

# The Relationship of Anger, Depression, and Perceived Disability Among Headache Patients

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## SYNOPSIS

Depression is a common concomitant of headache. Conflict with regard to anger or the expression of anger has also been discussed in terms of its relationships to headache. The direction of the relationship between headaches and depression and/or anger is not clear from available research literature. Thus, the present study proposed to examine the interrelationships among measures of anger expression, depression and self-reported disability in a sample of chronic headache patients. It was predicted that there would be significant correlations between depression and perceived disability, and anger held in and perceived disability. Finally, it was predicted that anger held in would be shown to impact perceived disability by way of its relationship to depression.

Path analysis was employed to investigate the relationships among the variables. Results showed a significant and positive relationship between depression and perceived disability, which supported the first hypothesis. Anger expression was not significantly related to perceived disability. Therefore, the second hypothesis was not supported. Anger-in, however, was strongly and positively related to depression.

Although the causal direction of the relationships cannot be stated with certainty, the suppression of anger appears to be a moderating variable that amplifies the experience of depression among chronic headache patients.

**Key words:** headache, anger, depression, disability

**Abbreviations:** AXIN anger-in, AXOUT anger-out, BDI Beck Depression Inventory, PDI1 Pain Disability Index

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## INTRODUCTION

Over the years, researchers have explored the emotional components related to the experience of headache. Studies have revealed that depression is a common concomitant of headache.<sup>1-5</sup> Significant relationships between headache and depression have been found in both the chronic headache and clinically depressed populations.<sup>6</sup>

Other affects, particularly anger, have also been discussed in terms of their relationships to headache.<sup>4,7-9</sup> Conflict with regard to anger or the expression of anger is the most commonly reported affective factor.<sup>1,8,10</sup>

The relationship between anger and depression has also been investigated in the general population. Some theories of depression hypothesize a link between anger repression and depression.<sup>11</sup> Corroborating evidence of Riley, Treiber, and Woods<sup>12</sup> showed a significant relationship between depression and anger suppression in a sample of depressed patients.

The direction of the relationship between headaches and depression and/or anger is not clear from available research literature.<sup>4,7,12-14</sup> Thus, in the present study it was proposed to examine the interrelationships among measures of anger expression, depression and self-reported disability in a sample of chronic headache patients. Self-reported (or perceived) disability represents the impact of the headache on the patient's daily functioning and is conceptually different from objective measures of headache activity or observed impairment.

Based on the literature cited above, it was predicted that there would be a significant correlation between depression and perceived disability. It was also predicted that anger held in would be significantly correlated with perceived disability based on the clinical literature which suggests that suppressed anger and resentment are related to dysfunction.<sup>1</sup> Finally, it was predicted that anger held in would be shown to impact perceived disability by way of its relationship to depression.

## METHOD

**Subjects.** Subjects were 139 patients (105 females and 34 males) referred for evaluation at St. Louis University's Biobehavioral Treatment Center. Among the sample, 67% were married, 19% were single, and 14% were separated or divorced. Median age was 37 years ( $X=38.55$ ,  $sd=12.06$ ,  $N=139$ ). Median yearly income of the sample was in the \$20,000 to 29,999 range ( $N=95$ ). Ten years ( $X=12.37$ ,  $sd=12.14$ , range= 1 month to 60 years,  $N=129$ ) was the median length of time that patients had suffered pain problems. Nearly three quarters (74.1%) of the patients reported near daily headaches.

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