



Contents lists available at ScienceDirect

Aggression and Violent Behavior

journal homepage: www.elsevier.com/locate/aggiobeh

Facial affect processing in incarcerated violent males: A systematic review

Harriet Chapman^{a,*}, Steven M. Gillespie^b, Ian J. Mitchell^a^a Centre for Forensic and Criminological Psychology, School of Psychology, University of Birmingham, Birmingham, UK^b Department of Psychological Sciences, Institute of Psychology, Health and Society, University of Liverpool, UK

ARTICLE INFO

Keywords:

Facial affect processing
Emotion
Expression
Violent
Offenders

ABSTRACT

Previous reviews exploring facial affect processing among forensic samples have focused on the presence of psychopathy and/or have not distinguished on the basis of offence type. In order to develop understandings about etiological processes implicated in different types of antisocial behavior, the principle aim of this review was to systematically explore facial affect processing in incarcerated violent offenders, relative to other non-violent offenders, sexual offenders, and non-offenders. Following a systematic search of electronic databases and subsequent manual search, eight studies were assessed as meeting inclusion criteria, of which seven obtained a quality score deemed acceptable for review. These studies examined recognition accuracy, sensitivity and response bias for seven emotion categories (including neutral) in incarcerated male offenders with a history of violence. Findings supported the presence of generally impaired facial affect processing among violent offenders, including deficits in fear, anger, and disgust. Overall the findings of the review did not support the presence of a hostile attribution bias among violent offenders. The review also highlights differences in sample composition, stimuli, and study designs in emotion recognition research. Recommendations are made for future work on facial affect processing in clinically relevant groups.

1. Introduction

Evidence suggests that there are six basic emotions that are universally recognized across cultures: anger, disgust, fear, happiness, sadness and surprise (Ekman, 1972, 1992a, 1992b, 1993; Ekman & Friesen, 1971; Elfenbein & Ambady, 2002). According to Keltner (2003) emotional facial expressions play a pivotal role in the formation and regulation of relationships; they provide information about the emotions and motives of the sender, they provoke a response in the receiver, and they provide motivation for desired social behavior (Keltner, 2003). It is perhaps not surprising, then, that breakdowns in social and emotional responding occur when individuals are impaired in recognising others' facial displays of emotion (Gillespie, Rotshtein, Satherley, Beech, & Mitchell, 2015). Indeed, impairments in decoding socio-emotional information, including facial affect, have been observed in a number of clinical conditions including anxiety disorder (Demenescu, Kortekaas, den Boer, & Aleman, 2010; Easter et al., 2005), attention-deficit hyperactivity disorder (Rapport, Friedman, Tzelepis, & Van Voorhis, 2002; Singh et al., 1998), autism (Gross, 2004), depression (Demenescu et al., 2010; Surguladze et al., 2004) and schizophrenia (Kohler & Brennan, 2004; Trémeau, 2006).

Socio-cognitive impairments have also been observed in antisocial populations, who exhibit difficulties responding to social rules

(Gillespie, Rotshtein, Satherley et al., 2015; Loney, Frick, Clements, Ellis, & Kerlin, 2003). Blair (2001) postulated that aggressive behavior in antisocial populations may be related to problems in identifying and responding to social cues, particularly distress cues, such as fear and sadness. In particular, it is believed that accurate decoding of distress cues is required for evoking affective responses in the decoder – such as empathy and remorse – that serve to mitigate the likelihood of aggression against the sender (Blair, 2001; Marsh & Ambady, 2007; Marsh & Blair, 2008). Indeed, in their meta-analysis exploring facial affect recognition in antisocial populations, Marsh and Blair (2008) found that individuals who show instrumental aggression have specific deficits pertaining to the recognition of fearful, sad, and surprised expressions. Moreover, the impairment in fear recognition was significantly worse than impairments for sad and surprised expressions. However, it is important to note that although impairments in recognising others fear have been reported in relation to instrumentally aggressive populations, these deficits are not necessarily indicative of deficits in the subjective experience of fear (Hoppenbrouwers, Bulten, & Brazil, 2016).

Antisocial behavior, broadly defined, covers all behaviors that violate social norms and the rights of others (Burt, Mikolajewski, & Larson, 2009; Schönenberg, Mayer, Christian, Louis, & Jusyte, 2015). It includes aggressive, criminal, and externalising behaviors, and abusive conduct (Marsh & Blair, 2008), and incorporates aggressive and forceful

* Corresponding author at: School of Psychology, University of Birmingham, Birmingham, UK.
E-mail address: hxc388@bham.ac.uk (H. Chapman).

<https://doi.org/10.1016/j.avb.2017.10.006>

Received 12 December 2016; Received in revised form 10 October 2017; Accepted 12 October 2017
1359-1789/ © 2017 Published by Elsevier Ltd.

contact with a victim (i.e., violent behavior), as well as behaviors that do not involve such contact. Given the breadth of this definition, it is perhaps unsurprising that the concept of antisociality appears to consist of at least two distinct and “only modestly correlated” dimensions: an aggressive subtype and a rule-breaking subtype (Burt, 2009, 2012; Burt & Neiderhiser, 2009; Tackett, Krueger, Sawyer, & Graetz, 2003). It is therefore reasonable to propose that there may be fundamentally different cognitive mechanisms mediating these different subtypes of antisocial behavior (Gillespie, Rotshtein, Satherley et al., 2015). Indeed, the relative influence of different etiological factors differs depending on the subtype of antisocial behavior (Leist & Dadds, 2009), and different etiological factors have been found to be implicated in violent and non-violent behavior. For example, risk factors for violence include the presence of violent attitudes and affective instability, while these factors are of lesser importance in predicting non-violent offences. With this in mind, more recent research has explored facial affect recognition deficits associated with specific types of antisocial behavior. This research has provided insight into whether, and indeed how, patterns of socio-cognitive impairment differ between violent and non-violent delinquency.

A vast amount of this research has utilized prison samples, due to the accessibility of individuals demonstrating violent and non-violent antisocial behavior within incarcerated populations. However, methodological variation makes comparisons across studies difficult. For example, some studies have examined violent offenders relative to non-violent offenders and others relative to non-offenders. For studies that make use of the latter design, it is unclear whether the observed impairments are specific to violent behavior or are associated with rule-breaking behavior more generally. Moreover, there is a lack of consistency in methodological design with regard to the inclusion of sexual offenders, with some studies including sexual offenders in their sample of violent offenders, some studying sexual offenders as a separate sample, and others altogether excluding sexual offenders from the sample. Given that a specific set of risk factors is implicated in sexual offending (such as self-regulation difficulties, sexual preoccupation, and deviant sexual preferences; Hanson & Morton-Bourgon, 2005; Mann, Hanson, & Thornton, 2010), it is reasonable to propose that differences could extend to socio-cognitive factors, and thus the inclusion and exclusion of sexual offenders may make comparisons across studies problematic. Indeed, research comparing samples of sexual offenders to other violent or non-violent offenders has indicated differences in facial affect recognition between these different types of offenders (Gillespie, Rotshtein, Satherley et al., 2015; Gery, Miljkovitch, Berthoz, & Soussignan, 2009; Hudson et al., 1993).

1.1. Current review

While previous reviews and meta-analyses have explored deficits in emotion recognition in antisocial populations and in relation to psychopathic tendencies (e.g., Dawel, O’Kearney, McKone, & Palermo, 2012; Marsh & Blair, 2008; Wilson, Juodis, & Porter, 2011), including samples of offenders, such reviews have not analysed results as a function of offending status and/or have not distinguished on the basis of the type of offence. Collapsing across violent and non-violent offenders precludes learning about differences in etiological processes underlying these subtypes of antisocial behavior. A greater understanding of how patterns of socio-cognitive impairment differ among subtypes of offenders could help to inform the development of intervention modules that are tailored to the specific needs of different types of offender. Indeed, if the behavioral dimensions of rule-breaking and violent behavior cannot be meaningfully distinguished in their interpersonal correlates, then delivering the same intervention protocol to individuals would offer both financial and resource benefits to treatment providers.

The present review attempts to facilitate understanding by assessing the literature on facial affect processing in violent offenders as

compared to populations of non-violent offenders and/or non-offenders. The review also explores how the study of sexual offenders has affected study outcomes.

1.2. Existing reviews

A scoping exercise to identify the likely volume of studies to be reviewed and any existing reviews was carried out in July 2015. The search was conducted using the Cochrane Library, EMBASE, MEDLINE, PsycINFO and Web of Knowledge. Over 40 reviews of facial emotion recognition were identified. The majority of these papers reviewed emotion recognition in neuropsychiatric conditions ($n = 33$); four papers reviewed abilities in individuals with cognitive impairment (McCade, Savage, & Naismith, 2012; Moore, 1990; Rojahn, Lederer, & Tassé, 1995; Zaja & Rojahn, 2008); two reviewed abilities in Borderline Personality Disorder (BPD) (Domes, Schulze, & Herpertz, 2009; Mitchell, Dickens, & Picchioni, 2014); one reviewed alcoholic patients (Fortunata & de Lima Osório, 2014); and one reviewed abilities in maltreated children (da Silva Ferreira, Crippa, & de Lima Osório, 2014). Of particular relevance to the current review were five papers that reviewed facial affect processing in antisocial populations, and included samples of offenders. Two of these reviews, of which one was a meta-analysis, looked at facial affect processing in antisocial and aggressive populations more generally (Marsh & Blair, 2008; Mellentin, Dervisevic, Stenager, Pilegaard, & Kirk, 2015), while three reviews, of which two were meta-analyses, looked specifically at psychopathic populations (Brook, Brieman, & Kosson, 2013; Dawel et al., 2012; Wilson et al., 2011).

1.2.1. Reviews exploring facial affect processing in antisocial populations

The meta-analysis of Marsh and Blair (2008) looked at children and adults with antisocial traits or behaviors and included participants displaying high levels of violence and/or aggression, of which an unreported proportion was prisoners. They examined the evidence that individuals with antisocial behavior showed deficits in recognising each of the six basic expressions, whether the impairment is greatest for fear, and whether fear deficits are attributable to task difficulty. The authors carried out a comprehensive search to identify relevant studies ($n = 20$). Methods included a search of PsycINFO and PubMed, and a search of reference lists, citation reports, and unpublished manuscripts. The authors concluded that antisocial populations exhibited significant deficits in recognising fearful, sad, and surprised expressions, and that deficits in recognising fear were significantly greater than other impairments. Moreover, they found that this impairment was not attributable to task difficulty. It remains to be investigated to what extent their conclusions generalize to populations of violent prisoners specifically, who arguably display more severe aggression and exhibit greater antisocial pathology than those continuing to reside in the community (Pascual-Leone, Bierman, Arnold, & Stasiak, 2011). Furthermore, Marsh and Blair (2008) analysed samples of children and adults together. However, recent research suggests that the facial emotion recognition abilities of children differ to those of adults (Leime, Rique Neto, Alves, & Torro-Alves, 2013), making it difficult to draw conclusions about the relationship of antisocial behavior with emotion recognition in exclusively adult samples. Additionally, Marsh and Blair’s meta-analysis, published in 2008, only included studies up to 2005, and many studies have been carried out in the field since then.

Mellentin et al. (2015) carried out a systematic review of 15 studies to explore whether anger-prone and aggressive individuals show an anger bias when perceiving facial expressions in neuropsychological paradigms. Search strategy included the use of EMBASE, PubMed, PsycINFO, and Web of Science, as well as a search of references. The review included community, forensic and clinical samples of children and adults, and the authors found that anger-prone and aggressive individuals showed a bias toward perceiving anger and hostility in facial expressions.

Download English Version:

<https://daneshyari.com/en/article/6550112>

Download Persian Version:

<https://daneshyari.com/article/6550112>

[Daneshyari.com](https://daneshyari.com)