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Brief report: Maltreatment in childhood and body concerns in adulthood

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Abstract

Objective: We examined the relationship between maltreatment in childhood and body concerns in adulthood. **Method:** A community sample of 156 women and 143 men completed measures of maltreatment – frequency of sexual abuse, physical abuse, physical neglect, emotional abuse and emotional neglect – in childhood. They also reported current dissatisfaction with body weight and shape and drive for thinness and drive for muscle. **Results and conclusions:** Childhood maltreatment was associated with drive for muscle in women and body dissatisfaction and drive for thinness in men. The results provide some evidence that adverse conditions in childhood can be associated with gender-atypical body concerns in adulthood.

Keywords

appearance, body image, body shape, eating behaviour, eating disorders, exercise behaviour

Introduction

Since 1985, almost 200 studies have examined the relationship between childhood maltreatment and disordered eating in adolescence. The results have been inconsistent, revealing at best a small positive relationship (Smolak and Murnen, 2002). This may be because the underlying relationships are complex and dependent on the type of maltreatment involved (Ball et al., 1999). Unfortunately, previous research has tended to focus on sexual abuse and overlook less salient but more common types of maltreatment (Higgins and McCabe, 1998). Therefore, the first aim of the present study was to assess the impact of various types of maltreatment on body concerns. (For prevalence statistics, refer to US Children's Bureau, 2008.)

A review of published research revealed no previous research on childhood maltreatment

and appearance concerns that are unrelated to thinness (we used combinations of search terms such as 'abuse', 'neglect', 'maltreatment', 'trauma', 'appearance concern', 'body shape', 'body image', 'body dissatisfaction' and/or 'muscle' and conducted the search through a variety of EBSCO databases such as the Psychology and Behavioral Sciences Collection, PsycINFO, PsycBOOKS, PsychiatryOnline, the Social Sciences Citation Index and Social Work

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Abstracts, as well as MEDLINE and generic search engines such as Google Scholar). Therefore, the second aim of this study was to examine the impact of child maltreatment on dissatisfaction with body weight and body shape and in relation to the pursuit of thinness as well as the pursuit of muscle.

Body concerns are strongly gendered with women emphasising thinness and men muscularity (McCreary, 2007). Therefore, the third aim of this study was to examine gender differences in the relationships between childhood maltreatment and the drive for thinness versus muscle. Our inclusion of men and muscularity was also motivated by the limited research that exists on men's experiences of childhood maltreatment.

On the basis of the available literature (e.g. Smolak and Murnen, 2002), it was hypothesised that positive associations would occur between childhood maltreatment, weight/shape dissatisfaction and drive for thinness (Everill and Waller, 1995). In the absence of relevant research on maltreatment and muscularity, we speculated that such a relationship might exist particularly in men because the attainment of muscle is seen by some men as a means of countering threats to their masculinity and social status (Leit et al., 2001).

Methods

A community sample of 156 women (18–40 years old, $M = 24.68$, standard deviation (SD) = 5.02) and 143 men (18–40 years old, $M = 24.5$, SD = 5.86) was recruited with the approval of the University Ethics Committee (DUHREC-H44/06-09) to complete a pencil-and-paper questionnaire. Flyers advertising the project were posted on university noticeboards, and in gymnasiums, announcements were made at university lectures, and research assistants used snowball sampling.

Childhood Trauma Questionnaire (Bernstein and Fink, 1998). Respondents used a 5-point scale from 1 ('never true') to 5 ('very often

true') to report retrospectively the frequency of sexual, physical and emotional abuse, and physical and emotional neglect in childhood. *Weight and Shape Dissatisfaction Subscales of the Eating Disorder Examination Questionnaire* (Fairburn and Beglin, 1994). Respondents used a 7-point scale from 1 ('not at all') to 7 ('markedly') to indicate the extent to which their body weight or shape has influenced them in a negative way over the previous 28 days.

Drive for Thinness Subscale of the Eating Disorders Inventory-3 (Garner, 2004). Respondents used a 6-point Likert scale from 1 ('never') to 6 ('always') to indicate their level of agreement with statements about the pursuit of thinness.

Drive for Muscularity Scale (McCreary, 2007). Respondents used a 6-point scale from 1 ('not at all like me') to 7 ('very much like me') to indicate their level of agreement with statements about the pursuit of muscle.

Results

Due to skewness, emotional abuse was logarithmically transformed and sexual abuse was dichotomised (1 = 'no or minimal abuse'; 2 = 'low, moderate or severe abuse'). All other measures possessed adequate psychometric properties (see Table 1).

Rates of childhood maltreatment

According to cut-offs (Bernstein and Fink, 1998), 'severe' levels of sexual abuse were reported by 6 per cent of our sample, with an additional 10 per cent reporting 'moderate' and 4 per cent reporting 'low' levels of sexual abuse. 'Severe' levels of physical abuse were reported by 5 per cent of our sample, with an additional 23 per cent reporting 'moderate' levels of abuse. 'Severe' levels of physical neglect were reported by 4 per cent of our sample, with an additional 22 per cent reporting 'moderate' levels of neglect. 'Severe' levels of emotional abuse were reported by 8 per cent of our sample, with

Table 1. Bivariate correlations, means, standard deviations (SDs), and Cronbach's α

	1	2	3	4	5	6	7	8	9	10	Female data		
											M	SD	α
1 Sexual abuse	—	.25**	.39**	.46**	.36**	-.08	-.05	.16	-.10	.00	6.41	3.99	.95
2 Physical abuse	.46**	—	.46**	.57**	.52**	-.06	.15	.13	.14	.16	6.83	2.76	.70
3 Physical neglect	.44**	.39**	—	.44**	.64**	-.20*	-.06	.19*	-.04	-.08	6.49	2.79	.77
4 Emotional abuse	.40**	.44**	.45**	—	.65**	-.05	.06	.33**	.11	.14	9.00	4.18	.82
5 Emotional neglect	.42**	.33**	.60**	.66**	—	-.05	.13	.28**	.12	.06	9.33	4.11	.87
6 BMI	.10	.04	-.04	-.02	.04	—	.19*	.11	.29**	.26**	22.40	3.04	n/a
7 Drive for thinness	.15	.08	.19*	.20*	.15	.21*	—	.18*	.82**	.82**	3.27	1.23	.92
8 Drive for muscle	.14	.13	.09	.03	.03	-.04	.25**	—	.21*	.27**	1.76	.55	.81
9 Weight dissatisfaction	.18*	.07	.11	.17*	.11	.13	.69**	.30**	—	.91**	3.06	1.57	.85
10 Shape dissatisfaction	.17*	.09	.12	.19*	.11	.12	.65**	.36**	.86**	—	3.36	1.60	.91
Male data	5.76	6.95	7.17	8.66	10.12	24.46	2.28	2.55	2.00	2.33			
SD	2.43	2.45	2.88	3.83	4.26	3.38	.94	.93	1.11	1.21			
α	.93	.67	.70	.81	.89	n/a	.88	.91	.79	.87			

BMI: body mass index.

Female data are in the top right diagonal and male data are in the bottom left diagonal. Descriptives are included for the variable 'Sexual abuse' despite it having being dichotomised for use in inferential analyses.

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

an additional 31 per cent reporting 'moderate' levels of abuse. 'Severe' levels of emotional neglect were reported by 4 per cent of our sample, with an additional 39 per cent reporting 'moderate' levels of neglect.

Gender differences in maltreatment and body concerns

A series of independent groups *t*-tests revealed no gender differences in terms of frequency of sexual, physical and emotional abuse, or emotional neglect, $t(297) = 1.40, .92, .74$ and 1.63 , all $p > .05$, respectively. The absence of a gender difference for sexual abuse was unexpected and may be due to insufficient statistical power related to the low frequency of reported sexual abuse and/or the need to dichotomise this variable. Men did, however, report more frequent physical neglect than women, $t(297) = -2.65$, $p < .01$, $d = .31$. In terms of body image, women reported more dissatisfaction with body weight, $t(297) = 6.81$, $p < .001$, $d = .79$, and shape, $t(297) = 6.28$, $p < .001$, $d = .73$, and more drive for thinness, $t(297) = 7.73$, $p < .001$, $d = .90$, and men reported more drive for muscle, $t(297) = -8.85$, $p < .001$, $d = 1.03$.

Maltreatment and body concerns

Bivariate correlations in Table 1 show that in women, dissatisfaction with weight and shape was highly correlated, and both also correlated positively and strongly with drive for thinness, moderately with body mass index (BMI) and weakly with drive for muscle. In men, dissatisfaction with weight and shape was highly correlated, and both also correlated strongly with drive for thinness, moderately with drive for muscle and slightly with BMI.

It was hypothesised that childhood maltreatment would be associated with body dissatisfaction and drive for thinness in both adult women and men and with drive for muscle only in men. These associations, as well as gender differences, were tested in a series of moderation analyses conducted via hierarchical regressions

in which each dependent variable – weight and shape dissatisfaction, drive for thinness and drive for muscle – was regressed on gender and the five maltreatment variables (the main effects) in step 1 of the regression followed by the products of gender and each maltreatment variable (the two-way interaction effects) in step 2. All variables were centred and the gender was dummy-coded such that 'female' was negative and 'male' was positive.

The predictors explained 16 per cent of the variance in weight dissatisfaction, $R^2 = .16$, $p < .001$, with a significant main effect of gender, $\beta = -.23$, $p < .005$, and a significant interaction between gender and sexual abuse, $\beta = .19$, $p < .03$. Specifically, although women reported more weight dissatisfaction than men, men's (but not women's) weight dissatisfaction was positively correlated with a history of sexual abuse. This is evident in the differential pattern of correlations in Table 1 for both women and men in the context of sexual abuse. The same predictors explained 17 per cent of the variance in shape dissatisfaction, $R^2 = .17$, $p < .001$, with a main effect of gender evident, $\beta = -.25$, $p < .01$ (i.e. women reported more dissatisfaction with shape than men), but in this case, no interaction between gender and sexual abuse was obtained.

In relation to drive for thinness, 23 per cent of the variance was explained, $R^2 = .23$, $p < .001$, partly due to the main effect of gender, $\beta = -.36$, $p < .001$, and partly due to the interaction between gender and physical neglect, $\beta = .20$, $p < .001$. As is evident in the correlations of Table 1, although women reported a greater drive for thinness, it was men whose drive for thinness was positively correlated with the frequency of physical neglect.

Finally, of the 26 per cent of drive for muscle explained, $R^2 = .26$, $p < .001$, only the main effect of gender, $\beta = .53$, $p < .001$, was significant. As expected, men reported a great drive for muscle than women. The lack of an interaction effect involving gender is surprising given that inspection of Table 1 shows that for women, but not men, significant positive correlations

involving the drive for muscle were obtained in relation to the frequency of physical neglect, emotional abuse and emotional neglect.

Discussion

Moderate to severe levels of abuse and neglect were reported. Considering that this was a community sample, this observation is troubling, but not unexpected, given previous epidemiological research (Smolak and Murnen, 2002). Several of the body concern variables were positively associated with childhood maltreatment. The fact that these associations were different depending on the type of maltreatment suggests that the underlying relationships are complex (Ball et al., 1999).

As expected, physical neglect and emotional abuse were associated with weight and shape dissatisfaction as well as drive for thinness. Although this was evident only in men, it adds to previous research suggestive of a link between maltreatment and weight-related concerns (Thompson and Wonderlich, 2004). In women, the pattern of correlations obtained (but not moderations) indicated that emotional abuse and emotional neglect were associated with increased drive for muscle. This was unexpected given that girls and women are more preoccupied with thinness than muscle (McCabe et al., 2006). It was also inconsistent with cultural associations between thinness and femininity and between muscle and masculinity (Mussap, 2007). The gender-atypical associations between maltreatment and body concerns are discussed below.

Body dissatisfaction and drive for thinness in men

The consequences of maltreatment are often conceptualised as disruptions to a child's normal development. These disruptions are thought to promote maladaptive coping strategies that can persist into adulthood (Spataro et al., 2004). Given the centrality of body image in identity formation, and the cultural prominence of leanness

to both genders, it is perhaps not surprising that childhood maltreatment in boys would contribute to body dissatisfaction later in life and promote appearance-based coping through the pursuit of thinness (Heywood and McCabe, 2006). Control of body weight may also be an attempt by male victims of abuse/neglect to cope with stress (Bennett and Cooper, 1999), improve self-esteem and reduce perceived shame (Kearney-Cooke and Striegel-Moore, 1994), regulate affect (Goodsitt, 1983) and (although not yet confirmed with boys) to postpone the onset of visible signs of sexual maturity in order to avoid unwanted sexual advances from abusers (Rorty and Yager, 1996). The development of dissociative defence mechanisms by victims of abuse/neglect might also contribute to symptoms of disordered eating in men such as bingeing and purging (Everill and Waller, 1995).

Drive for muscle in women

Although the link between muscle and maltreatment in women was statistically weak, it is worth noting that a growing number of women do value and pursue muscularity. This is consistent with a cultural shift towards a more athletic female ideal and also with the popularity of body building as a means of reducing adiposity (Shomaker and Furman, 2010). The observation that women are more likely than men to use muscle building as a means of psychological coping and stress reduction (Pritchard et al., 2011) is particularly relevant to our study. Body building might be used by female victims of maltreatment to cope with negative affect by physically empowering them or improving their body self-esteem (e.g. Ahmed et al., 2002).

Limitations

The use of a non-clinical sample prevents generalisation of the results to clinical groups such as those with disturbed body image, eating disorders or muscle dysmorphia. The cross-sectional design with correlational analyses prevents causal inferences being drawn. And the use of

retrospective reporting of childhood maltreatment introduces confounds such as selective recall and post-traumatic dissociation.

Conclusions

In conclusion, our results provide tentative evidence of a link between maltreatment in childhood and body image in adulthood. That these links are gender atypical – that is, muscle concerns in women and weight concerns in men – might reflect different ways in which women and men cope with negative childhood memories and experiences. Future research using more robust research designs (e.g. prospective cohort studies) is needed to confirm these associations and uncover their psychological bases.

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