like these could lead to responses from the social support network that the bereaved parents perceive as unsupportive ([Dyregrov & Dyregrov, 2008](#)). This may illustrate how received social support is not enough, in itself, to make the bereaved parent feel cared for.

This tendency could also be seen in the perspective of the Relational Regulation Theory, which constitutes that social support networks help affected individuals best by regulating their feelings, cognitions, and behaviors. Subsequently, the bereaved are led toward better psychological adjustment ([Lakey & Orehek, 2011](#)). Friends and family members might struggle in their support efforts and fail to contribute to relational regulation, thereby minimizing the potential effect of social support. It is also possible that in some cases, social support has a contradictory effect, such as in being perceived as harmful by the bereaved ([Dyregrov, 2004](#); [Wilsey & Shear, 2007](#)). Examples of this situation could be impertinent advice about how to grieve (e.g., recommending not to visit the grave as often, cleaning the room of the deceased, or "pushing" the bereaved into work too soon). It is possible that negative social interactions could counterweigh the beneficial effects of social support in the bereaved

parent's recovery process and hinder his or her adjustment to the loss. Finally, the level of social support might not be the best measure for studying the effect of social support on complicated grief. The quality of the ongoing social support given and received constantly changes over time and may be difficult to grasp in one-time measurement. The relational interactions (Lakey & Orehek, 2011) and the dynamic processes in the meeting between those grieving and the social support network might be of more relevance.

Wortman (1989) suggests that there might be stigma related to persistent experiences of difficulties after loss, which causes the bereaved to conceal levels of distress in order to maintain their relationships within their social network. This could possibly make the bereaved parents need for social support, and the amount of support given by friends and family, disproportionate. It might also reduce the effect on adaptation to bereavement.

Another possible explanation for the lack of an acceleration effect of social support is that the bereaved parents were offered and reported a large amount of help from the Norwegian health care system, in terms of proactive help given within the municipalities (Helsedirektoratet, 2011), national weekend gatherings, and help received from psychologists and general health practitioners. It is a possibility as well that the social network surrounding the bereaved parent felt, to some degree, superfluous or that friends and family withheld their support because they felt unneeded or insecure about their support abilities.

Strengths and limitations

Our sample ($n = 86$) consisted of 68% of the parents who lost a child at Utøya, with no significant gender differences between the biological parents who chose to partake in our study and those who declined. This tendency indicates that our sample is representative of this bereaved population. It was characterized by a high degree of homogeneity, consisting of parents in approximately the same age range, experiencing the same traumatic event and loss at the same time, and by the same violent mode of death. Homogeneous samples are rare in the field of complicated grief, and our sample may have provided less confounding variables compared to studies using more heterogeneous samples.

Another strength of the present study is its longitudinal design. Inclusion of three data collection points makes more extensive testing of the impact social support has on complicated grief possible. However, the first collection of data did not occur until 18 months after the terror attack. Levels of complicated grief and social support may have been higher closer to the attacks, and an earlier data collection point could have had potential consequences for the

results of the study.

Both measurement instruments, respectively CSS and ICG, were self-report questionnaires. This type of data collection method has limitations in that it might increase misinterpretations of the questions and that it lacks the flexibility and in-depth information that can be retrieved from semi-structured interviews and other qualitative measures (Bui et al., 2015; Derogatis, 1986). One could therefore argue that there is a need for additional methods besides self-report questionnaires to investigate constructs such as social support and complicated grief (e.g., semi-structured interviews or in-depth interviews). Both measurement instruments used in the present study have, however, been shown to have good psychometric properties.

CSS has been shown to be a valid measurement instrument.

However, a general limitation of using quantitative measures of social support is that it can be challenging to discriminate between the recipient and the provider of social support. It can also prove difficult to determine what impact the relationship between them has (Lakey & Orehek, 2011). Other factors, such as personality, social influences, and contextual mechanisms, may affect the score, and by not accounting for these factors, only a partial truth will be reflected.

Conclusion

The present study found levels of complicated grief, although remaining relatively high, to abate over time. The gender of the bereaved parents was also found to have an effect on symptoms of complicated grief, with women reporting higher levels of complicated grief at all data collection points. The observed gender differences could indicate a greater vulnerability for complicated grief reactions in women compared to men, or they could also reflect socially learned differences in coping and expressions of grief. Further research should be aware of these factors. Social support was not found to have an effect on levels of complicated grief or to accelerate the bereaved parents' adaptation to loss. Further research should investigate whether received and perceived social support exerts different influences on traumatic bereavement outcomes. It should also address how relational regulation between the bereaved and their social support networks might influence health outcomes such as complicated grief. The complexity of social support and its connection with complicated grief is in need of further investigation. This may require the use of more complex data analyses and the utilization of both quantitative and qualitative research methods.

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Citation

Wågø, S. S., Byrkjedal, I. K., Sinnes, H. M., Hystad, S. W., & Dyregrov, K. (2017). Social support and complicated grief: A longitudinal study on bereaved parents after the Utøya terror attack in Norway. *Scandinavian Psychologist*, 4, e10.

<https://doi.org/10.15714/scandpsychol.4.e10>

Abstract

Social support and complicated grief: A longitudinal study on bereaved parents after the Utøya terror attack in Norway

On the 22nd of July 2011, Norway experienced its most extreme act of terror in recent times. The terror attacks at the Government Quarters and Utøya, claiming the lives of 77 people, left a nation in shock and numerous people grieving. Such traumatic bereavement is associated with an increased risk of chronically elevated grief symptoms, and identifying protective factors is important. The purpose of this study was to investigate the effect of social support on complicated grief over time among bereaved parents after the terror attack on Utøya. Our sample consisted of 86 bereaved parents (*M* age = 51.6 years, 52.3% women), who completed the Crisis Support Scale (CSS) and the Inventory of Complicated Grief (ICG) 18, 28, and 40 months after the loss of their child. The results showed a decrease in levels of complicated grief with time. Men had lower levels of complicated grief than women. Findings did not, however, show that parents with higher levels of social support had significantly lower levels of complicated grief compared to parents with less social support. Furthermore, our results did not suggest an accelerated recovery directly due to these factors of social support and gender. Implications and suggestions for further research are discussed.

Keywords: bereavement, complicated grief, CSS, gender, health outcomes, ICG, social support.

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Received: February 7, 2017. **Accepted:** June 29, 2017. **Published:** July 19, 2017.

Language: English.

Acknowledgements: We would like to express our deepest gratitude toward the bereaved parents who, despite their enormous loss, were willing to participate in the overall research project. By doing so, they have contributed to increasing public knowledge on traumatic child bereavement and its relationship to both mental health outcomes and social support. This knowledge provides an important contribution to both clinical practice and the scientific research field.

Competing interests: The authors report no conflict of interest. The authors alone are responsible for the contents and writing of this paper.

This is a peer-reviewed paper.