Assessment of Coping in Cognitively Impaired Older Adults: A Preliminary Study

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ABSTRACT. This pilot study examined dispositional coping styles and distress among cognitively impaired older adults (n = 28), anxious/depressed older adults (n = 42) and non-distressed older adults (n = 25). Participants completed the Coping Orientations to Problems Experienced Scale (COPE) and the Brief Symptom Inventory. Internal consistency analyses showed that the COPE was reliably completed by the cognitively impaired participants, with one internally poor subscale. Regarding coping clusters (problem focused, emotional focused, dysfunctional), cognitively impaired older adults reported lower levels of problem focused coping and emotional focused coping techniques than anxious/depressed and control participants. Regarding specific coping scales, cognitively impaired participants were lower on positive reinterpretation and higher on behavioral disengagement than the other groups. Among cognitively impaired persons, the coping strategy of venting emotions was positively correlated with distress, whereas the strategy of accepting the situation was negatively related to distress. An implication
Many studies of dementia have focused on diagnosis, clinical drug studies, and the biological and etiological aspects of the disorder. An important trend in the research involves including the patient as a conscious victim of the disease, a person capable of displaying emotions, expressing fears, and communicating the struggle against a devastating disorder (e.g., Bachman et al., 2000; Quayhagen & Quayhagen, 1996). Indeed, there is growing evidence that support groups and cognitive-behavioral interventions are effective in building coping strategies and reducing distress among individuals with early stage dementia (see review by Kasl-Godley & Gatz, 2000). Unfortunately, coping has infrequently been assessed with standardized instruments. The purpose of the present study was to measure formally coping among cognitively impaired older adults. We also examine subjective levels of distress in order to explore how coping may relate to distress. Notably, Folkman and Lazarus (1988) noted that coping is a product of various cognitive processes that manage negative feelings. Unfortunately, the decline in information processing in patients with a dementing illness is likely to affect coping behaviors as well as subsequent psychiatric symptoms.

**METHOD**

**Participants and Procedures**

*Cognitive Impairment Group*. Initially, 53 older adults who presented with cognitive problems at a local outpatient memory disorders assessment clinic were assessed by a multidisciplinary team (psychologist, social worker, occupational therapist, nurse practitioner). Of the original group, 34 patients received a primary diagnosis of dementia based on
standardized diagnostic criteria specified by the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition* (DSM-IV, American Psychiatric Association, 1994). A packet of questionnaires was given to each patient to be completed at home independently or with the help of the primary caregiver. Six patients were excluded for failing to complete fully the questionnaires. The final cognitive impairment group consisted of 28 persons (82% female; $M$ age = 79.5 years, $SD$ = 7.7; range = 65 to 99 years; 89% Caucasian).

**Anxious/Depressed Group and Control Group.** To create comparison groups for the cognitive impairment sample, an anxious/depressed group and a control group were created. Purportedly, non-demented older adults ($n = 91$) were gathered by asking undergraduate students to recruit family members or friends with no overt signs of cognitive impairment. These participants were then divided into two samples based on their scores on the anxiety and depression subscales of the Brief Symptom Inventory (BSI; Derogatis, 1993) as follows: Participants who received a T-score of 60 or above on either the depression or anxiety subscale of the BSI constituted the anxious/depressed group ($n = 42$; 64% female; $M$ age = 64.4 years, $SD$ = 6.8; range = 55 to 78 years; 93% Caucasian). The remaining participants were screened for the presence of psychological symptoms using the BSI. Participants who received a T-score of 60 or above on any of the BSI subscales were excluded from the study ($n = 24$), thus leaving a control group believed to be healthy older adults ($n = 25$; 56% female; $M$ age = 63.7 years, $SD$ = 7.1; range = 55 to 79 years; 96% Caucasian).

**Measures**

*Coping Orientations to Problems Experienced Scale (COPE; Carver, Scheier, & Weintraub, 1989).* The COPE scale is a 60-item, theoretically based, self-report questionnaire that assesses dispositional coping styles in stressful situations. Answers are based on a four-point scale from (1) *not at all* to (4) *a lot*. The COPE consists of three main clusters (problem focused, emotional focused, and dysfunctional coping) with five scales in each cluster and four questions per scale.

*Brief Symptom Inventory (BSI; Derogatis, 1993).* The BSI is a 53-item self-report symptom inventory that measures nine symptom dimensions and also includes a global index of distress, called the global severity index (GSI).
RESULTS

Reliability of COPE and BSI. The first analysis was conducted to assess the degree to which the cognitively impaired participants could reliably complete the COPE and BSI. Internal consistencies (Cronbach’s $\alpha$) were calculated separately for the cognitively impaired and non-cognitively impaired (combining the anxious/depressed group and control group) participants and compared to normative data (Carver et al., 1989; Derogatis, 1993). For the 15 COPE subscales, the median reliability was identical for the cognitively impaired group and the normative sample (.71). For the non-demented group, the median reliability was .67. Fisher’s $z$, a test for differences between independent correlations, showed that the cognitively impaired participants performed significantly more poorly than the normative sample on only one scale, mental disengagement (Cronbach’s $\alpha = -.02$). For the 9 BSI subscales and the GSI, the median reliabilities were as follows: cognitively impaired group, .82; non-cognitively impaired group, .72; normative sample, .79. Fisher’s $z$ showed that the cognitively impaired participants performed more poorly on two scales than the normative sample: interpersonal sensitivity (Cronbach’s $\alpha = .43$) and somatization (Cronbach’s $\alpha = .55$). Overall, results suggested that most of the subscales of the COPE and BSI were reliably completed by cognitively impaired and non-cognitively impaired groups.

Coping Analyses. Group differences on the three coping clusters (problem focused, emotional focused, dysfunctional) were analyzed with one factor analyses of variance (ANOVAs). Holm’s modification of the Bonferroni correction was used to control for Type 1 error. Results (see Table 1) indicated significant main effects for groups regarding problem focused coping and emotional focused coping. Tukey’s post hoc test showed that the cognitively impaired group reported lower use of problem focused and emotional focused coping techniques than both the control group and the anxious/depressed group, but the control group did not differ from the anxious/depressed group. No group differences emerged for the dysfunctional coping cluster.

ANOVAs were also performed on each of the 15 COPE subscales to further examine coping differences (see Table 1). Type 1 error was controlled by Holm’s modification of the Bonferroni correction. Main effects for group emerged for all five of the problem focused coping subscales (active coping, planning, suppression, restraint, and instrumental support), one emotional focused subscale (reinterpretation), and one dysfunctional subscale (behavioral disengagement). Tukey’s tests
revealed that the cognitively impaired group was lower than both the control and anxious/depressed groups on all five problem focused subscales, whereas the latter two groups did not differ. For the reinterpretation subscale, the cognitively impaired group was lower than the anxious/depressed group, which was lower than the control group. For the behavioral disengagement subscale, the cognitively impaired group was higher than both the anxious/depressed and control groups, which did not differ.

Finally, relationships between coping (the 15 subscales) and psychiatric distress (GSI scale of the BSI) among the cognitively impaired group were examined by use of simple correlations (see Table 2). There were two significant relationships: acceptance was negatively and moderately correlated with distress whereas venting of emotions was positively and strongly correlated with distress.

TABLE 1. ANOVA Results and Mean Scores Among Cognitively Impaired, Anxious/Depressed, and Control Groups on the COPE

<table>
<thead>
<tr>
<th>COPE Scales</th>
<th>Cog./Impaired</th>
<th>Anx./Dep.</th>
<th>Control</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
</table>
| Problem Focused Cluster         | 41.3<sup>a</sup> | 56.1<sup>b</sup> | 57.2<sup>c</sup> | 29.59 | .000 |}
| Active Coping                   | 9.4<sup>a</sup>  | 12.0<sup>b</sup> | 12.3<sup>c</sup> | 11.14 | .000 |}
| Planning                        | 7.7<sup>a</sup>  | 12.7<sup>b</sup> | 13.6<sup>c</sup> | 47.30 | .000 |}
| Suppression                     | 7.0<sup>a</sup>  | 10.5<sup>b</sup> | 9.8<sup>c</sup> | 21.98 | .000 |}
| Restraint                       | 9.0<sup>a</sup>  | 10.9<sup>b</sup> | 11.3<sup>c</sup> | 8.09  | .001 |}
| Instrumental Support            | 8.1<sup>a</sup>  | 10.0<sup>b</sup> | 10.3<sup>c</sup> | 6.50  | .002 |}
| Emotional Focused Cluster       | 45.7<sup>a</sup> | 52.6<sup>b</sup> | 55.5<sup>c</sup> | 8.03  | .001 |}
| Emotional Support               | 8.1             | 9.3        | 9.8      | 2.53  | .085 |}
| Reinterpretation                | 8.6<sup>a</sup>  | 11.8<sup>b</sup> | 13.3<sup>c</sup> | 28.37 | .000 |}
| Acceptance                      | 10.4            | 11.4       | 11.8     | 2.60  | .080 |}
| Religion                        | 11.4            | 12.0       | 11.8     | 0.02  | .855 |}
| Humor                           | 7.5             | 8.1        | 8.6      | 0.89  | .415 |}
| Dysfunctional Cluster           | 33.4            | 31.9       | 30.0     | 2.66  | .075 |}
| Venting                         | 8.3             | 8.6        | 8.8      | 0.30  | .739 |}
| Denial                          | 5.8             | 5.1        | 4.6      | 2.68  | .074 |}
| Behavioral Disengagement        | 7.3<sup>a</sup>  | 5.9<sup>b</sup> | 5.3<sup>c</sup> | 7.65  | .001 |}
| Mental Disengagement            | 7.4             | 8.2        | 7.2      | 2.31  | .105 |}
| Alcohol/Drug Abuse              | 4.6             | 4.1        | 4.1      | 1.78  | .174 |}

*Note. Means with different superscripts differ significantly.*
DISCUSSION

Overall, this preliminary study suggests that dispositional coping among those in the early stages of a dementing illness may be reliably assessed with the COPE and that older adults with cognitive impairment may show deficits in their coping styles. Cognitively impaired older adults reported lower levels of problem focused and emotional focused coping techniques compared to another clinical sample (older adults with significant anxiety or depressive symptoms but no cognitive impairment) and older adults with no psychological distress (our control group). More specifically, the cognitively impaired participants used all five adaptive problem focused coping techniques and one adaptive emotional focused technique (positive reinterpretation of distressing events) less frequently than the anxious/depressed participants. The cognitively impaired participants also reported a greater tendency to resort to avoidance coping (behavioral disengagement) to deal with stressful events compared to the other groups.

<table>
<thead>
<tr>
<th>COPE Subscales</th>
<th>GSI score</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Coping</td>
<td>-.04</td>
<td>.832</td>
</tr>
<tr>
<td>Planning</td>
<td>.08</td>
<td>.693</td>
</tr>
<tr>
<td>Suppression</td>
<td>.08</td>
<td>.684</td>
</tr>
<tr>
<td>Restraint</td>
<td>-.09</td>
<td>.642</td>
</tr>
<tr>
<td>Instrumental Support</td>
<td>.10</td>
<td>.601</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>.20</td>
<td>.316</td>
</tr>
<tr>
<td>Reinterpretation</td>
<td>-.25</td>
<td>.209</td>
</tr>
<tr>
<td>Acceptance</td>
<td>-.43</td>
<td>.024*</td>
</tr>
<tr>
<td>Religion</td>
<td>.14</td>
<td>.484</td>
</tr>
<tr>
<td>Humor</td>
<td>.09</td>
<td>.664</td>
</tr>
<tr>
<td>Focus on and Vent Emotions</td>
<td>.63</td>
<td>.000*</td>
</tr>
<tr>
<td>Denial</td>
<td>.19</td>
<td>.337</td>
</tr>
<tr>
<td>Behavioral Disengagement</td>
<td>-.16</td>
<td>.428</td>
</tr>
<tr>
<td>Mental Disengagement</td>
<td>.16</td>
<td>.421</td>
</tr>
<tr>
<td>Alcohol/Drug Abuse</td>
<td>-.07</td>
<td>.723</td>
</tr>
</tbody>
</table>

* = significant
Previous investigations into coping found that problem focused coping strategies, such as suppression of competing activities or seeking instrumental support from others, are used more often when the stressful situation is perceived as controllable or changeable (Carver et al., 1989). In problem focused coping, the sources of stress are directly confronted by either changing one’s own problem-maintaining behavior or the environmental conditions that contributed to the stressor. The present results might reflect the sense of helplessness among the participants with cognitive impairment as they experience an illness that makes their life increasingly difficult to comprehend and control. This coincides with other findings (Downe-Wamboldt & Melanson, 1995) showing that coping choices of chronically ill older adults were influenced by how they appraised their ability to manage a stressful situation. For some cognitively impaired persons, the dementing illness may be perceived as a problem outside the realm of their manageability, thus making problem focused coping an unlikely choice. Furthermore, as the illness progresses (as is the case in Alzheimer’s disease, the most common form of dementing illness), the sophisticated cognitive processes necessary for problem focused coping might no longer be available to the person. An interesting question is: Does a person’s preferred method of coping change with cognitive impairment or is the preferred method blocked by the disability? We also found few coping differences between anxious/depressed and control participants, which might indicate that our anxious/depressed participants, contrary to the cognitive impairment group, perceived themselves as capable of making personal or situational changes despite their symptoms.

The emotional focused coping cluster was also lower among cognitively impaired patients compared to the anxious/depressed and control groups. Given that the complex demands of a given stressful encounter usually elicit cognitive and behavioral strategies that serve problem solving as well as emotion-regulating functions (Folkman & Lazarus, 1988), it is not surprising that emotional coping was primarily used by participants who perceived themselves as able to control their stressors. A follow-up analysis that separated this cluster into its individual coping strategies showed, however, that only positive reinterpretation of distressing events emerged as being used differently by our three groups of participants. It is possible that the older adults with cognitive impairment may lack the cognitive resources to change their mental perspective about their illness. The control group (defined as having limited psychological distress) reported the highest use of this
strategy, hinting that positive interpretation may be a powerful coping tool.

Interestingly, the dysfunctional coping cluster was not used differently by the three groups. However, when subscales were examined, the cognitively impaired participants resorted to behavioral disengagement more frequently than anxious/depressed and control participants, which may, in fact, be a sign of dementing illness itself (such as apathy) or a psychological reaction to an illness that cannot be managed. Among the different coping techniques, behavioral disengagement, which describes a person’s resignation when faced with difficult or stressful events, might be considered the most primitive of strategies, involving minimal mental and physical efforts from the person. Older adults with cognitive impairment may not be able to think of appropriate behavioral responses, and as a result, may tend to do nothing. Furthermore, it is possible that their tendency to resort to behavioral disengagement may be an attempt to disassociate themselves from their illness and other problems. Because there were few group differences regarding dysfunctional coping, this might suggest that the main deficit among cognitively impaired older persons is a lack of adaptive coping in addition to resorting to avoidance coping strategies.

How did coping relate to distress among our demented participants? The reciprocal relationship between coping and distress has been well documented among community dwelling and psychiatric older adults (Segal, Hook, & Coolidge, 2001). Indeed, coping resources and mood regulation expectancies have been identified as important components of well-being, especially in older adults (Catanzaro, Horaney, & Creasey, 1995). Felton and Revenson (1984) showed that coping is an important predictor of well-being and mental health in people who experience critical life events or suffer from a chronic illness. Our results extend these findings to cognitively impaired patients.

Specifically, among the cognitively impaired participants, we found that acceptance was negatively correlated with distress, suggesting that this is an adaptive coping response. In contrast, focusing on and venting of emotions was positively correlated with distress suggesting that mere expression of feelings is possibly a less helpful response among cognitively impaired persons. It is possible that focusing on and venting of emotions make distress more salient for both the patient and the caregiver and can exacerbate symptoms of psychological distress while it further decreases the sufferer’s efforts to actively cope with the stressor. Of course, it could also be true that the cognitively impaired persons with the greatest distress are least able to distract themselves from their emotional experience and, therefore, report more emotional focusing and
venting. Our correlational results prevent the drawing of causative relationships. However, other studies have suggested that the coping strategy of acceptance decreases subjective emotional distress (Pruchno & Resch, 1989), whereas the strategy of blaming others increases negative emotional states (Downe-Wamboldt & Melanson, 1995), which was supported by the current findings.

A limitation of the present study was that all assessments were self-reports, which depend on the respondent’s ability to correctly understand the question and make accurate self-assessments, which was critical in the current study. We found that the measures were completed in a reliable fashion, but we do not have data regarding validity of the responses, although the correlational results suggest, at least preliminarily, some construct validity. Other limitations included an almost entirely Caucasian sample and a small sample size, which limits generalizations. A further limitation was our inability to accurately determine the severity of cognitive impairment, although the dementia diagnosis was thoroughly established. There also were gender differences among the groups (higher percentage of females in the cognitively impaired group compared to the others), which could possibly account for some of the coping differences.

Future research using larger samples, diagnostic interviews and behavioral assessments (as well as self-report inventories) and longitudinal follow-ups might also be helpful. Future investigations might determine whether the teaching or modeling of different coping strategies benefits older adults with cognitive impairment, especially in the early stages of the disease process. Interventions aimed at increasing acceptance and other adaptive coping strategies are, therefore, encouraged whereas venting of negative emotions should probably be discouraged. Indeed, recent research suggests that interventions aimed at improving coping strategies have a strong impact on reducing distress among caregivers of physically or cognitively impaired older adults (Gallagher-Thompson et al., 2000). We hope that continued and more refined research focuses as well on interventions aimed at helping the older adult cope with cognitive impairment. A formal assessment of coping and the targeting of specific coping strategies may be useful.

REFERENCES


