

# Childhood Abuse and Eating Disorders in Gay and Bisexual Men

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#### ABSTRACT

**Objective:** This study examines the association between eating disorders and a history of childhood abuse in gay and bisexual men, and how substance abuse and depression might impact this relationship.

**Method:** 193 white, black, Latino gay, and bisexual men were sampled from community venues. DSM-IV diagnoses of anorexia, bulimia, and binge eating disorder were assessed using the World Health Organization's Composite International Diagnostic Interview.

**Results:** Men with a history of child-hood sexual abuse are significantly more likely to have subclinical bulimia or any current full-syndrome or subclinical eating disorder compared with men who do not have a history of childhood sexual

abuse. A history of depression and/or substance use disorders did not mediate this relationship.

Conclusion: Researchers should study other potential explanations of the relationship between a history of childhood abuse and eating disorders in gay and bisexual men. Clinicians working with gay and bisexual men who have a history of childhood abuse should assess for disordered eating as a potential mechanism to cope with the emotional sequelae associated with abuse. © 2007 by Wiley Periodicals, Inc.

**Keywords:** gay; bisexual; childhood sexual abuse; childhood physical abuse; eating disorders

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### Introduction

Gay and bisexual men are more likely than heterosexual men to have behavioral symptoms indicative of disordered eating<sup>1–8</sup> as well as a higher prevalence of DSM-IV eating disorders,<sup>9–12</sup> yet little is known about the risk factors for eating disorders in this population. Research has also shown that gay and bisexual men are more likely than heterosexual men to have experienced abuse and victimization in childhood.<sup>13–15</sup> Studies of gay and bisexual men have shown that 15%–43% experienced childhood physical abuse,<sup>14,15</sup> and 14%–37%<sup>13,15–19</sup> experi-

enced childhood sexual abuse. The high prevalence of both childhood abuse and eating disorders in gay and bisexual men led us to examine whether childhood abuse is a risk factor for adult eating disorders in this population.

Studies have shown that there is an association between a history of childhood abuse and eating disorders in women, 20-24 but few studies have examined this relationship in men. Men with either a history of childhood sexual abuse, 25 physical abuse, 26,27 or both sexual and physical abuse were more likely to have eating disorders. Researchers hypothesize that eating disorders may represent an attempt to manage the vulnerability and overwhelming emotional states associated with the abuse. In the absence of more adaptive coping strategies, such researchers say, disordered eating could serve as a coping mechanism to address feelings of intense distress and the experiences associated with that distress.

Researchers have searched for factors that mediate the relationship of a history of childhood abuse and eating disorders in various populations, although not in gay and bisexual men. Among the factors that have been suggested are psychological factors, such as dissociation,<sup>31</sup> general distress,<sup>30,32</sup> anxiety,<sup>31</sup> depression,<sup>33</sup> substance abuse,<sup>22</sup> and

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alexithymia (an unawareness or inability to talk about feelings or emotions  $^{30,32,33}$ ).

In the only study that examined the mediators of this relationship in men, Mitchell and Mazzeo<sup>27</sup> found that depression had a significant mediating role in the relationship between childhood abuse and eating disorders. Studies have shown that gay and bisexual men with a history of childhood abuse are more likely than their counterparts to have substance use problems<sup>16,19</sup> and depression, <sup>16,34,35</sup> while others have shown that disordered eating and depression are associated in gay and bisexual men.<sup>1,7,8,36</sup> Based on these results we hypothesize gay and bisexual men with a history of childhood abuse (including physical and sexual abuse) would be more likely to have eating disorders as adults, and that major depression and substance use disorders mediate this relationship.

## Method

#### Sampling

Respondents were sampled by direct solicitation in diverse New York City venues (e.g., business establishments, such as bookstores and cafes, social groups, outdoor areas, such as parks), and through snowball referrals. Sampling venues were selected to ensure a wide diversity of cultural, political, ethnic, and sexual representation within the demographics of interest. To reduce bias, venues were excluded from our venue-sampling frame if they were likely to over- or under-represent people receiving support for mental health problems (e.g., 12-step programs, HIV/AIDS treatment facilities), or significant life events (e.g., organizations that provide services to people who have experienced domestic violence).

Between February 2004 and January 2005, 25 outreach workers visited a total of 274 venues in 32 different New York City zip codes. Respondents were eligible if they were between the ages of 18 and 59 years, New York City residents for 2 or more years, and self-identified as: (a) heterosexual or lesbian, gay, or bisexual; (b) male or female; and (c) white, black, or Latino (respondents may have used other identity terms in referring to these social groups). Eligible respondents were then invited to participate in a face-to-face interview that lasted a mean of 3.8 hours (SD = 55 min). The cooperation rate for the study was 79% and the response rate was 60%.37 Response and cooperation rates did not vary greatly by gender, race, and sexual orientation. Recruitment efforts were successful at reaching individuals who resided in diverse New York City neighborhoods and avoided concentration in

particular "gay neighborhoods" that is often characteristic of sampling of LGB populations. Interviewed individuals resided in 128 different New York City zip codes and no more than 3.8% of the sample resided in any one zip code area. The research protocol was reviewed by the Western Institutional Review Board.

## **Participants**

This analysis is based on the subsample of gay and bisexual male respondents (n=193). The mean age for the gay and bisexual men in this sample is 33 (SD = 9). Of the men, 85% were identified as gay and 14% as bisexual, and 23% of the gay and bisexual men had a high school diploma or less education. The black and Latino respondents had a lower socio-economic status as indicated by lower education and lower income.

#### Measures

**Eating Disorders.** Diagnoses were made using the computer-assisted personal interview version 19 of the WMH-CIDI, a fully structured measure used in the National Comorbidity Study (www.hcp.med.harvard. edu/ncs). 38,39 We assessed the presence of both lifetime and current (12 months) eating disorders, including full syndrome anorexia, bulimia, and binge eating disorder. To classify participants, we used the algorithms from Hudson et al.'s<sup>40</sup> study of the prevalence of eating disorders in the National Comorbidity Survey Replication (www.hcp.med.harvard.edu/ncs/eating.php) with one exception. To satisfy criterion D for the DSM-IV bulimia diagnosis, we only used EA17f (did you feel like your selfesteem and confidence depended on your weight or body shape?), which Hudson et al. acknowledge would be the stricter interpretations of this criterion.<sup>12</sup>

Although most of the CIDI questions reflected the DSM-IV criteria, Hudson et al.40 identified two exceptions. To meet the criteria for binge eating disorder, the DSM-IV requires a minimum of 6 months of regular binge eating episodes, while the CIDI asked only whether the individual experienced 3 months of symptoms. Therefore, participants who reported more than 3 months of symptoms, but less than 6 months of regular binge eating would be classified as having binge eating disorder according to this algorithm, but not the DSM-IV criteria. Also, for eating binges in bulimia and binge eating disorders, the DSM-IV requires an assessment of loss of control. For binge eating disorder, the DSM-IV further requires an assessment of marked distress. These items were assessed in the CIDI by a series of questions about attitudes and behaviors that are indicators of loss of control and distress, rather than by direct questions.

Consistent with others, <sup>41,42</sup> we defined *subclinical ano*rexia as characterized by (a) having a fear or gaining weight or becoming fat and (b) experiencing disturbance in how one perceives their body. *Subclinical bulimia* was defined using the same criteria as full syndrome bulimia except there was no requirement regarding the frequency of binging and compensatory behavior. We also used Hudson et al.'s<sup>40</sup> algorithm for *subclinical binge eating disorder*, which was defined as binge eating episodes that occur at least twice a week for at least 3 months, and not during the course of anorexia, bulimia, or full syndrome binge eating disorder. All of the subclinical diagnosis categories included full syndrome and subthreshold cases. We used this expanded category in this study because the eating disorder literature has suggested that the full syndrome diagnosis criteria may be too restrictive. <sup>43,44</sup>

**Substance Use and Major Depressive Disorder.** Lifetime histories of *major depressive* and *substance use* disorders were identified using the WHM-CIDI.<sup>38,39</sup> Substance use disorders include alcohol abuse, drug abuse, alcohol dependence, and drug dependence.

**History of Childhood Abuse.** Histories of childhood sexual and physical abuse were assessed following procedures of Life Events Questionnaire. 45 Respondents were first asked whether they had experienced any of a list of events, including childhood sexual and physical abuse. If they indicated that they had experienced a certain event, they were then probed by the interviewer who wrote an event narrative. Probing was aimed at collecting details about the event that would ascertain that the conditions were met for classifying the reported event as an abuse event, according to the criteria described below. The event narratives were later rated by two independent raters to assess whether the narrative described an event that met criteria for an incident of childhood abuse and to evaluate the event on a number of dimensions such as its magnitude and severity. The independent ratings were then checked for reliability. When there was a discrepancy the ratings were reconciled by discussion and consensus among raters during weekly meetings.

Childhood physical abuse was assessed by the question: "Before age 18, did anyone hit you so hard that it left bruises or marks, punish you with a belt, board, cord, or other hard object, or hit you so hard you had to go to see a doctor or go to the hospital?"

Childhood sexual abuse was assessed by the question: "Before age 18, did anyone who was responsible for your care such as a parent, caregiver, or babysitter—or someone else who was at least 5 years older than you—ever touch your sexual parts (penis or anus), make you touch their sexual parts, or make you watch sexual things?" Men reporting that they had been coerced into sexual activity at age 16 or younger by a man 5 years their senior

TABLE 1. Prevalence of histories of childhood sexual and physical abuse in gay and bisexual men

	Childhood Sexual Abuse (%)	OR (CI)	Childhood Physical Abuse (%)	OR (CI)
All $(n = 193)$	34		33	
Sexual orientation				
Gay $(n = 165)$	31	2.6 (1.1, 5.8)	32	1.4 (0.6, 3.1)
Bisexual $(n = 28)$	53		39	
Race				
White $(n = 65)$	17		25	
African-American	36	2.7 (1.2, 6.3)	33	1.5 (0.7, 3.2)
(n = 64)				
Latino ( <i>n</i> = 64)	50	5.0 (2.2, 11.1)	42	2.2 (1.0, 4.7)
Age				
18-30 (n = 94)	28	1.6 (0.8, 3.0)	31	1.2 (0.7, 2.2)
31-59 (n=99)	39		35	
Education				
High school diploma or less $(n = 45)$	51	2.5 (1.3, 5.0)	40	1.5 (0.7, 3.0)
Negative net worth $(n = 104)$	37	1.4 (0.7, 2.5)	36	1.4 (0.7, 2.5)

were defined as having a history of childhood sexual abuse. 46

**Sociodemographic Factors.** Respondents were characterized based on self-reported *racelethnicity, sexual orientation*, and *age groups*: (18–30 and 31–59). *Education* was categorized as high school or less vs. more than high school. *Net worth* was calculated by asking respondents to assess their total financial assets and liabilities. These sums were then divided to arrive at an asset to liabilities ratio. <sup>47</sup> Negative net worth is dichotomized variable that identifies those individuals who had more liabilities than assets.

Statistical Analysis. We used  $\chi^2$ -square analyses to assess demographic group differences in prevalence of history of sexual and physical abuse (Table 1) and logistic regression analyses to test the hypothesis that men with a history of childhood abuse had more lifetime and current eating disorders (Table 2) than men without a history of abuse. In all these analyses except for full syndrome anorexia we present the odds ratios (OR) and 95% confidence intervals (CI). We used Fisher's exact test to assess full syndrome anorexia because risk estimate statistics could not be computed due to empty expected cells.

We examined the mediating role of substance abuse and depression following Baron and Kenny's<sup>48</sup> procedure. Data were analyzed using SPSS statistical software (Version 13.0).

### Results

Of the gay and bisexual men in this sample, 33% had a history of childhood physical abuse and 34%

TABLE 2. Lifetime and current (12-months) eating disorders among gay and bisexual men with and without a history of childhood sexual abuse

	Childhood Sexual Abuse		
	Yes (n = 66) (%)	No (n = 127) (%)	OR (CI)
Lifetime history of DSM-IV full-syndrome anorexia	0	1.6	$\chi^2 = 1.0,  \mathrm{ns}^{\mathrm{a}}$
Lifetime history of DSM-IV full-syndrome bulimia	9.1	4.7	2.0 (0.6, 6.5)
Lifetime history of full-syndrome DSM-IV binge eating disorder	6.1	4.7	1.3 (0.3, 4.8)
Subclinical anorexia	4.5	2.4	2.0 (0.4, 10.0)
Subclinical bulimia	16.7	5.5	3.4 (1.2, 9.3)
Subclinical binge eating disorder	13.6	7.1	2.0 (0.8, 5.5)
Any lifetime full-syndrome or subclinical eating disorder	24.2	11	2.6 (1.2, 5.7)
Any current full-syndrome or subclinical eating disorder	13.6	3.9	3.8 (1.2, 12.0)

<sup>&</sup>lt;sup>a</sup> Fisher's exact test performed because odds ratios are not calculable.

had a history of childhood sexual abuse. **Table 1** displays the differences in prevalence of a history of childhood sexual and physical abuse by demographic groups. The analyses showed that bisexual-identified men had a higher prevalence of childhood sexual abuse than gay-identified men. African American and Latino men had a higher prevalence of childhood sexual abuse than white men, and men with a high school education or less had a higher prevalence of childhood sexual abuse than men with a higher education level. There were no differences between the younger and older men in the sample and between men with positive versus negative net worth.

**Table 2** displays the associations of childhood sexual abuse and DSM-IV eating disorders. When compared with men without a history of childhood sexual abuse, men with a history of childhood sexual abuse were more likely to have developed subclinical bulimia and both current and lifetime any subclinical eating disorder. Risk for full-syndrome disorders followed the same pattern but these results did not reach statistical significance. A history of physical abuse was not related to any of the eating disorders.

Although childhood sexual abuse was associated with eating disorders, it was not associated with the putative mediators: substance use disorders (OR  $[CI] = 1.6 \ [0.8, 3.0]$ ) or major depressive disorder (OR  $[CI] = 1.0 \ [0.5, 2.1]$ ). An association between the putative mediators and the predictor is a preliminary condition for mediation. Therefore, we conclude that neither substance use disorders nor major depressive disorder played a

mediating role in the association of childhood sexual abuse and eating disorders.

## Conclusion

This study is the first to examine the relationship between a history of childhood abuse and eating disorders in gay and bisexual men. Our results show that gay and bisexual men with a history of childhood sexual abuse are more likely to have subclinical bulimia or any current full syndrome or subclinical eating disorder compared with men who do not have a history of childhood sexual abuse. We found that a history of childhood sexual abuse was related to bulimia, but not anorexia, which is consistent with prior research. 49,50 Some studies have shown a relationship between a history of childhood abuse and anorexia, however this was significantly more likely to be the binge-purge subtype of anorexia. 51,52 Childhood sexual abuse may be more highly associated with symptoms of bulimia, such as binging and purging, because these behaviors can represent an attempt to regulate negative internal states, such as depression or anxiety, that can be the result of a history of childhood abuse.51,53

Prior studies have suggested that values and norms in the gay male community place a heightened focus on physical appearance to which men may feel pressured to conform, thereby increasing the risk for eating disorders in this population. While there might be validity to this explanation, our findings suggest that a history of childhood sexual abuse might also be an important factor in understanding what might place gay and bisexual men at risk for developing an eating disorder. It may be, as researchers have argued, that engaging in disordered eating is a way to cope with the emotions that result from a history of childhood sexual abuse. <sup>29,30</sup>

Our study is limited in that it is based on non-probability sampling. Our sampling strategy was designed to minimize such bias and is a great improvement over current studies of LGB populations whose study volunteers may have been motivated by having greater difficulties around body image and eating disorders than nonvolunteers. We found that 33% of the gay and bisexual men reported a history of childhood physical abuse, and 34% reported a history of childhood sexual abuse. The prevalences of sexual and physical abuse that we report here are similar to what have been found

in other studies in this population gives us some assurance that our sample is not unrepresentative of the gay/bisexual male populations. The second limitation involves the measure we used for childhood abuse. While other studies of childhood abuse in gay and bisexual men have used a similar measure to our study, the other instruments, such as the Childhood Trauma Questionnaire, are more reliable and valid measures of childhood abuse that should be used in future studies of childhood abuse and eating disorders in this population. Although these are limitations of our study, they do not seem to be a plausible cause of bias in our results.

Contrary to our hypothesis, neither substance abuse nor depression were found to be significant mediators of the relationship between abuse and eating disorders. Also we found that eating disorders were related to childhood sexual abuse but not physical abuse. Even though studies have found that childhood psychological, physical, and sexual abuse are associated with eating disorders, there is no current hypothesis as to why eating disorders would be more strongly associated with one type of abuse over another. Further, there have been no consistent findings of what mediates the relationship between a history of childhood abuse and eating disorders, particularly in men. Although our study does not answer these questions, it represents the beginning of an important line of research that examines risk factors for eating disorders in gay men. Further research needs to explore the association between childhood abuse and eating disorders in gay and bisexual men, and what might explain this relationship.

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