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Jealousy: A Community Study

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This study represents the first attempt to study sexual jealousy in a random community sample. Jealousy was reported by all subjects. Men, when jealous, were particularly concerned about the potential loss of the partner, whereas women were more concerned with the effects of infidelity on the quality of the relationship. Behaviours such as searching the partner's belongings or inspecting their clothes for signs of sexual activity correlated with unusually intense jealousy. Men tended to cope with jealousy by using denial and avoidance, whereas women were more likely to express their distress and to try to make themselves more attractive to their erring partner. Greater jealousy concerns were expressed by young men who had either married early or were now living without a partner. Heavy drinkers and those reporting more psychiatric symptoms were also more prone to jealousy. A clear correlation emerged between lowered self-esteem and increased jealousy, which was particularly marked in women, for whom robust self-esteem was virtually incompatible with high jealousy concerns. The study supported the prosaic notion that those who are satisfied with their romantic attachments are less prone to jealous suspicions. This study offers a starting point for the clinician seeking information about the experience of jealousy in the community.

Sexual jealousy is of clinical significance by virtue of its association with both mental illness and violent domestic discord (Shepherd, 1961). A wealth of descriptions of jealousy are to be found in the writings of novelists and playwrights, and a multiplicity of thinkers have offered their theories about the nature of this passion. Systematic research into jealousy is more limited and little is known about the range of experiences and behaviours associated with jealousy in a normal population.

A descriptive analysis of the jealousy complex has been attempted employing such techniques as: asking people to write down accounts of previous jealous reactions (Bryson, 1977); conducting in-depth interviews (Ankles, 1939; Francis, 1977); having subjects comment on videotapes or role-plays of jealousy-evoking situations (Shettel-Neuber *et al*, 1978), conducting surveys employing jealousy scales (Bringle, 1981; White, 1981*b*,*c*; Pines & Aronson, 1983; Mathes, 1986; Hupka & Eshett, 1988) and attempting a phenomenological analysis relying on literary and autobiographical descriptions (Mullen, 1990). A number of such studies enquire not into the subjects' actual experiences of jealousy, but into how they think they would respond to hypothetical situations by canvassing responses to 'what if' questions. This allows more detailed and reproducible enquiries about possible responses to a wide range of postulated contingencies, but may fail to detect, or highlight, how people have actually felt or behaved when jealous. A relatively narrow range of individuals have been studied, the most frequently employed population being students. To date, there are no studies on random community samples.

Jealousy plagues some more than others. In part, this stems from differing exposures to actual or potential infidelity, but in part it reflects differing sensitivities to threats to relationships. Relationship factors have been hypothesised to protect against or exacerbate jealousy (Shettel-Neuber *et al*, 1978; White & Mullen, 1989). Jealousy may well be, in part, an evolutionary adaptation to paternity uncertainty and maternal needs for a stable environment for child rearing (Daly *et al*, 1982; Buss, 1988) but equally it is partly a cultural construct with wide variations in expression in different cultures and at different historical periods (Mullen, 1991; Hupka, 1991). Those who discern an intimate connection between the sibling rivalry of childhood and adult jealousy (Stearns, 1989) are likely to regard birth order as significant, whereas others who view jealousy as an aberration would look to correlations with personality problems or frank mental disorders. Many observers have commented that threats to self-esteem or a 'narcissistic wound' are inherent in jealousy (Freud, 1922; Mead, 1931; Farber, 1973). The pathological extensions of jealousy have long been hypothesised to be associated with alcohol abuse (Krafft-Ebing, 1905; Shrestha *et al*, 1985) which puts in question a possible interaction between less dramatic forms of jealousy and alcohol consumption. Last, but not least, there is a popular prejudice supported by an occasional authority such as the psychoanalyst Ernest Jones (1937), which regards women as inherently more prone to jealousy.

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The present study used a questionnaire format in a random community sample to explore the feelings, behaviour and responses associated with jealousy. The first part of this paper is a description of the behaviours, attitudes and strategies associated with jealousy and the second part of the paper examines the demographic and mental health correlates of those who expressed high levels of jealousy concerns.

Method

The study was approved by the University and Hospital Board Ethical Committee. It involved the selection of a random sample of 600 men and women from three electoral rolls in Dunedin, a New Zealand university city with a population of 130 000. A 12-page questionnaire with an explanatory letter was mailed to each subject. Non-respondents were followed up by telephone and letter. The questionnaire consisted of:

(a) demographic information, including marital, educational and socio-economic status, birth order and parents' educational and socio-economic status
(b) Rosenberg Self-esteem Scale (Rosenberg, 1965; Ingham *et al*, 1986)
(c) General Health Questionnaire (GHQ-28; Goldberg & Williams, 1988) which had been standardised and validated in the local community (Romans-Clarkson *et al*, 1989)
(d) the WHO alcohol consumption scale (Saunders *et al*, 1987)
(e) Spielberger Anger Expression Scale (Spielberger *et al*, 1988), which measures both overt anger and suppressed anger
(f) social support data in which subjects were asked about their degrees of satisfaction with their current relationship and overall level of social support
(g) a 50-item jealousy scale which was developed from White's (1981*a*) Chronic Jealousy and Relationship Scales which explored the subjects' experience of amorous jealousy.

An initial schedule was piloted for acceptability and ease of comprehension using 100 subjects. The final version modified on the basis of the pilot study included a series of questions probing the level of the subject's concern about their own jealousy and how large a part it had played in their lives. The strength of the composite emotions involved in jealousy were examined using visual analogue scales whereas checklists were employed to explore:

(a) situations in which jealousy had been experienced
(b) life stages at which jealousy had been experienced
(c) fears experienced in response to a relationship threat
(d) checking behaviours used when jealous
(e) coping behaviours used when jealous.

Analysis

Demographic and relationship variables were transformed into binary variables to produce two-way comparisons, using χ^2 and odds ratios. The esteem, anger and GHQ scales each produced a total score, but were also dichotomised, using a median split for the first two scales, and a validated cut-off for the GHQ (Romans-Clarkson *et al*, 1989). Non-parametric correlations were used for analyses involving total scores, as none of the scales had a normal distribution. For the same reason, logarithmic transformations were made on the jealousy and mental health scales before *t*-tests were carried out. Analyses were carried out on the university mainframe computer, using the SPSSx statistical package (SPSS Inc., 1988). Variables that correlated with greater and extreme jealousy concerns were entered into logistic regression analyses using the statistical package GLIM with the dichotomised jealousy scores as the dependent variable. Adjusted odds ratios were produced for those variables that remained significant risk factors when considered in relation to all other variables.

Results

Completed questionnaires were received from 351 subjects (58.5%). The failure to return questionnaires was due to refusal, or a lack of response after contact in 128 cases (21.3%), to having moved and being untraceable in 109 (18.2%), to being too old or infirm to complete the questionnaire in 15 (2.5%) and to having died in 7 (1.1%). The response rate was 62.6% if those unable to respond by death or infirmity are removed from consideration and 74.8% if only those contactable are considered. Data in the electoral roles enabled us to determine that non-responders had the same gender ratio as responders (5.4:4.6). Socio-economic status derived from the occupational status given in the electoral rolls did not differ significantly between the refusers and the respondents, but a comparison with census data for the area demonstrated that more people in their 40s and fewer below the age of 20 responded than the age distribution of the population would have indicated.

Jealousy concerns

All subjects responded positively to at least one question indicative of having experienced jealousy, although the majority of respondents rated themselves as having only modest levels of the emotion and its related problems. Jealousy without good cause on at least one occasion was acknowledged by 40% of the sample, and 46% considered jealousy to be inevitable if you truly love someone. Fewer than 10% admitted to their own jealousy producing "a great deal of problems in their relationship", but 19% of women and 14.6% (NS) of men considered their partner's jealousy to have caused them significant problems. Interestingly, though subjects blamed their partners' jealousy for creating more problems, they rated themselves as being more prone to jealousy than their partners ($P<0.001$).

The subject's level of jealousy concerns on the measures of their perceived jealousy, its frequency, strength and the difficulties it caused were summed to create a self-report jealousy score with a minimum of 0 and a maximum of 32 (mean 8.12, s.d. 7.4). The median was 6 with 164 (46.7%) subjects scoring above this level. We wished to identify a group with high levels of jealousy concerns which might approach those experienced by persons seeking help with

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jealousy-related problems. The 66 subjects (19%) whose jealousy scores were more than one standard deviation above the mean were designated as being those with high jealousy concerns.

Jealousy-provoking situations

The most frequently cited jealous-inducing situation was, not surprisingly, when the partner showed interest in someone else (63%). A smaller number (14%) reported jealousy arising when they did not know the partner's whereabouts and a similar number (15%) when under stress for reasons unrelated to the partner, or their behaviour. Of the women, 79% reported that jealousy had arisen, or was exacerbated, during episodes of premenstrual tension. The 164 subjects with jealousy scores greater than 6 were significantly more likely to report jealousy in response to the partner showing interest in another (95.8% v. 16.0%; $\chi^2 = 70.75$, d.f. = 1, $P < 0.001$), or when their whereabouts was uncertain (23.2% v. 6.6%; $\chi^2 = 19$, d.f. = 1, $P < 0.001$), and 71.4% of the women who said that their premenstrual tension brought out their jealousy belonged to this group ($\chi^2 = 5.28$, d.f. = 1, $P < 0.05$).

Jealousy fears

The most commonly reported fear when jealous was losing the partner (65%), with men being more likely to be apprehensive of such desertion (70.4% v. 59%; $\chi^2 = 4.22$, d.f. = 1, $P < 0.05$). The next most common anxiety, expressed by 21% of both men and women, was the loss of attention and time. A loss of the intimacy inherent in a close relationship was feared by 11% of men and 19.7% of women ($\chi^2 = 4.22$, d.f. = 1, $P < 0.05$). No gender differences emerged in fears that the partner's infidelity would bring shame and humiliation, which was expressed by 12% of subjects, or with anxieties about the loss of sexual exclusivity, which was expressed by 14.5%. Fears for future financial security was expressed by 9.5%, again with no gender difference.

Those with jealousy scores above the median of 6 were more likely to express fears of being shamed and humiliated (17.7% v. 7.7%; $\chi^2 = 7.80$, d.f. = 1, $P < 0.01$), to fear loss of their partner's time and attention (27.4% v. 16.0%; $\chi^2 = 6.65$, d.f. = 1, $P < 0.01$) and to acknowledge specific concerns over the loss of sexual exclusivity (22% v. 8.3%; $\chi^2 = 12.75$, d.f. = 1, $P < 0.001$).

Emotional responses to fears of infidelity

Men and women reported a similar frequency and strength of anger, sadness, agitation and restlessness, with less prominent feelings of shame and humiliation. The overall patterns of emotional responses when jealous differed between the sexes only for insecurity, higher levels of which were reported by women ($P < 0.05$). Those individuals acknowledging greater jealousy concerns reported significantly elevated levels of all emotional components. A substantial proportion of subjects (30%) did not respond to enquiries about how jealousy affected their perceptions of the partner's sexual attractiveness, but of those who did reply 65% reported no change, with 11.9% acknowledging an increase and 22.9% a decrease. There were no significant gender differences.

Jealous behaviours

Cross-questioning their partners when jealous was reported by just over 30% of both men and women. Phoning to ascertain the partner's whereabouts and turning up unexpectedly was each acknowledged by 10% of subjects. Searching through their partner's belongings and going through their pockets and bags in pursuit of incriminating evidence was admitted by 7% of women, but only 1% of men ($\chi^2 = 6.71$, d.f. = 1, $P < 0.01$), and opening the partner's mail by 3.8% of women and 1.3% of men (NS). Following their partner to check up where they went and who they met was described by 2% of men and women. One man and six women described examining their partner's clothes for signs of illicit sexual contact.

The 164 subjects scoring over 6 on the jealousy scale reported significantly higher rates of all jealousy-related behaviour. When the 164 subjects scoring above the median on jealousy concerns were compared with those with lesser concerns, clear differences emerged. Cross-questioning their partner was reported by 52.8% of those with greater jealousy concerns compared with 12.8% for those with lower jealousy concerns ($\chi^2 = 63.07$, d.f. = 1, $P < 0.001$). Phoning to establish their partner's whereabouts was reported by 16% of the more jealous group, compared with 2.8% of the less jealous ($\chi^2 = 18.21$, d.f. = 1, $P < 0.001$) and 14% compared with 4.4% described turning up unexpectedly to check on their partners ($\chi^2 = 9.72$, d.f. = 1, $P < 0.01$). Searching through their partner's possessions, trailing them and examining their clothes for signs of illicit sexual contact were reported exclusively by the more jealous group.

Strategies for coping with jealousy

Confronting the partner and asking for an explanation was the most frequent coping strategy and was particularly favoured by women (27% v. 19%; $P < 0.05$). Conversely, men were significantly more likely to try and ignore the problem in the hope that it would go away (21% v. 13%; $P < 0.05$). The open expression of distress by either tearfulness or angry recriminations was more commonly reported by women (32% v. 11%; $P < 0.001$), as was attempting to make themselves more interesting and attractive to their partners (20.2% v. 9.8%; $P < 0.01$). Similar proportions of men and women reported coping by demanding future commitment to the relationship (13.3% v. 13%, NS), contemplating ending the relationship (12% v. 13.8%, NS) or confiding in family or friends (18% women v. 12.5% men, NS). Displacement activities such as going on a spending spree, drinking more than usual or comfort eating were acknowledged as coping strategies by 12.3% of women and 15% of men (NS). Confronting the actual or supposed rival was a coping strategy which appealed to only 12 subjects and derision of the rival was reported by a further 16 respondents. In this sample,

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the resort to professional help in the form of counselling was only reported by 12 respondents (3.4%).

The 164 subjects with greater jealousy concerns made more attempts to make themselves attractive to their partners (23% v. 8.3%; $\chi^2 = 15.64$, d.f. = 1, $P < 0.001$), but also reported being more prone to become angry or tearful (34.8% v. 11.6%; $\chi^2 = 26.36$, d.f. = 1, $P < 0.001$). Direct demands that the partner give a stronger and clearer commitment to the relationship were also favoured by the more jealous (22% v. 8.3%; $\chi^2 = 12.75$, d.f. = 1, $P < 0.01$) and they confided more in family and friends (24.2% v. 8.3%, $\chi^2 = 16.65$, d.f. = 1, $P < 0.001$). The use of displacement activities in the way of excessive eating and spending sprees was also more common in this group (23.3% v. 5.5%; $\chi^2 = 22.37$, d.f. = 1, $P < 0.001$) as was confronting their erring partner (39% v. 9.4%, $\chi^2 = 42.05$, d.f. = 1, $P < 0.001$) or confronting the rival (6.1% v. 1.1%, $\chi^2 = 6.39$, d.f. = 1, $P < 0.01$).

Threatening their partner with violence was acknowledged by 13 subjects, and 8 admitted striking the partner. An even smaller number reported threatening (5 subjects) or being physically aggressive (3 subjects) to the rival. The more jealous group reported more threatening behaviour (7.9% v. 0; $\chi^2 = 14.9$, d.f. = 1, $P < 0.001$) and physical aggression (4.5% v. 0.6%; $\chi^2 = 5.24$, d.f. = 1, $P < 0.05$). Conversely, 15.4% of the sample reported having been subjected to physical aggression as a result of a partner's jealousy. Men and women were equally likely to report having been attacked by jealous partners.

Demographic and relationship correlates of high jealousy concerns

Jealousy caused greatest difficulty during the subjects' teens and 20s, with only 3% of those who had reached their 40s nominating the age of 40 or over as particularly troublesome. Jealousy concerns were greater in those who had never married, were not living with a partner, or married before the age of 20. The risk factors for belonging to the group of 66 subjects with high jealousy concerns varied between men and women (Table 1). Males and females were equally likely to express high jealousy concerns and age was a risk factor, with 36.9% of those under 30 in this group compared with 13% of the older sample (odds ratio (OR) = 3.9, 95% confidence interval (CI) 2.1–6.9). Being a student was strongly related to high jealousy concerns (OR = 6.9, 95% CI 2.1–18.0) as to a lesser extent was lower social class (OR = 2.0, 95% CI 1.1–3.8). Only 13% of respondents living with partners fell into the high jealousy group compared with 38% of those without (OR 4.1, 95% CI 2.3–7.2).

Table 1
Demographic risk factors for increased jealousy concerns

Risk factor	High jealousy concerns (66 subjects)			
	Men		Women	
	Odds ratio	95% CI interval	Odds ratio	95% CI interval
Under 30 years	3.47	1.53-7.9	4.34	1.96-9.61
Never married	3.71	1.61-8.56	4.10	1.69-9.93
Not with a partner	5.25	2.3-11.99	3.17	1.40-7.15
Married before age 20	12.02	3.31-46.01	NS	
Impaired self-esteem	2.32	1.03-5.22	5.69	2.33-13.9
High suppressed anger	3.12	1.33-7.33	2.29	1.06-4.98
High expressed anger	3.34	1.42-7.84	2.19	1.01-4.75

There were gender differences among those expressing high jealousy concerns (Table 1). For example, being divorced or separated and marrying before 20 were risk factors for being in this group for men, but not women. Similarly, having an older sibling was a risk factor for males only. Males in the high jealousy group who were not currently in a relationship were likely to be dissatisfied with their unpartnered state. Women with high jealousy concerns were particularly likely to lack a confidante (21.2% v. 4.5%; $P < 0.01$) and over half of these women who were in relationships did not confide in their partners (53.6% v. 22.7%; $P < 0.01$).

Self-esteem

The mean self-esteem score for the group was 1.5 (s.d. 1.6) with women recording higher scores, indicative of lower self-esteem ($P < 0.001$). The composite jealousy scale correlated positively with the self-esteem score for the group as a whole ($r = 0.22$, $P < 0.001$) as well as for men ($r = 0.21$, $P = 0.004$) and women ($r = 0.24$, $P = 0.001$) separately. Those scoring above one on the self-esteem measure (median split) were designated as having some impairment of self-esteem ($n = 134$). Impaired self-esteem was present in 63% of those in the subgroup with high jealousy scores. This difference was particularly marked in the women with high jealousy scores, who were over five times as likely to have impaired self-esteem (Table 1). Subjects with impaired self-esteem were significantly more likely to report responding to jealousy with anger and tearfulness (28.5% v. 183.%; $\chi^2 = 4.95$, $P < 0.05$), and twice as likely to employ displacement activities such as excessive eating (19% v. 10.1%; $\chi^2 = 5.54$, $P < 0.05$).

Alcohol

Hazardous levels of current alcohol consumption using the criteria of the Royal College of Physicians (1987) were reported by 30 men and 9 women, and among this group high jealousy concerns were more common (24.2% v. 8.2%; $\chi^2 = 13.72$, $P < 0.001$).

The General Health Questionnaire (GHQ)

The chronic scoring of the GHQ was chosen for this analysis. This includes long-standing symptoms in its scoring and has been shown to correlate with other psychiatric rating scales more strongly than the standard scoring (Goodchild & Duncan-Jones, 1985). In this study, the

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chronic GHQ score correlated with the composite jealousy score ($r=0.31$, $P<0.001$). Those with high jealousy concerns had significantly greater chronic GHQ scores ($P<0.001$). A score of over 11 has been established as a cut-off in this population that identifies a group likely to be suffering from a recognisable psychiatric disorder (Romans-Clarkson *et al*, 1989). Subjects scoring over this cut-off (38 men, 41 women) had a relative risk of 2.78 of having high jealousy concerns (95% CI 1.6–4.9). Those with high chronic GHQs were more apt to respond when jealous with anger and tears (33.3% v. 18.9%; $\chi^2=7.52$, $P<0.01$) and to employ displacement activities such as eating or drinking excessively (27.2% v. 9.6%; $\chi^2=16.22$, $P<0.001$). This high chronic GHQ group reported more frequently being threatening to their partner (8.6% v. 2.2%; $\chi^2=7.2$, $P<0.01$), or using open aggression (6.2% v. 1.1%; $\chi^2=7.16$, $P<0.01$).

Anger scale

The scores on the anger scales, both anger-out, representing expressed anger, and anger-in, suggestive of suppressed anger, were significantly correlated with the jealousy scores for men ($r=0.26$ and $r=0.28$, respectively, $P<0.001$) and for women ($r=0.36$ and $r=0.22$, $P<0.001$). The anger-out and the anger-in scores both correlated with high jealousy in both sexes (Table 1). Those with high levels of outwardly expressed anger were more likely to fear a loss of intimacy in a potential jealousy situation (21.6% v. 11.7%; $\chi^2=5.86$, $P<0.02$) and to cope with jealousy by confronting their partner (32.7% v. 16.8%; $\chi^2=11.43$, $P<0.001$) or threatening them (6.5% v. 0.6%; $\chi^2=4.52$, $P<0.05$). Those with high anger-in scores were more frequent users of only two coping strategies, namely, trying to get greater commitment from the partner (20.8% v. 10.7%; $\chi^2=6.37$, $P<0.02$) and using displacement activities such as overindulging in alcohol or food (19.5% v. 10.2%; $\chi^2=5.76$, $P<0.02$).

Logistic analysis

Each of the variables correlated with high jealousy concerns were entered into a logistic analysis with the dichotomised jealousy scores as the dependent variables. Separate analyses were undertaken for men and women because of the apparent gender difference. Adjusted odds ratios were produced for those variables that still remained significant risk factors when the confounding effects of other variables were taken into consideration. High jealousy in males correlated with being married before the age of 20 (OR 16.0, 95% CI 2.6–88.9), having an older sibling (OR 4.2, 95% CI 1.3–13.4), not currently living with a partner (OR 6.3, 95% CI 2.4–16.6) and having high continuing stress symptoms as measured by the chronic GHQ (OR 2.9, 95% CI 1.1–7.8). The pattern differed for women, in whom high jealousy was associated with drinking to excess (OR 5.5, 95% CI 1.1–26.5), having impaired self-esteem (OR 5.8, 95% CI 2.1–15.6) and being under 30 (OR 3.2, 95% CI 1.3–8.1).

Discussion

Jealousy came within the acknowledged experience of all subjects. The approach used to elicit information ensured that the responses were about the individual's own jealousy, but it is likely that the majority would have had to rely on memories rather than having access to any immediate experience of jealousy. Recall of autobiographical details is not always reliable (Barclay, 1986) and with time the memories of disruptive and painful events may both diminish the distress and elute those elements most distasteful to our self-image. Thus this method of enquiry may well reveal only an attenuated account of jealousy. Given the nature of the study, the response rate was good, but the return of a completed questionnaire does not guarantee frankness. Aggression induced by jealousy was probably under-rated not only because of the low level of aggression acknowledged, but also because of the higher rates of aggression reported as having been suffered at their partners' hands. Our respondents were also apparently more sensitive to the problems their partners' jealousy had caused for them than the difficulties their own suspicions may have engendered for their partners. This was despite rating themselves as more prone to jealousy than their partners.

The experience of jealousy has been claimed to differ markedly for men and women, with women being more threatened by the potential loss of the relationship and the implications of a rival relationship for future financial security (Clanton & Smith, 1977; Bringle & Buunk, 1985; White & Mullen, 1989). In this study, jealousy was associated with a fear of losing the partner to a rival in both sexes, but men acknowledged being apprehensive about such desertion significantly more frequently. The previous evidence in favour of women being more focused on retaining the relationship and men more concerned with sexual exclusivity comes largely from such sources as attitudinal surveys and the analysis of television portrayals of jealousy (Teismann & Mosher, 1978; Bringle & Buunk, 1985; White, 1985) the only direct enquiry being that of Buss *et al* (1992) who examined anticipated jealousy responses in students to a number of hypothetical situations. What subjects, particularly young students, predict they would feel in a jealousy-inducing situation appears to differ from what a community sample, covering a far wider range of age and social class, report has been their experience when jealous. The claimed greater concern in women with the implication of infidelity for future financial security was not confirmed. There may be a difference, however, between men and women in the way in which they

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construe the threat to financial security occasioned by infidelity. Men might fear a drain on their financial resources as a consequence of separation, whereas women may be primarily apprehensive about the loss of a stable economic base. Our enquiries into the implications for future financial security could not distinguish between these two aspects.

Men are reportedly more concerned by the specifically sexual aspects of a rival relationship and the maintenance of sexual exclusivity (Daly *et al*, 1982; Buss *et al*, 1992). In our sample, specific fears about the loss of sexual exclusivity were acknowledged by less than 15% of subjects, with no evidence of a male preponderance. Jealousy in men has been postulated to derive from a biological imperative to ensure paternity by maintaining sexual exclusivity (Wilson, 1975; Symons, 1979). In our sample, this imperative appears to have been largely absent or unacknowledged and, where reported, to be just as frequent in women.

Loss of time and attention has been claimed to lie at the heart of the jealousy complex (Tov-Ruach, 1980) and to be a preoccupation of jealous women rather than men (Teismann & Mosher, 1978). This was not borne out by the responses of this sample, in which it was given as an anxiety by just over 20% of both men and women. The only difference which did conform to the usual stereotyping of male and female jealousy was that women were significantly more concerned with the effects of infidelity on future closeness, intimacy and trust within the relationship.

In the clinical assessment of jealousy, considerable emphasis is, perforce, placed on actual behaviour. Does the person cross-question, follow their partner, do they open their mail and search their clothes for the tell-tale signs of sexual activity? The assumption has been made that jealousy is, at the very least, excessive and probably pathological if such behaviours are either present to a marked degree, as with cross-questioning, or to any significant extent, as in searching for semen stains on underclothing. No systematic enquiry has previously been attempted in the general population as to which behaviours are resorted to when jealous. Cross-questioning the partner and various techniques for checking the partner's location were admitted by over half of our subjects. Searching the partner's mail, going through their pockets, or checking on their clothes for signs of sexual activity were rarely reported and such behaviours were only found in the subjects acknowledging greater jealousy concerns. This supports the clinical emphasis placed on the presence of such activities as markers for more intense jealousy.

The most commonly reported response to suspicions about fidelity was to confront the partner and demand an explanation. This was often accompanied by the expression of some combination of anger and distress. Though this approach found favour with both sexes, it was more commonly employed by women. Men were significantly more likely to try and cope by using denial and avoidance. Women were also more likely to try and make themselves more attractive and interesting to their erring partner. Displacement activities such as drinking too much or going on a spending spree were acknowledged equally by both sexes. Attempts to try and put the partner off the rival by criticising them have been reported as a central coping strategy (Schmitt, 1988; Amstutz, 1982) but, in this study, active derision of the rival was acknowledged only by a tiny minority of subjects.

The descriptions provided by our subjects of their experience of jealousy gives some insight into the meanings they attach to jealousy. Jealousy was, for most, a response to a threat to the relationship, particularly important in terms of the potential desertion of the partner, but also involving an apprehension of a decrease in the amount of attention and time the partner devotes to the relationship. Threats to pride, financial security and sexual exclusivity were part of what makes up the experience of jealousy, but played a less prominent role. Jealousy for the majority was a complex of thoughts, emotions and actions invoked by a threat to the stability or quality of an intimate relationship. In those expressing greater jealousy concerns, the aspects of shame and loss of sexual exclusivity were more prominent.

The demographics of jealousy have not previously been studied. Our findings that younger subjects are more prone to jealousy accord with everyday experience, though the expression of more jealousy concerns by our male subjects runs counter to the prejudice which regards women as the jealous sex. This popular perception of women as more jealous could relate to our findings that jealousy in men is associated with a tendency to try and ignore the threat and suppress the expression of feelings, while the women who exhibited similar levels of jealousy are more prone to give open expression to distress and anger. Differences between males and females produce an intriguing pattern when high levels of jealousy are considered. Multivariate analysis suggested it is young women who report high jealousy, possibly because, as women grow older, they find their emotional needs become less dependent on a primary relationship, and are more satisfied by their children and friendships. On the other hand, our logistic analysis shows an existing

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relationship is the strongest buffer against high levels of jealousy for men. This is reinforced by our finding that men are much more likely than women to fear the loss of their partner as the result of a jealousy-provoking situation. Men who marry early, and could, therefore, be said to have demonstrated strong relationship needs, are the most likely to report extreme jealousy.

The cultural influences on jealousy have been extensively studied (Ford & Beach, 1951; Hupka, 1981), but social class has not previously been commented upon. We failed to detect any association between social class and overall jealousy concerns, but those falling into the subgroup with high jealousy were twice as likely to come from the lowest socio-economic group. This may reflect the interaction between the pressures created by the financial and social disadvantages experienced by this group and the expression of the particular form of insecurity represented by jealousy. The apparently higher level of jealousy among students, when compared to other occupational groups, was no longer significant when age was controlled for, but nevertheless this finding places a question over many of the existing studies which draw their subjects exclusively from student populations.

Mental health measures were associated with jealousy, particularly its more extreme manifestations. Heavy drinking was associated with high jealousy concerns, and multivariate analysis showed that this effect persists when the relatively younger age of heavy drinkers is controlled for. Because alcohol intake is also associated with strategies for dealing with jealousy that threaten the physical safety of others, the juxtaposition of heavy drinking and jealousy should continue to be regarded seriously in a clinical situation. For men, the important mental health variable was the chronic GHQ score, which indicates high rates of anxious or depressive symptoms in the more jealous males. The GHQ is a screening, not a diagnostic instrument, and the results do not warrant the claim of a correlation between any specific form of mental disorder and jealousy. The direction of a causal link, if any, must also be in doubt. For example, the jealous men with high chronic GHQ scores contained a high proportion of separated or divorced men and the high chronic GHQ scores could be a result of their unpartnered state.

Jealousy has been defined as, in part, a reaction to a threat to self-esteem (Mead, 1931; White & Mullen, 1989). This does not necessarily imply that those who become jealous lack self-esteem, for it is possible that jealousy acts to reduce self-esteem, creating the illusion that insecure people are more jealous. The evidence from other studies for a correlation between measures of self-esteem and jealousy are contradictory (Shettel-Neuber *et al*, 1978; Hansen, 1982; De Moja, 1986; Stewart & Beatty, 1985). The majority of these studies employ college students asked to anticipate their responses to jealousy-inducing events. In our community sample, a clear correlation emerged between self-esteem and jealousy. This association was particularly strong for women, for whom robust self-esteem was virtually incompatible with high jealousy concerns. These data cannot establish the direction of the causal influence, if any, but do underlie the strength of the relationship. Clinically, this suggests the need to attend to issues of self-esteem in the assessment and treatment of those seeking help with jealousy problems.

Sibling rivalry has been hypothesised to lie at the root of adult jealousy. Older siblings, in particular the first born, are claimed to show more marked ambivalence, distress and hostility to younger siblings (Nadelman & Begun, 1982; Dunn, 1983) which leads to predictions that first borns will be particularly susceptible to jealousy (White & Mullen, 1989). The finding that men who had been the oldest sons were significantly less likely to fall into the select group with extreme jealousy concerns runs counter to this hypothesis.

The commonly asserted association between more valued romantic relationships and a greater tendency to jealousy (Buunk, 1981; White & Mullen, 1989) was not found. Our subjects covered a wide range of ages, as well as status and length of relationship, whereas previous studies have tended to depend on students or other young people. Correlations in previous studies between level of romantic attachment and jealousy have generally been higher for anticipated jealousy than current levels of jealousy (Mathes, 1986; Bush *et al*, 1988) and here we focused on actual jealousy experiences. This study supports the prosaic notion that those who are satisfied with their romantic attachments are less likely to be plagued by jealous suspicions than those who feel discontented, unsupported and relatively ignored. This said, it should also be noted that those who were currently not in a relationship expressed higher jealousy concerns than those in a relationship, however satisfactory or otherwise they may have found their partner. This could indicate that those particularly prone to jealousy have more difficulty establishing and maintaining relationships.

Jealousy is private and isolating, and its very existence may be hidden out of shame or embarrassment. In attempting to explore such an experience through the medium of a questionnaire, posted at

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random, it could be argued that little of substance can be expected to emerge. Clinicians are called upon to assess the significance of jealousy in those presenting to them. Currently, they often rely on a mixture of personal experience and clinical folklore in making such assessments. Though an empirical literature does exist on the experience of jealousy, it derives in large part from students' expectations of their future responses, and students may well be a particularly problematic group from which to extrapolate to the general population. This study offers a view of jealousy clouded by the subject's ability and willingness to recall and reveal. The image of jealousy which emerges is almost certainly a pale reflection of reality, but offers a starting point for the clinician seeking information about the experience of jealousy in the community.

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