

# There is a positive relationship between psychopathic personality traits and heroism: firefighters scored significantly higher in psychopathic traits than the general population.



## The Relationship Between Psychopathic Personality Traits and Heroism in a Sample of Firefighters Jason Mussellwhite & Dr John Lawson

### Background & Aims

Psychopathy is no longer believed to be a unitary entity, a global condition with a discrete underlying cause. Evidence suggests that it is a configuration of several distinguishable, but intersecting trait dimensions (Levenson, Kiehl, & Fitzpatrick, 1995), found in the general population (Babiak, 1995).

Little is known about the adaptive behavioural manifestations of psychopathic traits. Traditionally psychopathy has been viewed as a dark and destructive aspect of 'being', but new research has provided empirical evidence for a 'brighter' side to the construct (Lilienfeld, Watts, & Smith, 2015).

Evidence suggests that individuals who are employed in high risk occupations and perform heroic acts have very different personality traits to the average person (Salters-Pedneault, Reuf, & Orr, 2010). Certain professions, particularly those that involve risk taking, may not only attract individuals with a high level of certain psychopathic traits, but they may in fact be prerequisites to success in these roles.

**Research aim:** Adaptive prosocial psychopathic personality traits have been neglected in the research, this study aims to fill this void in some part by examining the association between psychopathic personality traits and heroism

"the hero and the psychopath may be twigs on the same genetic branch" (Lykken, 1996)

### Method

**Participants:** Experiment-firefighter group = 231: General population-control group = 181

**Measures:** The psychopathy scale of the Dark Triad Index (DTI-P) (DTI; Lawson, Byrom and Hyland, in prep). The DTI-P consists of four components; callousness, dehumanisation, social potency and disinhibition. The Woodard Pury Courage Scale (WPCS-23; Woodard & Pury, 2007) was used to assess courage (willingness to act) and fear.

**Research Design:** To measure and assess the relationship between psychopathic personality traits and heroism, an independent measures design was used. Psychopathy items were measured as dependant variables (DV); this included a global psychopathy score and the four sub-scale scores. Similarly, the 'willingness to act' and fear scales were measured as DVs. Firefighters (Experiment) = IV-1 and the control group (general population) = IV-2. The other IV measured was gender.

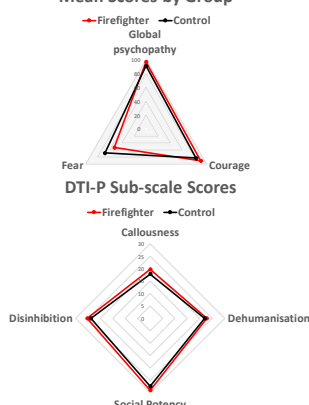
### Results

- Firefighters scored significantly higher on global psychopathy than the control sample, they also scored higher on all psychopathy sub-categories. Additionally, the courage scores were higher in the firefighter sample and they recorded lower mean scores on fear. Male participants scored higher in psychopathic traits than female participants.
- DTI-P total scores correlated positively and significantly with the courage scores. Courage was also positively correlated with social potency and disinhibition, with social potency being the most dominant variable. All DTI-P variables were negatively and significantly correlated with fear.
- The multivariate analysis shows a significant effect of group on the dependant variables; DTI-P sub-scales, courage and fear [ $F(18,1092) = 9.48, p < .001$ ; Wilk's  $\lambda = .66$ ; partial  $\eta^2 = .13$ ]. Univariate analysis found that group had a significant effect on all scales with the exception of disinhibition. A Sheffe post hoc test identified significant differences between male firefighters and the control group, female firefighters scored significantly higher than all other groups on disinhibition and courage.

DTI-P and WPCS-23 mean and standard deviation scores by group and gender

Variable	Firefighter		Control	
	Male	Female	Male	Female
Psychopathy	97.91	91.62	96.68	89.15
Callousness	20.41	16.57	19.23	17.44
Dehumanisation	22.93	21.93	23.28	21.51
Social Potency	29.2	27.71	29.23	26.71
Disinhibition	25.36	25.4	24.96	23.5
Courage	90.3	91.48	87.38	81
Fear	52	56.5	59.9	71.03

Psychopathy, Courage and Fear - Mean Scores by Group



### Conclusion

Psychopathic personality traits are found to be higher in individuals that are required to carry out acts of heroism. Firefighters scored higher on psychopathic traits, they were more willing to act (courage) in a difficult or crisis situation, and experienced lower levels of fear during these situations. Social potency and disinhibition were found to be the two most prominent traits which correlated with courage, and higher levels of fear had a negative effect on someone's willingness to act. It was found that males scored significantly higher in psychopathic traits than their female counterparts with disinhibition being the only exception.

These findings support previous research by providing evidence for the existence of a positive association between psychopathic personality traits and heroism.

### Future Research – Next Steps

- The researcher is continuing this avenue of study via a PhD programme at Oxford Brookes.
- In the right situation the Dark Triad traits can evoke heroic behaviours and/or daring leadership.
- This research will address the adaptive pro-social behaviours of the Dark Triad, with the primary aim of identifying the DT rescuer personality profile across different emergency services/high risk occupation populations



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