Irregular hand movements in psychodynamic psychotherapy as a marker for comorbid depression in patients with social anxiety

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Objectives

Research has identified *irregular* hand movements ("fidgeting") as a motor sign in patients with social anxiety disorder (SAD) as well as in patients with depression (Bucci & Freedman, 1981; Freedman & Hoffman, 1967; Kreyenbrink et al., 2017; Heerey & Kring, 2007). This raises the question if *irregular* hand movements are a disorder-specific phenomenon or, since SAD patients show a high comorbidity in depression, if it constitutes a specific and therefore, diagnostically relevant sign of depression.

Methods

SAD patients (*N* = 24) with depression (*N* = 11) and without depression (*N* = 13) from the *Social Phobia Psychotherapy Research Network Project* (SOPHO-NET) were investigated. The patients' hand movements were coded with the NEUROGES-ELAN system for the analysis of kinesic behaviour by two independent certified raters.

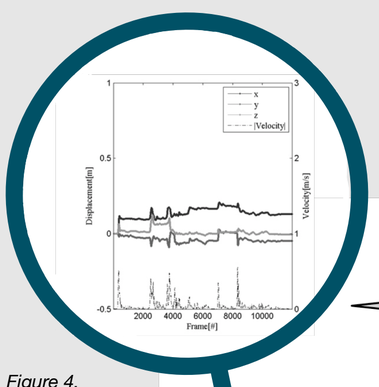
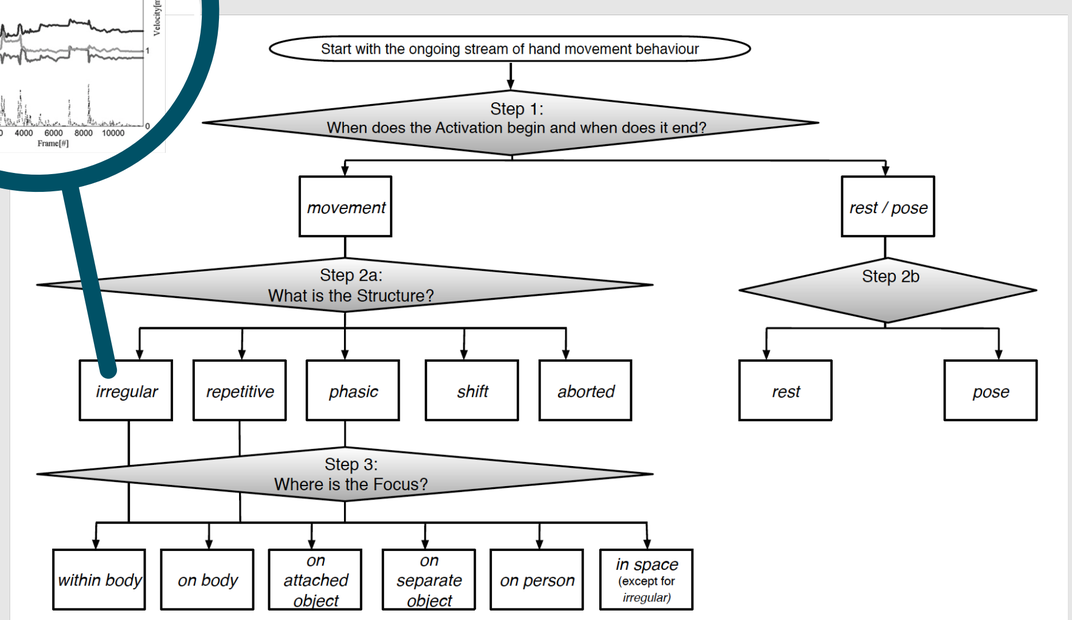


Figure 4. Kinematoraphy of an *irregular* hand movement; Lausberg & Kryger, 2011.



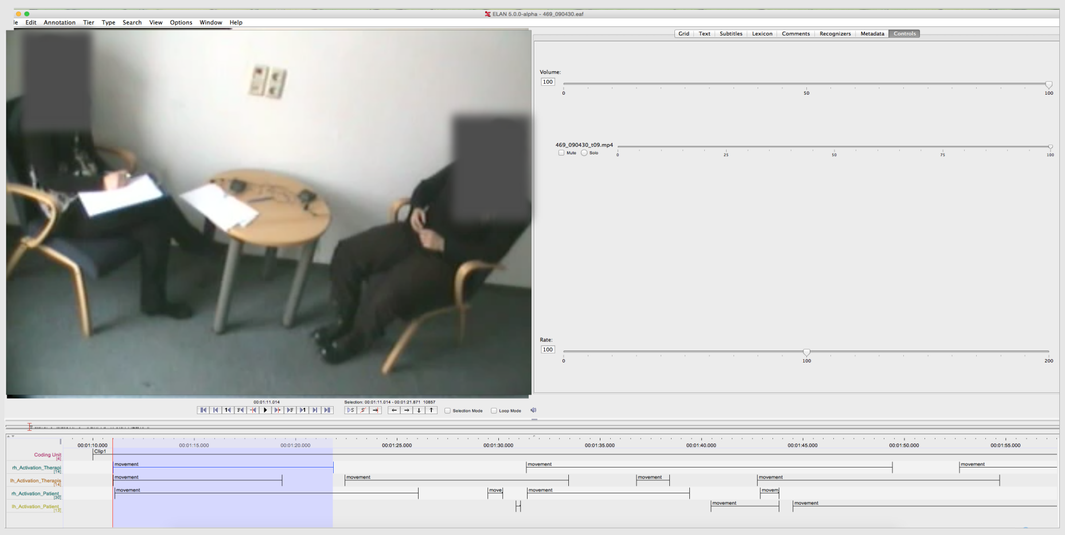


Figure 3. NEUROGES-ELAN coding system (Lausberg & Sloetjes, 2009; Lausberg, 2013).

Results

SAD patients with comorbid depression showed significantly more *irregular* and longer *irregular on body* movements, but less *repetitive*, specifically *repetitive on body* movements than SAD patients without comorbid depression. Furthermore, the frequency of *irregular* movements correlated positively with the level of depression, but not with the level of SAD.

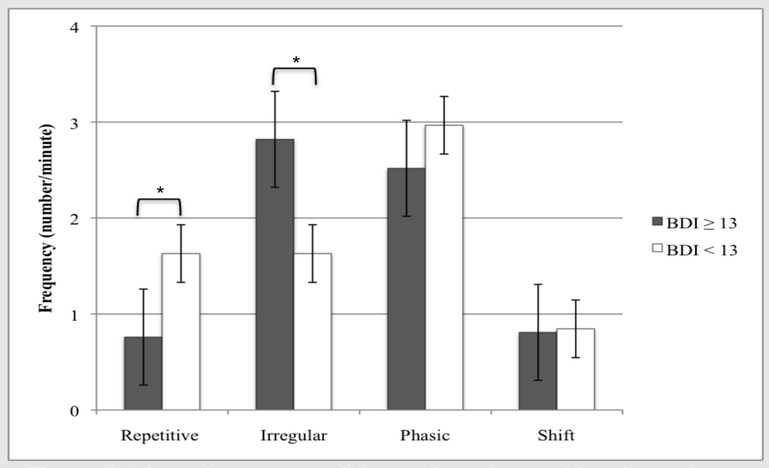


Figure 1. Mean frequency of the patients' *repetitive, irregular, phasic* and *shift* movements in the group with comorbid depressive symptoms (BDI-II ≥ 13) and in the group without diagnostically relevant depressive symptoms (BDI-II < 13), $p < .05$.

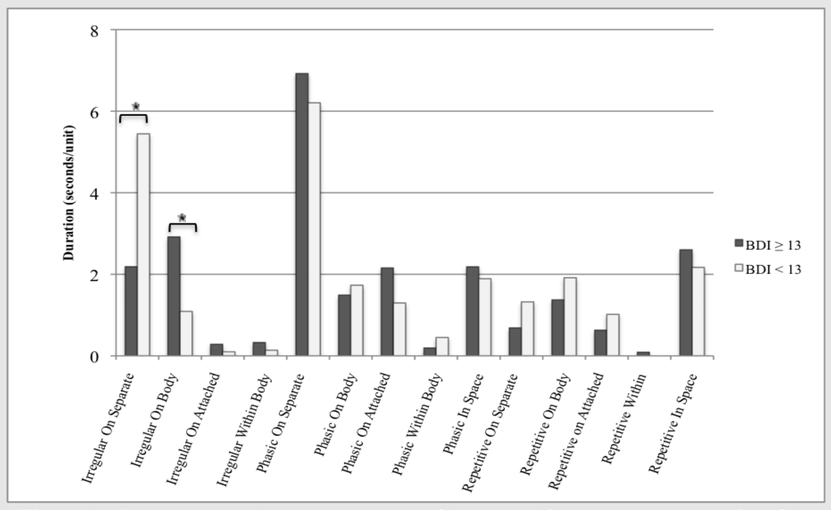


Figure 2. Means and standard errors of the duration (seconds / unit) of the patients' *Structure-Focus* movements in the group with comorbid depressive symptoms (BDI-II ≥ 13) and in the group without diagnostically relevant depressive symptoms (BDI-II < 13), $p < .05$.

Correlation	*N*	Spearman's *g*	*p*
lh_irregular x Level Depr	24	*g* = .424	*p* = .039
rh_irregular x Level Depr	24	*g* = .449	*p* = .028
lh_irregular x Level SAD	24	*g* = .177	*p* = n.s.
lh_irregular x Level SAD	24	*g* = -.049	*p* = n.s.
lh_repetitive x Level Depr	24	*g* = -.576	*p* = .003
rh_repetitive x Level Depr	24	*g* = -.388	*p* = n.s.
lh_repetitive x Level SAD	24	*g* = -.307	*p* = n.s.
lh_repetitive x Level SAD	24	*g* = -.322	*p* = n.s.

Table 1. Bivariate correlations for the frequency of the left hand (lh) and right hand (rh) *irregular* and *repetitive* movements with level of depression and level of SAD.

Conclusion

Contrary to the proposition that fidgeting is a sign of social anxiety disorder, the present study supports previous studies demonstrating *irregular* hand movements in depressive individuals. Furthermore, it appears that *irregular* hand movements constitute a diagnostically relevant motor sign not only in primary depression but likewise in comorbid depression.

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