Archives of Psychiatry and Psychotherapy, 2012; 2 : 23–33

Assessing the link between coping patterns and interpersonal behaviors in depressed women

Deborah Schwartzman, Katherine Thompson, Debora D'Iuso, Keith S. Dobson, Ueli Kramer, Martin Drapeau

Summary

Aim. Stressful life events are an important contributor to the onset and course of depression. Coping strategies and interpersonal patterns have been found to mediate the effects of stress [1].
Methods. This study examined the relationship between coping patterns and interpersonal interactions in early psychotherapy sessions of 25 female patients with major depression. Transcripts were rated for coping patterns using the Coping Patterns Rating Scale (CPRS; [2]). Interpersonal patterns were assessed using the Structural Analysis of Social Behavior (SASB; [3]).
Results. Significant correlations were found between coping patterns and markers of interpersonal functioning in selected contexts.
Discussion. The implications of these findings in understanding an important aspect of vulnerability to depression and enhancing treatment outcome are discussed.

coping patterns / depression / interpersonal patterns / cognitive behavioral therapy / CPRS / coping patterns rating scale / SASB

INTRODUCTION

Major Depressive Disorder (MDD) is associated with considerable limitations in psychosocial functioning and decreased quality of life [4]. It is often linked with disturbances in sleep, appetite and sexual desire, suicidal thoughts and substance abuse [5]. Despite the growing number of individuals with depression who have received treatment [6], the relapse rates of MDD are significant. Current estimates suggest that 60% of individuals who have had one depressive episode will experience another within their lifetime [7, 8]. Further, 70% of individuals who have had two episodes of MDD are at an increased risk of experiencing a third, and 90% of individuals who have experienced three episodes can expect to have a fourth episode [7, 8].

Stressful life events have been recognized as an important contributor to the etiology and course of MDD [9, 10, 11, 12]. During the three to six months preceding the onset of depression, 50% to 80% of depressed individuals have experienced a traumatic event, such as the death of a spouse or the loss of a job [13]. Furthermore, chronic stress (e.g., stress persisting for over 12 months) has been found to affect the course of depression, including longer duration, greater severity of symptoms, and relapse [10, 11, 12]. Although most episodes of major depression are preceded by stressors, only 20% to 25% of individuals who experience a major stressful event develop depression [14]. The majority of individ-

Deborah Schwartzman[1], Katherine Thompson[1], Debora D'Iuso[1], Keith S. Dobson[2], Ueli Kramer[3], Martin Drapeau[1]: [1] Department of Counselling Psychology and Department of Psychiatry, McGill University, [2] Department of Clinical Psychology, University of Calgary. [3]Department of Psychology and Department of Psychiatry – CHUV, University of Lausanne. Correspondence address: Martin Drapeau, ECP-McGill University, 3700 McTavish, Montreal, Quebec, H3A 1Y2, Canada. E-mail: martin.drapeau@mcgill.ca

This research has been supported by the Fonds de Recherche en Sauté du Québec.

uals who experience stressful life events may be distressed for a period of time, but do not meet the criteria of MDD [15]. Thus, there has been considerable research to identify the suspected vulnerability factors that predispose some people, but not others, to become clinically depressed following the experience of stress [16, 17, 18, 19, 20].

Evidence suggests that coping strategies play an important role in mediating the effects of stress [1, 21, 22] and that effective coping responses can help maintain psychological well-being during periods of stress [23]. For example, problem-focused coping and affective regulation (e.g., suppressing impulsive acts) have been associated with improvement in depression levels [24, 25]. Maladaptive coping responses, however, have been shown to aggravate symptoms and prolong the duration of depressive episodes [26]. For instance, the use of rumination (e.g., focusing on one's symptoms) and helplessness have been found to maintain depression as it prevents individuals from employing more instrumental behaviors, such as problem solving [12, 26, 27]. Other strategies, including wishful thinking, denial, and disengagement, have also been linked with negative outcomes [25].

Furthermore, individuals with depression often display difficulties in decision-making [28]. Indeed, earlier research indicates that the coping strategies of individuals with depression are typically characterized by the seeking of emotional and informational support to help provide reassurance [29]. In turn, this greater requirement for certainty contributes to the failure of individuals with depression to make effective coping decisions [30].

A focus on the role of interpersonal vulnerability factors as an important contributor to the onset and course of depression has also begun to emerge [31]. Individuals with depression have been found to be deficient in general social competencies [32]; they tend to display greater levels of hostile and controlling behaviors, a lack of assertiveness, shyness, and withdrawal [33, 34]. These behaviors often distance others; indeed, complaints about social isolation are among the most frequently presented problems of individuals with depression [35]. For example, interpersonal problems with romantic partners and family members have been linked to the development and intensity of depression [36]. Furthermore, depressed individuals, who have experienced marital conflicts, were less likely to recover from depressive episodes and were more prone to relapse [37]. The potential for conflict within the social, marital, and family environments is high due to the degree of intimacy within these relationships and can negatively influence the course of the depressive episode.

There have been some advances in the area of interpersonal context and the selection of coping strategies. For example, Holahan and Moos [38] found that individuals with greater personal and social resources were more likely to rely on adaptive coping strategies (e.g., problem solving) and less likely to use maladaptive coping (e.g., avoidance). It has been hypothesized that personal resources (e.g., self-confidence and an easygoing disposition) may increase the individuals' ability to engage adaptive problem-focused coping by fostering beliefs about one's ability to successfully manage stressors, while social resources (e.g., family and social support) may provide a context for exploring coping options and obtaining constructive feedback [23, 39, 40]. Depressed individuals, on the other hand, have been found to engage in reassurance-seeking behaviors, which have been found to predict the occurrence of stressors and increase depressive symptoms [41]. For example, the maladaptive patterns of solicitation, reception, and provision of support that depressed women displayed with their spouses were found to create more marital stress and depression [42].

Due to methodological limitations, data on coping and interpersonal behaviors have largely been collected from natural experiments that took advantage of stressors occurring outside of the individual's control (e.g., natural disasters or physical illness) and by examining the reactions of individuals with depression to hypothetical scenarios in the laboratory. As a result, researchers and clinicians cannot make accurate generalizations about how individuals with depression cope or behave in everyday life situations. Given the importance of coping strategies and interpersonal behaviors for predicting depression onset, maintenance, and relapse, it is important to document the frequency and type of coping patterns and their association with interpersonal behaviors in selected contexts. The present study was intended to provide preliminary data de-

scribing situation-specific coping efforts of depressed individuals. The understanding of the link between interpersonal behaviors and the selection of coping responses in depressed individuals may shed light on an important aspect of vulnerability to MDD and yield important treatment implications.

METHOD

Participants

The data were collected as part of the landmark Jacobson and colleagues [43] component study of cognitive-behavioral treatment of depression, wherein 152 participants with MDD were randomly assigned to one of three treatment conditions: cognitive behavioral therapy (CBT), behavioral activation and automatic thoughts; after matching to ensure group equivalence in the number of previous episodes of depression, the presence of dysthymia, the severity of the depressive episode, gender and marital status. Patients with bipolar or psychotic subtypes of depression, mental retardation, organic brain syndrome, panic disorder, schizophrenia or schizophreniform disorder, and substance abuse were excluded. In addition, patients already in therapy, receiving psychotropic drugs, or requiring hospitalization were also excluded. All treatments were conducted by four therapists with an average of 14.8 years of post-degree clinical experience. The treatment protocols were based on a modified version of the Collaborative Study Psychotherapy Rating Scale (CSPRS; [43, 44]. Twenty percent (20%) of the audiotaped sessions were assessed for treatment adherence.

The current study focused on 25 female participants assigned to the CBT arm or whom complete data were available. CBT interventions focused on modifying maladaptive behaviors, situation-specific cognitive distortions, and dysfunctional core beliefs. Participants were predominantly Caucasian (87.5%) and had a mean age of 37.84 (SD=5.21). The third therapy sessions with each patient were selected for the study based on the availability of verbatim transcripts and because exploration of the treatment process and of patient and therapist expectations has usually occurred by this session.

Measures

Coping Patterns Rating Scale (CPRS; (2)). This observer-rated method was used to assess the patient Coping Patterns (CPs) as they occurred or were reported in-session. The method, which is based on the work of Skinner, Edge, Altman, and Sherwood [45], includes a manual with definitions, rating procedures, and examples for 12 coping patterns: 1. Problem solving (e.g., attempting to understand a stressor in order to adjust one's actions to it and effect a desired outcome); 2. Information-seeking (e.g., dealing with a stressor by attempting to discover additional contingencies for dealing with it); 3. Helplessness (e.g., believing that one is unable to deal with a stressor); 4. Escape (e.g., avoiding trying to deal with the stressor); 5. Self-reliance (e.g., using one's personal resources to deal with a stressor); 6. Support-seeking (e.g., using social resources to accompany or replace one's own efforts in dealing with a stressor); 7. Delegation (e.g., abandoning active attempts to deal with the stressor in favor of trying to get others to assume responsibility for dealing with it); 8. Isolation (e.g., dealing with a stressor by withdrawing from the presence of others); 9. Accommodation (e.g., compromising or accepting what can and cannot be changed); 10. Negotiation (e.g., attempting to enlarge the options at hand by examining one's priorities or by engaging others in a give and take); 11. Submission (e.g., giving into others and giving up on effecting one's own preferences); and 12. Opposition (e.g., attempting to remove any constraints imposed on one's preferences). Coping patterns are assessed as either Affective – expressing feelings and focusing on the emotional experience; Behavioral – encompassing personal and interpersonal behaviors; or Cognitive – indicating thoughts, beliefs, or ideas [2].

The third psychotherapy session from each patient was transcribed verbatim and rated using the CPRS by four graduate level students who were trained by the developers of the method. Raters were blind as to participant number and as to all other measures. After scoring a transcript, the total count of each type of CP, broken down by modality (affective, behavioral, or cognitive), was entered on a scoring sheet. Raw count scores were divided by the total subject

word count and presented as an adjusted score per 1000 subject words to control for participant verbal productivity. Approximately 20% of the transcripts were rated by at least two raters to document interrater reliability. Instances of disagreement between two raters were resolved through discussion. The mean inter-rater agreement was satisfactory (ICC (2.1)=0.70). Previous studies have shown the reliability and validity of the method [46, 47, 48, 49].

Structural Analysis of Social Behavior (SASB; (3)). This observer-rated measure was used to analyze interpersonal processes. Behavioral observations are classified according to focus (e.g., on other, self in relation to other, or introject). The focus of the behavioral transaction is assigned by determining whether the patient is doing something for or to another person (focus on other), responding to another person (focus on self), or doing something for him or herself (focus on introject) [50]. The behavioral transaction is then further classified in terms of two axes: affiliation (love vs. hate) and autonomy (enmeshment vs. differentiation). For example, when the focus of the behavior is on other, the affiliation dimension classifies behavior as ranging from hostile (low affiliation) to affirming and nurturing (high affiliation); the autonomy dimension categorizes behavior as ranging from controlling (low autonomy) to autonomy giving (high autonomy). When the focus of the behavior is on self, the affiliation dimension classifies behavior as ranging from walling-off (low affiliation) to reacting in a comfortable and trusting manner (high affiliation); the autonomy dimension categorizes behavior as ranging from submissiveness (low autonomy) to assertiveness (high autonomy). Finally, when the focus of the behavior is on introject, the affiliation dimension classifies behavior as ranging from self-criticism (low affiliation) to self-acceptance (high affiliation); the autonomy dimension categorizes behavior as ranging from self-monitoring (low autonomy) to spontaneity (high autonomy). Affiliation and autonomy ratings can be used as Cartesian coordinate points to assign one of 24 codes to the behavioral observation (8 possible codes per surface); however, to increase statistical power, this study focused on the two main axes. Summary scores of the amount of affiliation and autonomy in the participants' communications were calculated by assigning weighted scores, ranging from low (-9) to high (+9), to each code according to the level of affiliation or autonomy that was present in the behavioral observation [51]. The total of the weighted scores were divided by the number of possible codes for each surface (8); next, an additional division using the total number of codes on each surface entered for each case was calculated to adjust for the different number of codes across cases.

The SASB method involves coding thought units, or short pieces of text, that often contain a subject, a verb, and an object, that is present in the interpersonal material [51]. As indicated by Benjamin and Cushing [51], coding a sample of the behavioral observations has been shown to be representative of the interpersonal patterns of the whole analyzed session. Accordingly, the middle 15-20 minutes of the third therapy sessions were analyzed. Furthermore, 200 units were coded for each participant to control for verbal productivity.

Referents, which refer to the individuals who were participating in the behavioral interaction or who were being spoken about in the communication, were identified for each thought unit. Referents included the therapist (78.04% of all interactions reported by the patients), the participant's romantic partners (including (ex)spouse and (ex)boyfriends; 3.13%), the participant's children (2.26%), family members (the participant's parents, siblings, aunts and uncles; 1.2%), social relations (friends and colleagues; 0.76%), and participant introjections (13.83%). As only the patient and therapist participated in the CBT sessions, the patient-therapist interaction codes and the patient introjections were based on direct observations. The interaction codes between the patient and her romantic partners, children, family members, and social relations were based on the material in the patients' discussion of these significant others with the therapist.

Four graduate students and one clinical supervisor completed the SASB ratings. Approximately 20% of the ratings were checked for interrater reliability. Instances of disagreement were resolved through discussion. The weighted Cohen's kappa was satisfactory (K_w=0.67). Previous studies have shown the reliability and validity of the method [51, 52, 53, 54, 55].

Data Analysis

Spearman's correlation coefficients were calculated to assess the relationships between coping patterns and markers of interpersonal functioning. The total number of each coping pattern per 1000 subject words were examined in relation to the participant's level of a) affiliation and b) autonomy as rated using the SASB model.

RESULTS

Detailed results can be found in Tab. 1 and Tab. 2. – *at the end of article*.

Interactions with the therapist. As can be seen in Tab. 2, significant positive relationships were found between affiliation with a focus on other and Accommodation (r=0.41, p<0.05), and between autonomy with a focus on self and Submission (r=0.49, p<0.05). Negative relationships between Opposition and affiliation with a focus on other (r=-0.44, p<0.05) and autonomy with a focus on other (r=-0.43, p<0.05) were also found to be significant. When referring to the therapeutic relationship, patients who were interpersonally affirming and nurturing were more likely to cope with stressors by compromising. Patients who were assertive with the therapist were more likely to give up on effecting their own preferences when dealing with a stressor. Patients who were interpersonally hostile and controlling were more likely to cope with stressors by attempting to remove any constraints imposed on their preferences.

Interactions with child. Positive relationships between Support-seeking and affiliation with a focus on self (r=0.44, p<0.05) and autonomy with a focus on self (r=0.43, p<0.05) were found. A positive relationship between affiliation with a focus on other and Problem solving (r=0.43, p<0.05) was also found to be significant. A negative relationship between affiliation with a focus on self and Problem solving (r=-0.44, p<0.05) was found to be significant. Significant negative relationships were also found between affiliation with a focus on other and Negotiation (r=-0.48, p<0.05) and Opposition (r=-0.43, p<0.05). Patients who reacted to their children in a comfortable and trusting manner, and those who were assertive with their children were more likely to use social resources to accompany or replace their own efforts in coping with a stressor. Patients who were affirming and nurturing and those who distanced themselves from their children were more likely to adjust their actions to achieve a desired outcome. Finally, patients who were interpersonally hostile towards their children were more likely to cope with stressors by engaging their children in a give and take and by attempting to remove any constraints imposed on their preferences.

Interactions with family members. A negative relationship between affiliation with a focus on other and Opposition (r=-0.46, p<0.05) was found to be significant. A negative relationship between affiliation with a focus on self and Escape (r=-0.50, p<0.05) was also found to be significant. When referring to relationships with family members, patients who were interpersonally hostile were more likely to cope with stressors by attempting to remove any constraints imposed on their preferences. Patients that distanced themselves from their family members were more likely to avoid trying to deal with stressors.

Interactions with romantic partners. Significant positive relationships were found between affiliation with a focus on other and Problem solving (r=0.41, p<0.05), and between autonomy with a focus on self and Delegation (r=0.41, p<0.05). Patients who were affirming and nurturing with their romantic partners were more likely to more likely to adjust their own actions to achieve a desired outcome. Patients who were assertive with their romantic partners were more likely to have their partners assume responsibility for dealing with the stressors.

Social relationships. A negative relationship between autonomy and a focus on self and Opposition (r=-0.44, p<0.05) was found to be significant. When referring to social relationships, patients who were interpersonally submissive were more likely cope with stressors by attempting to remove any constraints imposed on their preferences.

Introjection. A negative relationship between affiliation and Escape (r=-0.50, p<0.05) was found

to be significant. Patients who were self-critical were more likely to avoid trying to deal with stressors.

DISCUSSION

Interactions with therapist. Participants who treated their therapists in an affirming and nurturing manner (high affiliation) were more likely to engage in accommodation. Conversely, participants who were hostile (low affiliation) and controlling (low autonomy) towards their therapists were more likely to react to stressors in an oppositional manner. While collaboration between the patient and therapist has been previously linked with positive outcomes in therapy [56], Connolly Gibbons and colleagues [57] found hostile-dominant interpersonal patterns predicted poor therapeutic alliance. Indeed, Moreno, Selby, Fuhriman, and Laver [58] found positive correlations between severity of depression and hostility. Accordingly, these results might be a reflection of the types of patients who go on to do better or worse in therapy. An interesting finding was that participants who were assertive with their therapists (high autonomy) were more likely to employ the submission coping strategy. The autonomy scores might reflect a more action-oriented, problem solving standpoint and the submission might be a sign of treatment adherence (e.g., using the therapist's strategies). Asserting oneself to the therapist may also be a sign of treatment progress, as patients may be making their needs and feelings known as a way of taking care of themselves.

Interactions with child. Participants who reacted to their children in a comfortable and trusting manner (high affiliation) and who were assertive with their children (high autonomy) were more likely to engage in support seeking behaviors. These results might suggest that participants cope with stressful events by engaging their children and relying on their support to explore coping options. Consistent with this is an earlier finding by Schaefer, Coyne, and Lazarus [40] that family support increased active coping by providing a context for exploring coping options and for obtaining constructive feedback. Participants who interacted with their children in an affirming and nurturing manner (high affiliation) were more likely to use problem solving behaviors. In keeping with the previous results, this finding might suggest that participants who were interpersonally nurturing with their children were more likely to engage in active, problem-focused coping, possibly as a way of exploring coping options. While participants might have experienced conflicts with their children, those with high affiliation and autonomy scores were more likely to engage in active coping techniques. However, participants who reacted to their children by withdrawing from them (low affiliation) were also likely to engage in problem solving. This possibly marks an attempt by these participants, who might feel overwhelmed with the challenge of dealing with their children, to cope by withdrawing from the stressor perhaps as a way of gaining perspective and thereby becoming better suited to then engage in behaviors that will effect a desirable solution. Finally, participants who were attacking and rejecting towards their children (low affiliation) were more likely to engage in negotiation and act in an oppositional manner. Perhaps owing to the depressive symptomatology (e.g., irritability, fatigue), the participants may find it difficult to function effectively and cope by engaging their children in a constant give and take and by behaving in a defiant and aggressive manner.

Interactions with family members. Impaired family functioning in the area of communication has been found to play an important role in the course of depression [34]. Consistent with this, the results of this study found that participants who were attacking and rejecting towards their family members (low affiliation) were likely to engage in oppositional coping behaviors. Furthermore, participants who withdrew and refused assistance from their family members (low affiliation) were likely to escape dealing with stressors.

Interactions with romantic partners. While previous research has suggested that the intimate relationships of individuals with depression are often marked by friction and hostility [59], participants in the study who interacted with their romantic partners in an affirming and nurturing manner (high affiliation) were more

likely to engage in problem solving behaviors. Perhaps the degree of intimacy of these relationships helped foster positive beliefs about one's ability to successfully manage stressful situations and thereby increase adaptive problem-solving behaviors [39]. Furthermore, excessive reassurance seeking, which is often characteristic of individuals with depression may account for the affirming and nurturing behaviors patients displayed toward their romantic partners [60]. Participants who were assertive with their romantic partners (high autonomy) were more likely to engage in delegation. Consistent with Hinchliffe and colleagues [61] that depressed women display more attempts at controlling their romantic partners, the participants of this study tended to abandon attempts at coping with stressors and had their partners assume responsibility for dealing with them.

Social relationships. Participants who were overly compliant and submissive in their social interactions (low autonomy) were more likely to engage in oppositional coping behaviors. What this possibly suggests is that in their social interactions, depressed individuals may behave in a submissive manner in an effort to elicit support and attention. As Coyne [62] proposed, these requests for attention often become bothersome and result in social partners withdrawing and becoming more hostile. In turn, rather than becoming more dependent, the depressed individual might react by becoming overly defiant and aggressive when coping with social stressors.

Introjection. Consistent with Blatt and Maroudas [63], who found that individuals who are self-critical are predisposed to depression when faced with life events leading to perceived failure or lack of control over the environment, our findings suggest that participants who were self-critical were more likely to escape stressors. Perhaps these individual lacked the personal resources required to foster a belief that one is capable of successfully managing a stressor and thereby respond though avoidance.

Specific coping patterns were found across the correlations. Significant correlations were found between the problem solving coping pattern and affirming and nurturing behaviors (high affiliation) among closer relations (e.g., with the participants' children and romantic partners). Among more distant relations (e.g., with the therapist and family members) hostile behaviors were significantly correlated with the oppositional coping style. This pattern was also found in relationships with one's children.

The results demonstrate that there is a link between coping patterns and interpersonal functioning in depressed individuals, and that dysfunctional coping strategies and problematic behavioral patterns are thus closely related. Furthermore, this study indicates that the manner in which depressed individuals cope with stressors is object specific. Because interpersonal behaviors and coping are so closely related, treatment protocols where the sole focus is on targeting either maladaptive interpersonal behaviors or dysfunctional coping strategies may be incomplete. Moreover, rather than exclusively attending to the depressed patient, treatment should also focus on the important relationship in the patient's life so that they may learn to create interpersonal contexts that will help support them rather than stress them [64]. The ability to recognize and measure when this process is occurring can provide important information for the clinician to more effectively manage the course of treatment. For example, as it may be easier to generalize an existing positive behavior to different contexts, therapists could help patients identify stressful life events in which they were able to cope in a positive manner, and help them use such adaptive behaviors in other situations as well. This might also serve to prevent relapse as patients might learn to employ more adaptive coping techniques when faced with a similar environmental context or stressful situation that may have formerly lead to the onset of depression.

LIMITATIONS

The results of the present study should be interpreted with caution. First, the sole focus on female participants with major depressive disorder does not allow for generalizations of the findings to men and to other diagnostic groups. Second, the correlational design does not allow us to establish causality between coping patterns and interpersonal functioning. Finally, the use

of the two SASB axes, rather than the 24 possible codes, prevents us from going beyond broad conclusions at this point.

CONCLUSION

Previous research has examined the link between coping and interpersonal behaviors in non-clinical samples and outside the context of psychotherapy. The current study yields a more extensive understanding of the nature of the associations between these two constructs in depressed individuals receiving CBT. Recognizing that the manner in which depressed individuals cope with stress differs when they are interacting with different significant others underscores the value of therapeutic interventions oriented toward strengthening adaptive coping responses in various contexts and creating interpersonal relationships that will help to offset stressful life events.

REFERENCES

1. Tomczak-Witych A. Coping with stress strategies among female patients suffering from a depression. Psychiatr Pol. 2006; 40: 491–502.
2. Perry JC, Drapeau M, Dunkley D. Coping action patterns manual. Montreal Qc: McGill University. Unpublished manual; 2009.
3. Benjamin LS. Structural analysis of social behavior. Psychol Rev. 1974; 81: 392–425.
4. Scott J, Dickey B. Global burden of depression: the intersection of culture and medicine. Brit J Psychiat. 2003; 183: 92–94.
5. Belmaker RH, Agam G. Major depressive disorder. N Engl J Med. 2008; 3(358): 55–68.
6. Greenberg PE, Kessler RC, Birnbaum HG, Leong SA, Lowe SW, Berglund PA, Corey-Lisle PK. The economic burden of depression in the United States: how did it change between 1990 and 2000? J Clin Psychiat. 2003; 64: 1465–1475.
7. Diagnostic and statistical manual of mental disorders. 4th ed., text revision ed. Washington, DC: American Psychiatric Association; 2000.
8. Solomon DA, Keller MB, Leon AC, Mueller TI, Lavori PW, Shea MT, Coryell W, Warshaw M, Turvey C, et al. Multiple recurrences of major depressive disorder. Am J Psychiat. 2000; 157: 229–233.
9. Mitchell PB, Parker GB, Gladstone GL, Wilhelm K, Austin MP. Severity of stressful life events in first and subsequent episodes of depression: the relevance of depressive subtype. J Affect Disord. 2003; 73: 245–252.
10. Monroe SM, Harkness K, Simons AD, Thase ME. Life stress and the symptoms of major depression. J Nerv Ment Dis. 2001; 189: 168–75.
11. Hammen C. Stress and depression. Annu Rev Clin Psychol. 2005; 1: 293–319.
12. Mazure CM. Life stressors as risk factors in depression. Clinical Psychology: Science and Practice. 1998; 5: 291–313.
13. Monroe SM, Simons AD. Diathesis-stress theories in the context of life stress research: implications for the depressive disorders. Psychol Bull. 1991; 110: 406–425.
14. van Praag HM, de Koet ER, van Os J. Stress, the brain and depression. Cambridge, England: Cambridge University Press; 2004.
15. Hammen C, Ellicott A, Gitlin M. Vulnerability to specific life events and prediciton of course of disorder in unipolar depressed patients. Canadian Journal of Behavioral Science. 1989; 21: 377–388.
16. Beatson J, Taryan S. Predisposition to depression: the role of attachment. Aust N Z J Psychiat. 2003; 37: 219–225.
17. Corruble E. Personality and vulnerability to severe depression. Encephale. 2009; 35(7): 282–285.
18. De Raedt R, Koster EH. Understanding vulnerability for depression from a cognitive neuroscience perspective: A reappraisal of attentional factors and a new conceptual framework. Cogn Affect Behav Neurosci. 2010; 10: 50–70.
19. Nolen-Hoeksema S. Gender differences in depression. Current directions in psychological science. 2001; 10: 173–176.
20. Sarosi A, Balogh G, Szekely A, Sasvari M, Faludi G. Markers of cognitive vulnerability in major depression. Neuropsychopharmacol Hung. 2007; 9: 183–188.
21. Holahan CJ, Moos RH, Holahan CK, Brennan PL, Schutte KK. Stress generation, avoidance coping, and depressive symptoms: a 10-year model. J Consult Clin Psychol. 2005; 73: 658–666.
22. Sigmon ST, Pells JJ, Schartel JG, Hermann BA, Edenfield TM, LaMattina SM, Boulard NE, Whitcomb-Smith SR. Stress reactivity and coping in seasonal and nonseasonal depression. Behav Res Ther. 2007; 45: 965–975.
23. Holahan CJ, Moos RH. Life stressors, personal and social resources, and depression: a 4-year structural model. J Abnorm Psychol. 1991; 100: 31–38.
24. Swindle RW, Jr, Cronkite RC, Moos RH. Life stressors, social resources, coping, and the 4-year course of unipolar depression. J Abnorm Psychol. 1989; 98: 468–477.
25. McNamara S. Stress in young people: What's new and what can we do? New York: Continuum; 2000.
26. Lara ME, Klein DN. Psychosocial processes underlying the maintenance and persistence of depression: implications for understanding chronic depression. Clin Psychol Rev. 1999; 19: 553–570.
27. Terry DJ. Coping resources and situational appraisals as predictors of coping behavior. Personality and Individual Differences. 1991; 12: 1031–1047.

28. van Randenborgh A, de Jong-Meyer R, Huffmeier J. Decision making in depression: differences in decisional conflict between healthy and depressed individuals. Clin Psychol Psychother. 2010; 17: 285–298.
29. Coyne JC, Aldwin C, Lazarus RS. Depression and coping in stressful episodes. J Abnorm Psychol. 1981; 90: 439–447.
30. Miller E, Lewis P. Recognition memory in elderly patients with depression and dementia: a signal detection analysis. J Abnorm Psychol. 1977; 86: 84–86.
31. Joiner TE. Depression in its interpersonal context In: Gotlib IH, Hammen CL, editors. Handbook of depression. New York: Guilford; 2002. p. 295–313.
32. Segrin C. Social skills deficits associated with depression. Clin Psychol Rev. 2000; 20: 379–403.
33. Alden LE, Phillips N. An interpersonal analysis of social anxiety and depression. Cognitive Therapy and Research. 1990; 14: 499–513.
34. Keitner GI, Miller IW. Family functioning and major depression: an overview. Am J Psychiat. 1990; 147: 1128–1137.
35. Wills TA, DePaulo BM. An interpersonal analysis of the helpseeking process. In: Snyder CR, Forsyth DR, editors. Handbook of social and clinical psychology. New York: Pergamon; 1991. p. 350–75.
36. Beach SRH, Jones DJ, Franklin KJ. Marital, family, and interpersonal therapies for depression in adults. In: Gotlib IH, Hammen CL, editors. Handbook of depression. New York: Guilford; 2008.
37. Fincham FD, Beach SRH, Harold GT, Osborne LN. Marital satisfaction and depression: Different causal relationship for men and women? Psychological Science. 1997; 8: 351–357.
38. Holahan CJ, Moos RH. Personal and contextual determinants of coping strategies. J Pers Soc Psychol. 1987; 52: 946–955.
39. Lazarus RS, Folkman S. Stress, appraisal, and coping. New York: Springer; 1984.
40. Schaefer C, Coyne JC, Lazarus RS. The health-related functions of social support. Journal of Behavioral Medicine. 1982; 4: 381–406.
41. Potthoff JG, Holahan CJ, Joiner TE, Jr. Reassurance seeking, stress generation, and depressive symptoms: an integrative model. J Pers Soc Psychol. 1995; 68: 664–670.
42. Davila J, Bradbury TN, Cohan CL, Tochluk S. Marital functioning and depressive symptoms: evidence for a stress generation model. J Pers Soc Psychol. 1997; 73: 849–861.
43. Jacobson NS, Dobson KS, Truax PA, Addis ME, Koerner K, Gollan JK, Gortner E, Prince SE. A component analysis of cognitive-behavioral treatment for depression. Journal of Consulting and Clinical Psychology. 1996; 64: 295–304.
44. Hollon SD, Evans MD, Elkin I, Lowery A. System for rating therapies for depression. 92nd Annual Convention of the American Psychological Association. Toronto, Ontario, Canada; 1984.
45. Skinner EA, Edge K, Altman J, Sherwood H. Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. Psychological Bulletin. 2003; 12: 216–269.
46. D'Iuso D, Blake E, Fitzpatrick M, Drapeau M. Cognitive errors, coping patterns, and the therapeutic alliance: A pilot study of in-session process. Counselling and Psychotherapy Research. 2009; 9: 108–114.
47. Kramer U, de Roten Y, Drapeau M. Training effects in using the observer-rated cognitive errors and coping action patterns rating scales. Swiss Journal of Psychology. 2011; 70: 41–46.
48. Kramer U, Drapeau M. Étude de validation de la version française des échelles de codage du coping et des erreurs cognitives (CE-CAP) sur une population non clinique. Annales Medico-Psychologiques. 2010; 169: 523–527.
49. Lewandowski M, D'Iuso D, Blake E, Drapeau M. The relationship between therapeutic engagement, cognitive errors, and coping action patterns: An exploratory study. Counselling and Psychotherapy Research. 2011; 11: 284–290.
50. Benjamin LS. ntroduction to the special section on structural analysis of social behavior. J Consult Clin Psychol. 1996; 64: 1203–1212.
51. Benjamin LS, Cushing G. Reference manual for coding social ineractions in terms of structural analysis of social behavior: University of Utah; 2000.
52. Benjamin LS. SASB: A bridge between personality theory and clinical psychology. Psychological Inquiry. 1994; 5: 273–316.
53. Benjamin LS, Rothweiler JC, Critchfield KL. The use of structural analysis of social behavior (SASB) as an assessment tool. Annual Review of Clinical Psychology. 2006; 2: 83–109.
54. Pincus AL, Newes SL, Dickinson KA, Ruiz MA. A comparison of three indexes to assess the dimensions of structural analysis of social behavior. Journal of personality assessment. 1998; 70: 145–170.
55. Rothweiler JC. An evaluation of the internal and external validity of the Intrex and Interpersonal Adjective Scales. Salt Lake City: University of Utah; 2004.
56. Barber JP, Connolly MB, Crits-Christoph P, Gladis L, Siqueland L. Alliance predicts patients' outcome beyond in-treatment change in symptoms. J Consult Clin Psychol. 2000; 68: 1027–1032.
57. Connolly Gibbons MB, Crits-Christoph P, de la Cruz C, Barber JP, Siqueland L, Gladis L. Pretreatment expectations, interpersonal functioning, and symptoms in the prediction of the therapeutic alliance across supportive-expressive psychotherapy and cognitive therapy. Psychotherapy Research. 2003: 56–76.
58. Moreno JK, Selby MJ, Fuhriman A, Laver G. Hostility in depression. Psychological Reports. 1994; 75: 1391–1401.
59. Gotlib IH, Beach SRH. A marital/family discord model of depression: Implications of therapeutic intervention. In: Jacobson NS, Gurman AS, editors. Clinical handbook of couple therapy. New York: Guilford Press; 1995. p. 411–436.

60. Joiner TE, Jr., Metalsky GI. Excessive reassurance seeking: delineating a risk factor involved in the development of depressive symptoms. Psychol Sci. 2001; 12: 371–378.
61. Hinchliffe MR, Hooper D, Roberts FJ, Vaughan RV. A study of interaction of depressed patients and their spouses. Br J Psychiat. 1975; 126: 164–72.
62. Coyne JC. Toward an interactional description of depression. Psychiatry. 1976; 39: 28–40.
63. Blatt SJ, Maroudas C. Convergence of psychoanalytic and cognitive-behavioral theories of depression. Psychoanalytic Psychology. 1992; 9: 157–190.
64. Hammen C. Interpersonal stress and depression in women. J Affect Disord. 2003; 74: 49–57.

TABLES

Table 1. Descriptive statistics

			Mean	Std. Deviation
SASB ratings				
Interactions with Therapist	Other	AF	0.29	0.54
		AU	0.07	0.56
	Self	AF	0.46	0.03
		AU	0.34	0.11
Interactions with Child	Other	AF	-0.01	0.25
		AU	-0.24	0.43
	Self	AF	-0.11	0.30
		AU	-0.03	0.17
Interactions with Family Members	Other	AF	-0.07	0.25
		AU	-0.13	0.35
	Self	AF	-0.04	0.33
		AU	0.01	0.27
Interactions with Romantic Partners	Other	AF	-0.12	0.45
		AU	-0.27	0.47
	Self	AF	-0.25	0.44
		AU	-0.14	0.42
Social Relationships	Other	AF	-0.08	0.26
		AU	-0.08	0.28
	Self	AF	0.02	0.31
		AU	-0.09	0.30
CPRS ratings				
Introjection		AF	0.06	0.46
		AU	-0.57	0.27
Problem Solving			0.91	0.69
Information Seeking			1.10	0.66
Helplessness			0.83	0.73
Escape			0.24	0.39
Self-Reliance			0.74	0.58
Support-Seeking			0.36	0.35
Delegation			0.06	0.13
Isolation			0.26	0.30
Accommodation			0.49	0.44
Negotiation			0.09	0.14
Submission			0.12	0.27
Opposition			0.34	0.43

Note: AF = Affiliation; AU = Autonomy

Table 2.

	Interactions with Therapist				Interactions with Child				Interactions with Family Members				Interactions with Romantic Partners				Social Relationships				Introjection	
	Other		Self		Other		Self		Other		Self		Other		Self		Other		Self			
	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU	AF	AU
Problem Solving	-0.11	-0.15	-0.07	0.05	**0.43***	-0.21	**-0.44***	-0.11	-0.17	-0.09	0.15	-0.15	**0.41***	0.25	0.01	-0.34	0.04	0.04	-0.35	-0.04	-0.24	0.07
Information Seeking	0.12	0.02	-0.38	-0.19	0.04	0.21	0.09	0.27	-0.14	-0.19	0.11	-0.24	-0.12	-0.15	-0.37	-0.11	0.31	0.30	-0.05	-0.18	0.07	-0.03
Helplessness	0	-0.10	-0.01	-0.26	0.05	-0.21	-0.16	-0.13	0.31	0.27	0.14	-0.14	0.27	-0.09	-0.11	-0.08	-0.11	-0.11	0.10	-0.14	-0.17	0.05
Escape	0.13	0.02	-0.17	0.03	0.07	-0.08	-0.07	-0.05	0.26	0.33	**-0.50***	-0.20	-0.14	-0.21	0.07	-0.36	-0.31	-0.31	0.30	0.27	**-0.50***	0.03
Self-Reliance	-0.26	-0.30	-0.31	0.33	0.05	0.11	-0.27	0.10	-0.21	0.02	0.36	0.34	0.31	0.34	-0.09	0.24	0.21	0.23	0.04	0.06	0.35	-0.10
Support-Seeking	0.08	-0.10	-0.11	0.04	-0.10	0.31	**0.44***	**0.43***	-0.24	-0.29	0.37	0.11	-0.11	-0.04	0.29	0.10	-0.14	-0.13	0.02	-0.29	0.18	-0.15
Delegation	0.09	0.05	-0.12	0.07	-0.10	-0.18	-0.14	-0.06	-0.14	-0.37	0.22	0.10	0.03	0.05	0.03	**0.41***	-0.23	-0.26	-0.06	0.11	0.05	-0.29
Isolation	-0.17	-0.09	-0.12	-0.15	-0.18	-0.27	-0.14	0.02	0.14	0.24	0.02	0	-0.21	0.02	-0.02	0.28	-0.36	-0.37	-0.02	0.04	-0.05	-0.04
Accommodation	**0.41***	0.27	-0.26	-0.28	-0.01	0.15	0.35	0.18	-0.16	-0.13	-0.36	-0.21	-0.03	0.07	-0.13	0.11	0.16	0.17	-0.13	-0.03	-0.20	0.25
Negotiation	-0.22	0	-0.37	-0.12	-0.49*	-0.06	0.24	0.27	-0.04	0.03	-0.10	-0.23	-0.23	-0.19	0.22	0.03	-0.17	-0.21	0.17	-0.08	0.02	0.06
Submission	-0.21	-0.11	0.18	**0.49***	0.25	-0.09	-0.10	0.02	-0.20	-0.11	0.27	0.15	0.24	0.09	-0.06	0.28	0.17	0.17	0.18	-0.10	0.30	-0.16
Opposition	**-0.44***	**-0.43***	-0.19	0.18	**-0.43***	0	-0.06	0.18	**-0.46***	-0.23	0.26	0.04	-0.11	-0.16	0.04	0.07	-0.24	-0.26	-0.15	**-0.44***	-0.02	-0.05

* Correlation is significant at the 0.05 level (2-tailed)