

The Moderating Effects of Coping Strategies on Major Depression in the General Population

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Objectives: To evaluate the moderating effects of various coping strategies on the association between stressors and the prevalence of major depression in the general population.

Methods: Subjects from the Alberta buy-in component of the 1994–1995 National Population Health Survey (NPHS) were included in the analysis ($n = 1039$). Each subject was asked 8 questions about coping strategies that dealt with unexpected stress from family problems and personal crises. Major depression was measured using the World Health Organization's (WHO) Composite International Diagnostic Interview-Short Form (CIDI-SF) for major depression. The impacts of coping strategies in relation to psychological stressors on the prevalence of major depression were determined by examining interactions between coping and life stress on major depression using logistic regression modelling.

Results: No robust impact of coping strategies in relation to various categories of stress evaluated in the NPHS was observed. There was evidence that the use of “pray and seek religious help” and “talks to others about the situations” as coping strategies by women moderated the risk of major depression in the presence of financial stress and relationship stress (with a partner). Using emotional expression as a coping strategy by women might decrease the risk of major depression in the presence of 1 or more recent life events, personal stress, relationship stress (with a partner), and environmental stress.

Conclusion: Different coping strategies may have a differential impact on the prevalence of major depression in specific circumstances. These findings may be important both to prevent and to treat depressive disorders.

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Clinical Implications

- Coping strategies in relation to life stressors may be determinants of mood disturbance in the general population.
- The moderating effects of coping strategies on the prevalence of major depression are sex-specific and conditional on the specific stress exposures.
- The National Population Health Survey (NPHS) was a representative survey; these findings can apply to the Canadian community populations.

Limitations

- This analysis was cross-sectional; therefore, a causal inference could not be drawn.
- The NPHS relied on self-reported information and a rudimentary method of evaluating coping strategies.
- The Composite International Diagnostic Interview-Short Form (CIDI-SF) is a brief indicator for major depression.

Key Words : *major depression, coping, stressors, women, life events, chronic stress*

Coping is a response aimed at diminishing the physical, emotional, and psychological burden linked to stressful life events and daily hassles (1,2). Coping responses are believed to play an important role in depression (3,4). Further, stressful life events have been found to have a causal relation with the onset of major depression (5). However, the relations among stressful life events, coping, and major depression at the population level remain unclear.

One possible way in which coping can affect well-being is by moderating the effects of stress on depressive symptoms (6,7) where individuals with effective coping strategies may have a lower risk of depressive disorders. However, there has been a paucity of epidemiological research on the moderating effects of coping strategies on major depression. Evidence from an existing literature with respect to the moderating effect of coping on depressive symptom levels has been inconsistent. In a study using 60 patients with major depression according to the DSM-IV criteria, Bouhuys and others (8) failed to find that coping moderated the effects of negative emotions on the levels of depressive symptoms measured 6 weeks later. Similarly, using a sample comprising 424 depression patients, Billings and Moos (9) reported that coping responses did not moderate the effects of life stressors on depressive symptom levels measured by the Research Diagnostic Criteria for Depression (10). However, in a longitudinal community study, problem-focused coping was found to have a moderating effect on depressive symptoms among those who were exposed to a self-named stress episode (11). Appropriate coping also reduced depressive symptom levels among parents of children with autism and among caregivers working in nursing homes and long-term care facilities (12,13).

The objective of this analysis was to examine the moderating effects of various coping strategies on the associations between stressful life events, chronic stresses, and major depression in the general population. To fulfill this objective, data from the Alberta buy-in component of the Canadian National Population Health Survey (NPHS) were used. In 1994–1995, Statistics Canada initiated the NPHS using a multistaged,

stratified, random sampling procedure. The NPHS was conducted every 2 years. The target population of the NPHS included household residents in all provinces, with the exclusion of residents of Indian reserves, Canadian Forces bases, and some remote areas in Ontario and Quebec (14). Under agreements between Statistics Canada and provincial governments, the sample size in a province could be increased, and additional information could be collected in return for extra funds. As part of a buy-in agreement between Statistics Canada and the Alberta Ministry of Health, respondents who were age 18 years or over in Alberta in the 1994–1995 NPHS were asked questions about how they coped with an expected stress from family problems and personal crises. These subjects formed the basis of this analysis.

Methods

In the 1994–1995 NPHS, subjects who were age 18 years or over and resided in Alberta at the time of interview ($n = 1039$) provided information about major depression and how the subjects dealt with stress from an expected and difficult problems related to family and personal crises. Table 1 presents the questions related to coping strategies. Subjects might have offered either a “Yes” or “No” answer to each of those questions. A “Yes” answer was considered evidence that the subject used this coping strategy to deal with an expected family problems and personal crises in this analysis.

In the NPHS, major depression was measured using the Composite International Diagnostic Interview-Short Form (CIDI-SF) for major depression, developed and validated by Kessler and colleagues (15). Major depression, as defined in the NPHS, represents a 90% predictive cut-point for the CIDI-SF (14). This cut-point corresponds to reporting 5 of 9 DSM-IV diagnostic criteria for major depression (the number of symptoms required to make the diagnosis) during the same 2-week period in the past 12 months, and at least 1 of which must be depressed mood or loss of interest (16). Therefore, using this cut-point has its face validity for the DSM-IV criterion A for major depression. The sensitivity and specificity of the

Table 1. Summary of the questions about coping strategies in the 1994–1995 NPHS^a

- If an unexpected problem or situation was causing you to feel under stress, which of the following would you do?
- Try not to think about the situation and keep yourself busy to prevent thinking
 - Try to see the situation in a different light that makes it seem more bearable
 - Think about ways to change the situation or do something to solve the problem causing the stress
 - Express your emotions to reduce your tension, anxiety, or frustration about it
 - Admit to yourself that the situation is stressful, but otherwise do nothing
 - Talk about the situation with others
 - Do something you enjoy to relax
 - Pray and seek comfort or strength through religion

^aAdopted from Statistics Canada. National Population Health Survey, 1994–95. Public used data files. Minister of Industry, Ottawa. 1995 (33).

Table 2. Questions about recent life events in the NPHS^a

I'd like to ask you about some things that may have happened in the past 12 months. First, I'd like to ask about yourself or anyone close to you (that is, your spouse or partner, children, relatives or close friends):

- Was any one of you beaten up or physically attacked?
- Did you or some one in your family have an unwanted pregnancy?
- Did you or some one in your family have an abortion or miscarriage?
- Did you or some one in your family have a major financial crisis?
- Did you or some one in your family fail school or a training program?
- Did you or your partner experience a change of job for a worse one?
- Were you or your partner demoted at work or did you or either of you take a cut in pay?
- Did you have an increase in arguments with your partner?
- Did you go on welfare?
- Did you have a child move back into the house?

^aAdopted from Statistics Canada. National Population Health Survey, 1994–95. Public use data files. Minister of Industry, Ottawa. 1995 (33).

Table 3. Questions about chronic stress in the NPHS^a

Personal stress

- You are trying to take on too many things at once
- There is too much pressure on you to be like other people
- Too much is expected of you by others
- Your work around the home is not appreciated
- People are too critical of you or what you do

Financial problem

- You don't have enough money to buy the things you need

Relationship problem (with mate)

- Your partner doesn't understand you
- Your partner doesn't show enough affection
- Your partner is not committed enough to your relationship

Relationship problem (no mate)

- You find it is very difficult to find someone compatible with you

Child problem

- One of your children seems very unhappy
- A child's behaviour is a source of serious concern to you

Environmental problem

- Your friends are a bad influence
- You would like to move, but you can not
- Your neighbourhood or community is too noisy or too polluted

Family health

- You have a parent, a child, or partner who is in very bad health and may die
- Someone in your family has an alcohol or drug problem

^aAdopted from Statistics Canada. National Population Health Survey, 1994–95. Public use data files. Minister of Industry, Ottawa. 1995 (33).

CIDI-SF ranged between 90% and 94% in studies conducted by Kessler and colleagues (15). However, the CIDI-SF does not contain probe questions to determine whether depressive symptoms are due to substance use, physical illness, and bereavement. The CIDI-SF development and validation documents showed that organic exclusions were used in the empirical work to select the scale items and were considered in generating the possibilities of caseness (<http://www.who.int/msa/cidi/cidifscoring.pdf>). However, a recent validation study using a community sample suggested the CIDI-SF might pick up a broader spectrum of depressive

morbidity than would major depression as strictly defined using the full version of CIDI (17). About 75% of subjects scoring 5 or more on the Composite International Diagnostic Interview-Short Form for Major Depression (CIDI-SFMD) had major depression according to the full CIDI.

In this analysis, stresses were identified by identifying those subjects who reported 1 or more recent life events or chronic stress. The NPHS used 17 questions to measure chronic stress in 7 dimensions: personal stress, financial stress, relationship stress (with a partner), relationship stress (no partner),

environmental stress, child problems, and family health stress. Tables 2 and 3 present the questions used to measure recent life events and chronic stress. Again, subjects might have offered either a “Yes” or a “No” answer to each of these questions. In this analysis, logistic regression models were used to detect interaction effects between stress and various coping strategies on major depression prevalence. All analyses were performed in men and in women separately. Since the NPHS used a complex sampling design, the estimates of this analysis were weighted to account for sampling procedures.

Because we examined the impacts of 8 different coping strategies on the association between stress and the prevalence of major depression, multiple comparison problems presented. To address this issue, we used Bonferroni’s correction in this analysis. Specifically, the significance level was set at 0.006 (0.05/8 = 0.00625) in the current analysis. The results of statistical tests, above this level were considered not significant. Although Bonferroni’s correction is simple and applicable in any multiple test situation, the weakness of Bonferroni’s correction is low power (18). Therefore, Bonferroni’s correction should be considered a conservative strategy for adjusting the multiple comparison problem.

Results

To evaluate the moderating effects of reported coping strategies on the associations between stresses and major depression, interaction terms involving the specific stress and coping responses were fitted into a series of logistic regression models. Table 4 illustrates the significant results with Bonferroni’s correction. As seen from this table, when exposed to financial stress, using “pray or seek religious help” as a coping strategy alleviated the risk of major depression for women. In addition, when women were exposed to relationship stress (with a partner), those who reported using “talk to others about the situation” as a coping strategy were found to have a lower risk of major depression than did other women.

Table 5 lists the results that were significant at the level of 0.05. The data suggested that, when subjects were exposed to 1 or more recent life events, women who reported using “try not to think about it” or “expressing emotion” as a coping strategy might have a lower risk of major depression than did other women. The former strategy could be loosely characterized as avoidance. The data also suggested that using “talk to others about the situation” as a coping strategy moderates the risk of major depression to a lower degree for men when they reported 1 or more recent life events. Women who used “expressing emotion” as a coping strategy to deal with personal stress appeared to be at a lower risk of major depression. This finding was not observed among men. When exposed to financial stress, using problem-solving strategies (“try to do something to change the situation”) as a coping mechanism seemed to decrease the risk of major depression for men. When exposed to relationship stress (with and without a partner) and environmental stress, using “expressing emotion” might decrease the risk of major depression among women. The data provided no evidence that the reported coping strategies moderated the risk of major depression for men dealing with relationship and environmental stresses. One unexpected finding of this part of the analysis was that reported use of “try to see the situation differently” as a coping strategy might be associated with an increased prevalence of major depression for those women who were not married or with out partners when they dealt with relationship stress.

Discussion

In this analysis, none of the reported coping strategies were found to have a general moderating effect on the association between major depression prevalence and all of the stressors evaluated. This finding suggests people’s coping strategies may differ with stressful situations, and certain coping strategies may moderate the effect of specific types of life stress on major depression risk or prognosis—but not necessarily to the same extent for both sex groups. This finding is consistent with the current view that coping strategies are situation-

Table 4. The associations between stress and major depression in relation to coping strategies among women

	Stratum-specific OR (95% CI)	Likelihood ratio test ^a
Financial stress		
Pray and seek comfort or strength through religion		
Yes	0.56 (0.12, 2.56)	$\chi^2(1) = 9.80, P = 0.002$
No	5.17 (2.07, 12.91)	
Relationship stress (with partner)		
Talk with others about the situation		
Yes	0.76 (0.19, 3.12)	$\chi^2(1) = 8.89, P = 0.003$
No	11.28 (2.72, 46.83)	

^aBy comparing the models with and without the interaction term of “stress x coping strategy”.

Table 5. The associations between stress and major depression in relation to sex and coping strategies		
	Stratum specific OR (95% CI)	Likelihood ratio test ^a
Recent life events		
Women		
Try to forget about it		
<input type="checkbox"/> Yes	2.07 (0.61, 6.99)	—
<input type="checkbox"/> No	8.67 (3.01, 24.96)	$\chi^2(1) = 3.70, P = 0.05$
Express emotion		
<input type="checkbox"/> Yes	2.15 (0.77, 5.98)	—
<input type="checkbox"/> No	9.05 (2.88, 28.42)	$\chi^2(1) = 3.86, P = 0.05$
Men		
Talk to others about the situation		
<input type="checkbox"/> Yes	1.09 (0.25, 4.78)	—
<input type="checkbox"/> No	28.84 (3.49, 238.20)	$\chi^2(1) = 4.97, P = 0.03$
Personal stress		
Women		
Express emotion		
<input type="checkbox"/> Yes	1.39 (0.46, 4.15)	—
<input type="checkbox"/> No	13.84 (2.82, 67.73)	$\chi^2(1) = 5.80, P = 0.02$
Financial stress		
Men		
Try to change the situation		
<input type="checkbox"/> Yes	0.86 (0.25, 3.00)	—
<input type="checkbox"/> No	12.53 (1.35, 116.29)	$\chi^2(1) = 3.90, P = 0.05$
Relationship stress (no partner)		
Women		
To see situation differently		
<input type="checkbox"/> Yes	12.88 (2.67, 62.10)	—
<input type="checkbox"/> No	1.41 (0.31, 6.45)	$\chi^2(1) = 4.62, P = 0.03$
Relationship stress (with partner)		
Women		
Express emotion		
<input type="checkbox"/> Yes	0.92 (0.22, 3.86)	—
<input type="checkbox"/> No	7.69 (2.25, 26.30)	$\chi^2(1) = 5.94, P = 0.01$
Environmental stress		
Women		
Express emotion		
<input type="checkbox"/> Yes	0.88 (0.31, 2.53)	—
<input type="checkbox"/> No	3.78 (1.43, 9.96)	$\chi^2(1) = 4.59, P = 0.03$
^a By comparing the models with and without the interaction term of "stress x coping strategy."		

-specific. That is, the same coping strategy may be helpful or counterproductive, depending on the dimensions of challenge (19). Some individuals may use maladaptive coping styles to deal with a life event or has one, which may intensify the depressive symptoms (3,20).

Using "pray or seek religious help" may decrease the risk of major depression due to financial stress, and "talk to others about the situation" regarding relationship stress may reduce the risk of major depression for women. So far, only 1 study has investigated the impact of religiosity on the associations

between depressive symptoms and various life stressors (21). In that study, Strawbridge and others reported that involvement in organized and nonorganized religious activities buffered the association between depressive symptoms and nonfamily stressors such as financial and health problems among elderly people (aged 50 to 102 years) (21). It is possible that women who have financial stress and who are religious may not only receive spiritual comforts but may also receive tangible help from others in the religious group, thus leading to a decreased risk of major depression. With respect to the effect of using "talk to others about the situation" as a

coping strategy, Fuhrer and others (22) reported that women have more close personal relationships than do men, although men have larger social networks in the Whitehall II study. Therefore, in the NPHS, women who reported relationship stress with a partner and who use “talk to others about the situation” as a coping strategy may more likely share their problems with close friends and be comforted by these friends.

The mechanisms underlying the sex-specific effects of reported coping strategies such as “talk to others about the situation” and “pray and seek religious help” on major depression prevalence were not clear. Men were less likely than women to report using these 2 coping strategies in the NPHS. Detailed studies using more highly developed methods evaluating coping are necessary to replicate these findings and to delineate why certain coping strategies affect men and women to different extents in reducing the effects of life stressors on major depression.

Previous studies have reported that expressing emotion was associated with an increased level of depressive symptoms for women (9,23). In a Finnish adolescent sample, Hanninen and Aro (24), found that using emotional discharge as a coping strategy increased the levels of depressive symptom (measured by Beck Depression Inventory [25]) for young girls when exposed to life stress. In our analysis, it was found that using “expressing emotion” as a coping strategy might moderate the effects of recent life events, personal stress, relationship stress (with a partner), and environmental stress on major depression for women, but not for men. These differences might be due to the instruments used to measure depression, the definition of emotional expression, and the samples used in the different studies. In Hanninen and Aro’s study, emotional discharge included venting anger, self-blaming, smoking, and drinking—and these items were positively associated with depressive symptoms (25). Further, we considered that these differences could also be due to the buffering effect of social support because women were more likely to use “talk to others about the situation” as a coping strategy. In fact, a longitudinal study using university students (26) reported findings consistent with ours, that is, emotion-focused coping including emotional expression benefited women in that it reduced depressive symptom levels when they were exposed to life stress. Some researchers have concluded that emotional expression may enhance adjustment when exposed to life stress by facilitating change in cognitive-affective schema, releasing inhibited physiological and psychological tension, and motivating adaptive behaviour (27,28). The moderating effect of “expressing emotion” on the association between various stresses and major depression was considered not statistically significant after Bonferroni’s correction in this analysis. We need to confirm these findings in future studies.

Because the subjects in this analysis consisted exclusively of those who resided in Alberta at the time of interview, specific

social context might impact on the associations observed in this analysis. Thus, these findings should be extrapolated with caution. Moreover, this analysis consisted of subjects who were exclusively age 18 years and over at the time of the interview. Hence, the results might not apply to the younger population.

One of the limitations, however, was that this analysis relied on self-reported information. Subjects might either overreport or underreport their coping strategies. Nevertheless, the impact of reporting bias on the results of this analysis could not be examined directly using the existing data. An other limitation of this analysis was that the CIDI-SFMD is a brief indicator of major depression that may not be as sensitive as the full version of CIDI. Unlike previous studies asking detailed questions about coping strategies, the NPHS questions about coping strategies are rudimentary in nature. These questions are relatively crude and could not necessarily capture or measure all aspects of coping. Consequently, the findings of this analysis should be considered preliminary.

This analysis was cross-sectional. Causal relations could not be drawn from this analysis because having a depressive disorder could impact upon self-reported coping strategies. Longitudinal studies will be necessary to clarify this and other temporal effects. Although NPHS contained a longitudinal component, due to a small sample size, the estimates based on this longitudinal component were not sufficiently precise to support this type of analysis. Further, the NPHS is a general-population health survey, and measures sufficiently accurate to fully address such issues were not included in the interview. The advantage of reporting the NPHS data is that it is population-based, providing some insights into the experiences of members of the general population.

Major depression is a heterogeneous condition influenced by biological, psychological, and social factors. Recent studies of the efficacy of brief counselling in the primary care context—particularly those forms of counselling that focus on enhanced coping—suggest that these approaches are efficacious, at least for mild depressive episodes (29–32). We need detailed clinical studies to develop and refine these strategies. Nevertheless, the data presented here provide some epidemiological confirmation of the importance of coping strategies in relation to stress as determinants of mood disturbances in the population.

References

1. Snyder CR, Ford CE, and Harris RN. The effects of the ordinal perspective on the analysis of coping with negative life events. In: Snyder CR, Ford CE, editors. Coping with negative life events: clinical and social psychological perspectives. New York: Plenum Press; 1987. p 3–13.
2. Houtson BK. Stresses and coping. In: Snyder CR, Ford CE, editors. Coping with negative life events: clinical and social psychological perspectives. New York: Plenum Press; 1987. p 373–99.
3. Beck AT. Cognitive therapy and the emotional disorders. New York: International Universities Press; 1976.

4. Abramson LY, Seligman ME, Teasdale JD. Learned helplessness in humans: critique and reformulation. *J Abnorm Psychol* 1978;87:49–74.
5. Kendler KS, Karkowski LM, Prescott CA. Causal relationship between stressful life events and the onset of major depression. *Am J Psychiatry* 1999;156:837–41.
6. Aldwin CM. Stress, coping, and development: an integrative perspective. New York, London: The Guilford Press; 1994.
7. Bedi RP. Depression: an inability to adapt to one's perceived life stress? *J Affect Disord* 1999;54:225–34.
8. Bouhuys AL, Geerts E, Gordijn MC. Gender-specific mechanisms as associated with outcome of depression: perception of emotions, coping and interpersonal functioning. *Psychiatry Res* 1999;85:247–61.
9. Billings AG, Moos RH. Coping, stress, and social resources among adults with unipolar depression. *J Pers Soc Psychol* 1984;46:877–91.
10. Spitzer RL, Endicott J, Robins E. Research diagnostic criteria: rationale and reliability. *Arch Gen Psychiatry* 1978;35:773–82.
11. Aldwin CM, Revenson TA. Does coping help? A re-examination of the relationship between coping and mental health. *J Pers Soc Psychol* 1987;53:337–48.
12. Dunn ME, Burbine T, Bowers CA, Tantleff-Dunn S. Modulators of stress in parents of children with autism. *Community Ment Health J* 2001;37:39–52.
13. Margallo-Lana M, Reichelt K, Hayes P, Lee L, Fossey J, O'Brien J. Longitudinal comparison of depression, coping, and turnover among NHS and private sector staff caring for people with dementia. *BMJ* 2001;322:769–70.
14. Statistics Canada. National population health survey overview, 1994–95. (Catalogue No. 82-567): Minister of Industry; 1996.
15. Kessler RC, Andrews G, Mroczek D, Ustun B, Wittchen HU. The World Health Organization Composite International Diagnostic Interview Short Form (CIDI-SF). *International Journal of Methods in Psychiatric Research* 1998;7:171–85.
16. American Psychiatric Association. The Diagnostic and Statistical Manual for Mental Disorders, 4th edition. Washington (DC): American Psychiatric Association; 1994.
17. Patten SB, Brandon-Christie J, Devji J, Sedmak B. Performance of the composite international diagnostic interview short form for major depression in a community sample. *Chronic Dis Can* 2000; 21:68–72.
18. Bender R and Lange S. Adjusting for multiple testing – when and how? *J Clin Epidemiol* 2001;54:343–9.
19. Mechanic D. Stress – moderator and – amplifying factors. In: Dohrenwend BP, editor. *Adversity, stress, and psychopathology*. New York, Oxford: Oxford University Press; 1998. p 371–5.
20. Teasdale JD, Dent J. Cognitive vulnerability to depression: an investigation of two hypotheses. *Br J Clin Psychol* 1987;26:113–26.
21. Strawbridge WJ, Shema SJ, Cohen RD, Roberts RE, Kaplan GA. Resilience effects of some stressors on depression but exacerbates others. *J Gerontol B Psychol Sci Soc Sci*. 1998;53: S118–26.
22. Fuhrer R, Stansfeld SA, Chemali J, Shipley MJ. Gender, social relationships and mental health: prospective findings from an occupational cohort (Whitehall II study). *Soc Sci Med* 1999;48:77–87.
23. Stone AA, Neale JM. New measure of daily coping: development and preliminary results. *J Pers Soc Psychol* 1984;46: 892–906.
24. Hanninen V, Aro H. Sex differences in coping and depression among young adults. *Soc Sci Med* 1996;43:1453–60.
25. Beck AT, Ward CH, Mendelson M, Mock JE, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry* 1961;4: 561–71.
26. Stanton AL, Danoff-Burg S, Cameron CL, Ellis AP. Coping through emotional approach: problems of conceptualization and confounding. *J Pers Soc Psychol* 1994;66:350–62.
27. Pennebaker JW, Kiecolt-Glaser JK, Glaser R. Disclosure of trauma and immune function: Health implications for psychotherapy. *J Consult Clin Psychol* 1988;56:239–45.
28. Safran JD and Greenberg LS. *Emotion, psychotherapy, and change*. New York: Guilford Press; 1991.
29. Dowrick C, Dunn G, Ayuso-Mateos JL, Dalgard OS, Page H, Lehtinen V. Problem solving treatment and group psychoeducation for depression: multicentre randomized controlled trial. Outcomes of Depression International Network (ODIN) Group. *BMJ* 2000; 321:1450–4.
30. Chilvers C, Dewey M, Fielding K, Gretton V, Miller P, Palmer B. Antidepressant drugs and generic counselling for treatment of major depression in primary care: randomized trial with patient preference arms. *BMJ* 2001;322:772.
31. Ward E, King M, Lloyd M, Bower P, Sibbald B, Farrelly S. Randomized controlled trial of non-directive counselling, cognitive-behaviour therapy, and usual general practitioner care for patients with depression. *I: Clinical effectiveness* *BMJ* 2000;321:1383–8.
32. Mynors-Wallis LM, Gath DH, Day A, Baker F. Randomized controlled trial of problem solving treatment, antidepressant medication, and combined treatment for major depression in primary care. *BMJ* 2000;320:26–30.
33. Statistics Canada. National population health survey, 1994–95, Public use microdata files. Minister of Industry; 1995.

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Résumé : Les effets modérateurs des stratégies d'adaptation sur la dépression majeure dans la population générale

Objectifs : Évaluer les effets modérateurs de diverses stratégies d'adaptation sur l'association entre les agents stressants et la prévalence de la dépression majeure dans la population générale.

Méthodes : Les sujets de la composition aléatoire des questions supplémentaires de l'Enquête nationale sur la santé de la population (ENSP) de 1994–1995 ont été inclus dans l'analyse (n = 1039). Chaque sujet de vaait répondre à 8 questions sur les stratégies d'adaptation portant sur le stress inattendu issu de problèmes familiaux et de crises personnelles. La dépression majeure a été mesurée à l'aide de la forme abrégée du questionnaire composite international pour le diagnostic de la dépression majeure (CIDI-SFMD) de l'Organisation mondiale de la santé (OMS). Les effets des stratégies d'adaptation liées aux agents stressants psychologiques sur la prévalence de la dépression majeure ont été déterminés en examinant les interactions de l'adaptation et du stress sur la dépression majeure, à l'aide de la régression logistique.

Résultats : Aucun effet robuste des stratégies d'adaptation liées aux divers catégories de stress évaluées dans l'ENSP n'a été observé. Il y avait des preuves que l'utilisation par les femmes des stratégies d'adaptation « prier et recourir à la religion » et « parler aux autres de la situation » modéraient le risque de dépression majeure en présence de stress financier et de stress relationnel (avec un partenaire). L'utilisation par les femmes de la stratégie d'adaptation de l'expression émotionnelle peut réduire le risque de dépression majeure en présence d'un événement de vie récent ou plus, de stress personnel, de stress relationnel (avec un partenaire) et de stress environnemental.

Conclusion : Différentes stratégies d'adaptation peuvent avoir un effet différentiel sur la prévalence de la dépression majeure dans des circonstances particulières. Ces résultats peuvent être importants tant pour prévenir que pour traiter les troubles dépressifs.