Hypermentalizing, Self-Injurious Behaviors, and Treatment Response In Psychiatric Adolescents

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Background

Theory and empirical research suggest that suicidal and non-suicidal self-injurious (NSSI) behaviors may be rooted in dysfunctional social processes, and therefore, represent a sort of failure in social functioning (Joiner et al., 2008). Underlying social functioning is our ability to interpret others' feelings, attitudes, and thoughts, commonly referred to as Theory of Mind (ToM) or mentalizing (Fonagy, 1991). The Movie for the Assessment of Social Cognition (MASC; Dziobek et al., 2006) assesses different types of ToM (reduced ToM, no ToM, excessive ToM); excessive ToM, or hypermentalizing, refers to over-interpretative mental state reasoning (Montag et al., 2009) and has been linked to frontal lobe activity, an area of the brain also associated with suicidality (Backasch et al., 2013; Stuss et al., 2001; Van Heeringen & Marusic, 2003). To date, no studies have directly examined the role of excessive ToM in suicidal phenomena (ideation/attempt) and NSSI, and also whether excessive ToM plays a role in NSSI treatment response.

Aims

Against this background, the aim of the current study was to examine whether suicidal behaviors (ideation, attempt) and NSSI related to excessive ToM, and also, whether excessive ToM (hypermentalizing) played a role in treatment response in a sample of N= 194 adolescent inpatients at a private psychiatric hospital.

Measures

- ToM was captured with the Movie for the Assessment of Social Cognition (Dziobek et al., 2006); in this study, only the excessive ToM subscale was utilized.
- NSSI was captured at two time points (admission, discharge) using the Deliberate Self Harm Inventory, a 17-item self-report of NSSI characteristics.
- Suicidal behaviors (ideation, attempt) and Major Depressive Disorder (MDD) diagnosis were captured via the Computerized Diagnostic Interview Schedule for Children (CDISC; Shaffer et al., 2000). Suicide ideation and attempt were examined over the past year, four weeks, and lifetime, and then coded dichotomously for the presence or absence of ideation/attempt at these time points.
- Affective problems were captured using the Youth Self Report (Achenbach & Rescorla, 2001).

Data Analytic Approach

Descriptive and bivariate analyses were conducted among all main study variables. Independent sample t-tests and chi-square analyses were used to identify confounds. Regression analyses were conducted to determine significant, predictive relations between excessive ToM, NSSI, and suicide ideation/attempt. In order to examine NSSI treatment response, two analyses were conducted: 1) linear regression between excessive ToM and discharge NSSI, controlling for admission NSSI; 2) t-tests to examine whether admission NSSI and discharge NSSI levels significantly differed.

Results

Bivariate analyses revealed that excessive ToM significantly relates to NSSI (r= -.14; p=.05), current suicide ideation (t= -2.45; p= .01), and suicide attempts in the past year (t= -.2.54; p= .01). Independent sample t-tests and chi square analyses revealed significant confounds (gender, affective problems, MDD diagnosis) to control for in subsequent analyses. Linear regression analyses revealed that excessive ToM did not significantly predict NSSI, when controlling for both gender/MDD (t= 1.286; p=.200), and gender/affective problems (t= 1.652; p=.100). Hierarchical logistic regression analyses however revealed that excessive ToM significantly predicts current suicide ideation, independent of MDD diagnosis (OR= 1.101, p= .041) and affective problems (OR= 1.122, p= .019). Likewise, excessive ToM significantly predicts suicide attempts in the past year, irrespective of MDD diagnosis (OR= 1.110, p= .026) and affective problems (OR= 1.119, p= .019).

Analyses to examine excessive ToM's role in NSSI treatment response first revealed that excessive ToM predicts discharge NSSI levels, while holding constant admission NSSI levels. Independent sample t-tests revealed that NSSI levels were significantly reduced between admission and discharge (t= 2.08, p= .03).

Discussion

The current study revealed that excessive ToM has a unique, predictive relation with both suicide ideation and attempt, but not NSSI. Despite this, excessive ToM appeared to predict NSSI treatment response. Future research is needed to unpack these findings and their clinical implications.