

# Prevalence in the Line of Duty: Career vs. Volunteer First Responders

Boston Shipley, Shawn Crawford, Spencer Mathews & Daniel Devoe

## Background

First responders (FRs) face risks that elevate their likelihood of developing psychological disorders. Due to their frequent exposure to trauma, such as death and severe injuries, FRs typically have poorer mental health outcomes compared to the general population (Jones, 2017). However, the differences between career and volunteer FRs remain unclear (Stanley et al., 2017). This is the first systematic review and meta-analysis that aims to determine whether volunteer firefighters (FF), emergency medical services (EMS) and search and rescue (SAR) experience higher rates of psychological disorders than career FF, EMS and SAR.

## Methods

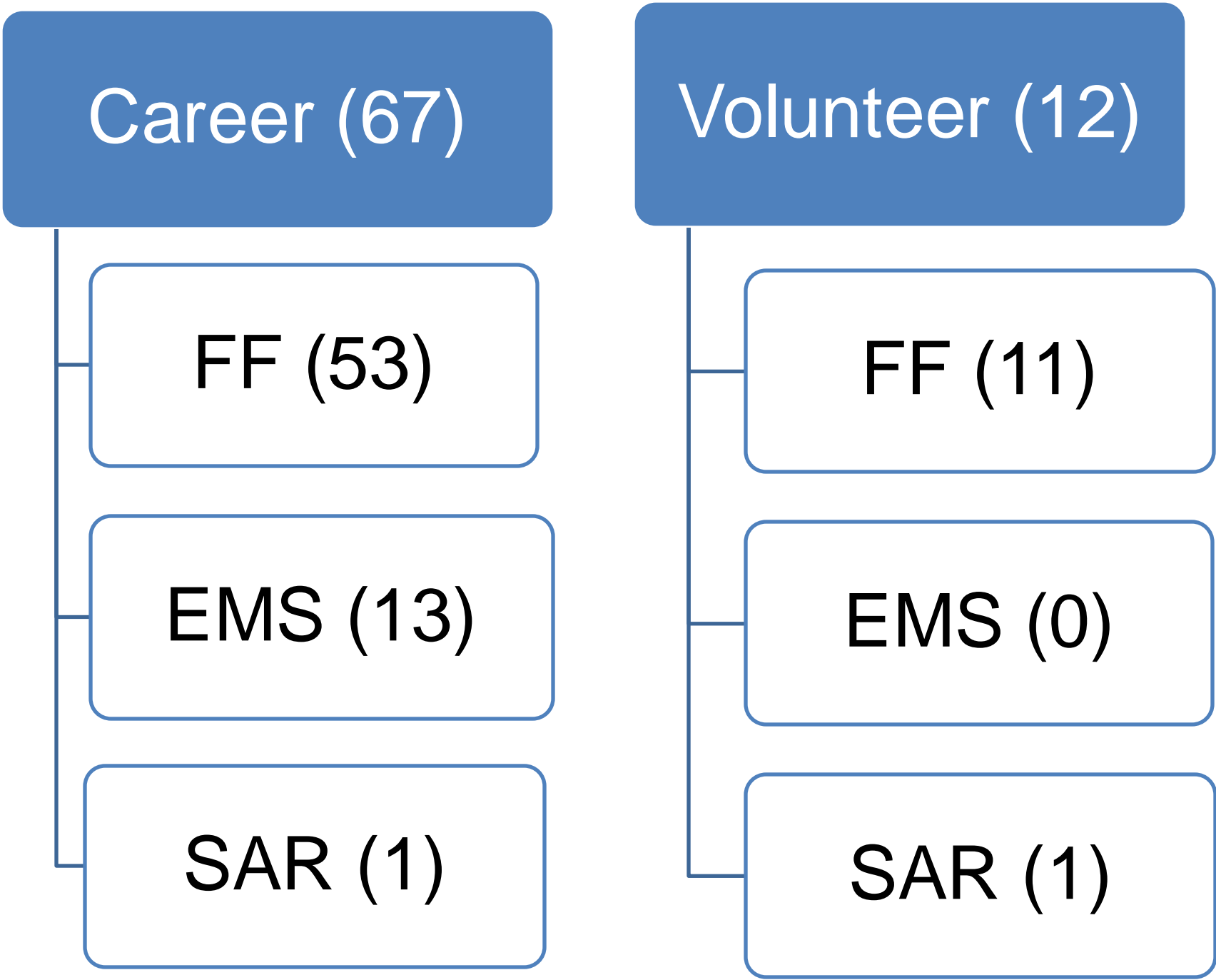
### Inclusion Criteria

- ✓ Professional and volunteer FRs of interest (firefighter, emergency medical services and search and rescue)
- ✓ Studies that report prevalence rates of diagnosed and subclinical Depressive Disorder, Anxiety Disorders, Trauma & Stressor-Related Disorders, Suicide, and Addictions
- ✓ Articles written in any language
- ✓ Articles from any geographical location

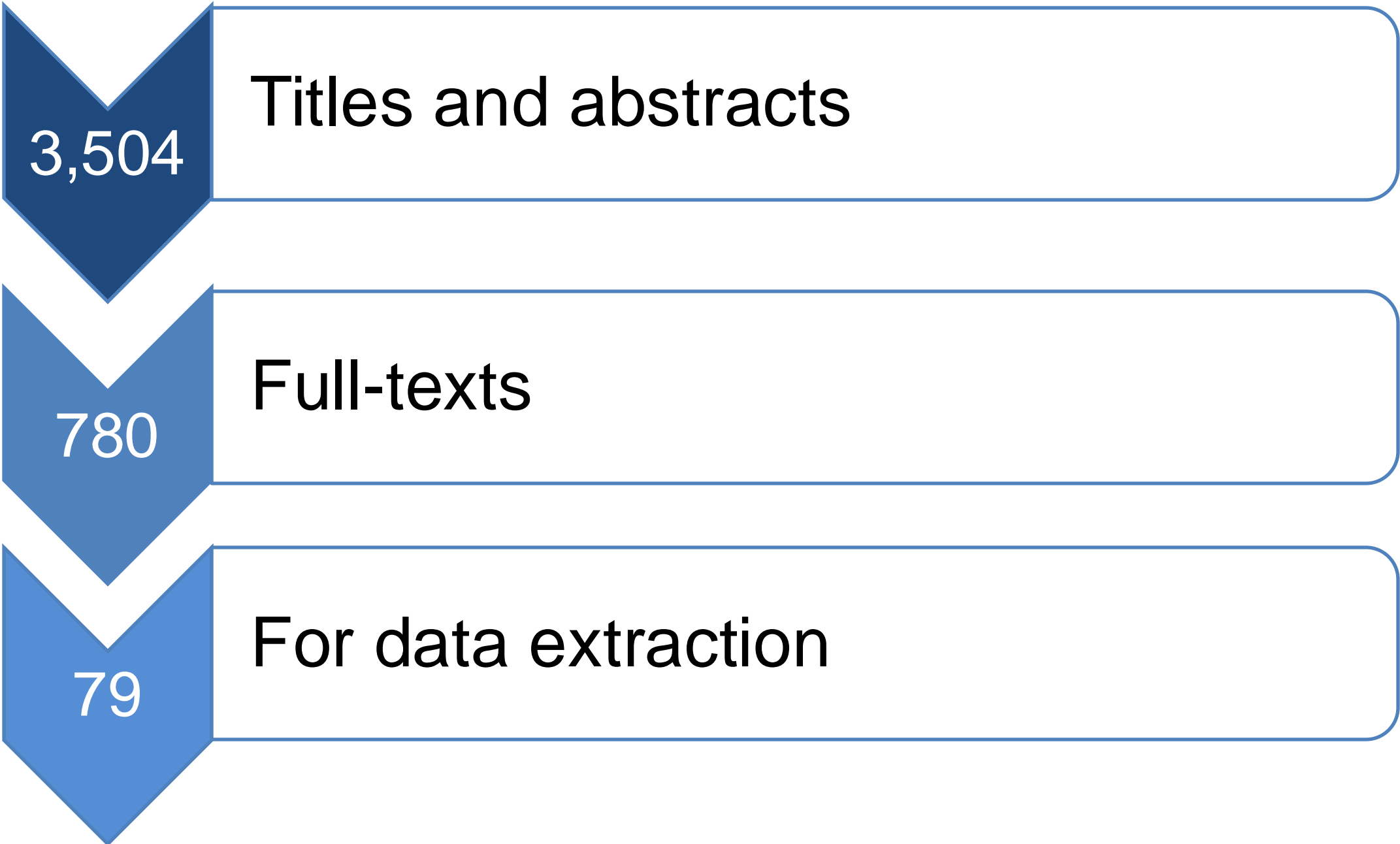
### Exclusion Criteria

- ✗ Unaffiliated volunteers and civilians
- ✗ Unrelated FRs (police, military, doctors, and surgeons)
- ✗ FRs who are current students or have retired

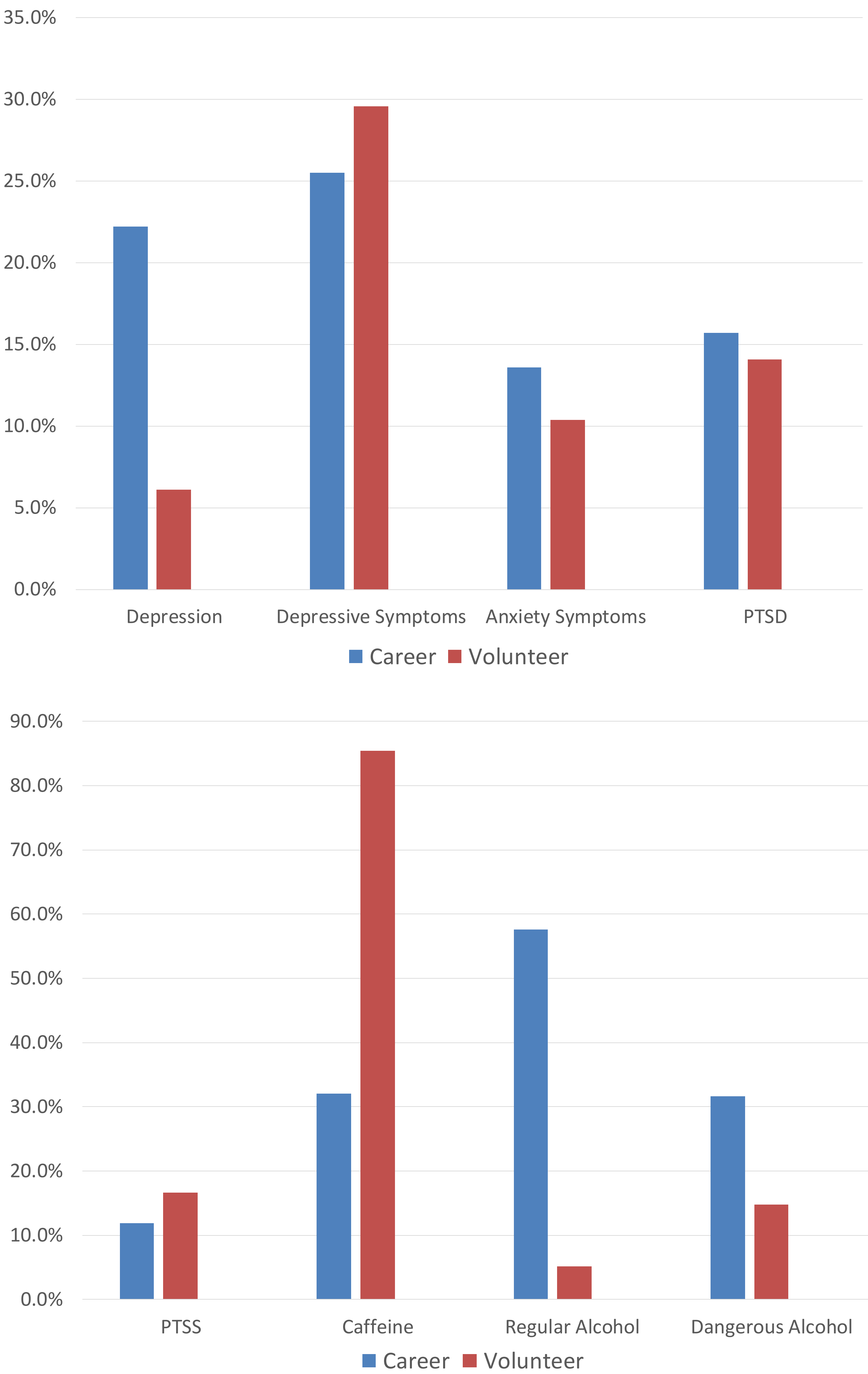
## Results



## Article Type



## Prevalence Rates



## Discussion

FRs experience higher rates of psychological disorders compared to the general population.

Volunteer FRs demonstrated higher prevalence rates of PTSS, depressive symptoms and caffeine use.

Career FRs demonstrated higher rates of depression, anxiety symptoms, PTSD, and regular and dangerous alcohol use.

No volunteer studies reported anxiety, suicide ideation or gambling.

**Implications:** Volunteers comprise a large portion of FRs, with up to 70% of firefighters in Western countries being volunteers (Canadian Association of Fire Chiefs). Mental health efforts need to focus on FRs and volunteers specifically.

**Limitations:** Few articles on volunteers, emergency medical services and search and rescue.

**Future directions:** Future FR research should compare prevalence rates between FR type and employment status (career vs volunteer).

## References

Canadian Association of Fire Chiefs. (2022). *Great Canadian Fire Census 2022- Results*. <https://cafc.ca/page/2022Censusresults>

Jones, S. (2017). Describing the mental health profile of first responders: A systematic review. *Journal of the American Psychiatric Nurses Association*, 23(3), 200-214.

Stanley, I., Boffa, J., Hom, M., Kimbrel, N., & Joiner, T. (2017). Differences in psychiatric symptoms and barriers to mental health care between volunteer and career firefighters. *Psychiatry Research*, 247(1), 236–242.