Effects of intelligence level and place of residence on the ability of individuals with mental retardation to identify facial expressions

Orit Hetzroni*, Boaz Oren

Special Education, Faculty of Education, University of Haifa, Mount Carmel, Haifa 31905, Israel

Received 28 June 2001; received in revised form 24 June 2002; accepted 30 July 2002

Abstract

This study was designed to investigate the abilities of individuals with mental retardation to recognize and match emotional facial expressions from a series of photographs depicting various facial expressions. There were four groups of participants according to their place of residence (community or institution) and their intelligence level (mild or moderate). Each individual participated in two tasks: (1) recognizing a facial expression from an array of three pictures presented, and (2) matching a facial expression from one picture with a picture depicting a similar emotion from an array of three pictures. All information was presented to the participants in the native language, Hebrew. The six facial expressions used for the study included happiness, sadness, fear, anger, surprise, and disgust. The ability to recognize and match facial expressions was significantly higher for individuals with mild than moderate mental retardation. There was no significant difference for place of residence. Happiness was the easiest feeling to recognize and match for all groups. Fear and anger were the most difficult to recognize, while sadness and anger were most difficult to match.

© 2002 Elsevier Science Ltd. All rights reserved.

Keywords: facial expression; mental retardation; adaptive behavior

1. Introduction

The ability to recognize facial emotional expressions is a critical skill for understanding the messages conveyed to one another during communication.

*Corresponding author. Tel.: +972-9-7967104; fax: +972-9-7967371.

E-mail address: hetzroni@construct.haifa.ac.il (O. Hetzroni).
Distinguishing between various facial expressions and different emotions also appears to be an essential component of social functioning (Simon, Rosen, & Ponpipom, 1996). The ability to decode emotional expressions and interpersonal skills are key elements in the development of social adaptation and socio-emotional competence (Rojahn, Lederer, & Tasse, 1995). While adults with typical abilities are able to identify facial emotions such as happiness, sadness, anger, fear, surprise, and disgust with great accuracy across various cultures (e.g., Ekman & Oster, 1982), this ability has been shown to be impaired in adults with mental retardation (e.g., McAlpine, Kendall, & Singh, 1991; Simon et al., 1996).

Children with mental retardation perform well on tasks involving identification of facial expressions when compared to mental age-matched children (McAlpine et al., 1991). However, when older children and adolescents with mental retardation were compared to children with typical abilities, even when matched for age, they were not able to perform as well (Adams & Markham, 1991; Rojahn et al., 1995).

In a study examining age and IQ as factors influencing the ability of adults with mental retardation to identify facial expressions, results indicated that age correlated negatively with performance and the ability to identify expressions increased significantly when IQ was higher (Simon et al., 1996). Thus, IQ predicted the ability to choose pictorial representations of an emotion and the label that corresponded to various facial expressions (Simon et al., 1996).

The Ekman and Friesen (1976) facial emotion slides have been used in various studies investigating the ability of individuals with mental retardation to identify facial emotional expressions (e.g., McAlpine et al., 1991; Simon, Rosen, Grossman, & Pratowski, 1995; Simon et al., 1996). These slides have also been used in a study investigating the ability of individuals with mild and moderate mental retardation to recognize facial expressions (McAlpine, Singh, Kendall, & Ellis, 1992). The study involved the use of slides that depicted six sets of emotions: happiness, disgust, sadness, anger, fear, and surprise. No difference was found between the abilities of adults with mild and moderate mental retardation to recognize facial expressions. In an attempt to explain these results, the authors suggested that place of residence could be a cause for the lack of differences. The authors reported that while the individuals with mild mental retardation participating in the study lived in institutions, the individuals with moderate mental retardation lived in the community (McAlpine et al., 1992). Thus, the authors suggested that the type of residence possibly influenced the results.

Research examining the level of social skills of people in institutional and community-based settings has found that individuals with mental retardation living in the community demonstrate higher levels of social and adaptive behavior skills when compared to people living in institutions (e.g., Anderson, Lakin, Hill, & Chen, 1992; Heller, Factor, Hsieh, & Hahn, 1998; Hill, Rotegard, & Bruininks, 1984; Spreatt, Conroy, & Rice, 1998). The number of social interactions in institutions is fewer than in the community. This finding may influence experience and exposure to emotional facial expressions. In a longitudinal study investigating the effects of institutionalization on individuals who remained in the institutions, researchers found that adaptive behavior was not affected by intra-institutional
دریافت فوری متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات