

Coping in Marital Dyads: Patterns and Associations with Psychological Symptoms

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Coping in Marital Dyads: Patterns and Associations with Psychological Symptoms

This study examined data from 153 married couples to determine their patterns of coping with stress and the association between couples' coping and psychological symptoms in each spouse. We investigated whether information about the dyadic pattern of coping added to the understanding of psychological symptoms in husbands and wives beyond that gleaned from examining each partner's coping. Cluster analysis yielded eight distinguishable patterns of dyadic coping. Two of these patterns were associated with high levels of psychological symptoms in one or both spouses. Most notably, a pattern of dyadic coping marked by strong reliance on escape-avoidance coping by both husband and wife was associated with high levels of symptoms in both spouses. In regression analyses, wives' escape-avoidance coping predicted both their own and their husbands' psychological symptoms. Husbands' escape-avoidance coping predicted only their own symptoms.

The literature on coping with stress and psychological symptoms in adults has focused primarily on the coping of individuals, without considering the interpersonal contexts in which an individu-

al's coping occurs. Because individuals cope in the context of relationships with significant others who are coping with their own stressors, one particularly important context for understanding the coping efforts of many adults is their marital relationship. An essential step toward further clarification of the association between coping and symptoms involves examining coping within marital dyads.

Despite the use of different scales to measure coping, and different terminology to refer to similar types of coping, a few trends can be seen across studies of coping and symptoms that may be instructive for studying coping in marital dyads. First, what is variously termed avoidance, escapism, or escape-avoidance coping has been found to be significantly positively related to psychological symptoms in adults (e.g., Aldwin & Revenson, 1987; Billings & Moos, 1981). Second, confrontive coping, an interpersonally assertive or aggressive type of coping, has also been shown to be significantly positively related to symptoms (e.g., Folkman, Lazarus, Gruen, & De-Longis, 1986). Finally, what is termed planful problem solving, instrumental action, or approach coping, an active problem-solving approach that is generally not interpersonal, has been shown to be significantly negatively related to symptoms in adults (e.g., Aldwin & Revenson, 1987; Billings & Moos, 1981). Because of the relatively consistent nature of their association with psychological symptoms in individuals, these three types of

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coping represent a reasonable focus for examining coping in marital dyads. Other types of coping have been shown to be significantly correlated with psychological symptoms; however, they yielded near zero part correlations with symptoms in a regression analysis reflecting less predictive utility (Folkman, Lazarus, Gruen, & DeLongis, 1986). Confrontive coping, planful problem solving, and escape-avoidance coping were chosen as the focus of the present study because they have been shown to be the most powerful predictors of psychological symptoms and thus merit further investigation (Folkman, Lazarus, Gruen, & DeLongis, 1986).

Cronkite and Moos (1984) reported a study of dyadic coping in which they tested a model of stress, coping, and psychological symptoms in a sample of couples drawn from the community. They operationally defined coping within couples as the statistical interaction between husband's and wife's coping responses, thus examining one type of husband's coping in relation to one type of wife's coping. They operationalized stress in two ways. First, the number of undesirable life events experienced within the last year by each individual was assessed; second, indices of each spouse's physical and psychological distress and drinking behavior were used as a measure of ongoing stress for the other partner. They found that for husbands who were high on avoidance coping, their depressed mood increased in association with an increase in their wives' avoidance coping. Further, the interaction of wives' avoidance coping with husbands' approach coping (planful problem solving) significantly predicted wives' depression. While they tested a number of other interaction terms that proved to be nonsignificant, the findings that did emerge are suggestive of the potential moderating effects of couples' coping, and point to the need for further work in this area.

A potentially valuable approach to studying dyadic processes is through the use of cluster analysis (see Gruen, Folkman, & Lazarus, 1987, for an example of cluster analysis of patterns of emotions in marital dyads). To date, cluster analysis has yet to be employed to study coping in couples. The aim of the current study is to move beyond the individual level of analysis to examine couples' coping. We investigated whether information about the dyadic pattern of coping added to the understanding of psychological symptoms in husbands and wives beyond that gleaned from examining each partner's coping. Coping and psychological symptoms in marital

dyads were examined in three steps. First, correlational analyses were performed to assess the strength of association between three types of husbands' and wives' coping with each spouse's psychological symptoms. Second, cluster analysis was performed to identify patterns of dyadic coping in this sample. Third, regression analyses were employed to identify the relative contribution of each spouse's coping, as well as the dyadic pattern of coping, in predicting each spouse's psychological symptoms.

METHODS

Subjects

Participants were 153 married couples living in the rural northeast portion of Vermont. This group represents a subset of a sample of 309 families participating in a study of stress and coping in the lives of adolescents and their parents (see Compas, Howell, Phares, Williams, & Giunta, 1989; Compas, Howell, Phares, Williams, & Ledoux, 1989). Only two-parent families with complete data on the coping subscales were chosen for the present study. As is typical of the Vermont population, more than 98% of the families were white. Family income ranged from less than \$3,000 to more than \$40,000, with the median between \$20,000 and \$24,999. Mothers worked an average of 27.93 hours per week outside the home (SD = 16.48); fathers worked an average of 44.52 hours per week outside the home (SD =13.27). Mothers had a mean of 13.31 years of education (SD = 2.43) and fathers an average of 13.01 years (SD = 2.99). Family socioeconomic status (SES) based on education, occupation, gender, and marital status (Hollingshead, 1975) was as follows: 3% Level I (unskilled laborer), 22% Level II (semiskilled worker), 27% Level III (skilled craftsperson, clerical worker), 35% Level IV (medium business, minor professional), 13% Level V (major business or professional).

Procedure

Recruitment for the larger study was conducted in eight rural schools; all sixth, seventh, and eighth grade students were given a letter of informed consent inviting participation to take home to their parents. Approximately half of the available families agreed to take part in the study. Participation was completely voluntary and families were paid \$25 for completing the question-

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naires. All forms were completed anonymously and identified only by a code number for each family. Students were given an envelope containing questionnaires for their parents and were instructed to take these materials home and to return their parents' completed forms in a sealed envelope the following week.

Measures

Spouses' coping. The revised Ways of Coping Checklist (Folkman & Lazarus, 1985) was used to assess each spouse's self-report of coping with a recent stressful event. The 67-item checklist describes a broad range of cognitive and behavioral strategies that people use to manage both internal and external demands in stressful situations. Respondents are instructed to identify a stressful event with which they coped in the last 3 months and to indicate the extent to which they used each coping strategy to deal with that event (0 = "does")not apply and/or not used," 3 = "used a great deal"). For the most part, spouses reported on different stressors. Nevertheless, events, emotions, and symptoms in the lives of individuals are believed to have an impact directly and indirectly on their marital partners (e.g., Finney, Moos, Cronkite, & Gamble, 1983). Thus, even when a spouse is coping with a nonshared stressor (e.g., health or work related), the partner is likely to be affected. Indeed, within the context of close relationships such as marriage, nonshared stressors (e.g., an illness in one spouse) become dyadic events, particularly as the severity of the stressor increases.

Several different factor structures exist for the Ways of Coping Checklist. The present study used the factor structure derived by Folkman, Lazarus, Dunkel-Schetter, DeLongis, and Gruen (1986), based on a community sample of adults. Internal consistency has been shown to be adequate for all subscales. As described above, three of the eight subscales were used in the present analyses: planful problem solving, confrontive coping, and escape-avoidance coping. These were chosen empirically because they have been found to be most strongly associated with individuals' symptoms in both correlational and regression analyses (e.g., Aldwin & Revenson, 1987; Billings & Moos, 1981; Folkman, Lazarus, Gruen, & DeLongis, 1986). A cluster analysis utilizing the eight coping subtypes for each spouse was considered because it would describe couples' coping more completely. However, the clusters derived from 16 data points per couple would be highly specific, greatly limiting the generalizability of the findings.

Spouses' symptoms. Each spouses' psychological symptoms were assessed using the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983), a 90-item measure of a wide range of symptoms of emotional and somatic distress. Respondents rate the extent to which they have been distressed by each symptom during the past week (0 = "not at all," 4 = "extremely"). Test-retest reliability, internal consistency, and concurrent validity have all been shown to be adequate (Derogatis, 1983). The Global Severity Index (GSI), which combines information on numbers of symptoms and intensity of perceived distress, was used in all analyses.

Demographic questionnaire. Each couple completed a demographic questionnaire indicating their marital status, age, education, income, and number of children in the family.

RESULTS

Correlational Analyses

Pearson correlations among the measures for both spouses are presented in Table 1. An ordered Bonferroni procedure was used to control for Type I error rate (Larzelere & Mulaik, 1977). Looking at the within-spouse relationships, wives' confrontive coping was significantly associated with wives' planful problem solving, and husbands' confrontive coping was significantly related to both their own planful problem solving, and their own escape-avoidance coping. Looking across spouses, wives' escape-avoidance coping was significantly related to husbands' escapeavoidance coping, and wives' planful problem solving was associated with husbands' planful problem solving. For correlations between coping and symptoms, wives' use of escape-avoidance coping was significantly related to both their own and their husbands' symptoms. Husbands' symptoms were significantly correlated with their own use of both confrontive coping, and escape-avoidance coping. Correlations observed between types of coping are within the range reported by Folkman and colleagues (Folkman, Lazarus, Gruen, & DeLongis, 1986). While some degree of covariance is reflected among types of coping, each type remains conceptually distinct. It is

	1	2	3	4	5	6	7	8
Wives' coping								
1. Confrontive								
2. Escape-avoidance	.17	-						
3. Planful problem solving	.50*	.09						
Husbands' coping								
4. Confrontive	.20	.12	.16					
5. Escape-avoidance	.21	.30*	.23	.49*				
6. Planful problem solving	.16	.09	.30*	.41*	.23			
Symptoms								
7. Wives	.17	.53*	.09	.02	.18	.02		
8. Husbands	.22	.29*	.10	.34*	.50*	.13	.38*	

TABLE 1. PEARSON CORRELATIONS AMONG HUSBANDS' AND WIVES' COPING AND SYMPTOMS

noteworthy that, unlike several previous studies, planful problem solving was not related to husbands' or wives' psychological symptoms. Husbands' and wives' symptoms were significantly correlated.

Dyadic Coping Patterns

Ward's method of hierarchical cluster analysis was used to classify the couples with respect to coping (Anderberg, 1973). Scores from both husbands and wives on the three types of coping were used to represent couples' coping. The cluster analysis yielded a solution consisting of eight clusters; this configuration was chosen because no cluster contained less than 10% of the overall sample and all clusters were clinically distinct, in

that each dyadic pattern was felt to be clinically recognizable as different from the others. The mean z scores for husbands and wives in each cluster on the measures of coping are shown in Table 2.

In five of the eight clusters, the husbands and wives had similar types of coping profiles in that both partners reported using the same types of coping strategies to a similar extent. In the first cluster (Husband & wife: confrontive, moderate), each partner reported higher levels of confrontive coping than of the other two types of coping; both spouses are within ½ standard deviation of the sample mean on all types of coping. In the second (Husband & wife: avoidant, high) and third (Husband & wife: avoidant, moderate) clusters, each partner relied on escape-avoidance coping as his

TABLE 2. MEAN Z SCORES FOR THREE TYPES OF WIVES' AND HUSBANDS' COPING IN EIGHT CLUSTERS OF COUPLES

		Wives		Husbands			
Clusters	Confrontive Coping	Escape- Avoidance Coping	Planful Problem Solving	Confrontive Coping	Escape- Avoidance Coping	Planful Problem Solving	
1. Husband & wife: confrontive,							
moderate $(n = 19)$	0.2	-0.5	-0.6	0.4	-0.5	-0.4	
2. Husband & wife: avoidant,							
high (n = 20)	0.6	1.5	0.1	0.2	1.1	0.2	
3. Husband & wife: avoidant,							
moderate $(n = 14)$	-1.2	-0.4	-1.4	-1.2	-0.7	-1.2	
4. Husband: problem solving & confrontive, high	ı;						
wife: problem solving, high $(n = 16)$	0.5	0.1	1.0	0.9	0.6	1.7	
5. Husband & wife: problem solving,							
high (n = 18)	-0.1	-0.15	1.0	-0.2	-0.5	0.7	
6. Husband: confrontive & avoidant,							
high (n = 16)	-0.15	-0.1	0.2	1.4	1.5	-0.1	
7. Wife: confrontive & problem solving,							
high (n = 26)	0.8	-0.3	0.6	-0.7	-0.5	-0.9	
8. Husband: problem solving, moderate;							
wife: avoidant, moderate $(n = 24)$	-0.9	-0.1	-1.0	-0.4	-0.5	0.4	

Note: For z scores, mean = 0, SD = 1.

^{*}p < .05 after Bonferroni correction.

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or her primary coping strategy, relying to a lesser and more equal extent on the other two types of coping. These two clusters differed however, in the absolute levels of coping employed by each partner; couples in cluster two were above the mean for the sample in their use of all three types of coping while couples in cluster three were below the sample mean in their use of all types of coping. Couples in clusters four (Husband: problem solving & confrontive, high; wife: problem solving, high) and five (Husband & wife: problem solving, high) reported higher levels of planful problem solving coping. These two clusters differed from one another in the absolute levels of coping used by each partner, with husbands in cluster four reporting higher levels of all three types of coping than husbands in cluster five, particularly more confrontive coping and problem solving.

The three remaining clusters are characterized by differing patterns of coping between the spouses. In cluster six (Husband: confrontive & avoidant, high), husbands' use of both confrontive and escape-avoidance coping was 1½ standard deviations above the sample mean while their use of planful problem solving was at the mean; their wives reported normative levels of all three types of coping. In contrast, wives in cluster seven (Wife: confrontive & problem solving, high) were between $\frac{1}{2}$ and 1 standard deviations above the sample mean in their use of confrontive coping and planful problem solving and just below the sample mean in their use of escapeavoidance coping, while their husbands were below the sample mean in their use of all three types of coping. In cluster eight (Husband: problem solving, moderate; wife: avoidant, moderate), wives reported relatively higher levels of escapeavoidance coping but were below the sample mean in their use of all three types of coping; husbands were below the sample mean on their use of confrontive and escape-avoidance coping and were slightly above the sample mean in their use of planful problem solving.

The Relation Between Dyadic Coping Patterns and Psychological Symptoms

Using analysis of variance, husbands' psychological symptoms were found to differ significantly across the eight clusters (F [7,141] = 6.25, p < .001). Student Newman-Keuls analyses indicated that husbands in clusters two and six reported significantly more symptoms than did husbands in

the other clusters. Wives' psychological symptoms also varied significantly across clusters (F [7,144] = 2.32, p < .05). Post-hoc analyses indicated that wives in cluster two reported significantly more symptoms than did wives in the other clusters.

Thus two of the eight clusters, clusters two and six, were associated with significantly higher levels of psychological symptoms for one or both spouses; these elevations were all greater than 1 standard deviation above the normative mean on the SCL-90-R. Cluster two is marked by high use of escape-avoidance coping by both spouses and more normative use of the other two types of coping; this coping profile was associated with high levels of psychological symptoms on the SCL-90-R for both spouses (wives' mean GSI T score = 63; husbands' mean GSI T score = 64). Wives in cluster six engaged in normative amounts of all three types of coping and experienced moderate levels of psychological symptoms (mean GSI T score = 56) while their husbands reported high levels of symptoms (mean GSI T score = 64) and engaged in high levels of both escape-avoidance coping and confrontive coping and low levels of planful problem solving.

Regression Analyses

Separate hierarchical regression analyses using each spouse's psychological symptoms as the criterion variable were conducted to identify the relative contribution of husbands' coping, wives' coping, and the dyadic pattern of coping (cf. Gruen et al., 1987). A dummy-coded variable indicating cluster membership was used to represent the dyadic pattern of coping. In predicting wives' symptoms, wives' scores on the three individual coping scales were entered first, followed by husbands' scores on the coping scales; the dyadic pattern of coping was entered third. For husbands' symptoms, husbands' scores on the three types of coping were entered first, and wives' scores on the three coping scales were entered second, followed by the dyadic patterns of coping. Listwise deletion, using only cases with nonmissing values on all variables, was used in all regression analyses. The unique variance accounted for by each predictor variable (the squared semipartial correlation) is reported below.

Using the entire sample, wives' symptoms were predicted by their own use of escape-avoidance coping ($sr^2 = .28$). The other two types of wives' coping did not predict their own symp-

toms; neither husbands' coping nor the dyadic pattern of coping predicted wives' symptoms. Husbands' symptoms were predicted by their own use of escape-avoidance coping ($sr^2 = .21$), as well as by their wives' use of escape-avoidance coping ($sr^2 = .03$). Use of the other two types of coping by either spouse did not predict husbands' symptoms, nor did the dyadic pattern of coping.

DISCUSSION

The present findings indicate that husbands' and wives' coping are associated with each other and that wives' escape-avoidance coping is associated with husbands' symptoms, while husbands' coping is not associated with wives' symptoms. Findings from the cluster analysis indicate that meaningful groups of couples can be distinguished on the basis of their reports of their use of escapeavoidance, confrontive, and planful problem-solving coping. In the present sample, eight clusters were identified, a pattern that will require replication and validation in future research. We would expect that the specific dyadic patterns of coping identified in any sample would depend on personal characteristics of the individuals in the sample and the types of stress with which they are cop-

In this sample, similar patterns of coping were seen between husbands and wives in five of the eight clusters. One might hypothesize that these couples look similar because they reported the same or similar events, thus leading to the use of similar types of coping. However, the rate of spouses reporting the same stressful event was not significantly higher in the five clusters with similar patterns of coping. As such, similarity in coping does not seem to be an artifact of coping with the same stressor or even the same type of event. Rather, it seems that either individuals tend to choose spouses with similar coping styles or that spousal behavior becomes more similar over time.

From the eight subgroups identified in this sample, two groups of couples (clusters two and six) are distinguished by significantly higher levels of psychological symptoms in one or both spouses. In cluster two (Husband & wife: avoidant, high), both spouses reported elevated symptoms, while only the husbands reported high levels of symptoms in cluster six (Husband: confrontive & avoidant, high). In cluster two, the use of high levels of escape-avoidance coping by both spouses was associated with high levels of symp-

toms for both spouses. Indeed, wives' escapeavoidance coping predicted both their own as well as their husbands' symptoms in regression analyses, indicating that wives' use of this type of coping is associated with more distress in both spouses. This finding is similar to the interactive effect of husbands' and wives' avoidance coping reported by Cronkite and Moos (1984). Thus, we see some cross-prediction of one spouse's symptoms by the other spouse's coping, but only in the case of understanding husbands' symptoms.

The finding that wives' coping predicted husbands' symptoms but husbands' coping did not predict wives' symptoms can be interpreted several ways. One view would suggest that perhaps wives are resilient, in that they are unaffected by their husbands' use of escape-avoidance coping, while husbands are more vulnerable to being affected by how their wives are coping. Alternatively, wives' use of escape-avoidance coping may be particularly noxious to husbands. It is also possible that husbands' use of escape-avoidance coping is protective for their wives, at least in the short run, through avoidance of direct conflict or confrontation. Finally, it may be that the direction of effect is from husbands' symptoms to wives' escape-avoidance coping, such that wives are using this type of coping in response to their husbands' symptoms. Since direction of effect was not tested in the present design, this final interpretation remains only a possibility. The potential predictive relationship between spouses' coping and psychological symptoms remains to be tested through prospective studies.

Regression findings indicating that husbands' symptoms are predicted to a small extent by wives' coping speak to the importance of moving beyond the level of examining individual coping efforts. However, studying dyadic and familial patterns of coping present considerable methodological challenges (McCubbin, Joy, Caubie, Compean, Patterson, & Needle, 1980; Thompson & Walker, 1982). The most useful methodologies for examining the pattern of response between partners or family members remain to be determined empirically. Cluster analysis is a promising approach that will require further exploration.

Through cluster analysis, we were able to capture patterns of dyadic coping; however, the ability of dyadic coping to predict symptoms was lacking, as seen in the regression equations. Thus, we see some cross-prediction in the case of wives' coping explaining husbands' symptoms, but overall, the dyadic patterns of coping did not

explain additional unique variance in symptoms. This may be due, in part, to the small amount of variance in symptoms generally explained by coping; while the relationship between coping and symptoms is felt to be important clinically, it may be more difficult to demonstrate this statistically. This is supported by the large number of variables believed to be related to symptoms.

Future research should examine dyadic patterns of coping in couples confronting the same stressor, as opposed to those coping with separate, independent stressors as in the present study (e.g., Manne & Zautra, 1989). This would provide an even more rigorous test of the dyadic relationship between coping and symptoms in couples. In this way, we can identify the nature of couples' coping with a variety of ongoing stressful events. The use of diary studies and studies of dyadic interaction are also indicated as important next steps in the exploration of dyadic coping processes.

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