Psychiatry Research 279 (2019) 378–379

Contents lists available at ScienceDirect

Psychiatry Research

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

Letter to the Editor

Emotion identification among people with serious mental illnesses: The role of specific emotions and sex

People with serious mental illness (SMI) experience difficulty identifying the emotions of other people when relying on facial expression which contributes to poor functional outcomes. Associations between this deficit and subjective outcomes such as quality of life are less consistent with one study suggesting that such deficits might protect people from accurately identifying facial expressions of fear and disgust resulting from stigma (Hasson-Ohayon et al., 2017).

To explore the hypothesis that defensively avoiding emotion recognition might play a role in social quality of life, we investigated the association between the accurate identification of specific emotions (positively and negatively valenced) and social quality of life (SQoL). We expected that by examining the identification of different emotions (positive and negative) we could learn whether a defensive process (i.e., avoiding a negative emotion by misidentifying it) is taking place. Given that presumably there is no defensive rationale for misidentifying positive emotions, a negative association between SQoL and emotion identification is expected to exist only with regard to negative emotions.

Interestingly, a study conducted among healthy people suggested that defensiveness in emotional information processing is associated with an individual's effort to move his/her attention away from emotional information, and that sex interacts with this process (Jansson et al., 2005). Notably, the differences between women with schizophrenia and men with schizophrenia have been shown to be emotion-specific, with women misinterpreting neutral faces as sad and men misinterpreting these same neutral faces as angry (Weiss et al., 2007), a finding that the authors discussed in terms of its relation to aggressive behavior among men in the aftermath of their attributing hostile emotions to a neutral facial expression (Weiss et al., 2007).

Based on the reviewed literature, it is reasonable to suggest that both factors – type of emotion and sex – play a role in emotion identification deficits among people with SMI. Accordingly, an interaction effect of type of emotion and sex would be expected.

The current study was part of a large-scale intervention study (Clinicaltrial.gov ID NCT02380885). The data presented in this paper are the baseline data that were collected between the years 2014 and 2018, prior to the intervention. Approval for the study was obtained from the ethics committee of the Department of Psychology at Bar-Ilan University, as well as from two psychiatric hospital committees. After receiving a detailed explanation of the study, all research participants provided written informed consent.

The current study included 172 participants whose ages ranged from 20–69 years (M = 40.08, SD = 11.06). These individuals had a case-record diagnosis of SMI and a psychiatric disability of at least 40% (determined by a medical committee, made up in part by a psychiatrist). 59% of the participants were men, 67% had never been married, and **77%** had completed at least a high school level of education. Their mean duration of illness was 15.76 years (SD = 9.91), and their mean number of previous hospitalizations was **2.38** (SD = 2.98). A significant difference in marital status was observed between men and women, $\chi^2(2) = 11.1$, $p < .01$. Among men there was a higher percentage of singles (78%) than among women (54%). No significant differences were found between men and women in terms of age, education, duration of illness, or number of previous hospitalizations. Participants completed the Wisconsin Social Quality of Life Scale (Becker et al., 1993) and the Facial Emotion Identification Task (FEIT; Kerr and Neale, 1993).

Results showed no statistically significant differences between men and women in any of the emotion identification scores. In addition, although the total score of emotion recognition, beyond different types of emotion, was negatively related to SQoL (as we showed in a previous study with a smaller sample from this project, Hasson-Ohayon et al., 2017), differences between sex were found. Among men, a negative association appeared between the ability to accurately identify anger and SQoL. Among women, a negative association appeared between the ability to accurately identify fear and SQoL. In addition to these a regression analyses showing that: 1) Among men, no significant correlation was found between accurately identifying fear and SQoL ($b = -0.11$, $p = .263$), whereas among women there was a significant negative correlation ($b = -0.28$, $p = .011$); 2) among men a significant negative correlation was found between accurately identifying surprise and SQoL ($b = -0.57$, $p = .01$), whereas among women there was a positive correlation, which was not significant ($b = 0.41$, $p = .132$); 3) among men a significant negative correlation was found between accurately identifying anger and SQoL ($b = -0.46$, $p < .001$), whereas among women no such correlation emerged ($b = -0.13$, $p = .367$).

Findings may suggest that the failure to accurately decipher negative emotions in other people's facial expressions may have a protective, or defensive, role. In addition, men and women differed with regard to their ability to identify emotions that were negatively related to SQoL. Specifically, whereas for men correctly identifying "anger" and "surprise" was negatively associated with SQoL, for women correctly identifying "fear" was negatively associated with SQoL. It might be that possible hormonal and socialization differences are responsible for men being more vulnerable to the effects of anger and women being more vulnerable to the effects of fear, and therefore the accurate identification of these emotions has a differential impact according to sex.

The current study has several limitations including the heterogeneity of the sample and the use of a task that utilized only one positive emotion (i.e., happiness). Keeping these limitations in mind, the findings of the current study suggest that the possible negative effects of emotion identification should be addressed, alongside the positive ones. That is, in order to broaden interpretations, it would be helpful to explore the ways in which patients attach meaning to different facial expressions, beyond their mere naming of an emotion.

https://doi.org/10.1016/j.psychres.2019.01.082
Received 29 October 2018; Received in revised form 17 January 2019; Accepted 18 January 2019
Available online 27 January 2019

Acknowledgments

This study was part of an intervention study funded by a grant from the Israel Science Foundation (grant 329/13) of authors IHO and DR (authors 1,5).

References

Becker, M., Diamond, R., Sainfort, F., 1993. A new patient focused index for measuring quality of life in persons with severe and persistent mental illness. Qual. Life. Res. 2 (4), 239–251.

Hasson-Ohayon, I., Mashiach-Eizenberg, M., Arnon-Ribenfeld, N., Kravetz, S., Roe, D., 2017. Neuro-cognition and social cognition elements of social functioning and social quality of life. Psychiatry Res. 258, 538–543.

Jansson, B., Lundh, L.G., Oldenburg, C., 2005. Is defensiveness associated with cognitive bias away from emotional information? Pers. Individ. Dif. 39 (8), 1373–1382.

Kerr, S.L., Neale, J.M., 1993. Emotion perception in schizophrenia: specific deficit or further evidence of generalized poor performance? J. Abnorm. Psychol. 102, 312–318.

Weiss, E.M., Kohler, C.G., Brensinger, C.M., Bilker, W.B., Loughead, J., Delazer, M., Nolan, K.A., 2007. Sex differences in facial emotion recognition in persons with chronic schizophrenia. Eur. Psychiatry 22 (2), 116–122.

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