

The Association of Alexithymia and Internet Gaming Disorder in a Clinical German Sample

Magdalena Pape¹, Benedict Reichrath², Laura Bottel¹, Stephan Herpertz¹, Jan Dieris-Hirche¹

¹= Department of Psychosomatic Medicine and Psychotherapy, LWL-University Hospital, Ruhr-University Bochum, Germany

²= Department of Clinical Psychology, Institute of Experimental Psychology, Heinrich-Heine-University Düsseldorf, Düsseldorf, Germany



Theoretical Background

Presumably in 2022 (Internet) Gaming Disorder (IGD) will be added to the 11th revision of the International Classification of Diseases (ICD-11) as the first specific form of Internet Addiction (IA) and encoded as a disorder due to addictive behavior.

However, there is still a need for research on the clinical psychological profile of IGD patients, especially to identify specific risk factors (Müller et al. 2014, Torres-Rodríguez et al. 2018). In Germany, about 1.16% of adolescents aged between 13–18 years suffer from IGD (Rehbein et al. 2015). Several studies indicate that alexithymia is associated with IA in general and might be a predictor for the severity of IA (Mahapatra et al. 2018). To the best of our knowledge, no surveys are analyzing the relationship between IGD and alexithymia in a clinical sample with patients suffering from IGD and in comparison to healthy controls.

Methods

A total of n=40 IGD inpatients and outpatients (95% male, $M_{age}=25.80$, $SD=5.85$) have been recruited within a cross-sectional collaborative study over a time period of 15 months (February 2018 – June 2019) forming the Experimental Group (EG). Half of the patients (n=20) have been abstinent from playing videogames. The Control Group (CG) consisted of n=43 healthy control participants (97.7% male, $M_{age}=29.00$, $SD=5.93$), who conducted an online survey.

Each group fulfilled psychometric questionnaires measuring alexithymia (TAS-20, Taylor et al. 2003), IGD severity (adapted version of the sIAT, Pawlikowski et al. 2013) and depression (BDI, Beck et al. 1988) as well as socio-demographic factors.

Results

Chi-Square tests show an association between belonging to the EG and lower education levels ($\chi^2(4)=17.88$, $p<.001$, $\phi=.47$) as well as not being in a relationship ($\chi^2(1)=16.78$, $p<.001$, $\phi=.48$). **(I)** Figure 1 illustrates results from multivariate data analysis indicating higher rates of alexithymia in the EG compared to the CG on all subscales of the TAS-20. **(II)** Figure 2 illustrates results from mediation analysis (*PROCESS Procedure for SPSS*, Version 3.2, <http://www.afhayes.com>) showing neither a prediction effect of alexithymia on IGD severity, **(i)** nor a mediating effect of depression.

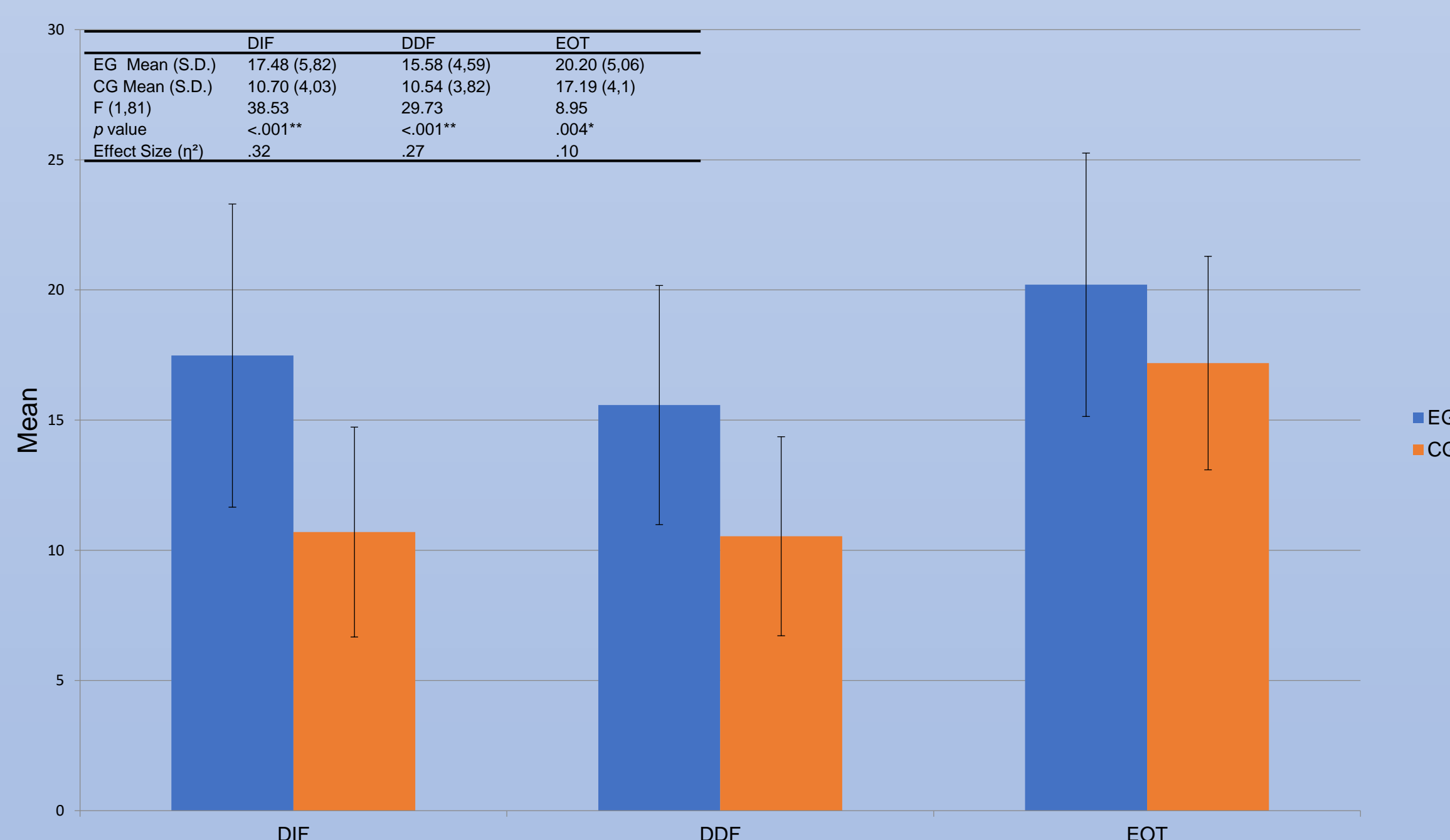


Figure 1 Differences between the groups in Alexithymia on all TAS-20 subscales (DIF=Difficulties Identifying Feelings, DDF=Difficulties Describing Feelings, EOT=External-Oriented Thinking)

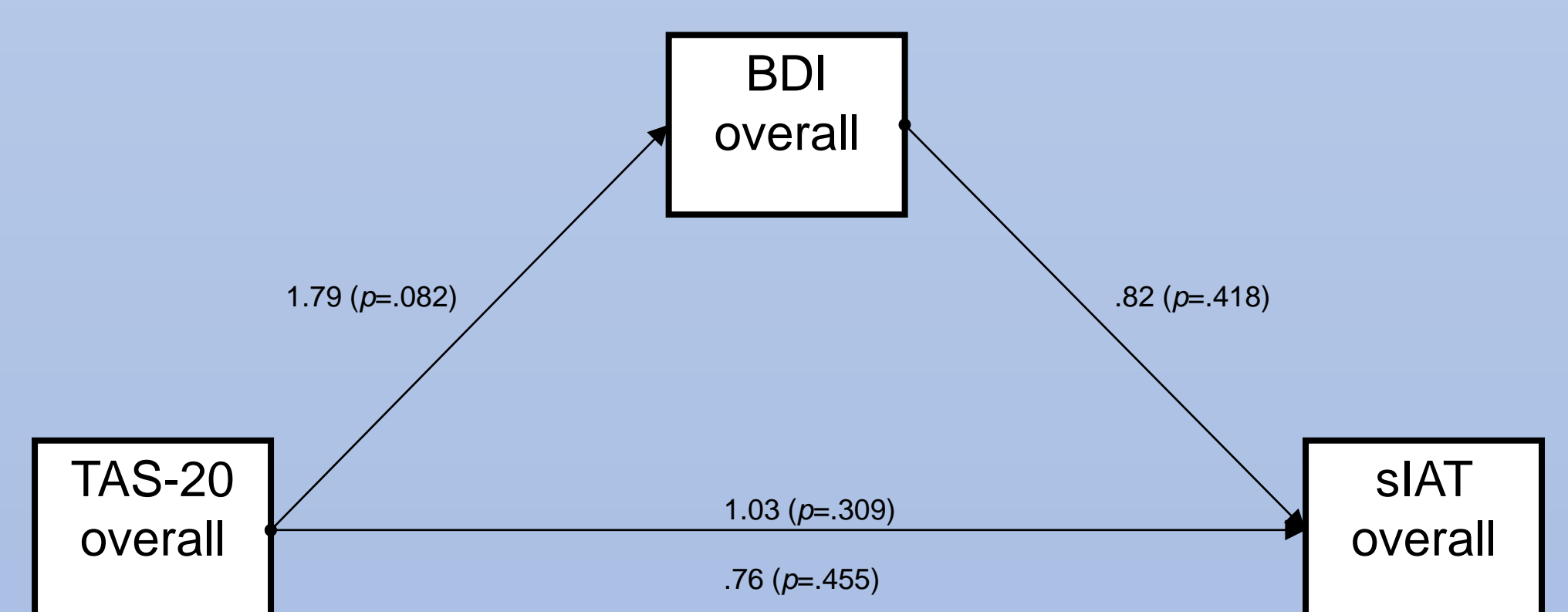


Figure 2 Results from Mediation Analysis within the EG

Conclusion

Alexithymia and IGD seem to be associated, yet in this clinical sample the degree of alexithymia doesn't predict the severity of IGD. Limiting factors are the heterogeneous treatment status resulting in high abstinence rates within the EG and the cross-sectional design. Future research should therefore focus on homogeneous samples and longitudinal study designs in order to analyze the causal relationship of alexithymia and IGD.

References

- Müller, K. W., Beutel, M. E., Egloff, B., & Wölfling, K. (2014). Investigating risk factors for internet gaming disorder: a comparison of patients with addictive gaming, pathological gamblers and healthy controls regarding the big five personality traits. *European addiction research*, 20(3), 129-136.
- Torres-Rodríguez, A., Griffiths, M. D., Carbonell, X., & Oberst, U. (2018). Internet gaming disorder in adolescence: Psychological characteristics of a clinical sample. *Journal of behavioral addictions*, 7(3), 707-718.
- Rehbein, F., Klein, S., Baier, D., Mölle, T., & Peiry, N. M. (2015). Prevalence of Internet gaming disorder in German adolescents: Diagnostic contribution of the nine DSM-5 criteria in a state-wide representative sample. *Addiction*, 110(5), 842-851.
- Mahapatra, A., & Sharma, P. (2018). Association of Internet addiction and alexithymia—A scoping review. *Addictive behaviors*, 81, 175-182.
- Parker, J. D., Bagby, R. M., & Taylor, G. J. (1991). Alexithymia and depression: distinct or overlapping constructs? *Comprehensive psychiatry*, 32(5), 387-394.
- González-Bueso, V., Santamaría, J., Fernández, D., Merino, L., Montero, E., & Ribas, J. (2018). Association between internet gaming disorder or pathological video-game use and comorbid psychopathology: a comprehensive review. *International journal of environmental research and public health*, 15(4), 668.
- Taylor, G. J., Bagby, R. M., & Parker, J. D. (2003). The 20-Item Toronto Alexithymia Scale: IV. Reliability and factorial validity in different languages and cultures. *Journal of psychosomatic research*, 55(3), 277-283.
- Pawlikowski, M., Altstötter-Gleich, C., & Brand, M. (2013). Validation and psychometric properties of a short version of Young's Internet Addiction Test. *Computers in Human Behavior*, 29(3), 1212-1223.
- Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical psychology review*, 8(1), 77-100.

Contact

Magdalena Pape, PhD student
Department of Psychosomatic Medicine and Psychotherapy,
LWL-University Clinic, Ruhr-University Bochum, Germany
Alexandriestrasse 1-3
44791 Bochum, Germany
magdalena.pape@rub.de