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Research Paper

Relationship between the big five personality traits and PTSD among French police officers

A. Madamet [a,b], C. Potard [c,d], I. Huart [a,b], W. El-Hage [d], R. Courtois [a,d,*]

[a] Département de psychologie, EA 2114 psychologie des âges de la vie, université François-Rabelais-de-Tours, 3, rue des Tanneurs,
BP 4103, 37041 Tours cedex 1, France
[b] Centre régional de formation de la police nationale, 37540 Saint-Cyr-sur-Loire, France
[c] Département de psychologie, EA 4638 laboratoire de psychologie des Pays-de-la-Loire, université d'Angers, 49045 Angers cedex 01, France
[d] Clinique psychiatrique universitaire, CHRU de Tours, 37044 Tours cedex 09, France

A R T I C L E   I N F O

A B S T R A C T

Introduction. – Post-traumatic stress disorder (PTSD) is rare among police officers, but the symptoms of PTSD are not. Personality traits can be a contributing factor of stress disorders. Based on the big five personality traits, three personality profiles can be identified: resilient, overcontrolled and undercontrolled. Resilient people are characterized by high emotional stability (low neuroticism), high social skills and self-confidence. Overcontrollers have higher scores on neuroticism and they tend to internalize their negative emotions. Undercontrollers are characterized by low conscientiousness (impulsivity), a tendency toward social withdrawal and low self-esteem.
Objective. – The aim of this study was to examine the role of personality traits and profiles in the emergence of PTSD symptoms among French police officers.
Method. – Participants were French national police officers ($n = 100$, $M = 32.9$ years, $SD = 9.8$, 19–57) who completed the Posttraumatic Stress Disorder Checklist Scale (PCLS) and the Big Five Inventory (BFI).
Results. – Results revealed the three expected personality profiles: resilients ($n = 31$), overcontrollers ($n = 43$) and undercontrollers ($n = 19$). The resilients presented with the fewest PTSD symptoms and the undercontrollers with the most (particularly reexperiencing). The latter also scored the highest on neuroticism and the lowest on extraversion and agreeableness. Police officers with an undercontrolled profile were also the oldest or those who had served the longest in the police force. Neuroticism and length of service were the two predictors of PTSD symptoms for reexperiencing and avoidance.
Conclusion. – This study demonstrates the contribution of each personality trait and length of service to PTSD symptoms in French police officers.

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R É S U M É

Introduction. – Le trouble de stress post-traumatique (TSPT) est rare parmi les policiers, mais les symptômes ne le sont pas. Les traits de personnalité peuvent être un facteur médiateur des troubles liés au stress. Ils permettent habituellement d'identifier trois profils de personnalité : les « résilients » caractérisés par une forte stabilité émotionnelle, des compétences sociales et une confiance en soi élevées ; les « surcontrôlés » qui ont des scores élevés de névrosisme et une tendance à internaliser leurs émotions négatives et des « sous-contrôlés » avec un faible caractère consciencieux (impulsivité), une tendance à l'isolement social et une faible estime de soi.
Objectif. – L'objectif de cette étude était d'examiner le rôle de la personnalité dans l'apparition de symptômes du TSPT chez les policiers français.

* Corresponding author. Département de psychologie, EA 2114 psychologie des âges de la vie, université François-Rabelais-de-Tours, 3, rue des Tanneurs, BP 4103, 37041 Tours cedex 1, France.
E-mail addresses: catherine.potard@univ-angers.fr (C. Potard), isabelle.huart@univ-tours.fr (I. Huart), wissam.elhage@univ-tours.fr (W. El-Hage), robert.courtois@univ-tours.fr (R. Courtois).

Méthode. – Les participants étaient des policiers français (*n* = 100, *M* = 32,9 ans, *ET* = 9,8, 19–57) qui ont complété l'échelle de l'état de stress post-traumatique (PCLS) et l'inventaire des cinq grands facteurs de personnalité (BFI).
Résultats. – Les résultats ont retrouvé les trois profils de personnalité attendus : « résilients » (*n* = 31), « surcontrôlés » (*n* = 43) et « sous-contrôlés » (*n* = 19). Les premiers présentaient le moins de symptômes de TSPT et les derniers le plus (en particulier la répétition ou intrusion). Ils avaient également les scores les plus élevés de névrosisme et les plus bas d'extraversion et d'agréabilité. Ces policiers étaient aussi les plus âgés ou ceux qui avaient servi le plus longtemps dans la police. Le névrosisme et la durée du service étaient les deux facteurs prédictifs des symptômes de TSPT pour la répétition et l'évitement.
Conclusion. – Cette étude met en évidence la contribution de chaque trait de personnalité et durée de service pour les symptômes de TSPT chez les policiers français.

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1. Introduction

Several studies have shown that police work is particularly stressful (e.g. Aytac, 2015; Lau, Hem, Berg, Ekeberg, & Torgersen, 2006). Stress is related both to critical events, which are rare and to everyday working conditions and the way that police officers cope with the pressures they face. Exposure to critical events (sexual trauma and combat trauma) is more predictive of posttraumatic stress disorder (PTSD) than other trauma types (Habersaat, Geiger, Abdellaoui, & Wolf, 2015; Jakob, Lamp, Rauch, Smith, & Buchholz, 2017). About 4.5% to 9% of police officers may suffer from full PTSD (Berger et al., 2012; Maia et al., 2007), but nearly 15–16% suffer from partial PTSD (Maia et al., 2007; Marmar et al., 2006). Work stressors and managing the job can cause other mood disorders in police officers, such as burnout (Kula, 2017; Lau et al., 2006), which are also underpinned by individual vulnerability factors (El Hage, Powell, & Surguladze, 2009). Understanding the protective factors against developing PTSD symptoms or other stress-related disorders is a major public health priority, and yet, there have been few studies on protective or aggravating factors (Ellrich & Baier, 2015).

The big five personality model (Five-Factor Model or FFM) is the most consensual approach to personality assessment. It proposes five main dimensions of personality, broadly defined as:

- extraversion vs introversion;
- agreeableness vs antagonism;
- conscientiousness or control vs impulsivity;
- neuroticism vs emotional stability;
- openness to new experience/intellect vs closed-mindedness (John, Naumann, & Soto, 2008; John & Srivastava, 1999).

Extraverted people are outgoing, sociable with positive emotionality, talkative, energetic, assertive and excitement seeking. Agreeable individuals promote prosocial and communal orientation toward others; they are cooperative, friendly, considerate or empathic, generous, trustful and kind. Conscientious individuals facilitate goal-directed and planned behavior, they are work-oriented, responsible, attentive, careful, dependable, persistent, orderly and impulse controlled. Neuroticism is associated with anxiety and instability. Neurotic individuals are moody, angry, easily frustrated, lacking in confidence, insecure in relationships and sometimes anti-social. Individuals high in openness are imaginative, curious, creative, complex and subtle, with artistic values, unusual ideas and varied experiences. They are also quick to learn, clever, insightful and independent-minded (Caspi, Roberts, & Shiner, 2005; John et al., 2008).

To understand and prevent mood disorders among police officers, it is important to gain a deeper insight into personality traits that may be linked to PTSD symptoms. Police officers probably share common personality traits (Lau et al., 2006; Lorr & Strack, 1994), although some authors doubt the idea of a single profile (Wagner, 2005). The personality profile of police officers is likely to be characterized by low scores on neuroticism (i.e., emotionally secure), high scores on extraversion (i.e., more assertive and self-confident), high scores on conscientiousness (i.e., with a strong pattern of self-discipline or sense of control) and high scores on agreeableness (i.e., friendly, sociable and gregarious) (e.g. Lau et al., 2006; Lorr & Strack, 1994; Wearing & Hart, 1996). This suggests the existence of a "rescue personality" of police officers and firefighters (Mitchell & Bray, 1990). Similar results have been found with other personality assessment tools (e.g. Eysenck: highly extraverted, venturesome and impulsive, but conforming, Gudjonsson & Adlam, 1983).

Obviously, personality factors could represent a mediating factor between environmental stressors and mental health. For instance, several studies highlighted the role of neuroticism (low emotional stability) in perceived stress levels and stress reactivity (e.g. Garbarino, Chiorri, & Magnavita, 2014; Heinrichs et al., 2005; Jakšić, Brajković, Ivezić, Topić, & Jakovljević, 2012; Vollrath, 2001; Yuan et al., 2011). Neuroticism fosters the subjective experience of negative emotions of events. By contrast, extraversion and agreeableness are both related to more positive feelings, and better adaptation to stressful work (e.g. Garbarino et al., 2014; Jakšić et al., 2012; Skomorovsky, 2013).

Three personality profiles were described by Block (1971) using the Q-Sort Method for personality assessment:

- resilients;
- overcontrollers;
- undercontrollers.

These profiles were consistent and stable over time. Various subsequent studies on children or adults found similar results. Subsequently, they were also found using the big five personality traits (e.g. Asendorpf, Borkenau, Ostendorf, & Van Aken, 2001; Asendorpf & van Aken, 1999; Boehm, Asendorpf, & Avia, 2002; Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996). Across studies, resilients obtain the most favorable descriptions on all five scales (high emotional stability and high scores in the other four personality traits). They demonstrate high social skills and self-confidence. They do not have mental disorders and they succeed academically and socially. Overcontrollers score higher on neuroticism than resilients, associated with high agreeableness and low extraversion. They share some of the features of resilients, but tend to internalize their problems and negative emotions. Undercontrollers are characterized by low conscientiousness (impulsivity) and low agreeableness, with a tendency toward social withdrawal and low self-esteem. They tend to fail academically and socially and have more emotional and behavioral problems.

Personality traits can thus constitute protective factors against stress and mood disorders, or, on the contrary, they can increase