The Experiences of Rural Volunteer Firefighters: a Mixed-Methods Approach.

by

Samantha K. Jones

A thesis submitted in partial fulfillment of the requirements for the degree of

Bachelor of Arts

in Psychology

Department of Social Science, Augustana Faculty University of Alberta

© Samantha K. Jones, 2016

Abstract

Previous studies have examined the motivations, characteristics, and health outcomes of volunteer and paid firefighters. No research to date, however, has examined these psychological outcomes and their implications for role perception in firefighters who work in rural Canadian settings. The present study analyzed the experiences of volunteer firefighters in rural jurisdictions to understand their motivations, experiences of the role, and the well-being outcomes of the participants. A mixed-methods approach was employed, utilizing phenomenological analysis of interview transcripts as well as a Volunteer Firefighter Job Design Scale (VFJDS) to assess the reports of volunteers in rural stations in Alberta. The VFJDS highlighted a diversity of volunteer activities that extended beyond fire related incidents and reflected their rural environment. Review of the transcripts revealed five themes that defined the experiences of the participants: community support, camaraderie, personal factors, humanizing the hero image, role clarity, and community support. These findings have implications for the strategies of recruitment officers and trauma service providers.

This thesis is an original work by Samantha K. Jones. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name "The Experiences of Urban and Rural Volunteer Firefighters: a Mixed Methods Approach" No. Pro00061134, February 5, 2016.

Acknowledgements

I would like to thank my wonderful friends, family, and research peers for their continual feedback and support throughout this project. I would also to thank my supervisor, Dr. Sean Moore for his input and guidance while maneuvering the research landscape as well as Dr. Paula Marentette for her feedback throughout the project. And lastly, I want to thank all the volunteer firefighters who took the time to share their experiences with me. Thank you not only for participating in this project, but for all of the hard work that you do to keep our communities safe.

Table of Contents

| TABLE OF CONTENTS |
|---|
| LIST OF TABLES AND FIGURESvi |
| THE EXPERIENCES OF URBAN AND RURAL VOLUNTEER FIREFIGHTERS 1 |
| Personal Characteristics |
| Motivations |
| Health Outcomes |
| Ideal versus actual experiences 5 |
| CURRENT RESEARCH |
| METHOD |
| Design |
| Participants and recruitment |
| Materials |
| Procedures |
| Data Analysis |
| Quantitative |
| Qualitative |
| RESULTS |
| Sample Demographics |
| Quantitative |
| Qualitative |
| Ideal versus actual experiences14 |
| Camaraderie 14 |

| Personal factors | | 16 |
|----------------------------|------------------------|----|
| Humanizing the hero in | mage | 17 |
| Role clarity | | 19 |
| Community support | | 20 |
| The Five-Factor Model of V | Volunteer Firefighting | 22 |
| DISCUSSION | | 23 |
| REFERENCES | | 29 |
| APPENDIX A | | |
| APPENDIX B | | 45 |

List of Tables and Figures

| Table 1 | Participant demographic information | |
|-------------|--|--|
| | | |
| | | |
| D' 1 | | |
| Figure 1 | Frequency of participant engagement in volunteer firefighter activities | |
| Figure 2 | The Five-Factor Model of Volunteer Firefighting for rural Albertan participants 36 | |
| | | |

The Experiences of Urban and Rural Volunteer Firefighters

First responders, including fire, police, and emergency medical personnel, are a vital component of the emergency response system in Canada and worldwide. These individuals frequently engage in physically and emotionally risky roles to protect and save the lives of others. In particular, volunteer roles such as firefighters, dedicate their time and skill to these causes without monetary compensation and their demands are far more significant than other community engagement roles. In Alberta alone, 80% of firefighters participate on a volunteer basis and 97% of Alberta's fire departments are run strictly by volunteers (Alberta Fire Chiefs Association, 2015). This equates to over 450 stations responding to some of Canada's 12 million annual 9-1-1 emergency calls (Robertson, 2008). The remaining 3% of stations are organized as either paid career firefighters or hybrid stations comprised of both career and volunteer firefighters. This is a vastly important group that has an impact, whether direct or indirect, on millions of Canadians, however little is known about what this role truly entails when serving rural Alberta regions.

Although previous studies have sought to examine components of the volunteer and career firefighting experience, the experiences are still not well understood or diversely considered. The existing body of literature largely examines personal characteristics (Elshaug & Metzer, 2001; Haski-Leventhal & McLeight, 2009), motivations (McLennan & Birch, 2008; Thompson & Bono, 1993), and psychological health outcomes (Bryant & Harvey, 1996; Heinrichs et al., 2005; Regehr, Hill, & Glancy, 2000) but fails to distinguish between volunteer and career roles as well as differences in the context of the role such as a rural setting. In this paper, I will be examining how volunteer firefighters in rural Alberta perceive their role to

1

determine what the ideal experience is compared to the actual experiences by using mixedmethods data.¹

Personal Characteristics

Research has examined the personal characteristics of individuals in a variety of roles, with particular interest in volunteers, aiming to understand the individual differences between those that engage in these types of roles and those that choose not to. Elshaug and Metzer (2001) have found that people who volunteer tend to be friendlier, experience higher frequency of positive emotions, and prefer to form close attached bonds with others as compared to nonvolunteers. When comparing different types of volunteer roles, they found that volunteer firefighters exhibited more assertive personality traits than other categories of volunteers, most likely to aid their need for leadership and effective decision making (Elshaug & Metzer, 2001). The importance of leadership skills and preference for affiliation in combination with altruism is further supported by Haski-Leventhal and McLeigh's (2009) examination of community volunteering engagement of firefighters. Participants claim that this type of role is a part of who they are, the brotherhood and camaraderie is unmatched in value, and they see themselves as leaders in the community (Haski-Leventhal & McLeigh, 2009). Carpenter and Myers (2010) also found support for the prevalence of altruistic attitudes in volunteer firefighters as measured by a willingness to donate money to a variety of charities. They did however also find a strong relationship between wanting to volunteer and a perception that it would improve their public image and a personal value for monetary stipends that are distributed in some volunteer fire

¹ Note: The present study was originally designed to include both urban and rural volunteer firefighters. Due to research constraints and participant recruitment, data was only collected from rural volunteers residing in areas less than 20, 000 people. Some resources used in the data collection process (i.e., consent and information forms) include original research questions and intended outcomes. These have not been changed as to accurately reflect the materials provided to participants during the data collection process.

stations (Carpenter & Myers, 2010). Overall, research suggests that volunteer firefighters have strong altruistic attitudes and leadership skills but are also influenced by their desire for their helping behaviour to be acknowledged by their friends and community members.

Motivations

In addition to personal dispositions, motivation to participate may be the result of values (McLennan & Birch, 2008), need fulfillment (Thompson & Bono 1993), and commitment to different organizations and individuals within the community (Carpenter & Myers, 2010; Lee & Olshfski, 2002). McLennan and Birch (2008) examined the relationship between age cohorts and motivations to join a volunteer firefighter organization. The findings suggested younger volunteers were more driven to join based on self-oriented motivations such career advancement and opportunity to make friends, while the older generation was more likely to report being motivated by their ability to help the community and their desire to promote and maintain safety for others. Changes to social structure, avoiding feelings of alienation, and conflicting values between different generations supports Thompson and Bono's (1993) findings. Their proposed and tested model suggests that volunteer firefighters choose to engage in the role as a way of avoiding social alienation in a growing capitalist world and as a means of enhancing self-actualization. This theoretical perspective frames the volunteer role as being motivated by the drive to fulfill a psychological need.

The motivations of volunteer firefighters may also be linked to community expectations and commitment to the organization. A common reason that volunteer firefighters cited for joining the organization was because they were directly asked to by the station or they had friends or family members that were already involved and wanted to participate with them (Carpenter & Myers, 2010). This social expectation model can have important influences for different communities, particularly where current volunteers engage in recruitment of their peers and there is low anonymity when refusing to accept. Research has also found that volunteers are more committed to the organization as a whole while their paid career firefighter counterparts are more committed to their independent supervisor such as a fire chief (Lee & Olshfski, 2002). This difference in level of commitment can have important implications when considering the success and experiences of all volunteer or hybrid stations in Canada.

Health Outcomes

Recent trends in research have shifted focus to the far-reaching effects of psychological well-being and in particular, some of the challenges and experiences niche groups have. In the context of first responders, this has resulted in an increased understanding of the long-term effects of the responsibilities of the role. Although a significant amount of the literature examines first responders in the context of natural disasters and terrorist attacks (see Alexander & Klein, 2009; Robbers & Jenkins, 2005), some researchers have examined firefighters specifically (Bryant & Harvey, 1996; Heinrichs et al., 2005; Regehr, Hill, & Glancy, 2000). Most volunteer firefighters have felt their life was threatened in the context of their role and high levels of posttraumatic symptoms are reported when the events occurred frequently and recently (Bryant & Harvey, 1996). Bryant and Harvey also found the events that are perceived as the most stressful are those where the individual felt little to no control over the outcomes, were exhausted, or felt that they did not have the proper training or equipment to handle the situation. The evaluation of stressful events such as these and their relationship to experiences of posttraumatic symptomology, were correlated with individual characteristics of hostility and low self-efficacy (Heinrichs et al., 2005). These findings are consistent with previous research regarding individual characteristics such as insecurity, lack of personal control, and feelings of

alienation as predisposing factors to experiences of posttraumatic stress symptoms (Regehr et al., 2000).

Despite the understanding of personal predispositions in the experience of trauma, no research has been done to examine details that are more central to the traumatic event itself and the implications it has for the firefighters. For example the rural context could have practical implications for the type of emergencies firefighters are responding to such as the frequency of fires versus vehicle accidents or medical emergencies, the dynamics of the individuals involved, and subsequently the challenges that the context poses for volunteers.

Ideal versus actual experiences

No research to date has been done to evaluate how role perception influences the experiences and satisfaction of volunteer firefighters however some relevant studies have been done in general workplace satisfaction research. Employees' role perceptions have been found to influence how they view their work, how satisfied they are, and their intentions to remain with the organization (Ehrhart, 2006; Scroggins, 2008). Ehrhart (2006) evaluated the individual's subjective perception of job fit in the context of personality and job characteristic beliefs. Job characteristic beliefs are the previous knowledge and perceptions that an individual has about an organization or a job role. These perceptions are found to have implications for how the individual perceives their ability to fit into an organization and be satisfied with their experiences. In Scroggins (2008), self-concept is considered in the context of person-job fit to evaluate what compromises meaningful work. Individuals that viewed their role as being congruent to their self-concept were more likely to perceive their work as meaningful. A positive relationship pathway was also found between perceived meaningfulness of their work and intention to remain with the organization. This body of research demonstrates the potential

implications of having high congruence between idealized or perceived fit and the satisfaction and intention to remain with an organization.

Current Research

Previous studies have begun to examine the experiences and characteristics of first responder roles, however, no research to date has considered the impact of location on the experiences of volunteer firefighters. Although volunteer firefighters are a crucial component of both the rural and urban centers throughout Canada and North America, much of our understanding and interventions are not wholly evidence-based practices. Rural settings have been shown to influence other types of behaviour such as helping behaviours, alcohol consumption, and leisure time (see Amato, 1983; Lowe & Peek, 1974; Wilcox, Castro, King, Housemann, & Brownson, 2000) and thus should be considered when examining emergency response behaviour. Without consideration of job context, recruitment, retention, and intervention programs have been designed without consideration of a potentially influential factor such as rurality of the response area.

The present study aims to address this gap in the research by providing insight into how volunteer firefighters perceive and experience their role in the context of geographic location and associated challenges. A mixed-methods approach will be employed to address these experiences. The research will be guided by two primary research questions, (a) what are the experiences of rural volunteer firefighters? and (b) do the actual volunteer firefighting experiences align with the ideal perception of the role?

Method

Design

A mixed-methods approach was used to allow a more holistic investigation into the experiences of rural volunteer firefighters (Hesse-Biber & Leavy, 2010). This approach allowed the complementary advantages of both qualitative and quantitative methodologies to provide more robust and in-depth evidence of the findings (Hesse-Biber & Leavy, 2010). The quantitative portion of the design provides evidence that highlights the daily experiences of the firefighters and the tasks of their role while the themes developed from the qualitative portion provide potential explanations and richer detail as to the dynamic experiences of the volunteer role. The first provides the benefits of generalizability and data trends while the latter provides context and meaning (Hesse-Biber & Leavy, 2010).

The primary methodology guiding this investigation was interpretive phenomenology. This approach is used in qualitative research when the goal is to achieve a deeper, more revealing understanding of the participants' narratives and the researcher does not believe it is appropriate to remove any previous understandings and knowledge of the phenomena (Connelly, 2010). The secondary method was a descriptive design of quantitative data to achieve a description of the sample where no previous hypothesis is present in the research (Montero & Leon, 2007).

Participants and recruitment

Volunteer firefighters were recruited through posters, posts on Facebook and Kijiji, and snow-ball sampling in volunteer and hybrid (stations employing both career and volunteer firefighters) rural volunteers fire stations located in Alberta. A rural fire station was defined as a department located in a city or town center with a population less than 20, 000 people in the 2015/2014 census report (Alberta Government, 2015).

To participate in the present research, individuals must be a current active volunteer firefighter and have been serving at the sample station for a minimum of six months. These inclusion criteria increase uniformity in the data as participants were reporting on experiences that are relatively recent and express their current feelings and perspectives. Meeting the minimum six month requirement resulted in the majority of the participants being past their probationary period. If individuals had not passed the probationary period after six months, as deemed by their ability and knowledge in the role determined by the fire chief, they were still present in the organization long enough to become sufficiently integrated into the organizational culture and the experiences of being a volunteer firefighter at that location.

Materials

Data were collected using the Volunteer Firefighter Job Design Scale (see Appendix A) and a series of semi-structured interview questions (see Appendix B). The questionnaire portion was designed using the list of requirements, traits, and skills that are recommended when applying to become a volunteer firefighter in Alberta (Alberta Fire Chiefs Association, 2015). The set of 30 questions measures volunteer experiences as a function of job design. The first section of questions addresses circumstances in which individuals must engage in their volunteer role such as responding to a higher frequency of calls at different times of the day or year and where these calls are located. The remaining two sections address frequency of engaging in certain job tasks on a 7-point Likert scale ranging from (1) *never* to (7) *more than once a week* and agreement with personal characteristics ranging from (1) *strongly disagree* to (7) *strongly agree*. The maximum score is 175 points on 25 of the questions and ratings of frequency in nominal categories for the remaining five questions. The survey took between 10 and 15 minutes to compete. This measure has been pilot tested to ensure a middle school education reading level.

The interview portion of the data collection was guided by 15 semi-structured interview questions that further addressed the experiences and characteristics of being a volunteer firefighter in a rural setting. The goal of these questions was to address the experiences from a variety of angles in order to gain a holistic representation of what participants thought their role should be and what their daily experiences actually were. The questions are structured to address three main areas, beginning with demographics. This portion allowed collection of background information such as age, gender, and primary occupation to understand the circumstances of the participants as well as build rapport and ease into the interview process. The remaining two sections addressed motivations to join and the daily experiences such as favourite aspects of the organization, challenges that they face in their role, and the opportunity to comment on the experiences that they think are specific to their context. In presenting questions around the topics of motivations, daily experiences, and challenges, participants were invited to talk about multiple aspects of their role and capture a wide variety of experiences, that when pieced together, defined what the participants perceived as being a volunteer. Both the negative and positive framing of questions was used to reveal characteristics of what the ideal firefighter role was and what their actual experiences were. This interviews took anywhere from 15 to 45 minutes, depending on how much information the participant choose to share.

Procedures

Potential participants recruited through the posters and snowball sampling procedures, contacted the principal investigator to gain more information about the study and to begin the screening process. Participants that meet the inclusion criteria, were sent the consent and

information letter followed by a digital SurveyMonkey link to the Volunteer Firefighter Job Design Scale. Once the questionnaire responses had been received, the participants were contacted by their specified method (i.e., email, telephone) to arrange a time to participate in the interview portion. The interviews were conducted over the phone at a time that was convenient for the participant and were audio recorded to allow for analysis. Consent was addressed again prior to beginning the interviews and was included in the audio recordings. The use of phone interviews has been demonstrated to be an effective way to collect data from geographically dispersed participants as well as lower response inhibitions when some of the responses may be sensitive in nature (Block & Erskine, 2012). Upon completion of the interview, participants were thanked for their time and any questions or concerns were addressed.

Data Analysis

Quantitative. The data collected from the Volunteer Firefighter Job Design Scale were scored and analyzed to provide descriptive statistics of the findings. Total scores were calculated for each participant to be compared with the maximum score of 175 to determine how much their actual reported experiences agreed with what the role was described as being in the job design description. Frequencies were analyzed for individual questions regarding characteristics of the calls, frequency of tasks engaged in, and the psychological outcomes that participants reported.

Qualitative. The interviews were transcribed verbatim and analyzed using the approach to thematic analysis outlined by Braun and Clarke (2006). This method has been used in previous qualitative research done with firefighters and has demonstrated effective in analyzing the data (see Sinden et al., 2013). Addressing qualitative analysis under this framework involves following the data through a series of six phases to produce a report illustrated with data-driven themes and participant quotes (Braun & Clarke, 2006). The first step requires the researcher to

transcribe the data and become familiar with its content by reading and re-reading the transcripts, making note of any initial impressions. It is important that this is an active and immersive process in order to start searching for meaning or patterns throughout the data.

The second phase begins the process of generating codes. This is done by systematically pulling out interesting comments of the data that represents a potential feature of the phenomena. In the context of the present study, the interviews were reviewed in their entirety to identify themes that addressed both the ideal experiences of being a volunteer firefighter and the actual experiences. These were done by identifying responses that spoke to how their role ought to be or examples of how they thought their department exhibited the best scenario when dealing with a particular aspect. These were then contrasted with what the participant said was occurring at their department and what their perception of that was relative to their shared ideal experience.

Once the features have been pulled from the complete data set, phase three involves combining these features to represent broader themes emerging from the descriptions. The themes represent a broader cluster of statements and ideas that are related to a similar experience or component of the experience. The development of these initial themes represents the pool of candidate themes that may be later refined during phase four. Phase four is the process of reviewing and refining the different themes, as well as beginning to map how they are related to one another. For example, mapping of the themes may show there is a relationship between two themes that is indicative of the experience being reported more in a certain area. Upon further review, it may also seem that two other themes are representing very similar ideas and can be collapsed into one another.

Once the themes have been developed and are sufficiently distinct, phase five involves naming and defining each of the themes to communicate the central idea that they represent. The goal of the themes is to tell a story of the experiences and should thus be named and defined to illustrate this (Braun & Clarke, 2006). It is important to include a level of interpretation in this portion of the analysis so that the themes include not just a summary of what the participant has said, but also what these might mean for the phenomena as a whole. Once the themes are clearly defined, they may be integrated into the report to provide a framework for the story of the experience: phase six. It is vital to provide a clear description of the themes, how they are related, and illustrate the findings with participants' quotes in relation to the research questions. By using this process in its entirety, the qualitative data were analyzed in a systematic manner, allowing the participants' descriptions to guide the conclusions. This process was completed with the use of NVivo data management software.

Results

Sample Demographics

The present study participants consisted of six males that served at various stations in rural areas of Alberta, Canada. The city or town centers for each jurisdiction ranged in population to provide respondents from a diversity of experiences. Two participants were serving areas with a population < 2, 000. Three participants were serving an area with a population between 2, 000 and 6, 000 and one participant was serving an area > 10, 000. Demographic information can be found in Table 1.

Quantitative

The Volunteer Firefighter Job Design Scale provided information about the diversity of the role and the frequency that participants engaged in various volunteer related activities. Total scores for each of the participants can be found in Table 1. The variation in the reported participant scores from the total score that can be achieved on the questionnaire provides evidence that overall, volunteer firefighters may be having experiences that are different than what is being suggested when they join the organization. The distribution of responses does not appear to be suggestive of a ceiling effect on the data.

Participants responded to a range of calls from 1 to 13 times per month (M = 7.3, SD = 5.1) with half (3/6) of participants reporting these calls occurring in the spring. One reason attributed to this is the unpredictability of Alberta's spring weather and the constantly changing environmental conditions increasing the risk of incidents. Half of the participants also reported responding to the majority of their calls outside of city/town limits (3/6) and the majority reported responding to these calls between 10:01 pm and 5:59 am (4/6).

Participants engaged in a wide variety of tasks related to their volunteer role. The frequency of volunteer activities can be found in Figure 1.

Despite the high reports of demands, the participants also reported high agreement with positive psychological outcomes of the position. Half (3/6) of the participants agreed that their work as a volunteer firefighter made them feel fulfilled and two out of six strongly agreed that they felt a sense of accomplishment and dedication. Feelings of courage were also reported with the majority (4/6) of participants choosing, slightly agree, agree, or strongly agree. No other clear trends were identified.

The diversity of the responses, along with the fluctuating volume and type of calls, provides evidence supporting the dynamic and demanding nature of being a volunteer firefighter in rural Alberta.

Qualitative

Ideal versus actual experiences. As the interview questions were framed to address the experience of being a volunteer firefighter from a variety of angles, the participants responses included both their perception of their role idealized as well as recollections of what their actual experiences were. These types of responses help to form the concept of what the idealized or perfect experience the participants thought being a firefighter should be and compared them to what they were experiencing in their current station. Many of these were framed in a comparative way or suggestions of how things should be. For example, Connor described how many of the other firefighters he works with define 'being a man' and the appropriate way to handle their emotions after a psychologically taxing response call. He also reflects on how he thinks it should be and how the concept of 'being a man' should be redefined to allow firefighters to express their negative emotions or struggles openly and still be respected as filling the masculine nature of the role.

I think that a lot of it has to do with like how a lot those guys define what it is to be a man. You know I think that a lot of those guys are rooted in the old school. You have to tough it all out sort of thing but you know, it would just be nice to hear for once like you know, somebody's crying, be like way to be a man.

Using examples such as these, the ideal and actual experiences of firefighters were constructed along fives themes: Camaraderie, personal factors, humanizing the hero image, role clarity, and community support.

Camaraderie. Participating in a volunteer firefighting experience played an important social role for all of the participants. The network within the organization was vital to providing support during challenging times and also celebrating their role in the community. This type of

relationship was different than those the participants had with other friends or family in the sense that there was a deeper level of understanding and trust. As Connor described it:

You can talk about things with some of these guys that like I don't even think that your closest family members would get. You know like there's just a certain level of conversation you can have that you just can't talk to anybody else about.

The brotherhood experience was something that participants did not attribute to being a factor of their rural location and strong local community ties. The experience was described as being universal to firefighters in general and was something that united individuals regardless of where they met. "[It's] more than just the department, it's a whole brotherhood thing. It's like an international thing. It's not just sort of a local thing" (Steve).

It's nationwide. Like it don't [*sic*] matter if I was to go down to the [United] States. I met a bunch of firefighters down in (other country) on my trip and you're one of them. It's it truly is a brotherhood. – Peter

The notion of camaraderie extended beyond solely the volunteers' relationship with their peers but also played an important role in their perception of their superiors. Mentorship and the role of the fire chief was another valued relationship that participants expressed as benefiting their social ties to the organization. As Peter shared "[it's] the comradery and brotherhood aspect. Along with the mentorship" in reference to some of the features he liked about being a volunteer firefighter in his community. Peter also spoke about the vital role that the superiors in the department played in ensuring that members had access to appropriate resources in the event of a negative incident that they were asked to respond to. If you as a lenient or senior officer or an officer or a fire chief regardless of your rank, if you see that you know somebody has been effected on a scene, you need to get that ball rolling... if you can realize what's going on and process it and talk about it and get those resources there, you will have a much more successful team... [then if] you didn't act upon it and you didn't get the help for your guys that you needed. Because then alls [*sic*] it ends up doing is dividing you. And then your team is no good to anybody. You can't have division like that.

This comment also reflects the practical role that camaraderie plays in the logistics of being a firefighter. Without a cohesive team, Peter feels that the department would not be able to live up to its expectations and serve the community adequately.

Personal factors. Intrinsic factors were influential in a participant's decision to join and remain in their role as a volunteer firefighter. These included motivations and aspects of the participants' personality that made them a good fit for the demands and commitment of the role. Many participants such as Michael "felt obligated to be able to give assistance wherever possible to help people" and others like Peter "wanted to give something back to a town that has given [him] so much." Peter also talked about a motto that the department used. "We all live by a saying. First in, last out... and I will live and die by that saying" (Peter). This is an example of the commitment as well as the teamwork that it takes to be a volunteer firefighter.

Along with the internal motivations, it takes a certain type of personality to take on the volunteer firefighting role. Participants discussed the love of the "adrenaline rush" and how the role had become a part of who they were. Many saw being a firefighter as an integral part of their identity.

It gets in your blood pretty quickly and I didn't want to live a normal life, I still don't. And I figured this is a way that I can do something different without you know, being too different – Connor

Humanizing the hero image. Participants reflected strongly on the challenges that they faced within their role as a volunteer firefighter and the struggle between maintaining the image of being an indestructible hero and ensuring self-care when needed. The nature of the position meant that there were often calls in which volunteers would be dealing with traumatic incidents and "you do see people on sometimes their worst days" (Ben). This strain was seen as one of the hazards of the job however participants still commented on how expressing and coping with these challenges was not congruent with the current definition of a firefighting hero.

It's hard to swallow your pride and you know make yourself feel the size of an ant compared to a giant right... but in that sense you are the giant in that scenario because you're able to admit it to yourself and you're able to get the help that you require to become a better person. And in doing that you're able to help the person next to you better than you even realize it. You're able to get on that level with them". – Peter

Comments such as Peter's describe the value of first responders admitting the 'humanism' that we all face, even when it is a struggle to admit the psychological toll that the role may be having. Peter also commented on how the perception of firefighters can make it difficult to do this.

We're firefighters. We're you know, we're perceived as... strong confident people but... when it comes down to it.. you know you have to be willing to put your pride aside and say I need help. Because sometimes you need to help yourself before you can help other people.

An idealized version of the firefighter role would include an acceptance that psychological strain is as important, if not more, than other types of strain experienced on the job. For the concept of being a firefighter to meet its desired goals, firefighters need to be able to express their emotions without fear of stigmatization and be valued and respected for their ability to do so as much as they are respected for the lifesaving work that they do.

The demands of being a volunteer firefighter could also make it difficult to maintain balance in interpersonal relationships and other expectations external to the organization. This struggle is termed the work – work – life balance. As Will described it, the challenge is "trying to handle firefighting and family. One or the other always wins." The need to able to respond to a call at any time of the day, regardless of what was going on in other aspects of the participant's life, resulted in a tension between their primary occupation (work), the professional expectation of their volunteer role (work), and their friends and family (life). It was also difficult to switch between these roles when there may be different psychological states associated with each.

There's the mental hazard of it just because you've went on calls and then you like yea I don't know. It's just hard to have a mix of life when you have that... say you just attended a call and then you have a family function to attend to. It's hard to you know just shut it off. –Ben

As Ben describes, you may be attending a family function where you are expected to be happy, upbeat, and conversational even if just a short time before you were dealing with a large fire or vehicle accident. This need to monitor emotions and step between drastically different identities rapidly is another example of how there are associated expectations of what a firefighter should be able to do and how they behave.

Role clarity. Firefighters are assumed to be people that carry out what their title implies, fighting fires, however given the location and nature of the jurisdiction, the station may face a much larger array of responsibilities. The features of rural areas in Alberta can include a variety of landscapes such as prairie land, dense forests, and mountain ranges, each of which comes with a differing nature of emergency. This is also true of each jurisdiction the rural area is responsible for responding to. Their response borders may encompass busy highways such as Highway II running north to south through the province, industrial parks, or new developments with heavy construction. All of these factors play into the diverse type of emergency a volunteer may be responding to. As Will describes, his early perceptions of his role quickly changed as he realized how much more would be expected of him and his team.

It's weird. I really only perceived firefighters as the people who put the fires out. I kind of forgot that they do a lot more...I guess I just perceived the job to be structural fires and that's it. I was so wrong

This shift from what the participants idealized being a firefighter entailed to their reality was profound and many struggled to describe what is was that they actually did on a daily or weekly basis. It was about much more than putting out fires and "it's always hard to predict, you never know" (Steve). It became evident that the demands were significant and varied and the nature of the calls was diverse.

It's hard to really think of like a main role that I would serve because the big thing that I think you have to be able to do being a volunteer is be very quick to adjustment. One

minute you could be told that you know okay you're getting in the back of this truck oh wait we need a driver for this truck okay so you're driving now. So then you have to start thinking okay where am I going, am I pumping do I you know where the pump is on this truck? Oh no I'm driving a rescue okay. Now I have to think of a whole other set of things. Yea it's you know traffic conditions all that kind of stuff – Connor

The diversity and dynamism was seen as being particularly true for volunteers in a rural setting. For many stations, the volunteer department was considered the primary first responder for the town center and surrounding county and therefore carried the responsibility of responding to all emergency related incidents. This could include anything from 'granny leaving the microwave on too long' (Connor) to a motor vehicle accident that required the Jaws of Life or a heart attack or other medical emergency. This high level of demand required extensive training, commitment, and tolerance of the role's continual ambiguity.

The customers have the same expectations as they would in [a major city]. A firefighter is a firefighter is a firefighter... So we have to maintain... at least a certain level of expertise and skill levels right?... From dangerous goods to vehicle extrication to ice rescue to whatever right? – Steve

As Steve's quote demonstrates, there was a high expectation from the community, department, and even themselves about what a firefighter should be able to do regardless of the volunteer nature of their role. The low role clarity meant that participants had to be prepared to address nearly any situation at a moment's notice, not only put out a fire as one would expect.

Community support. Being a volunteer firefighter is a public role that interacts extensively with the community. These interactions are not limited only to emergency responses

but also through community education, fire awareness and safety programming, and fundraising initiatives. Support from these community members is a valued outcome for participants and helps to reaffirm their motivations for engaging in a risking role. Both Steve and Connor gave examples of times when they felt especially valued and respected in the community.

Walking down the street people recognize you. So I do the fire safety at the schools so it's hi firefighter [Steve]... all the little kids know me and stuff like that... And the general people that you may not even know, they'll say "hi and hi how's it goin" [*sic*] and people on the street, so they'll buy you coffee at Tim Horton's, you know "thanks for your service" those kind of things right? – Steve

It's nice to be like smiled at. Like this one time I was just at Home Hardware getting stuff and I had my jacket on that has our little crest on the side and this woman was like "oh thank you for what you do" and it's really touching to hear that from people and to know that the community supports you so much. It's amazing actually so. – Connor

These examples of public acknowledgement reminded the participants of the impact their service had and how much even strangers respected their commitment to emergency services. The community's gratitude aids in mediating the association between positive outcomes and the work that volunteers put into the organization.

Another aspect of support that had significant implications for the departments was the number of resources that they were able to obtain. This could be in the form of mental health supports, aid from other departments, as well as the financial resources they had access to in order to keep the station going. These were all referred to as a function of community support, both from the general public and the city council. Many of the participants felt supported by their

community, both through their city allotted funding and their ability to fundraise to maintain the resources that they needed. These additional funds were often sourced through a department association that arranged events as Peter describes.

We have a [*sic*] association within our fire department. We do events for our department and the money that is raised from that [*sic*] events stays in our association... So we can buy tools or equipment or gear that stays with the department. The town does not own that.

There were however also notes about how this could be more difficult in a rural area, especially for a volunteer service. Ben talked about how their "fire engine [is] actually over 15 years old that should be replaced" but that the resources were hard to obtain from their municipality.

The Five-Factor Model of Volunteer Firefighting

The ideal and actual experience of volunteer firefighters in rural Alberta are captured by the five themes: camaraderie, personal factors, humanizing the hero image, role clarity, and community support. Figure 2 combines these factors to represent the relationships between the themes and in what ways the experiences of the current study's participants compared to how they viewed what their role should be. The external layer of the pentagon represents the ideal experiences and the pentagon mapped along the inner layers, represents the participants' reported experiences. Experiences mapped closer to the outside layer of the pentagon indicated high congruence between the reported actual experiences and the idealized experience. Experiences mapped closer to the center layer of pentagon are representative of disconnect between what the participants think their role ought to be and what they are actually experiencing. In the context of the present study, participants experienced high congruence between their actual and idealized experience in camaraderie, personal factors, and community support. There was evidence of disconnect between actual and idealized in humanizing the hero image and role clarity.

Discussion

The present study explored the actual and ideal experiences of rural volunteer firefighters in Alberta, Canada using a mixed-methods approach. As this is an exploratory study, no direct predictions were made. The Volunteer Firefighter Job Design Scale provided evidence that being a volunteer firefighter is rural Alberta is a diverse and demanding experience. This was also reflected in the interview data. Participants engaged in non-fire related volunteer activities as frequently as or more frequently than fire related incidents. This deviation from what many would consider the primary role of a firefighter, to fight fires, can be attributed to the nature of emergency response services in rural areas. For many small cities, towns, and villages, a volunteer fire department may be the primary emergency responding body and therefore must be able to handle any and all emergencies either in their entirety or until the appropriate response services arrive. These additional responsibilities significantly increase the commitment, depth of training, and potential severity of the calls that rural volunteers are responding to. Being faced with additional demands such as these can make maintaining a work – work – life balance must more difficult and may require additional measures and support to humanize the hero image.

The increased diversity of calls also significantly lowers role clarity as a volunteer may never have an idea of what type of call they are responding to until they are entering the scene. The need to quickly and safely adapt to many different extreme situations can also play into the physical and psychological strain individuals' face. Yarnal and Dowler (2002) explored the demands and expectations placed on volunteer firefighters and found similar conclusions. The role is one that is highly visible in the community and demands a high degree of professional knowledge and skill despite the voluntary status. The professional expectation results in a tension between the obligation to perform above the volunteers' amateur position and the ambiguity that comes with the unknown diverse demands.

Interdepartmental and external supports were also very valuable for rural volunteer firefighters. The support of other firefighters and the chief within the department was cited as being vital to the volunteers' ability to maneuver difficult calls and cope with the demands that were placed on them. The team as a coping resource plays a role similar to the proactive coping agents discussed in Angelo and Chambel (2014). These are resources the volunteer firefighters build and maintain before a crises, as opposed to reaching out after, and are found to mediate the relationship between job demands and burn-out. By having continuous support within the department, volunteers were able to have many of the support resources they needed when a crisis did occur. The brotherhood and mentorship aspects were an overall significant reward of being a part of the organization.

Many participants joined the organization as a way to give back to their community and provide a service they viewed as important to their friends and family. When the community was able to express gratitude through both verbal expressions and financial funding, the volunteers were affirmed that their sacrifices were acknowledged and appreciated. This is important to the commitment of volunteers as research has found the receiving gratitude for one's voluntary efforts reinforces the desire and commitment to volunteer (McCullough, Kimeldorf, & Cohen, 2008).

Lastly the personal factors identified in the present study are congruent with previous research findings. The strong identification with the volunteer firefighting role demonstrated here was also identified in Haski-Leventhal and McLeigh (2009) as participants spoke strongly about

how volunteering was a part of who they were. Altruistic motivations and community acceptance were also reported in the present study similar to findings from Haski-Leventhal and McLeigh (2009) and Carpenter and Myers (2010).

The results do demonstrate an overall positive experience for rural volunteer firefighters in Alberta compared to their idealized version of the role. In general, participants felt supported in their internal and external social needs and their own psychological identification with the role. Improvements can be made to remove the barriers present between the current experiences and the idealized version in both role clarity and humanizing the hero image. It may not be possible to alter the diversity of the demands, however participants spoke about how improved communication before and after entering a scene improved their ability to respond and cope appropriately. Improved methods of communication such as radios or response tracking software in the form of cell phone apps (See FireRescue1, 2014 for review) have the potential to give responders more information and improve role clarity when entering a response situation.

To improve the relationship between actual and idealized measures on humanizing the hero image, steps must be continually taken to destigmatize issues of mental health. In many areas participants said that they had access to mental health resources if needed but many people were unwilling to ask for the help, assuming they would 'be over it' soon enough. This disconnect between availability and use needs to be researched further to better understand what can be done to have first responders requesting and using the services that are becoming more available to them.

There are many strengths to the methodological approach taken to investigate the experiences of rural firefighters. The use of qualitative data and the framework of phenomenology, allows the role of volunteer firefighting to be approached from the perspective

of the participants and their narratives to be used directly in presenting and interpreting the findings. This strengthens the results by ensuring that the themes presented have both the voices of those that are experiencing the phenomena but also a level of interpretation to attempt to understanding the meaning and outcomes of the experiences.

The addition of quantitative measures in the mixed-methods approach are also a strength of the present study. In using the strengths from both the qualitative and quantitative approaches, the experiences are examined in a more holistic manner and a greater understanding of the phenomena are achieved (Hesse-Biber & Leavy, 2010). The quantitative portion of the questionnaire allowed descriptive data to demonstrate the true nature of the role in terms of demands and diversity, while the qualitative portion obtained from the interview data provided a deeper understanding and illustration of these experiences.

There are also a number of limitations to this study and its findings. Although the achieved sample size satisfied Polkinghorne's (1989) recommended minimum for the phenomenological qualitative portion, the data are not sufficiently adequate to be conclusive in the themes' relationships. Although data saturation was achieved early on in data collection, with no new themes arising, more participants would be required to have more robust conclusions. The small sample size also extremely limits the analysis that can be performed with the quantitative data, preventing the ability to present findings with measures of statistical significance. The descriptive statistics presented are easily influenced by outlier data and even responses that are even minimally distributed may significantly shift the measures of central tendency. Limited sample size also inhibits the ability to consider confounding demographic factors such as age, length of time with the department, and number of volunteers in the department. Despite the study participants being relatively distributed across these characteristics

to provide a range of responses, the data are not adequate for examining any correlations that may be present among these factors and any potential relationships that may identified, are not conclusive. Due to the variability of the data, conclusions made are very conservative and will require additional research in the future.

The final limitation is the potential for a response bias present in the participants. As this topic addressed helping behaviour and positive actions of individuals, the responses and descriptions provided may have addressed proportionately more positive, culturally desired motivations and experiences. This framework of responses may have failed to capture some of the self-oriented motivations such as career advancement, skill development, and personal gain (McLennan & Birch, 2008), as individuals may not have wanted to present themselves in a way that does not emphasize the selflessness of high-risk volunteer jobs and their commitment to the community and others. Although both the positive and negative experiences were shared, it is unknown to what extent those responses were complete. Future research should examine other techniques and questionnaire formats that are appropriate for overcoming these response barriers.

The potential findings of the present study have implications for volunteer and career firefighters throughout Canada and North America. With increased understanding of the experiences that occur in the context of the volunteer firefighter role in different rural regions, researchers and organization officials can better design services and supports that are available to facilitate a positive volunteer outcome. Recruitment and retention have been continuous issues for maintaining a strong volunteer base in departments. The strain has become so severe in parts of Alberta, stations and response teams have been forced to shut down (King, 2011). In light of these issues, a report for increasing recruitment and retention was developed, of which importance of psychological support services and engagement with the community were outlined as important initiatives (King, 2011). Despite this and similar reports, little research or work has been done to understand the experiences of these individuals in the context of a rural setting. The results of this study and the use of the Five-Factor Model of Volunteer Firefighting as a tool to evaluate the experience of volunteers could provide information to these parties about how to further improve implementation of these initiatives and address the needs of different departments in the context of their location. By better understanding what volunteers want their role to be in the idealized version and what they are actually experiencing, practitioners can provide services to close the gap to improve satisfaction and retention.

Overall, a better understanding of the experiences and challenges that life-saving and dedicated volunteers have, will improve the resources that organizations can provide to them and in turn the effective emergency response services they can provide to their communities.

References

- Alexander, D. A. & Klein, S. (2009). First responders after disasters: A review of stress reactions, at-risk, vulnerability, and resilience factors. *Prehospital and Disaster Medicine*, 24(2), 87-94. http://dx.doi.org/10.1017/S1049023X00006610
- Alberta Fire Chiefs Association (2015). Alberta volunteer firefighters. Retrieved from http://www.albertavolunteerfirefighters.ca/
- Alberta Government (2015). 2015 municipal affairs population list. Retrieved from http://www.municipalaffairs.alberta.ca/documents/msb/2015_Municipal_Affairs_Populat ion_List.pdf
- Amato, P. R. (1983). Helping behaviours in urban and rural environments: Field studies based on taxonomic organization of helping episodes. *Journal of Personality and Social Psychology*, 45(3), 571-586.
- Angelo, R. P., & Chambel, M. J. (2014). The role of proactive coping in the Job Demands-Resources Model: A corss-section study with firefighters. *European Journal of Work and Occupational Psychology*, 23(2), 203-216. http://dx.doi.org/10.1080/1359432X.2012 .728701
- Block, E. S. & Erskine, L. (2012). Interviewing by telephone: Specific considerations,
 opportunities, and challenges. *International Journal of Qualitative Methods*, 11(4), 428-445. doi: 10.1177/160940691201100409
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in Psychology*, 3(2), 77–101. Http://doi.Org/10.1191/1478088706qp063oa

- Bryant, R. A., & Harvey, A. G. (1996). Posttraumatic stress reactions in volunteer firefighters. *Journal of Traumatic Stress*, 9(1), 51-62.
- Carpenter, J., & Myers, C. K. (2010). Why volunteer? Evidence on the role of altruism, image, and incentives. *Journal of Public Economics*, 94(11-12), 911–920. http://doi.org/10.1016/j.jpubeco.2010.07.007
- Elshaug, C., & Metzer, L. (2001). Personality attributes of volunteers and paid workers engaged in similar occupational tasks. *The Journal of Social Psychology*, 141(6), 752-763. doi: 10.1080/00224540109600586
- Ehrhart, K. H. (2006). Job characteristic beliefs and personality as antecedents of subjective person-job fit. *Journal of Business and Psychology*, *21*(2), 193-226. doi: 10.1007/s10869-006-9025-6
- FireRescue 1 (2014, September 30). 10 aps every firefighter should have. Retrieved from http://www.firerescue1.com/fire-products/communications/articles/1994432-10-appsevery-firefighter-should-have/
- Haski-Leventhal, D., & McLeigh, J. D. (2009). Firefighters volunteering beyond their duty: An essential asset in rural communities. *Journal of Rural and Community Development*. 4(2), 80-92.
- Heinrichs, M., Wagner, D., Schoch, W., Soravia, L. M., Hallhammer, D. H., & Ehlert, U. (2005).
 Predicting posttraumatic stress symptoms from pretraumatic risk factors: A 2-year prospective follow-up study in firefighters. *The American Journal of Psychiatry*, *162*(12), 2276-2286. http://dx.doi.org.login.ezproxy.library.ualberta.ca/10.1176/appi.ajp.162.12.2276

- Hesse-Biber, S. N., & Leavy, P. (Eds.). (2010). *Handbook of emergent methods*. New York: The Guilford Press.
- King, L. (2011, January 31). Alberta tackles recruitment and retention, produces model and tool kit for volunteers departments. Retrieved from http://www.firefightingincanada.com/ volunteers/facing-facts-7914
- Lee, S. & Olshfski, D. (2002). An examination of variations in the nature of employee commitment: The case of paid and volunteer firefighters. *International Review of Public Administration*, 7(1), 29-38. doi: 10.1080/12294659.2002.10804990
- Lowe, G. D., & Peek, C. W. (1974). Location and lifestyle: The comparative explanatory ability of urbanism and rurality, *Rural Sociology*, *39*(3), 392-420.
- McCullough, M. E., Kimeldorf, M. B., & Cohen, A. D. (2008). An adaptation for altruism the social causes, social effects, and social evolution of gratitude. *Current directions in Psychological Science*, 17(4), 281-285. doi: 10.1111/j.1467-8721.2008.00590.x
- McLennan, J., & Birch, A. (2005). A potential crisis in wildfire emergency response capability?
 Australia's volunteer firefighters. *Global Environmental Change Part B. Environmental Hazards*, 6(2), 101-107. doi:10.1016/j.hazards.2005.10.003
- McLennan, J., & Birch, A. (2008). Why would you do it? Age and motivation to become a fire service volunteer. *The Australian and New Zealand Journal of Organisational Psychology*, 1, 7–11. http://doi.org/10.1375/ajop.1.1.7
- Montero, I., & León, O. G. (2007). A guide for naming research studies in psychology. *International Journal of Clinical and Health Psychology*, 7(3), 847–862.

Polkinghorne, D. E. (1989). Phenomenological research methods. In R. S. Valle & S. Halling, Existential- phenomenological perspectives in psychology: Exploring the breadths of human experience (pp. 41-60). US: Springer.

- Regehr, C., Hill, J., & Glancy, G. (2000). Individual predictors of traumatic reactions in firefighters. *The Journal of Nervous and Mental Disease*, *188*(6), 333-339.
- Robbers, M. L. P. & Jenkins, J. M. (2005). Symptomatology of post-traumatic stress disorder among first responders to the Pentagon on 9/11: A preliminary analysis of Arlington County police first responders. *Police Practice and Research: An International Journal,* 6(3), 235-249. doi: 10.1080/15614260500206244
- Robertson, G. (2008, December 19). Canada's 9-1-1 emergency. *The Globe and Mail*. Retrieved from http://www.theglobeandmail.com/technology/canadas-9-1-1-
- Scroggins, W. A. (2008). The relationship between employee fit perceptions, job performance, and retention: Implications of perceived fit. *Employee Responsibilities and Rights Journal, 20*(1), 57-71. doi: 10.1007/s10672-007-9060-0
- Sinden, K., MacDermid, J., Buckman, S., Davis, B., Matthews, T., & Viola, C. (2013). A qualitative study on the experiences of female firefighters. *Work*, 45(1), 97–105. http://doi.org/10.3233/WOR-121549
- Thompson, a M. (1993). Work without wages: the motivation for volunteer firefighters. *American Journal of Economics and Sociology*, 52(3), 323–343. http://doi.org/10.1111/j.1536-7150.1993.tb02553.xemergency/article560927/?page=all

- Wilcox, S., Castro, C., King, A. C., Housemann, R., & Brownson, R. C. (2000). Determinants of leisure time physical activity in rural compared with urban older and ethnically diverse women in the United States. *Journal of Epidemiology & Community Health*, 54, 667-772. doi:10.1136/jech.54.9.667
- Yarnal, C. M., & Dowler, L. (2002). Who is answering the call? Volunteer firefighting as serious leisure. *Leisure/Loisir*, 27(3-4). 161-189. doi: 10.1080/14927713.2002.9651302

| Table 1. | |
|----------|--|
|----------|--|

Participant demographic information

| Participant | Pseudonym | Gender | Age | Location | Size of | Time | VFJDS |
|-------------|-----------|--------|-------|----------|------------|----------|-------|
| | | | Range | | department | fighting | Score |
| | | | | | | (years) | |
| 1 | Connor | Male | 18-29 | Central | >30 | 4 | 72 |
| 2 | Ben | Male | 18-29 | Southern | >30 | 3 | 83 |
| 3 | Peter | Male | 18-29 | Central | 20-30 | 4 | 153 |
| 4 | Will | Male | 30-49 | Northern | 10-20 | 5 | 99 |
| 5 | Michael | Male | 50-65 | Northern | <10 | 20 | 122 |
| 6 | Steve | Male | 50-65 | Northern | >30 | 31 | 141 |

Note. VFJDS = Volunteer Firefighter Job Design Scale. VFJDS scores are out of a maximum 175.

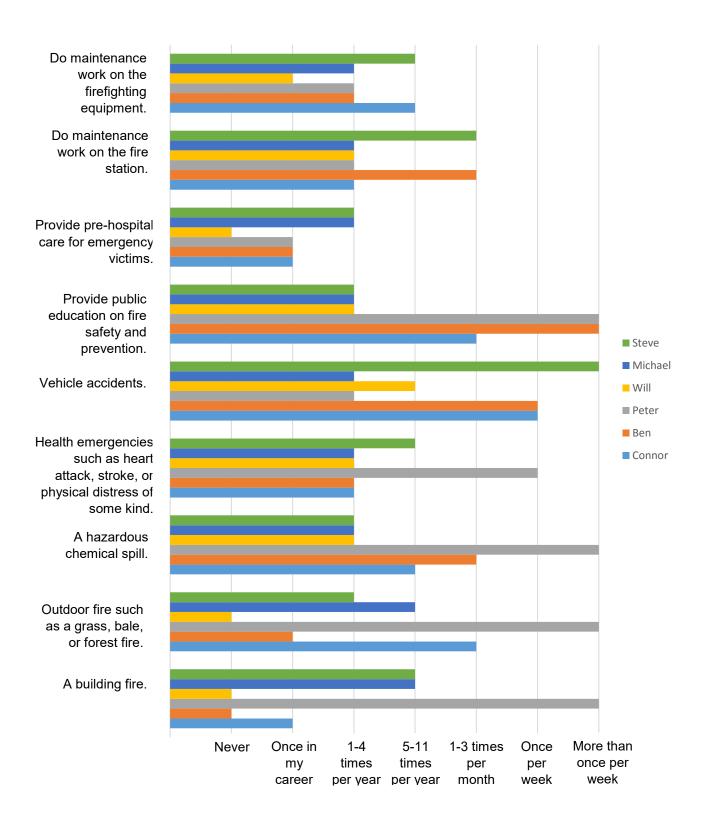


Figure 1. Frequency of participant engagement in volunteer firefighter activities.

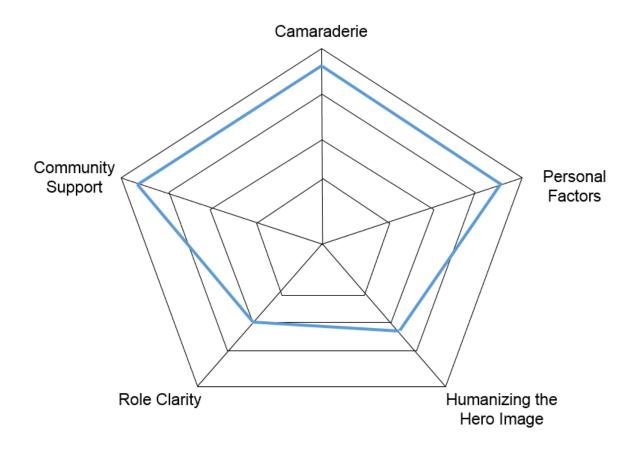


Figure 2. The Five-Factor Model of Volunteer Firefighting for rural Albertan participants.

Appendix A

Volunteer Firefighter Job Design Scale

Please enter your email address to access the Volunteer Firefighter Job Design Scale.

Participant Email address:

Circumstances

- 1. On average, how many emergency calls do you respond to in a month?
- 2. Please select a time of year when you would say you respond to the most calls or your station is the most busy:
 - a. drop down menu
 - i. Spring
 - ii. Summer
 - iii. Fall
 - iv. Winter
 - v. I respond to about the same amount of calls year-round.
- 3. Where are most of your responses located?
 - a. drop down menu
 - i. within city/town limits
 - ii. outside of city/town limits
 - iii. I respond to about the same amount of calls within and outside the city/town limits.
- 4. What time of day are most of the calls you receive?
 - a. Drop down menu
 - i. Morning
 - ii. Afternoon
 - iii. Evening
 - iv. Night
 - v. I respond to about the same amount of calls at all times of the day.

Nature of the Emergency

Please rate how often you respond calls related to each of the following scenarios:

5. A building fire.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

6. Outdoor fire such as a grass, bale, or forest fire.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

7. A hazardous chemical spill.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

8. Health emergencies such as heart attack, stroke, or physical distress of some kind.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

9. Vehicle accidents.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

How often do you participate in the following activities as a volunteer firefighter?

10. Provide public education on fire safety and prevention.

| Ī | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| | Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | | |

11. Provide pre-hospital care for emergency victims.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

12. Do maintenance work on the fire station.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-------|----------------------|-----------------------|------------------------|------------------------|----------------|-------------------------------|
| Never | Once in my career | 1-4 times per year | 5-11 times per year | 1-3 times per month | Once a week | More than once per week |
| | | | | | | |

| 1 Never | 2 Once in my career | 3 1-4 times per year | 4 5-11 times per year | 5 1-3 times per month | 6 Once a week | 7 More than once per week |
|------------|---------------------------|----------------------------|-----------------------------|-----------------------------|---------------------|------------------------------------|
| | | | | | | |

13. Do maintenance work on the firefighting equipment.

Personal Characteristics

Please rate how much you would agree these statements

14. I enjoy working as a part of a team.

| 1 Strongly | 2 Disagree | 3 Slightly | 4 Neither | 5 Slightly | 6 Agree | 7 Strongly |
|---------------|---------------|---------------|-----------------------|---------------|------------|---------------|
| disagree | | disagree | agree nor disagree | agree | | agree |
| | | | | | | |

15. I see myself as a role model in the community.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

16. I am always looking for new ways to improve my skills and physical abilities as a volunteer firefighter.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

| l Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

17. I find that my position as a volunteer firefighter is stressful.

18. I have knowledge similar to that of other first responders (i.e., career firefighter, police, 911 dispatchers, EMS).

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

19. I enjoy fast paced work environments.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

20. I enjoy working with people from diverse backgrounds.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

21. I find that my role can be very emotional.

22. I enjoy working in a challenging environment.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

23. I am satisfied in my role as a volunteer firefighter.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

My role as a firefighter has made me feel a strong sense of:

24.Accomplishment.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

25. Compassion.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

26. Fulfillment.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

27. Courage.

| 1 Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

28. Dedication.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

29. Assertiveness.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------|----------|----------------------|----------------------------------|-------------------|-------|-------------------|
| Strongly disagree | Disagree | Slightly disagree | Neither agree nor disagree | Slightly agree | Agree | Strongly agree |
| | | | | | | |

30. Reward.

| l Strongly disagree | 2 Disagree | 3 Slightly disagree | 4 Neither agree nor disagree | 5 Slightly agree | 6 Agree | 7 Strongly agree |
|---------------------------|---------------|---------------------------|---------------------------------------|------------------------|------------|------------------------|
| | | | | | | |

Appendix **B**

Interview Script

Demographics

- 1. Where are you a volunteer firefighter?
- 2. Can you please tell me your gender?
- 3. Can you please tell me your age?
- 4. What is your primary occupation?
- 5. How long have you been a volunteer firefighter?
- 6. How long have you been volunteer in _____ (location)?
- 7. How many people volunteer there (location)?
- 8. And how large is the area you respond to? Just approximately. Either boundaries or square kilometers.

Motivations

- 9. Why did you chose to become a firefighter?
- 10. Has firefighting met all of your expectations?
 - Why or why not?

Experiences

- 11. Can you explain to me a little about your role? What are you responsibilities on a given day or week?
- 12. What do you like about being a firefighter?
- 13. Is there anything that you don't like about being a firefighter?
- 14. In your opinion, what are some of the challenges that firefighters face in general?
 - How do you deal with those?
 - How do some of your colleagues deal with those?
- 15. Are there any challenges that you think are specific to being a rural/urban firefighter?

Final Remarks

16. Those are all of the questions I have. Is there anything else you would like to share about your experience as a volunteer firefighter in _____ (location)?