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Gender differences in the onset of depression following a shared life event: a study of couples

J. Y. NAZROO,[1] A. C. EDWARDS AND G. W. BROWN

From the Department of Social Policy and Social Science, Royal Holloway University of London

ABSTRACT

Background. Gender differences in clinically relevant depression are well established, appear to be greatest in childbearing years and may be the result of gender differences in social roles.

Methods. A community sample of 100 couples who had recently experienced at least one threatening life event that was potentially depressogenic for both of them was studied using a semi-structured interviewer-rated interview. Onset of depression was assessed using the Present State Examination, and, rather than assuming that a gender difference in roles existed uniformly across the couples, they were characterized according to their actual role activity and commitment.

Results. Women were found to have a greater risk of a depressive episode following the life event than men, and this difference was of a similar magnitude to other reports of gender differences in depression. Consistent with a role hypothesis, this greater risk was entirely restricted to episodes that followed events involving children, housing or reproductive problems. In addition, it was found that women's greater risk of a depressive episode following such events was only present among those couples where there were clear gender differences in associated roles. There was some suggestion that differences in roles on the one hand resulted in women being more likely to hold themselves responsible for such events and, on the other hand, enabled men to distance themselves from them.

Conclusions. These results support the hypothesis that gender differences in rates of depression in the general population are, to a considerable extent, a consequence of role differences.

INTRODUCTION

Gender differences in the prevalence of clinically relevant depressive disorders have been well documented (Gove & Tudor, 1973; Weissman & Klerman, 1977; Gove, 1978; Robins *et al*. 1984; Kessler *et al*. 1994). Prevalence for women is typically between 50 and 100% greater (Nolen-Hoeksema, 1987). The United States National Co-morbidity Survey reports that women were about two-thirds more likely to be depressed in both yearly and lifetime estimates (Kessler *et al*. 1994), and a national survey in the UK shows a similar ratio for current prevalence (Metzler *et al*. 1995). But any explanation must take into account those studies that have found no difference, although these have usually involved particular subgroups such as college students (Hammen & Padesky, 1977; Hong & Grambower, 1986), young adults (Jenkins, 1985), more 'traditional' communities (Carta *et al*. 1991; Lowenthal *et al*. 1995) and other atypical samples – for example, Wilhelm & Parker's longitudinal study of teachers (1989, 1994).

Suggested explanations have involved the possibility of an artefact (e.g. Newmann, 1984; Vrendenburg *et al*. 1986); that for men disorders such as alcoholism are an alternative to, or are given diagnostic priority over, depression (Petty & Nasrallah, 1981); or that biological differences are involved (Gater *et al*. 1989). In our judgement none of these has so far emerged as a major explanatory factor (e.g. Gove, 1978; Amenson

[1] Address for correspondence: Dr J. Y. Nazroo, Policy Studies Institute, 100 Park Village East, London NW1 3SR.

& Lewinsohn, 1981; Harris *et al.* 1991; Fennig *et al.* 1994), although they will be explored in more detail in a further paper. The present paper deals with the possibility that gender differences in social roles and the experiences, stresses and expectations that surround them are importantly involved.

The most common perspective, the role strain hypothesis, is that the roles typically occupied by women give rise to greater stress and fewer coping resources. This particularly holds for the married, where gender differences in depression are apparently at their greatest (Gove, 1972; Gove & Tudor, 1973; Aneshensel *et al.* 1981; Gore & Mangione, 1983 – but see also Fox 1980; Amenson & Lewinsohn, 1981). However, it should be noted that evidence has remained indirect; it has simply been assumed that greater strain is attached to female roles. In contrast, gender differences in exposure to life events have been directly assessed (Dohrenwend, 1973; Bebbington *et al.* 1981). Here the use of cumulative life event scores has revealed no differences in exposure, but women do report being more affected by events (Kessler, 1979). Such results have led to a concern with gender differences in the ability to cope with stress, with a focus on social support, learned helplessness, self-esteem, mastery, self-blame and problem *versus* emotion focused coping strategies (Pearlin & Schooler, 1978; Kobasa, 1987). Women are typically seen to be less resilient as a result of differences in socialization. Although some also emphasize the relatively powerless situation of women (Lowenthal *et al.* 1995), research has focused on individual differences and has ignored the role of gender in structuring these. Moreover, controlling for psychosocial vulnerability has failed to reduce gender differences in rates of depression (e.g. Amenson & Lewinsohn, 1981). In short, no differences in general vulnerability have so far been documented.

However, interesting evidence has begun to emerge for a more specific form of vulnerability. Kessler & McLeod (1984) present evidence that suggests that women's greater vulnerability is solely a result of their experience of events occurring to family and friends. They go on to argue that 'the demands for nurturance that are at the centre of female role obligations are also centrally involved in the events to which women are more emotionally vulnerable than men', referring to this as the 'cost of caring'. Although they suggest that this effect could well be due to differences in socialization, resulting in women being more attuned to the needs of others or to women being exposed to more stress arising from social networks, the position taken in this paper is that where the domestic arena at least is concerned, the ongoing greater involvement of women may in itself be enough to explain the greater stress arising from caring, irrespective of differences in socialization. This would suggest that a change in the domestic situation might be enough to reduce gender differences in risk. Consistent with this, a general review concludes that gender differences in depression are at their peak among those in their early thirties and least significant either side of the reproductive years (Jorm, 1987). Given that this is a time when differences in roles are particularly marked, this would help explain a number of the studies that have failed to find gender differences in depression, and also supports Gove's (1972) contention that they are largely a result of the experience of the married.

A closely related theme to that of role strain and cost of caring is Thoits' (1991) discussion of the importance of 'identity-relevant stressors'. She argues that identities based on roles provide individuals with a sense of who they are and how they ought to behave and, with this, a sense of meaning and purpose. In addition, because role expectations are normative, the adequacy of role performance has particular implications for self-evaluation, with any failure being likely to damage self-esteem. It follows that stressors that disrupt salient role-identities are likely to be particularly depressogenic. In fact, Brown *et al.* (1987) found that a woman was much more likely to develop depression following a severely threatening event if it matched a role domain to which she was highly committed. This suggests the need to take account of differences in the salience of role-identities, not only among women themselves but also in contrast to men.

The present paper explores these issues in a community sample of couples. The use of couples, unlike a sample of unrelated men and women, means that a variety of demographic variables have been held reasonably constant. Each couple had recently experienced at least one 'shared' life event that, in terms of prior research, was stressful enough in objective terms

to provoke an episode of depression for either of them (Brown *et al*. 1987). This allowed four central hypotheses to be addressed. First, that women would be more at risk of developing depression following such a shared event. Secondly, that this difference in risk would hold only for events that were typically more salient to female roles. Thirdly, that life events that were on the whole more salient to male roles would lead to more depression among men. Fourthly, that among couples who had experienced a life event that is typically more salient to female roles, no difference in depression would occur for those where there was little difference between the couple in the actual role salience of the crisis. In the following analysis the second and third hypotheses are tested in terms of *a priori* judgements about the relevance of particular roles to men and women. For our final hypothesis, the actual salience of roles for each couple is taken into account.

METHOD

The sample

The sample consisted of 100 cohabiting couples who were recruited from responses to a postal screening questionnaire sent to individuals on general practitioner patient lists in an inner-city area. The questionnaire, a modified version of that used by Costello & Devins (1988), screened for the presence of a number of potentially depressogenic life events. There was a response rate of 46%, with no gender difference. Suitable respondents (those with a possibly relevant event, who were in a heterosexual cohabiting relationship and below retirement age) were contacted by telephone or a home visit. If the respondent and his/her partner had experienced an event that was severe enough to be potentially depressogenic for both of them (see measures section), we asked for a full interview and, if this confirmed the presence of such an event, permission to approach the partner for an interview. Couples were offered £50 to participate and two-thirds agreed.

The analysis is based on 97 couples, because in three instances the partner refused to be interviewed despite initial agreement. These 97 couples experienced a total of 129 shared crises, defined by the occurrence of one or more related severe events and ongoing difficulties (see Measures section). Since for 14 of the 129 crises one of the couple was already depressed, in what follows 115 crises are used when the link with onset of depression is considered. This means that much of the analysis is based on crises rather than couples and, consequently, some couples are counted more than once in our tables (although never more than once in the same role domain). This was done in order to reflect the full variety of crises that the couples experienced, which was desirable given the need to test the proposition that men and women are sensitive to different types of crises. However, if only one crisis per couple is considered the pattern of results to be presented remains the same (including statistical significance).

The study period covered a minimum of 1 year prior to interview. For half the couples this was extended beyond a year to take account of the full time span of the crisis, which for eight meant extending the period beyond two years. Seventy per cent were working class according to the Goldthorpe & Hope (1974) criteria. The mean age of the men was 38 (range 22 to 61) and that of the women was 36 (range 19 to 55). Eighty-two per cent had children and for 77% they were still at home, and the mean length of cohabitation was 11 years (range 9 months to 35 years). Eighteen per cent of the men and 15% of the women had had at least one previous cohabiting relationship.

Measures

All measures consisted of rating scales completed by the interviewer from a tape-recorded semi-structured interview, usually carried out in the respondent's home. The couple were interviewed separately by different interviewers in order to ensure confidentiality and to reduce any interviewer-created bias regarding gender differences. Inter-rater reliability for new measures is reported. That for established measures has been shown to be satisfactory.

(1) *Psychiatric symptoms*

A shortened version of the Present State Examination (PSE) was used to assess psychiatric state (Wing *et al*. 1974). As well as assessing the severity of symptoms, it was extended to date onset of and recovery from episodes of depression. Ratings of 'caseness' were based on the frequency and severity of key symptoms and

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reflects current psychiatric practice (Finlay-Jones *et al*. 1980). In fact, the threshold for caseness has been compared to the thresholds for both the ID/CATEGO of the PSE (Wing & Sturt, 1978) and the research diagnostic criteria (Spitzer *et al*. 1978) and was found to be somewhat higher (Dean *et al*. 1983). The use of this measure should have minimized any gender differences in the reporting of symptoms as respondents were encouraged to talk at length and questioned in detail about any possible symptom. A wide range of other psychiatric symptoms were also covered.

(2) *Life events and difficulties*

The Life Events and Difficulties Schedule (LEDS) assesses the severity of events using a system of contextual measures relying on precedents collected over a number of years (Brown & Harris, 1978). This allows the investigator to make a judgement of the likely meaning of events based on their context and predetermined rules. The rating is contextual in the sense of using material about biography and current circumstances, while ignoring any report of feelings concerning the events. Events capable of provoking depression are those rated severe on long-term threat. Such an event was only considered to have actually provoked an episode of depression if there was no other severe event closer in time to the onset of the episode and if the onset occurred within 6 months of the event. A 'crisis' is defined in terms of a series of one or more related severe events and ongoing difficulties.[1]† As reported earlier, the couples were recruited on the basis of having experienced a crisis that was potentially depressogenic for both of them. The 129 crises were classified under seven broad role domains as follows.

1 'Children and other close relationships', e.g. serious illness, delinquent or criminal behaviour, death of a mother who was a confidant to both of the couple – 19% (24/129). (Since only one of these crises did not involve a child, the term 'children' is used in the following text.)

2 'Housing', e.g. being turned down for a housing transfer, the birth of a child in seriously overcrowded housing – 13% (17/129).

3 'Reproduction', e.g. infertility, miscarriages, complicated births – 9% (11/129).

4 'Financial', e.g. a job loss leading to financial problems, a bankruptcy – 41% (53/129).

5 'Marital', e.g. a separation, the discovery of an infidelity – 10% (13/129).

6 'Health', i.e. life-threatening illnesses in either partner – 5% (7/129).

7 'Crime', i.e. criminal activity of either partner (in practice this was always the man) – 3% (4/129).

(3) *Under-reporting the contextual severity of the crisis*

Consistent with previous reports of the reliability of the LEDS, only 5% (6/129) of the crises were rated severe on the basis of the account of one of the couple and not the other. In each of these instances it was quite clear that one of the couple had failed to report a critical aspect of the crisis. An example involved a financial crisis. Here the woman reported an event involving a court case over rent arrears and an event where her husband had an accident that caused over £1000 of uninsured damage to another car. He did not report the court case and reported the accident as though it had occurred to an acquaintance of his. In the following analysis we used the rating based on the more complete account.

There were more discrepancies concerning the contextual severity of individual events making up a particular crisis. This was sufficiently common to be used as the basis of an index of under-reporting. Such under-reporting was seen as possibly reflecting a coping response to the crisis. Under-reporting was judged present if there was a failure on the part of only one of the couple to report a threatening aspect of the crisis described by the other. An example is a son whose delinquent behaviour was causing serious problems. While both parents described the same overall situation, the mother, but not the father, recounted finding a note in his bedroom suggesting that he may be involved with drugs. This is a typical example; under-reporting almost always went along with broad agreement about the general characteristics of the crisis. However, occasionally the omission involved failure to describe context that was crucial to the overall account of the crisis – for example, in another couple only the wife reported that their son had been threatened with expulsion from

† The notes will be found on p. 18.

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school after seriously injuring another child, although both mentioned his referral to child guidance.

(4) *Self-blame*

One of the items in a coping schedule (Bifulco & Brown, 1996) was used to assess the extent of self-blame felt by both the man and the woman for the occurrence of the crisis. This particularly focused on feelings of self-reproach, failure, guilt and responsibility.

(5) *Role performance, commitment and salience*

(*i*) *Relative role responsibility and involvement*

Contributions to four role-related sets of activities – childcare, housework, financial provision and financial management – were assessed using a modified version of the Camberwell Family Interview (Brown & Rutter, 1966; Rutter & Brown, 1966). Respondents were questioned in detail about both who was responsible for activities and who performed particular tasks. Both 'male' and 'female' tasks within each role were covered. Ratings were made of whether the respondent felt more or less responsible for each of the four activities than his/her partner, i.e. relative responsibility, and also whether s/he was more or less involved in carrying them out, i.e. relative involvement, giving eight ratings in all. Scale points were: 'more male', 'intermediate' and 'more female'. Since in almost all instances women were more involved in childcare and housework, the criteria for rating the intermediate category here were broad enough to include men who did a substantial amount – for example, one who regularly got the children up in the morning, gave them their breakfast and took them to school, and was also involved in disciplining them and talking to doctors and teachers, would be placed in the middle category despite his wife still doing more in a time budget sense. All scales had satisfactory inter-rater reliability (kappa = 0·81 to 1·00). Parallel sets of ratings were made on the basis of the accounts of each partner. Since there was a considerable amount of agreement between the two, for the sake of simplification only those based on the woman's account have been used here. This makes no essential difference to the results reported.

(*ii*) *Relative role commitment*

Each respondent was asked about his/her feelings concerning children, homemaking and work roles using the Self Evaluation and Social Support Schedule (O'Connor & Brown, 1984). While most of the material for rating emotional commitment emerged as a result of discussion of current activities, each 4-point scale reflected the level of enthusiasm and commitment about the idea of the activity. So, although feelings about the quality of current activities were usually the basis of ratings, on occasions enthusiasm about the idea of the role as such could lead to a high rating despite significant dissatisfaction about the current situation. Comparison of the ratings of the couple enabled a 3-point rating ('more male', 'intermediate' and 'more female') of relative commitment to be made.

(*iii*) *Relative role salience of the crisis*

Our fourth hypothesis stated that among couples who have experienced a crisis that is typically more salient to female roles, no difference in onset of depression would occur for those where there is little difference in the actual role salience of the crisis. Therefore, crises involving children, housing and reproduction – i.e. those that on *a priori* grounds particularly concerned women – had their actual salience to the couple assessed using the role ratings just outlined. For this matching process two types of crisis were distinguished. The majority (almost 80%) had implications for daily activity and management – such as the birth of a handicapped child, or being turned down for a housing transfer in the context of overcrowding. Salience here was based on the ratings of relative involvement and responsibility for the domain on which the crisis had had an impact. The two sets of ratings were strongly related (kappa = 0·67 and 0·82 for childcare and housework respectively). Where there was a discrepancy it typically involved what had been said about responsibility not having been fully reflected in actual behaviour. For example, a number believed that men were equally responsible for children, but, in terms of daily childcare activities, the man did very little. Discrepancies always involved a 'more female' rating on one scale and an 'intermediate' rating on the other, so in practice we used the 'more female' rating to reflect this pattern of response.

The second type of crisis involved the failure,

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or potential failure, of a cherished concern or plan – such as the impact of a miscarriage on a wish to have children. Since here daily activity was not involved, the relative role salience of such a crisis was based on the ratings of relative commitment to the role domain on which the crisis had had an impact.

Although relative role salience is a three-point scale ('more male', 'intermediate' and 'more female'), only one of the crises turned out to have a greater salience for the man. So in what follows crises concerning children, housing and reproduction have only been distinguished by whether or not they had greater salience for the woman (e.g. Table 4).

RESULTS[2]

1 Onset of depression

In total 34 of the women and 20 of the men had an episode of depression in the study period ($P < 0{\cdot}03$). Thirteen of these episodes (8 female and 5 male) were excluded from the following analysis for one of three reasons: the episode was chronic; or it had no provoking agent; or the provoking agent was not shared by the couple. Various checks gave no indication that this exclusion in any way influenced the results reported. The remainder of the episodes were provoked by the kind of shared crisis that is the focus of this analysis. Following such a crisis women were still more likely than men to have had an onset of depression (final row Table 1). This difference was entirely a result of the five times greater risk women had following a children, housing or reproduction crisis (rows 1, 2 and 3 Table 1). The doubling of men's risk following financial crises (row 4 Table 1) is not statistically significant.

2 Gender differences in roles

The findings concerning role performance were as might be expected. Women were much more likely to have greater involvement in and responsibility for childcare and housework, while for men this was more likely to hold for financial provision – see Tables 2*a* and 2*b*. However, women were more likely to have greater involvement in and responsibility for the management of household finances, and this may help to explain why financial crises did not have a clear gender difference in outcome (see Table 1). In contrast to involvement and responsibility, there were minimal gender differences in emotional commitment to the children and homemaking roles (Table 2*c*). However, the work role was more important to men.

3 Other outcomes

In terms of role strain and cost of caring, it would be expected that role performance would, in addition to depression, influence other aspects of how the crises were experienced. The results presented in Table 3 confirm this. Table 3*a* shows the greater overall tendency of men to under-report the extent of the crises in entirely restricted to those involving children, housing and reproduction, the very ones explaining the gender difference in onset of depression.

Table 3*b* shows that while there is no overall gender difference in self-blame, women were more likely to have blamed themselves for children, housing and reproduction crises, while men were more likely to do so for financial crises.

4 A direct test of the effect of role differences

So far the issue of gender has only been approached in terms of *a priori* judgements of which crises were most likely to be more salient to women. By contrast, Table 4 takes into account actual variability in role performance using the rating of role salience of the crisis (based on matching type of crisis with relative role involvement, responsibility and commitment). Only children, housing and reproduction

Table 1. *Onset of depression by domain of provoking crisis and gender*

	Onset of depression				
	Women		Men		
Domain of crisis	(*N*)	%	(*N*)	%	*P* (1 df)
Children	(7/21)	33	(2/21)	10	
Housing	(4/16)	25 } 32	(0/16)	0 } 6	} < 0·005
Reproduction	(4/10)	40	(1/10)	10	
Financial	(4/44)	9	(8/44)	18	NS
Marital	(4/13)	31	(4/13)	31	
Health	(1/7)	14 } 29	(0/7)	0 } 17	} NS
Crime	(2/4)	50	(0/4)	0	
Total	(26/115)	23	(15/115)	13	< 0·06

Base = crises.

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Table 2. (*a*) *Relative role responsibility*, (*b*) *relative role involvement and* (*c*) *relative role commitment by gender**

Role domain	More female (*N*)	%	Intermediate (*N*)	%	More male (*N*)	%	*P* (sign test)
(*a*) *Relative responsibility*							
Housework	(83/97)	86	(10/97)	10	(4/97)	4	< 0·001
Childcare	(46/74)	63	(24/74)	32	(4/74)	5	< 0·001
Financial management	(46/96)	48	(27/96)	28	(23/96)	24	< 0·01
Financial provision	(11/97)	11	(19/97)	20	(67/97)	69	< 0·001
(*b*) *Relative involvement*							
Housework	(80/97)	82	(14/97)	14	(3/97)	3	< 0·001
Childcare	(47/71)	66	(24/71)	34	(0/71)	0	< 0·001
Financial management	(49/97)	51	(26/97)	27	(22/97)	23	< 0·002
Financial provision	(11/97)	11	(45/97)	46	(41/97)	42	< 0·001
(*c*) *Relative commitment*							
Homemaking	(34/97)	35	(33/97)	34	(30/97)	31	NS
Children	(35/97)	36	(38/97)	39	(24/97)	25	NS
Work	(23/97)	24	(25/97)	26	(49/97)	51	< 0.005

Base = couples.
* Numbers vary because some couples did not have children or children at home and because of some missing data.

Table 3. (*a*) *Under-reporting and* (*b*) *self-blame by domain of crisis and gender*

Domain of crisis	By women (*N*)	%	By men (*N*)	%	*P* (1 df)
(*a*) *Under-reporting*					
Children, housing and reproduction	(3/52)	6	(21/52)	40	< 0·001
Financial	(10/53)	19	(12/53)	23	NS
Other	(5/24)	21	(4/24)	17	NS
Total	(18/129)	14	(37/129)	29	< 0·02
(*b*) *Self-blame**					
Children, housing and reproduction	(12/51)	24	(3/52)	6	< 0·03
Financial	(9/53)	17	(20/53)	38	< 0·02
Other	(6/24)	25	(11/24)	44	NS
Total	(27/128)	21	(34/128)	27	NS

Base = crises. (Note that compared with Table 1 this table includes 14 additional crises where one of the couple was already depressed.)
* One respondent had a missing value.

Table 4. *Onset of depression by relative role salience for couples with children, housing and reproduction crises*

Role salience of crisis greater for woman	Onset of depression: Women (*N*)	%	Men (*N*)	%	*P* (1 df)
Yes	(12/34)	35	(1/34)	3	< 0·005
No	(3/13)	23	(2/13)	15	NS
Total	(15/47)	32	(3/47)	6	< 0·005

Base = children, housing and reproduction crises.

crises are dealt with, as it is only in relation to these that gender differences in depression have emerged. As predicted, gender differences in the onset of depression were restricted to those crises where actual salience was clearly greater for the woman.

In order to consider Table 4 as a whole, logistic regression was used, with onset of depression as the dependent variable and the main effects of salience and gender and the interaction between these as the independent variables. A backward elimination procedure, based on the significance of the relationship between dependent and independent variables, was carried out. The resulting model only included the interaction effect between gender and salience as significant ($P < 0{\cdot}01$), confirming that gender differences in depression only occurred for those children, housing and reproduction crises with greater salience for the woman.

This conclusion is also supported by Table 5, which shows that for both under-reporting (Table 5*a*) and self-blame (Table 5*b*) the pattern of results followed that which has been presented for depression.

DISCUSSION

This study used a sample of couples who had experienced a shared crisis that was severely threatening for both of them in objective

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Table 5. (*a*) *Under-reporting and* (*b*) *self-blame by relative role salience for couples with children, housing and reproduction crises*

Role salience of crisis greater for woman	By women		By men		
	(*N*)	%	(*N*)	%	*P* (1 df)
(*a*) *Under-reporting*					
Yes	(1/38)	3	(18/38)	47	< 0·001
No	(2/14)	14	(3/14)	21	NS
(*b*) *Self-blame**					
Yes	(10/37)	27	(1/37)	3	< 0·01
No	(2/14)	14	(2/14)	14	NS

Base = children, housing and reproduction crises. (Note that compared with Table 4 this table includes 5 additional crises where one of the couple was already depressed.)

* One respondent had a missing value.

contextual terms. The greater rate of onset of depression among women following such an event was consistent with, and of a similar magnitude to, other reports (Gove & Tudor, 1973; Weissman & Klerman, 1977; Gove, 1978; Robins *et al*. 1984; Nolen-Hoeksema, 1987; Kessler *et al*. 1994; Meltzer *et al*. 1995). However, this greater risk of depression only related to episodes following crises involving children, housing and reproduction, where women had five times the risk of men (Table 1). These are the domains where in general women would be expected to have more involvement than men. However, when in practice the man also had significant involvement in domestic roles this gender difference in onset did not occur (Table 4). Echoing the results for depression, women were also more likely to express self-blame for children, housing and reproduction crises and men were more likely to under-report them (Tables 3*a* and 3*b*). But, as for onset of depression, this difference was entirely restricted to those children, housing and reproduction crises that had greater actual role salience for women (Tables 5*a* and 5*b*).

Insofar as the domestic roles of women can be characterized as caring work, it follows that the greater risk of women in our series may well have been a direct result of the greater amount of such work they carried out. Consequently, both the cost of caring (Kessler & McLeod, 1984) and the role-identity (Thoits, 1991) interpretations of the origin of gender differences in depression have been broadly supported. Also, bearing in mind the, if anything, lower onset rate of depression among women following financial crises (Table 1), the results are also consistent with the view that they do not have a greater general vulnerability to stress. As noted earlier, where cost of caring is concerned some have underlined the likely importance of socialization leading to a greater sensitivity to the suffering of others (Kessler & McLeod, 1984; Avison, 1990). However, the greater risk of women following crises involving children, housing and reproduction here would appear just as likely to be a result of their much greater current involvement in and responsibility for domestic roles (Table 2) and the feelings of self-blame (Table 3*b* and 5*b*), failure and defeat that can result when things go wrong. This interpretation has the added advantage of being consistent with apparent changes in risk over the life span (e.g. Andrews & Brown, 1995).

Although past episodes of depression are important predictors of a current episode, they were not considered here. (In fact, Wilhelm & Parker's (1994) evidence on gender differences in the reliability of reporting past episodes suggests that the inclusion of such data might have led to misleading conclusions.) However, it seems unlikely that gender differences in risk resulting from differences in the prevalence of past episodes could account for both the specific types of events that led to the differences reported here, and that these differences only occurred for couples with a gender-based division of domestic labour. The specificity of this effect also suggests that biological factors may well prove of little value in explaining gender differences in rates of depression.

The greater tendency of men to fail to report threatening aspects of crises was also entirely confined to the reporting of children, housing and reproduction events. Consistent with this, Folkman & Lazarus (1980) found that women were more likely to report health and family crises, and Kessler & Wethington (1991), in a sample of couples, found that women were more accurate than men in reporting life events that involved the illness of their children. However, we have been able to show such differences no longer held when the relative role salience of the crises for the couples is taken into account. This suggests that role differences enable many men to distance themselves from the consequences of domestic crises.

A number of other published findings are consistent with these conclusions. Simon (1992) showed that gender differences in psychological distress (rather than case depression) could be attributed to women experiencing more parental role strains, and controlling for gender differences in the salience of the parental role reduced differences in response to such strain. Ross *et al*. (1983), when comparing four types of marriage, found only a small gender difference in rate of depression for those where both partners worked outside the home, were happy with this arrangement and, most importantly in the present context, the man made a significant contribution to housework. Similarly, Kessler & McRae (1982) found that paid employment only improved the levels of psychological distress for those women whose partners helped with childcare.

However, the present study has taken the issue of gender differences somewhat further. First, the use of a sample of couples with a shared crisis means that it has been possible to deal more satisfactorily with confounding factors that might be present in samples of unrelated men and women. This particularly holds for whether they had experienced a life event that was of a comparable objective level of stress for both of them. Secondly, the contextual measurement used by the LEDS has allowed us to include couples on the basis of an objective assessment of the severity of their crisis rather than relying on self-report of the crisis or its outcome. Thirdly, the use of the PSE to assess psychiatric symptomatology together with a clinically validated caseness threshold for depression provides some confidence in our diagnostic categories. Fourthly, as far as we are aware, this is the only study to provide a clinical assessment of outcome, a clear identification of the domain of the crisis which led to onset of case depression, and a direct assessment of gender differences in role performance rather than simply assuming they exist. This has enabled us to identify the types of crisis (children, housing and reproduction) that are associated with a greater risk of onset of depression for women compared to men, and to identify the characteristics, in terms of role performance, of those couples who do and do not show gender differences in depression following such crises.

In the light of these findings two reasons appear likely to be relevant for explaining studies that have failed to find gender differences. First, they may have used samples that have experienced low rates of children, housing and reproduction crises, the types to which cohabiting women are more vulnerable than men. For example, a possible reason for the negative findings in Lowenthal *et al*.'s (1995) study of orthodox Jews in London is that the majority of stress experienced by their sample was related to financial and work crises. Our results (Table 1) and those of Kessler & McLeod (1984) suggest that such crises have, if anything, a greater impact on men. Secondly, if gender differences in depression occur only when there are clear differences in domestic roles, studies of populations where this does not hold are unlikely to show large differences in depression. For example, Wilhelm & Parker's (1989, 1994) longitudinal study of a sample of teachers included only a small proportion of women with full-time home responsibilities (10% at the first interview and 18% at the second carried out 5 years later). It is also quite possible that the division of domestic responsibilities will be more equitable than usual among teachers.

Some possible limitations of the present study should be noted. First, a sample of couples who had experienced a common life event can only be used to explore gender differences in a limited way. Many depressogenic events arising from crises occurring to members of an individual's wider social network are unlikely to be shared and couples experiencing these would therefore not have been included in the study – a crisis involving a confidant of just one of them, for example, would have been excluded. Consequently, if a significant contribution to gender differences is the result of such events, as some have suggested (Wethington *et al*. 1987), our results might be misleading. (However, a community survey in London of women between 18 and 65 using the LEDS found that only 17% of onsets of depression were associated with such events – T. O. Harris, personal communication, 1995.) Secondly, a sample of couples is by no means representative of men and women in general. Men and women at different life-stages may well show a quite different patterning of risk, although, as with the Wilhelm & Parker (1989, 1994) study of teachers, this would not necessarily produce findings inconsistent with

our own. Thirdly, our sample was small, with only 52 of the crises involving children, housing or reproduction – although the differences that did emerge were statistically significant. Fourthly, the sample may well be unrepresentative of the couples we sought to study. The response rate to the questionnaire was modest. The majority of those who refused to participate when asked for an interview appeared to do so because the respondent's partner was not interested, or because their relationship was so poor that the respondent was unwilling for his/her partner to be contacted – though we do have several examples of very poor marriages. While there is evidence to suggest that onset rates of depression in poor marriages are higher (Brown & Harris, 1978; Birtchnell, 1991; Goering *et al*. 1992), it is unclear whether the inclusion of a greater number would influence the gender differences that were found. Finally, the sample was recruited from an inner-city population during a period of economic recession, raising the possibility that the pattern of stress experienced may have been atypical. But, this may well have served to minimize gender differences, as it would have resulted in a relatively greater number of the financial crises to which men, if anything, appeared to be more susceptible than women.

While some of these factors limit the confidence we have in generalizing from our findings, the results would appear to have sufficient implications for the issue of gender differences in depression to suggest they should be pursued in a fully representative sample of men and women.

NOTES

[1] Two of these crises, both of which were marital, in fact only had a major difficulty.

[2] Unless otherwise stated significance is assessed using two-tailed chi-square tests (with Yates' correction applied if any expected cell frequency is < 10, or 2-tailed Fisher Exact tests if any expected cell frequency is < 5 in a 2×2 table).

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