The Role of Cognitive Control and Social Camouflage Associated with Social Anxiety Autism Spectrum Conditions

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Abstract : Risk factors for social anxiety in autism spectrum conditions involve executive attention, emotion regulation, and thought regulation as processes of cognitive dysregulation. Social camouflaging behaviors as strategies used to mask and/or compensate for autism characteristics during social interactions in autism spectrum conditions have also been emphasized. However, the role of cognitive dysregulation and social camouflaging related to social anxiety in autism spectrum conditions has not been clarified. Whether these factors are specific to social anxiety in autism spectrum conditions or common to social anxiety independent of autism spectrum conditions needs to be clarified. Here, we explored risk factors specific to social anxiety in autism spectrum conditions and general risk factors for social anxiety independent of autism spectrum conditions. From the Japanese participants in early adulthood (age=18~39) of the online survey in Japan, those who exceeded the Japanese version Autism-Spectrum Quotient cutoff (33 points or more)were divided into the autism spectrum conditions group (ASC; N=255, mean age=32.08, SD age=5.16)and those who did not exceed the cutoff were divided into the non-autism spectrum conditions group (Non-ASC; N=255, mean age=31.70, SD age=5.09). Using the Japanese versions of the Social Phobia Scale, the Social Interaction Anxiety Scale, and the Short Fear of Negative Evaluation Scale, a composite score for social anxiety was calculated using a method of principal. We also measured emotional control difficulties using the Difficulties in Emotion Regulation Scale, executive attention using the Effortful Control Scale for Adults, rumination using the Rumination-Reflection Questionnaire, and worry using the Penn State Worry Questionnaire. This study was passed through the review of the Ethics Committee. No conflicts of interest. Multiple regression analysis with forced entry method was used to predict social anxiety in the ASC and non-ASC groups separately, based on executive attention, emotion dysregulation, worry, rumination, and social camouflage. In the ASC group, emotion dysregulation (β=.277, p<.001), worry (β=.162, p<.05), assimilation (β=.308, p<.001) and masking (β=.275, p<.001) were significant predictors of social anxiety (F (7,247) = 45.791, p <.001, R^2=.565). In the non-ASC groups,emotion dysregulation (β=.171, p<.05), worry (β=.344,p <.001), assimilation (β=.366,p <.001) and executive attention (β=-.132,p <.05) were significant predictors of social anxiety (F (7,207) =47.333, p <.001, R^2=.615).The findings suggest that masking was shown to be a risk factor for social anxiety specific to autism spectrum conditions, while emotion dysregulation, worry, and assimilation were shown to be common risk factors for social anxiety, regardless of autism spectrum conditions. In addition, executive attention is a risk factor for social anxiety without autism spectrum conditions.