Perceived quality of social interaction in adolescents with depression and anxiety disorders

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Background and Aim

Anxiety disorders (AD) and depression are often associated with impaired social interactions. The valence of social interactions can moderate physiological parameters like heart rate variability (HRV). Therefore, the present study (a) compares adolescence with AD or depression and healthy ones regarding the perceived quality of social interactions, and (b) investigates the interaction between perceived quality of social interactions, AD, depression and HRV.

Methods

- Epidemiologic study (BeMIND - Behavior and Mind Health Study): N=1180 individuals aged 14-22 years randomly sampled from the general population in Dresden, Germany
- ADs and depressive disorders were assessed face-to-face using a standardized interview (DIA-X/CIDI; DSM-5)
- Acoustic signals prompted to complete Ecologic Momentary Assessment (EMA) items via smartphone on two week-days and two weekend-days eight times a day
- HRV data (RR-intervals) were recorded continuously on all assessment days with a HRV recorder (BG 2) attached to the skin with two chest electrodes

EMA example screens and HRV device

- Weighted regression analyses adjusted for sex and age were used to examine associations between the perceived quality of social interaction and past month AD or depression.
- A multilevel regression was calculated for the interaction quality of social interaction*AD*depression*HRV (RMSSD).

Results

- Sample characteristics: 58,3% female, 41,7% male, mean age 17,3 years
- Linear regressions revealed a significant lower quality of social interaction for participants with major depression, panic disorder, and specific phobia compared to individuals without these diagnoses.

Diagnosis and perceived quality of social interaction in the EMA rating (0-100)

Diagnosis	N	b	95% CI	p-value
Any depressive disorder	71	-3,245	[-6,390 -0,105]	0,043
Dysthymia	29	-1,667	[-6,008 2,671]	0,451
Major depression	42	-4,427	[-8,155 -0,699]	0,020
Any anxiety disorder	137	-0,639	[-2,984 1,705]	0,593
Panic disorder	24	-5,511	[-10,029 -0,992]	0,017
Specific phobia	60	2,944	[0,257 5,630]	0,032
Social anxiety disorder	34	-2,604	[-7,529 2,320]	0,300
Agoraphobia	8	-5,823	[-12,502 0,857]	0,087
Generalized anxiety dis.	11	-4,589	[-12,244 3,066]	0,240

- Multilevel regression showed no significant interaction between perceived quality of social interaction, HRV and disorders.

Discussion

In this epidemiological sample of adolescents, quality of social interactions seems to play a role in some anxiety and depressive disorders, yet without impact on physiological measures. Further research may consider disorder chronicity and temporal/longitudinal relationships.

References

Cornelius, T., Birk, J.L., Edmondson, D. et al. (2018). The joint influence of emotional reactivity and social interaction quality on cardiovascular responses to daily social interactions in working adults. *Journal of Psychosomatic Research*, 108, 70-77.

Bernstein, M. J., Zawadski, M. J., Juth, V. et al. (2018). Social interactions in daily life: Within-person associations between momentary social experiences and psychological and physical health indicators. *Journal of social and personal relationships*, 35, 372-394.

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