

DOES CALL VOLUME, SEX, AND AGE INFLUENCE QUALITY OF LIFE IN CAREER FIREFIGHTERS?

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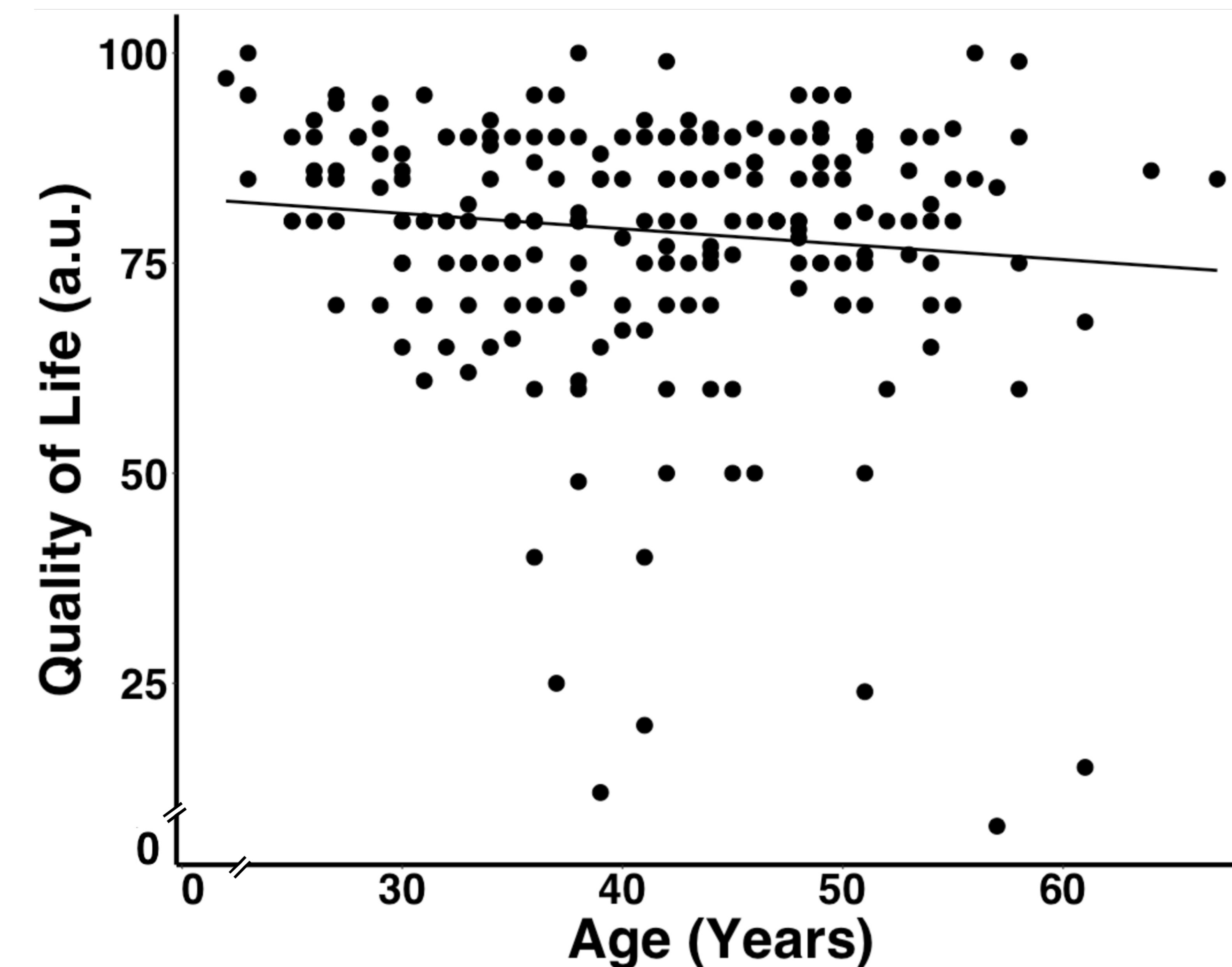
BACKGROUND

- Firefighters have physically strenuous careers and must work long shifts^{1,2}
- Shift schedules are often 24 hours on, 48 hours off; 48 hours on, 96 hours off²
- Fire stations across a city receive varying quantities of calls³
- Quality of life is a metric that has been previously investigated within the fire service^{4,5}
- However, the influence of call volume, sex, and age on career firefighter quality of life is unknown

PURPOSE: The purpose of this study was to investigate the influence of call volume, sex, and age on the quality of life in career firefighters.

PRACTICAL APPLICATIONS

While the present results suggest that call volume, sex, and age **may not impact** quality of life in career firefighters, future investigations may wish to consider a larger sample or other **job-specific variables** that may influence **quality of life** in the fire service.



METHODS

Participants

- Two hundred and forty career firefighters from a department in Texas completed an online survey
- 9 females; 231 males
- Age = 41 ± 9 years,
- BMI = 29.50 ± 4.55 kg/m²

Surveys

- Participants were asked to self-report demographic data (i.e., age, sex)
- Quality of life was estimated using a visual analog scale (VAS) from 0 to 100 arbitrary units (a.u.)
- Participants were asked to mark their current quality of life on a line where “0” represented the worse state and “100” represented perfect quality of life

42. Please rate your current health related quality of life. On the scale below, place a vertical mark on the line below to indicate your current health related quality of life. A score of “0” represents the worst health state you can imagine. A score of “100” represents perfect health

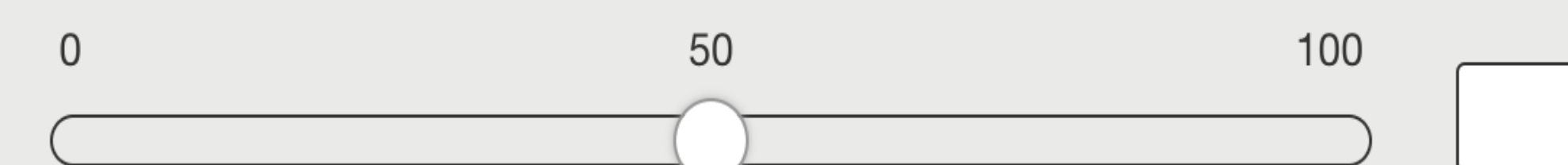


Figure 1. Participants estimated quality of life using a visual analog scale from 0 to 100 arbitrary units (a.u.). The 0 represents the worst state and 100 represents the best state. The quality of life value was used for analyses per participant.

Call Volume

- Stations’ call volumes were categorized into low, medium, or high based on the number of calls received

Statistical Analyses

- A multiple linear regression analysis was completed to estimate the effects of call volume category (low, medium, high), sex, and age on quality of life in career firefighters
- The independent variables were call volume category (low, medium, high), sex, and age
- The dependent variable was quality of life
- Demographic data is reported as mean $\pm$ standard deviations
- Alpha level was set to 0.05

RESULTS

- The sample consisted of 9 female and 231 male career firefighters
- The quality of life reported for the sample was 78.87 ± 15.02 a.u.
- The multiple linear regression outcomes indicate no significant influence of call volume category (low, medium, high), sex, and age ($F_{(4, 212)} = 1.921$, $p = 0.108$, $R^2 = 0.017$) on quality of life

Variable	Estimate	SE	t	p
Age	-0.191	0.111	-1.722	0.087
Sex (Male)	-8.906	5.453	-1.633	0.104
Medium Call Volume	2.505	2.442	1.026	0.306
High Call Volume	2.906	2.542	1.143	0.254

CONCLUSION

- The findings suggest that call volume category, sex, and age do not influence quality of life in career firefighters
- Future work may want to consider other demographic or work-related variables impact on quality of life (i.e., BMI, hours on shift, overtime hours)

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