

Contents lists available at ScienceDirect

Research in Autism Spectrum Disorders

journal homepage: http://ees.elsevier.com/RASD/default.asp



Are emotion recognition abilities related to everyday social functioning in ASD? A meta-analysis



Dominic A. Trevisan*, Elina Birmingham

Faculty of Education, Simon Fraser University, 8888 University Dr., Burnaby, BC V5A 1S6, Canada

ARTICLE INFO

Article history: Received 25 February 2016 Received in revised form 16 August 2016 Accepted 25 August 2016 Number of reviews 3 Available online xxx

Keywords: Autism Emotion recognition Meta-analysis Social functioning

ABSTRACT

Background: Most developmental theories of autism spectrum disorders (ASD) emphasize a link between the ability to infer others' emotional states with their everyday social functioning. However, rarely has this association been empirically examined in this population.

Methods: We conducted a meta-analysis to quantitatively summarize correlations between performance on facial emotion recognition tasks and theoretically related variables broadly related to social functioning and other cognitive abilities.

Results: Sixty-two correlation coefficients from 27 separate articles met our inclusion criteria. Correlations between the ability to recognize facial expressions (FER) and each category of variables were moderate but significant in the expected direction. FER was positively correlated with age, nonverbal and verbal intelligence, Theory of Mind, and adaptive functioning, and negatively correlated with alexithymia and higher ASD symptoms.

Conclusions: The findings of this meta-analysis indicate that FER abilities represent an important social cognitive ability given its relation to real-world social behavior and other characteristics and cognitive abilities. However, the striking lack of studies in this area calls for more research to gain a clearer understanding of the developmental significance of FER, especially in relation to the broader social impairment characteristic of ASD.

Crown Copyright © 2016 Published by Elsevier Ltd. All rights reserved.

Contents

Introduction					
1.1.	Overview	25			
1.2.	Autism theories	26			
1.3.	Empirical research	26			
	1.3.1. Everyday social functioning	26			
	1.3.2. Theoretically related variables				
	1.3.3. Matching Variables	27			
1.4.	Previous meta-analyses	27			
1.5.	The present study	27			
Methodology					
2.1.	Article retrieval	28			

E-mail addresses: dtrevisa@sfu.ca (D.A. Trevisan), ebirming@sfu.ca (E. Birmingham).

^{*} Corresponding author.

	2.2.	n criteria	28				
	2.3.	Publicat	ion bias and missing data	28			
2.4. Coding of articles			of articles	29			
	2.5.	Variable	categories	29			
		2.5.1.	Adaptive functioning	29			
		2.5.2.	ASD symptomology	30			
		2.5.3.	Theory of Mind	30			
		2.5.4.	Alexithymia	30			
		2.5.5.	Verbal intelligence	30			
		2.5.6.	Nonverbal intelligence	30			
		2.5.7.	Age	30			
	2.6.	Data an	alysis	30			
3.	Result	Results and discussion					
	3.1.	Effect si	zes and possible explanations	32			
		3.1.1.	What is the relationship between FER and adaptive functioning?	32			
		3.1.2.	What is the relationship between FER and ASD symptomology?				
		3.1.3.	What is the relationship between FER and Theory of Mind abilities?				
		3.1.4.	What is the relationship between FER and alexithymia?	33			
		3.1.5.	What is the relationship between FER and verbal intelligence?	33			
		3.1.6.	What is the relationship between FER and nonverbal intelligence?	34			
		3.1.7.	What is the relationship between FER and chronological age?	34			
	3.2.	Differen	nces in effect sizes among categories				
	3.3.	Method	variance	34			
	3.4.	General	discussion	34			
	3.5.	Clinical	implications	35			
	3.6.	•					
	3.7.	Method	ological considerations	36			
4.	Conclu	ısion		37			
	Ackno	wledgen	nents	37			
	Refere	nces ¹ .		37			

1. Introduction

1.1. Overview

"Human faces convey information about identity, lip movements, gaze direction, and emotion, and are the primary and most powerful source of information mediating emotional and linguistic communication as well as social interactions" (Gepner, Deruelle, & Grynfeltt, 2001, p. 37).

Autism spectrum disorder (ASD) is a complex neurodevelopmental disorder characterized in part by difficulty forming relationships, and deficits in verbal and nonverbal communication (APA, 2013). In the last three decades an abundance of experimental research has been published that compared the ability of participants with and without ASD to accurately identify the emotional states of others based on their facial expressions, body language and other contextual information. Although findings have been equivocal and dependent on a variety of variables including demographic factors, nature of the task demands, and how the dependent variables are measured (Harms, Martin, & Wallace, 2010), the majority of studies show that the ability to accurately recognize others' emotions is impaired in participants with ASD compared to neurotypical comparison groups (see Gaigg, 2012; Harms et al., 2010; Uljarevic & Hamilton, 2013 for reviews).

It has long been argued that the ability (or lack thereof) to recognize others' emotional states from their facial expressions has wide reaching influences on other areas of social functioning. It is thought that emotion recognition abilities may be a critical mechanism by which observers respond to others empathically and competently, and modify their own behavior adaptively based on the emotional signals of others (Izard et al., 2001). As Jones et al. (2011) described, "Basic emotion recognition is a fundamental building block of more sophisticated emotional and social understanding and establishing the degree of deficit in ASD is important for ascertaining at what level social-emotional understanding begins to break down for these individuals" (p. 275). Despite these purported links between emotion recognition and social functioning more broadly, surprisingly little research has explored which, and to what degree, other variables are continuously related to emotion recognition abilities in individuals with ASD. Instead, the primary motivation of the bulk of research in this area has been to uncover group differences between ASD and control groups, making it difficult to understand the real world impact of emotion recognition difficulties. The ability to decode others' emotional states from nonverbal information such as facial expressions is arguably an important social cognitive ability; yet, it is relatively unknown how this ability contributes to real world social functioning in ASD.

Download English Version:

https://daneshyari.com/en/article/4940940

Download Persian Version:

https://daneshyari.com/article/4940940

Daneshyari.com