[The Version of Record of this manuscript has been published and is available in *Death*Studies http://dx.doi.org/10.1080/07481187.2017.1329760]

# What determines supportive behaviours following bereavement? A systematic review and call to action

Emma L. Logan<sup>a</sup>

Emma.Logan@postgrad.curtin.edu.au

Jennifer A. Thornton<sup>a</sup>

J.Thornton@curtin.edu.au

Lauren J. Breen<sup>a</sup>

Lauren.Breen@curtin.edu.au

<sup>a</sup> School of Psychology and Speech Pathology, Curtin University, GPO Box U1987, Perth,

Western Australia 6845, Australia

Correspondence concerning this article should be addressed to Emma L. Logan, School of Psychology and Speech Pathology, Curtin University, GPO Box U1987, Perth, Western Australia 6845, Australia. E-mail: Emma.Logan@postgrad.curtin.edu.au

Keywords: systematic review; bereavement; grief; community norms; social support

1 Abstract

2	Very few factors that impact the grieving process can be modified after the fact to the extent
3	that social support can. However, social support has received limited research attention,
4	resulting in little conceptual understanding of the mechanisms behind perceptions of, and
5	intentions to support, grieving persons. This systematic review aimed to explore bereaved,
6	decedent, and respondent-related determinants of the provision of social support. The review
7	yielded 42 studies impacted by various methodological and sampling limitations. This review
8	poses a call to the field for more rigorous study of social support determinants to better assist
9	the bereaved and their natural supporters.
10	
11	Keywords: systematic review; bereavement; grief; community norms; social support
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

26 Introduction

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

The provision of helpful, timely social support is one of the strongest determinants of positive psychosocial outcomes following bereavement (Hibberd, Elwood, & Galovski, 2010). Although a multitude of factors (e.g., attachment to the deceased or cause of death) may complicate the grieving process (Lobb et al., 2010), very few of these can be modified after the fact to the extent that social support can (Bath, 2009). However, bereaved people often do not receive the quantity or quality of social support that they would like (Aoun et al., 2015). For social support to be effective, a need must be recognised, the potential supporter must be capable and willing, and the gesture must be perceived as helpful by the receiver (Kaunonen, Tarkka, Paunonen, & Laippala, 1999; Rando, 1993). Doka (1989) was the first to theorise the provision of social support as a function of 'grieving rules,' that is, principles that govern who should grieve, when, where, how, for how long, and for whom. Bound by these rules, losses are appraised as either enfranchised and legitimate, or disenfranchised and illegitimate. While an enfranchised loss promotes offerings of instrumental and/or emotional support, when a loss is disenfranchised, the grief is not recognised or validated and support is generally not offered (Doka, 1989). Although the role of informal supports in mediating the grief experience is increasingly well recognised, efforts to promote and enhance the community's capacity to provide bereavement support remain limited (Breen et al., 2015). Within the grief literature, there appears to be considerable emphasis on the experience of the bereaved, but far less so on the potential supporter and the mechanisms (i.e., determinants) that drive their perceptions of grief and intentions to provide social support (Bath, 2009). The authors know of only one other review that found four decedent-related determinants (cause of death, age, gender, family composition) and three respondent-related determinants (gender, age, experience with

bereavement) of social support following bereavement (Calhoun & Allen, 1991). However,

their review comprised only studies previously known to those authors and focused solely on suicide bereavement.

Given the largest proportion of bereavement care occurs in communities, rather than professional settings (Aoun et al., 2015), a comprehensive understanding of the circumstances under which potential supporters respond to grieving persons is of critical importance. This study set out to search the thanatological literature to provide a systematic account of all determinants that may hinder or facilitate the provision of social support to grieving persons. Specifically, determinants of social support were conceptualised as those factors that influence community perceptions of, and behavioural intentions towards, bereaved people. A synthesis of this kind is important to inform and direct future research in this area, guide bereavement practitioners in their work with grieving persons, and develop a foundation from which to enhance and grow the community's capacity to provide bereavement support. In conducting this review, we were guided by the research question: How do characteristics of the bereaved, the decedent, and the respondent impact on community responses to bereavement in terms of expectations of, beliefs about, evaluations of, and intentions to act towards bereaved people?

67 Method

A systematic search of the literature was performed in January to March 2015 and updated in January 2016. Our search strategy, screening criteria, and analysis plan were specified *a priori* and registered with the International Prospective Register of Systematic Reviews (PROSPERO; www.crd.york.ac.uk/prospero), registration number CRD42015016095. The review is reported according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009).

## **Inclusion and Exclusion Criteria**

Studies were considered if they described and/or manipulated one or more determinants which affect an individual's perception of and/or intended behaviours towards a bereaved person. Determinants could relate to the bereaved, the decedent, or the study respondent.

Studies had to be published in English or available for English translation and all study designs and data types were eligible. Only studies that described original research, upon first publication, were included.

Given the focus on community capacity for support, studies were excluded if they specifically described responses to be eavement from the perspective of a bereaved person, rather than their potential supporters. Similarly, studies examining specific respondent populations (e.g., health professionals or teachers) were excluded, in addition to those that did not clearly demarcate responses of specific populations from the general community. Studies were also deemed ineligible if full texts were not available once efforts to obtain a hard copy were exhausted.

#### **Search Strategy**

An electronic search of databases was performed across PubMed, EMBASE, ProQuest Central, CINAHL Plus, PsychINFO, and the Cochrane Database of Systematic Reviews.

Further studies were identified through grey literature searches of ProQuest Dissertations and Theses, NHS Evidence, and OpenGrey. The searches consisted of the keywords "bereavement" or "grief" AND "social norms" or "judgment" or "social support" or "helping behaviour" or "expectation or "belief" or "evaluation," with slight variations according to each database. No date or language restrictions were placed on the search. A reference list and citation search was also conducted to identify any further articles. Lastly, seven journals yielding the highest number of articles were hand-searched (Death Studies, Omega, Journal of Psychology, Journal of Consulting and Clinical Psychology, International Journal of Palliative Nursing, Bereavement Care, and Journal of Cultural Diversity).

#### **Study Selection and Data Extraction**

Title and abstract screening was followed by an inspection of full text articles. A random 10% of full texts were reviewed by authors one and three with an inter-rater Cohen's Kappa reliability of .80 indicating substantial agreement (Landis & Koch, 1977).

Disagreements were resolved by consensus and selection of the remaining 90% was determined by the first author.

Data were extracted from each study into a standardised, pre-piloted spreadsheet. Key variables included study characteristics, sample characteristics, determinant and outcome measurement, and direction and nature of reported effects. Data extraction of a random 10% of included studies were independently conducted by authors one and three to ensure consistency of reporting. Differences were discussed and data in the remaining 90% of studies were extracted by the first author.

# **Quality Assessment**

A quality assessment of the included studies was performed using the QualSyst quality appraisal tools (Kmet, Lee, & Cook, 2004). Mixed-method studies were evaluated using both the quantitative and qualitative checklists. Each study was scored out of 1 with quality appraised as: limited (less than .50), adequate (.50-.70), good (.70-.80), or strong (greater than .80). No studies were excluded on the basis of poor quality; however, limitations were considered in the reporting of findings.

## **Analysis**

Heterogeneity in study designs, samples, and measurement of outcomes precluded the consideration of meta-analysis. To account for the breadth in study designs, a narrative synthesis was conducted following the Guidance on the Conduct of Narrative Synthesis in Systematic Reviews (Popay et al., 2006).

125 Results

### **Study Characteristics**

Defining the research question and subsequent search words for this particular review using the traditional PICOS (population, intervention, comparator, outcome, study design) criteria proposed by The Cochrane Collaboration (Higgins & Green, 2008) proved challenging. This was due, in part, to the lack of a comparison/control group and a broad interest in all study designs, but could also be attributed to the generic nature of the keywords (e.g., belief, evaluation, judgment) relevant for describing the outcomes of interest. Consequently, although the authors developed a relatively narrow set of keywords, the initial database searches still yielded a total of 12967 studies.

After duplicates were removed, 9879 studies remained, of which 9769 were excluded on the basis of their title and/or abstract. Key reasons for exclusion included that the study did not describe or manipulate at least one variable that determines perceptions of/intended behaviours towards the bereaved, the sample was specific to one area of the population (e.g., teachers), and the study described responses to bereavement from the perspective of the bereaved rather than their potential supporters (e.g., narratives of how the bereaved recall being enfranchised/disenfranchised by others). Full texts of the remaining 110 studies were assessed for eligibility. At this point, 20 additional studies were identified through hand searches of relevant journals, reference list searches, and citation searches. Of the 130 studies, 88 were excluded leaving 42 studies accepted for inclusion in the review. Reasons for exclusion were very similar to those described above, with some decisions unable to be made at the title/abstract screening phase due to a lack of published detail. Studies were published between 1979 and 2015, with 37 being journal articles and five unpublished theses/dissertations (see Figure 1).

[Insert figure 1 here]

The majority (n = 31) of included studies were quantitative, three were qualitative, and eight mixed-methods. There were 21 experimental (19 between-subjects and 2 withinsubjects), 19 cross-sectional survey, and two exploratory qualitative designs. The experimental studies commonly presented participants with one version of a vignette, exploring how response outcomes differed dependent on levels of one or more manipulations in the vignette (as well as specific respondent characteristics). The cross-sectional and qualitative studies more generally explored participants' perceptions of grief or behavioural intentions towards grieving persons. The studies originated from: USA (n = 34), Australia (n = 2), Japan (n = 2), Ireland (n = 1), Norway (n = 1), UK (n = 1), and Spain (n = 1).

#### **Quality Appraisal and Risk of Bias**

The included studies varied greatly in terms of study design, standards of reporting, and quality. The overall quality of the included studies was adequate for the quantitative studies (and mixed-methods quantitative) with an average score of .68 (SD = 0.13, range = .43-.95), and good for the qualitative studies (and mixed-methods qualitative) with an average score of .74 (SD = 0.13, range = .55-.90).

**Participant selection.** Despite attempting to represent general community experiences, there was a high likelihood of selection bias across the included studies due to unrepresentative sampling and mixed response rates. In the majority of cases, participants were recruited via convenience sampling (e.g., universities, shopping malls, churches, and schools). Of the 39 quantitative and mixed-method studies, only six reported response rates, ranging from 45% to 99%.

Confounding bias. Thirty-three of the studies conducted between-groups analyses, yet only six studies analysed group differences and of these, only two controlled for extraneous variables. None of the 21 studies employing experimental factorial designs reported postmanipulation checks. Post-manipulation checks are advocated as a method of identifying

participants who overlook key information to minimise cognitive effort in completing the task (Krosniak, 1991). Despite the likely influence of confounding variables, only 10 studies investigated the effects of participants' own experiences of bereavement (bereavement history) and none included a measure of social desirability.

**Power to detect effects.** Sample sizes varied from 9 to 5154 participants. However, of the 39 quantitative and mixed methods studies, only three reported conducting *a priori* power analyses to determine adequate sample size to detect potential effects. It is probable that a large proportion of studies were underpowered, obscuring true findings.

Study heterogeneity. Heterogeneity in study samples, manipulations, and measurement instruments limits the comparability of findings across studies and likely contributed to the dissimilarity in the direction of reported effects. All studies selected participants from the general community; however, there was a trend towards over-representation of women and Caucasian people. The mean reported age varied from 17.6 years to 56.1 years. Only 12 studies reported the bereavement history of its participants, with anywhere between 37% and 99% of samples having grieved one or more losses. Bereavement response outcomes predominately comprised behaviours or behavioural intentions towards bereaved people (both of the self and as expected of others), beliefs and expectations about the grief experience, ratings of appropriateness of specified grief reactions, and interpersonal reactions towards bereaved people. In general, key outcome variables were poorly defined and few studies employed the same or similar measures, obfuscating the direct comparison of study findings. There was also a distinct lack of psychometrically-sound instruments.

# **Synthesis of Findings**

A summary of the 42 studies is reported across Tables 1-3, with the 41 determinants summarised under the areas of bereaved, decedent, and respondent.

**Bereaved determinants.** Across the bereaved-related category 10 determinants were identified across 20 studies.

[Insert table 1 here]

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

Gender of the bereaved was the most highly studied bereaved-related determinant with 10 out of the 12 studies reporting an effect. Compared to women, men were offered fewer opportunities to talk (Calhoun, Abernathy, & Selby, 1986), and were perceived to have more difficulty confronting grief and expressing feelings, especially in later life (Costa, Hall, & Stewart, 2007). The remaining studies reported interaction effects between gender of the bereaved and cause of death, gender of the respondent, intensity of grief, anticipation of death, and time since death (Calhoun et al., 1986; Ginn, Range, & Hailey, 1988; Knight, Elfenbein, & Messina-Soares, 1998; Kubitz, Thornton, & Robertson, 1989; Miller, 2014; Penman, Breen, Hewitt, & Prigerson, 2014; Range, Bright, & Ginn, 1985; Thornton, Whittemore, & Robertson, 1989; Villa, 2010). Two studies found no gender effect for any response outcome (Calhoun, Selby, & Walton, 1985; Versalle & McDowell, 2004). Time since death received the next greatest attention with all six studies indicating the expected resolution of grief over time. As time since death increased, grief was perceived as more maladaptive (Costa et al., 2007), respondents expected fewer grief-related symptoms (Garson, 1994; Penman et al., 2014) and more recovery-related indicators (Garson, 1994; Vickio, Cavanaugh, & Attig, 1990), social engagements were rated as more appropriate (Miller, 2014), the bereaved was offered less social support (Dyregrov, 2005), and respondents were less willing to talk with the bereaved about the death (Garson, 1994). Interaction effects were also identified between time since death and gender of the respondent, bereavement history, gender of the bereaved, and relationship to the deceased (Garson, 1994; Miller, 2014).

Relationship to the deceased was explored in five studies. Greater enfranchisement was given to bereaved children, spouses, and parents compared with more distant relatives/friends and less well recognised relationships (e.g., abortion; Costa et al., 2007; Miller, 2014; Reynolds & Cimbolic, 1988; Robson & Walter, 2012; Thornton, Robertson, & Mlecko, 1991). In one study, an interaction was observed between relationship to the deceased and time since death, with seeking a romantic partner rated as more appropriate over time and feelings of sorrow for oneself rated as less appropriate for those who lost a spouse than a child (Miller, 2014).

Perception of coping emerged across two studies. One found that, compared with typical grief, brief and prolonged forms of grief were rated as less common and less healthy, with an expectation that the bereaved would rate lower in role functioning and be offered less support (Rosenberger, 1996). The other study showed an interaction between perception of coping, gender of the bereaved, and anticipation of death (Kubitz et al., 1989). Respondents generally expected less intense grief for women bereaved by anticipated than sudden deaths (responding more favourably to those conforming to the norm); no such effect was observed for men.

Perceived social support was identified in two studies. When perceived social support was high, the bereaved person was assumed to be coping better (Costa et al., 2007) and less support was offered (Villa, 2010). In addition to the determinants described above, age (Costa et al., 2007), religion (Costa et al., 2007), affective response (Garson, 1994), disability (McEvoy & Smith, 2005), and gender stereotypes of grief (Versalle & McDowell, 2004) were also examined; however, each were only identified in single studies.

**Decedent determinants.** The decedent-related category was least represented with only five determinants across 22 studies.

[Insert table 2 here]

Cause of death was the single most researched decedent-related determinant with all 17 studies reporting some effect. The cause of death most often researched was suicide, which was often compared to deaths caused by illness, accident, or natural causes. Specifically, suicidal deaths were associated with ratings of greater psychological disturbance in the decedent and the bereaved (Allen, Calhoun, Cann, & Tedeschi, 1993; Calhoun, Selby, & Faulstich, 1980; Calhoun, Selby, & Faulstich, 1982; Ginn et al., 1988; Range et al., 1985; Rudestam & Imbroll, 1983; Yamanaka, 2015); less likeability of the bereaved (Calhoun et al., 1980; Yamanaka, 2015); greater shame, blame, and guilt attributions (Allen et al., 1993; Calhoun et al., 1980; Calhoun et al., 1982; Calhoun et al., 1985; Rudestam & Imbroll, 1983; Sand, Gordon, & Bresin, 2013; Yamanaka, 2015); a more difficult grief experience (Calhoun, Selby, & Abernathy, 1984; Calhoun et al., 1985; Ginn et al., 1988; Villa, 2010); greater anticipated tension in expressing sympathy to, and interacting with, the bereaved (Calhoun et al., 1986; Calhoun et al., 1984; Calhoun et al., 1985; Ginn et al., 1988; Villa, 2010; Yamanaka, 2015); assumptions of less support by others (Range & Thompson, 1987; Villa, 2010); and stronger beliefs about maintaining secrecy around the cause of death (Calhoun et al., 1980; Calhoun et al., 1982; Calhoun et al., 1985; Ginn et al., 1988). One study reported death by murder to be equally difficult as death by suicide (Calhoun et al., 1984). Ten of the studies also reported no effects of cause of death on: psychological disturbance of bereaved, likeability, blame and guilt attributions, intensity of grief and difficulty of the experience, anticipated support by others, anticipated tension and difficulty expressing sympathy to and interacting with the bereaved, and appropriateness of various help sources and helping statements (Allen et al., 1993; Calhoun et al., 1984; Calhoun et al., 1980; Calhoun et al., 1985; Ginn et al., 1988; Knight et al., 1998; Penman et al., 2014; Range & Thompson, 1987; Thompson & Range, 1990; Thornton et al., 1989).

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

Two out of five studies reported a significant effect for anticipation of death. In one study, anticipated deaths were described as easier to accept and resolve than unanticipated deaths (Costa et al., 2007). Another study reported an interaction effect between anticipation of death, gender of the bereaved, and intensity of grief symptoms (Kubitz et al., 1989). The other three studies found no effect of anticipation of death on perceived helpfulness of support-intended statements, blame attribution, appropriateness of grief reaction, impact of event, prediction of post-bereavement outcome, and perceived social support (Range & Thompson, 1987; Range, Walston, & Pollard, 1992; Thompson & Range, 1990).

Gender of the decedent was manipulated in four studies. The only significant finding showed an interaction effect between deceased gender and gender of the respondent, with participants expecting to be more relaxed around the bereaved family when the decedent was the same gender as them (Calhoun, Selby, & Gribble, 1979). There was, however, no effect of gender of the decedent on psychological disturbance of the deceased or bereaved, likeability of the bereaved, blame attributions, duration of sadness, and behavioural intentions (Calhoun et al., 1980; Lester, 1990; Sand et al., 2013).

Two studies examined the effect of decedent age on responses to suicide bereavement. One study observed that parents bereaved by older child deaths were rated as more psychologically disturbed (yet more likeable) than if the child was younger (Range et al., 1985). Another study also reported an interaction effect between decedent age and cause of death; with a child or adolescent death, blame was greater for suicide than illness; with an adult death, there was no association between cause of death and blame attribution (Thornton et al., 1989). However, these two studies found no effect of decedent age on psychological disturbance or role functioning of the parents, blame attribution, severity and duration of grief reaction, expectations of tension and difficulty when visiting, and usefulness of various help sources (Range et al., 1985; Thornton et al., 1989).

Two studies examined the effect of motive for suicidal death on responses to the bereaved (Calhoun et al., 1979; Lester, 1990). In Lester's (1990) study, participants believed it to be more difficult to express sympathy to a person bereaved by suicide where the decedent expressed self-blame, rather than anger or a desire to escape pain. Both studies found no effect of motive for death on reactions to the bereaved, expectations of tension, perceptions of responsibility, blame attribution, or psychological disturbance of the deceased.

**Respondent determinants.** The respondent-related category was the most well represented of all the categories, with 26 determinants across 26 studies.

[Insert table 3 here]

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

Gender of the respondent was the most studied respondent-related determinant and revealed mixed findings across 20 studies. Compared with women, men expected less distress and shorter recovery time (Alford & Catlin, 1993; Calhoun et al., 1985; Range et al., 1985), were less likely to expect friends to help the bereaved (Calhoun et al., 1985), endorsed more inappropriate and unhelpful behaviours towards the bereaved (Blair, 2003; Calhoun et al., 1986; Knight et al., 1998; Marwit & Carusa, 1998; Minamizono, Motohashi, Yamaji, & Kaneko, 2008), and offered less sympathy (Versalle & McDowell, 2004). However, in contrast with women, men were more likely to talk with the bereaved three months postdeath (Garson, 1994) and were less likely to believe the bereaved could have prevented the death (Calhoun et al., 1985). Other studies reported an interaction between gender of the respondent and deceased gender, gender of the bereaved, time since death, and cause of death (Calhoun et al., 1979; Garson, 1994; Knight et al., 1998; Rudestam & Imbroll, 1983; Villa, 2010). The remaining studies found no effect of gender of the respondent on likeability of the bereaved, blame or shame attributed to the bereaved, psychological disturbance of the deceased or bereaved, expected sadness and recovery-related symptoms in the bereaved, acknowledgement of the death, and behavioural intentions towards the bereaved (Allen et al.,

1993; Bath, 2009; Calhoun et al., 1980; Calhoun et al., 1982; Garson, 1994; Lester, 1990; Nathan, 1999; Rudestam & Imbroll, 1983; Sand et al., 2013).

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

338

339

340

341

342

343

344

345

346

The respondent's bereavement history was assessed in seven studies with five demonstrating a positive effect. Respondents with personal experience of bereavement were found to show greater empathy (Villa, 2010), acceptance and comfort with grieving (Egnoto, Sirianni, Ortega, & Stefanone, 2014), endorse more facilitative responses to the bereaved (Blair, 2003), and rate themselves as having more confidence in supporting grieving persons (Tedrick Parikh & Servaty-Seib, 2013; Villa, 2010) than those without. In contrast, the remaining studies found no effect of bereavement history on expectations of grief (Alford & Catlin, 1993), intentions to support a grieving person (Bath, 2009), or empathy (Nathan, 1999). Similarly, a further three studies examined the effects of current bereavement status on responses to bereavement. Non-bereaved respondents were less realistic in their assumptions about bereavement, underestimating grief-related thoughts/feelings (Lehman, Ellard, & Wortman, 1986) and over-estimating acceptance of the loss (Lehman et al., 1986) and amount of contact between bereaved and others in the lead up to the death (Thompson & Range, 1990). There was, however, no effect of bereavement status on impact of event, prognosis and perceived recovery, and social support (Thompson & Range, 1990; Wagner & Calhoun, 1991).

Four studies examined the effect of normative beliefs about supporting a grieving peer. This variable was defined as the respondent's strength of belief that others in their life would endorse their engagement in a particular behaviour (e.g., talking with a bereaved parent about their loss; Garson, 1994). Garson (1994) found that intentions to support a grieving person were higher when others endorsed this behaviour, while Villa (2010) found the opposite. Other studies found that respondents were aware of normative beliefs (Tedrick

Parikh & Servaty-Seib, 2013), but these beliefs did not affect intentions to support (Bath, 2009; Tedrick Parikh & Servaty-Seib, 2013).

Two studies investigated respondent age. The first study found an association between age and uncertainty in attitudes towards grieving; younger respondents were more likely to answer that they didn't know, rather than expressing a potentially appropriate or inappropriate response to the bereaved (Minamizono et al., 2008). In contrast, Blair (2003) found that younger respondents were no more likely to endorse facilitative responses to the bereaved than older respondents. This contrast is most likely the result of sampling variation; Blair's (2003) study comprised an American college student sample predominately aged between 17 and 29 years (with only 4.4% aged 30 years or over), while Minamizono and colleagues' (2008) study was a household survey of Japanese adults aged 30 to 69 years.

Familiarity with the cause of death (i.e., knowing someone who died by suicide) was examined across two studies. Two studies found some association, with higher familiarity with the cause of death associated with greater anger (Rudestam & Imbroll, 1983) and uncertainty in attitudes about grieving (Minamizono et al., 2008). Conversely, the latter study also found that respondents familiar with suicidal deaths were no more likely to hold appropriate or inappropriate attitudes about grieving than those not familiar.

In addition to these six determinants, a further 20 determinants were identified in isolation across 13 studies. These included country of residence (Alford & Catlin, 1993), behavioural beliefs (i.e., beliefs about the consequences of supporting a grieving person; Bath, 2009), control beliefs (i.e., belief that one possesses the necessary skills to support; Bath, 2009; Tedrick Parikh & Servaty-Seib, 2013), past experience supporting the bereaved (Bath, 2009), race (Blair, 2003), coping style (i.e., avoids or seeks to understand aversive events; Blair, 2003), locus of control (i.e., internal or external; Calhoun et al., 1979), religious affiliation (Egnoto et al., 2014), perceived consequences of supporting (Garson, 1994),

affective response (Garson, 1994), education level (Minamizono et al., 2008), depressive symptomatology (Minamizono et al., 2008), country of birth (Nathan, 1999), income (Nathan, 1999), past history of counselling (Nathan, 1999), receipt of information about suicide (Reynolds & Cimbolic, 1988), parenting status (i.e., children versus no children; Rudestam & Imbroll, 1983), sex role (i.e., masculinity versus femininity; Versalle & McDowell, 2004), and relationship between the respondent and the bereaved (Villa, 2010).

378 Discussion

This is the first systematic and comprehensive review of the literature on what determines supportive behaviours from the general public following bereavement. In addition to the seven determinants (four decedent, three respondent) identified by Calhoun et al. (1991), the present study identified a further 35 determinants (2 decedent, 23 respondent, and 10 bereaved). These data indicate that the provision of social support is based on an interplay of variables relating to the bereaved, the deceased, and the potential supporter, and it is likely this complexity that accounts for why some bereaved persons do not consistently receive the support they require (Aoun et al., 2015). Understanding these factors has clinical significance in that inconsistent or unsupportive actions and the potential breakdown of social networks following a death may become a type of secondary loss, compacting and complicating the nature of the primary loss (Breen et al., 2011).

Despite a growing body of research, bereaved persons' perspectives on helpful and unhelpful support attempts are rarely converted into practical support strategies (Breen et al., 2015). Most bereaved people grieve within the context of their friend and family networks and do not seek (or need) formal services (Aoun et al., 2015), these findings indicate considerable potential for improving community-wide understanding about the individuality of grief responses and the impact of helpful, timely social support on the grieving process. As the first of its kind, this review provides a stronger theoretical base for continued

exploration of the mechanisms behind support attempts, with a goal of translating these insights into targeted community education and therapeutic interventions that recognise the presence (or absence) of social support. Doing so would promote the offer and uptake of supportive behaviours by those surrounding the bereaved and, therefore, reduce the isolation and stigmatisation that is often reported by bereaved people (Dyregrov, 2011; Ghesquiere, 2013).

It is widely recognised that systematic reviews are only as sound as the evidence on which they are based. Whilst presenting the first international synthesis of the mechanisms behind the grieving rules originally proposed by Doka (1989), this review has simultaneously highlighted the significant methodological flaws and omissions that have plagued this field of research since its inception. This body of research has proven to be vastly diverse, such that there has been little recognition within studies of other related studies. The review revealed considerable variation in the quality of included studies, with a trend towards more recent studies achieving higher quality appraisal scores. Most studies were conducted on US samples and therefore little is known about social support elsewhere, student samples continue to be used to represent the general community, and there have been few attempts to control for the biases inherent in attitudinal social research (see Henrich, Heine, & Norenzayan, 2010). We urge that the findings of this review be used to inform more rigorous, methodologically sound and representative studies, with a goal of overcoming the previous 35 years of highly fragmented evidence.

Building on the previous work of Calhoun and colleagues (1991), this review has offered transparency of process and peer review of methods through the publication of a PROSPERO systematic review protocol. Quality appraisal, study eligibility, and data extraction were all conducted through collaboration between two authors, increasing the verifiability of the review. All identified studies were available for retrieval, thus none was

excluded on the basis of accessibility. The review, however, was limited in that no studies required translation, indicating that some non-English language articles may have been missed, limiting cross-cultural generalisability. Further, reporting biases (particularly in the pre-2000 studies) limited the degree to which a full synthesis of the studies could be conducted. Although a more targeted review of conceptually or methodologically similar studies might have enabled a more complete synthesis, the purpose of this review was to conduct a broader examination of the full scope of determinants, irrespective of study quality or methods employed.

430 Conclusions

Very few factors that impact the grieving process can be modified after the fact to the extent that social support can, and the greatest responsibility for this role lies within the informal relationships surrounding the bereaved person. With a comprehensive understanding of the factors that affect community recognition of and intention to provide social support to grieving persons, and with greater insight into the conceptual shortcomings of this research field, this review presents a call to action. We propose that it is not possible to promote and enhance the community's capacity to provide bereavement support without an understanding of current grief norms and supportive practices, and it is unethical to speak of these without a robust research base employing valid and reliable instruments in representative samples. From the perspective of potential supporters, this review has highlighted the complexity of processes which influence what motivates everyday people to recognise and respond empathically to another's distress. These findings provide a strong base for future research on the experience of social support from the viewpoint of both the giver and the receiver, suggest avenues for focused community education through highlighting common misconceptions and assumptions, and offer bereavement practitioners a broader

understanding of the secondary losses that may be encountered when a person's grief is not recognised as legitimate or warranted. Acknowledgements Lauren J. Breen is supported by the Australian Research Council (DE120101640). No other competing financial interests exist. 

471	References
472	Alford, J. W., & Catlin, G. (1993). The role of culture in grief. <i>Journal of Social Psychology</i> ,
473	133, 173-184. http://dx.doi.org/10.1080/00224545.1993.9712135
474	Allen, B. G., Calhoun, L. G., Cann, A., & Tedeschi, R. G. (1993). The effect of cause of
475	death on responses to the bereaved: Suicide compared to accident and natural causes.
476	Omega, 28, 39-48. http://dx.doi.org/10.2190/t44k-17uk-tb19-t9uv
477	Aoun, S. M., Breen, L. J., Howting, D., Rumbold, B., McNamara, B., & Hegney, D. (2015).
478	Who needs bereavement support? A populated based survey of bereavement risk and
479	support need. PLoS One, 10, 1-14. http://dx.doi.org/10.1371/journal.pone
480	Bath, D. M. (2009). Predicting social support for grieving persons: A theory of planned
481	behavior perspective. Death Studies, 33, 869-889.
482	http://dx.doi.org/10.1080/07481180903251547
483	Blair, C. W. (2003). College students' response preferences for responding to the bereaved
484	(Doctoral dissertation). University of Florida, USA.
485	Breen, L. J., Aoun, S. M., Rumbold, V., McNamara, B., Howting, D., & Mancini, V. (2015).
486	Building community capacity in bereavement support: Lessons learnt from bereaved
487	former caregivers. American Journal of Hospice and Palliative Medicine.
488	http://dx.doi.org/10.1177/1049909115615568.
489	Breen, L. J., & O'Connor, M. (2011). Family and social networks after bereavement:
490	Experiences of support, change and isolation. Journal of Family Therapy, 33, 98-120
491	http://dx.doi.org/10.1111/j.1467-6427.2010.00495.x
492	Calhoun, L. G., Abernathy, C. B., & Selby, J. W. (1986). The rules of bereavement: Are
493	suicidal deaths different? Journal of Community Psychology, 14, 213-218.
494	http://dx.doi.org/10.1002/1520-6629

495 Calhoun, L. G., & Allen, B. G. (1991). Social reactions to the survivor of a suicide in the family: A review of the literature. Omega, 23, 95-107. 496 http://dx.doi.org/10.2190/5bmq-awhg-79kn-t619 497 498 Calhoun, L. G., Selby, J. W., & Abernathy, C. B. (1984). Suicidal death: Social reactions to bereaved survivors. Journal of Psychology, 116, 255-261. 499 http://dx.doi.org/10.1080/00223980.1984.9923645 500 Calhoun, L. G., Selby, J. W., & Faulstich, M. E. (1980). Reactions to the parents of the child 501 suicide: A study of social impressions. Journal of Consulting and Clinical 502 503 Psychology, 48, 535-536. http://dx.doi.org/10.1037/0022-006x.48.4.535 Calhoun, L. G., Selby, J. W., & Faulstich, M. E. (1982). The aftermath of childhood suicide: 504 505 Influences on the perception of the parent. Journal of Community Psychology, 10, 506 250-254. http://dx.doi.org/10.1002/1520-6629(198207) Calhoun, L. G., Selby, J. W., & Gribble, C. M. (1979). Reactions to the family of the suicide. 507 American Journal of Community Psychology, 7, 571-575. 508 Calhoun, L. G., Selby, J. W., & Walton, P. B. (1985). Suicidal death of a spouse: The social 509 perception of the survivor. Omega, 16, 283-288. http://dx.doi.org/10.2190/v4fw-pf4k-510 mrpk-15fw 511 Costa, B. M., Hall, L., & Stewart, J. (2007). Qualitative exploration of the nature of grief-512 related beliefs and expectations. Omega, 55, 27-56. http://dx.doi.org/10.2190/cl20-513 514 02g6-607r-8561 Doka, K. J. (1989). Disenfranchised grief: Recognising hidden sorrow. Massachusetts, USA: 515 Lexington Books. 516 Dyregrov, K. (2005). Experiences of social networks supporting traumatically bereaved. 517 Omega, 52, 339-358. http://dx.doi.org/10.2190/CLAA-X2LW-JHQJ-T2DM 518

519	Dyregrov, K. (2011). What do we know about needs for help after suicide in different parts of
520	the world? A phenomenological perspective. Crisis, 32, 310-318.
521	http://dx.doi.org/10.1027/0227-5910/a000098
522	Egnoto, M. J., Sirianni, J. M., Ortega, C. R., & Stefanone, M. (2014). Death on the digital
523	landscape: A preliminary investigation into the grief process and motivations behind
524	participation in the online memoriam. Omega, 69, 283-304.
525	http://dx.doi.org/10.2190/OM.69.3.d
526	Garson, C. L. (1994). Variables related to the behavioral intention of talking with bereaved
527	parents about their loss experience (Doctoral dissertation). University of
528	Pennsylvania, USA.
529	Ghesquiere, A. (2013). "I was just trying to stick it out until I realized that I couldn't": A
530	phenomenological investigation of support seeking among older adults with
531	complicated grief. Omega, 68, 1-22. http://dx.doi.org/10.2190/OM.68.1.a
532	Ginn, P. D., Range, L. M., & Hailey, B. J. (1988). Community attitudes toward childhood
533	suicide and attempted suicide. Journal of Community Psychology, 16, 144-151.
534	http://dx.doi.org/10.1002/1520-6629
535	Henrich, J., Heine, S. J. and Norenzayan, A. (2010). The weirdest people in the world?
536	Behavioral and Brain Sciences, 33, 61-83.
537	http:dx.doi.org/10.1017/S0140525X0999152X
538	Hibberd, R., Elwood, L. S., & Galovski, T. E. (2010). Risk and protective factors for
539	posttraumatic stress disorder, prolonged grief, and depression in survivors of the
540	violent death of a loved one. Journal of Loss and Trauma, 15, 426-447.
541	http://dx.doi.org/10.1080/15325024.2010.507660
542	Higgins, J. P. T., & Green, S. (Eds) (2008). Cochrane handbook for systematic reviews of
543	interventions. England: John Wiley & Sons.

544	Kaunonen, M., Tarkka, MT., Paunonen, M., & Laippala, P. (1999). Grief and social support
545	after the death of a spouse. Journal of Advanced Nursing, 30, 1304-1311.
546	http://dx.doi.org/10.1046/j.1365-2648.1999.01220.x
547	Kmet, L. M., Lee, R. C., & Cook, L. S. (2004). Standard quality assessment criteria for
548	evaluating primary research papers from a variety of fields. Alberta, Canada: Alberta
549	Heritage Foundation for Medical Research.
550	Knight, K. H., Elfenbein, M. H., & Messina-Soares, J. A. (1998). College students'
551	perceptions of helpful responses to bereaved persons: Effects of sex of bereaved
552	persons and cause of death. Psychology Reports, 83, 627-636.
553	http://dx.doi.org/10.2466/pr0.1998.83.2.627
554	Krosniak, J. A. (1991). Response strategies for coping with the cognitive demands of attitude
555	measures in surveys. Applied Cognitive Psychology, 5, 213-236.
556	http://dx.doi.org/10.1002/acp.2350050305
557	Kubitz, N., Thornton, G., & Robertson, D. U. (1989). Expectations about grief and evaluation
558	of the griever. Death Studies, 13, 39-47.
559	http://dx.doi.org/10.1080/07481188908252278
560	Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical
561	data. Biometrics, 33, 159-174.
562	Lehman, D. R., Ellard, J. H., & Wortman, C. B. (1986). Social support for the bereaved:
563	Recipients' and providers' perspectives on what is helpful. Journal of Consulting and
564	Clinical Psychology, 54, 438-446. http://dx.doi.org/10.1037/0022-006X.54.4.438
565	Lester, D. (1990). Attitudes towards the survivors of suicide as a function of the motive for
566	suicide. Omega, 22, 215-218. http://dx.doi.org/10.2190/vpp1-ka8r-7muk-0jr0

567	Lobb, E.A., Kristjanson, L.J., Aoun, S.M., Monterosso, L., Halkett, G.K.B., & Davies, A.
568	(2010). Predictors of complicated grief: A systematic review of empirical studies.
569	Death Studies, 34, 673-698. http://dx.doi.org/10.1080/07481187.2010.496686
570	Marwit, S. J., & Carusa, S. S. (1998). Communicated support following loss: examining the
571	experiences of parental death and parental divorce in adolescence. Death Studies, 22,
572	237-255. http://dx.doi.org/10.1080/074811898201579
573	McEvoy, J., & Smith, E. (2005). Families perceptions of the grieving process and concept of
574	death in individuals with intellectual disabilities. British Journal of Developmental
575	Disabilities, 51, 17-25. doi:http://dx.doi.org/10.1179/096979505799103803
576	Miller, E. D. (2014). Evaluations of hypothetical bereavement and grief: The influence of
577	loss recency, loss type and gender. International Journal of Psychology, 50, 60-63.
578	http://dx.doi.org/10.1002/ijop.12080
579	Minamizono, S., Motohashi, Y., Yamaji, M., & Kaneko, Y. (2008). Attitudes towards those
580	bereaved by a suicide: A population-based, cross-sectional study in rural Japan. BMC
581	Public Health, 8, 334. http://dx.doi.org/10.1186/1471-2458-8-334
582	Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for
583	systematic reviews and meta-analyses: The PRISMA Statement. PloS Medicine, 6,
584	e1000097. http://dx.doi.org/10.1371/journal.pmed1000097
585	Nathan, A. J. (1999). Development of the empathy for loss in adolescent bereavement scale
586	(Doctor dissertation). California School of Professional Psychology, USA.
587	Penman, E. L., Breen, L. J., Hewitt, L. Y., & Prigerson, H. G. (2014). Public attitudes about
588	normal and pathological grief. Death Studies, 38, 510-516.
589	http://dx.doi.org/10.1080/07481187.2013.873839

- Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., . . . Duffy, S.
- 591 (2006). *Guidance on the conduct of narrative synthesis in systematic reviews.*
- Southampton, UK: Economic and Social Research Council.
- Rando, T. A. (1993). *Treatment of complicated mourning*. Champaign, IL: Research Press.
- Range, L. M., Bright, P. S., & Ginn, P. D. (1985). Public reactions to child suicide: Effects of
- child's age and method used. *Journal of Community Psychology*, 13, 288-294.
- 596 http://dx.doi.org/10.1002/1520-6629
- 8597 Range, L. M., & Thompson, K. E. (1987). Community responses following suicide,
- homicide, and other deaths: The perspective of potential comforters. *Journal of*
- 599 *Psychology*, 121, 193-198. http://dx.doi.org/10.1080/00223980.1987.9712657
- Range, L. M., Walston, A. S., & Pollard, P. M. (1992). Helpful and unhelpful comments after
- suicide, homicide, accident, or natural death. *Omega*, 25, 25-31.
- 602 http://dx.doi.org/10.2190/b5nl-dcby-28q5-kj8d
- Reynolds, F. M. T., & Cimbolic, P. (1988). Attitudes toward suicide survivors as a function
- of survivors' relationship to the victim. *Omega*, 19, 125-133.
- 605 http://dx.doi.org/10.2190/kr1x-qng3-2ygm-udyq
- Robson, P., & Walter, T. (2012). Hierarchies of loss: A critique of disenfranchised grief.
- 607 *Omega*, 66, 97-119. http://dx.doi.org/10.2190/om.66.2.a
- Rosenberger, K. L. (1996). Evaluations of typical and atypical grief (Doctoral dissertation).
- Indiana University of Pennsylvania, USA.
- Rudestam, K. E., & Imbroll, D. (1983). Societal reactions to a child's death by suicide.
- *Journal of Consulting and Clinical Psychology, 51*, 461-462.
- http://dx.doi.org/10.1037/0022-006x.51.3.461

513	Sand, E., Gordon, K. H., & Bresin, K. (2013). The impact of specifying suicide as the cause
514	of death in an obituary. Crisis, 34, 63-66. http://dx.doi.org/10.1027/0227-
515	5910/a000154
516	Tedrick Parikh, S. J., & Servaty-Seib, H. L. (2013). College students' beliefs about supporting
617	a grieving peer. Death Studies, 37, 653-669.
518	http://dx.doi.org/10.1080/07481187.2012.684834
519	Thompson, K. E., & Range, L. M. (1990). Recent bereavement from suicide and other deaths
520	Can people imagine it as it really is? Omega, 22, 249-259.
521	http://dx.doi.org/10.2190/10BD-WFE4-YAD3-ARY3
522	Thornton, G., Robertson, D. U., & Mlecko, M. L. (1991). Disenfranchised grief and
523	evaluations of social support by college students. Death Studies, 15, 355-362.
524	http://dx.doi.org/10.1080/07481189108252440
525	Thornton, G., Whittemore, K. D., & Robertson, D. U. (1989). Evaluation of people bereaved
526	by suicide. Death Studies, 13, 119-126.
527	http://dx.doi.org/10.1080/07481188908252289
528	Versalle, A., & McDowell, E. E. (2004). The attitudes of men and women concerning gender
529	differences in grief. Omega, 50, 53-67. http://dx.doi.org/10.2190/R2TJ-6M4F-RHGD-
530	C2MD
531	Vickio, C. J., Cavanaugh, J. C., & Attig, T. W. (1990). Perceptions of grief among university
532	students. Death Studies, 14, 231-240. http://dx.doi.org/10.1080/07481189008252364
533	Villa, D. P. (2010). The differential impact of suicide type on provision of social support: A
534	qualitative comparison (Doctoral dissertation). The University of California, USA.
535	Wagner, K. G., & Calhoun, L. G. (1991). Perceptions of social support by suicide survivors
536	and their social networks. Omega, 24, 61-73. http://dx.doi.org/10.2190/3748-g16y-
537	yebf-qd10

Yamanaka, A. (2015). Japanese undergraduates' attitudes toward students survivors of
 parental suicide: A comparison with other stigmatized deaths. *Omega*, 71, 82-91.
 http://dx.doi.org/10.1177/0030222814568290

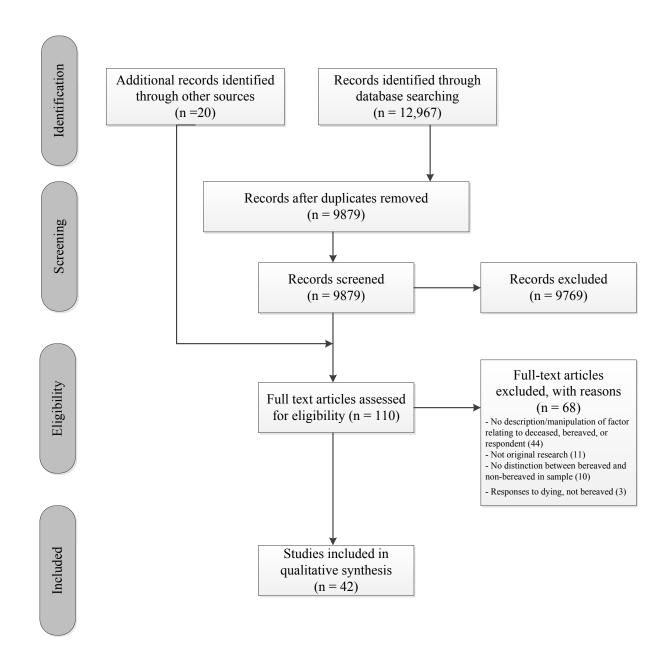


Figure 1. PRISMA flow chart of study selection and results.

**Table 1.** Summary of studies examining the effect of bereaved-related determinants on community responses towards bereavement.

	Sample size range. 157 to 172			
	Sample size range: 150 to 177	(n=2),	Rosenberger, 1996	coping
.6168	University students ( <i>n</i> =2)	Experimental between-subjects design	Kubitz et al., 1989;	Perception of
	Sample size range: 9 to 161	(n=1)	Robson & Walter, 2012; Thornton et al., 1991	
.4394	University students ( $n=4$ ), general citizens ( $n=1$ )	Experimental between-subjects design $(n=2)$ , qualitative $(n=1)$ , experimental within-subjects design $(n=1)$ , survey design	Costa et al., 2007; Miller, 2014; Reynolds & Cimbolic, 1988;	Relationship to deceased
	Sample size range: 9 to 348		1990	
.6894	University students ( $n$ =4), supporters of someone bereaved by SIDS or young suicide ( $n$ =1), parents of school-aged children ( $n$ =1), online responders ( $n$ =1)	Survey design ( $n$ =4), qualitative ( $n$ =1), experimental within-subjects design ( $n$ =1), experimental between-subjects design ( $n$ =1)	Costa et al., 2007; Dyregrov, 2005; Garson, 1994; Miller, 2014; Penman et al., 2014: Vickio et al.	Time since death
			Penman et al., 2014; Range et al., 1985; Thornton et al., 1989; Versalle & McDowell, 2004; Villa, 2010	
	Sample size range: 9 to 237		et al., 1988; Kubitz et al., 1989; Miller, 2014;	
	(n=2), online responders $(n=1)$	(n=2), qualitative $(n=2)$	Costa et al., 2007; Ginn	
	citizens ( $n=2$ ), shopping mall attendees	(n=8), experimental within-subjects design	Calhoun et al., 1985;	
.4390	University students $(n=7)$ , general	Experimental between-subjects design	Calhoun et al., 1986;	Gender
appraisal	7 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m	See		
Ouglity	Sample	Factor Reference Study designs	Reference	Factor
	The maintain of the property o	CO UNICHEMISTATE DATE DAVIGATA OF TARANTA AT	Things of children againing I	

support	Perceived social
	Costa et al., 2007; Villa, 2010
	Qualitative ( <i>n</i> =2)
Sample size range: 9 to 25	University students ( <i>n</i> =2)
	.8590

Table 2. Summary of studies examining the effect of decedent-related determinants on community responses towards bereavement.

Table 2. Summ	iai y or studies examining u	Table 2. Summary of studies examining the effect of decedent-fetaled determinants on community responses towards befeavement.	ommunity responses towards bereavement.	
Factor	Reference	Study designs	Sample	Quality appraisal
Cause of	Allen et al., 1993;	Experimental between-subjects design	University students $(n=11)$ , shopping	.4390
death	Calhoun et al., 1986;	(n=13), survey design $(n=4)$ , qualitative	mall attendees $(n=4)$ , general citizens	
	Calhoun et al., 1984;	(n=1)	(n=2), online responders $(n=1)$	
	Calhoun et al., 1980;			
	Calhoun et al., 1982;		Sample size range: 25 to 348	
	Calhoun et al., 1985;			
	Ginn et al., 1988;			
	Knight et al., 1998;			
	Penman et al., 2014,			
	Range et al., 1985;			
	Range & Thompson,			
	1987; Rudestam &			
	Imbroll, 1983; Sand et			
	al., 2013, Thompson &			
	Range, 1990; Thornton			
	et al., 1989, Villa, 2010,			
	Yamanaka, 2015			
Anticipation	Costa et al., 2007;	Experimental between-subjects design	University students $(n=5)$	.5085
of death	Kubitz et al., 1989;	(n=3), qualitative $(n=1)$ , survey design $(n=1)$		
	Range & Thompson, 1987: Range et al		Sample size range: 9 to 172	
	1992; Thompson &			
	Range, 1990			
	(			
Gender	Calhoun et al., 1979;	Experimental between-subjects design	University students $(n=2)$ , general	.5494
	Calhoun et al., 1980;	(n=4), survey design $(n=1)$	citizens $(n=2)$ , church attendees $(n=1)$	
	Lester, 1990; Sand et			
	al., 2013		Sample size range: 50 to 253	

dour.	Motive for suicidal		Age
	Calhoun et al., 1979; Lester, 1990		Range et al., 1985; Thornton et al., 1989
	Experimental between-subjects design (n=2)		Experimental between-subjects design (n=2)
Sample size range: 91 to 127	University students $(n=1)$ , church attendees $(n=1)$	Sample size range: 89 to 90	University students $(n=1)$ , shopping mall .4361 attendees $(n=1)$
	.5457		.4361

**Table 3.** Summary of studies examining the effect of respondent-related determinants on community responses towards bereavement.

Normative beliefs	Bereavement history	Gender	Factor
Bath, 2009; Garson, 1994; Tedrick Parikh &	Alford & Catlin, 1993; Bath, 2009; Blair, 2003; Egnoto et al., 2014; Nathan, 1999; Tedrick Parikh & Servaty-Seib, 2013; Villa, 2010	Alford & Catlin, 1993; Allen et al., 1993; Bath, 2009; Blair, 2003; Calhoun et al., 1986; Calhoun et al., 1980; Calhoun et al., 1982; Calhoun et al., 1985; Calhoun et al., 1985; Garson, 1994; Knight et al., 1998; Minamizono et al., 1998; Minamizono et al., 2008; Nathan, 1999; Range et al., 1985; Rudestam & Imbroll, 1983; Sand et al., 2013; Versalle & McDowell, 2004; Villa, 2010	Reference
Survey design ( <i>n</i> =3), qualitative ( <i>n</i> =1)	Survey design ( <i>n</i> =6), qualitative ( <i>n</i> =1)	Experimental between-subjects design $(n=10)$ , survey design $(n=7)$ , experimental within-subjects design $(n=1)$ , qualitative $(n=1)$	Factor Reference Study designs Sa
University students ( $n=3$ ), parents of school-aged children ( $n=1$ )	University students ( <i>n</i> =6), high school students ( <i>n</i> =1)  Sample size range: 23 to 349	University students ( <i>n</i> =10), general citizens ( <i>n</i> =4), shopping mall attendees ( <i>n</i> =3), church attendees, ( <i>n</i> =1), parents of school-aged children ( <i>n</i> =1), high school students ( <i>n</i> =1)  Sample size range: 25 to 5154	Sample
.6895	.6895	.4695	Quality

	Sample size range: 80 to 5154			
.4682	General citizens $(n=1)$ , shopping mall attendees $(n=1)$	Survey design $(n=1)$ , experimental between subjects design $(n=1)$	Minamizono et al., 2008; Rudestam & Imbroll 1983	Familiarity with cause of death
	Sample size range: 349 to 5154			
.6882	University students $(n=1)$ , general citizens $(n=1)$	Survey design $(n=2)$ ,	Blair, 2003; Minamizono et al.,	Age
	Sample size range: 22 to 194			
.6285	University students $(n=1)$ , suicide survivors and their social networks $(n=1)$ , bereaved individuals and matched controls $(n=1)$	Survey design $(n=2)$ , experimental betweensubjects design $(n=1)$	Lehman et al., 1986; Thompson & Range, 1990; Wagner & Calhoun, 1991	Current bereavement status
	Sample size range: 23 to 160		Servaty-Seib, 2013; Villa, 2010	

Supplementary Table 1. Full summary of included studies.

Calhoun et al. (1984)	Calhoun et al. (1986)	Blair (2003)	Bath (2009)	Allen et al. (1993)	Alford & Catlin (1993)	Author(s) and year
Survey design	Experimental design (betweensubjects)	Survey design	Survey design	Survey design	Survey design	Study design
N = 35  US university students	N = 237 (study one) and 126 (study two) US university students	N = 349  US university students	N = 160  US university students	N = 60  US university students	<ul><li>N = 250 American</li><li>and Spanish</li><li>university students</li></ul>	Author(s) and Study design Sample F  year
Cause of death	Gender of the respondent, gender of the bereaved, cause of death	Respondent age, gender of the respondent, race, bereavement history, coping style	Gender of the respondent, bereavement history, past experience supporting bereaved, behavioural beliefs, control beliefs, normative beliefs	Cause of death, gender of the respondent	Country of residence, gender of the respondent, bereavement history	Factors
Description of the bereavement and general perceptions of bereavement	Appropriateness of supportive behaviours towards bereaved	Responses to the bereaved (facilitative/non-facilitative)	Intentions to support bereaved	Likeability, blame attribution, shame attribution, and difficulty of encounter	Effects of grief on emotions, beliefs, attitudes, self-esteem, trust, and beliefs	Outcomes
.60 (quantitative) .65 (qualitative)	.54	.68	.95	.57 (quantitative)	.73 (quantitative) .70 (qualitative)	Quality appraisal

Costa et al. (2007)	Calhoun et al. (1985)	Calhoun et al. (1982)	Calhoun et al. (1980)	Calhoun et al. (1979)
Exploratory qualitative	Experimental design (betweensubjects)	Experimental design (betweensubjects)	Experimental design (betweensubjects)	Experimental design (betweensubjects)
<ul><li>N = 9 Australians</li><li>recruited through a university and local council</li></ul>	N = 120  US citizens	N = 148  US citizens recruited at a shopping mall	N = 119  US citizens	N = 127 US church attendees
Gender of the bereaved, bereaved age, bereaved religion, relationship to the deceased, perceived social support, time since death, anticipation of death	Gender of the respondent, gender of the bereaved, cause of death	Gender of the respondent, cause of death	Gender of the decedent, gender of the respondent, cause of death	Gender of the respondent, gender of the decedent, locus of control, motive for suicidal death
Evaluations and expectations of grieving style	Duration of psychological recovery, psychological disturbance, discomfort visiting the bereaved, appropriateness of responses towards the bereaved, blame attribution, expectation of other supporters, and preventability of death	Psychological disturbance, blame attribution, and likeability	Psychological disturbance, likeability, blame attribution, duration of sadness, expected tension visiting the bereaved, and difficulty expressing sympathy	Reactions to bereaved, and expected tension and embarrassment in responding to bereaved
.85	.57	.57	.57	.57

Ginn et al. (1988)	Garson (1994)	Egnoto et al. (2014)	Dyregrov (2005)
Experimental design (betweensubjects)	Survey design	Survey design	Survey design
N = 120 US citizens recruited at a shopping mall	<ul><li>N = 75 US parents</li><li>of school-aged</li><li>children</li></ul>	N = 270 US university students who use social networking sites	<ul><li>N = 100 Norwegian adults who had supported someone bereaved by SIDS or young suicide</li></ul>
Cause of death, bereaved gender	Gender of the respondent, time since death, affective response of bereaved and respondent, perceived consequences of support, normative beliefs	Bereavement history, religion	Time since death
Psychological disturbance, likeability, blame attribution, duration of sadness, preventability of death, difficulty expressing sympathy to bereaved, expected tension visiting the bereaved, shame attribution, expectations of the bereaved's behaviour, and perception of mental health supports for bereaved	Expectations of grief, and intentions to support bereaved	Self-based motivations for online posting, other-based motivations for online posting, perceived normalcy of online posting, and condolence giving	Content of support, positive and negative experiences supporting, and perceived effect of support efforts
.61	.68	.82	.94 (quantitative) .90 (qualitative)

McEvoy & Smith (2005)	Marwit & Carusa (1998)	Lester (1990)	Lehman et al. (1986)	Kubitz et al. (1989)	Knight et al. (1998)
Survey design	Survey design	Experimental design (betweensubjects)	Survey design	Experimental design (betweensubjects)	Experimental design (betweensubjects)
<ul><li>N = 38 Irish parents and relatives of individuals with an intellectual disability</li></ul>	N = 120  US university students	N = 91  US university students	N = 194 bereaved US citizens and matched controls	N = 172  US university students	N = 198  US university students
Disability	Gender of the respondent	Gender of the respondent, gender of the decedent, motive for suicidal death	Current bereavement status	Perception of coping, gender of the bereaved, anticipation of death	Gender of the bereaved, gender of the respondent, cause of death
Perceptions of experiences of and reaction's to bereavement, opinions on intervention and support, beliefs about the grieving process in individuals with intellectual disabilities	Helpfulness of supported- intended statements	Perceptions of responsibility, blame attribution, difficulty expressing sympathy to the bereaved, and psychological disturbance	Intentions to support the bereaved, beliefs about recovery and acceptance, and perceptions of helpful and unhelpful supports	Social distance	Helpfulness of support-intended statements
.70 (quantitative) .55 (qualitative)	.68	.54	.77 (quantitative) .85 (qualitative)	.68	.68

Range & Thompson (1987)	Range et al. (1985)	Penman et al. (2014)	Nathan (1999)	Minamizono et al. (2008)	Miller (2014)
Survey design	Experimental design (between-subjects)	Experimental design (between-subjects)	Survey design	Survey design	Experimental design (withinsubjects)
N = 83  US university students	<ul><li>N = 90 (study one)</li><li>and 90 (study two)</li><li>US citizens</li><li>recruited at a shopping mall</li></ul>	N = 348 adults recruited internationally	N = 97 US high school students	N = 5154 Japanese citizens recruited by postal survey	N = 161  US university students
Cause of death, anticipation of death	Decedent age, gender of the respondent, gender of the bereaved, cause of death	Time since death, gender of the bereaved, cause of death	Gender of the respondent, past history of counselling, bereavement history, country of birth, income	Gender of the respondent, respondent age, depressive symptomatology, familiarity with cause of death, education level	Time since death, relationship to the deceased, gender of the bereaved
Responses to bereavement, perceived adjustment of the bereaved person	Psychological disturbance, likeability, blame attribution, duration of sadness, expected tension visiting the bereaved, and difficulty expressing sympathy to the bereaved	Expectations of grief symptomatology, and social distance	Empathy for bereavement	Attitudes towards those bereaved by suicide and perceptions of suicide prevention and the promotion of mental health in the community	Appropriateness of grief reactions and post-bereavement behaviours
.73	.61	.77	.77	.82	.73

Rudestam & Imbroll (1983)	Rosenberger (1996)	Robson & Walter (2012)	Reynolds & Cimbolic (1988)	Range et al. (1992)
Experimental design (between-subjects)	Experimental design (betweensubjects)	Survey design	Experimental design (between-subjects)	Experimental design (between-subjects)
<ul><li>N = 80 US citizens recruited at a shopping mall</li></ul>	N = 159  US university students	N = 50 UK citizens	N = 60  US university students	N = 141  US university students
Gender of the respondent, cause of death, parenting status, familiarity with cause of death	Perception of coping	Relationship to the deceased	Recipient of information about suicide, relationship to the deceased	Anticipation of death
Emotional disturbance, blame attribution, intentions to support, expected tension and discomfort in visiting the bereaved, and difficulty expressing sympathy to the bereaved	Appropriateness of grief reaction, role functioning, recommended help sources, intentions to support, expectations of others' support, social distance, and expected discomfort when responding to the bereaved	Expected intensity and duration of grief	Likeability, psychological disturbance, blame attribution, feelings towards the bereaved, expected tension when visiting the bereaved, and difficulty expressing sympathy to the bereaved	Helpfulness of support-intended statements
.46	.61	94	.61	.50

.75	Sympathy for the target figure and .75 appropriateness of the grief response	Gender of the bereaved, gender stereotypes of grief,	N = 106 US citizens recruited through churches,	Experimental design (withinsubjects)	Versalle & McDowell (2004)
.43	Personal role functioning, social role functioning, perceived responsibility, psychological disturbance, severity of grief reaction, duration of grief, usefulness of help sources	Gender of the bereaved, cause of death, age of decedent	N = 89  US university students	Experimental design (betweensubjects)	Thornton et al. (1989)
.43	Personal role functioning, social role functioning, severity of griever's reaction, usefulness of help sources, perception of available social support, and methods of expressing sympathy	Relationship to the deceased	N = 96 US university students	Experimental design (betweensubjects)	Thornton et al. (1991)
.62	Perceived impact of event, prediction of post-bereavement outcome, perceived social support	Current bereavement status, cause of death, anticipation of death	N = 92  US university students	Experimental design (betweensubjects)	Thompson & Range (1990)
.88 (quantitative) .75 (qualitative)	Positives and negatives of various supportive behaviours	Bereavement history, normative beliefs, perceived capacity to respond	N = 23 US university students	Survey design	Tedrick Parikh & Servaty-Seib (2013)
.75	Characteristics attributed to the deceased, and intentions to support the bereaved	Cause of death, gender of the decedent, gender of the respondent	N = 253  US university students	Experimental design (betweensubjects)	Sand et al. (2013)

Yamanaka Survey design (2015)	Wagner & Survey design Calhoun (1991)	Villa (2010) Exploratory qualitative	Vickio et al. Survey design (1990)	
n $N = 134$ Japanese university students	n N = 22 US survivors of suicide bereavement and members of their social networks	<ul><li>N = 25 US</li><li>university</li><li>graduates and older</li><li>adults recruited</li><li>through agencies</li></ul>	n $N = 123$ US university students	civic organisations, and retirement communities
Cause of death	Bereavement status	Cause of death, relationship between respondent and bereaved, normative beliefs, perceived social support, bereavement history, gender of the bereaved, gender of the respondent	Time since death	gender of the respondent, sex role of respondent
Psychological disturbance, blame attribution, expected tension when visiting the bereaved, sympathy for the bereaved, and attributes of the bereaved	Social support, supportive gestures, frequency of supportive activities, and perceived recovery	Expectations of others' reactions towards the bereaved, intentions to support, and motivations/influences for offering social support	Duration of grief, expected emotional and physical reactions, expected impact of grief on relationships, methods of coping with grief, and emotional reactions of respondent	
.80	.68 (quantitative) .65 (qualitative)	.90	.80	