Effectively Recruiting and Retaining Volunteers in Rural Emergency Services Through Better Management

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Abstract

The number of volunteers in the emergency services of rural central Pennsylvania continues to decline. As the number of recruits is reportedly diminishing (as noted in field interviews) and the available pool of trained volunteers ages rapidly, emergency service organizational leadership is faced with the need to examine how it motivates citizens to join their organizations as well as how to retain them. I have examined survey data of rural emergency service volunteers and have determined that a more central focus on the personal needs of the individual volunteer, as well increased familiarity with their individual personality preferences will lead the organizational leadership to a better understanding of how to more effectively recruit and retain the next generation of emergency service volunteers. Additionally, a conclusion is reached regarding a perceived 'volunteer famine' suspected to be looming in rural central Pennsylvania's emergency services.

1. Introduction

In rural central Pennsylvania, community responses to emergency conditions (fires, floods, medical alarms, etc.) are predominantly accomplished by volunteer emergency service organizations. These organizations are comprised of individuals of nearly every age and demographic background who generally share a common desire to help others through community service.

In communities without volunteer services, paid emergency services exist, driven by legal requirements for communities to ensure the provision of public safety services. These services are predominantly tax-funded, and are staffed with full-time employees. There are commonly known differences in opinion regarding the personnel and capabilities of the paid and volunteer services, which are not within the scope of the study, but notably help to identify that there is a distinction between the emergency services paid employees and those who choose to volunteer. The breadth and nature of the distinctions are a subject for further study.

The author was not able to identify any academic study of volunteerism in emergency services in rural central Pennsylvania which presented wholly a demographic, service oriented and respondent perspective examination of the emergency service volunteer. This study was conducted not only as a response to the lack of data regarding the rural emergency service volunteers as individuals, but also to answer a question that is gathering an increasing amount of attention both regionally and nationally: Is there going to be a famine of volunteers to respond to disasters in the future, or are they a dying breed? This study was constructed to examine the ages of the volunteer population, their levels of experience in

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the emergency services, and the availability of replacement volunteers who will be responsible for the longevity of these organizations. These were compared to develop a framework to gauge whether there were more volunteers in a position to retire from the service than there were entering into the service to replace them.

Additionally, there is a need and desire for some members of the 'civilian' community (those who are not members of an organization, or who have never served in such a capacity during a disaster response) to understand the volunteer as a person, to both conceptualize and appreciate their experiences and sacrifices. This study presents an introspective view into volunteers on an individual level, and presents an opportunity for the under informed to gain invaluable perspective into the lives of the volunteers who risk their lives everyday for those who they don't even know, with most doing so for a selfless and altruistic reason.

This research is supported by a survey sent from the agency to regional emergency services for distribution to their volunteers. The survey was estimated to reach approximately 500 volunteers, 116 responses were received, making the return rate almost 25%. After reviewing the returns and conducting exit interviews with organizational leaders locally, it is concluded that a representative sampling of local emergency service organizations has been achieved.

This research is designed to represent a 'snapshot in time' of the current conditions in the volunteer emergency services of central Pennsylvania. There are a number of subjects identified in the research as having merit for further study, especially the rates of recruitment, retention and resignation within these services. Inferences and conclusions reached in this study are made on this basis, and subjects which require additional study are noted.
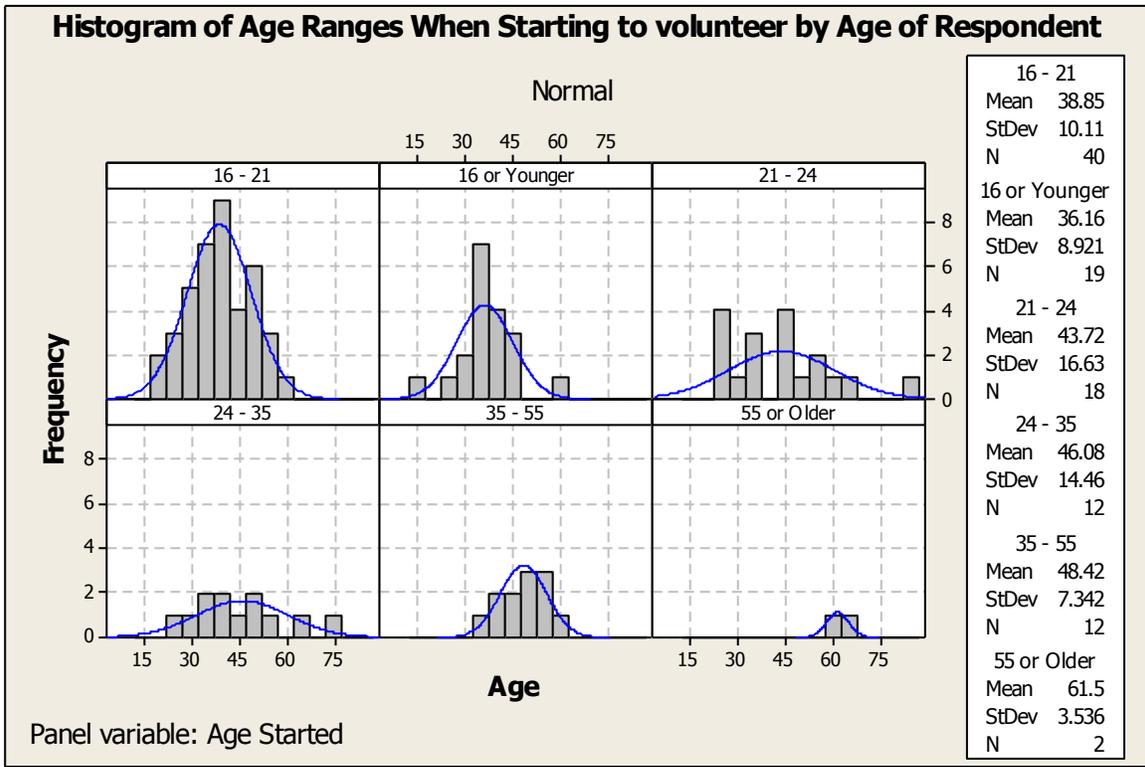
2. Demographic Background

To understand the rural emergency service volunteer, it is important to understand the demographic background of the survey population studied. In this study, the majority of the volunteer community studied can be described as white, middle aged, low to middle income individuals who are predominantly conservative in nature. The graphical representations below show the key information gathered in the study.

Ages of Rural Emergency Service Volunteers Studied
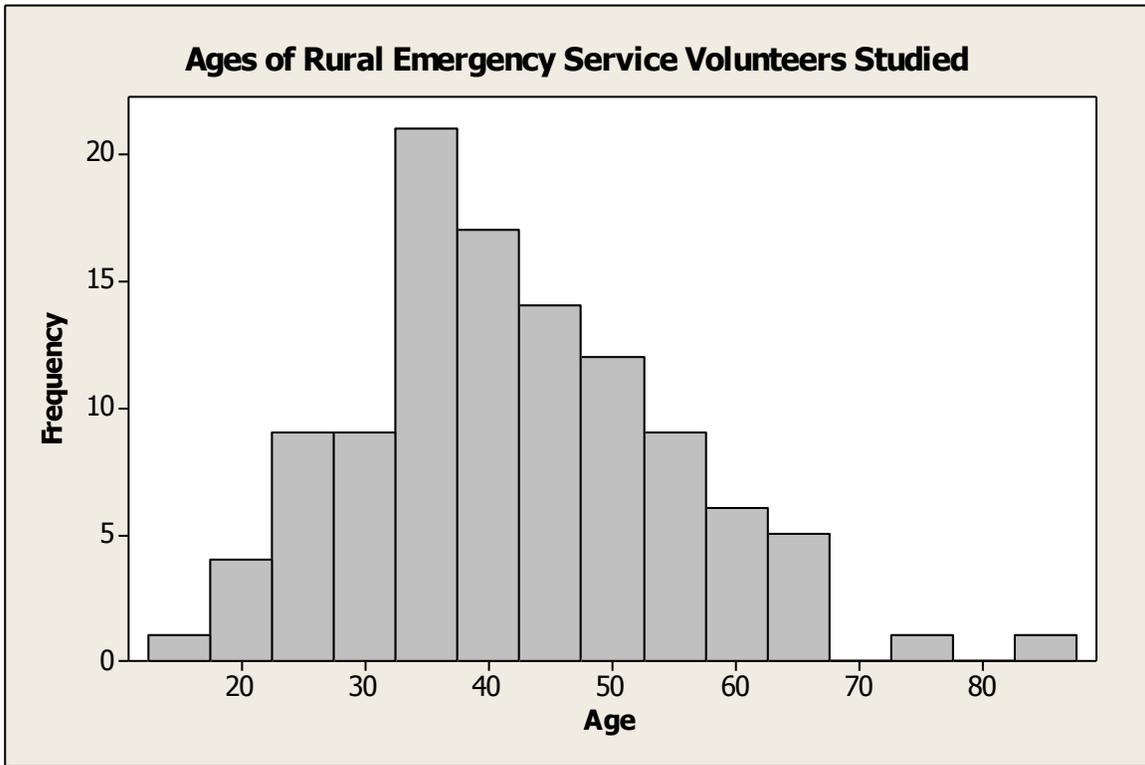
Age

N	Valid	109
	Missing	7
Mean		41.7156
Median		40
Std. Deviation		12.95512
Range		68
Minimum		15
Maximum		83

Chart of Observed and Expected Values for Age of Volunteer

Histogram of Age Ranges When Starting to volunteer by Age of Respondent

Panel variable: Age Started
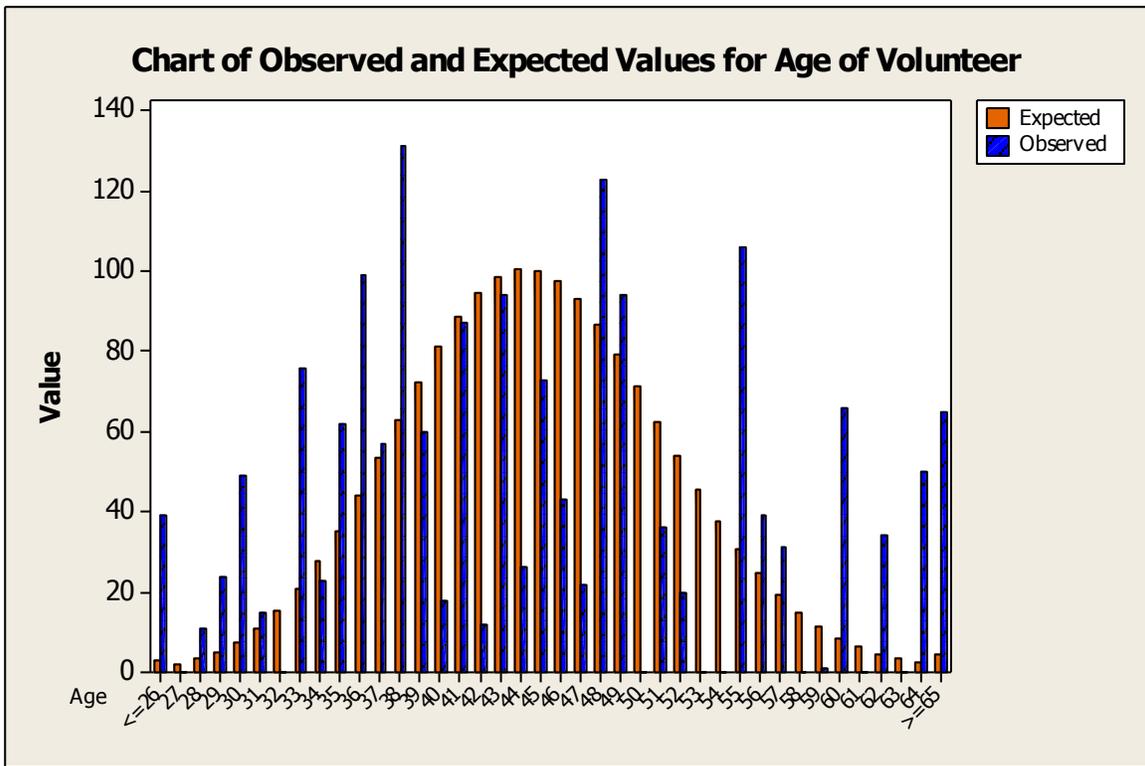
From this information, it is clear that there is no absolute beginning or end age where recruitment and retention efforts lack utility and relevance. The largest portion of the survey population lies between the ages of 30 and 55, and based on their responses as to when they began their volunteer career, retention programs should focus on volunteers in their 30's and beyond. This would also suggest that recruitment efforts are likely to be most effective from the range of adolescence through the mid 30's for organization building.

Education Background of Rural Emergency Service Volunteers Studied

Percent within all data.
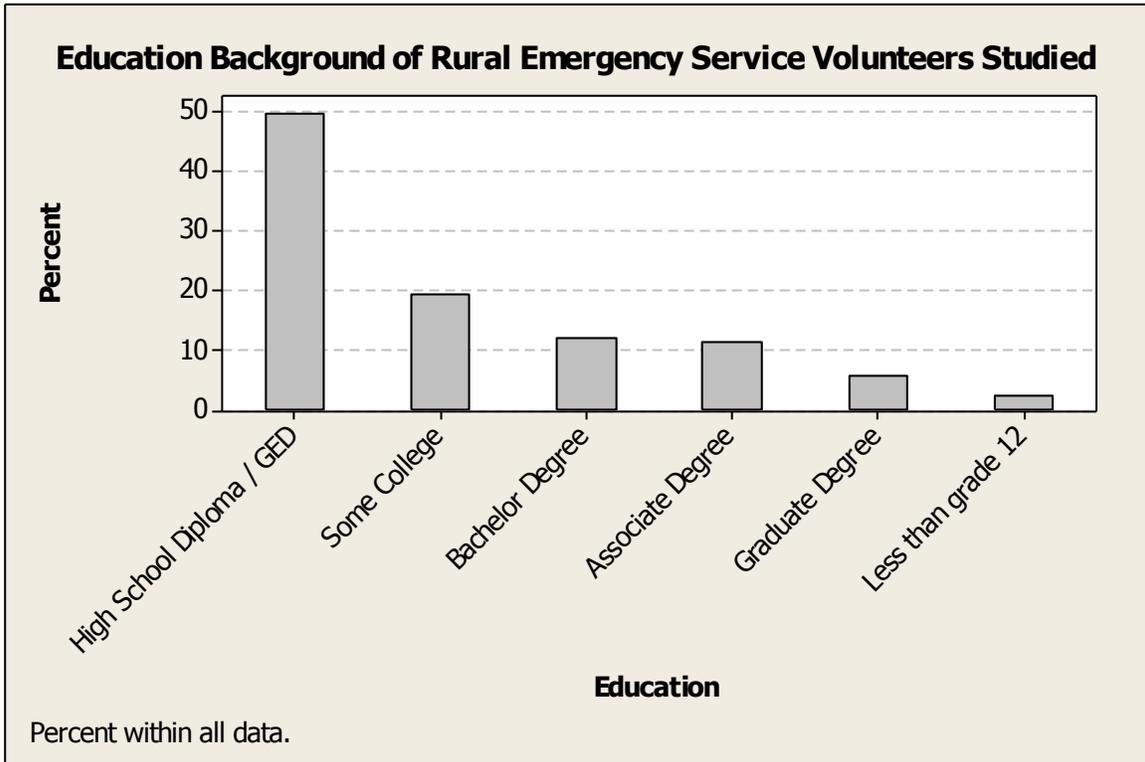
The majority of rural emergency service volunteers have at least a high school diploma, and 48% of the survey population has completed some level of post-secondary education. Those who choose to volunteer in the emergency services do so with an understanding of the importance of their actions, the community need, and the sacrifice that must be personally realized. Due to training and certification requirements, volunteers must work even harder than paid emergency service employees to serve in an active capacity because they must take their training outside of normal work and family hours, without compensation.

Income Background of Rural Emergency Service Volunteers Studied

Category
- No Answer
- $15,000 - $30,000
- $30,000 - $50,000
- $50,000 or more
- Less than $15,000

- 2.6%
- 22.4%
- 38.8%
- 25.0%
- 11.2%
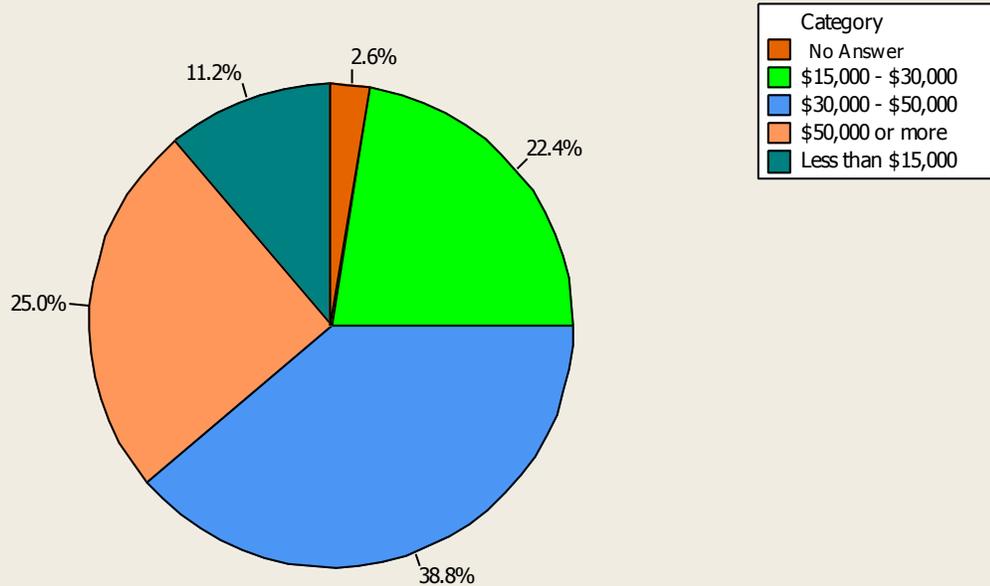
3/4 of the volunteer study population earns less than $50,000.00 per year, and at least 11% of the volunteer population earns less than minimum wage. In central Pennsylvania, although these are not high incomes, at least half of the population earns enough to provide for their family's basic needs. Of those who don't, the cost of volunteering can present a significant strain on their personal economic welfare. Understanding the drivers that motivate individuals to volunteer (discussed in detail later in this study) will help to explain why individuals may place themselves in positions of economic disadvantage to serve their community. It is reasonable to suggest that the majority of rural emergency service volunteers have a sufficiently stable income to afford the cost (time, actual direct expenses, etc.) of volunteering their services in an organization. It is also reasonable to suggest that, based on the increasing cost of living and the downturn in manufacturing jobs and employment rates nationally, more volunteers will find themselves in less stable positions of economic viability should the economy continue to decline.

Gender Breakdown of Survey Population

Category
- Female
- Male
- N/A

5.2%

22.4%

72.4%
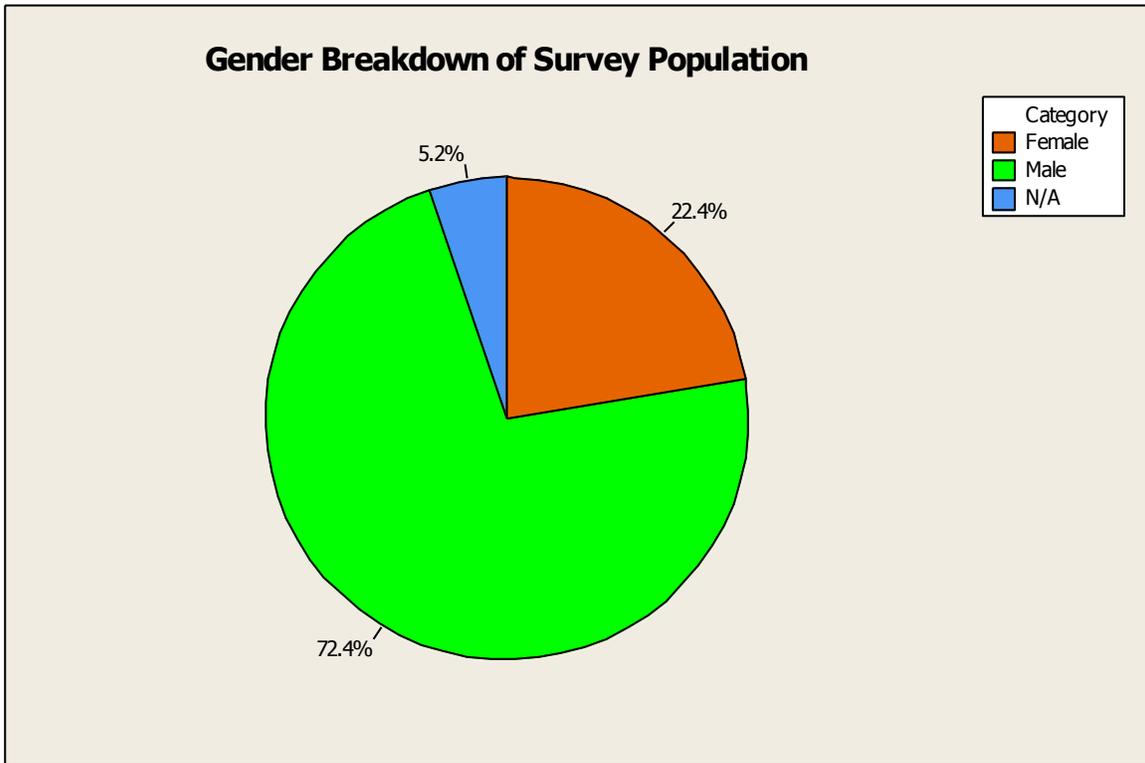
The majority of the survey population is male. No particular determinations can be made simply on the breakdown of the gender of respondents, other than this supports the perception that currently there are more male emergency service volunteers in this region than there are female.

Respondents by Race

Category
■ Black
■ Two or more races
■ White, Non-Hispanic

0.9% 0.9%

98.3%
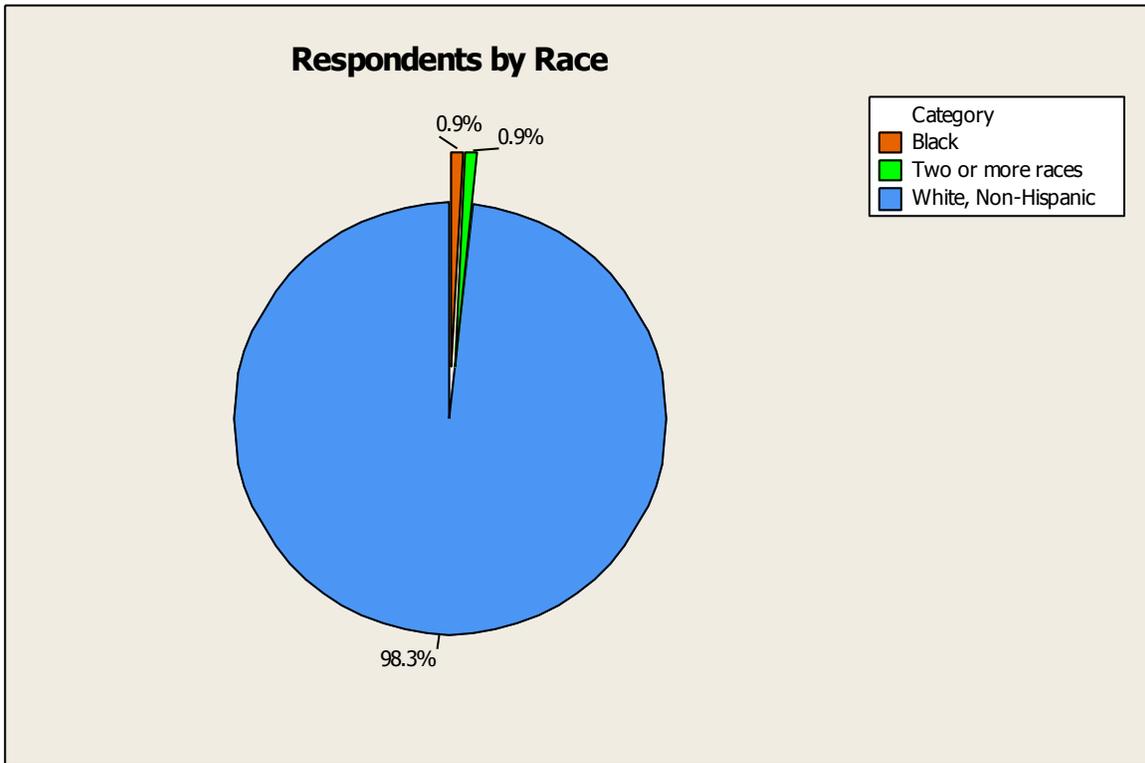
The overwhelming majority of respondents are white and of non-hispanic ethnicity. The response is not in proportion to the race statistics reported for the survey population area, however this does not lead to any difference in understanding of volunteers, but implies that race plays at least some role in the motivation for membership or retention in a rural emergency service organization. This could serve as a topic of additional study. To gain additional perspective, comparative census demographic information is presented in Annex A.

County of Respondent's Primary Volunteer Organization

Percent within all data.
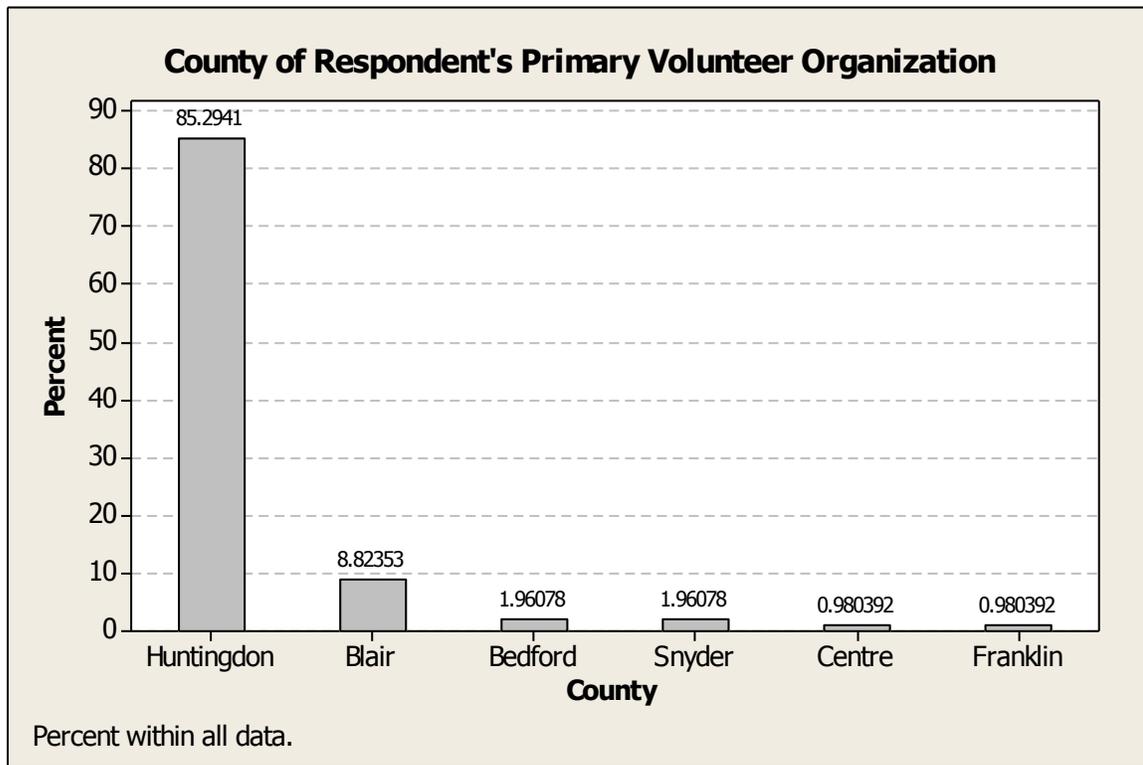
Although the survey was sent to volunteers in the central Pennsylvania counties of Huntingdon, Blair, Bedford, Snyder, Centre, Mifflin, Fulton, Juniata and Franklin (both contiguous to Huntingdon, and member organizations of the regional task force which work closely together, frequently as an organized emergency response group,) only 6 out of 9 counties had any organizations which returned responses. Of those, 85% of the sample population's main organization in which they serve is located within Huntingdon County. Notably, Huntingdon County is the one of the larger political subdivisions, covering over 874 square miles, and contains within it 48 municipal political subdivisions (townships and boroughs,) 18 fire departments and 8 emergency medical services organizations. Responders from this county often serve with neighboring jurisdictions, and vice versa. Although the survey population is heavily weighted with volunteers that spend the majority of their volunteer time in Huntingdon County, regional emergency service organization leaders, upon review, still feel this survey population is representative of their volunteer communities.

Chart of Gender, Marital Status
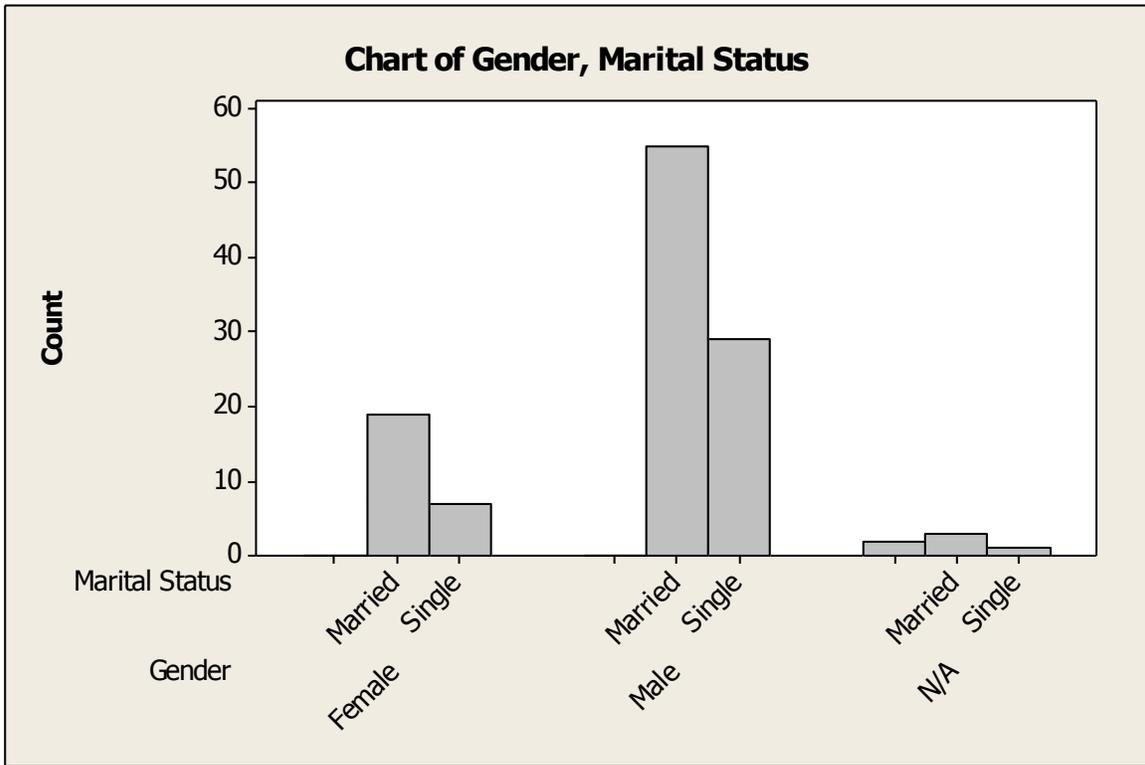
The majority of volunteers sampled are married males. However, regardless of gender, the majority of the respondents are married. From experience and observation, organizations currently are more fully comprised of middle aged individuals who are settled into a committed relationship. This is important considering that individuals who volunteer may be spending their limited free time in service to the community as opposed to their significant other. This has created conflict for some volunteers, and is a condition that leadership must consider when evaluating how much time investment is being called for from a given volunteer.

Volunteer Respondents Who Have Children

Category
- N/A
- No
- Yes

4.3%

23.3%

72.4%
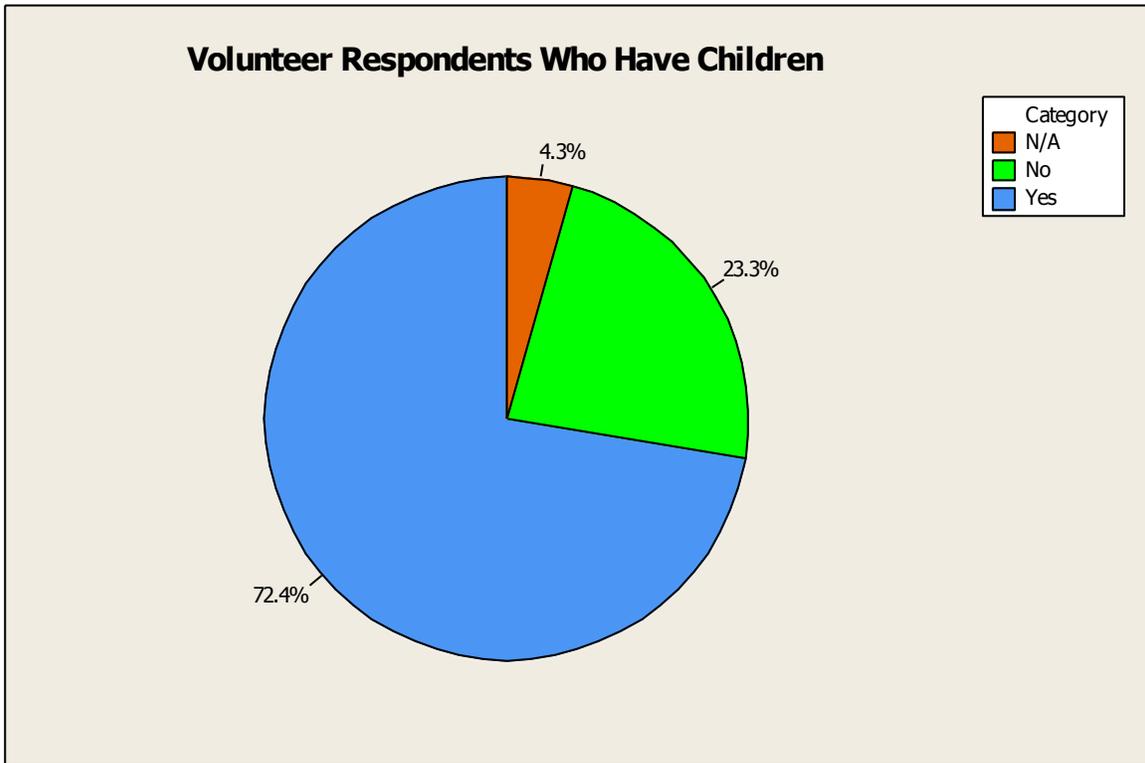
In conjunction with the familial aspects of marriage, the commitment to dependent children must be considered by leadership as well, considering the majority of respondents have children. The needs of children often are more significant and pressing than those of a spouse, and the stress of determining who receives what amount of available free time is a burden on the volunteer. Leadership should understand that such stress has a detrimental impact on the individual volunteer, and steps should be taken to relieve as much of this pressure as possible. One effective method, when appropriate, that has been identified by many organizations is to include the family in the volunteer organization 'experience.' Inclusiveness, in addition to structured family-oriented activities, has been reported to aid in reducing the stress of volunteering in the emergency services[2].

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[2] Information gathered from personal contact with a number of local organizations' leaders, as well as from observations within our own organization.

Comparison of Living Conditions and Ownership
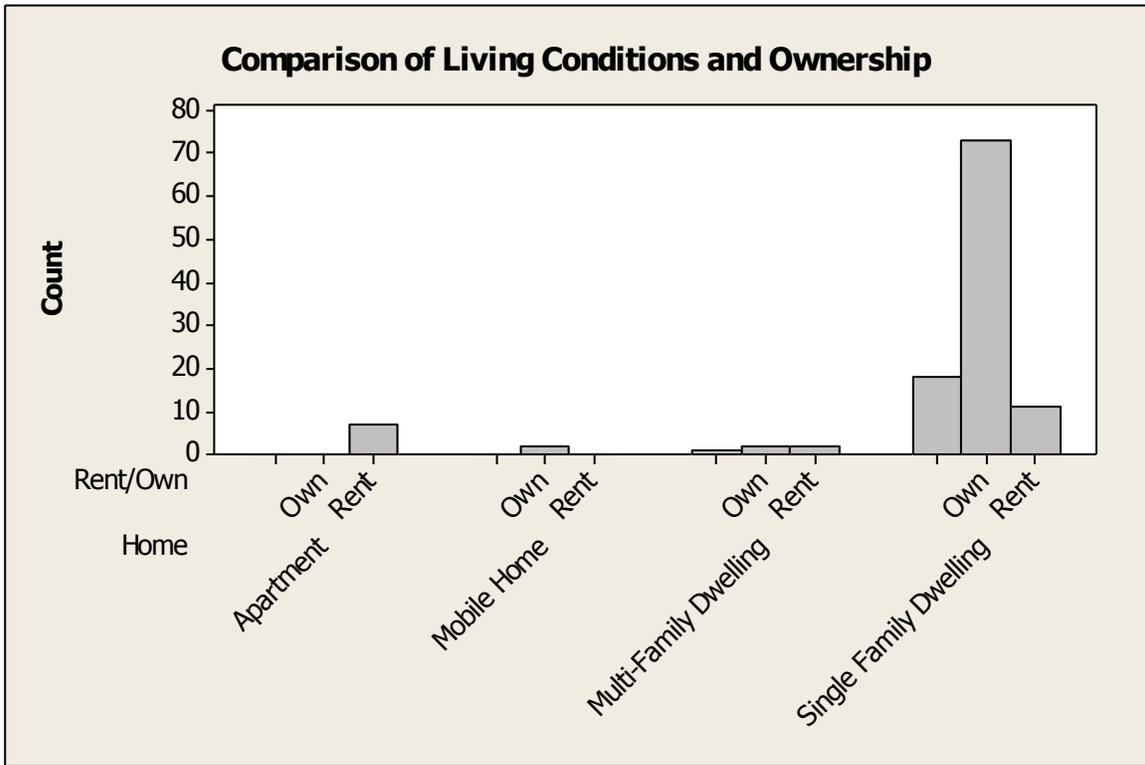
The overwhelming majority of the responding volunteers own a single family dwelling, which is indicative of a stable home life, and correlates to the number of respondents who are married and/or have children. Also, it is reasonable to infer that most of the respondents are financially secure enough to afford both home ownership and volunteering on the income they reported. Note: untitled bins represent the number of respondents who did not enter a selection.

Employment Status of the Volunteer Respondents

Percent within all data.
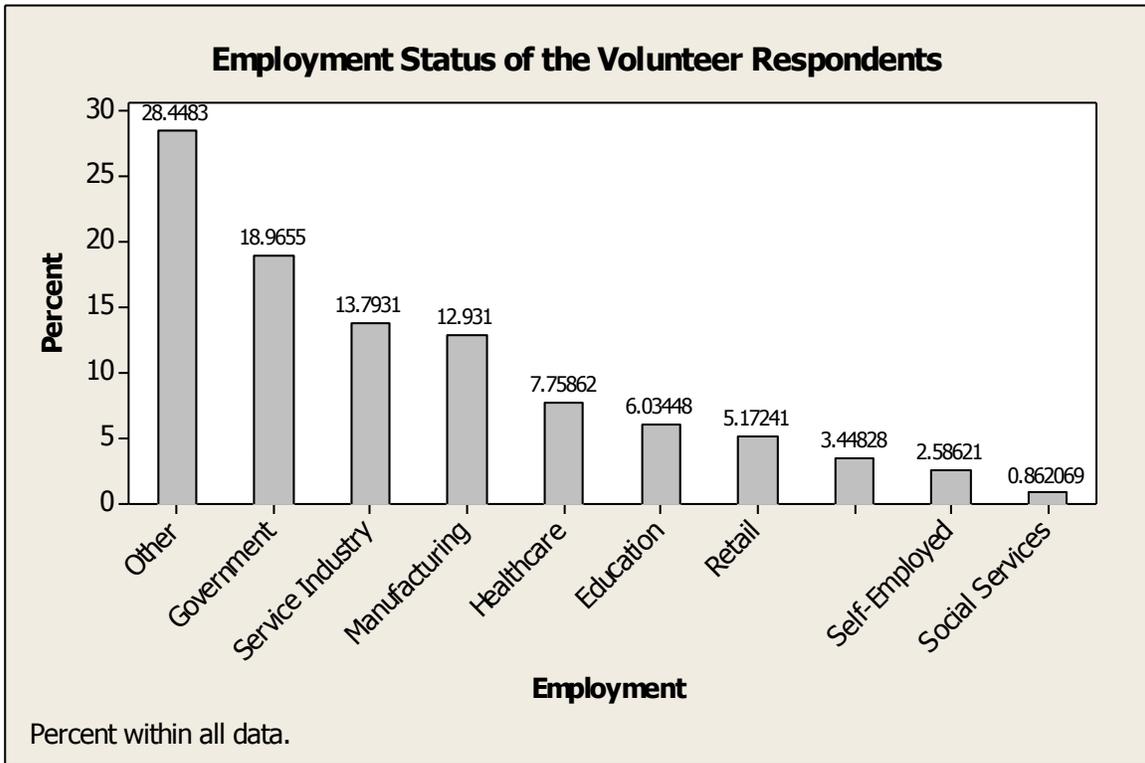
Based on the information available, the majority of employed volunteer respondents work in environments that would require working as part of a team, with shared responsibility for group outcomes (especially in the government and manufacturing industries.) There are fewer respondents who work in environments that are highly independent and not necessarily group oriented (self employment, retail.) This implies that individuals who volunteer in rural emergency services are accustomed to working in team-oriented environments, and will acclimate naturally to the group expectations of emergency service organizations. Note: untitled bins represent the number of respondents who did not enter a selection.

Political Leaning of Respondents

Category
- Conservative
- Liberal

19.8%

21.6%

58.6%
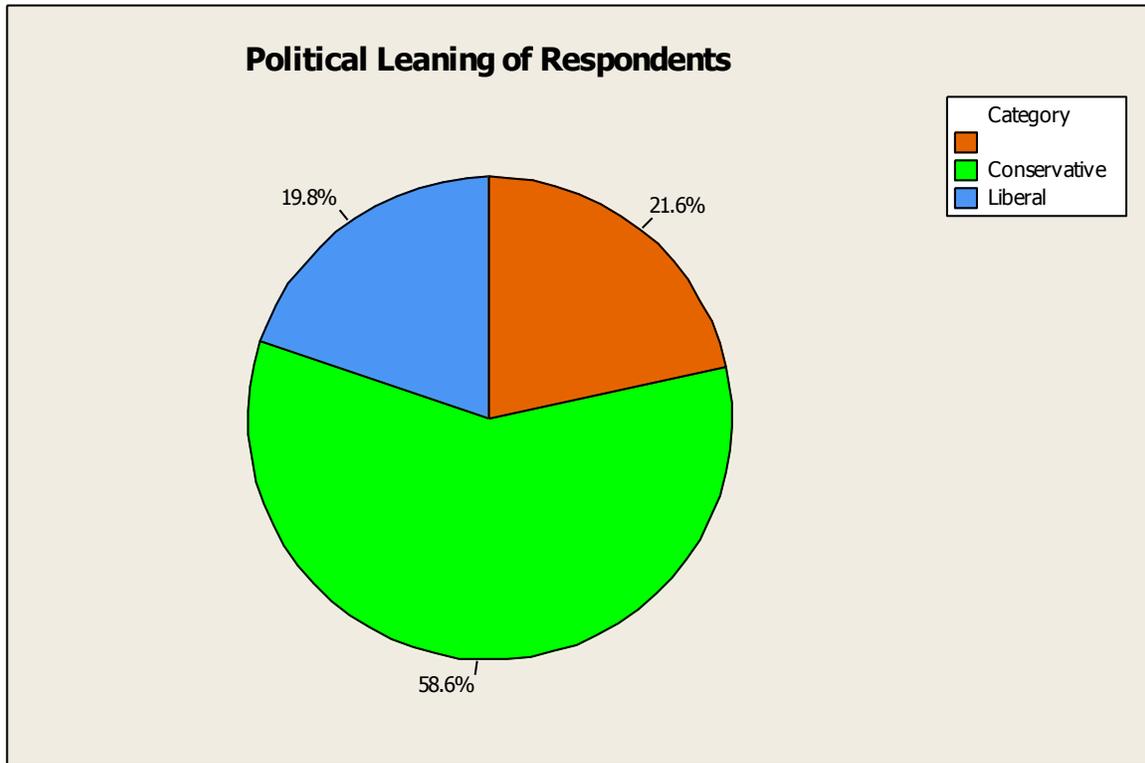
The majority of respondents indicate that their political leanings are conservative in nature. This correlates to the knowledge that the majority of registered voters in central Pennsylvania are Republican.

Faith of the Volunteer Respondent

Percent

Faith	Percent
Methodist	51.7544
Baptist	17.5439
Christian	5.26316
Lutheran	5.26316
Protestant	5.26316
Catholic	5.26316
Presbyterian	4.38596
Anglican	1.75439
Evangelical	0.877193
LDS (Mormon)	0.877193
na	0.877193

Percent within all data.
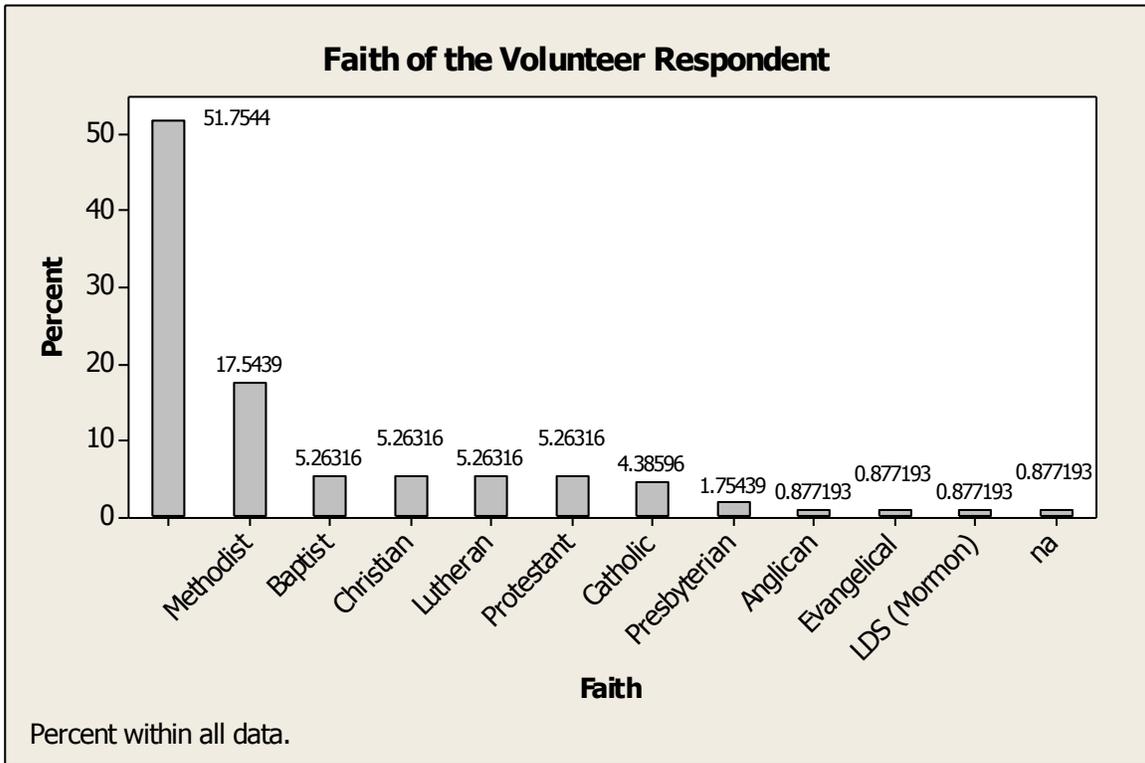
Although no clear information can be drawn to suggest there is a religion that is more influential in determining volunteerism in emergency services, it is clear that over half of the respondents did not choose to answer this question. There are many implications that could be made from this, but one that is reasonable is that religion (or lack of membership in a religion) has no particular measurable relevance on predicting whether someone will or will not volunteer in an emergency service organization. Also, it is apparent that about half of the volunteers surveyed are required to commit a portion of their available free time to activities related to their faith (i.e.: attendance at services.) This presents yet another draw on the availability of the volunteer. Also, engaging in this type of activity further demonstrates the volunteers' preference towards community and service-oriented participation.

Distribution of Rank / Position Within Respondent's Volunteer Organization
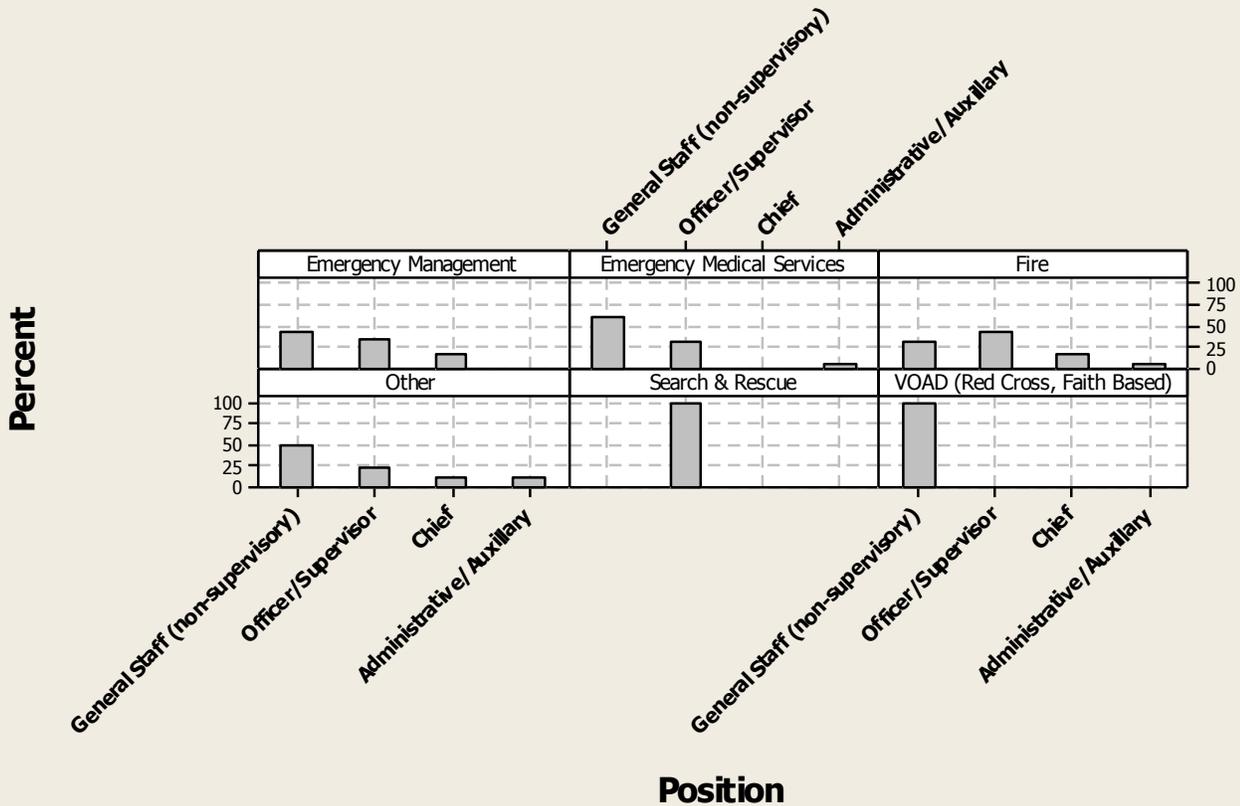
The distribution of positions within each discipline of the survey population indicates that the vast majority of the responses to this survey are representative of the general staff and first line supervisor level of the emergency response organizations. Chiefs are only a small portion of the representative sample, as are administrative / auxiliary members. This indicates that the data in general from this survey most fully represents the impressions of the volunteers conducting 'street' duties (response and field management.) In this there is the value of gaining a clear perspective into what the true day-to-day volunteers on the street are reporting as their perceptions and values of their volunteer experience in the emergency services.

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3. Recruitment / Initiation Phases of Volunteer Experience

The initial states of the volunteer's experience with the emergency services often comprise interactions in youth with a variety of promotional efforts to instill fire safety practices and principles, especially in the public school setting. At this age, fascination with the imagery and interaction with authority figures is a quality of youth that can be employed by emergency service leaders in a positive way. This impressionableness allows for the planting of a seed of interest in the minds of children which can later grow into an actionable desire to serve the community through an emergency service organization. In this study, the early developmental aspects of volunteering are examined in order to understand when and where the best opportunities to recruit volunteers exist.

Age Where Volunteer Became an Active Member in an Emergency Service
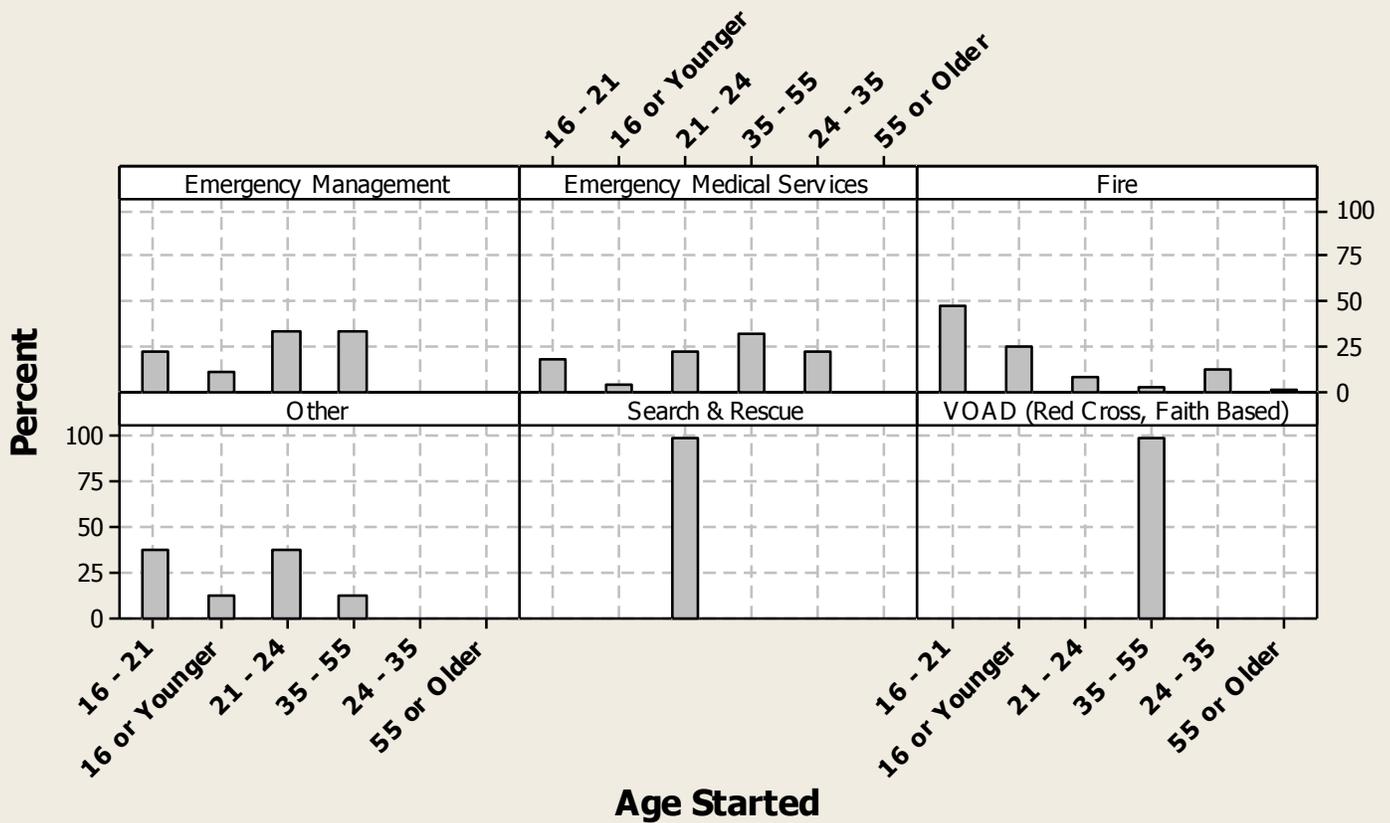
This comparison of starting age was made to show in each discipline where the prime recruiting age exists in the survey population. In the fire services, it is clear that the prime recruiting period is prior to 21 years of age. The fire service represents the most visible of all the featured emergency service disciplines, and has the most frequent access to youth in schools. Following this trend, the "other" category has a prime recruiting target of less than 24 years of age. This category is a catch all for organizations that have a role in emergency response, but are not an organization specifically chartered for emergency response (such as boy/eagle scouts, neighborhood watches, etc.) The prime time for recruiting emergency medical services and search and rescue organizations is between the ages of 25 and 35.

Tally for Discrete Variables: Discipline

Discipline	Count	Percent
Emergency Management	11	10.38
Emergency Medical Services	22	20.75
Fire	61	57.55
Other	8	7.55
Search & Rescue	1	0.94
VOAD	3	2.83
N=	106	
*=	10	

This information reports the number of respondents in each discipline, and includes percentages of the total sample population responding. There were 10 respondents who did not enter an answer for discipline.

Comparison of Volunteer Respondents Whose Family Served Prior To Starting
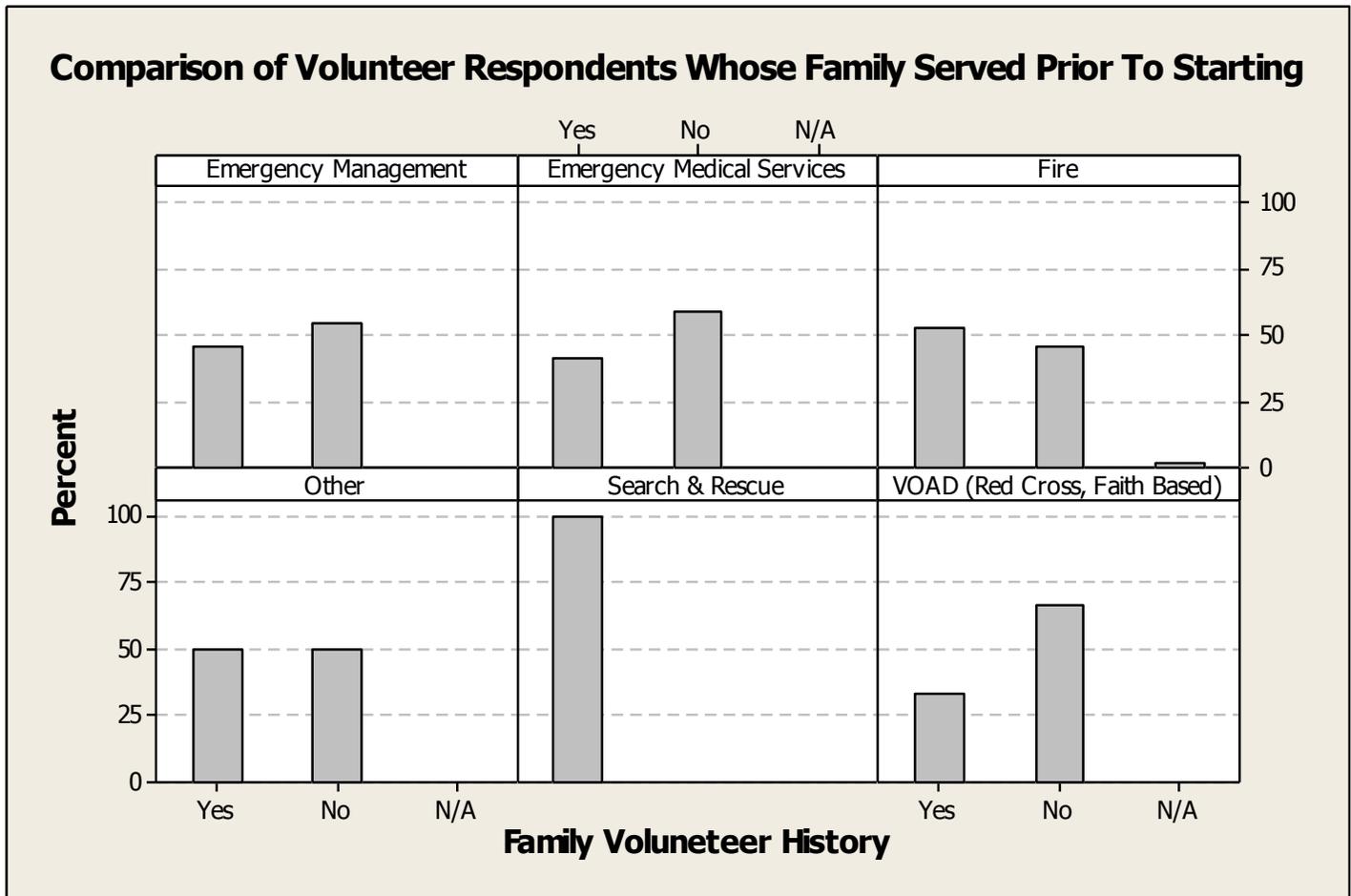
Family history plays a role in approximately half of the survey population. In the fire services particularly, the perpetuation of the organization has been described as modeling the Confucian principles of filial piety. In that system, the older males passed on their knowledge and positions of authority and responsibility to their sons, and so on as the system propagates. In modern times, the process is becoming more gender neutral, yet still embraces the principle of a legacy adoption by the younger generations of the volunteers. Considering that about half of the organization is likely to have some family connection, it is indicated that organizational leadership should invest appropriately in family-oriented activities, as well as take strides to reinforce a family-oriented philosophy to individual volunteer management practices.

Reason for Volunteering in an Emergency Service
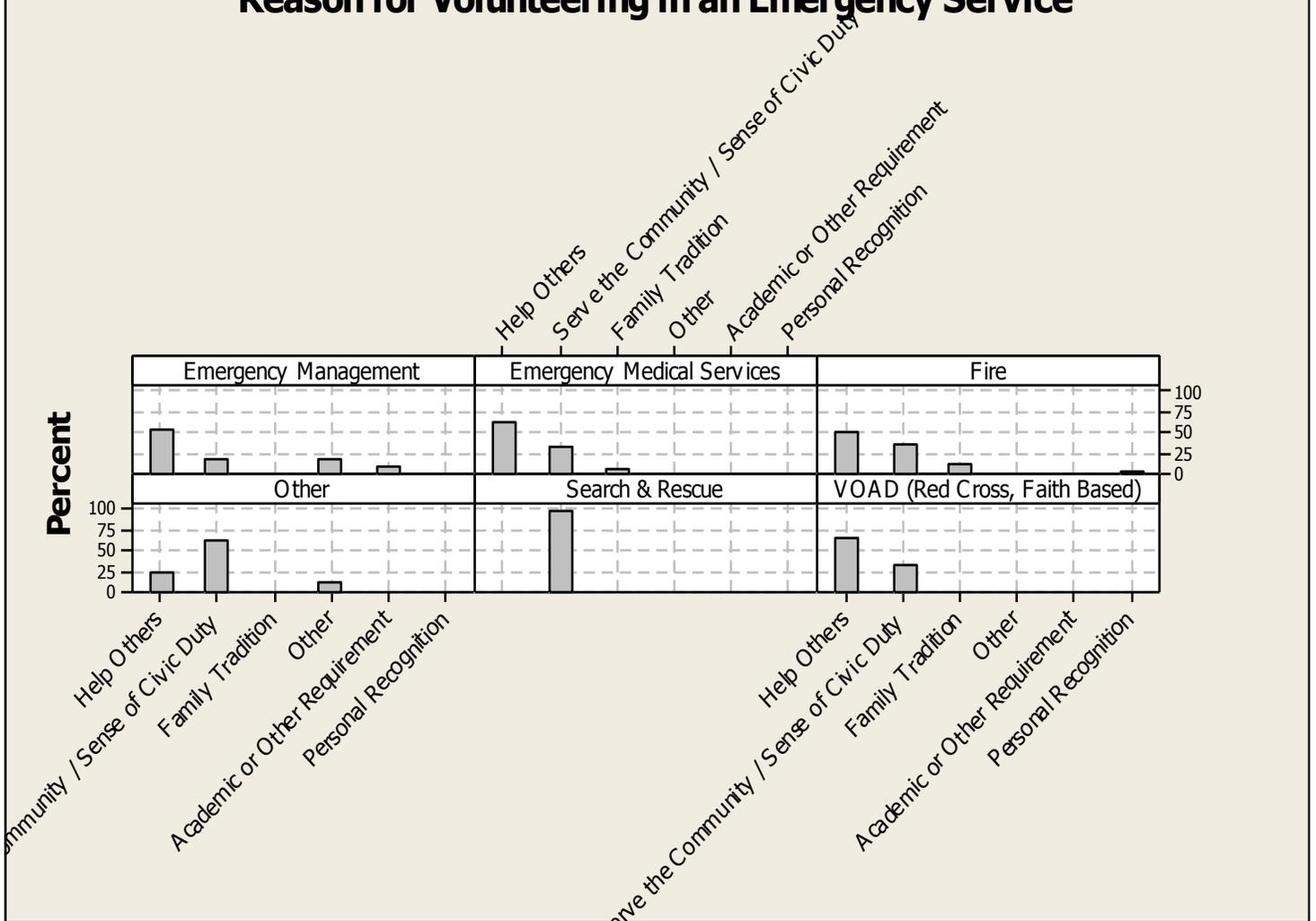
Across all disciplines, there are two predominant reasons given for volunteering in an emergency service organization, which are the opportunity to help others, and to serve the community / fulfill their sense of civic duty. The top total reason by count is the desire to help others, which is a foundational concept in community service. Family tradition has the most draw in the fire services, as would be expected with the legacy developments within that discipline. Leaders must take note of this, because this core motivation will be the long term driver which keeps the volunteer interested in serving with the organization over time. Also, the individual volunteers are most likely to experience a sense of achievement and satisfaction if they are able to experience tangible progress over time towards fulfilling these initial desires.

4. In Service / Retention Phases of Volunteer Experience

The 'One Word' That Describes The Volunteer's Experience

A question on the survey asked the respondents to describe their volunteer experience in the emergency services using one word that best captured the entirety of the experience. Although it is hard to conceptualize a blind sample of 116 individual volunteers of a wide variety of disciplinary backgrounds choosing the same single word to describe their experience in the service, nearly 30% chose the word satisfaction. This is an important indicator, in that it shows just how important volunteering is to the individual, and that those elements of motivation which drive them as people to help others are being met with the reward of knowing they are accomplishing their desires. Additionally, very few of the respondents expressed a negative connotation regarding their experience. This indicates that almost all volunteers can sum up their experience in emergency services as positive. Emergency services, therefore, do provide a community resource for individuals to serve others in a positive, productive and fulfilling manner.

What the Respondents Value Most About Volunteering in an Emergency Service

Category
- Camaraderie / Friendship
- Community Service
- Influence / Status in Community
- Personal Development / Satisfaction

12.3%

0.9%

13.2%

73.7%

Chart of Age Groups, Value in Volunteering

Count

Value in Volunteering

Age Groups

Community Service	Community Service	Camaraderie / Community Service	Camaraderie / Community Service / Community Status / Personal Development	Camaraderie / Community Service / Personal Development	Camaraderie / Community Service / Personal Development
16 & Under	17 to 21	22 to 25	26 to 35	36 to 55	55 & Older

From the data, it appears that community service remains the highest priority value in all age groups of the volunteers. Camaraderie is not listed with respondents younger than 22 years of age, who are focused solely on community service as what they value most. The only place where community

status evolves is within the 26-35 year category, implying that as individuals enter the job market or entering a political career, some may see volunteering in an emergency service organization as an appropriate vehicle to improve their status among their peers as emergency servants are highly regarded within their communities in general.

## Volunteer Effort Areas of Focus in Order of Priority They Chose

1

28.0% / 43.9% / 14.6% / 6.1% / 7.3%

2

26.8% / 19.5% / 19.5% / 29.3% / 4.9%

3

20.7% / 19.5% / 17.1% / 28.0% / 14.6%

4

14.6% / 11.0% / 29.3% / 26.8% / 18.3%

5

8.6% / 6.2% / 8.6% / 19.8% / 56.8%

Category
- a. Learning how to do my job at my volunteer organization from mentors
- b. Independent time spent working on my volunteer organization's priorities
- c. Spending social time with the members of my organization
- d. Learning how to become a leader in my volunteer organization
- e. Being there for my Chief when they need me, to do whatever they need done

One focus area of the study seeks to understand how volunteers choose to prioritize the distribution of their participation time within the volunteer organization. In general, the highest priority for most of the volunteers sampled was learning how to do their job in the organization from their mentors. Often times, mentors are somewhat experienced members of the organization who 'know the ropes,' and have the ability to 'connect' with the particular volunteer. The most selected second priority (which is also the most selected third priority) is using their time independently to work on their volunteer organization's priorities. This shows that there is a role in an emergency service organization for both time invested on inherited learning as well as on carrying out that learning by doing. The least prioritized category was spending social time with members of the organization. This is interesting in that social activities and recreational fraternization are subordinate to accomplishing tasks and developing the organization for the majority of the surveyed population. The spread of interest in learning leadership skills is distributed
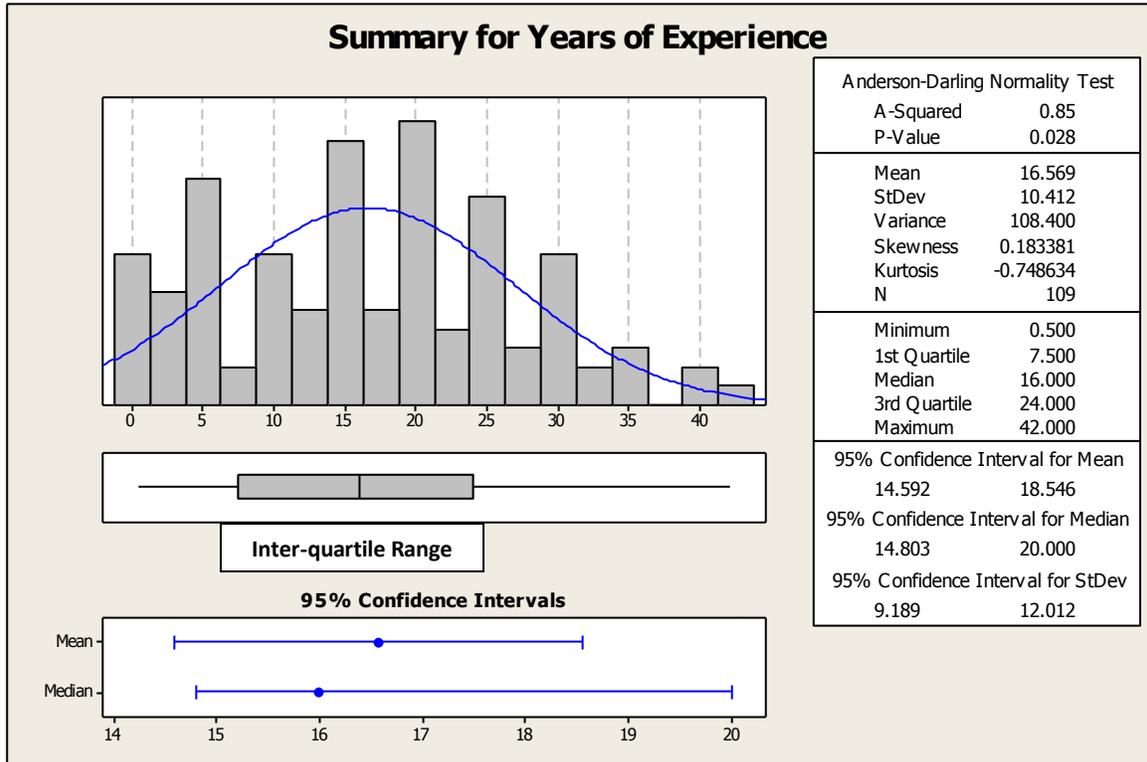
fairly evenly across all five levels of priority. Interestingly, service and assistance to the organization's chief is highlighted as a priority in decreasing increments from highest priority to lowest priority. This indicates that more volunteers are willing to express their loyalty to leadership through efforts that are 'above and beyond' as a matter of priority than those who prioritize this lower. Leaders in emergency service organizations have a great deal of influence on their members, and their charismatic qualities, as well as their level of proficiency are respected on a personal level by volunteers. It is this influence that necessitates the careful selection of leaders, as their vision, goals and objectives will affect the individual volunteer's level of motivation directly.

Years of Service for Respondents in Their Volunteer Organization

Percent within all data.
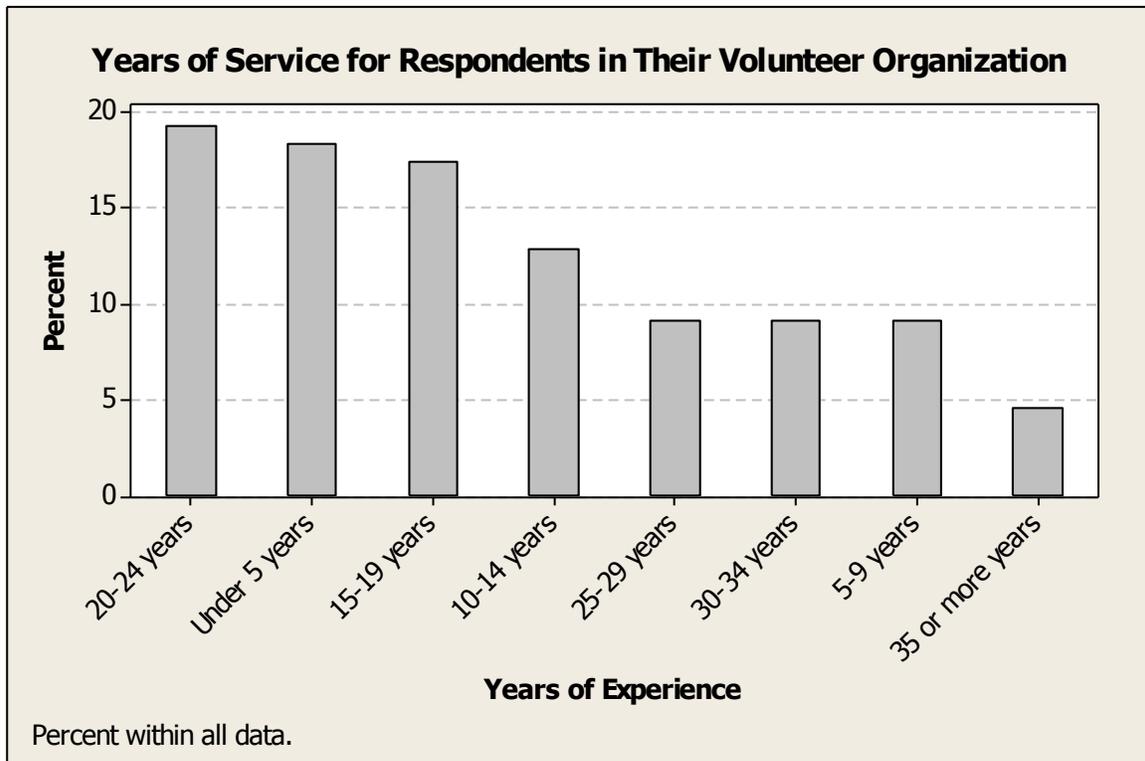
Note, all respondents reporting less than 12 months of experience were assigned a 0.5 value for analytical purposes. 5 of the 109 respondents had less than 1 year of experience, and were adjusted

Respondents' levels of experience vary greatly, from a number of months to greater than 35 years (42 being the highest reported.) A key inquiry of this study seeks to understand not only if the majority of volunteer responders is nearing the age or length of service where one would retire from active volunteer service in an emergency service organization, but also if there appears to be enough fresh volunteers entering the services to replace those preparing to retire. This inquiry is increasingly significant in that there is a widespread concern among veteran organization leadership, as well as some government leaders, that there is an impending famine in the volunteer population available for emergency and disaster response. The first step in answering this inquiry using the study data is to identify what the average level of experience is among the respondent population, and what portion of the responding population fit into the non-veteran (fresh,) as well as the likely-to-retire, margins of data. Based on experience and interview based research among regional emergency service leadership veterans, it has been strongly suggested that 20 years of cumulative service is (and perhaps liberally termed) the

retirement age for active emergency service volunteers. It is to be noted that service in this industry is relatively high stress / high risk in nature, and presents a significant impact on the lifestyle of the individual volunteer. Many volunteers experience 'burn-out,' or the condition where the experiences and conditions of volunteering create sufficient stress to compel a volunteer to cease active membership in the organization.

Summary for Years of Experience

Anderson-Darling Normality Test	
A-Squared	0.85
P-Value	0.028
Mean	16.569
StDev	10.412
Variance	108.400
Skewness	0.183381
Kurtosis	-0.748634
N	109
Minimum	0.500
1st Quartile	7.500
Median	16.000
3rd Quartile	24.000
Maximum	42.000

95% Confidence Interval for Mean
14.592   18.546

95% Confidence Interval for Median
14.803   20.000

95% Confidence Interval for StDev
9.189   12.012

Inter-quartile Range

95% Confidence Intervals

The mean number of cumulative years of experience is 16.6, showing that the average level of experience of the sampled rural volunteers is indicative of a significant amount of experience. In rural emergency services, it is not uncommon to see a member in a position of leadership (above the general staff level) with around five years of experience. Based on the author's research and experience, and for the purposes of this study, a volunteer with five or greater years of experience is considered a veteran volunteer.

Inter-quartile Range Boxplot of Volunteer Experience
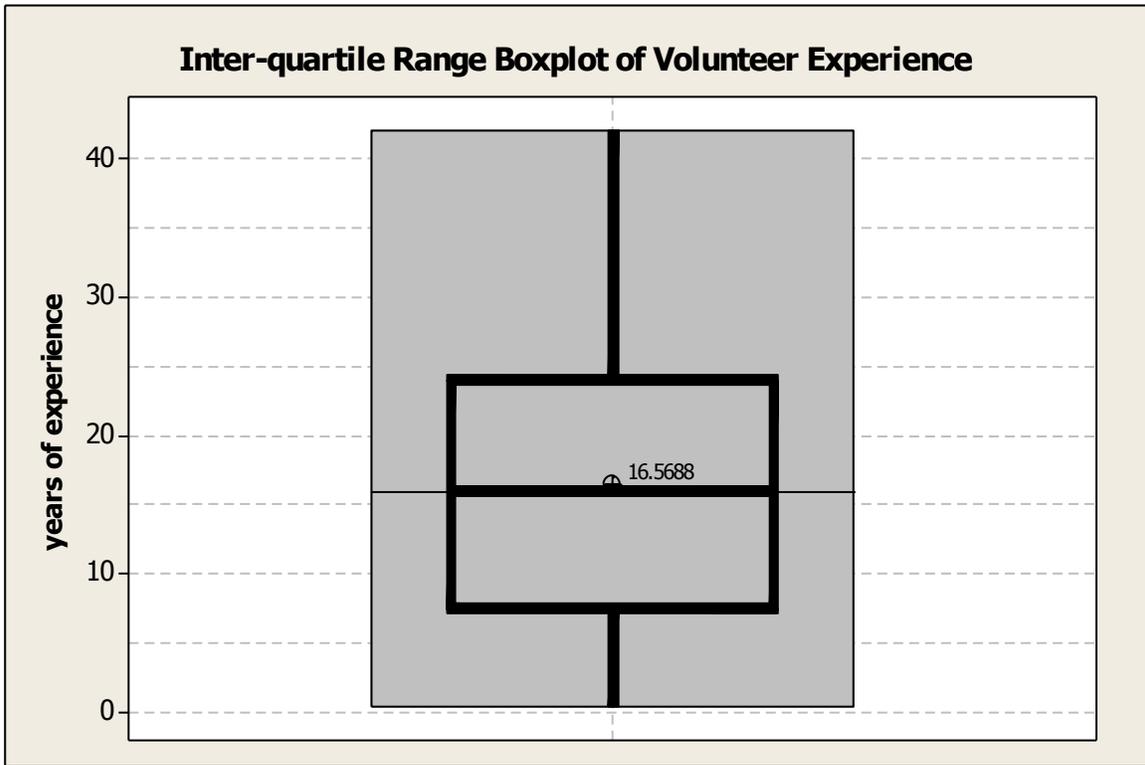
According to the survey population, 50% of those surveyed have between 7.5 and 24 cumulative years of experience, with 16.6 years being the average. That means that the bulk of all volunteers in central Pennsylvania's rural emergency services are not only veterans, but the inter-quartile range actually stretches into the range of those volunteers past the retirement age. Less than 25% of all volunteers are in the range of fresh volunteers, who will be responsible for operating the emergency service organizations over the next 10-15 years. Considering these data, it appears that the next generation of volunteer leadership will have fewer manpower resources than previous generations.

**Respondents in Veteran, Non-Veteran or Retirement Likely Classifications**
Normal

Mean	16.57
StDev	10.41
N	109
AD	0.846
P-Value	0.028
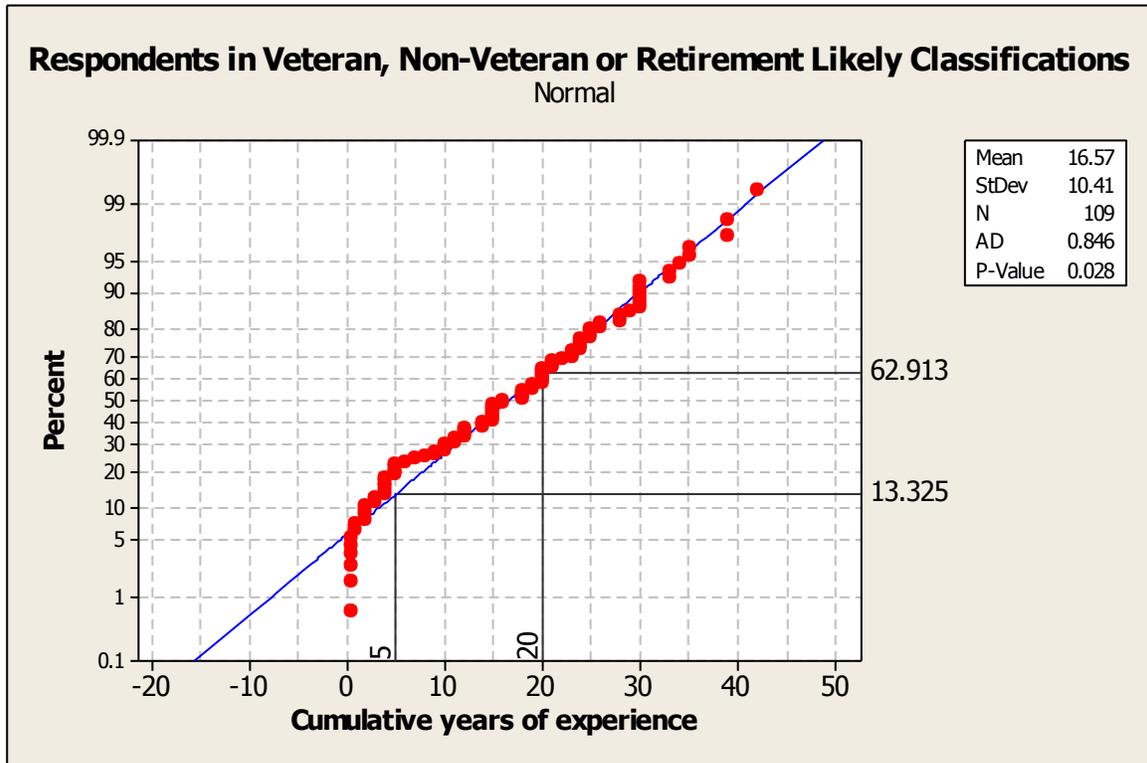
This leads to exploring how many respondents fit into the suggested categorical assignments of veteran, non-veteran and retirement likely. This information is important because it helps to show how many fresh volunteers are coming into the service and how many existing volunteers are preparing to leave (or are likely to leave.) The breakdown is shown graphically above, and the table below shows the key information in tabular format:

Non-Veteran	Veteran	Retirement Likely
13.25%	49.59%	37.09%

Based on this information, an inference can be made regarding the inflow and egress of volunteers. The net inflow into the emergency services that will be active is determined by the non-veterans (fresh recruits) and those who are likely to retire. The calculations indicate that there are 2.8 times more volunteers likely to retire than there are recruits coming in to replace them currently. This is a strong indication that the perception of a volunteer famine has merit when considering the studied volunteers in central Pennsylvania. If action is not taken to bring equilibrium to this condition, nearly half the available volunteer population could be ready to retire. Stated another way, the volunteer population could reduce by approximately 10% in five years. This could easily increase if the rate of drop out (not studied) is higher than it is currently. With some organizations already at their operating limits due to limited manpower being available for service calls, this has the actual and real potential to force organizations to either merge or close.

Risk Analysis of Volunteer Age Versus Experience
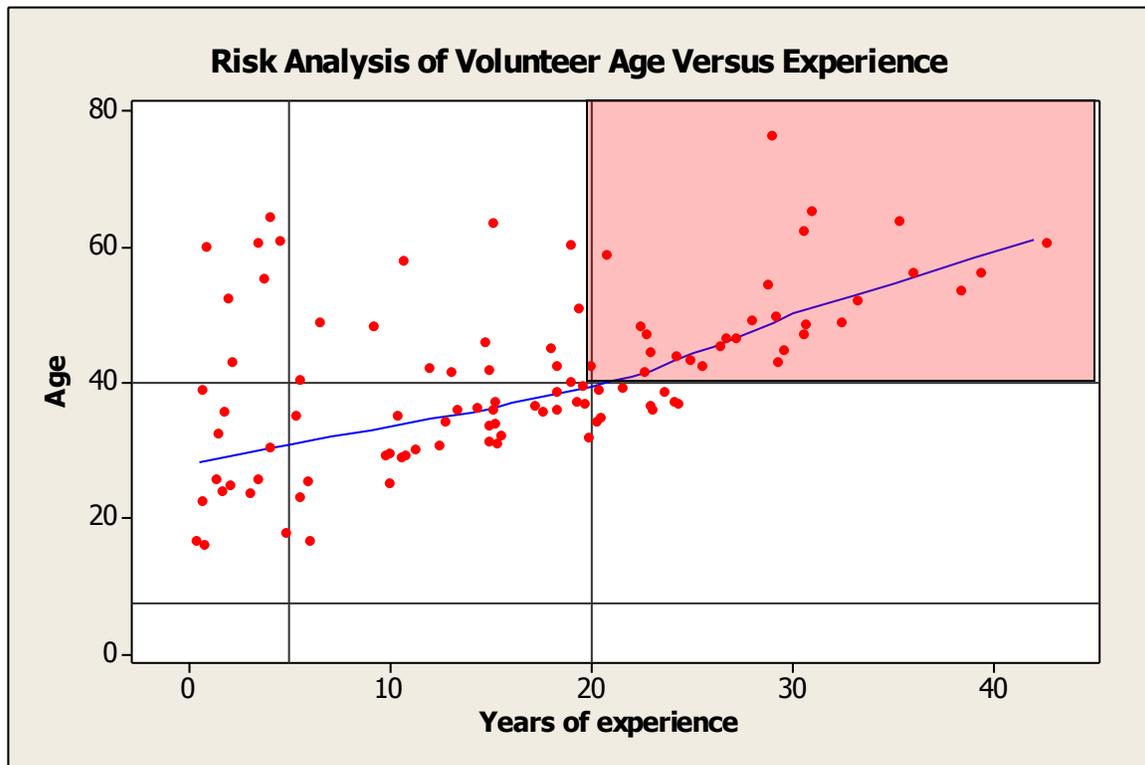
The red shaded area to the upper right represents the highest risk category for potential retirement: volunteers who are older than the median age and who also have more than 20 cumulative years of experience in serving the organization. The risk area is based on arbitrary assignments of risk (above the median age,) and risk based on field research (more than 20 cumulative years of experience,) both shown on this plot. The blue line represents the number of years of experience volunteers have in the organization, and the dots represent the ages of the volunteers surveyed. 25% of all surveyed respondents fall within the risk area identified. The data show a very important aspect of those who have less than 5 years of experience: only 11.2% of the survey respondents who are fresh recruits are under the median age of 40 years old. This indicates that just over 10% of the entire survey population represents the prospective body of available emergency service volunteers over the next 15-20 years. If this were to continue as a trend, not only would the available manpower in each organization be reduced significantly, but the available number of 'worker bees' used for the most arduous physical tasks may be insufficient to carry out the requirements of operating an emergency service organization. This is another strong indicator that there is a pending emergency service volunteer shortage in central Pennsylvania.

Agreement Statements

The following charts and descriptions are analyses of key emotional questions designed to gauge the responders' attitudes and impressions about their volunteer experience on a very personal level. Each of these categories affects not only the quality of the individual volunteer's experience as a member of an organization, but also identifies certain aspects of volunteering that can generate disruptive levels of stress in their personal and professional lives. The questions are rated from strongly agree to strongly disagree. This portion of the study focuses wholly on the individual perspective of those who chose to volunteer; additional perspective on the volunteer experience by those who chose not to volunteer in an organization is a subject for further study.

Volunteering in Emergency Service is Accepted and Supported by Primary Employer

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

4.4%
25.7%
33.6%
6.2%
30.1%
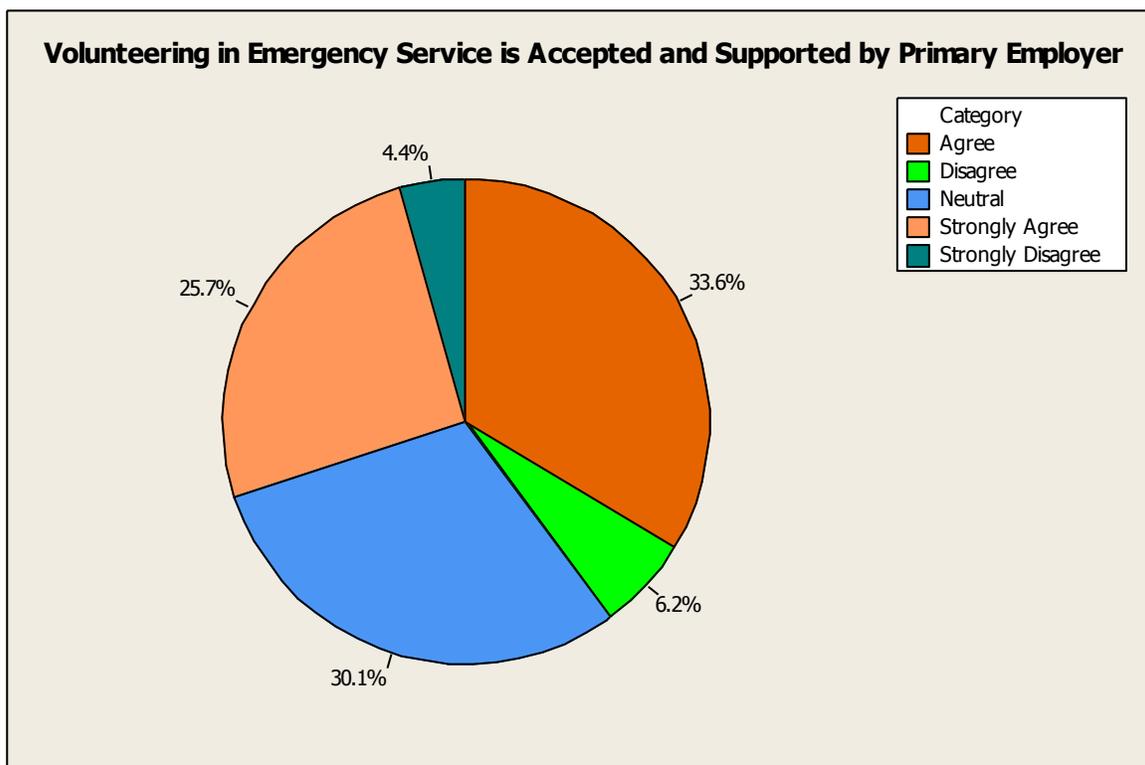
The majority of respondents felt that their employer was supportive of their volunteer efforts, however around 40% of the respondents which indicated that they were not comfortable stating that their employer supported their efforts. In the cases where the employer doesn't support the volunteer, many tensions can arise over being late / leaving work as a result of emergencies. In Pennsylvania, the state legislature enacted law which prohibits employers from administering punitive actions against employees who are late due to a bonafide emergency, however that law transcends the bounds of reality which real people face when they return to work and are punished indirectly. Delayed or non-advancement of the volunteer may be a retribution technique used, as well as others such as diminished access to overtime opportunities. Regardless of the penalty, the welfare of both the volunteer and the organization are impacted by increased stress burdens on the individual volunteer.

Q: The Chief and Supervising Officers are Sensitive to My Family Time Needs

Administrative/Auxillary: Agree 60, Strongly Agree 20, Neutral 20

Chief: Agree 46.1538, Strongly Agree 30.7692, Neutral 23.0769

General Staff (non-supervisory): Agree 45, Strongly Agree 25, Neutral 15, Disagree 7.5, Strongly Disagree 7.5

Officer/Supervisor: Agree 44.4444, Strongly Agree 27.7778, Neutral 25, Disagree 2.77778

Percent. Position and Level of Agreement.

Panel variable: Position; Percent within all data.

The demonstration of concern for the welfare of the volunteer is important for organizational leadership, especially when attempting to individualize an approach that mak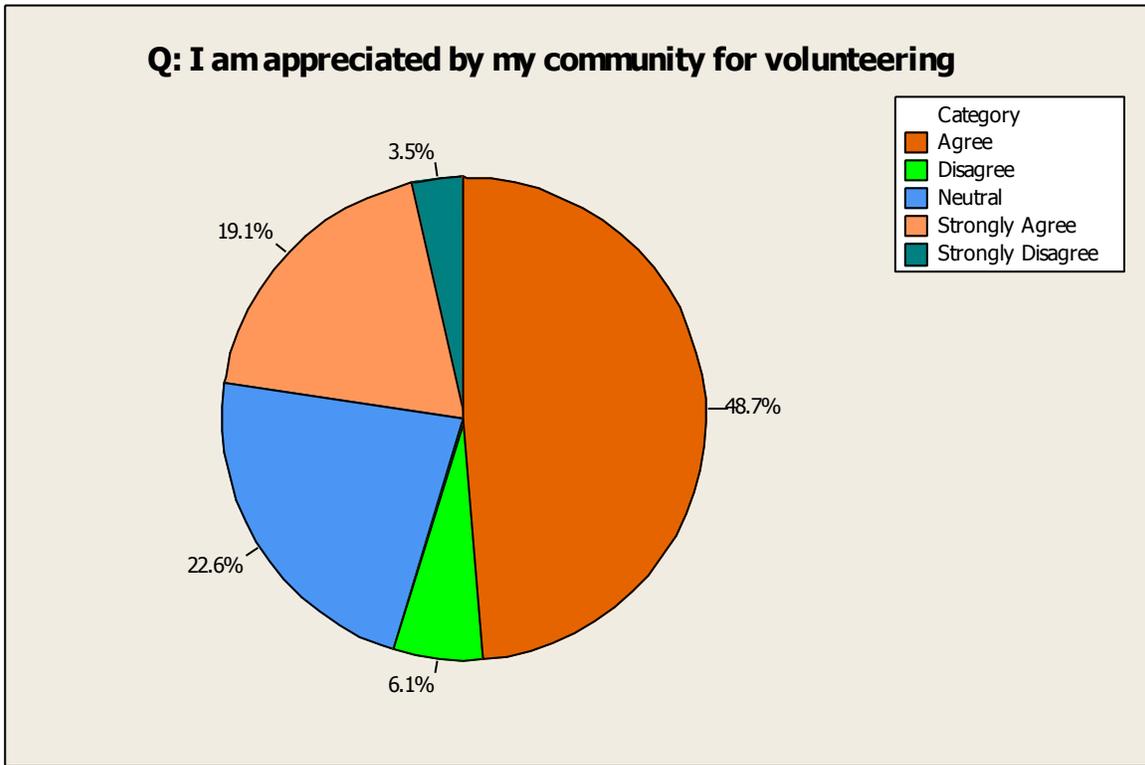es volunteering feasible for each individual member. It is not necessarily the chief's actual level of concern, but it is the level of concern that is perceived to exist by the volunteer which impacts the relationship. It is the same as delivering a message to a recipient who speaks a foreign language, although you did communicate, you might fail to get your message through effectively because you do not send it in a language that the recipient can understand. In the chart above, the levels of staff which have a supervisor were examined to see if they felt their chief or supervisor is sensitive to the individual volunteer's family time needs. According to the data, most all of the responders either agree or strongly agree that there is understanding and sensitivity towards their family time needs by leadership. For those who stated that they feel there is not an adequate level of sensitivity (mainly in the general staff,) it is important for leadership to identify those individuals and find a way to bridge the gap between their expectations and the leaders' positions. Failure to consider the family time needs of volunteers has sufficient negative impact on the volunteer-organizational relationship to cause them to resign. In many cases, family comes first.

Q: I am appreciated by my emergency service organization

Category
Agree
Disagree
Neutral
Strongly Agree
Strongly Disagree

1.7%

26.1%

48.7%

14.8%

8.7%
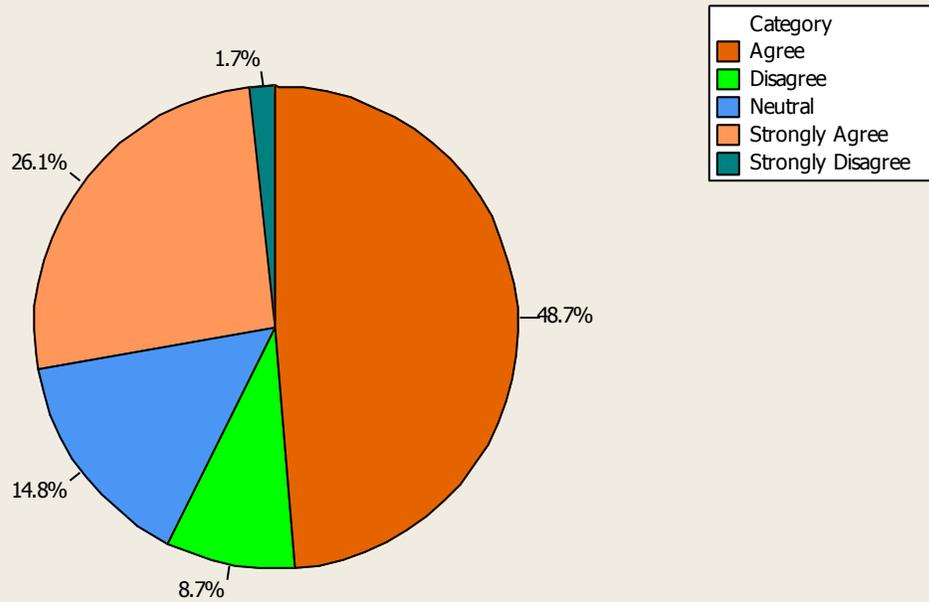
The majority of volunteers (about 75%) feels appreciated by their emergency service organization. This is important because if they don't feel appreciated by the organization they are serving, it is likely that they will not continue to serve it for long. There are always individuals who do not feel appreciated, for whatever reason, however it is important for leadership to understand who those individuals are and to find ways of reducing this perception in order to increase retention rates. It is reasonable to state that one reason that people volunteer in the emergency services, and stay there, is because they do feel appreciated for their investments of time and effort.
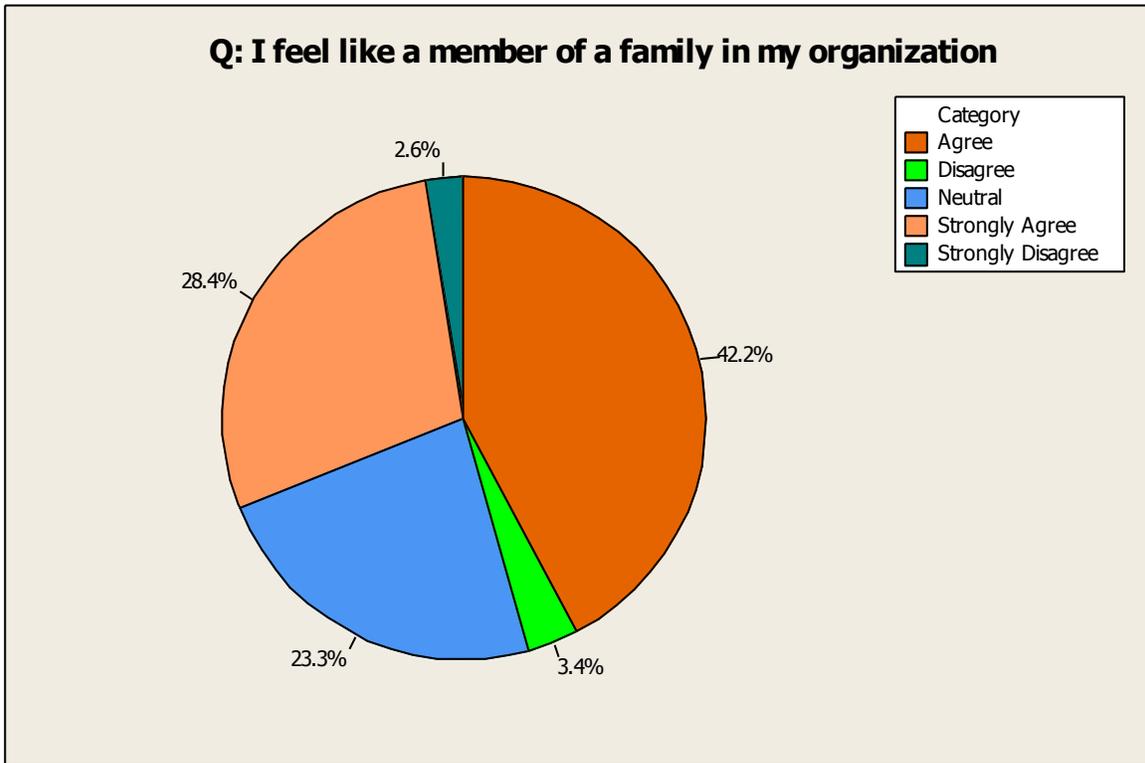
Q: I am appreciated by my community for volunteering

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

3.5%
19.1%
48.7%
22.6%
6.1%

Equally important to volunteers is the perception that their efforts are appreciated by the community they are serving. Remember, the motivations to volunteer are highly skewed towards helping members of the community over the other potential reasons to volunteer. Individual satisfaction depends on the fulfillment of their desires and goals, but also is impacted by the 'return' on the investment, meaning a sense that they have done a good job which was truly appreciated by those they did it for. 67.8% of volunteers feel appreciated (agree or strongly agree) by the community they serve; almost 6% less than feel appreciated by their organization. It is sometimes difficult for a community to show appreciation to its volunteers; however public events, media campaigns and ceremonial gratuities by higher-level elected officials are common practices for showing community appreciation. There is a perception among some volunteers (noted in field discussions) that their community only cares about them when there is a crisis. This feeling may be represented in the neutral and disagreement areas. Considering that approximately 1/3 of the volunteers felt this diminished level of appreciation, it is advisable for elected leaders in rural communities served by volunteers to actively seek more effective ways to communicate their appreciation to all volunteers in the emergency service organizations.

Q: I am treated fairly by the leadership of my organization

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
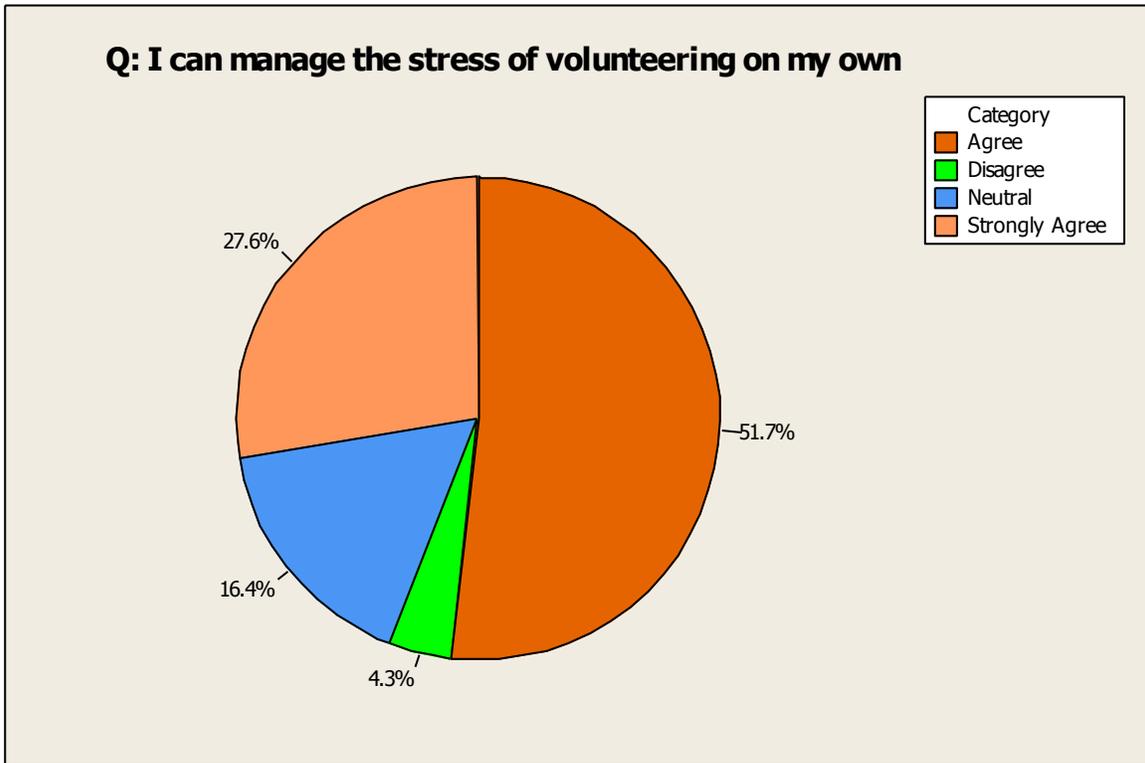- Strongly Disagree

2.6%
25.9%
49.1%
16.4%
6.0%

According to Stephen Robbins, "Equity theory says that employees weigh what they put into a job situation (input) against what they get from it (outcome) and then compare their input-outcome ratio with the input-outcome ratio of relevant others" (Robbins 2005). A state of status equilibrium is also important within emergency service organizations; whereas, just like you choose to apply for a job, you volunteer to do the job of emergency response – just without monetary compensation. Many theories regarding organizational behavior apply to emergency service organizations, and in these relationships between the leaders and their subordinates are often noted as highly relevant to the satisfaction level of staff. It is apparent that the majority (75%) of the respondents felt (agree or strongly agree) that they were treated fairly by the leadership. Robbins goes on to say that when employees envision an inequity, they make one or more of five choices. They (1) distort inputs or outcomes, (2) attempt to persuade others to change inputs or outcomes, (3) attempt to change their own inputs or outcomes, (4) choose a different relevant other, and (5) quit their job (Robbins 2005). The first four choices have the ability, if selected, to compel responders to take action to either return to equilibrium or alter their perceptions. In this case, organizational leadership can have an impact on their choices either positively or negatively, depending on their action or inaction. The fifth choice is the most undesirable, because there will be no further opportunity to engage in practices which promote the retention of that member. In this study, almost 9% of the respondents disagreed or strongly disagreed that they were treated fairly. Leadership should identify such members in their organization and attempt to promote a state of equity, or counsel the member in adopting a more accurate perception of their status within the organization.

Q: I feel like a member of a family in my organization

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

2.6%
28.4%
42.2%
23.3%
3.4%

The majority of respondents stated they felt like a member of a family in their organization. This proportion was expected, based on experience, observation and understanding that the type of service engaged in by the organization naturally draws people together of like interests. It is important for leadership to recognize that there is a family orientation within the volunteer community, and it is their responsibility as leaders to 'parent' the organization as well as manage it.

Q: I can manage the stress of volunteering on my own

Category	
■	Agree
■	Disagree
■	Neutral
■	Strongly Agree

27.6%

51.7%

16.4%

4.3%

Volunteers studied feel confident (nearly 80% of the population) that they are properly managing the stress of their volunteering experience. The area of concern is the 20% who are not sure, or are sure they are not managing it properly. This may be an internalized reaction; however there may be external indications that a volunteer is unable to manage stress properly (such as irritability, isolation, etc.) These data show that there are volunteers who recognize (and perhaps more that do not recognize) that they need support to help manage the additional stress placed upon them by volunteering in the emergency services. This type of service is emotionally draining, occasionally traumatic, and has a tendency to bear a personal cost for the volunteer with their friends, co-workers, team members and families if not properly managed. Leaders need to be constantly attentive to these signals, and address them proactively to ensure minimal harm is experienced by their volunteers. Preventing excessive stress will prevent burn-out, hence increasing the number of retained volunteers.

Q: I believe that volunteering is a civic duty

Category
Agree
Disagree
Neutral
Strongly Agree
Strongly Disagree

1.8%

34.2%

41.2%

21.9%

0.9%
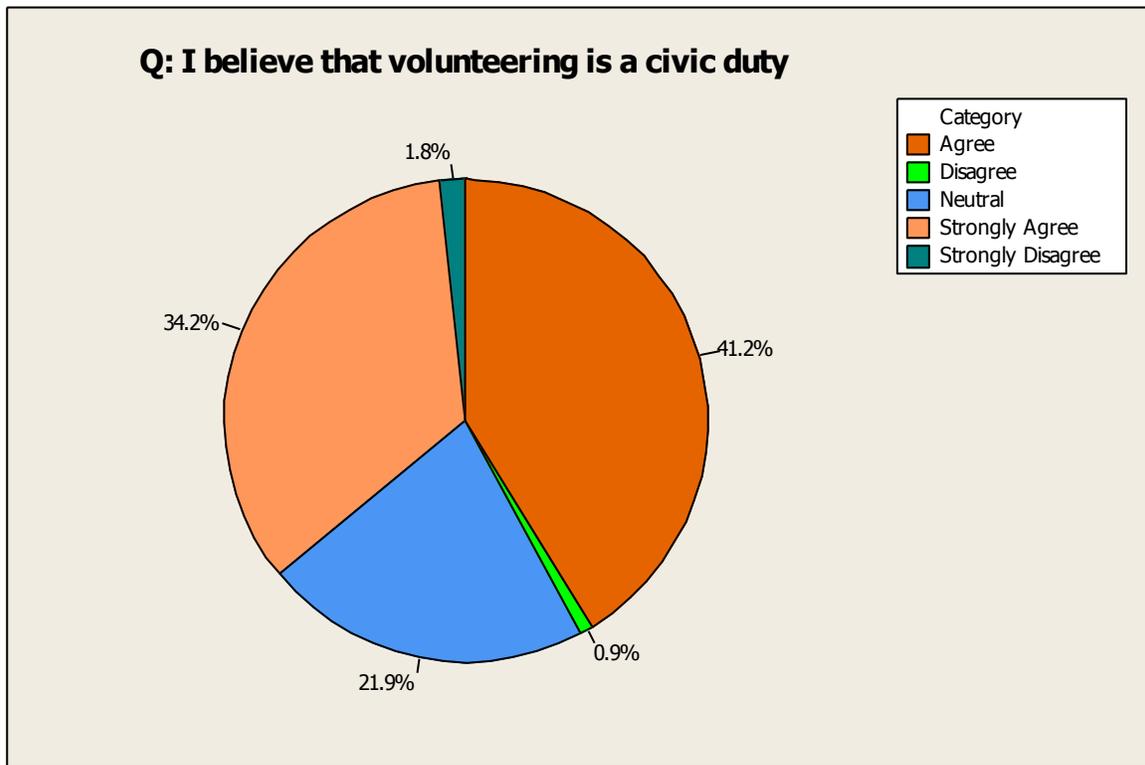
According to Dr. Peter Murk of Ball State University, some people "simply see it (volunteering) as civic duty to help others in need" (Mark Ransford 19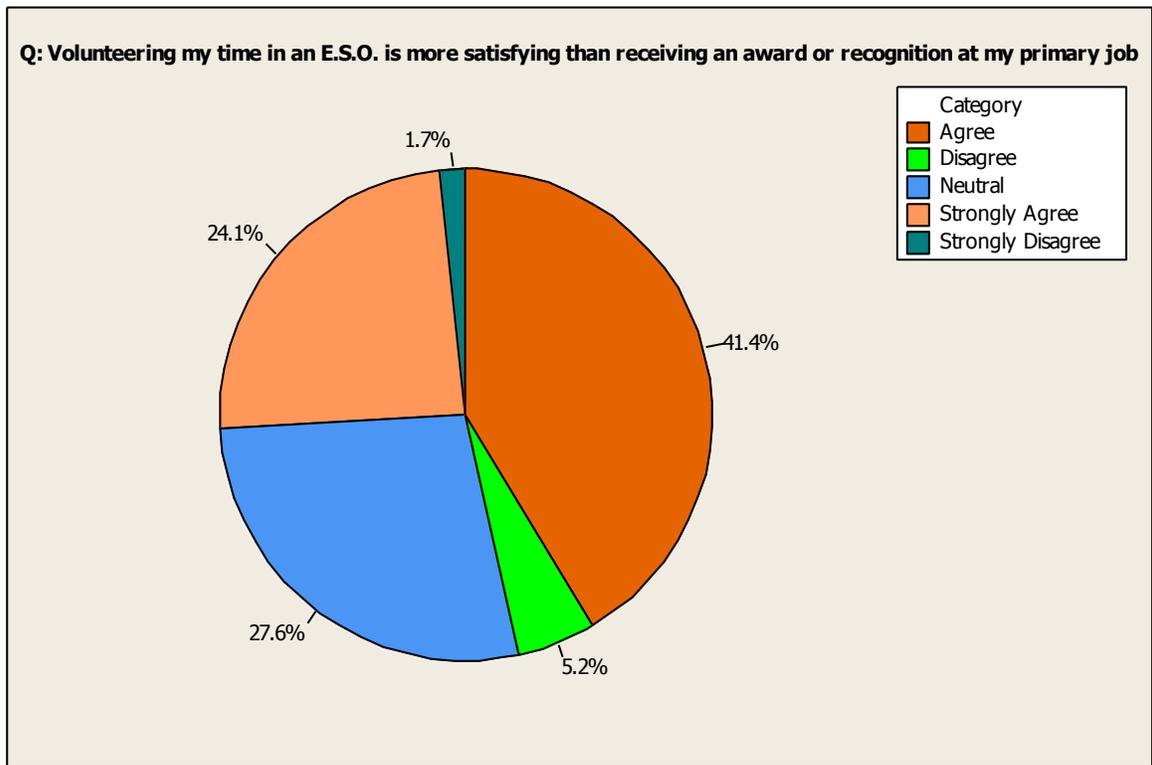99). The survey data agree with this statement, as just over 75% of the respondents felt that volunteering is a civic duty. Interestingly, almost 35% of the respondents strongly agreed, whereas only 1.8% strongly disagreed. This is a clear indication that those who choose to volunteer in rural emergency services have a strong internalized sense of civic responsibility, and the emergency services match well with their skills and abilities. When considering recruitment efforts, it would be valuable for organizational leadership to take this information into account and integrate it into their recruitment programs. Since civic responsibility is taught in schools (i.e., daily pledge of allegiance, etc.,) this is a good time to emphasize that service in the organization is service to the community. When considering retention, political leaders should be mindful that they represent the face of the government, which is the vehicle for pursuing civil service. Volunteers look to public officials for guidance, support and encouragement. Commensurate with this, public officials have a level of responsibility for the success of emergency service organizations in central Pennsylvania, as their stance and relationship regarding the volunteers has an impact on the volunteers' interests in serving through the government. Emergency service organizations are often chartered under, or authorized through, units of local government, and local leaders interact directly with leaders of the emergency service organizations. If the volunteers perceive the relationship to be positive and supportive, they will continue to feel good about fulfilling their civic duty. When they feel as though local leaders are interfering or inhibiting their organization's efforts to serve the community, they develop a direct association between the local leader and service to the community (as the politician represents the people.) Sometimes volunteers resign from service because they do not want to serve the leaders, hence causing a level of harm to the entire community. It is crucial that local leaders take reasonable and consistent steps to ensure the accurate and positive perception of their relationship with volunteers,

because if they do not, there is a potential for retention numbers to be negatively affected by the deterioration of the relationship.

Q: I believe that volunteering time to an emergency service is more important than donating money to it

Category
■ Agree
■ Disagree
■ Neutral
■ Strongly Agree
■ Strongly Disagree

1.7%

24.1%

41.4%

27.6%

5.2%
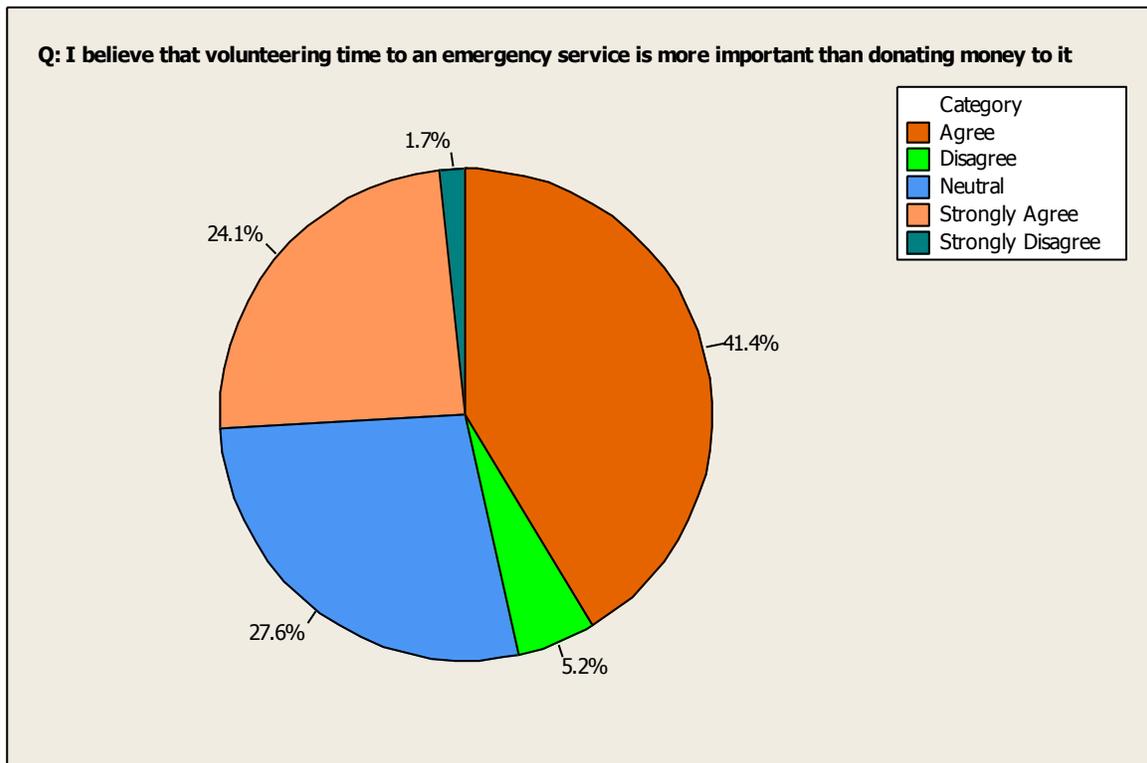
As to be expected, volunteers are more likely to place a greater importance on volunteering time than donating money, as they themselves donate their time to it. It was unexpected to see a fairly large (almost 35%) margin of respondents who disagreed or were unsure. It is possible that the respondents who disagreed or were unsure see monetary support as being necessary and just as important as volunteering time. There was no available information from the research which could indicate a trend in either direction, which indicates that this may be an area of potential study to determine if there is a trend towards more interest in monetary support as opposed to time donation in the volunteer community.

Q: Volunteering my time in an E.S.O. is more satisfying than receiving an award or recognition at my primary job

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

1.7%
24.1%
41.4%
27.6%
5.2%

Many volunteers feel that volunteering is important, however it is difficult to gauge in comparison to other positive aspects of life just how important volunteering is to the volunteer. In this study, volunteers were asked if volunteering their time in their emergency service organizations proved more satisfying than any award or recognition they could receive from their regular employer. The word satisfying was used because satisfaction is a very positive assignment of quality to an experience. It was anticipated that few volunteers would see the act of volunteering their time as more *satisfying* than being recognized for their achievement in their professional career. Surprisingly, the majority of volunteers felt that it was. This speaks to the intrinsic value of the volunteer experience that can be realized within an emergency service organization, and to the agency's responsibility to facilitate the individual volunteer's goals of helping others and serving their community. In most cases, the volunteers spend less time volunteering per week than they would at a 40hr/week career, yet even though the time invested in this effort is less, the reward is much greater for many of them.

Q: I consider it a privilege to volunteer at my primary emergency service organization

Category
- ■ Agree
- ■ Disagree
- ■ Neutral
- ■ Strongly Agree
- ■ Strongly Disagree

0.9%

35.3%

46.6%

14.7%

2.6%
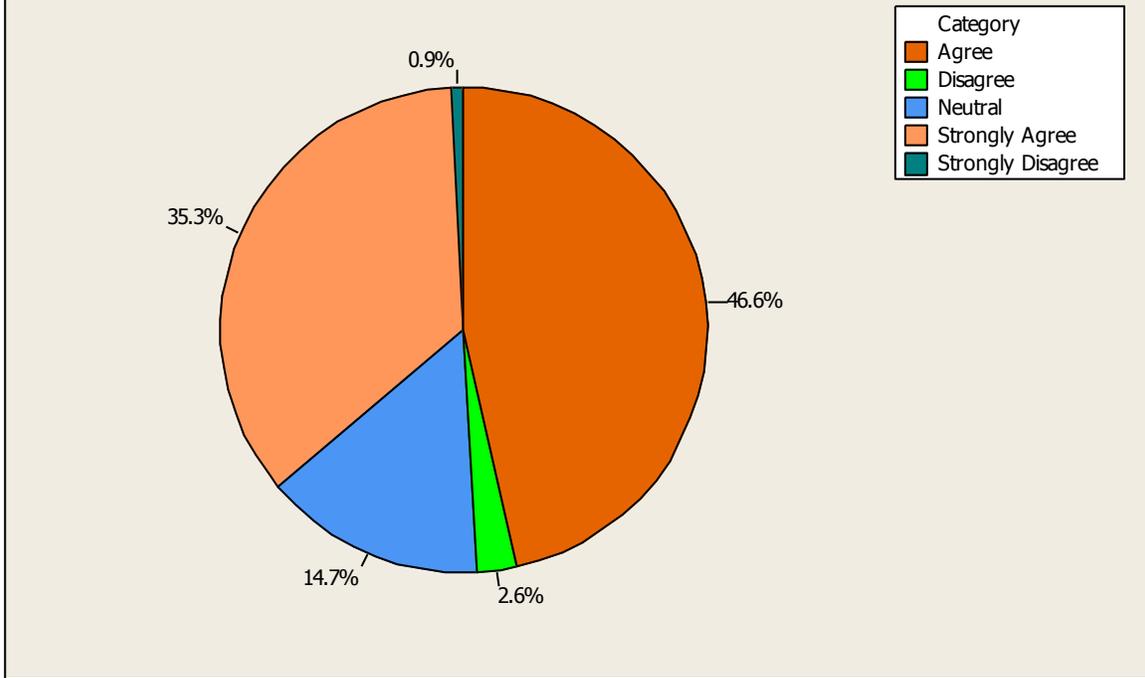
To gain further perspective on the volunteers' perceptions of how highly they regard their experience in the emergency services, this study asked if they felt it was a privilege to serve their organization. The word privilege invokes the connotations of honor, pleasure and joy. Over 80% of volunteers associated this distinction with their opportunity to volunteer in an emergency service organization. This is significant in that it shows a clear indication that the opportunity to volunteer is more than just an inconsequential matter to volunteers. In fact, it is highly regarded, and volunteer organizational leadership should consider this when recruiting and retaining their volunteers. The image of the organization plays a part in this, and volunteers are cognizant in general[3] that they are the stewards of the public trust. Such responsibility is a privilege and an honor, therefore leaders must strive to maintain the highest and most positive image of the organization in the eyes of both the membership and the community.

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[3] Based on field research interviews

Q: I follow the direction of my volunteer org's leadership, even when I'm not sure it is the right decision

Category
Agree
Disagree
Neutral
Strongly Agree
Strongly Disagree

0.9%
13.9%
50.4%
28.7%
6.1%
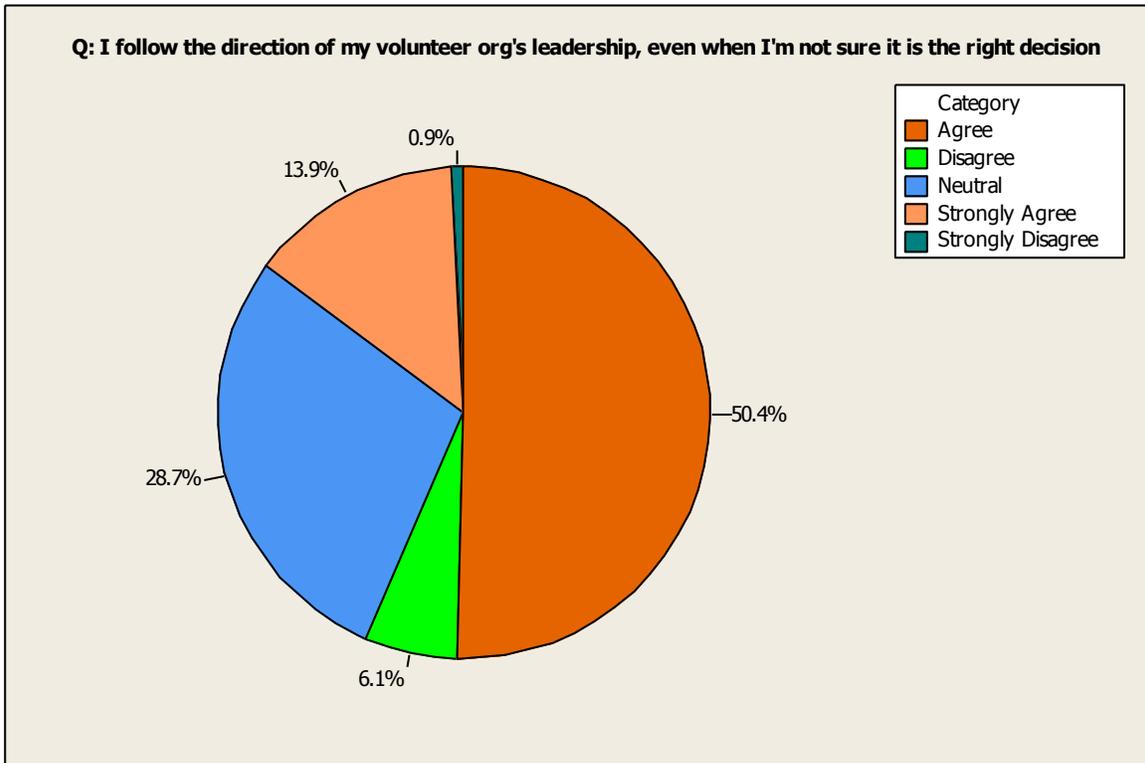
There is a need to explore how trust is experienced within the organization, both vertically between the leadership and the membership, and laterally among the membership themselves. This question examines the relationship between the volunteers and all leadership, including administrative personnel, line officers and chiefs. The data shows that just over 64% of the membership will follow the direction of leadership, even if they disagree. This is a testament to the level of influence the leadership has on the membership, and the high degree to which the majority holds them even when there is conflict. It is the responsibility of the leaders to use this great influence with great responsibility, ensuring that the best interests of the individual volunteers are considered in every decision made, because their wishes will likely be carried out whether right or wrong.

Q: I trust my volunteer organization's Chief

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

1.8%
37.7%
44.7%
12.3%
3.5%
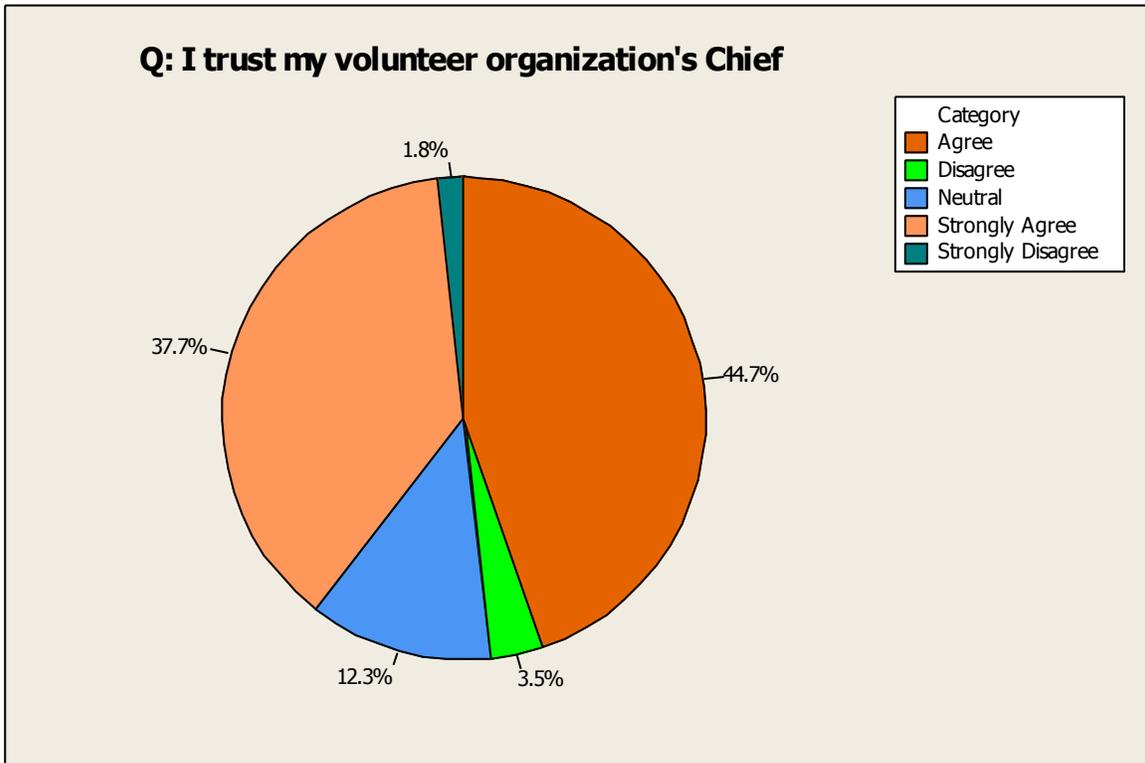
The trust that the volunteers have in their chief is greater than that for any other person or level in the organization, as is evidenced by over 82% indicating agree or strongly agree. There is an ultimate level of responsibility, and concurrently of influence, attached to the position of chief in a volunteer emergency service organization. Chiefs also are volunteers, but their wisdom, experience, character and charisma meld to form a figurehead that can be considered someone to look up to and trust in the organization. Volunteers show more trust in those who are higher ranked in the organization, and are most likely to allow the chief's influence to drive their impressions of their volunteer experience. Selection criterion / qualities and traits of chiefs are a subject for another study, but it is important to note that the single most likely person in the volunteer organization to affect change in the experience of the individual volunteer is the chief. When considering resolving broad issues that affect retention in the organization, such as status inequity perceptions, the chief is best suited to compel a change in conditions among the volunteers.

Q: The attitude of my org's Chief is more important to me than their level of education when I listen to them

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

3.5%

15.8%

45.6%

25.4%

9.6%
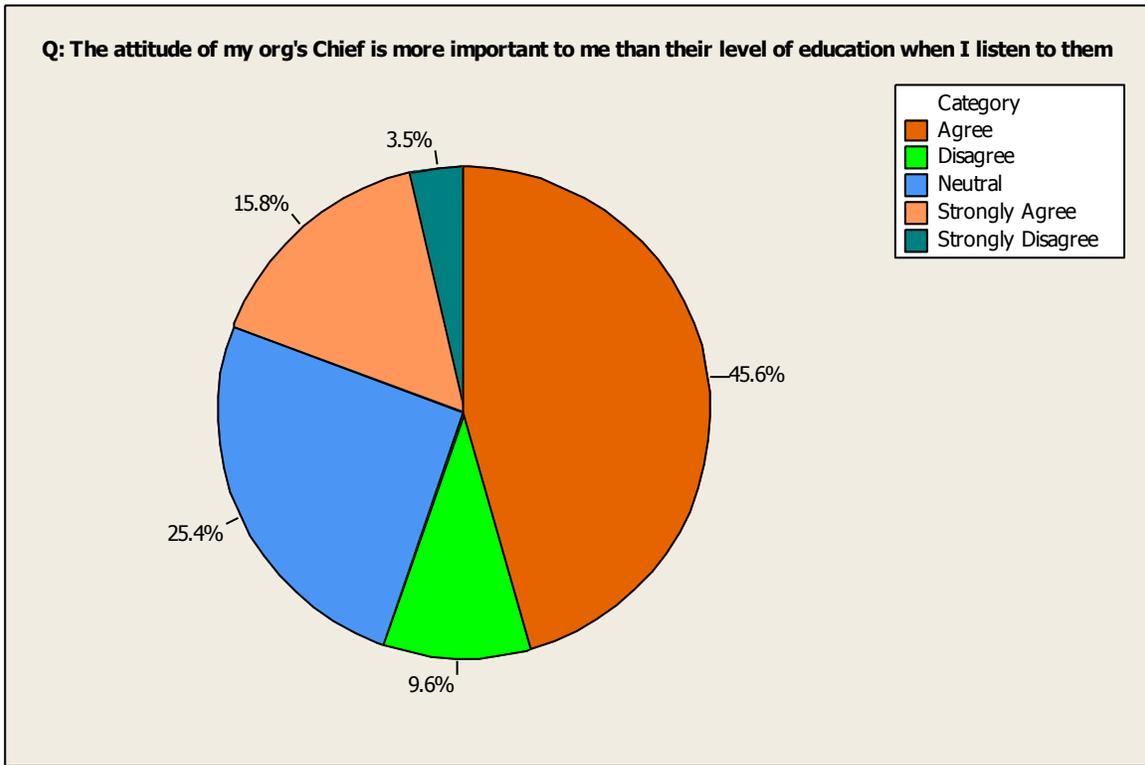
The chief's attitude, as perceived by the volunteers, is an important aspect of the relationship between the volunteer and the leadership. So important, that volunteers are willing to overlook the chiefs' levels of education to consider their attitudes and countenances when receiving instructions or simply listening to them. 61% of volunteers expressed this opinion, however there is a fairly large percentage that disagree (13%) and 1/4th of the volunteers were neutral on the issue. Still, the majority expressed this as being of higher importance, which should indicate to chiefs that their attitudes count for a lot among many of their members. Modeling a positive, reinforcing and professional demeanor helps to exemplify the desired qualities from the membership. You could be highly educated, but if you do not 'practice what you preach' as the organization's chief, a large percentage of the volunteers will take notice, and possibly react.

Q: I am willing to trust my org's membership with my life and safety

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

2.6%

34.5%

52.6%

7.8%

2.6%
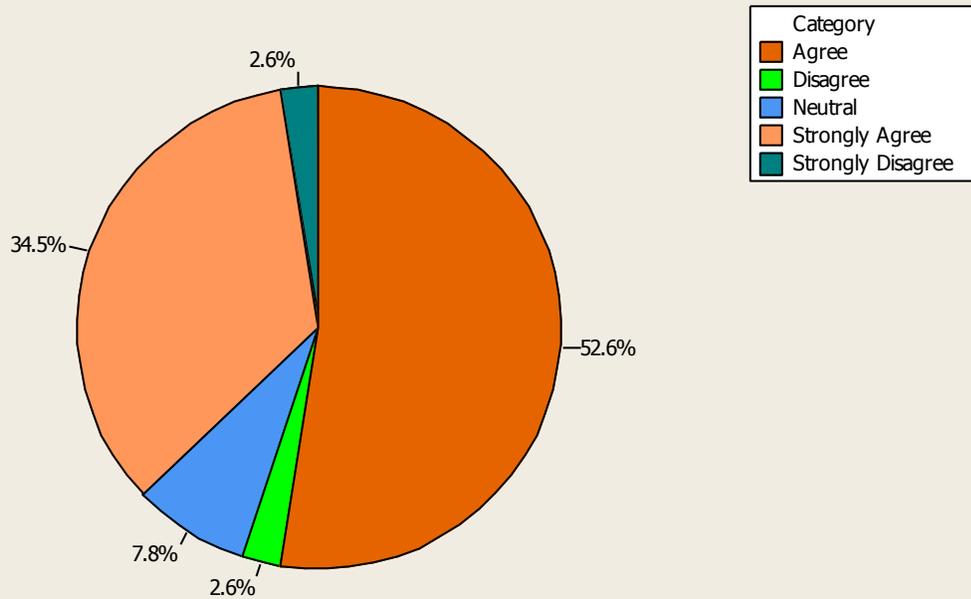
As anticipated, the vast majority (over 87%) of the volunteers surveyed are willing to trust their comrades with their lives and their safety. This would be natural considering the nature of the work, and the close bonds that would naturally develop from working together under such hazardous conditions. For those who responded that they were unsure or that they disagreed, there is no clear indication in the data to infer at what level of experience in the volunteer career a volunteer would most likely lose trust in their colleagues, however the range seems to be somewhere between 8 and 30 years on the job when this distrust is most likely to occur. See chart below for details:

Histogram of years of experience Vs. trust in organization's membership
Normal

	Agree	Disagree	Neutral
	Strongly Agree	Strongly Disagree	

Frequency

years of experience

Panel variable: Trust org. w/ life

Agree
Mean 17.38
StDev 10.12
N 58

Disagree
Mean 18.33
StDev 3.786
N 3

Neutral
Mean 15.56
StDev 11.63
N 8

Strongly Agree
Mean 15.12
StDev 11.22
N 37

Strongly Disagree
Mean 19.67
StDev 10.02
N 3
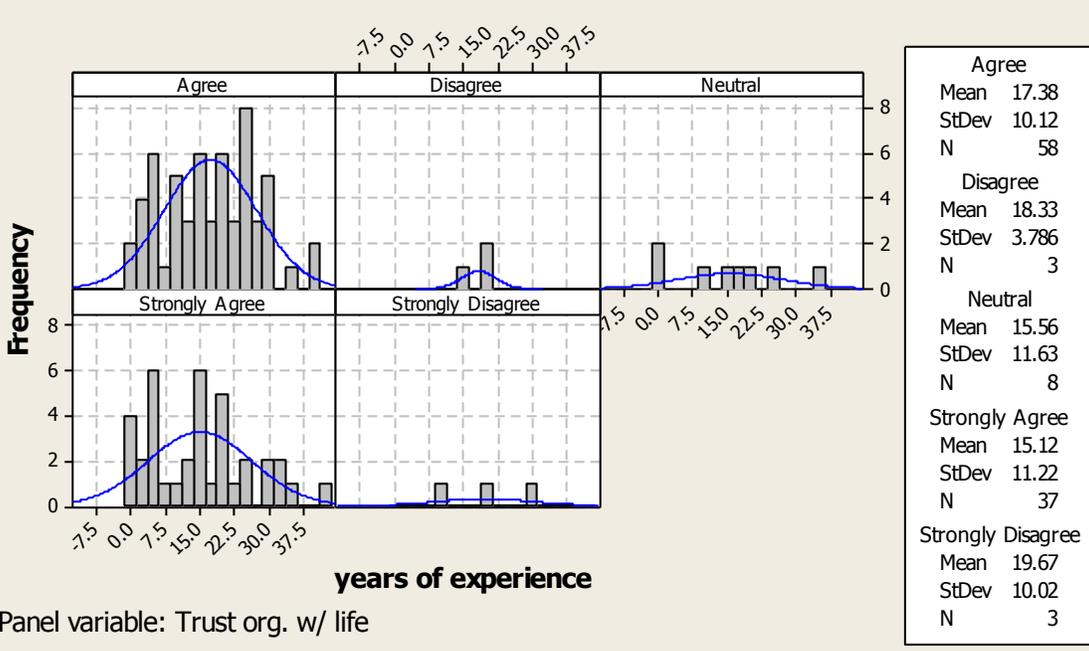
Q: I feel as though I am trusted by my peers in my volunteer organzation

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

0.9%
20.7%
13.8%
2.6%
62.1%
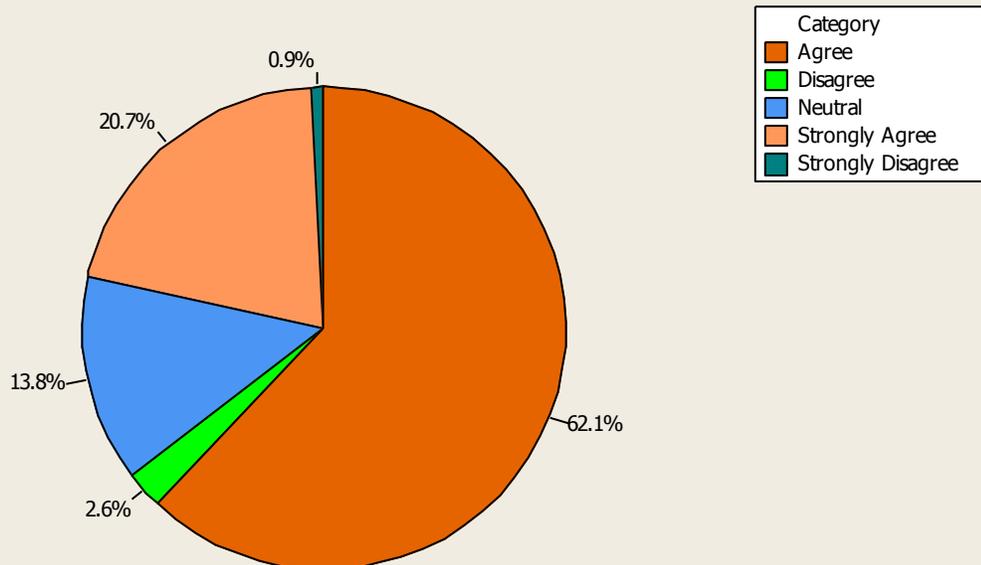
An overwhelming 83% of respondents perceive that they are trusted by their colleagues in their emergency service organization, which is within 4% of the last question regarding trusting others. This series of questions was injected to act as a psychometric validation of truth among the respondents, and it is clear that there is a correlation between the two answers that is sufficiently complimentary to warrant the assertion that the data are valid regarding the perceptions of trust. It is also indicated that trust is a very significant matter to the volunteers both vertically and laterally in the organization. If there is a loss or infringement of trust, it is bound to have a negative impact which will pervade the entire volunteer membership. Leaders need to be aware of this characteristic of their membership, and take affirmative steps to ensure that the trust relationships are maintained on every level of the organization. Failure to do so could result in a widespread negative impact on retention and recruitment for the organization.

Q: I have experienced trouble sleeping due to events that have occured / I have observed while volunteering

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

19.8%

25.9%

7.8%

12.1%

34.5%
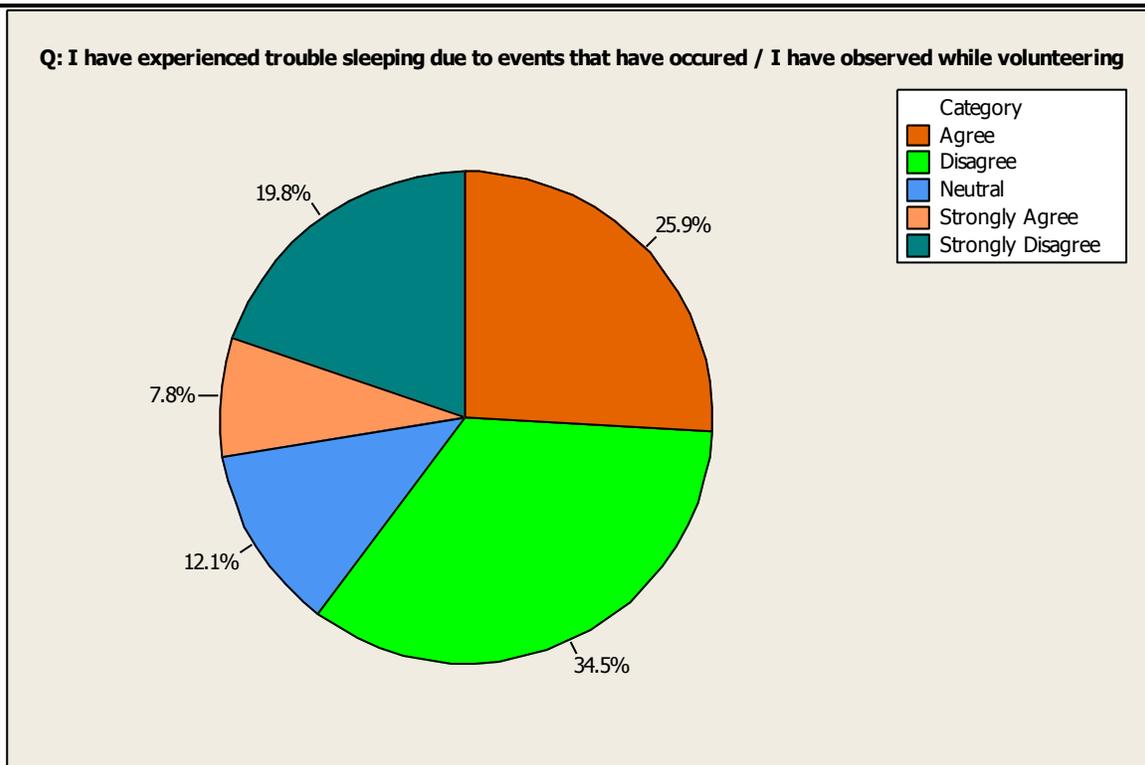
54% of surveyed volunteers feel that they have not experienced a sleeping problem as a result of their volunteer experiences. About 34% stated they did experience trouble sleeping, which is over 1/3 of the total population of volunteers. Problems with sleeping are symptomatic of post-traumatic stress disorder[4], and call for leaders not only to be sensitive to these conditions among their members, but also to find ways to assist these volunteers manage their personal strife. Failures to address these conditions expose this 1/3 of your volunteer cadre to potential physical and emotional health maladies, and if ignored long enough, could affect the retention rate negatively. Beyond numeric figures, a basic level of concern for the individual volunteer is warranted, and should be expressed in a manner that demonstrates the concern for the volunteer without exposing their personal situation to their colleagues. From experience, it is important for leaders to make this a resolution that is not broadcast to the general membership, although group counseling such as CISD (Critical Incident Stress Debriefing) is always indicated following

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[4] (Penn State Milton S. Hershey Medical Center - Various 2006)

traumatic events experienced during service. This confidentiality maintains their level of trust, addresses the needed concern, and meets their needs to ensure they can continue to serve effectively in the future.

5. Time Management

Histogram of Hours of Volunteer Time Given By Age
Normal

Panel variable: Vol. Time
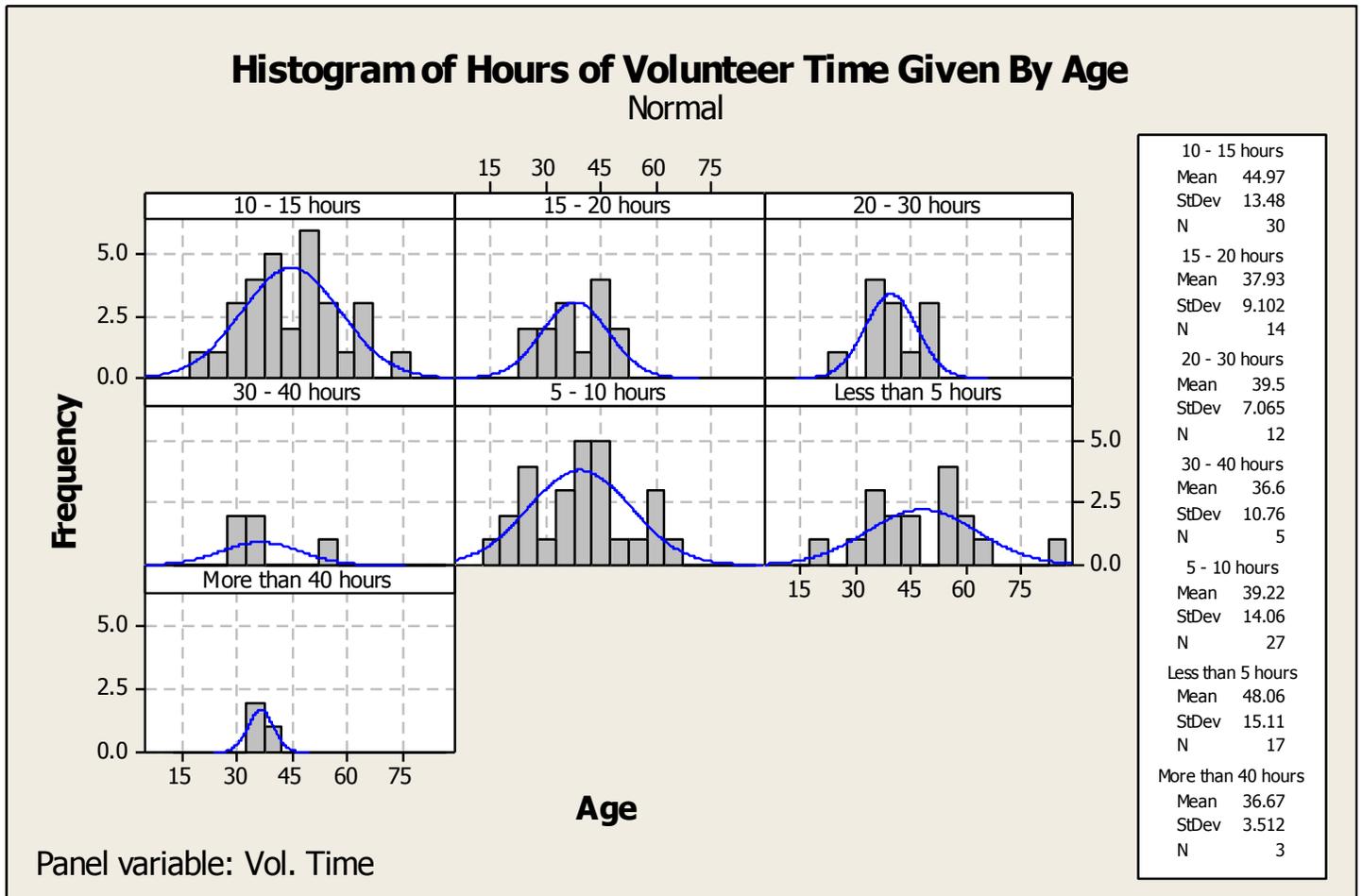
Volunteers tend to give the most time when a) they have it available, b) they can afford to do so and c) the emergency service organization and its priorities fit into the priority scheme of the individual volunteer's lifestyle. To understand who can give the most time, look at the spread of the ages of volunteers in both the 0-5 and 5-10 hours per week donated boxes. In these boxes, a wide selection of age groups representing both the upper and lower range of all ages is able to participate. Increasingly as you require more hours, the spread contracts towards the age center, or between 30 and 45 years of age (there is a deviation in the 30-40 hour group, however slight, and the number of volunteers counted is minimal compared to the studied sample.). This indicates that middle aged people are volunteering the most time

to the organization. Financial stability, as well as changing life values and experience appears to contribute to this factor.

Histogram of Hours Volunteers Spend (per week) With Family By Age

Panel variable: Family Time

10 - 15 hours	Mean 37.28, StDev 13.41, N 18
15 - 20 hours	Mean 41.07, StDev 11.61, N 15
20 - 30 hours	Mean 43.21, StDev 10.27, N 19
30 - 40 hours	Mean 48.67, StDev 14.59, N 12
40 - 50 hours	Mean 42.83, StDev 12.07, N 6
5 - 10 hours	Mean 35.33, StDev 13.39, N 9
Less than 5 hours	Mean 40, StDev 6.683, N 4
More than 50 hours	Mean 45.23, StDev 14.58, N 22

Family time is crucial to the emotional health of the volunteers and their families. It is important to examine at what age the respondents are spending the most time with their families, and this will lead to an understanding of how the family and organization share the overall free time of the volunteer. From the information available, most volunteers spend either between 10 and 30 hours a week on family time, or more than 50. What is most interesting to note is that only 40 out of 107 responders (37.3%) who answered this question spend more than 30 hours per week with their families. Consider this, if the 'average Joe' put in 40 hours per week at the office (or 8a-4p) and was home for family time daily through the week by 5pm (and went to bed at 10pm,) and spent 12 hours each on Saturday and Sunday with the family, the 'average Joe' would have spent almost 50 hours with his family. He would have done this while maintaining a full time job, and he still would have time to engage in personal pursuits. It is clear from this information that the emergency service volunteer is sacrificing family time for the organization, and in comparison to the 'average Joe,' he or she is giving up a significant amount more.

Q: I Am Able To Manage My Time Properly Between Work, Volunteering and Home
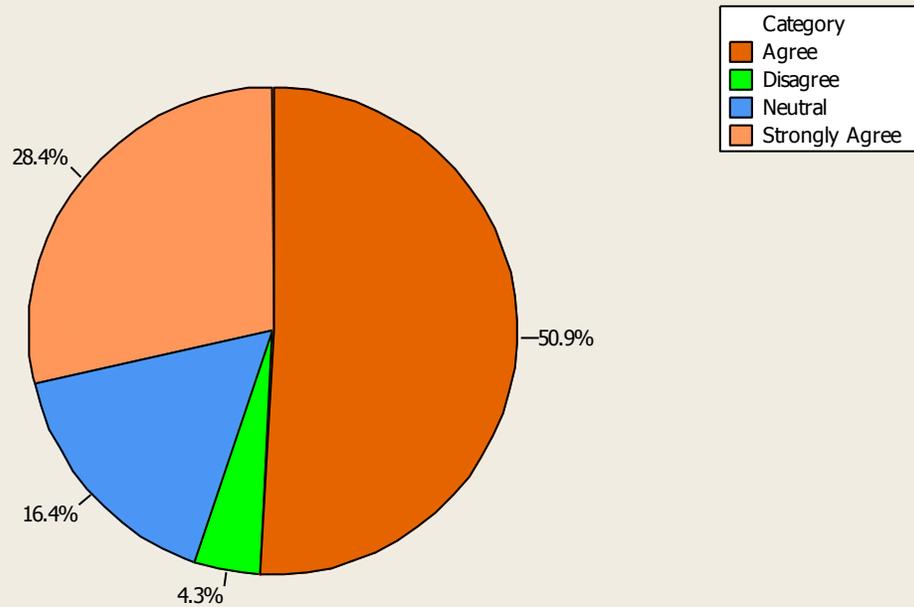
Most of the emergency service volunteers felt that they were generally able to manage their time properly. For those few (just over 20%) of the group who felt they could not, it is important for leadership to intervene in assisting these members avoid a condition that may cause them to burn out. Early intervention and mentorship from those who are successful at time management serve to help remedy this unmet need.

Q: My family supports my time away to volunteer

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

0.9%

29.6%

47.8%

17.4%

4.3%
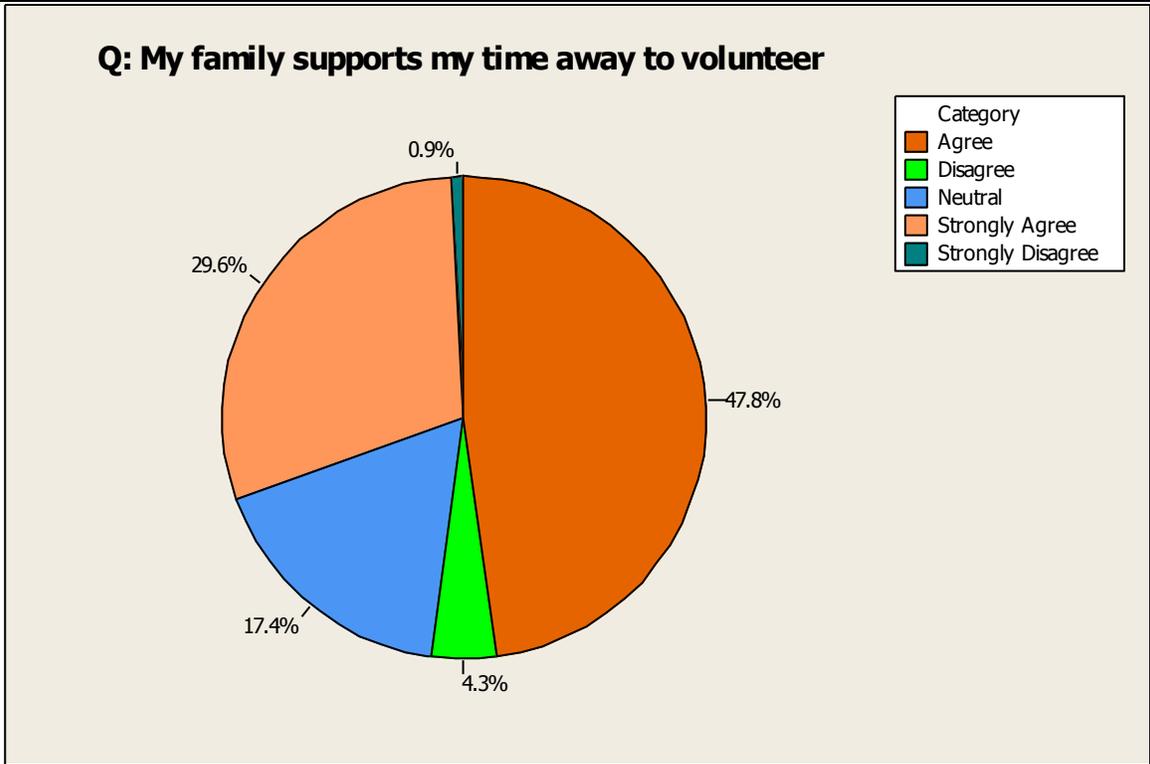
The overwhelming majority (77%) of the respondents reported that their families support their time away to volunteer. The reasoning behind why this happens is a subject for further study; however it is valuable to compare the amount of time some volunteers spend with the amount of support they receive from their families to do it. To do this, you need to look at how many hours volunteers are spending with their families, and compare that with how much time they are spending volunteering. This helps to identify any risk trends that may exist based on a correlation of both factors.

Chart of Time Spent With Family Vs. Time Spent Volunteering
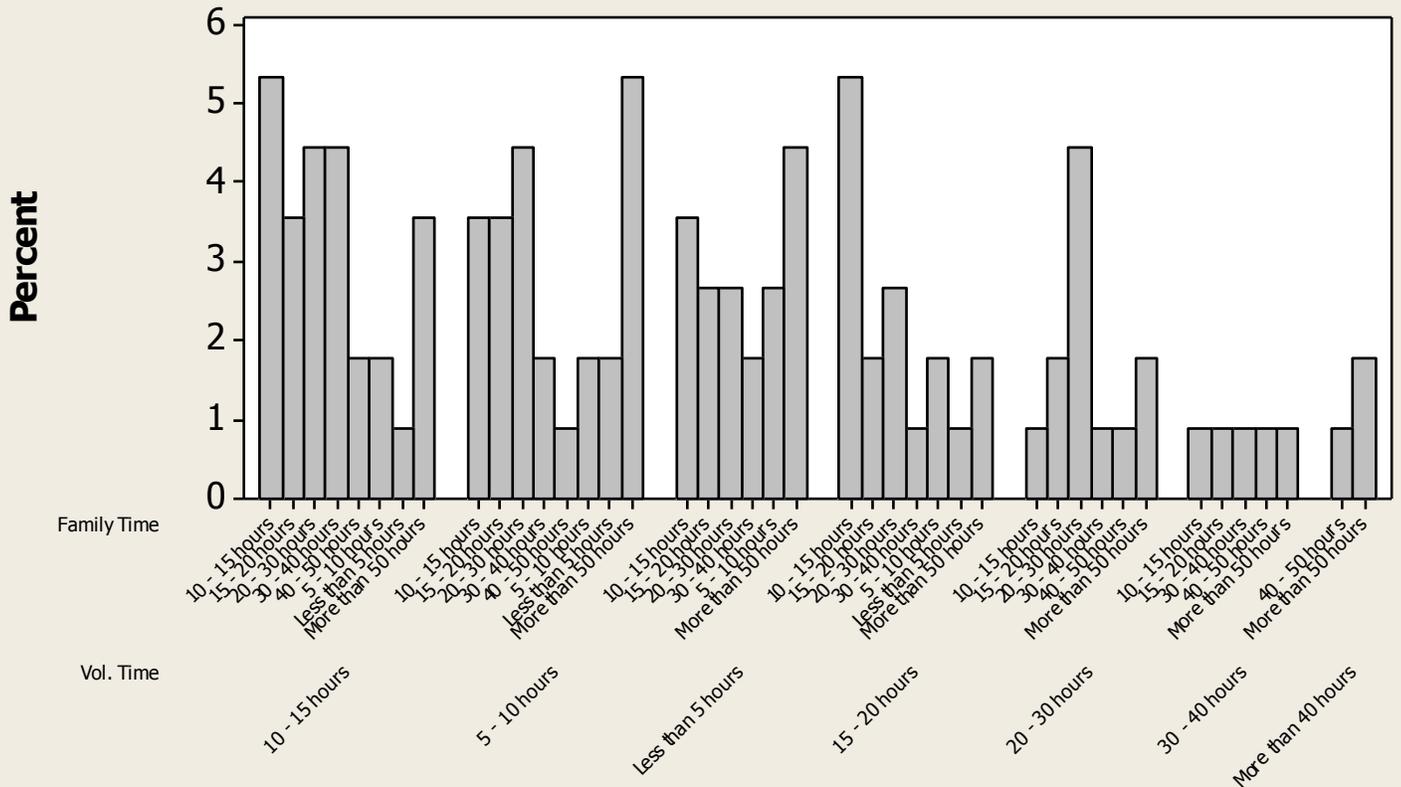
Percent within all data.

These data show that, in general, those who spend more time volunteering spend less time with their families. This translates into a potential struggle between the family desiring time and the organization desiring the same time available from the volunteer. From this, you compare the hours spent volunteering against family approval perceptions to identify potential time-donation ranges that are more risky than others for volunteers.

Chart of Time Spent Volunteering Vs. Family Support for Time Spent Away
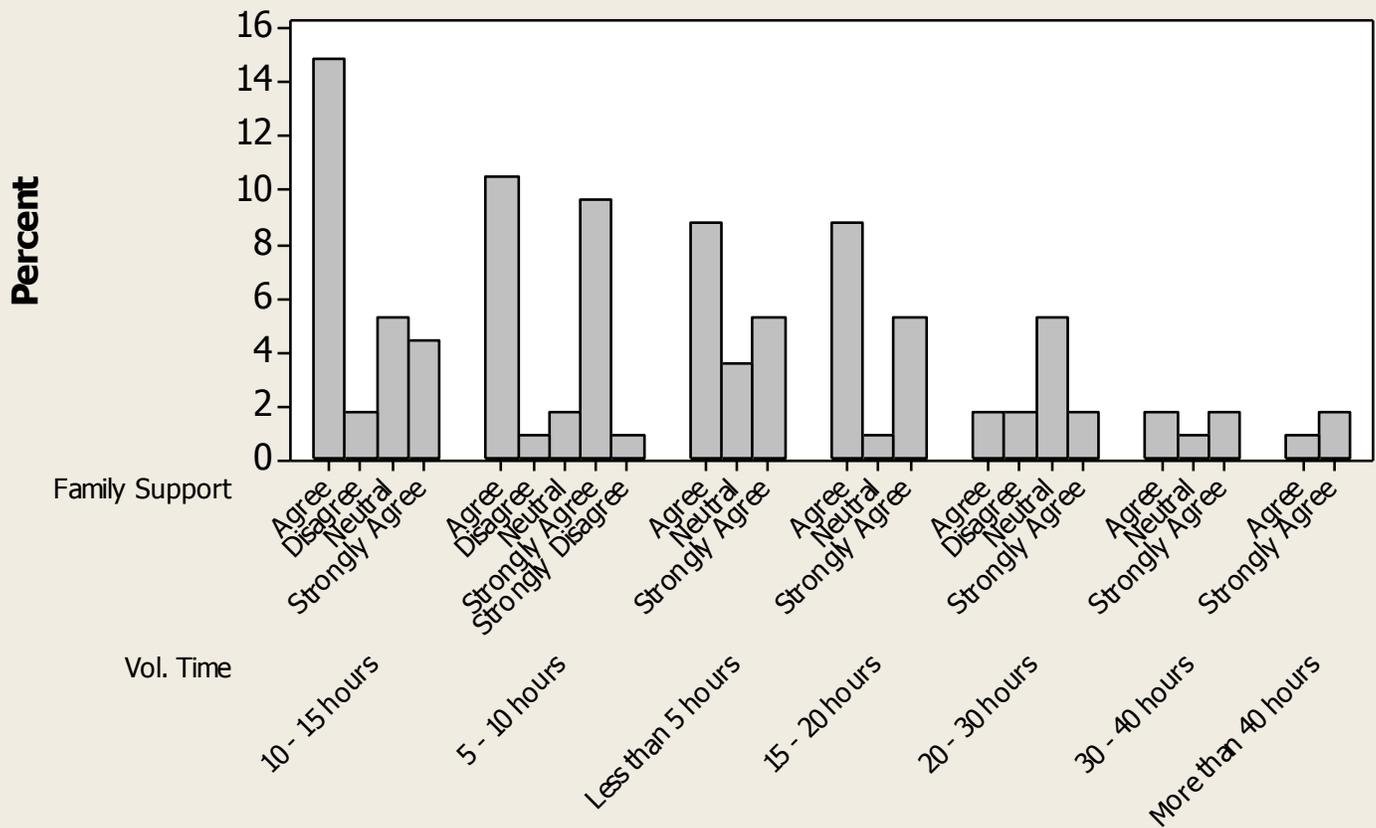
Based on the data presented, it appears that there is no particular risk to volunteering more hours than less hours, when considering perceived family acceptance. An unanticipated indication from the data may be that those who volunteer less time do not perceive they have the approval of their family. This would, if true, help to explain why some members interested in volunteering are unable to donate as much time as they would like to. It would be logical to infer that volunteers may be embarrassed or reluctant to justify their lower participation using their families' feelings as the basis. This is an area in which additional study could be conducted, and should reveal potential roadblocks to volunteering that may be surmountable.

Q: I have experienced family problems related to the amount of time I spend volunteering

Category
- Agree
- Disagree
- Neutral
- Strongly Agree
- Strongly Disagree

13.0%

28.7%

11.3%

20.9%

26.1%
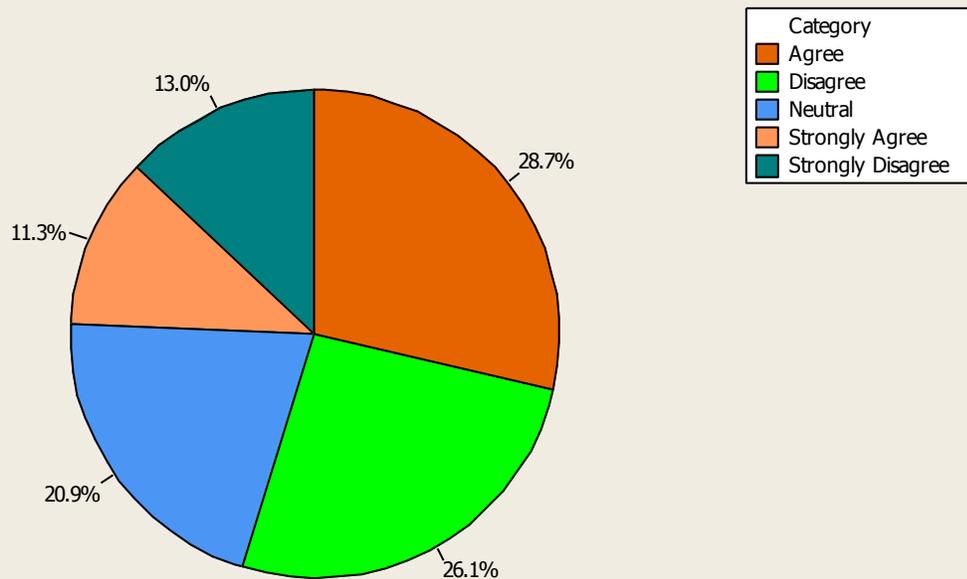
When examining the cost of volunteering, there is likely to be no more disruptive interference with the positive experience than domestic discord as a result of the time spent serving. According to the data, 40% of the population has agreed that they have experienced some form of family problem related to the time spent serving. Although this is not the majority (it is unclear where "neutral" would stand on this given a more descriptive explanation of the term "family problems,") this percentage of volunteers is sufficient enough to warrant consideration by the organizations' leadership as to their individual time needs and costs of volunteering.

6. Findings

A key area of examination was to consider the validity of the claim that there is a pending volunteer famine. Upon examining the data, it is apparent that there is evidence to support this claim based on the represented sample if the current variance between the numbers of volunteers leaving the emergency services and the number entering continues. The information presented demonstrates that there are 2.8 times more volunteers prepared to exit their volunteer career than there are recruits entering the service. If this becomes a trend, some volunteer organizations will be forced to consolidate to meet manpower needs, or forced to close due to insufficient manpower for an effective response.

Volunteers are not confined to a given age group, as the study shows that volunteers range from 15 to 83 years of age. All of them have good reasons to volunteer their time and effort, with the majority having chosen to volunteer to either help others, or serve their community. Almost all volunteers have received a high school diploma (or equivalent,) and almost half have completed some level of post secondary education. Most of the volunteers are not financially wealthy, yet almost all of them demonstrate financial responsibility. There are more male than female volunteers, and there are more married volunteers than single ones. Most have children, and identify themselves as conservative in political leaning. Volunteers tend to have regular jobs that require team orientation, which relates to their team oriented volunteer service.

Most volunteers start when they are young, and agree that volunteering is their civic duty. Family tradition drives some volunteers, more in the fire service than in any other discipline. Almost all volunteers attribute a positive connotation to their experience, and many describe it as satisfying. Most volunteers especially value the opportunity to serve the community regardless of their age.

Volunteers prioritize learning from mentors and serving their chief above spending social time with each other. The average volunteer has around 16 years of service under his/her belt, and many are willing to continue serving actively for more years than some people spend in a career. Many volunteers have the support of their families and employers to serve, but notably some do not, contributing to the stress in the volunteers' lives. Most volunteers feel appreciated by their emergency service organization, and the majority feels that the leadership of their organization is sensitive to their needs for family time. For those that feel otherwise, there is a potential that they may leave the organization. Fewer volunteers feel appreciated by their community than by their emergency service organization. Most felt they were treated fairly by the leadership within their organization, yet for those who didn't, there is a potential they also may leave the organization. Most volunteers feel like they are a member of a family due to their membership in their organization.

Most volunteers feel like they can manage the stress of volunteering on their own, however, for those who cant, individualized assistance is necessary to prevent burn-out.

Most volunteers feel it is their civic duty to volunteer, and feel that it is more important to donate their time to the emergency service organizations than to donate money to them. Most also consider it a privilege to volunteer at their organization, denoting the high level of regard they hold for their volunteer experience. Most of the volunteers felt that the simple act of volunteering their time was more satisfying than receiving award and recognition from their employer.

Individual and group trust are essential to the health of the emergency service organization, and are foundations upon which relationships between leadership, as well as with the volunteers' colleagues, are built. Over 80% of volunteers trust their organization's chief, and most of the volunteers will follow their direction even if they are not sure it is right. Almost all volunteers trust their fellow members with their lives, and the same rate was reported when the respondents were asked if they felt as though they were trusted by their peers in the organization. The attitude of the chief is more likely to influence the volunteer than his or her level of education, which shows that the interpersonal relationship the chief has with the volunteer is a key aspect of how positive of negative the volunteer's experience will be within the organization.

About 1/3 of volunteers experience trouble sleeping as a result of the experiences they have had or observed in the services, possibly indicating they may have suffered from post-traumatic stress disorder. Individual attention is required to ensure the health of the volunteer, which will thus translate into the health of the organization. The organization is only as strong as its weakest link.

Time availability and distribution, as well as the volunteer's individual emotional health play a role in determining the staffing of an emergency service organization by volunteers. Those who are able to give the most time to the volunteer organization are those who can afford to do so. Most are between the ages of 30 and 45. These individuals have more access to time as their children get older, and as they become more financially secure. Just over 1/3 of volunteers spends more than 30 hours of time with their family each week, where as the individual who works only a 40 hour week might have 50 or more hours to spend each week with their family. This represents a disproportionate sacrifice that the volunteer (and his/her family) makes as opposed to an individual who chooses to not volunteer.

Most volunteers feel that they are able to manage their time properly between work, volunteering and home. Most of the volunteers feel that their families support their time away to volunteer. The more time people spend volunteering, the less time they spend with their families; however it may be possible that those who volunteer only a few hours per week do so because their families do not support them spending more time away from home. Supporting this, the data show that 40% of the surveyed population reports they have experienced a family problem as a result of volunteering in an emergency service.

7. Conclusion

There is evidence to suggest that there may be a shortage of volunteers in the emergency services, and that the shortage could turn into a crisis over the next 5-10 years. Immediate investment on the part of local communities in recruiting and sustaining the volunteer services is necessary. Otherwise, they may either need to merge their community service with neighbors, or fund a paid emergency service organization to replace what they lose.

The establishment of a formal recruitment program for young individuals in each emergency service has great potential for influencing the target audience. Regardless of how elaborate or sizable the program is, the research indicates that there are too few younger volunteers in the emergency services indicating a need for a fuller and formal approach to the organizations' recruiting strategies. Emphasis on the youths' sense of civic duty, which is their driving motivation, will likely increase the number of youth who receive the recruitment message and act upon it favorably. Regarding retention, programs within the organization designed for social activity / fraternization are most effective for those volunteers who are in their 30's.

The relationship between the volunteer organization's chief and the membership is key, as volunteers in the organization relate to, and trust their chief. This relationship can be used to either positively motivate the membership to accomplish goals and objectives, or it can be used negatively, which can become the constraint to the realization of the organization's true potential. Investment in the organization's leadership through training in improved management practices and related advanced leadership skills contributes to enhancing the potential for their success at effectively managing their personnel. In parallel, the chief's investment of time and energy in the youth recruiting program, as well as an increased situational awareness of their volunteers' emotional and personal health, hold great potential for sustaining the program and enticing youth to become part of (and stay with) the organization.

Additionally, as discussed in this study, there are many areas of the volunteer's life which can be examined by leadership and community officials in order to identify potential threats to the welfare of their volunteers and organizations. Individual emotional health, time needs and *demonstration* of appreciation are key areas where community and organizational leadership can begin to address the need to retain more volunteers, and to encourage the recruitment of others. Of course, this is not to imply that leaders are responsible for micromanaging the volunteers' lives, but it does mean that efforts need to be funded and maintained to ensure that the volunteers have the proper resources and support needed to accomplish the dangerous but necessary task of protecting the community. Such efforts as reaching out to employers to request continued support for the volunteers time needs during an emergency response help to strengthen relationships between community leaders and industry, while providing a cost effective and proactive way to support the real needs of volunteers. Philanthropy on the part of a business, especially to support the volunteers, can be a powerful marketing tool for the individual business as well.

The cost of living, at the time of this study is growing rapidly and will affect the abilities of individuals to volunteer their time in emergency service organizations. Funding family needs will take priority over service time in the organization. Most volunteers that are giving their time and effort may soon find that

they are no longer able to afford to do so. It is indicated that there is a need for more individuals who fall into the higher income categories to donate more time to the community emergency service organizations.

Overall, the volunteers in the emergency services are altruistic individuals who give more of themselves than the average person for the good of many. It is incumbent upon community and organizational leadership to invest the same level of commitment to the needs of the volunteers in order to ensure that there will be someone to respond when the community is in need.

8. Acknowledgments

Credit is given with great regard to the brave and committed individuals who volunteer to risk their lives to save the lives of those who often they do not even know. Their participation in this study contributed to an ongoing effort to enhance the stability and capabilities of the emergency services in our region.

Credit is also extended to Dr. Randy Rosenberger, Dr. Norman Siems and Mr. Nathan Minarchick of Juniata College, who provided technical guidance and assistance with electronic resources.

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Annex A: Respondent County Demographic Information

People QuickFacts	Pennsylvania	Huntingdon County	Blair County	Bedford County	Snyder County	Centre County	Franklin County
Population, 2006 estimate	12,440,621	45,771	126,494	49,927	38,226	140,953	139,991
Population, percent change, April 1, 2000 to July 1, 2006	1.3%	0.4%	-2.1%	-0.1%	1.8%	3.8%	8.3%
Population, 2000	12,281,054	45,586	129,144	49,984	37,546	135,758	129,313
Persons under 5 years old, percent, 2006	5.8%	4.8%	5.7%	5.2%	6.0%	4.5%	6.0%
Persons under 18 years old, percent, 2006	22.5%	19.6%	21.4%	21.5%	22.1%	16.7%	22.6%
Persons 65 years old and over, percent, 2006	15.2%	15.4%	17.1%	17.2%	14.0%	11.1%	16.3%
Female persons, percent, 2006	51.4%	47.4%	51.8%	50.5%	50.9%	48.6%	51.2%
White persons, percent, 2006 (a)	85.7%	93.3%	97.2%	98.5%	97.7%	90.9%	95.2%
Black persons, percent, 2006 (a)	10.7%	5.6%	1.4%	0.4%	1.0%	3.0%	2.8%
American Indian and Alaska Native persons, percent, 2006 (a)	0.2%	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%
Asian persons, percent, 2006 (a)	2.4%	0.3%	0.5%	0.3%	0.6%	4.7%	0.8%
Native Hawaiian and Other Pacific Islander, percent, 2006 (a)	Z	Z	Z	Z	Z	0.1%	0.1%
Persons reporting two or more races, percent, 2006	1.0%	0.7%	0.8%	0.5%	0.6%	1.0%	0.9%
Persons of Hispanic or Latino origin, percent, 2006 (b)	4.2%	1.2%	0.6%	0.6%	1.3%	2.0%	2.7%

White persons not Hispanic, percent, 2006	82.1%	92.2%	96.6%	98.0%	96.6%	89.2%	92.8%
Living in same house in 1995 and 2000, pct 5 yrs old & over	63.5%	68.2%	66.7%	70.6%	67.8%	46.9%	62.8%
Foreign born persons, percent, 2000	4.1%	0.7%	1.0%	0.6%	0.9%	5.8%	2.0%
Language other than English spoken at home, pct age 5+, 2000	8.4%	3.2%	3.1%	2.5%	8.0%	8.6%	4.5%
High school graduates, percent of persons age 25+, 2000	81.9%	74.6%	83.8%	78.3%	73.2%	88.2%	78.9%
Bachelor's degree or higher, pct of persons age 25+, 2000	22.4%	11.9%	13.9%	10.2%	12.5%	36.3%	14.8%
Persons with a disability, age 5+, 2000	2,111,771	7,706	25,182	9,420	6,502	14,207	21,605
Mean travel time to work (minutes), workers age 16+, 2000	25.2	28.9	20.2	27.9	22	19.6	23
Housing units, 2006	5,453,228	21,927	56,114	24,245	15,528	57,530	58,931
Homeownership rate, 2000	71.3%	77.5%	72.9%	80.1%	76.5%	60.2%	74.0%
Housing units in multi-unit structures, percent, 2000	21.2%	9.7%	19.1%	8.4%	10.9%	30.3%	14.4%
Median value of owner-occupied housing units, 2000	$97,000	$72,800	$73,600	$80,200	$87,900	$114,900	$97,800
Households, 2000	4,777,003	16,759	51,518	19,768	13,654	49,323	50,633
Persons per household, 2000	2.48	2.44	2.43	2.5	2.58	2.45	2.49
Median household income, 2004	$43,714	$35,828	$35,185	$36,059	$39,265	$38,625	$45,454
Per capita money income,	$20,880	$15,379	$16,743	$16,316	$16,756	$18,020	$19,339

1999						
Persons below poverty, percent, 2004	11.2%	12.4%	13.4%	10.8%	8.8%	12.1%	8.2%

Business QuickFacts	Pennsylvania	Huntingdon County	Blair County	Bedford County	Snyder County	Centre County	Franklin County
Private nonfarm establishments, 2005	303,333	845	3,295	1,089	861	3,281	3,017
Private nonfarm employment, 2005	5,082,630	9,288	50,445	14,098	15,433	43,619	46,230
Private nonfarm employment, percent change 2000-2005	-0.1%	-7.9%	-2.7%	-4.8%	13.1%	-6.7%	9.5%
Nonemployer establishments, 2005	730,980	2,511	6,606	3,399	2,559	8,730	8,660
Total number of firms, 2002	874,255	3,065	8,801	4,023	3,091	10,290	9,955
Black-owned firms, percent, 2002	2.8%	F	F	F	F	F	S
American Indian and Alaska Native owned firms, percent, 2002	S	F	F	F	F	F	F
Asian-owned firms, percent, 2002	2.6%	F	F	F	F	1.4%	1.6%
Native Hawaiian and Other Pacific Islander owned firms, percent, 2002	0.0%	F	F	F	F	F	F
Hispanic-owned firms, percent, 2002	1.3%	F	F	F	F	F	F
Women-owned firms, percent, 2002	26.0%	13.8%	25.7%	32.8%	S	19.4%	32.4%
Manufacturers shipments, 2002 ($1000)	181,462,443	460,074	1,557,695	607,724	675,655	1,154,084	2,165,228
Wholesale trade sales, 2002 ($1000)	183,741,873	53,102	1,774,176	D	D	189,589	676,933
Retail sales,	130,713,197	271,911	1,695,016	476,065	527,924	1,403,041	1,294,089

	Pennsylvania	Huntingdon County	Blair County	Bedford County	Snyder County	Centre County	Franklin County
2002 ($1000)							
Retail sales per capita, 2002	$10,603	$5,933	$13,277	$9,541	$13,918	$10,123	$9,842
Accommodation and foodservices sales, 2002 ($1000)	15,305,402	26,842	154,890	51,174	47,494	209,187	121,356
Building permits, 2006	39,128	119	193	108	130	678	869
Federal spending, 2004 ($1000)	94,900,254	248,455	867,304	293,221	169,394	940,643	821,938
Geography QuickFacts	Pennsylvania	Huntingdon County	Blair County	Bedford County	Snyder County	Centre County	Franklin County
Land area, 2000 (square miles)	44,816.61	874.05	525.8	1,014.51	331.2	1,107.53	771.92
Persons per square mile, 2000	274	52.2	245.5	49.2	113.4	122.5	167.5
FIPS Code	42	61	13	9	109	27	55
Metropolitan or Micropolitan Statistical Area		Huntingdon, PA Micro Area	Altoona, PA Metro Area	None	Selinsgrove, PA Micro Area	State College, PA Metro Area	Chambersburg, PA Micro Area
		(a) Includes persons reporting only one race.	(a) Includes persons reporting only one race.	(a) Includes persons reporting only one race.	(a) Includes persons reporting only one race.	(a) Includes persons reporting only one race.	(a) Includes persons reporting only one race.
		(b) Hispanics may be of any race, so also are included in applicable race categories.	(b) Hispanics may be of any race, so also are included in applicable race categories.	(b) Hispanics may be of any race, so also are included in applicable race categories.	(b) Hispanics may be of any race, so also are included in applicable race categories.	(b) Hispanics may be of any race, so also are included in applicable race categories.	(b) Hispanics may be of any race, so also are included in applicable race categories.

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		NA: Not available	NA: Not available	NA: Not available	NA: Not available	NA: Not available	NA: Not available
		D: Suppressed to avoid disclosure of confidential information	D: Suppressed to avoid disclosure of confidential information	D: Suppressed to avoid disclosure of confidential information	D: Suppressed to avoid disclosure of confidential information	D: Suppressed to avoid disclosure of confidential information	D: Suppressed to avoid disclosure of confidential information
		X: Not applicable	X: Not applicable	X: Not applicable	X: Not applicable	X: Not applicable	X: Not applicable
		S: Suppressed; does not meet publication standards	S: Suppressed; does not meet publication standards	S: Suppressed; does not meet publication standards	S: Suppressed; does not meet publication standards	S: Suppressed; does not meet publication standards	S: Suppressed; does not meet publication standards
		Z: Value greater than zero but less than half unit of measure shown	Z: Value greater than zero but less than half unit of measure shown	Z: Value greater than zero but less than half unit of measure shown	Z: Value greater than zero but less than half unit of measure shown	Z: Value greater than zero but less than half unit of measure shown	Z: Value greater than zero but less than half unit of measure shown
		F: Fewer than 100 firms	F: Fewer than 100 firms	F: Fewer than 100 firms	F: Fewer than 100 firms	F: Fewer than 100 firms	F: Fewer than 100 firms
		Source: US Census Bureau State & County QuickFacts	Source: US Census Bureau State & County QuickFacts	Source: US Census Bureau State & County QuickFacts	Source: US Census Bureau State & County QuickFacts	Source: US Census Bureau State & County QuickFacts	Source: US Census Bureau State & County QuickFacts