A Content Analysis of Psychological Resilience Among First Responders and the General Population

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Abstract
The current study examined how first responders and the general population described the concept of resilience. Categories of resilience were coded a priori using Stemler’s content analysis. For the general population, positive coping was the most frequently occurring category followed by social support and adaptability. The next most frequently occurring terms were societal resources and personal competence. Consistent with the general population, first responders described resilience most frequently with positive coping. Social support was the next most frequently occurring category, followed by personal competence, perseverance, emotional regulation, and physical fitness. Although both the general population and first responder participants highlighted the importance of having a support network, first responders suggested that dealing with traumatic experiences was more of an individual process, and seeking professional help was not common practice. Implications for mental health professionals and future directions for research are offered.

Keywords
first responders, psychological resilience, law enforcement, fire and rescue, coping

Resilience has been defined as a dynamic, positive adaptation despite adversity (Reich, Zautra, & Hall, 2010), the ability to recover from a challenge and pursue the positive (Masten, 2001; Reich et al., 2010; Rutter, 1987), and the ability to adapt as conditions change (Hamel & Valikangas, 2003; Lengnick-Hall & Beck, 2005). Resilience has been viewed as both a process and an outcome (Zellars, Justice, & Beck, 2011), and research linking resilience to a number of positive personal outcomes, such as improved mental and physical health, increased longevity, and decreased heart disease (Connor, 2003, 2006; Lazarus, 1993; Tugade, Fredrickson, & Barrett, 2004) as well as professional outcomes (e.g., improved overall employee well-being, job satisfaction, and job performance; Avey, Luthans, Smith, & Palmer, 2010; Luthans, Avolio, Avey, & Norman, 2007; Luthans, Avolio, Walumbwa, & Li, 2005; Youssef & Luthans, 2007), has established the construct as an important area of study.

One particular occupation that has gained attention in the scholarly literature related to resilience is first responders (Kronenberg et al., 2008; Meadows, Shreffler, & Mullins-Sweatt, 2011). First responders, or professionals who deal with emergencies, natural disasters, and other traumatic events include police officers, firefighters, and emergency medical technicians (EMTs) (Meadows et al., 2011). The nature of these events requires that professionals perform critical tasks, which may affect mental and physical well-being. Along with the traumatic experiences that are inherent to the work, other stressors such as long and irregular shifts, overnight hours, dangerous environments, and physical demands contribute additional stressors (Meadows et al., 2011). Scholars have posited that some first responders struggle with mental health concerns including depression (Benedek, Fullerton, & Ursano, 2007), posttraumatic stress disorder (PTSD; Benedek et al., 2007), and alcoholism (Jacobson et al., 2008; Taft et al., 2007) due to the nature of the work. Physical health injuries that result from workplace responsibilities can be an additional source of stress (Szubert & Sobala, 2002).

Given all this information, it seems clear that first responders have unique work stressors that might require them to seek support from professionals to cope with the demands they are experiencing as a professional; however, research has suggested that first responders struggle with seeking formal assistance for mental health concerns (Crowe, Glass,
The Current Study

In an effort to understand how first responders define and understand resilience as it affects them personally and professionally, the authors conducted a qualitative investigation of the perceptions of first responders related to the definition of resilience. They also investigated whether and how resilience can be increased or decreased over time, as well as how the concept relates to the work of first responders. This study allowed for in-depth responses from participants and a deeper understanding of resilience and the first responder population. Certainly, the profession of first responders lends itself to experiences that shape resilience among this group, because it is well known that the job itself is uniquely oriented to crisis, natural disasters, and dangerousness. Knowing how this group of professionals define and understand resilience, as compared with those in professions not as closely associated with these factors, will add to the scholarly understanding of the concept of resilience. To the authors’ knowledge, this research is the first of its kind to examine how these two samples’ perceptions of resilience might be similar or different.

Method

The authors conducted a total of four focus groups with members of two populations of interest, first responders and the general population. Two group meetings were held with participants from law enforcement, emergency services, and fire departments. General population participants attended two groups that included university staff members from a university located in the Southeastern United States. The focus groups were primarily qualitative in nature, with the exception of a few questions regarding demographics and mental health history of each participant. Prior to participant recruitment and data collection, the Institutional Review Board of the authors’ university approved the study (UMCIRB 13-000259).

Participants

First responders. A total of seven emergency personnel workers participated in the first responder focus groups. There were four men and three women. Participant age ranged from 34 to 58 years, with an average age of 40 years (SD = 8.72 years). Six participants reported being Caucasian and one reported being African American. The majority of participants reported being married (n = 6), with the one remaining participant reporting being single, never married. Participants reported having received either a 4-year (n = 4) or a 2-year (n = 3) college degree. Occupations included fire and rescue, paramedic firefighter, and police officer.

The majority of participants indicated that they had previously sought treatment for a mental health concern (n = 4), and all those same participants indicated that the treatment they received was helpful. Reasons for seeking treatment included alcohol addiction, anxiety, life coaching, and postpartum depression. Three participants reported that a family member had a mental illness, including addiction, anxiety, and depression. The majority of participants also indicated that they would seek mental health treatment in the future should they begin to suffer from any symptoms (n = 5).

General population. A total of 10 full-time employees at a southeastern university participated in the general population focus groups. There were four men and six women. Participant age ranged from 27 to 65 years, with an average age of 49.6 years (SD = 11.03 years). Nine participants were Caucasian and one reported being African American. Exactly half (n = 5) were single, never married, with the other half (n = 5) reporting being currently married. Half the participants (n = 5) indicated that they had received a master’s degree, with the remaining participants indicating that they had received either a 4-year (n = 2) or a 2-year (n = 3) college degree. Occupations included administrative assistant, archivist, lab compliance coordinator, library technician, student affairs administration, and maintenance technician, to name a few.

Participants also answered a few mental health history questions on a mental health history form designed specifically for this study. The majority of participants indicated that they had previously sought treatment for a mental health concern (n = 7), and all those same participants indicated that the treatment they received was helpful. Reasons for seeking treatment included anxiety, bipolar disorder, past trauma experience, depression, family concerns, and relationship issues. The majority of the group also indicated that they had a family member with a mental illness (n = 7). These family
illnesses included alcoholism, depression, anxiety, bipolar disorder, dementia, and schizophrenia. The majority of participants also indicated that they would seek mental health treatment in the future should they begin to suffer from any symptoms ($n = 7$).

**Procedures**

Participants were recruited from an email listserv. Participation was voluntary and no incentives were provided. The authors conducted initial phone screenings to verify that all participants met the required criteria for inclusion. Participants were asked whether they were at least 18 years of age and felt comfortable discussing attitudes toward mental health. Participants who answered yes to these questions were eligible to participate. Focus groups were conducted in a conference room located at a researcher’s office building. All participants completed an informed consent before participating in the research. Next, each participant completed a short demographic form and a mental health history questionnaire prior to the start of discussion. Focus groups lasted anywhere from 60 to 90 min and all were directed by use of a predesigned question script. Discussions were audio recorded and later transcribed for ease of analysis. Demographic information included age, gender, ethnic background, relationship status, level of education, and current occupation. For mental health history, sample questions included, “Have you ever sought treatment for a mental health concern?” “Was the treatment you received helpful?” “What did you seek treatment for?” and “Do you have someone in your family with a mental illness?” First responders also answered questions such as “Can you describe the types of stressors that you face on the job?” and “What types of emergency situations have you dealt with in your job?”

Focus group discussion concentrated on psychological resilience. Topics covered included the definition of resilience and what it means for a person to be resilient, where resilience originates, how and if it can be developed, and where resilience might be tested. Sample questions included, “In your own words, what do you think it means for someone to be resilient?” and “What experiences or situations may cause someone to become less resilient?”

**Results**

**Data Analysis**

Key study questions included (a) how first responders and the general population define resilience, (b) how first responders and the general population understand innate and learned resilience, (c) how first responders and the general population describe life experiences that cause more or less resilience, (d) what first responders and the general population describe as protective and risk factors for resilience, (e) how first responders believe the term applies to their profession, and (f) how first responders describe the relationship between increasing resilience and coping with stressful or traumatic events.

Transcribed versions of the focus group discussions were used to analyze the data. All statements made by participants during the discussions were used as unique quotes. The authors followed Stemler’s (2001) content analysis procedures using an a priori coding strategy. Through this approach, the authors began with a preestablished set of coding categories that were based on previously published research and theoretical descriptions of resilience. The initial set of codes was revised following the preliminary rounds of data analysis (Stemler, 2001). Three members of the research team coded each statement as representative of one factor of resilience. These potential factors were based on an a priori review of the literature regarding known factors of resilience. This list was finalized following a pilot test round where all members of the research team coded a subset of data.

The following 10 factors were used to code the data: positive coping (Meredith et al., 2011), optimism (conceptualized from positive thinking and positive affect; Meredith et al., 2011), social support (reflected in The Resilience Scale for Adults; conceptualized from emotional ties, communication, support, closeness, nurturing, and connectedness; Meredith et al., 2011; definition via Lin, Simeone, Ensel, & Kuo, 1979; National Cancer Institute, 2014; Ozbay et al., 2007), belongingness (Meredith et al., 2011), personal competence (Friborg, Hjemdal, Rosenvinge, & Martinsussen, 2003), emotional regulation (Tugade & Fredrickson, 2004), adaptability (Meredith et al., 2011), Perseverance (n.d., Merriam-Webster Dictionary), societal resources (Donenfeld, 1940), and physical fitness (Meredith et al., 2011).

When all three coders agreed on a factor, the agreed-upon code became the final code. When only two coders agreed on a factor, the final code was the one on which both agreed. Statements that resulted in disagreement between all three reviewers resulted in the statement being coded into the “other/no code” category. A total of 141 statements were coded by each coder, resulting in a total of 423 coded statements. The authors calculated the intrarater reliability for these coded statements, which resulted in an overall percentage of agreement of 85.8% and a Fleiss’ kappa statistic of .600, indicating moderate agreement (Landis & Koch, 1977).

**Resilience and general population results.** Within the general population sample, 133 statements were coded according to resilience categories. The most common category of resilience expressed by participants was positive coping. A total of 34 statements were coded in this category. This factor included active/pragmatic, problem-focused, and spiritual approaches to coping, and was defined by the researchers as the process of managing taxing circumstances, expending effort to solve personal and interpersonal problems, and seeking help to reduce or tolerate stress or conflict (Meredith et al., 2011). A statement that describes the concept of
positive coping was as follows: “Integrating or teaching the skills to people to integrate support structures helps to build a stronger framework to assist in their resilience . . . from better nutrition to decreased stress, ways of coping with stress . . . .” General population participants mentioned coping skills directly, as well as things that help individuals cope such as faith, pets, and other outlets. Positive coping was also discussed when participants were asked about being born resilient. One individual stated, “I see it having a lot to do with nurture. In some ways, you would be taught different ways to cope and work through things.”

The next most commonly occurring categories of resilience were social support and adaptability. A total of 22 statements were coded in each of these categories. Social support was defined as support accessible to an individual through social ties to other individuals, groups, and the larger community (Lin et al., 1979). Participants commented on personal experiences of social support including, “I think that there is a support network . . . you show them the resources they have and then the next time they are able to do that on their own” and “a safety net . . . where parents or teachers or very understanding bosses can create a context where . . . failure can be used to give strength to push forward.” These social support experiences were mainly discussed when participants were asked about what causes people to become more or less resilient over time.

Adaptability, defined as positive adaptation to life changes, was described in statements such as, “… you can be restored to this previous position rather quickly” and “… restore oneself to a position of balance, whatever that balance was before the episode or incident.” Finally, many participants used the term flexible when describing resilience.

The term societal resources was the next most frequently occurring, with 13 statements coded as such. For the purposes of this research, the factor was defined as access to resources that are out of the immediate control of the individual. Most discussion involving this factor was around a lack of societal resources, which subsequently placed strain on an individual and tested resilience. One participant stated, “Resilience is related to the resources you have around you . . . and you wear those resources out. Emotional, financial, whatever resources are worn out, you can’t bounce back anymore.” In addition, societal resources were attributed to risk factors of resilience, specifically, “… the lack of resources, or the lack of the ability to connect to resources . . . .” as well as protective factors such as, “socioeconomic factors, like level of education, educational attainment of parents, level of income in your household . . . .” Furthermore, affluence was seen as both a potential protective and risk factor for resilience. One participant attested the following, “higher income . . . my guess would be that in general that leads to people dealing with trauma better . . . .” whereas another participant stated, “… if someone has been raised affluent . . . they’ve been coddled their whole life . . . they completely fall apart. They’ve been protected, they have not actually had to deal . . . .”

Eleven statements were coded as personal competence, which includes self-esteem, self-efficacy, self-liking, determination and a realistic orientation to life (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003). This factor was cited as a characteristic of being resilient and most often associated with being “strong.” For example, one participant stated that trainees over time, if given tools and models and examples and (being) incrementally exposed to increasing amounts of stress . . . begin to build confidence and see that what they once thought were insurmountable obstacles can be overcome and actually can be turned to a positive experience to build your inner strengths and capabilities to better prepare you for future events.

Nine statements were coded as perseverance, defined as continued effort to do or achieve something despite difficulties, failure, or opposition. Multiple participants discussed the lack of this factor with regard to a cause for being less resilient. For example, “You could be knocked down how many times before you learn to stay down.”

Seventeen statements were coded in each of the following categories: optimism, emotional regulation, and physical fitness. The researchers defined optimism as feeling enthusiastic, active, and alert, including positive emotions, hope, and flexibility about change. It also includes information processing through positive reframing, making sense out of a situation and refocusing with a positive outlook and expectations. One participant discussed being born resilient in the following way: “I’m thinking of some people that I know who are very upbeat all the time and they seem to handle things pretty well.”

Emotional regulation includes attempts to influence the types of emotions experienced, and when and how they are expressed and experienced. It may involve changes in the quality or intensity of emotional experiences, as well as the regulation or maintenance of affective experiences (Tugade & Fredrickson, 2004). For instance, one participant stated, “I know people who are very emotionally stable, but who are very passionate about their work and it’s just when something bad happens, they don’t flip out. They just go, okay, something bad happened, I’m going to go and deal with it and get this out of the way and go on.”

The researchers conceptualized physical fitness as a state of health and well-being including exercise, nutrition, hygiene, and rest (Meredith et al., 2011). It may include specific abilities to perform aspects of an occupation (i.e., cardiovascular fitness, flexibility, muscular endurance). This factor was mentioned mainly in the context of helping build or diminish resilience. For example, with regard to making one become less resilient, a participant mentioned that, “… illness in general. I think part of that is mental health as well. You could become depressed and then have trouble, and you wouldn’t be quite as resilient . . . .” Another participant said, “… sleep deprivation and health can degrade your resilience
because it affects your ability to put things into that perspective."

The belongingness factor included only one statement. This concept was defined as cohesion, friendships, group membership, including participation in spiritual/faith-based organizations, ceremonies, social services, and schools (Meredith et al., 2011). This factor was discussed similarly to a support group in a faith-based organization as follows:

Our church has a group called grief share . . . (including) widows and widowers recently that are trying to cope with a very difficult situation and there are people at different stages in that process, but by coming together not unlike many other support group situations, like situations with . . . people that have walked that path before . . . .

**Resilience and first responders results.** For the sample of first responders, a total of 82 statements were coded according to resilience categories. The largest portion of participants’ statements was categorized as positive coping. Specifically, 16 statements were coded in this category. In general, this factor represented the process of applying beneficial practices, such as problem-focused coping (Meredith et al., 2011) to resolve feelings of stress or conflict. Furthermore, positive coping was considered to be a process utilized by resilient individuals. The following statement provided by one of the first responder participants illustrates the concept of positive coping:

If a person is wanting to get better, they need to pick a certain time in their life that just stands out in their mind where they were either really happy or really successful at something and have it as a positive motivator in their head. I can get back to this, I can do this, I can get there.

In addition, first responder participants provided succinct descriptors of positive coping such as “avenues for relief” and made statements such as “humor is a huge one,” when referencing specific types of positive coping. Finally, when asked to describe what it means to be resilient, one participant noted positive coping’s relationship with resilience by stating, “the ability to cope with life’s ups and downs . . . including the professional and personal life.”

The next most frequently occurring category of resilience was social support. Thirteen statements were coded as social support including,

- a positive, loving environment at home. Kids will thrive when they are loved and feel love and are shown love and they reciprocate love . . . that kind of healthy environment will help them grow and develop as opposed to the opposite.

Furthermore, comments highlighting the benefit of a positive home life suggested that resilience was fostered through social support. Such comments included,

When you have that person that you can go home to . . . hang up the coat, so to speak, and be able to let your guard down and be in a condition where you have that moment to relax and let somebody care for you.

Finally, other participants mentioned the importance of having “a support system” and “positive role models,” when describing social support’s role in resilience.

Personal competence was the next most frequently used category of resilience, including 12 statements. Personal competence was defined as having personal feelings of self-esteem, self-efficacy, and possessing a realistic orientation toward life (Friborg, 2003). A statement that demonstrates personal competence includes, “Being able to withstand pressure. When you are put under pressure, some people focus and some people fold, and I think (people) who last long and do well are those that can focus.” Another example of personal competence includes, “I always had a certain amount of confidence that kind of helped me get over whatever it was.”

Following, perseverance was the next most frequently used category of resilience, including 11 statements. A statement that illustrates the category of perseverance includes, “You are going to have highs and lows and you’re going to have situations, but with all the craziness . . . kind of keep a base and continue to go. Stamina is a good word.” Furthermore, when speaking about resilient individuals, one participant stated, “A certain percentage (of individuals), no matter what you do to them, they will always continue.” Finally, some words and phrases that were used by participants that were categorized as perseverance included, “survival,” “tough,” and “bounce back.”

Eight statements were categorized in both emotional regulation and physical fitness categories. Emotional regulation was defined as an individual’s ability to modify various aspects of emotional experience (Tugade & Fredrickson, 2004). An example of a statement regarding emotional regulation includes,

A lot of times we see resilience equals emotionless and so what happens is you never know how to turn it back on . . . in order to be resilient, in order to deal, is to turn off completely in every aspect of your life just to make sure you get through. In my mind, resiliency is not that, it’s being able to actually deal with the situation and be able to process, learn something from it, and move on.

An example of a statement regarding physical fitness includes,

There are people that are more physically fit, that are less shaky, are less nervous, or at least able to control it better. Everyone gets tunnel vision, but those who have more physical fitness tend to breathe and open that (tunnel vision) back up at a better rate than somebody who is not as physically fit.
The next most frequently occurring categories were adaptability and belongingness, with seven and six statements in each category, respectively. Regarding adaptability, when discussing resilience as a learned characteristic, one participant stated,

Some things are instinctive. The will to survive might be instinctive but then you can learn how to, maybe by modeling, something an adult would model, or your environment would allow you to model, how to adapt and adjust. I think you can learn and sharpen those skills.

In addition, the following statement illustrated the concept of belongingness:

I think that many of us in our job rely on that. We crave it. That’s one of the reasons that we got into this job to begin with . . . we really love the camaraderie and the brotherhood that we try to make. We have each other to rely on and that makes us a lot stronger than individuals.

Finally, a single statement was categorized as optimism. Optimism was defined by feelings of enthusiasm, hopefulness, and alertness. The statement that was best categorized as optimism included,

A positive mindset. My instruction and expertise has always been in the tactical realm . . . and mindset is what we train for as much as anything else. The no quit attitude . . . the roof is caving in on me from the fire perspective and I’m not going to let that stop me, I’m going to get out and get my team out. That’s a form of resiliency.

Discussion

Police officers, firefighters, and EMTs perform a variety of tasks that can greatly affect their mental and physical well-being. Given that first responders operate in environments that inherently are stressful, it is important to examine how these professionals stay resilient to gain a better understanding of how they are able to effectively cope with various situations and perform successfully. For persons in helping professions, the data gathered through these focus groups give a glimpse into the perceptions of first responders, as well as the general population as they relate to resilience and surviving in the workplace.

There were a number of commonalities between first responders and the general population in the way that they described resilience. Positive coping, or using strategies to reduce stress and solve problems, was the most frequently occurring factor in both samples. This seems to suggest that regardless of occupation, there is a belief that one can cope with adversity with internal or external strategies mechanisms to be resilient. Both groups also believed that social support, or social ties such as friends and family can affect resilience. Personal competence or belief in oneself also was mentioned by both groups. For mental health professionals who might work with people to increase resilience, discussion about positive ways of coping, building or maintaining a support network, and raising self-efficacy might assist with increasing resilience.

In addition to the commonalities, there were a number of interesting distinctions in how the two samples understood the term resilience. One important point of discussion is that the characteristics identified by first responders did not include the desire to process these traumatic events with a helping professional. It is important for mental health professionals to recognize the unique nature of first responder occupations and approach working with this population with an appreciation for the occupational hazards that are common with this group. This uniqueness separates these workers from those in the general population, and the difference in the way the two groups perceive resiliency is an important distinction to keep in mind.

Through the study, it became clear that first responders believed that positive coping is a process that resilient individuals use to deal with occupational stressors. The participants identified a variety of ways that stress can be dealt with including humor and positive thinking. As a group, first responders suggested that dealing with work stressors is simply something that persons in their positions must learn to do. The assumption then is that first responders believe that traumatic events and work stress should be dealt with individually, and that to survive in the job, they must learn internal coping mechanisms. When asked about dealing with these traumatic events, the participants did not readily identify counseling or professional helping relationships as an effective way of working through such issues.

First responders also highlighted the importance of having a support system to help with resilience. A common theme that was evident through this study’s focus groups is that first responders understand the value of having a positive, supportive environment outside of work. This is not to suggest that having a support system at work is not beneficial; however, participants specifically discussed the home environment as a place where they could “let their guard down” and have the opportunity to relax. Specifically, allowing another person to care for them was helpful after so much of their work time was focused on helping others in various levels of need. However, the first responders in our study did not identify talking about their specific stressors, or processing their traumatic experiences as being important to stay resilient. In fact, first responders highlighted the ability to remain emotionless in the face of trauma as being an effective way to deal with work experiences.

Although both first responders and the general population discussed the importance of social support in relation to resilience, their notions of social support was vastly different. Those in the general population referred to social support as a way to share resources so that people are able to learn from each other. This implies a sharing of information
and a discussion of some personal information. While first responders also highlighted the importance of social support, they tended to view that as a place to feel accepted and relax, but did not imply that there was any discussion regarding the traumatic events at work. It would seem that first responders appreciate a supportive environment where they can detach from the world of work, but not necessarily have to deal with any of the horrors they may face through their jobs. This finding might demonstrate that first responders struggle with sharing their reactions to these events as a way to cope or that this style of coping is simply a means of avoiding stressors without effectively dealing with any of them. If this is the case, then it would seem likely that at some point, the stressors would increase and perhaps lead to greater mental health or psychosomatic health concerns. It is also interesting to note that the general population referred to societal resources a number of times, however this term was not found in the focus groups with first responders. This suggests that the general population understands the value of accessing resources that are out of the immediate control of the individual. However, first responders did not mention societal resources implying that this population believes the development of resilience is more of personal process, and that the utilization of outside resources is either not needed, or not viewed as a positive within that community.

Limitations
A few limitations are noteworthy related to this study. Many participants (both first responder as well as those who were in the general population subgroup) had some experience related to mental health concerns, either personally or with someone in their family. This could affect attitudes as well as resilience. Some of our participants also indicated that they had sought professional support for a mental health concern, or stressor related to work or personal life and that they had felt positively about this experience. Perhaps resilience levels and perceptions of the concept of resilience are different for those who have been touched in some way with a mental health concern, and affected by seeking professional help. In addition, this study used a focus group design, which lends itself to gathering a large amount of data in a short amount of time; however, participant responses can be affected by what is being shared by others in the focus group. Although the focus group leader made every effort to allow each participant to share his or her unique perceptions, the very nature of focus group design includes this threat.

Implications for Future Research
This research explored perceptions of general population members as well as first responders as they related to the notion of resilience. The qualitative design allowed for the research team to unveil attitudes and uncover content related to how these two groups defined the concept and related it to personal and professional experiences. Future scholars might continue this line of inquiry with large-scale, quantitative investigations so that group differences can be explored. When looking at the ways that the two samples (first responders and general population) defined the concept of resilience, there were noteworthy differences in addition to some similarities. For the general population, positive coping was the most frequently occurring category followed by social support and adaptability. Consistent with the general population, first responders described resilience most frequently with positive coping. Social support was the next most frequently occurring category, followed by personal competence, perseverance, emotional regulation, and physical fitness. Although both the general population and first responder participants highlighted the importance of having a support network, first responders suggested that dealing with traumatic experiences was more of an individual process, and seeking professional help was not common practice. Future studies can continue to explore how first responders cope with the nature of their work, so that professionals as well as those in their personal networks can best support them.

Conclusion
First responders are tasked with difficult jobs that often require an individual to work and perform in the face of tremendous stressors and traumatic events. It would seem that everyone would benefit from having such individuals be as resilient as possible, so that they are able to perform effectively while maintaining a healthy mental and physical balance in their lives outside of work. As helping professionals, it is important to keep in mind the unique characteristics of these occupations as we seek to provide these individuals with quality care. Mental health professionals have the potential to reach this population, educate them on the benefits of seeking counseling, and help them better understand the positives that can be found through utilizing such services. Furthermore, mental health professionals must also understand the unique culture of the profession to understand how to effectively work with this client population. This study highlighted differences as well as similarities in the perceptions of resilience among first responders and the general population. Positive coping, social support, and personal competence were mentioned in both samples as part of what comprises resilience. A noteworthy difference was that first responders seemed to conceptualize resilience as an individual characteristic not necessarily requiring the use of outside resources. Until strides are made to change these perceptions, it seems unlikely that first responders will take the step to seek professional support, further isolating these persons to deal with these stressors alone. In turn, it is clear that helping professionals must begin to reach out to such populations to both educate and care for our first responders, who persistently care for and protect the population at large, despite constant threats to their personal well-being.
Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research and/or authorship of this article.

References

Avey, J., Luthans, F., Smith, R., & Palmer, N. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology, 15*, 17-28.

Benedek, D. M., Fullerton, C., & Ursano, R. J. (2007). First responders: Mental health consequences of natural and human-made disasters for public health and public safety workers. *Annual Review of Public Health, 28*, 55-68.

Connor, K. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Anxiety, 18*(2), 76-82.

Connor, K. (2006). Assessment of resilience in the aftermath of trauma. *Journal of Clinical Psychiatry, 67*, 46-49.

Crowe, A., Glass, J. S., Raines, J., Lancaster, M., & Waggy, M. (2015). Mental illness stigma among first responders and the general population. *Journal of Military and Government Counseling, 3*, 132-149.

Donenfeld, M. J. (1940). The meaning of social resources. *Journal of Educational Sociology, 13*, 560-564.

Friberg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research, 12*, 65-76.

Hamel, G., & Valikangas, L. (2003). The quest for resilience. *Harvard Business Review, 81*(9), 52-65.

Jacobson, I. G., Ryan, M. A. K., Hooper, T. I., Smith, T. C., Amoroso, P. J., Boyko, E. J., . . . Bell, N. S. (2008). Alcohol use and alcohol-related problems before and after military combat deployment. *Journal of the American Medical Association, 300*, 663-675. doi:10.1001/jama.300.6.663

Kronenberg, M., Ososfky, H. J., Many, M., Hardy, M., Ososfky, J., & Arey, J. (2008). First responder culture: Implications for mental health professionals providing services following a natural disaster. *Psychiatric Annals, 38*, 114-118.

Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics, 33*, 159-174.

Lazarus, R. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology, 44*, 1-22.

Lengnick-Hall, C. A., & Beck, T. E. (2005). Adaptive fit versus robust transformation: How organizations respond to environmental change. *Journal of Management, 31*, 738-757.

Lin, N., Simeone, R. S., Ensel, W. M., & Kuo, W. (1979). Social support, stressful life events, and illness: A model and an empirical test. *Journal of Health and Social Behavior, 20*, 108-119.

Luthans, F., Avolio, B., Walumbwa, F., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review, 1*, 249-271.

Luthans, F., Avoio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology, 60*, 541-572.

Masten, A. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.

Meadows, M. P., Shreffler, K. M., & Mullins-Sweatt, S. N. (2011). Occupational stressors and resilience in critical occupations: The role of personality. In P. L. Perrewé & D. C. Ganster (Eds.), *Research in Occupational Stress and Well-Being: The role of individual differences in occupational stress and well being* (pp. 39-61). Bingley, UK: Emerald Group Publishing.

Meredith, L. S., Sherbourne, C. D., Gaillot, S., Hansell, L., Ritschard, H. V., Parker, A. M., & Wrenn, G. (2011). Promoting psychological resilience in the U.S. military. Santa Monica, CA: RAND.

National Cancer Institute. (2014). *NCI dictionary of cancer terms: Social support*. Retrieved from http://www.cancer.gov/dictionary?cdrid=440116

Ozbay, F., Johnson, D. C., Dimoulas, E., Ill, M., Charney, D., & Southwick, S. (2007). Social support and resilience to stress. *Psychiatry, 4*, 35-40.

Perseverance. (n.d.). In *Merriam-Webster’s online dictionary* (11th ed.). Retrieved from http://www.merriam-webster.com/dictionary/perseverance

Reich, J. W., Zautra, A. J., & Hall, J. S. (2010). *Handbook of adult resilience*. New York, NY: Guilford Press.

Royle, L., Keenan, P., & Farrell, D. (2009). Stigma for first responders accessing support for post traumatic stress. *International Journal of Emergency Mental Health, 11*, 79-86.

Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57*, 316-331.

Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation, 7*(17). Retrieved from http://PAREonline.net/getvn.asp?v=7&n=17

Szubert, Z., & Sobala, W. (2002). Work-related injuries among firefighters: Sites and circumstances of their occurrence. *International Journal of Occupational Medicine and Environmental Health, 15*, 49-55.

Taft, C. T., Kaloupek, D. G., Schumm, J. A., Marshall, A. D., Panuzlo, J., King, D. W., & Keane, T. M. (2007). Posttraumatic stress disorder symptoms, physiological reactivity, alcohol problems, and aggression among military veterans. *Journal of Abnormal Psychology, 116*, 498-507. doi:10.1037/0021-843X.116.3.498

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*, 320-333.

Youssef, C., & Luthans, F. (2007). Positive organizational behavior in the workplace: The impact of hope, optimism, and resilience. *Journal of Management, 33*, 774-800.

Zellars, K. L., Justice, L., & Beck, T. E. (2011). Resilience: New paths for building and sustaining individual and organizational capacity. In P. L. Perrewé & D. C. Ganster (Eds.), *Research in Occupational Stress and Well-Being: The role of individual differences in occupational stress and well being* (Vol. 9, pp. 1-37). Bingley, UK: Emerald Group Publishing.
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