Attitudes Toward Anger Management Scale: Development and Initial Validation

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Abstract

This article describes the development and preliminary validation of the Attitudes Towards Anger Management Scale (ATAMS), a self-report measure of attitudes toward anger management services. Undergraduate volunteers ($N = 415$) completed an initial version of the instrument. Principal components analysis yielded a 2-factor solution. Convergent and incremental validity were supported.
Attitudes Toward Anger Management Scale: Development and Initial Validation

Clinically dysfunctional anger (i.e., that which is chronic, excessive, expressed in a maladaptive manner, and/or results in adverse consequences) has a number of adverse correlates, including depression, reduced social support, alcohol abuse, aggressive behavior, and a variety of cardiovascular problems (Dahlen, Edwards, Tubrè, Zyphur, & Warren, 2012; Dahlen & Martin, 2005; Deffenbacher, 1992, 1993; Smith, Glazer, Ruiz, & Gallo, 2004; Tafrate, Kassinove, & Dundin, 2002; Williams, 2010). Moreover, while evidence-based treatments for dysfunctional anger are available (Deffenbacher, 2006), they are often designed for the highly motivated client who recognizes his or her anger problem and is prepared to seek help. That is, such protocols tend to be optimized for a different sort of client than those many counselors encounter. The importance of assessing and enhancing client motivation early in treatment cannot be overstated, as a significant number of clients receiving anger management will terminate prematurely (Brown, O’Leary, & Feldbau, 1997; Deffenbacher, 2006; Feazell, Mayers, & Deschner, 1984; Tafrate & Kassinove, 2003).

Attitudes toward anger management services may be among the factors that influence client motivation and willingness to seek professional assistance with dysfunctional anger. With numerous reports in the news media of celebrities receiving anger management, it is likely that most people have formed initial impressions of these services and those who participate in them. To the degree that these attitudes are positive, individuals may regard anger management as a worthwhile endeavor in which they could imagine themselves or a friend participating. More negative attitudes could be associated with the perception of anger management as ineffective or as a stigmatizing experience to be avoided. Investigating these possibilities may be useful in informing prevention or early intervention efforts. However, doing so requires instrument
development, as there are currently no valid measures of anger-related help seeking. The
development and initial validation of such an instrument is the goal of the present study.

Help Seeking

Despite evidence of the efficacy of counseling for a number of mental health problems,
many individuals are reluctant to seek professional help (Leichsenring, Hiller, Weissberg, &
Leibing, 2006; Lundeberg, Stith, Penn, & Ward, 2004; Wampold, 2001; Westen & Morrison,
2001). Some factors identified as affecting readiness for seeking help include self-concealment,
social support, psychological distress (Cepeda-Benito & Short, 1998; Hinson & Swanson, 1993;
Kelly & Achter, 1995), self-concept/self-esteem (Lopez, Melendez, Sauer, Berger, &
Wyssmann, 1998; Tessler & Schwartz, 1972), and emotional openness and fear of emotional
experience and expression (Komiya, Good, & Sherrod, 2000). Other factors include education
(Leaf, Bruce, Tischler, & Holzer, 1987), lack of knowledge of existing services and minority
status (Loo, Tong, & True, 1989; Narikiyo & Kameoka, 1992; Suan & Tyler, 1990), the stigma
of mental illness and counseling (Farina, Holland, & Ring, 1966; Phillips, 1963; Sibicky &
Dovidio, 1986), and values distinctive to the concept of individualism (Tata & Leong, 1994).

While there is a vast literature focusing on general readiness and help seeking, little
information is available on help seeking orientation for anger management specifically. Howells
and Day (2003), defined low readiness as the “presence of characteristics (states or dispositions)
within either the client or the therapeutic situation, which are likely to impede engagement in
therapy and which, thereby, are likely to diminish therapeutic change” (p. 320). Based on their
research into readiness for anger management, they suggested that help seeking for anger issues
may have unique factors which separate it from help seeking for other emotional problems. For
example, persons experiencing anger problems may not find their issues with anger personally
distressing enough to motivate them to seek professional help. Due to the many adverse correlates of dysfunctional anger, additional research into help seeking for anger management is warranted (Howells, 1998; Howells & Day, 2003).

Assessing Help-Seeking Attitudes

The Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH; Fischer & Turner, 1970) has been studied more than any other scale assessing mental health treatment attitudes (Elhai, Schweinle, & Anderson, 2008). The 29-item ATSPPH was developed and standardized with college students to assess a global orientation towards seeking professional therapeutic help for mental health issues. The authors based their items on statements collected from clinical psychologists working in various mental health settings, which were then reviewed by a panel of counseling psychologists and psychiatrists to determine their relevance in assessing attitudes towards seeking professional psychological help. The resulting 31 items and a social desirability scale were then presented to a college student sample, who was asked to respond to the items and rate them as to how well they assessed the desired construct. The process was repeated with a second sample, resulting in the final 29-item version of the ATSPPH. Fischer and Turner (1970) identified four factors relating to orientation to seeking professional psychological help: Need, Stigma, Openness, and Confidence (Lopez et al., 1998). Due to concerns about the internal consistency of the factors, the authors recommended using the overall score of the scale.

Because the ATSPPHS was developed 40 years ago, it is not surprising that the item wording has been criticized as possibly dated or less relevant to modern participants. Another possible limitation of the measure is the high face validity and concerns about deception (Aegisdottir & Gerstein, 2009). As a result, Fischer and Farina (1995) updated and shortened the
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ATSPPH, creating the 14-item Attitudes Toward Seeking Professional Psychological Help Scale – Short Form (ATSPPH-SF). The ATSPPH-SF is a brief, psychometrically sound measure of general help seeking attitudes that has been widely used in the literature (Elhai et al., 2008).

Relevant to the present study, Cellucci, Krough, and Vik (2006) used the ATSPPH-SF to develop a measure of help seeking specific to alcohol problems. Based on survey data collected on college student drinking, statements concerning help seeking for alcohol problems were constructed and administered to a college student sample. Results were factor analyzed and compared to established measures on help seeking. Scores on the new measure of help seeking for alcohol problems were found to be related to scores on established measures of similar constructs. Cellucci and colleagues (2006) noted that there may be some differences in help seeking for various problems, suggesting that developing problem-specific measures may be useful.

The Present Study

In the anger management literature, many authors have made the case that greater attention be devoted to assessing client readiness for change, treatment motivation, and attitudes toward help seeking (e.g., Howells & Day, 2003; DiGiuseppe & Tafrate, 2007; Tafrate & Kassinove, 2003). However, few measures of these constructs have been developed. The development of such measures may extend our knowledge of clinically dysfunctional anger, its prevention, and its treatment in meaningful ways. Efforts aimed at helping those with elevated anger may be limited by specific attitudes held by individuals dealing with problem anger. A psychometrically sound means of assessing attitudes toward seeking professional help with one’s anger could be invaluable in informing prevention and early intervention programs.
The present study describes the development of the Attitudes Towards Anger Management Scale (ATAMS), a 13-item self-report scale designed to assess attitudes toward seeking psychological help for anger-related issues. Following a description of the development process, we provide initial data to support the construct validity of the ATAMS.

Method

Item Pool Development

A thorough review of the literature on help seeking in the context of counseling and mental health services was completed in order to facilitate an understanding of the construct from which item development could proceed. For the purpose of this study, help seeking was defined as the “processes of symptom perception, interpretation, appraisal and decision making in addition to having the ability and motivation to enforce the decision by visiting a health-care professional” (Scott & Walter, 2010, p. 531). Therefore, we sought to develop items assessing attitudes toward help-seeking for anger perceived as problematic by an individual or those in an individual’s environment were developed for this study.

Existing measures of help seeking were examined, including the Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Turner, 1970) and the Self-Stigma of Seeking Help Scale (Vogel, Wade, & Haake, 2006), in order to inform the item generation process. Next, the anger management literature was examined to guide efforts to shift the focus of general help seeking items to an anger management context (i.e., wording items in such a way that they would assess help seeking specific to anger management as opposed to help seeking in general). Our approach was modeled after Cellucci and colleagues’ (2006) development of a measure of help seeking for alcohol problems.
This process resulted in an initial set of 50 items designed to assess help seeking attitudes that focused on seeking help for anger-related issues. These items were then reviewed by four graduate students familiar with the anger literature. Based on this review, 10 redundant items were eliminated, and the remaining items were edited to improve clarity. Finally, the remaining 40 items, called the Attitudes Toward Anger Management Scale (ATAMS), were scaled from 0 ("Disagree") to 3 ("Agree"), modeled after the Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Turner, 1970).

Participants

Participants were 415 (294 women and 121 men) undergraduate students (Mdn age = 19) recruited from a mid-sized Southeastern university using the Department of Psychology’s online research system. Students volunteered to participate in exchange for research credit. Participants identified themselves as follows: 58.1% White, 35.2% Black, 3.6% “other,” 1.7% Hispanic, 1% Asian, and 0.5% American Indian/Alaskan Native. The size of the sample was based on recommendations in the literature that 5 to 10 participants per item is optimal for exploratory factor analysis (Clark & Watson, 1995; Floyd & Widaman, 1995).

Instruments

In addition to the 40 ATAMS items and a brief demographic questionnaire, the instruments described below were administered to permit initial validation.

Demographic Questionnaire. In addition to gathering general demographic information (e.g., age, gender, ethnicity, etc.), three additional questions were added to assess individuals’ motivation to engage in anger management services. Motivation has been proposed as a factor contributing to the prediction of an individual’s intent to carry out a specific behavior (Ajzen, 1991), and since a goal in developing the ATAMS is the prediction of one’s engagement and
success in anger management, motivation to engage in anger management was assessed. Based on research conducted by Miller and Johnson (2008), participants answered items rating their agreement from 1 (“Strongly Disagree”) to 5 (“Strongly Agree”) with the importance of addressing problematic anger, ability to engage in anger management for problematic anger, and commitment to addressing problematic anger. Using importance, confidence, and commitment to create similar three-item questionnaires to assess motivation to engage in specific behaviors is a common approach (Rollnick, Mason, & Butler, 1999; Rollnick, Miller, & Butler, 2008), and Miller and Johnson (2008) showed that brief scales like this are closely related to longer measures of motivation.

*Attitudes Toward Seeking Professional Psychological Help Scale – Short Form (ATSPPH-SF)*. Developed by Fischer and Farina (1995), the ATSPPH-SF has been described as “the most relevant and widely used contemporary assessment of mental health treatment attitudes” (Elhai et al., 2008, p. 321). It consists of 14 Likert-type items, with response options ranging from: 0 (“Disagree”) to 3 (“Agree”). Scores range from 0 to 30, with higher scores indicating more positive attitudes toward treatment. Alpha coefficients ranging from .82 to .84 have been reported (Constantine, 2002; Fischer & Farina, 1995; Komiya et al., 2000), as has a 5-day test-retest coefficient of .86 (Fischer & Farina, 1995). In the present study, ATSPPH-SF scores demonstrated acceptable internal consistency (α = .76). Regarding validity, Elhai and colleagues (2008) provided evidence of convergent validity by showing that the ATSPPH-SF was correlated with the Stigma Scale for Receiving Psychological Help (SSRPH, Komiya et al., 2000). Moreover, evidence of criterion validity comes from findings that the ATSPPH-SF discriminates between those who have and have not received previous professional mental health care (Constantine, 2002; Elhai et al., 2008; Fischer & Farina, 1995; Komiya et al., 2000).
Self-Stigma of Seeking Help Scale (SSOSH). The SSOSH was developed to measure “the perception that seeking help from a psychologist or other mental health professional would threaten one’s self-regard, satisfaction with oneself, self-confidence, and overall worth as a person” (Vogel, Wade, & Haake, 2006, p. 326). It includes 10 Likert-type items, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). Higher total scores on the scale reflect a more negative association with seeking professional psychological help. The SSOSH was reported to be internally consistent with an alpha coefficient of .91, and both construct and criterion validity have been supported using a college student sample (Vogel et al., 2006). The internal consistency of SSOSH scores was acceptable in the present study ($\alpha = .83$). Evidence of construct validity has been provided through comparisons with the Anticipated Risks and Anticipated Benefits scales, and Social Stigma for Seeking Psychological Help scale (Komiya et al., 2000), and comparisons with the ATSPPHS and Intentions to Seek Counseling Inventory scales (Cash, Begley, McCown, & Weise, 1975) have provided evidence of criterion validity (Vogel et al., 2006).

Trait Anger (T-Ang) Scale of the State-Trait Anger Expression Inventory-2 (STAXI-2). The 10 item T-Ang scale from the STAXI-2, developed by Spielberger (1999), was used to assess respondents’ propensity to experience angry feelings. Items are scored on a 4-point Likert-type scale as to how well they describe the respondent (1 = “not at all” to 4 = “almost always”). The STAXI-2 scales have been found to be internally consistent, with alpha coefficients ranging from .73 to .95 (Spielberger, 1999). In the present study, internal consistency was acceptable ($\alpha = .86$). Considerable evidence in support of the STAXI-2’s validity as a measure of the experience and expression/control of anger has been reported in the literature (Culhane & Morera, 2010; Driscoll, Zinkivskay, Evans, & Campbell, 2006). This
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includes structural validity via factor analyses and convergent/discriminant validity via comparisons with other measures of anger and dissimilar constructs (Culhane & Morera, 2010; Freeman, 2001; Spielberger, 1999).

Procedure

Participants completed all measures online using a secure host. After obtaining informed consent, participants were directed to the demographic questionnaire, followed by the ATAMS item set, and all remaining measures in random order to minimize potential order effects.

Results

Item-level distributions were examined for each of the 40 ATAMS items, and two items were deleted due to extreme skewness in their distributions (i.e., nearly all respondents used the same response option). Tests of sampling adequacy (Kaiser-Meyer-Olkin criterion) and multicollinearity (Bartlett’s test of sphericity) were then performed with the remaining 38 ATAMS items. A Kaiser-Meyer-Olkin (KMO) criterion of .93 indicated suitable common variance for factor extraction, and Bartlett’s test indicated that the intercorrelation matrix was appropriate for analysis, $\chi^2 (703) = 6747.41, p < .0001$. These 38 items were subjected to principal components analysis (PCA) to reduce the number of items while maintaining acceptable internal consistency. An oblique rotation (Direct Oblimin) was used based on the assumption that the resulting factors would be correlated. Initial eigenvalues are reported in Table 1. Factor extraction criteria were determined using parallel analysis (Horn, 1965) as described by Thompson (2004). Parallel analysis utilizes random data sets that share the number of variables and cases of the actual data set. Eigenvalues computed from the random data are compared with those from the actual data, and eigenvalues from the actual data above those from
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the random data are retained. On this basis, two factors were initially extracted, explaining a cumulative variance of 39.71%.

Consistent with best practices in exploratory factor analysis (Costello & Osborne, 2005), items with factor loadings > .40 and loadings on other factors < .40 were retained, resulting in the elimination of 10 items. The content of the remaining items was closely examined, and four more items were eliminated due to redundancy with other items on their components. Next, communalities were examined, and an additional 11 items with communalities < .50 were eliminated. Factor loadings for the final 13 items retained are provided in Table 2. The two factors accounted for 61.24% of the cumulative variance. Based on an examination of the items with the highest loadings, Factor 1 was labeled Belief in Treatment, as items appeared to assess one’s belief in the efficacy of anger management (e.g., “If anger is out of control, a person could benefit from an anger management program” and “If anger problems have lasted over a long period of time, anger management is a good idea”). Factor 2 was labeled Receptiveness, as items focused on one’s willingness to seek help outside of one’s social circle (e.g., “People should be able to work out their anger problems on their own” and “Talking to a close friend about anger problems is better than attending anger management”). Alpha coefficients and average item-total correlations for each factor are presented in Table 3.

Gender and race differences in help-seeking behavior are well established in the literature (e.g., Cheng, Kwan, & Sevig, 2013; Husaini, Moore, & Cain, 1994; Morgan, Ness, & Robinson, 2003; Nam, Chu, Lee, Lee, Kim, & Lee, 2010), and so it was important to determine whether gender or race differences existed on the ATAMS that might need to be taken into account during subsequent analyses. First, a one-way (gender) Multivariate Analysis of Variance (MANOVA) was conducted using the two subscales of the ATAMS as dependent variables.
There was a significant multivariate effect for gender, $F(2, 412) = 20.62, p < .001$; Wilks’ Lambda = .91; $\eta^2 = .09$. Univariate tests showed that women scored somewhat higher than men on both Belief in Treatment and Receptiveness, $F_{s}(1, 415) = 25.54$ and $24.28, ps < .001$, and $d$s = .57 and .52, respectively. Second, we selected those participants who identified themselves as Black or White and compared them using a similar one-way (race) MANOVA. The multivariate effect for race was not significant, $F(2, 384) = 2.05, p = .13$.

Bivariate correlations were computed among the two subscales of the ATAMS and measures of similar constructs to evaluate the construct validity of the new measure (see Table 4). Both subscales of the ATAMS were positively correlated with scores on the ATSPPHS-SF and inversely related to scores on the SSOSH. In addition, both were positively correlated with the Importance and Ability items. In addition, the Receptiveness subscale was inversely related to the Commitment item. Finally, the Receptiveness subscale was inversely related to $T$-Ang, while the Belief in Treatment subscale was unrelated to $T$-Ang.

To provide a preliminary test of the criterion validity of the ATAMS hierarchical multiple regression was used to determine whether scores on the ATAMS would predict participants’ scores on the Importance, Ability, and Commitment items added to the demographic questionnaire, independent of gender and $T$-Ang. The three items were examined separately after it was determined that they lacked sufficient internal consistency to be considered a unitary construct ($\alpha = .62$). In each regression, respondent gender was entered on Step 1, $T$-Ang on Step 2, and the two ATAMS subscales on Step 3. A significant change in $R^2$ on Step 3 would indicate that the ATAMS was contributing to the prediction of the dependent variable beyond participant gender and $T$-Ang.
The ATAMS contributed to the prediction of all three dependent variables, demonstrating incremental validity beyond participant gender and T-Ang (see Table 5). Importance was predicted by T-Ang and the Belief in Treatment subscale. That is, participants higher in trait anger and reporting more positive belief in anger management were more likely to agree with the importance of addressing anger issues should they become problematic. Ability was predicted only by the Belief in Treatment subscale, demonstrating that belief in treatment was associated with confidence in one’s ability to address anger problems through an anger management program. Finally, Commitment was predicted by gender, T-Ang, and the Receptiveness subscale. That is, women with elevated trait anger and lower scores on Receptiveness were more likely to express agreement with the statement that they are trying to address issues with problematic anger.

Discussion

Principal components analysis was used to produce a 13-item self-report measure of help seeking attitudes specific to seeking help for anger-related issues, the Attitudes Toward Anger Management Scale (ATAMS). Two internally consistent factors were labeled Belief in Treatment and Receptiveness. The ATAMS is available from the corresponding author by request. Initial support for the construct validity of the ATAMS was provided through comparisons with established measures of help seeking and stigma. That is, scores on the ATAMS factors were related to attitudes toward general (i.e., non-anger-specific) help seeking and stigma, as expected. Moreover, scores on the ATAMS predicted participants’ responses to each of three items assessing constructs related to readiness to change their anger (i.e., the importance of anger management, perceived ability to engage in anger management, and
commmitment to engage in anger management), over and above both respondent gender and trait anger.

Many individuals are reluctant to seek help for psychological problems (Cepeda-Benito & Short, 1998; Westen & Morrison, 2001), and this reluctance is particularly evident among individuals with anger problems. The ATAMS was developed to provide a tool for assessing one potential barrier to treatment seeking among persons who might benefit from professional anger management services (i.e., negative attitudes toward anger management services) and in direct response to calls in the literature for greater attention devoted to assessing client readiness for change, treatment motivation, and attitudes toward help seeking (Howells & Day, 2003; DiGiuseppe & Tafrate, 2007; Tafrate & Kassinove, 2003). In a population often perceived as resistant and noncompliant with treatment, it is hoped that measures like the ATAMS will prove to be a useful addition to measures of related constructs, such as readiness for change (Prochaska & Di Clemente, 1984), in informing counselors about their clients’ attitudes toward anger management.

Pending additional research to confirm the factor structure obtained here with more diverse samples, we are encouraged by the two meaningful factors obtained from the ATAMS. First, it appears that the Belief in Treatment subscale assesses respondents’ beliefs about the efficacy of anger management. Higher scores reflect more positive attitudes (i.e., respondents perceive anger management as more beneficial and more likely to result in positive change). Thus, low scores may be useful in identifying persons with negative attitudes that may impede service utilization. Second, the Receptiveness subscale appears to measure respondents’ willingness to seek help for anger problems outside of their own social circle. High scorers are willing to look outside their friends and family for assistance with dysfunctional anger, while
low scorers are less inclined to do so. Thus, low scores on this subscale may help to identify persons who are reluctant to seek anger management services due to resistance against outside help.

Initial support for the construct validity of the ATAMS was obtained through comparisons with established measures of general help seeking and stigma. The Belief in Treatment subscale was positively related to the Attitudes Towards Seeking Professional Psychological Help – Short Form (ATSPPH-SF), a common measure of general help seeking. Additionally, the Receptiveness subscale was inversely related to those on the Self-Stigma of Seeking Help Scale (SSOSH). Thus, the ATAMS seems to be assessing constructs similar to measures of attitudes and stigma toward general psychological help seeking. At the same time, these relationships were not so strong as to suggest that the ATAMS was assessing exactly the same construct as general measures of help-seeking and stigma. Comparisons of the ATAMS to a measure of trait anger (i.e., the T-Ang subscale of the STAXI-2) also showed that these are distinct constructs. The Belief in Treatment subscale was unrelated to trait anger, and scores on the Receptiveness subscale were negatively related to trait anger. This inverse relationship may initially seem surprising, as it suggests that anger prone individuals may be less likely to be receptive to seeking treatment outside their friends and family. However, this relationship makes sense when one remembers that anger is not always perceived as problematic by those experiencing it (Howells & Day, 2003; Tafrate & Kassinove, 2003). Simply because someone reports high trait anger does not necessarily mean that he or she will acknowledge the presence of problematic anger for which seeking help might be needed.

To determine whether the ATAMS might be useful in predicting one’s perceived commitment to anger management, ability to engage in anger management, and the perceived
importance of anger management, we regressed the ATAMS on each of the three items adapted from Miller and Johnson (2008) after entering respondent gender and trait anger. Since trait anger was expected to be a robust predictor of scores on these components of readiness to change, we sought to determine whether the ATAMS would offer incremental validity in the prediction of readiness beyond trait anger. The ATAMS predicted all three variables even after accounting for gender and trait anger. Independent of their propensity to experience angry feelings, participants with more positive attitudes toward anger management (i.e., both Belief in Treatment and Receptiveness) were more likely to support the importance of addressing problem anger. Perceived ability to address anger issues was predicted by the Belief in Treatment subscale, suggesting that respondents with more positive attitudes toward anger management, regardless of their level of trait anger, had more confidence in their ability to resolve anger problems through anger management. Finally, the degree to which participants reported being committed to resolving their anger problems was inversely related to the Receptiveness subscale once gender and trait anger were accounted for. That is, those who expressed a greater willingness to seek help with anger outside their peer and family networks were less likely to report being committed to resolving anger problems currently. This last finding seems counterintuitive, but it could be that those with a willingness to seek anger management outside of their networks were less likely to regard their anger as problematic. There is evidence that college students do not seek professional help unless they find their problems to be personally distressing (Cellucci et al., 2006) and that many individuals with problem anger do not experience their anger as personally distressing (Howells & Day, 2003). Additional research with high anger samples will be useful in making sense out of this finding.
Referrals of mandated clients for anger management services, whether they are court-ordered or mandated by university personnel as part of a remediation plan, pose some important challenges for service providers. Given the importance of client motivation and the quality of the working alliance in predicting treatment outcome (Horvath & Symonds, 1991), we hope that the ATAMS will ultimately prove useful in assessing negative attitudes toward these services as a part of a comprehensive assessment. In some cases, access to such data might empower clinicians to work with referring agents to find alternative treatment options. In other cases, detecting strong negative attitudes may help guide clinicians to pre-treatment interventions such as motivational interviewing (Miller & Rollnick, 2013).

Although it appears that the ATAMS holds promise as a reliable and valid measure of attitudes toward anger management services, the present study was merely the first step in the process of developing the ATAMS and has some important limitations that will guide future steps in the process. Not only does the use of a college student sample preclude generalizing these findings to community adults, but students enrolled in psychology courses were overrepresented in our sample. This is relevant because their attitudes toward psychological services of any kind may not have been representative of the larger student body. After testing the structural validity of the ATAMS with confirmatory procedures in a new sample, it will be necessary to make sure it performs as intended in a more representative student sample. It will be important for future research to examine the ATAMS in community and clinical samples too, especially those including individuals mandated to treatment. A related limitation concerns the degree to which the participants in the present study experienced problematic anger. Because participants were not screened and selected for inclusion based on having any sort of problem with anger, attempting to determine how well the ATAMS predicts variables such as one’s
commitment to seeking anger management services was somewhat artificial. It will be important to evaluate the ATAMS in high anger samples to determine the degree to which it predicts treatment seeking. Finally, it is worth noting that we do not yet have information on the temporal stability of scores on the ATAMS.

There is a clear need for brief, psychometrically sound measures for assessing the attitudes and beliefs that may interfere with people seeking anger management services. It is hoped that the ATAMS will eventually help to fill that void. The results of the present study provide initial evidence to support the reliability and validity of the ATAMS, providing a foundation on which future studies can build.

References
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Table 1

*Initial Eigenvalues and Explained Variance from a Principal-Components Analysis of the Attitudes Towards Anger Management Scale (ATAMS)*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>% of variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11.20</td>
<td>28.00</td>
<td>28.00</td>
</tr>
<tr>
<td>2</td>
<td>4.49</td>
<td>11.97</td>
<td>39.97</td>
</tr>
<tr>
<td>3</td>
<td>1.72</td>
<td>4.29</td>
<td>44.23</td>
</tr>
<tr>
<td>4</td>
<td>1.47</td>
<td>3.68</td>
<td>47.95</td>
</tr>
<tr>
<td>5</td>
<td>1.21</td>
<td>3.03</td>
<td>50.97</td>
</tr>
<tr>
<td>6</td>
<td>1.12</td>
<td>2.79</td>
<td>53.76</td>
</tr>
<tr>
<td>7</td>
<td>1.02</td>
<td>2.55</td>
<td>56.31</td>
</tr>
</tbody>
</table>
Table 2

*Factor Loadings From the Rotated Structure Matrix: Principal-Components Analysis With Direct Oblimin Rotation*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. If anger is out of control, a person could benefit from an anger management program.</td>
<td>.84  .16</td>
<td>.70</td>
</tr>
<tr>
<td>37. If I ever developed problems with anger, it would be nice to know that anger management programs are available.</td>
<td>.83  .25</td>
<td>.69</td>
</tr>
<tr>
<td>15. If anger problems have lasted over a long period of time, anger management is a good idea.</td>
<td>.82  .16</td>
<td>.66</td>
</tr>
<tr>
<td>7. If it is beneficial, sharing thoughts and feelings with an anger management counselor is OK.</td>
<td>.80  .23</td>
<td>.65</td>
</tr>
</tbody>
</table>
34. Going to an anger management program would mean that an individual is taking charge of his or her life.

19. If anger problems are causing harm to self or others, anger management would help to make things better.

10. Someone with serious anger problems should attend an anger management program.

23. If anger management is necessary, a person should go no matter what other people think.

33. Attending anger management should make a person feel better about him or herself.

36. People should be able to work out their anger problems on their own.

4. An individual should be able to handle his or her personal problems so anger management is unnecessary.
9. Given enough time, anger problems will solve themselves.

13. Talking to a close friend about anger problems is better than attending anger management.

*Note.* Boldface indicates highest factor loadings.
### Table 3

**Internal Consistencies and Item-Total Correlations for the Two Factors Extracted**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Label</th>
<th>No. of Items</th>
<th>Internal Consistency ($\alpha$)</th>
<th>Mean Item-Total Correlation ($r_{it}$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Belief in Treatment</td>
<td>9</td>
<td>.93</td>
<td>.73</td>
</tr>
<tr>
<td>2</td>
<td>Receptiveness</td>
<td>4</td>
<td>.73</td>
<td>.52</td>
</tr>
</tbody>
</table>
### Table 4

**Means, Standard Deviations, and Intercorrelations Among Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<td>1. ATAMS-Belief in Treatment</td>
<td>22.48 (5.57)</td>
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<tr>
<td>2. ATAMS-Receptiveness</td>
<td>7.90 (2.49)</td>
<td>.25*</td>
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<td></td>
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<tr>
<td>3. ATSPPH-SF</td>
<td>29.41 (5.11)</td>
<td>.53*</td>
<td>.52*</td>
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<tr>
<td>4. SSOSH</td>
<td>24.51 (6.89)</td>
<td>-.40*</td>
<td>-.36*</td>
<td>-.51*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>5. T-Ang</td>
<td>17.75 (5.57)</td>
<td>-.09</td>
<td>-.18*</td>
<td>-.04</td>
<td>.10*</td>
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</tr>
<tr>
<td>6. Importance</td>
<td>3.50 (1.36)</td>
<td>.47*</td>
<td>.19*</td>
<td>.40*</td>
<td>-.16*</td>
<td>.14*</td>
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<tr>
<td>7. Ability</td>
<td>3.57 (1.24)</td>
<td>.56</td>
<td>.21*</td>
<td>.46*</td>
<td>-.22*</td>
<td>.03</td>
<td>.72*</td>
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<tr>
<td>8. Commitment</td>
<td>1.74 (1.03)</td>
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<td>-.18*</td>
<td>.03</td>
<td>.07</td>
<td>.45*</td>
<td>-.14*</td>
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*p < .01

Note. ATAMS = Attitudes Towards Anger Management Scale; ATSPPH-SF = Attitudes Towards Seeking Professional Psychological Help Scale.
Table 5

*Summary of Hierarchical Multiple Regressions*

<table>
<thead>
<tr>
<th>Importance</th>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
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<tbody>
<tr>
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<td>.01*</td>
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<td>.01</td>
<td>.20**</td>
<td>.17</td>
<td>.02*</td>
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<td>.01</td>
<td>.46**</td>
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<td>.23**</td>
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<tr>
<td></td>
<td>Receptiveness</td>
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<td>.03</td>
<td>.10*</td>
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<table>
<thead>
<tr>
<th>Ability</th>
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<th>B</th>
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<th>β</th>
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<td>.03**</td>
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<td>.01</td>
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<td>.39**</td>
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Table 6 (continued).

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<th>SEB</th>
<th>β</th>
<th>R²</th>
<th>ΔR²</th>
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<tbody>
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<td>.63**</td>
<td>.42</td>
<td>.39**</td>
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<tr>
<td></td>
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<td>.04</td>
<td>.02</td>
<td>.07</td>
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## Attitudes Toward Anger Management

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<tbody>
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<tr>
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* *p < .05 ** *p < .01