# The Survivor Network: The Role of Shared Experiences in Mass Shootings Recovery

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#### ABSTRACT

Social support from others with shared experiences can be an invaluable resource for individuals impacted by traumatic events, like school and mass shootings. While a growing body of literature explores the psychological impacts of these events on those who survive them, these studies predominantly focus on shootings at two universities, do not assess the effects beyond three years post-shooting, and rely almost exclusively on quantitative methodologies. To extend this body of literature, the present study relies on in-depth interviews with 16 survivors of the April 20, 1999 shooting at Columbine High School to explore the way in which they viewed various forms of social support during their trauma recovery process in both the short- and long-term. The findings indicate that the most effective support came from "similar others," or those who had experienced the shooting in an analogous manner. Social support from the outside, even when well-intended, was viewed as unhelpful, while mixed perspectives were found related to community-level support. Based on these findings, broader consideration is given to the benefits of informal survivor networks.

#### **KEYWORDS**

Mass/school shootings; trauma; survivors; recovery; Columbine

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On April 20, 1999, two students opened fire at Columbine High School in Jefferson County, Colorado. After nearly 50 minutes, the pair had killed 12 students and a teacher and injured nearly two dozen others; they then committed suicide. From Columbine through the end of 2016, 237 other public mass shootings have occurred, leaving 775 dead and 903 others physically injured (Schildkraut et al., 2018). These figures, however, do not account for the untold number of individuals exposed to the attacks who were not physically injured and members of the surrounding community, each of whom also likely were impacted in some way.

A growing body of literature has explored the impact of mass shootings on those who experience them (for a thorough review of available studies and their respective findings, see Lowe & Galea, 2017 or Wilson, 2014). Collectively, these studies provide valuable insight to better understanding the impact of mass shootings on the people who experience them. To date, a considerable portion of this research has focused specifically on two collegiate shootings – Virginia Tech in 2007 and Northern Illinois University (NIU) in 2008 (Lowe & Galea, 2017). Despite, however, that Columbine often is considered the watershed moment in the discussion of school and mass shootings (Schildkraut & Muschert, 2019), just one study to date has explored the effects of the shooting on those who lived it (Hawkins et al., 2004).

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Additionally, much of this available research has focused on posttraumatic stress disorder (PTSD) and related symptomology (Smith, Ramsdell, et al., 2017). While a number of these studies (see, for example, Littleton et al., 2009; Miron et al., 2014; Palus et al., 2012) have found significant benefits of social support on trauma symptomology, they have not specifically addressed which types of support survivors perceive to be the most helpful. Yet since differences exist in what recipients may need and what providers are able to offer (e.g., Lehman et al., 1986; Revenson & Lepore, 2012), a better understanding of what specific types of social support are viewed as beneficial is warranted and could have broader reaching implications for policymakers, practitioners, and community leaders alike. Moreover, studies examining the impact of mass shootings on community members have almost exclusively relied on quantitative methodologies (Hawkins et al., 2004; Palinkas et al., 2004 are notable exceptions). Lowe and Galea (2017), however, note the importance of qualitative studies in providing a more robust understanding of the experiences of mass shooting survivors that can complement these quantitative assessments. Further, none of the aforementioned studies connected with survivors beyond three years post-shooting, which typically also is when state-sponsored resources run out.

The present study seeks to add to this extant body of literature in several important ways. First, this study examines a context – high school shootings – that is underrepresented in the literature. Similarly, given the cultural importance of Columbine (Schildkraut & Muschert, 2019), understanding how members of the community were impacted, beyond considerations of the attack's impact on broader society, is warranted. Second, given that no study has assessed survivors beyond the three year mark, we consider the longer range impacts of mass shootings on individuals who have had more than 20 years to experience posttraumatic growth. Finally, we employ a qualitative methodology to add a richer understanding of the experiences of mass shooting survivors. Through interviews with 16 individuals impacted in various ways by the Columbine shooting, we seek to explore the role of shared experience as a facilitator of recovery and resilience. This article suggests that the lessons learned by the survivors of April 20, 1999 have not only helped to facilitate their own posttraumatic growth, but also paved the way for those individuals impacted by similar traumatic events after.

## **Review of the literature**

### Trauma after mass shootings

Since the 1980s, a collective of researchers have worked to understand the psychological impact of mass shootings on those who are exposed to them.<sup>1</sup> These events have been found to lead to a number of mental health outcomes (Lowe & Galea, 2017; Novotney, 2018). Smith, Layne, et al. (2017) note that much of this research focuses on PTSD, which has been found to be prevalent after mass shootings at a Killeen, TX cafeteria in 1991 (North et al., 2002, 1994, 1997), Virginia Tech (Hughes et al., 2011; Littleton et al., 2009; Mancini et al., 2016, 2019; Vicary & Fraley, 2010), and NIU (Miron et al., 2014; Orcutt et al., 2014; Vicary & Fraley, 2010), among others (Norris, 2007). Additionally, posttraumatic stress symptoms (PTSS; Bardeen et al., 2013; Holzman et al., 2017; Miron et al., 2014; Orcutt et al., 2014; Smith, Donlon et al., 2015; Smith, Felix et al., 2017; Smith, Layne et al., 2017), major depression (North et al., 2002,

1994, 1997), anxiety (Grills-Taquechel et al., 2011; Palinkas et al., 2004; Smith, Donlon et al., 2015), and other mood disorders (Hartnett & Skowronski, 2010) also have presented themselves in individuals in the aftermath of mass shootings. In other words, a range of reactions are experienced by people impacted by these traumatic events (Bonanno, 2004).

Such reactions can be manifested in a number of different ways. Survivors of mass shootings may experience intrusions, flashbacks, and other reminders of the event, as well as sleep problems including nightmares and trouble falling or staying asleep (Mancini et al., 2019; Palinkas et al., 2004; North et al., 1994; Sullivan et al., 2018). Hypervigilance and other forms of arousal also may be present (Mancini et al., 2019; Palinkas et al., 2004). Such symptomology can be influenced by a number of factors, including being close to someone who was killed or injured in a mass shooting as well as the inability to contact close friends during or after the attack (Hughes et al., 2011; Smith, Layne et al., 2017; see also Hawdon & Ryan, 2012). Similarly, experiencing psychological distress prior to a shooting may lead to difficulty in responding to trauma from the attack (Littleton et al., 2009; Littleton, Axsom et al., 2011; see also Bardeen et al., 2013; Littleton, Kumpula et al., 2011). Still, trauma-related disorders have been found among individuals both with direct (e.g., being personally injured, witnessing others being killed or injured, seeing others escape the scene, or observing the response of first responders; see Hughes et al., 2011; Wilson, 2014) and indirect (e.g., being in close proximity to or being an eyewitness of the event; see Hughes et al., 2011; National Center for PTSD, 2018; Norris, 2007; North et al., 1994; Schwarz & Kowalski, 1991) exposure to a mass shooting (see also Smith, Layne et al., 2017 for a discussion on dose responses and grief outcomes or; Lowe & Galea, 2017). Notably, however, others have found that exposure was not a significant predictor of posttraumatic symptoms like anxiety (Grills-Taquechel et al., 2011; Littleton et al., 2009).

Moreover, these reactions are not static but instead may vary over time (Bonanno, 2004; Miron et al., 2014). Not surprisingly, the greatest frequency of reported symptomology typically comes in the immediate (several weeks to a month) aftermath of a shooting, or what is known as the acute phase (Bardeen et al., 2013; Bonanno et al., 2011; Hughes et al., 2011; Littleton, Axsom et al., 2011; Miron et al., 2014; North et al., 1994; Orcutt et al., 2014; Vicary & Fraley, 2010). Researchers also have found that such elevated symptomology declines over time the further out temporally a person gets from the shooting (Bardeen et al., 2013; Lowe & Galea, 2017; North et al., 2002, 1997; Orcutt et al., 2014; Vicary & Fraley, 2010). Not all victims of mass shootings, however, will follow the same trajectories in regard to the onset and decrease in trauma symptomology (Bonanno & Mancini, 2008; Orcutt et al., 2014). Some reactions may be delayed or slow to come to fruition (Bonanno & Mancini, 2008; Mancini, 2019; Mancini et al., 2016; North et al., 2002). Further, chronic dysfunction is not as common as might be assumed given the severity of mass shootings; just a small subset of people who experience potentially traumatic events fall along this trajectory (Bonanno & Mancini, 2008; Mancini et al., 2016; Orcutt et al., 2014).

## Resilience, recovery, and coping

Given their violent and random nature, it is not unexpected that there are high rates of psychological distress that accompany mass shootings (Grills-Taquechel et al., 2011). With misperceptions about the prevalence of chronic dysfunction among trauma victims, the

aftermath of such events has been considered through the lens of recovery. According to Orcutt et al. (2014), recovery is represented by elevated distress and symptomology in the immediate period following the traumatic event. After some time at this heightened stage, symptoms begin a gradual decline, eventually returning to a pre-event state or something close to it (Orcutt et al., 2014). Depending on the severity of the trauma, the disruption in functioning can take months or even years to rebound to normal (Bonanno, 2004).

In the context of traumatic events, resilience is conceptually distinct from recovery (Bonanno, 2004). Resilience refers to

[T]he ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning, as well as the capacity for generative experiences and positive emotions. (Bonanno, 2004, pp. 20-21)

Bonanno and Mancini (2008) later extended this definition to include children who have been exposed to potentially traumatic events. Individuals who display resilience are able to manage stress well (Bonanno et al., 2011), and even in the face of trauma, can meet the demands of their everyday lives (Bonanno & Mancini, 2008). This is not to suggest that resilient individuals do not experiences stress; to them, however, it is more mild to moderate than it would be for non-resilient people, it does not last as long, and it does not interfere with cognitive functioning (Bonanno & Mancini, 2008; Miron et al., 2014). Researchers (e.g., Bonanno, 2004; Hartnett & Skowronski, 2010; Mancini et al., 2016; Miron et al., 2014; Palus et al., 2012) have found that, in fact, most people tend to exhibit general resilience after trauma, including mass shootings. Some, however, may be unaware of their resilience (Hartnett & Skowronski, 2010) or underestimate how resilient they are (Palus et al., 2012). It also bears noting that resilience is not attributable to any one determinant; instead, it stems from a combination of both protective (additive) and risk (deleterious) factors (Bonanno & Mancini, 2008).

Both recovery and resilience result from a third important concept – coping. Lazarus and Folkman (1984) have defined coping as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). In other words, stress or traumatic events can require an individual to come up with a strategy to respond to the issue. Such strategies are dependent on a number of factors, including prior experiences, feedback or assistance from others, and other environmental factors (Revenson & Lepore, 2012). Further, coping strategies may take a number of different forms.

Palus et al. (2012) summarized four key dimensions of coping previously found in the literature: problem-focused, emotion-focused, avoidance, and acceptance (p. 15; adapted from Carver et al., 1989; Folkman & Lazarus, 1980; Sigmon et al., 1995). Problem-focused coping refers to taking steps to change or do away with the source of stress through strategies, such as doing something about the problem (active coping), coming up with ways to resolve the issue (planning), removing distractions to deal with the obstacle (suppression of competing activities), or making sense of it through religion or spirituality. Emotion-focused coping, on the other hand, involves management of the stressor's associated negative feelings. This is accomplished through getting advice from others (instrumental social support), seeking empathy (emotional social support), or even getting

upset (venting). Avoidance, or finding ways to not deal with the stressor, can be achieved through distraction (disengagement) either mentally or behaviorally, refusing to acknowledge the stressor exists (denial), avoiding impulsive reactions (restraint), or using drugs and alcohol to evade facing the issue. Finally, acceptance occurs when the person acknowledges that the stressor is real; this may lead to the individual simply coming to terms with its existence or working to deal with the situation and move forward from it (reinterpretation and growth).

In considering these different dimensions, much of the available research has focused on avoidance. The use of this type of coping strategy has been linked to chronic dysfunction, including prolonged PTSS, among victims (Kumpula et al., 2011; Mancini et al., 2019; Miron et al., 2014; Orcutt et al., 2014). Holzman et al. (2017) found that, following the NIU shooting, the use of high dose alcohol consumption early after the event may have mediated and strengthened the relationship between trauma exposure and PTSS. Palus et al. (2012) did find that the use of avoidance decreased over time; they also indicated that acceptance, the most common approach reportedly used by NIU survivors, continued to increase in its employment over time. Interestingly, they also determined that in the context of problem-focused coping, only active coping and religion had a significant impact with trauma recovery after the shooting (Palus et al., 2012).

Researchers have noted that coping is a dynamic, rather than static, process that can change over time (Palus et al., 2012; Revenson & Lepore, 2012). Moreover, utilizing multiple coping strategies has been shown to predict greater resilience after trauma (North et al., 2001; Orcutt et al., 2014). For example, in their examination of coping following the NIU shooting, Palus et al. (2012) found that employing a combination of problem- and emotion-focused strategies was correlated with greater acceptance of the trauma and promoted post-traumatic growth over time. Coping strategies also do not apply uniformly across stressors – what may apply to some may not work for others; similarly, what works at one point in time or in one scenario may not be successful in others (Revenson & Lepore, 2012). Likewise, social and interpersonal context, such as in the form of social support, also may influence what strategies are most successful for coping (Revenson & Lepore, 2012).

### The role of social support

According to Maercker and Müller (2004), social support is regularly described as "the degree of emotional and instrumental support received by a person from the people in his or her environment" (p. 346; see also Kessler et al., 1985). Positive social support has been found to be one of the most important predictors of a reduction of PTSD and other trauma-related mental health concerns (Bonanno et al., 2011; Hawdon & Ryan, 2011, 2012; Hawkins et al., 2004; Maercker & Müller, 2004; North et al., 2001; Orcutt et al., 2014; Revenson & Lepore, 2012; Smith, Felix et al., 2017; Turunen et al., 2014). When present, positive social support offers a number of benefits to survivors of mass shootings. First, it can act as a protective factor against the onset of PTSD or other problems, whereas its absence or the presence of negative social support increases the likelihood of the development of such symptomology (Charuvastra & Cloitre, 2008; Hawdon & Ryan, 2012; Kessler et al., 1985). Second, should PTSD or related problems set in, the presence of positive social support can decrease its severity and potentially shorten the length of time

until it goes into remission; conversely, its absence can lead to chronic bouts of trauma symptoms (Charuvastra & Cloitre, 2008). Finally, positive social support has been found to be directly correlated with resilience, posttraumatic growth, effective coping strategies, and an ability to manage one's trauma and subsequent recovery over the life course (Charuvastra & Cloitre, 2008; Cohen, 2004; Miron et al., 2014; Thoits, 2011; Turunen et al., 2014). Notably, positive social support does not always come in response to a traumatic event; that which is in place *before* such an incident occurs also is effective at buffering trauma symptomology (Smith, Felix et al., 2017).

At the same time, the absence of positive social support can potentially impede the trauma recovery process. For survivors of homicide more broadly, which has been described as one of the most severe traumatic losses a person can experience, traditional social support systems may weaken or even evaporate over time due to the stigmatizing and isolating nature of the loss (Blakley & Mehr, 2008). In other words, the lack of shared experience between a homicide survivor and their social network can erode the buffering influence of interactions between the two on trauma responses (Charuvastra & Cloitre, 2008; Thoits, 2011) and the loss of such interpersonal resources can lead to a greater prevalence of PTSD and other issues (Littleton, et al., 2009; Novotney, 2018). Similarly, an unsupportive environment may exacerbate symptoms that already were present (Hawkins et al., 2004).

It bears noting that social support impacts not only the receiver, but the provider as well. This is especially true when the provider has little or no experience with the stressor (Thoits, 2011; Wortman & Lehman, 1985). This lack of experience can lead to uncertainty in what to do or say, and even the most well-intentioned efforts still may be perceived as unhelpful by the victim (Revenson & Lepore, 2012; Wortman & Lehman, 1985) and also may cause distress and helplessness for the provider (Kessler et al., 1985). Similarly, such efforts may unintentionally discourage communication, dismiss the receiver's feelings, or imply they should not feel the way they do, leaving them to perceive that they are alone or isolated (Wortman & Lehman, 1985).

### What works and what does not

Social support can take a number of different forms, both positive and negative. Lehman et al. (1986) found that providing victims with opportunities to express their feelings, giving them opportunities to be involved in activities, and expressing concern are viewed as types of positive social support. Conversely, minimizing victims' feelings, attempting to identify with their trauma (e.g., saying "I know how you feel"), giving advice, encouraging recovery, and forced cheerfulness have been found to be more negative forms of social support (Lehman et al., 1986), as has purposefully discouraging open communication or expressions of grief (Hawkins et al., 2004; Wortman & Lehman, 1985). Revenson and Lepore (2012) note that social support also may be viewed as negative when it does not match the victim's needs, is not needed, and/or when it is unsolicited.

One of the most beneficial forms of positive social support is contact with "similar others" or those individuals who have experienced a similar trauma (Hawkins et al., 2004; Smith, Donlon et al., 2015; Thoits, 2011; Wortman & Lehman, 1985). Such individuals are, as Wortman and Lehman (1985) assert, in a unique position to provide effective support. Since they have "been there," similar others are able to validate a person's emotional reactions as being normal for the exigency of the situation (Smith, Donlon et al., 2015; Thoits, 2011). At

the same time, similar others are likely to respond with more interest to a person's concerns, communicate in a non-scripted way, and be less likely to push a victim toward a quicker recovery (Wortman & Lehman, 1985); they also may offer information, advice, and coping encouragement as well as other forms of assistance (Thoits, 2011). Moreover, they can serve as role models for victims – their actions and coping strategies can be observed and emulated, and a person can identify what was or was not successful in helping the similar other handle their situation (Thoits, 2011).

Support groups for homicide survivors, for example, where individuals can bond with others who have experienced similar loss, can be invaluable in the recovery process (Blakley & Mehr, 2008; see also Wortman & Lehman, 1985). As Briere and Scott (2006) note, these groups allow homicide survivors to "learn from the similar experiences of others; a process that may be more powerful and enduring than when similar material is delivered solely by the therapist" (p. 88).<sup>2</sup> Homicide support groups further enable survivors to make sense of their losses and have their feelings validated by those who share them, which can help to reinforce positive coping skills (Blakley & Mehr, 2008). As Blakley and Mehr (2008) summarize, "in moments of 'me too' realization, the support group becomes the epicenter from which the trauma shock waves are felt and safely stabilized" (p. 243), which ultimately can have a positive and mutually beneficial effect on the overall recovery process. Despite the documented success of homicide survivor support groups, research has yet to determine how effective such a practice would be for individuals impacted by mass shootings.

Other types of social support have been found to play an important and positive role in the trauma recovery process following such attacks (see, generally, Nurmi, 2017). Hawdon and Ryan (2012) found, for example, that being a part of and participating in events within a community impacted by a shooting can promote well-being and recovery in the aftermath (see also Palus et al., 2012). Community-based events or rituals increase social support by bringing people together, giving them a sense of belonging, uniting them in common sentiments (e.g., grief), and promoting solidarity, all of which can serve as positive coping mechanisms (Høeg, 2015; Nurmi, 2017). Examples of such rituals may include public gatherings and community marches that promote a sense of belonging, as well as funerals that unite individuals as they say goodbye to those who were lost (Hawke & Ness, 2017; Høeg, 2015; Nurmi et al., 2012). Community memorials, both spontaneous and permanent, that serve as sites of collective mourning where people leave items including flowers, teddy bears, ribbons, signs, and candles, also provide forums that promote increased solidarity (Hawke & Ness, 2017; Nurmi, 2017; Nurmi et al., 2012). As Nurmi et al. (2012) surmise, "[b]y creating an atmosphere of solidarity, social support also strengthens the sense of unity in the community," which in turn can have a positive impact on coping in the aftermath of tragedy and trauma recovery (p. 303; see also Hawkins et al., 2004; Mancini et al., 2016; Palinkas et al., 2004; Smith, Felix, et al., 2017).

#### Theories of social support

As Revenson and Lepore (2012) aptly summarize, different strategies work for different people. Accordingly, it is beneficial to understand how individuals seek out or acquire social support in traumatic situations. To better understand this process, there are several key theories that can be used: tend-and-befriend, relational regulation theory, and psychosocial gains from adversity.

Tend-and-befriend was offered by Taylor and colleagues (Taylor, 2006; Taylor et al., 2000; Taylor & Master, 2011) as an alternate behavioral response to fight-or-flight, which historically had been considered the typical human reaction to stress. While the fight-or-flight response still is more common among men, tend-and-befriend also provides an avenue to better understand how females are able to mobilize resources and social support in times of stress (Taylor, 2006; Taylor et al., 2000). Broadly speaking, in times that are stressful or even life threatening, people come together to provide and receive joint protection (Taylor, 2006; Taylor et al., 2000; Taylor & Master, 2011). Helping others can reduce psychological stress for both the provider and receiver (Taylor, 2006; Taylor & Master, 2011), as well as provide opportunities to model positive coping behavior (Taylor et al., 2000). Tending refers to the process of caring for offspring during times of stress in order to ensure their survival (Taylor, 2006). Taylor et al. (2000) note that engaging in caregiving behavior can bolster attachment, which serves to mitigate both stress and trauma. Befriending involves affiliating with similar others through the creation and maintenance of social networks (Taylor, 2006; Taylor & Master, 2011). Such networks serve to reduce social isolation and promote social bonding (Taylor, 2006), which can serve to promote safety and reduce stress through contact with others (Taylor & Master, 2011).

Relational regulation theory (RRT), introduced by Lakey and Orehek (2011), was developed to describe the association between perceived social support and mental health (see also Lakey et al., 2014). In this perspective, both perceived support and mental health are grounded in social interactions, particularly those that are substantive, meaningful, and cover topics of mutual interest (Lakey & Orehek, 2011). In other words, ordinary conversations and shared activities with others who have like interests can help to improve perceived social support and overall well-being; by extension, this helps an individual regulate their emotions and affect better than discussing stress and coping mechanisms does (Lakey et al., 2014; Lakey & Orehek, 2011). As Lakey et al. (2014) point out, however, perceived support does not cause affect, but rather both emerge in tandem from specific kinds of social interactions. This even may occur in connection with adverse situations that can provide a platform for meaningful and substantive social exchanges (Lakey & Orehek, 2011). RRT also suggests that affect also can be regulated simply by observing other people's interactions and conversations that a person finds meaningful (Lakey et al., 2014). While trait-like support is a constant over time and providers, RRT promotes a more dynamic approach of socially influenced support, whereby a person may think about or interact with various providers who can help regulate affect differently on a moment-by-moment, day-by-day basis (Lakey et al., 2014); who is viewed as a successful provider of social support is a matter of personal taste as one person may view a provider as supportive while another person may not (Lakey & Orehek, 2011). Moreover, when low support is perceived, an individual may face mental health issues like major depression, psychological distress, or PTSD symptomology; with higher perceived support, individuals will exhibit signs of better mental health (Lakey & Orehek, 2011).

Drawing, in part, on both tend-and-befriend (Taylor et al., 2000) and relational regulation theory (Lakey & Orehek, 2011), Mancini (2019) has proposed that following an adverse event, such as an isolated episode (e.g., mass shooting) or major life stressor (e.g., death of a loved one), people can exhibit significant psychological improvement rather than just distress (see also Bonanno & Mancini, 2012). Termed psychosocial gains from adversity (PGA), this theory proposes a "favorable and reliable change on an index of psychological

functioning from before and after exposure to adversity" (Mancini, 2019, p. 486). Instead of being an internalized process, PGA actually is derived from an improved social environment that presents itself after the adversity and promotes prosocial behaviors among those impacted (Mancini et al., 2019). To underscore this process, Mancini (2019) highlights four key mechanisms of the theory. First, drawing on Taylor's (2006) work, social affiliation and prosocial behaviors, which lead to the emergence of strong social bonds, are byproducts of painful shared experiences. Second, in line with RRT (Lakey & Orehek, 2011), these meaningful interactions serve to promote well-being among those who have been impacted. Third, at the group level, adversity like mass trauma serves to promote cooperation within the social environment, which facilitates group formation and stronger ties among individuals while simultaneously eroding differences among classes of people (Mancini, 2019). Finally, psychological functioning is advanced by adverse situations by offering more social resources, enhancing relationships and interactions among individuals, and promoting positive affect (see also Lakey & Orehek, 2011). Importantly, the benefits of PGA are not found only in the immediate aftermath of an adverse event but also continue long-term (Mancini, 2019; Mancini et al., 2016).

Taken together, these perspectives highlight the importance of opportunities to cultivate positive forms of social support. This can serve to buffer against trauma symptomology and ultimately inform resilience and/or response to an acute or tragic event, such as a mass shooting. Moreover, a greater focus of these perspectives centers on social support from similar others who have analogous experiences. In turn, these relationships serve to reduce isolation and promote solidarity and social growth.

### Methodology

The present study, while exploratory in nature, seeks to better understand the needs of mass shooting survivors in the aftermath of their event. Specifically, this research centers on the answering the question, "What resource(s) do survivors perceive as beneficial or feel are needed to aid in the trauma recovery process?" Given that decisions about the availability of resources often fall to policymakers who themselves are not survivors, answering such a question is all the more imperative in understanding the needs of individuals impacted by these extremely violent events in order to ensure that resources, including money, are directed in ways that are the most useful and can provide the greatest potential benefit. Further, given the cultural importance of the 1999 shooting at Columbine High School, coupled with the length of time since the event, exploring the experiences of this particular group of survivors can be beneficial not only for better understanding how they navigated the aftermath but how the lessons they learned may have paved the way for survivors of other attacks that followed.

### **Participants**

Mass shooting survivors are a particularly vulnerable group that is difficult both to identify and access.<sup>3</sup> In order to recruit participants, snowball sampling, primarily through social media, was utilized (see, generally, Baltar & Brunet, 2012; Dusek et al., 2015). A letter detailing the goals of the project was provided to one of the founders of a mass shootings survivor outreach group known to the researchers after institutional review board (IRB) approval was secured from the principal investigator's (PI) university. The founder then posted the call for participants to the group's Facebook page, and members of the group also shared the letter with other mass shooting survivor groups or with others they knew beyond social media. Included in the letter was a link to sign up for an interview either by phone or Skype, depending on the participant's preference. Of the total number of survivors who signed up to participate in the project, 18 were from Columbine, the focus of the present study.<sup>4</sup>

Each individual who expressed interest in participating was provided a detailed consent form that included an overview of the project, a description of their role in the study as well as the potential risks or discomforts to them, information on confidentiality and participant rights, and contact details for the principal investigator and IRB. Trauma counseling information also a was provided, including the contact details for the co-PI's counseling firm and the U.S. Department of Veteran's Affairs website that provides additional information and resources for finding a therapist. Consent forms were forwarded by e-mail, with follow-ups by e-mail and phone if not returned within two weeks. Sixteen completed consent forms were received from the Columbine survivors, representing a nearly 89 percent return rate from initially interested parties.

Upon receipt of the signed consent forms, interviews were scheduled at the convenience of the participant. Interviews were conducted between October 18, 2017 and May 3, 2018, with 11 taking place in November 2017.<sup>5</sup> A semi-structured interview guide was used with each participant with questions aimed at not only understanding how each person had been impacted by the shooting in their respective roles (e.g., family member of a deceased victim; administrator, teacher, or student in the school during the attack) but also what types of services, either formal or informal, they sought at varying intervals after the shooting (short term [first 30 days], mid-range [30 days to 1 year], and long term [beyond the first year mark]). By using a semi-structured format, it allowed the researcher to probe for additional information based on the participant's responses in each of the initial questions. Each interview lasted, on average, approximately one hour and, regardless of interview mode (phone [n = 14] or Skype [n = 2]), the audio was recorded with the participant's consent. After completion, each audio file was transcribed, with a copy of the transcription provided to participants both for their own records and in case they wanted to clarify any points or expand further on any topics.

Seven of the interviewees were present at the school on the day of the shooting but did not have any direct contact with the perpetrators, whereas four other participants did encounter them at some point during the attack (none were shot, though one did sustain a small leg wound from shrapnel from an exploding pipe bomb). The majority were students at the time, with one teacher and one administrator. Three of the interviewees were surviving family members of individuals who were killed in the attack. One interviewee was the parent of two students who were in the school at the time of the shooting (both physically unharmed), while the remaining participant was a student at a neighboring school.<sup>6</sup>

### Analytic strategy

Given its exploratory nature, the present study relied largely on inductive techniques to guide the coding and analysis of the interviews. The inductive approach was particularly appropriate for the present study because it allows the researchers to immerse themselves in the data and for themes meaningful to the broader research question to be identified systematically through the content analysis process (see Berg, 2007). Once the article transcriptions were finalized, meaning that no further clarifications or revisions were made by the participants, they were loaded into the NVivo 11 software package for organizational and analysis purposes. Two of the researchers then completed an initial read through of each transcription, at which time it was determined that the experiences referenced by participants fell within two broader categories, positive and negative, that became the parent categories for coding. From there, a second review of the transcripts was completed where memos and notes were made regarding recurrent themes, which were then organized based on who was providing the support (e.g., family, friend, professional, stranger) in either the positive or negative context. The role of the support provider subsequently served as the child nodes (primary level) for coding purposes.

In the present study, the themes themselves (positive or negative social support by provider) served as the units of analysis. A sample of 10 transcripts from the full sample (including, but not limited to, the Columbine survivors) was randomly generated for the purpose of a reliability check. Each of the two researchers then independently coded the articles, highlighting each time that any of the themes presented themselves. Once both researchers had completed their respective coding, NVivo was used to calculate a Kappa coefficient for each of the themes. Several of these coefficients were below 0.6, which is the generally accepted benchmark for acceptable reliability agreement (Landis & Koch, 1977). After reviewing potential discrepancies in understanding the themes and revising the codebook as needed, the sample was cleared and recoded. A second reliability check indicated that all Kappa coefficients exceeded the 0.6 benchmark, and the full sample subsequently was coded using the revised codebook.

### Findings

### Shared experiences and social support

As was noted, the presence of positive social support can provide a number of benefits to survivors of mass shootings, including (but certainly not limited to) a mitigation of traumarelated mental health concerns (Hawdon & Ryan, 2011, 2012; North et al., 2001; Turunen et al., 2014). Positive social support can take various forms but, as was expressed by the Columbine survivors, this was most commonly achieved by being around other survivors, particularly when those individuals had experienced the shooting in the same way and consequently could relate to their feelings and emotions (Smith, Donlon et al., 2015; Thoits, 2011). By connecting with those who shared in their experiences, it created a sense of solidarity for the survivors (see also Nurmi, 2017). This, in turn, was viewed by nearly all (n = 15 or 94%) of the Columbine survivors interviewed as one of the most important parts of their recovery process (see also Hawkins et al., 2004; Smith, Donlon, et al., 2015; Thoits, 2011; Wortman & Lehman, 1985).

For Heather, who was a senior at Columbine on the day of the shooting, she commented that "the only time that I felt comfortable was when I was surrounded by people that I was in the [choir office]" where she and approximately 60 other students hid during the attack. Brandon, another Columbine senior trapped in the choir office alongside Heather, echoed a similar sentiment:

[M]y healing was being with my friends because they understood it, they got it. My parents didn't get it, I mean, yes, they did, but I was looking for primary people, that was it. ... [I]t was the people who were there, that was it, those were the only ones who I wanted to talk to.

Both Heather and Brandon highlight the importance of connecting with similar others who served to validate their experiences that others (family and friends outside of Columbine) could not directly relate to (Smith, Donlon et al., 2015; Thoits, 2011).

Maddie, a Columbine freshman who was in math class when the shooting erupted, also expressed a disconnect from her parents, instead seeking comfort from her classmates:

I would not let my parents hug me. ... I almost felt guilty for being able to be hugged or they would hug me and the hug wouldn't feel the same because they don't know what it was like to go through that. I was trying to be at these vigils and these ceremonies and this everything as much as I possibly could because the hugs from somebody else who you knew made it and was alive meant more than a hug from my parents for some reason. ... I tried to spend as much time with friends as possible, to learn their stories and hear what their perspective was and what had happened to them.

Kelsey, also a freshman who had just begun her lunch period in the cafeteria, shared similar feelings with Maddie:

It's just nice to be with somebody who knew and who got it. My mom tried. My dad tried too, he was right there. ... At least in my heart, there was a real emotional separation between me and people who weren't there, and also a real bond between me and people who were there who got it, who I didn't have to explain things to.

For Monica, a senior who also was in the choir room and hid in the adjoining office when the attack began, finding comfort among her friends became all the more important as, even if she had sought it out, her family failed to provide such support: "[M]y mother drank a bottle of Jack and said, 'We're never going to talk about this.' She has no idea what happened to me that day. She's never asked questions. She's never acknowledged the day." These quotes by Maddie, Kelsey, and Monica highlight different ways in which social support can be problematic. For Maddie and Kelsey, it appears that although their parents' first inclination was to tend to them (e.g., Taylor, 2006), the support they offered was viewed as unhelpful because it did not match their needs at the time (Revenson & Lepore, 2012); instead, connection with similar others was more beneficial (Thoits, 2011; Wortman & Lehman, 1985). For Monica, however, her mother's refusal to acknowledge the situation (thereby employing an avoidant coping strategy; see Palus et al., 2012) and discouragement of open communication actually could have led to her feeling more isolated, which may have had an effect on how she processed her experience (Wortman & Lehman, 1985).

The importance of connecting with similar others was not solely limited to the students of Columbine. For family members of those killed, like David, the shared experience of loss provided a reprieve not found in any other type of support received:

[W]e had 12 other families who had lost somebody and we became close with them. Although it was this horrendous tragedy, that familiarity was extremely important in terms of getting through all this and seeing how they dealt with it. Walking into this group of people and knowing you didn't have to explain how you felt. They were there and they knew and you could just start talking. They knew it was okay to laugh sometimes. Where you always feel like when you're out in public and people knew who you were that if you start laughing and joking about something, they would somehow think badly of you that you're somehow finding some happiness. However, with those other families, there were no worries about that. They knew what was going on.

Here, David highlights elements of relation regulation theory and psychosocial gains from adversity. Under both theories, meaningful social interactions may arise as the byproduct of adverse situations (Lakey & Orehek, 2011; Mancini, 2019). For David and the members of the other families of the deceased victims, while there was undoubtedly an outpouring of support for them from a variety of sources (e.g., community members, outsiders, even President Clinton who visited Littleton after the shooting), the fact that they had the most meaningful social exchanges with one another likely positively impacted their overall well-being. Further, as David references, such exchanges did not have to focus on their shared grief, stress, or coping to be effective; instead, one of the most beneficial forms of social support was having a place where they could respond as they needed to - not as they were expected to - without judgment (Lakey & Orehek, 2011). Moreover, the shared adverse experiences faced by the families of the deceased helped to foster their formation as a group (Mancini, 2019), a resource that carried them forward after the shooting. In fact, as Stephanie, David's wife, noted, working together with the other 12 families as a group to build a new library at the school (see Associated Press, 2001; Schildkraut & Muschert, 2019) was a way in which she both honored her loved one and engaged in positive, prosocial behaviors that helped her recovery (Mancini, 2019). Raising money for the library allowed for not only an influx of resources from the community that also simultaneously generated more social support for the families (Mancini, 2019).

Kerry, a mother of two students who survived the attack, viewed the support she received from other parents somewhat as a double-edged sword, in that they would focus on their children, but never deal with their own traumatic experiences:

We shared stories about what our kids were doing and where they were and all that kind stuff, but I don't really think we ever talked about ourselves so much because we were just all in so much pain. ... We would talk to each and we would just all cry. I guess that we just knew. It's again knowing what we know. We could cry together and could just be silent and it was okay. We understood the silence, you know?

Kerry's quote presents an interesting take on Taylor's (2006) tend-and-befriend strategy. She, like many parents who had children at the school on the day of the shooting, quickly moved into tending mode (e.g., checking in on their children, seeking out resources to help them cope with the tragedy). Yet even though the parents never focused on themselves specifically in conversation, they still engaged in befriending – mobilizing resources (one another) for social support. Whether it was crying together or being silent, having the outlet to do so with others minimized their isolation, which in turn may have helped to reduce their stress (Taylor, 2006; Taylor & Master, 2011).

Thus, for nearly all survivors – in some capacity – the most meaningful relationships, particularly in the immediate aftermath of the shooting, were with those people that they had similar experiences with (see also Hawkins et al., 2004; Smith, Donlon et al., 2015; Thoits, 2011; Wortman & Lehman, 1985). This allowed the survivors both to make sense of what they had experienced by understanding that they had not gone through it alone and validating their feelings that seemed at odds with how others were responding (Blakley & Mehr, 2008; Briere & Scott, 2006; Hawkins et al., 2004; Smith, Donlon et al., 2015; Thoits, 2011; Wortman & Lehman, 1985). What were perceived as positive

associations, even when stemming from a negative event, provided a buffer from the outside world, which was particularly invaluable as the Columbine survivors were, as David summarized, "grieving in a fishbowl."

### Social support from the "outside"

Nearly as frequently mentioned as positive experiences with others who had experienced that day in a similar manner as the survivors were the negative encounters with those individuals who had not (n = 14 or 88%). Such encounters can breed resentment toward non-survivors (Nurmi, 2017) and can could potentially lead to survivors feeling isolated and minimizing or dismissing their experiences (Wortman & Lehman, 1985). A number of the Columbine survivors discussed how the attempt for individuals from the "outside" who had not shared in their experience to provide social support created an "us versus them" mentality. This divide was further exacerbated when people attempted to compare their situations with the survivors' to create a sense of shared experience (e.g., Lehman et al., 1986).

For some, the lack of shared experiences with non-survivors led to isolation and retreatment from society in the aftermath of the shooting. Andrea, a senior who also had been in the cafeteria when the shooting began, found people trying to relate to her experience to be a trigger: "People were trying to act like they know what I had gone through, and they didn't. I felt like an outsider. I felt crazy." From a parent's perspective, Kerry also expressed the negative impact such comments had on her:

People say, "I understand how you feel." That's not the right thing to say because you don't understand how we feel unless you've been there. If you've been there, you have that right. If you haven't been there, you just need to be there and not say anything. Just say, "I'm really sorry," or, "If there's anything that you need," or just a hug, whatever, but don't say "I understand" because you don't understand. You haven't been through it, you don't understand it. ... It's offensive or something for people to tell you they understand. It's stupid, I know. It seems crazy but it feels very offensive for someone to say I understand what you're going through because they don't understand what you're going through. Your kid almost died. Your kid's friends are dead.

Kerry's comment in particular highlights how even well-intentioned efforts from others can be viewed as unhelpful by survivors (Revenson & Lepore, 2012; Wortman & Lehman, 1985).

For others, the attempt by non-survivors to provide social support, even from within the local community, was perceived as adding more pressure to the recovery process. Zach, also a senior who found safety in the choir office after witnessing Coach Dave Sanders get shot when he had gone to look for his younger sister in the school, describes his feelings as defiant:

[T]here were these bumper stickers that came out almost immediately that said, "We are all Columbine." And I remember for students, "Now we get it." But then we were like, "No, we're not. We're not all Columbine. You weren't there. It was different."

Zach's experience in this instance highlights the fact that the solidarity established within the affected group (the survivors, in this case) can produce attitudes that deny the experiences of others in the community, even though they may suffer their own form of trauma as a result of an event like Columbine that has such widespread reach (Nurmi, 2017; Palinkas et al., 2004).

Even people who had lost loved ones attempted to draw comparisons between their own experiences, despite that the type of loss differed drastically (see also Lehman et al., 1986). For Chantal, whose family member was killed in the shooting, the desire for others to commiserate with her, no matter how well-meaning, that led to a comparison of grief undoubtedly made the recovery process all the more difficult and even led her to adopt an avoidant coping strategy (e.g., Palus et al., 2012):

I had this woman who, she was like, "When my husband died, I was fine a week later. I don't know what the heck your problem is." I was like, "Okay, my [family member] was murdered." I had this mixed reaction and everybody ... thought they were doing the right thing wanted to come and tell me about their loss and how it impacted them and how they got through it. ... At this point, I'm just like, "Stop talking to me. I don't want to talk about this." I want to go back to that state of denial.

Fletcher, an administrator at the school who actually came face-to-face with the perpetrators, expressed that his experience that day actually provides this missing legitimacy for survivors in other communities:

I think what happens is that someone walks in and says, "I know how you're feeling" and people are sitting there, "How do you know how we're feeling? Were you in that school when bullets were flying? Did you lose a child the way I lost a child?" With me, if I go and say "I know," it's just like the people from Las Vegas – "I know how you're feeling." When I walked in Sandy Hook, "I know how you are feeling." They're saying, "Yes, you do because you experienced it." It doesn't make me better than anyone else … it's just that we've experienced that.

The legitimacy that Fletcher mentions allows him to serve as a role model for other community leaders. Moreover, he now can share what did and did not work for him as far as response and coping strategies, and others in similar situations can emulate or adapt on his behaviors they view as successful in the process (Thoits, 2011).

Beyond the immediate aftermath of the shooting, the lack of understanding of nonsurvivors also provided additional challenges (see, generally, Hawkins et al., 2004; Lehman et al., 1986; Revenson & Lepore, 2012; Wortman & Lehman, 1985). Monica described her experiences when she went away to college the following year:

I talked about it my first semester of college and the looks that I would get or just the awful questions. They want to know where I was, but it wasn't because they were sincerely concerned about me. They want to go home and say, "Hey, I met Columbine survivor." ... After this first semester, I didn't say to anybody at all because I don't like the looks, I don't like the comments, I don't like the persona that – I felt people just stayed away from me because I was different.

This experience while at college highlights how insensitive interactions with others may lead survivors actually to retreat, either physically or emotionally, out of fear of these types of responses. By not being able to openly continue to work through their experiences, it is possible that Monica and others who had similar experiences felt forced to internalize everything they were trying to work through, which may, in some ways, stunt their posttraumatic growth, at least in the interim.

Similarly, the lack of understanding the overall experience yielded re-traumatization for some, even when they attempted to advocate for themselves. Kristina, a senior in science class when the shooting happened who went on to be a teacher, described an incident early in her career:

I think the next day [after the 2006 Platte Canyon High School shooting], they wanted to do a lockdown drill, and I was just – I went in to [see] the principal, and I was like, "I can't do this. Can you please do it a different day?" She's like, "No. I have to do it today." And was very kind of just this is what it's going to be. And so, I had a complete breakdown in her office, and she ended up sending me away from the school with the social worker to go drive around. I did not love how she handled that, and I lost a lot of respect for her after that.

Kristina's quote in particular highlights how, even seven years after the shooting occurred, she still experienced triggers that took her back to April 20, 1999. Although she attempted to advocate for herself in a meaningful way, her supervisor's response underscores the disparity in understanding of experiences of survivors by non-survivors. In other words, for individuals who have not experienced a traumatic event like a mass shooting, being able to relate to the needs of individuals who have, no matter how far removed from the event they may be, is particularly challenging. Without an ability to draw a meaningful comparison between shared experiences, non-survivors may view the responses from survivors simply as "other people's problems," which may further minimize the trauma of the survivor. While not all experiences with non-survivors were negative (Stephanie recalls the endless support she received from friends, family, and even coworkers), it was those that were viewed as counterproductive or unhelpful that were recounted most by the participants (see also Revenson & Lepore, 2012).

Social support from the outside also came in more formalized ways, namely counseling and therapy resources. While resources, such as grief counselors, were provided to students once they resumed classes at nearby Chatfield High School, their availability was short-lived due to the timing of the shooting in relation to the end of the school year, particularly for the seniors who graduated a month later. Further, the manner in which such resources were made available was equally as problematic. Karissa, a junior who was in the lunchroom at the time of the shooting, recalled how group counseling was carried out:

[W]e'd be sitting in these classrooms and we would have to get into these small groups with people in our class. The person on the intercom would come on and say, "Talk about how you're feeling today." Then they'd give us five minutes and then they come on back on and say, "Talk about a new struggle that you're having." I remember that so clearly of being the worst thing that could have possibly been done.

This quote by Karissa, which highlights the importance of recognizing that not all survivors respond or grieve in the same way, mirrors the findings of Hawkins et al. (2004), who similarly found that other Columbine students viewed these exercises as unhelpful. In some instances, students were irritated by these efforts because they did not want to be forced to talk (see also Palinkas et al., 2004); one student expressed frustration with this form of structured counseling that relied on treating everyone the same even though they all were not responding to the shooting the same (Hawkins et al., 2004). Such blanket debriefing techniques are not only ineffective at reducing or preventing PTSD and other trauma-related symptomology, but also may potentially interfere with the natural recovery process associated with trauma and even cause harm (McNally et al., 2003; see also Kagee, 2002).

For those who sought professional resources outside of school (n = 14 or 88%), there were other barriers to their success. One was timing. For some, like Karissa, who sought out professional help shortly after the shooting took place, the amount of time that

funding was made available was an impediment, such that they could not afford to pay for therapy sessions once victims' assistance expired. For those who were able to afford such services, either out of pocket or through their or their family's insurance, the time impediment came in respect to how long it took them to be willing to seek out counseling. While some being seeking treatment almost immediately, others were delayed: Heather did not begin counseling for about a year, while Zach waited nearly eight years before finding a therapist. Both Heather and Zach indicated that the delay in seeking counselingrelated resources was due to either not being ready to delve deeper into their experiences and/or not thinking that they needed help from others, instead believing they could come to terms with what had happened to them on their own. It was only when they were ready to have the assistance of someone else that they sought it out.

Yet as a number of the survivors noted, finding a mental health professional was not always easily achieved because it was about finding the *right* person to help. Many of the professionals who came forward after the shooting to offer assistance had little to no formalized grief counseling experience or trauma training, skills that were undoubtedly needed to assist the survivors. For some, like Kelsey, Maddie, and Monica, the counselors did not seem to understand what they had experienced, making them realize that the person they were seeing was not the right fit. For others, like Chantal and Karissa, there was a lack of trust in the therapist. As Chantal recalled, there was an existing distrust between her family and the media, and she viewed therapists in a similar light:

[W]e didn't trust that they would keep it confidential. I would bounce in and out of therapists but as soon as they started asking me questions that I would imagine were going to be put in the newspaper, I'd shut up.

Karissa shared similar sentiments, noting that her lack of trust in her initial therapist, combined with him pushing her to do EMDR despite her not wanting to, created a situation where she would withhold information that potentially could be vital to helping her through the recovery process. EMDR, or eye movement desensitization and reprocessing, is a form of psychotherapy that involves accelerating the cognitive and emotional healing process over a fewer number of sessions than traditional trauma therapy (Shapiro, 2001). An effective treatment for PTSD and other trauma related disorders, EMDR requires the patient to relive their triggering experiences in doses, which may cause added trauma for some patients in the initial phases (Gotter, 2019; Hase et al., 2015). Further, at the time the treatment was being offered to Columbine survivors, it was a newer form of psychotherapy with little in the way of results to show its effectiveness (Gotter, 2019), which may have contributed to reluctance to its use by Karissa and other survivors, though some, like Andrea and Monica, did express finding EMDR to be helpful.

Even in situations where survivors were able to find therapists who were a good fit on the first try, information about their personal connections to Columbine was not always made readily available. As Zach recalls about one particular conversation with his therapist, with whom he found an almost immediate level of comfort, that occurred some time after they began working together:

I said, "Oh, Meryl. By the way, I'm a – I don't think this has any impact, but I'm a Columbine survivor, and I was trapped in the school for about four hours." And she goes, "Where the fuck was that this whole time?" I was obviously endeared to her [at] that moment.

Here, Zach's failure to share his experience at Columbine with his therapist potentially may have been due to thinking that the shooting was not still impacting him all those years later. There may be a mind-set, either individually or socially imposed, among survivors that they should "get over" their experience by a certain time, which may lead them to underestimate or even minimize the potential long-term consequences of their trauma. By opening up to his therapist, Zach was able to learn about how his experience, even if not always at the forefront of his thinking, likely conditioned other emotions and experiences by having not dealt with it for so long; in doing so, he could begin to learn positive coping mechanisms to help counter the trauma's lingering effects.

By and large, however, finding professional help that was a good fit and could provide the necessary resources to the survivors was not easily achieved. Instead, it was a process of trial and error, testing different therapists to find one that the survivors felt that they could open up to and who had the necessary skills to be able to help them, and coming to a place where they were willing to access such resources. Collectively, when the survivors discussed formal counseling services, they typically looked at it as unnecessary or not helpful in the immediate, short term after the shooting (see also Hawdon & Ryan, 2011, 2012), only finding it beneficial in the later years of their journey. Moreover, as the variability in the survivors' experiences indicate, there was no "one-size-fits all" solution in regard to the type or delivery in counseling services. This is consistent with RRT in that who or what is perceived as supportive is subjective (Lakey & Orehek, 2011) and different types of social resources must be made available to those in need (Mancini, 2019).

# The role of community

Researchers have noted that being a part of a community is important for sustaining solidarity among survivors, which can aid in the trauma recovery process (Hawdon & Ryan, 2011, 2012; Nurmi, 2017). Specifically, communities can foster opportunities for impacted individuals to gather, reflect, and respond together with others who have shared in their experiences (Høeg, 2015; Nurmi, 2017). Communities may be defined geographically (e.g., a town or city) or socially (e.g., a school or religious group), yet still promote a sense of belonging (Hawke & Ness, 2017; Høeg, 2015; Nurmi et al., 2012). This, in turn, can help to buffer trauma symptomology and promote a more positive and healthy recovery and even resilience (Hawdon & Ryan, 2012; Palus et al., 2012; Smith, Donlon et al., 2015).

Such sentiments were echoed by a number of the participants in the present study (n = 6 or 38%). The Columbine community was particularly tight-knit before the shooting, and several survivors, like Kerry, noted how this facilitated getting back to "normal":

Without our community partners, our surrounding principals, and the business community at large, I don't think that we would have healed nearly as well as we did because everyone wanted to help each other. It's just such a loving community out there.

Similarly, Brandon acknowledged how the greater community that surrounded the school was impacted but how the breadth of the tragedy actually served to get more done for those who were in need of help:

[W]e're in an existing community, because we had an identity, because there were layers. You have the primary people who were there [in the school and came face to face with the gunmen], you have the secondary people who are – who could hear it but couldn't necessarily

see it. You have tertiary people who are parents and the grocery store workers who saw us every day and our employers and all of these circles and circles and circles, but it all still stemmed from the heart of the community. Everything that was possible was done because we had this community.

The remarks by both Kerry and Brandon highlight findings from other researchers that show that having positive social support in place before a trauma or tragedy like Columbine occurs actually can help to mitigate the aftereffects of the incident (e.g., Littleton et al., 2009; Smith, Felix et al., 2017). Similarly, as illustrated within the PGA theoretical framework (Mancini, 2019), group cohesion can serve to erode differences, either real or perceived, among community members and encourage cooperation in times of crisis that, in turn, promotes well-being.

For the younger survivors, like freshmen Maddie and Kelsey, they were able to continue their recovery process surrounded by other students who had the shared experience of the shooting and who were facing the same struggles. Additionally, remaining in the school and broader community provided for access to resources that also helped them. For those who were seniors at the time of the shooting, however, they lost that sense of social solidarity when they graduated. As Zach noted, "I never entered Columbine again as a student." Andrea recalled how she responded to her experience after graduation, a sentiment that was echoed by others who were seniors at the time of the shooting:

I wanted to forget it all, but we had to cope on our own. We had to find our own ways. Even still, my peers, to this day, are struggling because we were all shoved out into the world after going through this traumatic event. It's either sink or swim. That's how I look at it. It was like survival of the fittest, like, "Good luck. Good luck, hope you survive."

Andrea's quote in particular highlights the impact that the loss of community had on her and the other graduating seniors. Some of her classmates, including Heather, filled this absence with more negative and avoidant coping mechanisms, such as drug and alcohol abuse, that led to additional issues that compounded the trauma recovery process (e.g., Holzman et al., 2017; Palus et al., 2012). The removal of the Columbine community as a network of resources likely fostered social isolation for the graduating seniors (in opposition to tending-and-befriending that occurred within the community; see Taylor, 2006), which deprived them of the necessary support and interactions that have been found in RRT (Lakey & Orehek, 2011) and PGA (Mancini, 2019) to promote well-being and healthy emotional regulation.

Three of the survivors recognized not only how important the role of community was for their recovery, but how the absence of such could affect other individuals who went through different shootings. Louis, a teacher at Columbine when the attack occurred, commented that:

I think one of the things that helped us as a community, where things like Aurora and Las Vegas most people will struggle, is we were already a tight-knit community. At Las Vegas, those several thousand strangers in the same place, the same with Aurora. I know that our kids that are working with the folks at Aurora ... have talked about they struggle because they don't have a lot of people that have something in common with them from that day. I think the fact that we were already a school community was something that helped us as a community to get through it all.

Overall, the role of community as a facilitator for social solidarity was viewed by all survivors, regardless of whether their experience with such was perceived as positive or negative, as a necessary component to the recovery process (see also Hawdon & Ryan, 2011). Those survivors who were able to remain within or connected to the Columbine community were able to manage their trauma earlier and, by some accounts, more successfully than those who graduated and perceived that they were shoved out into the world. Similarly, while all reported experienced some form of trauma-induced psychological issues (e.g., PTSD, PTSS) immediately after the shooting, those who remained in the community expressed that they were able to achieve resilience or see their symptoms go into remission sooner, whereas those who left may have experienced not only a prolonged response but also, in some cases, a potentially delayed onset (see also Littleton et al., 2009).

#### The survivor network

Shortly after the 2012 shooting at an Aurora, CO movie theater located just 30 minutes from the high school, survivors Heather and Zach, along with several others, formed a support group called The Rebels Project, named after the Columbine mascot. The goal of the organization is to "[t]o provide safe, empowering platforms for survivors to connect, share experiences, foster relationships, and cultivate healing" (The Rebels Project, 2017). In doing so, the group provides the positive social support and solidarity that facilitates the recovery process (Charuvastra & Cloitre, 2008; Hawdon & Ryan, 2011, 2012). Group members are able to not only share experiences but also lessons of what has or has not worked throughout the recovery process, serving as role models for one another (Blakley & Mehr, 2008; Thoits, 2011).

The need for connectedness is something that, in different ways, was highlighted by nearly every survivor (n = 15 or 94%). What's more is that it was not *any* connectedness that they highlighted as important but rather the need to be connected to others who shared in their experience in some way (see also Thoits, 2011 or Wortman & Lehman, 1985 for discussions of "similar others"). As the previous sections indicate, however, this was not always easily achieved, particularly with individuals who had not been in the building on the day of the shooting or who had not lost loved ones in the attack. Thus, the creation of The Rebels Project provided a much needed outlet for survivors to find a resource that they viewed as beneficial to their recovery process. As Mancini (2019) also has noted, group formation is a marker of PGA and the benefits of association, including enhance relationships and interactions, are available not only in the period immediately following a tragedy but also the long-term.

In line with this notion, Brandon indicated, "That's one of the pieces that I think is so essential about The Rebels Project ... creating a place and a safe haven where you can talk with other people who get it." Andrea also indicated that the group had provided her a necessary outlet with people who understood how she was feeling: "It's so weird because I used to not want to connect. Now, it's just about connecting" (see also Smith, Donlon et al., 2015). Kelsey also expressed the importance of the group in her continued healing:

For me, just being able to reach out and contact somebody if I'm feeling triggered or down, or just whatever. ... But knowing that that resource is there and knowing that there's a safety net, that's been a major help I feel like. Just to know that if I do crash and burn, I can at least call out for help.

She further summarized the significance of the group connection related to trauma recovery: "I know part of what made Columbine not as terrible was the fact that we had each other."

As noted, The Rebels Project was not formed until more than 13 years after the shooting had occurred, and several of the survivors indicated that not only was the group important for their recovery, they wish they had the resource earlier. Monica, for example, stated that "I wish that someone ... was there to say, 'Hey, this is what you're going to look like in 18 years. It's going to be okay." Maddie shared a similar sentiment: " ... [A] program like this would definitely be something I wish I had."

Though a support group like The Rebels Project may not have been around immediately after their shooting, a number of those interviewed also recognized how the group, led by members of Columbine, became its own defining moment for the survivor community. In other words, in the same way that Columbine provided a blueprint for how other communities experiencing mass shootings would respond, the experiences of those who survived April 20 also became a foundation to help others (see also Thoits, 2011). In her interview, Maddie commented that "I'm in the spot now where I'm able to help other people that have been involved in things like this [mass shootings] in their life." She went on to add:

I have the capability of saying, "You're not alone ... You want to talk with me, I'm going to talk with you. We're going to get you what you need. You can get whatever you want. I'm going to help you." I wish that I could take everything away for them, so that they wouldn't be feeling, because I know what they're feeling and know what they're thinking. It's so bizarre because now when you see people in different situations and scenarios, you can tell where they are from where you've been. I wish I could tell them that, say, "Hey, you're not alone. I'm here for you. I know where you are, because I've been there."

Kristina also expressed that she saw a value in The Rebels Project, not only in how it helped her but in how she was able to give back to others: "[T]the fact that we're helping other people, it just kind of makes things seem worthwhile. We went through all of this, and at least something good can come out of it, that we can help support others." Perhaps the greatest takeaway about the benefits of The Rebels Project can be summarized by the following quote from Brandon as he reflected on the importance of the group:

Being a part of The Rebels Project has been huge and like everything has had ups and downs. There's a part of it that has ended up being very, very raw, there's parts of it that it's been wonderful to connect with other people who get it, who understands some of the ridiculous thoughts and process that have gone through my mind in various different pieces. ... [P]ain and trauma are universal things. That's been a huge part of my continued journey at this point is connecting with other survivors and being able to identify and occasionally help and support them as we reflect, share experiences, be able to listen. Listening can be very, very therapeutic. Sharing experiences, sharing some of the thoughts and experiences, the more detailed experience that other survivors get and understand.

Thus, as Blakley and Mehr (2008) theorize, The Rebels Project has, in many ways, become the epicenter for a number of the survivors of the Columbine shooting and beyond. What began with around 100 members has grown to more than 1,000 since its inception, further illustrating the importance of creating a safe space where survivors can gravitate for resources and support (see also Lakey & Orehek, 2011; Mancini, 2019; Wortman & Lehman, 1985).

## Discussion

The present study sought to understand the role of shared experiences in trauma recovery related to mass shootings and Columbine in particular. For survivors of the tragedy, their greatest resource was one another. In fact, nearly every individual (n = 15 or 94%) interviewed for this project agreed that it was being able to connect with similar others that helped to validate their feelings and experiences, which was critical to their posttraumatic growth (Hawkins et al., 2004; Smith, Donlon et al., 2015; Thoits, 2011; Wortman & Lehman, 1985). Such connectedness also created opportunities to share information, advice, and other coping strategies (Thoits, 2011).

Depending on how individuals were impacted by the shooting, different theories highlight why social support from similar others may have been so beneficial. For families of individuals killed in the shooting, for example, having others with whom they could have meaningful social exchanges about how they were feeling - even in instances where they could engage in something as simple and ordinary as laughing without judgment from others - was particularly important. This highlights relation regulation theory for Lakey and Orehek (2011), who suggest that substantive social interactions that emerge from a mutual interest are critical to posttraumatic growth. Conversely, for parents who had children in the school on the day of the shooting, however, Taylor's (2006) tend-and-befriend approach was a better explanation. In addition to tending to their children who had been exposed to the shooting, parents also befriended one another as they too tried to make sense of what had happened. Though they may have prioritized their children over themselves in some instances, befriending among parents still provided a social network that allowed for increased affiliation and reduced isolation that could have promoted posttraumatic growth (Taylor, 2006; Taylor & Master, 2011).

In many instances, survivors had a negative view of social support or experience with individuals from outside the school or Columbine community. For some of the students, this included their families who either discouraged communication about what happened that day (Hawkins et al., 2004; Wortman & Lehman, 1985) or whose efforts did not align with what they believed they needed at the time (Revenson & Lepore, 2012). Beyond their families, others who tried to compare their bereavement process to the survivors' were perceived negatively (Lehman et al., 1986). Even the community response of "We are Columbine" was met with resistance by some, like Zach, who felt that others were trying to identify with their experiences despite not having shared in them (Lehman et al., 1986). While some of these efforts, particularly from within the surrounding community, may have had the best of intentions, they were viewed negatively because, in part, they did not match the victims' needs (Revenson & Lepore, 2012).

Despite the resistance from some of the survivors to these shows of support, others noted how the fact that Columbine already was a tight-knit community before the shooting actually may have facilitated more positive and prosocial responses (see also Hawdon & Ryan, 2012; Palus et al., 2012; Smith, Donlon et al., 2015). Students, teachers, administrators, and even parents each respectively had something in common with others in the community, which likely helped foster resilience and ameliorate the aftermath of the shooting. For the younger students who remained in the community (e.g., coming back to Columbine the following year), this may have helped sustain positive coping efforts. Conversely, for the students who graduated and left for college, the loss of such community, which included similar others, could not be replaced by their new environments. Consequently, this led to some engaging in more negative and avoidant strategies like alcohol and drugs.

Looking back on more than 20 years since the shooting has provided these survivors with opportunities to identify what has worked for them and what has not. Such reflection has led some, like Heather and Zach, to recognize the unique position they are in - one where the lessons they have learned in the aftermath of Columbine can be used to help others (see also Wortman & Lehman, 1985). With this in mind, The Rebels Project serves several important functions. First, it provides a surrogate sense of community for Columbine survivors who have long since been at the high school but who, to this day, still share in the experience of the shooting. The formation of this group, whose primary mission is to foster relationships among survivors, aligns with Mancini's (2019) PGA perspective. Second, The Rebels Project lends itself to an almost abstract application of Taylor's (2006) tend-and-befriend. Many of the survivors, even in states of resilience, expressed that they experience triggering with each new shooting that takes place. In this respect, having The Rebels Project effectively allows them to tend to one another - checking in, seeing what is needed, and providing each other with support. At the same time, as more shootings happen and more people become survivors themselves, The Rebels Project allows for befriending of those individuals who also may need support from similar others. Moreover, with Columbine being perceived as the first of its kind, individuals like Heather and Zach, who have had 20 years to navigate the "new normal," are viewed as role models who can share what works and what does not, and from whom others can learn valuable coping skills and model their behavior after (Thoits, 2011; see also Smith, Donlon et al., 2015).

An ancillary benefit of The Rebels Project is that it exists primarily online, which allows the group to serve as a surrogate community that fosters sustained social solidarity across both time and space (Hawdon & Ryan, 2011). With mass shooting survivors spread out across the nation and beyond, coupled with the increasing number of individuals impacted each year, having an online survivor community can provide a place that fosters the same meaningful relationships that help to buffer stress and facilitate the recovery process (Hawdon & Ryan, 2012; see also Vicary & Fraley, 2010). At the same time, it also provides a forum through which lessons learned along the recovery pathway are passed along to other impacted individuals, furthering the group's influence (Blakley & Mehr, 2008). Though, according to Hawdon and Ryan (2012), virtual communities alone are not a sufficient replacement for face-to-face communication, the latter is achieved through annual in-person survivor gatherings that are organized through communities like The Rebels Project and also can (and should) be supplemented with more traditional forms of counseling that can provide survivors with additional resources and education.

To that avail, a potential direction for policymakers to explore is funding survivor groups like The Rebels Project either directly or through grant programs. It is clear that the services that these groups provide not only are invaluable but also unable to be duplicated by those who have not lived through a similar shared experience. Without

assistance, as has been seen with Columbine, survivors may face a host of other problems, such as drug and alcohol addiction or even suicide, that may be costly to the community. By offering resources to these groups that further their ability to provide support (including counseling services through vetted providers and funding attendance to the in-person gatherings for persons otherwise unable to go) to those in need, policymakers will be making short-term investments that yield long-term benefits to the individuals and the communities at large.

## Limitations

The present study is, of course, not without its limitations. There are several factors that must be considered related to any potential generalizability of our findings. The first of these is sample size, with just 16 participants in the present study. Additionally, there was considerable variability within the sample in respect to exposure to the shooting and corresponding loss. As such, even with theoretical saturation being reached across several of the themes (e.g., Gentles et al., 2015; Marshall et al., 2013), particularly those related to social support, we cannot for certain say that all or even the majority of Columbine survivors would express similar perspectives. Moreover, many of the participants in the study already are members of The Rebels Project and, as such, subsequently have self-selected into a group that they believed could provide the social support they were missing; this likely also colors their perceptions. At the same time, those who volunteered to participate in the present study also may differ from other members of The Rebels Project in regard to their social support-seeking or social interaction behaviors, and therefore, their perspectives should not be construed to represent all membership of the group. In sum, these findings should be interpreted as an important first step in better understanding the types of social support that mass shooting survivors feel are most beneficial rather than firm conclusions about what is most effective.

A second consideration is the fact that the majority (88%) of the interviews were conducted by phone rather than Skype. While video conferencing, which can serve as a substitute for face-to-face interviewing (Iacono et al., 2016; Sullivan, 2012), allows researchers to pick up on non-verbal cues and even build greater rapport with their interviewees (Iacono et al., 2016; Weller, 2017), having multiple methods available likely increased participation in the project (Weinmann et al., 2012). While it is possible that differences exist between the two modes of communication in the types of interviews they produce, the extent of such disparities is unable to be determined. Still, despite these limitations, the present study provides a necessary understanding of the role of social support and solidarity among survivors of a mass casualty incident.

### Conclusion

Sadly, since Columbine, there have been more than 200 other mass shootings in the U.S. that have left a trail of trauma in their wake (Schildkraut et al., 2018). As more communities are impacted each year, the need to provide social support and cultivate solidarity among survivors is crucial to paving the way to a healthy recovery. The present study has shown that while the social and psychological footprint of these events may be

large, there are individuals who are able to mobilize into a survivor network to answer the call of those in need. Accordingly, continuing to learn how these networks operate and support those in crisis is crucial to providing additional support and resources to promote a healthy road to recovery.

### Notes

- 1. Lowe and Galea (2017) offer a meta-analysis of 49 studies that examines potential psychological impacts of mass shootings on both directly and indirectly affected populations.
- 2. Interestingly, Hawdon and Ryan (2011, 2012) found that in the context of Virginia Tech survivors, seeking assistance from a professional counselor, particularly in the immediate aftermath of the shooting, actually was inversely correlated with their well-being.
- 3. For the present study, the term "survivors" as it relates to mass shootings in general encompass (1) immediate and extended family members of those individuals killed in the attack; (2) individuals who were physically injured in the shooting; (3) individuals who were present on scene, saw what happened, but were not physically injured; (4) individuals who were present and did not see but heard what happened; and (5) individuals with a direct connection (e.g., a parent with children in a school) to a participant in groups two, three, or four. This is in line with North et al. (1994, 1997, 2002) examinations of the 1991 Luby's cafeteria shooting, where they looked at the impact of the shooting on all restaurant customers and employees present during the attack, as well as responding law enforcement and emergency medical technicians and residents in neighboring apartments who heard the shooting and took in fleeing survivors. Other studies looking at the Virginia Tech shooting (Hawdon & Ryan, 2012; Hughes et al., 2011) sampled all students who had been present on campus when the attack occurred.
- 4. In total, 44 people signed up to participate in the study. The other 26 survivors were from Virginia Tech, Sandy Hook, Las Vegas, and Orlando/Pulse, among other shooting incidents.
- 5. The remaining interviews were spread across October (2), December (1), January (1), and May (1).
- 6. For the protection and confidentiality of respondents, pseudonyms have been used for all but two of the participants. Those two individuals Heather and Zach are prominent figures in the survivor community and organizers of one of the support groups; accordingly, they consented to going on record with their actual identities.

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