

Morbid jealousy from an evolutionary psychological perspective

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Initial receipt 24 July 2006; final revision received 3 May 2007

Abstract

Individuals diagnosed with morbid jealousy have hypersensitive jealousy mechanisms that cause them to have irrational thoughts about their partner's fidelity and to exhibit extreme behaviors. Using a newly constructed database of 398 cases of morbid jealousy reported in the literature from 1940 to 2002, we tested four evolutionarily informed hypotheses about normally functioning jealousy mechanisms and applied them to this novel population of individuals diagnosed with morbid jealousy. We hypothesized that a greater percentage of men than women diagnosed with morbid jealousy would be focused on a partner's sexual infidelity and on indicators of a rival's status and resources and that a greater percentage of women than men diagnosed with morbid jealousy would be focused on a partner's emotional infidelity and on indicators of a rival's youth and physical attractiveness. All four hypotheses were supported. The results suggest continuity between normal jealousy and morbid jealousy and highlight the heuristic value of using archival databases to test evolutionarily informed hypotheses. © 2007 Elsevier Inc. All rights reserved.

Keywords: Morbid jealousy; Infidelity; Clinical disorders; Sex differences; Evolutionary psychology

1. Introduction

Sexual jealousy has been studied extensively by evolutionary scientists and has been shown to be a normal emotional reaction to perceived or actual partner infidelity. This research has provided evidence for sex differences in jealousy, as well as an explanation as to why the sexes have different reactions to infidelity. When asked which type of partner infidelity would be more upsetting, men are more likely to select sexual infidelity and women are more likely to select emotional infidelity (Buss, Larsen, Westen, & Semmelroth, 1992; Buss et al., 1999; Schützwohl, 2004, 2005; Schützwohl & Koch, 2004; Shackelford, Buss, & Bennett, 2002; Shackelford et al., 2004).

Men and women also differ in reports of the characteristics of rivals that produce jealousy, due to the different characteristics that men and women prefer in a mate. When asked to rate a potential mate's characteristics, women place greater importance on the ability to invest in offspring than do men, and men place greater importance on characteristics

indicating health and fertility than do women (Buss, 1989, 2003; Buss & Schmitt, 1993; Kenrick, Sadalla, Groth, & Trost, 1990; Li, Bailey, Kenrick, & Linsenmeier, 2002; Schmitt, Shackelford, Duntley, Tooke, & Buss, 2001). It has been hypothesized that men and women are particularly upset by rivals who display these particular characteristics (Buss, 2000). Research supports this hypothesis: When asked to identify the characteristics of a potential rival that are upsetting, men are more likely than women to identify characteristics related to resource acquisition or holdings, whereas women more than men report upset when confronted with potential rivals who display youthfulness and attractiveness (Brase, Caprar, & Voracek, 2004; Buss, Shackelford, Choe, Buunk, & Dijkstra, 2000).

These findings have been well documented in normal adult populations but have not yet been investigated in individuals diagnosed with morbid jealousy. These individuals have irrational thoughts about their partner's fidelity (APA, 2000), and they incessantly make unwarranted or unverified accusations about their partner's infidelity (e.g., Kingham & Gordon, 2004; Shepherd, 1961; Vauhkonen, 1968). Morbid jealousy can be thought of as hypersensitive jealousy, as these individuals experience jealous reactions at a much lower threshold than normal individuals.

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2. Hypotheses

Because morbid jealousy can be considered hypersensitive jealousy, it is hypothesized that the noted sex differences also will be found in individuals diagnosed with morbid jealousy. Specifically, it is hypothesized that:

Hypothesis 1. A greater percentage of men than women diagnosed with morbid jealousy will focus on a partner's sexual infidelity.

Hypothesis 2. A greater percentage of women than men diagnosed with morbid jealousy will focus on a partner's emotional infidelity.

Hypothesis 3. A greater percentage of men than women diagnosed with morbid jealousy will focus on indicators of a rival's status and resources.

Hypothesis 4. A greater percentage of women than men diagnosed with morbid jealousy will focus on a rival's youth and physical attractiveness.

3. Method

3.1. Participants

To investigate a large enough sample of individuals diagnosed with morbid jealousy, we constructed a database that included information from all case histories of morbid jealousy published in English. This produced a sample of 398 case histories (298 men and 100 women) published during the years 1940–2002. The ages of individuals diagnosed with morbid jealousy ranged from 18 to 98 years (mean=43.52; S.D.=12.04). Case histories represented various countries: England (56%), Norway (11%), United States (8%), Australia (3%), and Sri Lanka (3%). Eight percent of the case histories came from countries with few reported cases of morbid jealousy, and the rest reported no country of origin (12%). At the time of initial interview, 310 of the individuals diagnosed with morbid jealousy were married. Current relationships varied in length from 4 months to 51 year (mean=15.48; S.D.=10.43).

3.2. Materials

The database was constructed by identifying and securing all morbid jealousy case histories published in English (available upon request from the first author). We then constructed a coding sheet to be used for each case history (available upon request from the first author). The coding sheet secured demographic information, including the sex and age of the individual, the sex and age of the partner, type of relationship, and length of relationship. Collection of other information on the coding sheet was guided by evolutionary psychological theories of jealousy and included information regarding the mate value of both individuals in the relationship, the sexual history of the couple, sexual

fidelity, sexual rivals, mate guarding, and violence in the relationship. Using the coding sheet, a spreadsheet database was constructed to allow for statistical analyses designed to test the hypotheses.

3.3. Procedure

We first identified all published case histories using the search terms “pathological jealousy,” “morbid jealousy,” “conjugal paranoia,” and “Othello syndrome” in the PsycINFO and MEDLINE/PubMed databases available online. These databases provide publication data that cover the years 1806–2005 for PsycINFO and the years 1896–2005 for MEDLINE/PubMed, inclusive, as of July 2005. Case histories were selected by reviewing individual article abstracts to determine a history was present in the article. Using these case histories and previous evolutionary psychology research, a coding sheet was generated for the purpose of standardizing the data contained in each case history. Two coders examined the case histories for information on the type of infidelity partners were accused of committing and for information about the morbidly jealous individual's potential rival. To ensure high reliability between coders, several cases were coded by both coders. Discrepancies between coders were minimal and were easily resolved.

4. Results

It was hypothesized that a greater percentage of men than women diagnosed with morbid jealousy will focus on a partner's sexual infidelity (Hypothesis 1) and on a potential rival's social status and resources (Hypothesis 3), and that a greater percentage of women than men diagnosed with morbid jealousy will focus on a partner's emotional infidelity (Hypothesis 2) and on a potential rival's youth and physical

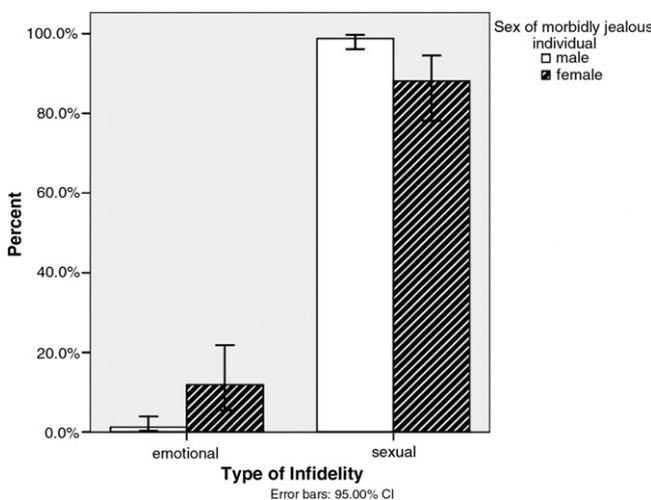


Fig. 1. Percentage of reported upset about sexual infidelity and emotional infidelity as a function of the sex of the morbidly jealous individual.

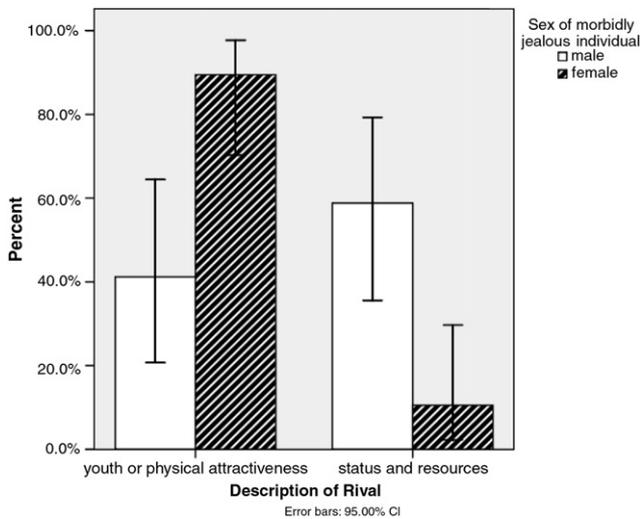


Fig. 2. Percentage of reported rival description as a function of the sex of the morbidly jealous individual.

attractiveness (Hypothesis 4). Chi-square analyses were used to test all hypotheses at $\alpha=.05$.

Hypotheses 1 and 2 were analyzed using information from case histories regarding the type of infidelity partners were accused of committing by the morbidly jealous individual. Cases that provided no information regarding the type of infidelity (164 cases) or in which the type of infidelity was not clear (i.e., history mentioned both sexual infidelity and emotional infidelity in 11 cases) were excluded from the analysis, leaving 223 cases that reported upset by either sexual infidelity or emotional infidelity. Of the remaining cases, 214 (162 men, 52 women) reported upset by sexual infidelity, and 9 (2 men, 7 women) reported upset by emotional infidelity. Because the number of men reporting emotional infidelity was less than five (the suggested minimum for each cell in Pearson's chi-square analyses), a 2×2 Fisher's Exact Test was used. This test is robust to small sample sizes (e.g., Parshall & Kromrey, 1996). A significant difference was found [$\chi^2(2, N=223) = 12.70, p=.002$], indicating that men were more upset by sexual infidelity and women were more upset by emotional infidelity (Fig. 1).

Hypotheses 3 and 4 were analyzed using descriptions of rivals provided by morbidly jealous individuals in the case histories. Cases that provided no information regarding the rival (327 cases) or a description of the rival that was not relevant (i.e., derogatory rival comments in 35 cases) were excluded from the analysis, leaving a total of 36 cases that reported a description of the rival. The rival's youthfulness and/or physical attractiveness was reported in 24 cases (7 men, 17 women), and status and/or resources were reported in 12 cases (10 men, 2 women). For analysis, a 2×2 Fisher's Exact Test was used due to the number of women reporting status and/or resources being less than five. A significant difference was found [$\chi^2(2, N=36) = 9.42,$

$p=.004$], indicating that men were more likely to report that a rival had greater status and/or resources and that women were more likely to report that a rival was younger and/or more physically attractive (Fig. 2).

5. Discussion

It was hypothesized that men and women diagnosed with morbid jealousy would exhibit behaviors similar to those of individuals who express normal sexual jealousy, and the results support these hypotheses. Men diagnosed with morbid jealousy are more likely to report being upset by sexual infidelity and are more likely to focus on a potential rival's status and/or resources. Women diagnosed with morbid jealousy are more likely to report being upset by emotional infidelity and are more likely to focus on a potential rival's youthfulness and/or physical attractiveness.

Although there have been many previous studies of jealousy, none has specifically studied the population of morbidly jealous individuals from an evolutionary perspective. Previous researchers have offered conjecture that this population would behave in a fashion similar to that of normal individuals, and the results from the present study support such conjecture (e.g., Buss, 2000; Daly, Wilson, & Weghorst, 1982).

One potential problem with the current study is that analyses were limited by what has been reported in published case histories. Careful effort was made by trained researchers to not use conjecture or to make assumptions about what was being reported. It is possible that, because of this caution, there are other cases that could be included in the analyses but were excluded from the present analyses. However, although this caution produced small frequencies for some of the variables, the hypothesized sex differences emerged.

Despite being limited by what has been reported in the case histories, the methodology of the present study is a valid research tool. Wilson and Daly (1992) suggested that archival data may be a better way to obtain information about jealousy from individuals, as individuals may not provide accurate responses on self-report measures. Archival data also allow researchers access to populations that are usually not readily available, such as clinical patients or convicted felons. Using archival data on homicides, Daly and Wilson (1988) documented that jealousy consistently appears as a source of conflict in sexual relationships. Their research has since been applied with various methodologies to other populations, and similar results have been found (e.g., Shackelford, Goetz, Buss, Euler, & Hoier, 2005).

This methodology can be applied to other clinical populations in which evolutionary hypotheses have been generated but not tested. Large archived databases of clinical patients can also benefit clinicians who treat these patients. For example, our database of individuals with morbid jealousy includes information regarding diagnosis and treatment. Having this information collected in one database

might make it easier for clinicians to determine successful courses of treatment for these individuals.

As demonstrated by the current study, using archival data on clinical patients can provide insight into human behavior. Although using published case reports has limitations, this procedure provided access to a large cross-cultural sample. We hope that other researchers use this to investigate other clinical populations and to investigate behaviors that may be difficult to assess with self-report measures.

Acknowledgments

We thank Jerome Wakefield, David Bjorklund, Robin Vallacher, the Evolutionary Psychology Laboratory at Florida Atlantic University, the Buss Laboratory at The University of Texas at Austin, and two anonymous reviewers for valuable feedback on various stages of this project and earlier drafts of this manuscript.

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