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## **Delusional Disorder and Gender**

Delusional disorders are a category of mental disorders in which individuals experience delusions for at least one month, but have never had a diagnosis of schizophrenia. There are several subtypes of delusional disorder, including: persecutory, grandiose, jealous, somatic and erotomanic. Although individuals diagnosed with delusional disorder experience delusions that may negatively affect their home, work, and social lives, the impact of the disorder on their lives is less severe than in other psychotic illnesses, such as schizophrenia. For each of the subtypes of delusional disorder, except the jealous subtype, there is no gender difference in prevalence, onset, or outcome. The jealous subtype occurs as much as three times more frequently in males than females. Guided by an evolutionary psychological perspective, this entry addresses this gender difference.

### **An Evolutionary Perspective**

An understanding of cognitive mechanisms requires examining why the mechanisms evolved and what function the mechanisms have been selected to perform. Modern humans possess mechanisms that were adaptive in the environments of ancestral humans, but these same mechanisms may not be adaptive in modern environments. Examining the evolved function of mechanisms may provide insight into the causes of psychological disorders. Jerome Wakefield has proposed that disorders be considered “harmful dysfunctions.” These include failures of mechanisms to perform their selected function in the environments for which they were selected. For example, depression can be conceptualized as a malfunction of the mechanisms for sadness.

Sadness usually occurs when individuals experience losses associated with reproductive resources, such as the loss of a romantic partner. The loss of resources may be an indication that maladaptive behaviors are occurring, and the accompanying sadness may function to alter future behaviors to avoid further losses. A parallel argument is applicable to the jealous subtype of delusional disorder. Better understanding of the disorder, and therefore more successful treatment, is likely to be facilitated by understanding the normal functioning of jealousy mechanisms.

### **Delusional Disorder, Jealous Type**

The functioning of regulatory mechanisms, such as jealousy, varies among individuals. As is the case with delusional disorder, jealousy mechanisms may be hypersensitive to perceived threats. Individuals with hypersensitive jealousy mechanisms may be more likely to misperceive innocent cues as threats of partner infidelity, or perhaps may be more aware than normal individuals of potential infidelities. Because these individuals might be less likely to experience the costs associated with partner infidelity, this might be a beneficial malfunction and, therefore, might propagate through future generations. There are, however, costs associated with hypersensitive jealousy mechanisms. Individuals that constantly accuse their partners of infidelity might risk their partners leaving the relationship. These individuals may be so focused on potential partner infidelity that their daily functioning suffers. Both of these costs are present in individuals who suffer from delusional disorder, jealous type, more commonly referred to as morbid or pathological jealousy. Individuals with this type of delusional disorder constantly monitor their partner's behaviors, doing such things as phoning them incessantly, following them, questioning them about their whereabouts, or not allowing them to leave the house. They also misinterpret everyday actions and objects as cues to their partner's infidelity. Examples of

these misinterpretations include letters from strangers perceived to be love letters, cars driving by perceived to be lovers checking the partner's availability, and sexual frigidity of the partner perceived to indicate the partner receives sexual satisfaction from someone else. To better understand the gender differences associated with this disorder, it is important to appreciate the gender differences associated with normally functioning jealousy mechanisms.

### **Jealousy and Types of Infidelity**

Jealousy is a normal emotional reaction to perceived or actual partner infidelity. Because both men and women invest heavily in long-term romantic relationships and have much to lose if their partner is unfaithful, jealousy serves the adaptive regulatory purpose of attempting to prevent the costly act of partner infidelity. Decades of research has demonstrated a sex difference in jealousy, such that men are more upset by a partner's sexual infidelity and women are more upset by a partner's emotional infidelity. Sexual infidelity involves having sexual intercourse with someone other than a romantic partner. Ancestral men and women may have benefited from engaging in sexual intercourse with an extra-pair partner. Men had the potential of producing another genetic offspring in which minimum investment would be required on their part, whereas women could have benefited by obtaining high quality genes for their offspring. Emotional infidelity involves spending time and resources on someone other than a romantic partner. Similar to sexual infidelity, both ancestral men and women may have benefited from an emotional relationship with an extra-pair partner. Men would have benefited by providing resources to increase the likelihood of survival for any offspring produced with the extra-pair partner, and women would have benefited by obtaining immediate resources for themselves and any current offspring.

Although men and women obtain benefits from both types of infidelity, the potential costs accrued by their romantic partners differ as a function of the gender of the unfaithful individual. Female sexual infidelity is more costly to a romantic partner than female emotional infidelity. If a man's partner engages in sexual intercourse with another man when she is fertile (and therefore may become pregnant), he risks unwittingly investing in offspring to whom he is genetically unrelated. Conversely, male emotional infidelity is more costly to a romantic partner than male sexual infidelity. The woman risks the loss of her partner's resources, which could reduce the survival chances for her offspring. Because of the gender differences in infidelity costs, jealousy may function to attune men to threats of their partner's sexual infidelity and women to threats of their partner's emotional infidelity.

### **Jealousy and Sexual Rivals**

Men and women also differ in the qualities of potential romantic rivals that produce jealousy. This gender difference can be explained by the different characteristics that men and women prefer in potential romantic partners. Robert Trivers' theory of parental investment suggests the sex that has the higher minimum required investment will prefer partners who will be able to provide for any potential offspring, and the sex with the lower minimum required investment will prefer partners who are fertile and able to produce offspring. In humans, men have lower minimum required parental investment; at a minimum, their investment is a few moments of time and the costs of a single ejaculate. Women's minimum required investment is nine months of gestation and approximately two years of lactation. Therefore, women prefer romantic partners who demonstrate a willingness to invest, either directly through parental care or indirectly through financial support and resources. Men prefer romantic partners who demonstrate health and fertility (as indexed by physical attractiveness and youth), because over

ancestral history, health and fertility traits would have indicated a greater likelihood of becoming pregnant and producing offspring.

Because of these differences in preferences for a romantic partner, men and women feel threatened by romantic rivals that embody these particular characteristics. Men are more likely to experience jealousy when a potential rival has more resources to invest, because a woman is more likely to want a partner with the best capabilities for investment. Women may be able to determine a potential romantic partner's ability to invest by his occupation, salary, social status, or by the amount of money he spends on her. Therefore, men should be more upset by potential romantic rivals who have better jobs, make more money, have higher social status, or who are willing to spend more money on the partner.

Women should be more upset by potential romantic rivals who display characteristics that index health and fertility as these are the traits preferred in a romantic partner by men. Health in women may be advertised as physical attractiveness and fertility may be advertised as youth. Younger women are more likely to be able to successfully produce offspring. Therefore, women should be more upset by potential rivals who are younger and more physically attractive.

In sum, the normal function of jealousy is to thwart the costly act of partner infidelity. There is a gender difference in what causes jealousy feelings. Men are more likely to experience jealousy when there is a threat of sexual infidelity with a rival who has more resources, and women are more likely to experience jealousy when there is a threat of emotional infidelity with a rival who is younger and more physically attractive. These gender differences should also be evident in individuals diagnosed with the jealous subtype of delusional disorder as their jealousy mechanisms are not atypical, but instead are hypersensitive.

### **Gender Differences in Delusional Disorder: Jealous Type**

Delusional disorder is one of the rarer disorders categorized in the *DSM-5*. The prevalence rate is less than 1% of the population. These low rates make studying this disorder difficult. Much about this disorder remains to be explained, for example, how an individual's sexual orientation may influence the onset, severity, and outcome of the disorder. Of the subtypes of the disorder, the jealous subtype is, on average, the third most common type of the disorder. One group of researchers compiled a database of published case histories, which resulted in a total of 398 case histories published from 1940 to 2002. Case histories came from several countries including England, Norway, United States, and Sri Lanka. To date, this remains the largest compilation of case histories on the jealous subtype of delusional disorder. Of the 398 cases, 298 were men and 100 were women. The gender difference was not influenced by country of origin. In 2010, a smaller case history investigation presented similar findings: 57% of their cases were men. Examining the content of the case histories indicates a gender difference parallel to what is seen in normal jealousy. Men with this disorder have delusions that focus on their partner's sexual infidelity and women with this disorder have delusions that focus on their partner's emotional infidelity. Additionally, men with this disorder tend to focus more on rival characteristics indicating resources and investment, whereas women tend to focus more on rival characteristics indicating youth and physical attractiveness. Further analysis of the case histories indicates a strong emphasis on perceived sexual infidelities of partners, not perceived emotional infidelities. This may explain the reported gender difference in prevalence rates. If clinicians believe jealousy only occurs after a sexual threat to a relationship, they may be underreporting or misdiagnosing the number of women afflicted with the jealous subtype of delusional disorder. Using an evolutionary psychological perspective to understand that individuals with the jealous subtype of delusional disorder may have hypersensitive jealousy mechanisms suggests that clinicians should

attend to cues of not only sexual infidelity, but also emotional infidelity. Doing so could help explain what appears to be an anomaly within the subtypes of delusional disorder—a gender difference only in one subtype—and could help in treating what is typically a difficult disorder to treat.

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See also: Biological Sex Differences: Overview; Evolutionary Sex Differences; Mental Health and Gender: Overview; OCD and Gender; Psychosis and Gender; Romantic Relationships in Adulthood; Schizophrenia and Gender

### **Further Readings**

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