Analysis of Firefighters’ Psychological Trauma and Interrupted Domains

Alyssa Garcia
*University of St. Augustine for Health Sciences, a.garcia4@usa.edu*

Pamela Kasyan-Howe
*University of St. Augustine for Health Sciences*

Kristin Domville
*University of St. Augustine for Health Sciences*

Kristian Llaca
*University of St. Augustine for Health Sciences*

Follow this and additional works at: [https://soar.usa.edu/otdcapstonesspring2023](https://soar.usa.edu/otdcapstonesspring2023)

Part of the Fire Science and Firefighting Commons, Mental and Social Health Commons, Occupational Therapy Commons, and the Psychiatry and Psychology Commons

**Recommended Citation**

This Poster/presentation is brought to you for free and open access by the OTD Capstone Symposia at SOAR @ USA. It has been accepted for inclusion in Spring 2023 Virtual OTD Capstone Symposium by an authorized administrator of SOAR @ USA. For more information, please contact soar@usa.edu, erobinson@usa.edu.
Analysis of Firefighters’ Psychological Trauma and Interrupted Domains

Alyssa M. Garcia, OTDs; Pamela Kasyan-Howe, OTD, OTR/L; Kristin Domville, DrOT, OTR/L; Kristian Llaca, Ed.D., OTD, MS, OTR/L, ATP, CSRS, BCTS

BACKGROUND

Firefighters are 10% more likely to have poor mental health and related behaviors due to high trauma exposure and intensity (Substance Abuse and Mental Health Services Administration, 2018). Specifically, firefighters are at a high risk of experiencing posttraumatic stress, anxiety, depression (Teoh et al., 2019), suicidality, substance abuse (Bing-Canar et al., 2019), and burnout (Teoh et al., 2019).

PROBLEM

Firefighters are regularly exposed to traumatic events on calls which results in their decreased mental health; and associated decreased participation in meaningful occupations, routines, and roles (Edgelow & Cramm, 2020; Edgelow et al., 2021; Wittwer et al., 2021).

PURPOSE

Research Purpose: Understand how firefighter demographics interact with interrupted occupations, routines, and roles and at what frequency when faced with work-related psychological trauma and stress (Edgelow & Cramm, 2020; Gulliver et al., 2021; Pennington et al., 2022).

Program Purpose: Educate firefighters on ways to re-engage in interrupted occupations, routines, and roles to reduce the negative effects of work-related psychological trauma (Edgelow & Cramm, 2020; Torchalla et al., 2019).

RESEARCH

Methods:
- Original quantitative assessment: “Firefighter Health and Wellness Functional Impact Survey”
- 32 questions on impairments in occupation, routines, and role identity when coping with work-related psychological trauma
- Pen-and-paper
- Likert scales measuring frequency

Results:
- There is no relationship between the number of years of experience as a firefighter and occupational participation.
- There is no relationship between the type of job assignment and occupational participation.
- There is no relationship between the number of years of experience as a firefighter and changes in routine participation.
- There is a relationship between the number of years as a firefighter and participation in varied occupations, routine changes, and role identification. (Figure 1)
- There is a relationship between marital status and participation in varied occupations, routine changes, and role identification. (Figure 2)

Discussion:
- After 3-6 years, work-related trauma significantly affects functional participation.
- There is a decline in functional participation from 11-14 years up to 19-22 years when the firefighters retire.
- Single firefighters had significantly better functional outcomes than those in a relationship and/or divorced.
- Married firefighters had significantly better functional outcomes than those in a relationship but not married.

Future Recommendations:
- Different ranks and stress
- Trauma processing with rescue to engine switch
- Effects of children with work stress
- Better look at nuanced marital statuses
- Longitudinal study after a critical incident
- Qualitative or mixed methods study

PROGRAM

Design:
- 30-minute workshop presentation
- Guided self-reflection
- Education on functional coping mechanisms for work-related trauma

Outcomes:
- Overall, results showed that participants found the workshop content and delivery interesting, useful, and informative.
- Most found the mental health statistics shocking and eye-opening.

Future Recommendations:
- Implementation at every level (cadets, recruits, probationary firefighters, active firefighters, administration, soon-to-be retirees, etc.)
- Similar program for firefighter spouses and partners
- Advocacy for administration and local council members to improve policies and mental health resources

REFERENCES

Acknowledgements: Special thanks to Vincent Van Hasselt, Ph.D.; Imani Gibbs, M.S.; and the Davie Fire Rescue Department

WORKSHOP

Figure 1

Figure 2