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Parental reflective functioning among mothers with eating disorder symptomatology☆

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ABSTRACT

Objective: Reflective Functioning is a vital aspect of parental aptitude and its absence, especially in the presence of psychopathology, can impair attachment. This study sought to clarify the relationship of parental RF among mothers with eating disorder symptomatology.
Method: We assessed 59 mothers for ED symptomatology using the Eating Disorder Examination Questionnaire (EDE-Q) and RF through the Parental Reflective Functioning Questionnaire (PRFQ). Bivariate and multivariate analyses compared PRFQ subscales between symptomatic and asymptomatic mothers, using a clinical cutoff score of 4 on the EDE-Q subscales. RESULTS: Greater weight and shape concerns were found to significantly predict higher RF ($p = 0.023$; $p = 0.026$).
Discussion: This finding could indicate a similar pattern seen among individuals with bulimia nervosa; individuals have higher RF scores, although affect regulation may still be limited. More research is needed with a larger sample to define the relationship between ED symptomatology and RF and identify potential mediators and moderators.

1. Introduction

The influence of eating disorders (EDs) and ED symptomatology on parental functioning and attachment remains under-studied. Although it is unclear how many mothers experience these disorders, EDs among women of childbearing age are common (Bulik, 2013).

To our knowledge, there have been few examinations of how ED symptoms impact domains of parent mentalization, that is, the process through which individuals make sense of ourselves and others by understanding and identifying varying emotional and mental states (Fonagy, Steele, Steele, Moran, & Higgitt, 1991). Mentalization can be measured through a person's capacity for reflective functioning (RF). Reflective functioning (RF) is the ability to understand behavior in terms of underlying mental states and to be able to join both a person's intention and their behavior into a meaningful whole (Fonagy et al., 1991). Specifically, it is the ability to understand that people act on the basis of their intentions, desires, and feelings and are able to recognize the separateness and opacity of others' minds (Fonagy & Target, 1997; Slade, Grienenberger, Bernbach, Levy, & Locker, 2005).

RF is critical in human attachment because it permits both parties to develop rational hypotheses for others' behavior, enabling appropriate and empathetic responses (Fonagy et al., 1991). Similarly, parental RF helps promote the understanding that behaviors are tied to underlying emotions in meaningful, predictable patterns, placing both negative and positive child behaviors into context (Bateman & Fonagy, 2004). RF provides a way for parents to reflect the child's own mental state so that the child can gain insight into their internal reality (Fonagy, Gergely, Jurist, & Target, 2002). In this way, a parent with high RF helps to solidify parent-child attachment by providing the child with a secure base through which to understand their own mental state.

Parental RF is so crucial that its absence or deficiency can be associated with maladaptive attachment in infancy and childhood, as well as personality disorders as children age (Sharp, Fonagy, & Goodyer,

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2006). Anorexia nervosa (AN), due to its ego-syntonic nature, has been shown to impair RF (Kuipers & Bekker, 2012; Skårderud, 2007). However, recent studies have found that individuals with bulimia nervosa (BN) have high RF although that increased mentalization does not assist in affect regulation (Pederson, Lunn, Katznelson, & Poulsen, 2012; Pederson, Poulsen, & Lunn, 2015). Therefore, it is important to define the relationship between eating disorder symptoms and RF since it is currently unclear.

We hypothesized that mothers with clinically significant eating disorder symptomatology might have lower RF. This hypothesis was formed due to the existing literature showing the impairment of RF among patients with AN and the poor emotional regulation despite higher RF among individuals with BN. A thorough understanding of how RF relates to ED symptoms could help inform interventions among mothers with ED symptomatology.

2. Methods & measures

This study is a secondary analysis of a cohort of women that were involved in a follow-up study to the Yale Study of Stress and Pregnancy's (NICHD 5R01HD045735) original longitudinal cohort of 2783 pregnant women (Yonkers et al., 2011). A total of 60 women were needed – based on a power calculation for the primary analysis – for this follow-up study from that original cohort. Women were recruited into three different groups according to whether they used cigarettes, antidepressants (specifically selective serotonin-reuptake inhibitors), or neither during pregnancy in order to understand the effect of intra-uterine exposure to certain substances on child development.

A total of 1789 women were eligible for this follow-up study on the basis of having children aged 4–8 years old and living within a 60-minute drive of the research center. Of those 1789 women, 1515 met criteria for the study based on age; women who used alcohol or substances during the pregnancy in question were also excluded. Research assistants contacted 125 women based on a random ID generator; 12 of those were out of contact and 54 declined to participate. A total of 59 women participated, which was a 48% response rate (see Consort diagram in Appendix A). Despite this low response rate, there was no difference between the non-responders and study participants in demographic characteristics including economic status, education, age, marital status, BMI, and race.

The current paper is a secondary analysis of that follow-up study. At the time of this study, children born to mothers who participated were between the ages of 4 and 8 years old. Institutional Review Board approval was obtained and written, informed consent was completed by all participants. Participants were mailed questionnaires in advance which were collected during office visits.

2.1. Eating disorder (ED) symptomatology

Eating disorder symptomatology was assessed by a 36-item self-report questionnaire, the Eating Disorder Examination – Questionnaire (EDE-Q). The EDE-Q is commonly used because it requires significantly less time than the Eating Disorder Examination (EDE) but retains acceptable internal consistency and test-retest reliability (Berg, Peterson, Frazier, & Crow, 2012). It has four subscales that assess restraint, eating, shape concerns, and weight concerns. The traditional clinical cutoff of 4 was used on the subscales as meeting the threshold for clinically significant eating disorder symptomatology (Mond, Hay, Rodgers, Owen, & Beumont, 2004).

2.2. Reflective functioning

RF was measured by the Parental Reflective Functioning Questionnaire (PRFQ-1), a 39-item self-report instrument based upon the Parent Development Interview (intra-class correlation coefficients = 0.87) (Grienenberger, Kristen, & Slade, 2005; Slade et al., 2005). The PRFQ has three subscales demonstrating different facets of RF. The first, 'prementalizing,' indicates parent's inability to understand the child's internal world (e.g. "when my child is fussy he or she does that just to annoy me"). The second, 'certainty about mental states,' targets the parent's inability to recognize the opacity of mental states (e.g. "I can completely read my child's mind"). The last, 'interest and curiosity in mental state' (e.g. "I am often curious to find out what my child feels"), reflects optimal RF.

2.3. Axis I diagnoses

An adapted version of the SCID-I administered by a trained interviewer measured co-morbid psychiatric conditions, including posttraumatic stress disorder (PTSD), major depressive disorder (MDD), mania, panic disorder (PD), generalized anxiety disorder (GAD), substance use, and alcohol use disorder (First & Gibbon, 2004). Test-retest reliability coefficients ranged from 0.44 to 0.76 depending on the disorder diagnosed (Zanarini et al., 2000). Validity has been demonstrated; 85% of people diagnosed with psychotic symptoms were similarly diagnosed on a SCID interview (Rush, 2000).

3. Statistical analysis

Participants were included if they had complete data for the EDE-Q and PRFQ. T-tests assuming unequal variances were used to assess PRFQ differences between symptoms. The response variable, the PRFQ met the assumptions of normality required for parametric tests. Therefore, linear regressions were used to create the best explanatory model for PRFQ scores with the EDE-Q total as the predictor. Univariate

Table 1
Demographics & clinical characteristics.

Characteristic	Total	
	N = 59 N (%)	Mean ± SD N = 59
Age		
26–34	25 (43.9)	
35+	32 (56.1)	
Race/ethnicity[2]		
White	42 (73.7)	
Black	5 (8.8)	
Hispanic	6 (10.6)	
Other	4 (7.0)	
BMI		27.9 ± 7.4
Education (years)		
High school or less	15 (26.3)	
Some college or greater	42 (73.7)	
Marital status		
Married or living with a partner	42 (71.2)	
Divorced, separated, or widowed	8 (13.6)	
Never married	7 (12.3)	
Psychopathology		
Eating disorder symptoms		
Clinically-significant symptoms[a]	14 (25)	
EDE-Q total		1.6 ± 1.3
Restraint subscale		1.4 ± 1.5
Eating concerns subscale		0.7 ± 1.5
Shape concerns subscale		2.4 ± 1.7
Weight concerns subscale		2.0 ± 1.6
Axis I disorders (current)		
Any Axis I disorder	19 (33.33)	
Depressive disorders	1 (1.8)	
Anxiety disorders	15 (26.3)	
Alcohol or substance disorders	4 (6.8)	

[a] Clinically significant is defined as a score ≥ 4 on any EDE-Q subscale.