Self-Silencing in a Clinical Sample of Female Adolescents with Eating Disorders

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Abstract

Objective: The present study was designed to assess the relationship between self-silencing behaviours and eating disorder symptoms in a female adolescent population with eating disorders. **Method:** One hundred and forty-nine adolescent girls between the ages of 13 and 18 completed a comprehensive assessment at a tertiary care children's hospital. Each participant completed the Eating Disorder Inventory-2 (EDI-2; Garner, 1991), the Multidimensional Anxiety Scale for Children (MASC; March et al, 1997), and an adapted version of the Silencing the Self Scale for adolescents (STSS; Sippola & Bukowski, 1996). **Results:** Self-silencing behaviours correlated strongly with eating disorder symptomatology. Social anxiety was found to predict body dissatisfaction, while externalized self-perception was found to contribute uniquely to body dissatisfaction and drive for thinness, two risk factors closely associated with eating disorders. **Conclusion:** These results suggest the importance of including relational and emotional development in comprehensive models of disordered eating.

Key words: eating disorders, adolescents, self-silencing

Résumé

Objectif: Évaluer la relation entre le silence volontaire et les symptômes d'adolescentes souffrant de troubles du comportement alimentaire. **Méthodologie:** Cent quarante-neuf adolescentes âgées de 13 à 18 ans ont fait l'objet d'une évaluation complète dans un hôpital de soins de troisième ligne pour enfants. Chaque sujet a rempli le questionnaire *Eating Disorder Inventory-2 (EDI-2; Garner, 1991),* le *Multidimensional Anxiety Scale for Children (MASC; March et al, 1997),* et une version adaptée du questionnaire *Silencing the Self Scale for adolescents (STSS; Sippola & Bukowski, 1996).* **Résultats:** Le silence volontaire est fortement lié à la symptomatologie des troubles du comportement alimentaire. L'anxiété sociale permet de prédire l'insatisfaction face à l'image corporelle; l'extériorisation de cette perception déformée de soi contribue seule à l'insatisfaction face à l'image corporelle et encourage la minceur, deux facteurs de risque étroitement liés aux troubles du comportement alimentaire. **Conclusion:** Ces résultats indiquent qu'il est important d'inclure le développement relationnel et émotionnel dans les modèles de thérapie des troubles du comportement alimentaire.

Mots clés: troubles du comportement alimentaire, adolescents, silence volontaire

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Introduction

Research theories highlight unique aspects of female emotional and identity development (Brown & Gilligan, 1992; Jack, 1991; Striegel-Moore et al, 1993). These theories emphasize the important role relationships play in female development, and how these relationships facilitate or inhibit emotional expression. From interviews with adolescent girls, Brown and Gilligan (1992) found that adolescent girls place a high degree of importance on interpersonal relationships, in addition to a heightened self-consciousness in relationships with others. Moreover, heightened self-consciousness in relation to others was associated with careful monitoring of one's thoughts and feelings, as well as increased vulnerability to another's opinions about one's self. A high degree of passivity was also described in more vulnerable relationships such that girls reported suppressing thoughts or feelings in order to maintain perceived important relationships. Gilligan (1982) has described this manner of suppressing thoughts, feelings, and desires when they come into conflict with interpersonal pressures as 'loss of voice'. Gilligan and others have suggested that a girl's loss of voice may be an important contributing factor to internalized psychopathologies such as depression and eating disorders (ED) (Gilligan, 1988).

Female socialization has been described as producing a dominant moral ideal of the 'good me' (Jack, 1991). An idealized version of what it is to be feminine is internalized and deemed necessary for acceptance. The 'good me' is characterized by presentation of an outwardly conforming, false self and cutting off internal emotions that deviate from this ideal (Formanek & Gurian, 1987; Jack, 1991). The 'good woman' continues to outwardly conform by

putting the needs of others first, while sacrificing the fulfillment of her own needs by defining caring as self-sacrifice that does not allow for personal attention. In this manner, she seeks to maintain emotional relationships, avoiding acting on her own needs for fear of damaging emotional relationships (Jack, 1991). Cut off from true feelings, the outward self conforms to gain love and intimacy. Such social standards create a discrepancy between the ideal and the actual self, leaving the actual self in turmoil.

Striegel-Moore, Silberstein, and Rodin (1993) have hypothesized important developmental links between identity formation, externalized self-perceptions and binge eating. These authors suggest that girls who feel vulnerable about their identity, especially about how they are perceived by others, may focus on their physical appearance in order to attain a concrete way to construct such an identity. Girls who are unable to experience a 'true self' tend to display heightened self-consciousness, often resulting in increased attention to their physical self. Geller, Cockell, Hewitt, Goldner and Flett (2000) investigated the effects of inhibited expression of negative emotions as well as interpersonal orientation in women with anorexia nervosa (AN), other psychiatric conditions, and a control group matched for age. Women with AN demonstrated higher scores on all four subscales of the STSS (Externalized Self-Perception, Care as Self Sacrifice, Silencing the Self and the Divided Self) than either the psychiatric or control women. After controlling for self-esteem, depression, and global assessment of functioning, significant scores still existed for the Care as Self-Sacrifice and Silencing the Self schemas. Hayaki, Friedman and Brownell (2002) also examined the relationship between emotional expression using the STSS and body dissatisfaction in a sample of female undergraduates. Greater body dissatisfaction corresponded with lower levels of emotional expression, even while controlling for the effects of depressive symptoms, Body Mass Index (BMI) and non-assertiveness. Self-silencing constructs have also been found to be associated with low body esteem and dysregulated eating in community samples of adolescent girls (Buchholz & White, 1996; Lieberman, Gauvin, Bukowski, & White, 2001). These findings provide support for the association between 'loss of voice' and disordered eating in adolescent and adult women.

The present study aims to investigate the link between self-silencing, social anxiety, body dissatisfaction, and drive for thinness in a sample of adolescent girls diagnosed with eating disorders. It is hypothesized that self-silencing behaviours and social anxiety will be predictive of body dissatisfaction and drive for thinness in this clinical population.

Method

Participants

The subjects consisted of 149 adolescent girls, ranging in age from 13 to 18 years (M = 15.65, SD = 1.17) who underwent a comprehensive assessment which included a clinical interview by a psychologist or a psychiatrist, and who were diagnosed with an eating disorder according to the Diagnostic and Statistical Manual IV - Revised (American Psychiatric Association, 2000). Of the 149 participants, 49 were diagnosed as suffering from AN (32.9%), 27 from BN (18.1%), 1 from binge eating disorder (0.7%), and 72 from EDNOS (48.3%). Participants also completed psychological measures as part of their assessments, and Body Mass Index (BMI) was also calculated and recorded.

Measures

The Silencing the Self Scale (STSS). Jack and Dill (1992) developed the STSS in order to assess specific perceptions regarding intimate relationships, and to evaluate the concepts of 'loss of voice'. Elevated scores on the STSS indicate greater internalization of stereotypical female gender roles and norms, and the acceptance of the concept of the 'good woman'. The STSS has been demonstrated to be reliable and valid in both normative and clinical adult female populations (Jack & Dill, 1992; Stevens & Galvin, 1995). A modified version of the STSS (adapted by Sippola and Bukowski (1996)) was administered in the present study to represent intimacy with friends rather than intimacy with partners. Given the importance of peer relations in adolescence, it was felt that intimacy in friendships would be a valid construct of 'voice' in youth. The scale consists of 24 items using a 5-point Likert scale, and comprising four subscales:

Externalized self-perception (e.g., "I tend to judge myself by how I think my friends see me"); Care as self-sacrifice (e.g., "Caring means putting the other person's needs in front of my own"); Silencing the Self (e.g., "I think it's better to keep my feelings to myself when they conflict with my friends") and Divided self (e.g., "I feel that my friends do not really know who I am"). Three of the four subscales of the STSS demonstrated excellent reliability with Cronbach alphas ranging from .81 (Externalized Self subscale) to .91 (Divided Self subscale) in our clinical population. The Care as Self-Sacrifice subscale was excluded from any further analyses due to low internal consistency (Cronbach alpha = .68).

Eating Disorder Inventory 2 (EDI – 2). The EDI –2 (Garner, 1991) is a self-report questionnaire of disordered eating symptoms. This 91-item scale follows a 6-point Likert scale format with responses ranging from 'always' to 'never'. It is divided into eleven clinical dimensions, two of which are relevant to this study: Body Dissatisfaction (e.g., "I think that my stomach is too big") and Drive for Thinness (e.g., "I am terrified of gaining weight"). Eberenz & Gleaves (1994) found the scales of the EDI-2 to be internally consistent with Cronbach's alphas ranging from .80 to .91.

The Multidimensional Anxiety Scale for Children (MASC). The MASC (March et al, 1997) is 39-item self-report questionnaire designed to assess anxiety in children and youth. The MASC Anxious Coping and Social Anxiety subscales were the only two subscales explored in this study. March et al (1997) have demonstrated excellent internal reliability for this measure (Cronbach alpha =.90).

Table 1: Means and Standard Deviations for all Psychological Variables

Subscales	Mean	SD
Externalized Self-Perception	17.80	5.48
Silencing the Self	17.00	5.76
Divided Self	15.01	6.47
Anxious Coping	8.36	2.85
Social Anxiety	15.02	7.17
Body Dissatisfaction	16.49	9.18
Drive for Thinness	13.53	6.84

Note. Externalized Self-Perception = STSS Externalized Self-Perception subscale; Silencing the Self = STSS Silencing the Self subscale; Divided Self = STSS Divided Self subscale; Anxious Coping = MASC Anxious Coping subscale; Social Anxiety = MASC Social Anxiety subscale; Body Dissatisfaction = EDI-2 Body Dissatisfaction subscale; Drive for Thinness = EDI-2 Drive for Thinness subscale

Results

Means and standard deviations for all psychological variables explored in this study are displayed in Table 1 and the Pearson product-moment correlation coefficients are presented in Table 2. As hypothesized, the three STSS subscales were significantly correlated with Body Dissatisfaction and Drive for Thinness. This result suggests that girls reporting higher levels of self-silencing behaviours were more likely to report higher body dissatisfaction and greater drive for thinness.

Regression Analyses

Body Dissatisfaction. A hierarchical regression analysis was used to explore the unique

Table 2: Correlations Between Age, BMI, and Psychological Variables

	1	2	3	4	5	6	7	8	9
1. BMI	1	.06	.25**	.04	.16	–.05	.22*	.27**	.37**
2. Age		1	.09	.03	.10	–.08	–.04	.01	.14
3. Externalized Self-Perception			1	.63**	.74**	.01	.54**	.51**	.62**
4. Silencing the Self				1	.75**	–.20*	.53**	.41**	.46**
5. Divided Self					1	–.13	.56**	.48**	.56**
6. Anxious Coping						1	.23**	.02	–.10
7. Social Anxiety							1	.43**	.54**
8. Body Dissatisfaction								1	.78**
9. Drive for Thinness									1

* $p < .05$
** $p < .01$

Table 3: Hierarchical Regression predicting Body Dissatisfaction

Variable	B	SE	β
Step 1			
Age	1.66	.79	.20*
BMI	.89	.24	.35***
Step 2			
Age	1.19	.61	.14
BMI	.39	.20	.15
Externalized Self Perception	.71	.19	.42***
Silencing the Self	–.10	.19	–.06
Divided Self	.13	.19	.09
Anxious Coping	–.52	.27	–.16
Social Anxiety	.36	.13	.27**

R^2 = .17 for Step 1; ΔR^2 = .37 for Step 2 ($p < .001$)
* $p < .05$
** $p < .01$
*** $p < .001$

Table 4: Hierarchical Regression predicting Drive for Thinness

Variable	B	SE	β
Step 1			
Age	.63	.62	.10
BMI	.49	.19	.26*
Step 2			
Age	.39	.54	.06
BMI	.20	.18	.11
Externalized Self Perception	.39	.17	.31*
Silencing the Self	.05	.17	.04
Divided Self	.09	.17	.08
Anxious Coping	–.05	.24	–.02
Social Anxiety	.21	.12	.21

R^2 = .08 for Step 1; ΔR^2 = .29 for Step 2 ($p < .001$)
* $p < .05$
** $p < .01$
*** $p < .001$

contributions of the self-silencing constructs and anxiety subscales in predicting Body Dissatisfaction while controlling for age and BMI. Age and BMI were entered in Step 1, and together these variables predicted 16.5% of the variance ($F_{(2, 94)} = 9.32$, $p < .001$). The Self-Silencing and Anxiety subscales were entered in Step 2, and accounted for 36.6% of the total variance ($F_{(5, 89)} = 13.93$, $p < .001$). Externalized self-perception subscale significantly contributed unique elements to the prediction of Body Dissatisfaction, as did the social anxiety subscale as seen in Table 3.

Drive for Thinness. A second hierarchical regression analysis examined the unique contributions of the self-silencing and anxiety subscales in predicting Drive for Thinness, while controlling for age and BMI. Age and BMI, entered in Step 1, accounted for 7.7% of the total variance ($F_{(2, 94)} = 3.90$, $p < .05$). In Step 2, the Self-Silencing and Anxiety subscales were entered and accounted for 28.8% of the total variance ($F_{(5, 89)} = 8.07$, $p < .001$). Only Externalized Self-Perception was found to uniquely predict Drive for Thinness (see Table 4).

Discussion

The constructs of self-silencing, anxious coping, and social anxiety were investigated in female adolescents with eating disorders. The results suggest that the constructs of the silenced self and social anxiety were important predictors of both body dissatisfaction and drive for thinness in adolescent girls and support the-

ories that have linked aspects of female social and emotional development to psychopathologies such as eating disorders (e.g., Buchholz & White, 1996; Gilligan, 1988). The subscale externalized self-perceptions was found to be a unique predictor of both body dissatisfaction and drive for thinness within the regression models, suggesting the particular importance of this construct. That is, adolescent girls with eating disorders who closely monitor their thoughts and feelings in order to maintain their friendships were more likely to report greater body dissatisfaction and higher drive for thinness in this clinical sample. These results are consistent with those reported by Buchholz and White (1996) in a community female adolescent population, as well as Geller et al (2000) in a female adult eating disordered population.

Social anxiety, but not anxious coping, was found to be a significant unique predictor of body dissatisfaction. These results suggest that young women with eating disorders who also struggle with higher social anxiety were more likely to report higher body dissatisfaction. Moreover, social anxiety was found to be significantly associated with the constructs of the silenced self, suggesting that these girls may be less likely to express negative thoughts or feelings while striving to maintain a socially desirable ideal of 'the good woman'. Girls who struggle to attain these perceived social ideals, in combination with the desire to attain the very thin physical ideal, may be more vulnerable to body dissatisfaction, and in turn, may develop pathological eating. Hence, the findings suggest that including a focus on combating self-silencing behaviours and social anxiety may be important in both prevention and treatment programs for eating disorders. For example, one might hypothesize that assertiveness training for girls might play a valuable role in prevention programs for eating disorders.

Limitations of the current study include a lack of causal and directional inferences between self-silencing and disordered eating. A study examining self-silencing and disordered eating prospectively in adolescence would strengthen the understanding of causal pathways between these variables. Another limitation of the study consists of only examining these constructs in girls with eating disorders. Future research with males may serve to highlight similarities and/or differences in self-silencing behaviours and eating disorders in males and females. Finally, it is important to note that the adapted version of the STSS used in this study examined intimacy in friendships and not romantic partners. It would be interesting to examine an adapted version of the STSS for adolescence that would also examine intimacy in romantic partners.

The findings from this study warrant further investigations into the link between self-silencing constructs, social anxiety and eating disorders in youth and adults. For example, a comparison of self-silencing constructs and social anxiety between a clinical sample of adolescent girls with eating disorders, a general psychiatric sample, and a community sample of adolescent girls may further our understanding of the specificity of these risk factors to eating disorders. Furthermore, an investigation of these self-silencing constructs in a prospective study examining a comprehensive developmental model of disordered eating in males and females would provide greater understanding of the development and causal pathways of disordered eating from pre-adolescence into adulthood.

Acknowledgements/Conflict of Interest
The authors have no financial relationships to disclose.

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