

Investigating the Relationship between Resilience and Dispositional Accommodative Efficacy

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Abstract

Dispositional accommodative efficacy (DAE) is the general belief in one's ability to adjust to an unwanted or unchangeable situation. Previous research has shown that this efficacy has a strong, positive relationship to well-being. In this study, our investigation focuses on the potential relationship of DAE to resilience: the general ability to overcome stress or trauma. We believe that DAE is closely related to resilience and its associated predictors and may even be a component of resilience. Our study examined this relationship by performing a reanalysis of data from a survey done by Chen & Smith (in preparation), which included the following constructs: DAE, resilience, and potentially related dispositions and social factors. From these data, we analyzed six predictors of resilience: trait mindfulness, maladaptive beliefs, self-efficacy/mastery, religious beliefs, emotional awareness, and social orientation. Our findings supported our original hypothesis that DAE and resilience have a close, seemingly special relationship, and that DAE at least partially mediated the relationships between the tested predictors and resilience. This evidence suggests that DAE might be helpful in creating interventions that seek to improve resilience in individuals with lower resilience levels and, to a further extent, could benefit individuals who struggle with anxiety if DAE's potential as a stress buffer is explored.

Investigating the Relationship between Resilience and Dispositional Accommodative Efficacy

A woman named Sarah has a naturally calm disposition in most situations. Therefore, those who know her well trust that she can keep her calm. On the other hand, Sarah's friend Mary is nervous and usually expects even the most minor things to go wrong around her. In psychological terms, this particular difference is called trait anxiety, and as the name states, it is anxiety that is tied to someone's personality. Furthermore, it is logical to assume from these descriptions that when they are in the same stressful situation, such as running late to an important meeting, Sarah can cope with such stress more efficiently than Mary. However, this still leads to another question: What underlies trait anxiety? What belief can be associated with personality-based nervousness? The potential answer that this analysis strives to look into is dispositional accommodative efficacy: the general belief in one's ability to mentally adjust to an unwanted situation.

Situational versus Dispositional Coping

The theory that leads to dispositional accommodative efficacy or DAE is appraisal theory, which states that emotions arise from the human appraisal of events (Lazarus, 1964). Appraisal itself is an evaluation of what one's circumstances mean for their personal well-being. The outcome of an appraisal leads to the development of one's emotional state, and they are appraisals about a specific situation. One situational appraisal that is especially relevant to the present analysis is accommodative coping potential, which is one's ability to readjust one's goals and beliefs to a new situation that cannot be physically altered. A brief example would be a student who gets a C on an important exam. This unfortunate turn of events stresses them because they expected a higher grade. However, they adapt to the new reality by believing they

will be all right despite the current situation. In this case, if the appraised accommodative coping potential is high, the student should be able to successfully calm themselves. However, if accommodative coping potential is low, the student is likely to remain anxious.

But as stated previously, the primary focus of this analysis is dispositional accommodative efficacy, again, a dispositional belief that one has the ability to accommodate to difficult situations. All else being equal, individuals high on this belief should appraise potentially stressful circumstances as less threatening, and respond with less anxiety, than individuals lower on this belief (Smith & Lazarus 1990). Thus, DAE is hypothesized to influence situated appraisals of accommodative coping potential. Our focus is on learning more about the properties of this belief.

Investigating Resilience

Previous research focusing on DAE has found that individual differences in DAE are associated with individual differences in subjective well-being (David et al., 2007). For example, individuals who were more confident in their accommodative abilities tended to display higher levels of life-satisfaction and lower levels of chronic stress, anxiety, and depression. Because of the positive implications of these results, this study explores the hypothesis that DAE is closely related to resilience: the general ability of an individual to handle traumatic and stressful events. In more detail, we are hypothesizing that DAE may actually be a component of resilience, and therefore, should be more closely related to resilience than other predictors of resilience.

Two primary correlates of resilience are dispositions and social resources (Chen, 2023). Social resources include various factors related to individual resilience, like access to social support, emotional support, network size, and instrumental support (Chen, 2023). According to

Chen (2023), dispositions related to resilience include ability beliefs, relationship perceptions, personality domains, and life orientations.

Ability beliefs are defined as mastery that represents the extent to which one controls the forces that affect one's life. Aspects of ability beliefs show a relationship to individual resilience in adult and children studies, where greater levels of self-esteem, perceived mastery, and perceived competence were associated with higher levels of resilience (Chen, 2023).

The second element, *relationship perceptions*, involves how close or isolated one is to other individuals. Therefore, related factors are alienation, loneliness, and social connectedness (Chen, 2023). Studies examining this factor have shown that more human interaction is correlated with greater levels of resilience.

Religious beliefs focus on an individual's devotion to a higher power. This devotion can be displayed through involvement with religious or spiritual communities, ritual participation, and other disciplines. Greater religiosity and spirituality are associated with greater levels of resilience (Chen, 2023).

Personality domains focus on a variety of broad yet defining dispositions. For example, this category includes the Big Five personality traits: neuroticism, extraversion, openness, agreeableness, and conscientiousness. As for their relationships to resilience, higher neuroticism levels appear to lower resilience, while the other four traits are positively associated with resilience (Chen, 2023). For instance, other characteristics, like shyness, which would involve low extraversion and openness, signify lower resilience levels.

Finally, there are *life orientations*. This factor focuses more on the flexibility of an individual's personality, especially when making decisions with little information and resources. Therefore, more hardened personalities like perfectionists and people with a high external locus

of control tend to display lower resilience than more adaptable individuals and individuals driven by an internal locus (Chen, 2023).

Present Study

Our present study seeks to investigate one main question: does dispositional accommodative efficacy have a solid relationship to resilience? From previous literature, there are strong correlations between other dispositions and resilience. If dispositional accommodative efficacy also displays such results, it would significantly impact the second question of the study. The second aim to observe is if, considering the other known predictors of resilience, accommodative efficacy mediates the effects of those components. The answer to this is essential because it would suggest a strong correlation between resilience and dispositional accommodative efficacy while hinting at new clinical approaches to mental well-being, which Chen, 2023 has also suggested.

Methods

Participants and Design

The present analysis was a reanalysis of data based on the methods from Chen & Smith, (in preparation). In that study, which analyzed a survey conducted through RedCap 13.4.4. Version (Vanderbilt University 2024), there were a total of 214 participants that participated in a portion of the survey. Because of this, the sample size of each analysis varied to minimize the potential effects of bias from differential dropout. All participants were over 18 years of age and at the time, lived in the US. 152 participants reported that they were 21 and younger, and the rest reported that they were older than that range.

The survey had primarily female participants with 130 participants reporting that they were female. 54 reported that they were male, and 2 reported that they were nonbinary. As for

race/ethnicity, participants were mostly white/ European American, with a sample size of 121. 2 were Black/ African American, 34 were of Asian descent, 3 were Native American/Alaska Native, 2 were from the Indian subcontinent, and there was 1 Native Hawaiian/ Pacific Islander. 14 participants considered themselves as other. Additionally, 20 participants considered themselves Hispanics and 166 participants reported that they were non-Hispanic. They were recruited through three approaches.

For the first approach, students were recruited from Vanderbilt University as a way to earn course credit for certain psychology courses. The second technique involved recruiting participants from the Social Psychology Network (SPN) and Hanover College, two research participation boards that could be accessed by the general public. The last approach utilized the snowballing method where members of the Appraisal, Stress, Coping, and Emotion (ASCE) lab encouraged individuals to take part in the survey, and then encouraged said individuals to send the study to their associates.

Measures

Predictors: First Order Scales

The following scales were used in Chen & Smith, 2020 to assess the resilience predictors.

Trait Mindfulness. Trait mindfulness is the observed one's awareness of their environment while along with their ability to remain flexible and adaptable. It was measured with the dispositional Mindful Attention Awareness Scale Scale. In previous studies, evidence for the reliability and validity of MAAS was displayed in various populations, such as Canadian cancer patients, college students, Chinese adolescents, and adults from a northeastern community in the US (Brown & Ryan, 2003; Carlson & Brown, 2005; Black et al., 2012). The MAAS demonstrated an alpha reliability of .85 in the current study.

Social Connectedness. Social connectedness is the cognitive processing related to the understanding of one's closeness to others in the world. It was measured with the Social Connectedness Scale-Revised (SCS-R; Lee et al., 2001). Lee et al. (2001), demonstrated good reliability for this scale, and in the present sample, Cronbach's alpha for the scale was .93.

Religiosity. Religiosity is stated as the strength of an individual's belief in religion, and this concept was measured with the Centrality of Religiosity Scale (CRS-10; Huber & Huber, 2012). This scale investigated five dimensions of religiosity: intellectual dimension (one's knowledge about religion and religiosity), ideology (one's belief in an otherworldly reality beyond real world experiences), public practice (participation in social religious rituals), private practice (participation in isolated religious rituals), and religious experience (one's direct contact with an otherworldly reality). In one 2012 study, the CRS-10 had an alpha reliability of .93 in a sample with participants from 21 countries. In this study, the alpha reliability was .94.

Spirituality. Spirituality is one's deep belief in something greater than oneself. The scale for this component was the short form of the Daily Spiritual Experience Scale (DSES; Underwood, 2011). The DSES scale results in this study have an internal consistency of .91.

Optimism. Optimism is described as one's hope that a desired outcome will occur. It was measured with the Life Orientation Test (LOT) (Scheier & Carver, 1985). Analyses reported from Scheier & Carver (1985) displayed that the LOT scale had good reliability, and for the present study, Cronbach's alpha was .84.

Mastery. Mastery is one's perception of the control they have in their lives. For this measure, the associated scale was the Pearlin Mastery Scale (PM; Pearlin & Schooler, 1978). This scale displayed a Cronbach's alpha of .75.

Perceived Competence. Perceived competence investigates one's belief in their ability to complete tasks and achieve goals. It was measured with the with a four-item perceived competence scale (Smith et al., 1991). The Cronbach alpha for this measure was .74.

General Self-Efficacy. General self-efficacy is described as one's overall positivity related to overcoming challenges and adversity. The scale for this measure was the the General Self-Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995). In the present study, the internal consistency through GSE was .86

Self Esteem. Self Esteem is defined as one's positive or negative beliefs about themselves. The Rosenberg Self-Esteem Scale was used to measure this concept (RSE; Rosenberg, 1965). For the adult age demographic in particular, the RSE has a very high internal consistency and reliability (Fleming & Courtney, 1984). For the present study, Cronbach's alpha was .89.

Self-Esteem Instability. Self-esteem instability observes how one's self-esteem can change based on the context of different situations. The associated scale was the Self-Esteem Instability Scale (Flaxer, 2012). Cronbach's alpha was .82 in this study.

Locus of control/LOC. Locus of control is based on the various events happening in one's life. It was measured with Levenson's Locus of Control Scale (Levenson, 1981). Three subscales were a part of this measure: internal scale (extent to which the consequences one faces is due to their own behaviors), powerful others scale (extent to which the consequences one faces is due to the behaviors of other individuals), and chance scale (extent to which the consequences one faces is random or based on luck). For this study, the Cronbach's alpha were .52, .68, and .67 for the internal, powerful others, and chance scales respectively.

Commitment. Commitment is one's perception of work, self, and others as meaningful and essential. The commitment subscale from the Dispositional Resilience Scale was used to measure commitment (Bartone et al., 1989). In the present sample, the alpha reliability was .71.

Tolerance for Ambiguity. Tolerance of ambiguity is explained as one's tendency to like or dislike things or ideas that are novel, complex, or unfamiliar. The scale for this measure is the Multiple Stimulus Types Ambiguity Tolerance Scale–II (MSTAT–II; McLain, 2009). Diverse populations that used the scale, such as undergraduate students, displayed good reliability and validity. For the present study, Cronbach's alpha was .85.

Alienation. Alienation is the degree to which one experiences negative feelings toward their peers, like anger, shame, and rejection. The associated scale was the Alienation from Others subscale from the PSALI Questionnaire (Walsh et al., 2018). The subscale had a high internal consistency of .85 (Walsh et al., 2018). For this study, the internal consistency remained high with a Cronbach's alpha of .80.

Perfectionism. Perfectionism involves one's desire to avoid failure and to lead a life filled with accomplishments and positive outcomes. The scale for this measure was a brief version of the Multidimensional Perfectionism Scale (F-MPS-Brief; Burgess et al., 2016). Additionally, the F-MPS measured two dimensions of perfectionism: striving (tendency to create high goals and aim for accomplishment of said goals) and evaluative concerns (blaming oneself for not achieving set goals and concerns about preoccupation with self-deprecating thoughts). These dimensions were calculated separately, and in this study, the internal consistency was .77 for the striving subscale and .80 for the evaluative concerns subscale.

Sense of Coherence. Sense of coherence is defined by three components: manageability (the predictability and structure of one's environment), manageability (availability of resources),

and meaningfulness of life (desire to partake in essential life activities). For this concept, all three components were combined into a single scale, the Sense of Coherence Scale (SOC-13; Frenz et al., 1993). Cronbach's alpha for this study was .69.

Loneliness. Loneliness is the social pain derived from lack of close social connections. The scale for this component was measured with the UCLA Loneliness Scale (Version 3) (Russell, 1996). In a validation study (Russell, 1996), this scale demonstrated a good internal consistency of .89. In this study, Cronbach's alpha is .92.

Emotional Intelligence. Emotional Intelligence is one's knowledge about perceiving, understanding, and handling their emotions and the emotions of others. There were three associated scales: the mood repair subscale from the Trait Meta-Mood Scale (TMMS; Salovey et al., 1995), the Mood Awareness Scale (MAS; Swinkels & Giuliano, 1995), and the Toronto Alexithymia Scale (TAS; Bagby et al., 1994). For the MAS, TAS, and TMMS scale, the internal consistencies were .80, .83, and .82 respectively.

Psychological Flexibility. Psychological flexibility is the ability to focus on satisfying long-term goals instead of consistently satisfying immediate urges. For this component, the scale was the Acceptance and Action Questionnaire II (AAQ-II; Bond et al., 2011). There was a diverse sample population with 2816 participants that supported the reliability and validity of this scale (Bond et al, 2011). In this study, with our participants, Cronbach's alpha was .83.

Shyness. Shyness is the lack of confidence in approaching social situations. It was measured with the Revised Cheek and Buss Shyness Scale (RCBS; Cheek, 1983). Validity and reliability were tested with a sample of 261 college students (Hopko et al., 2005). Cronbach's alpha in this study was .90.

Big Five Personality Traits. The Big Five personality traits include openness, extraversion, neuroticism, agreeableness, and conscientiousness. The measure that observed these traits was the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992). Across a variety of contexts and within college-age individuals, this scale has displayed good reliability and validity. In this study, there were similar results (alpha = .86 for neuroticism; alpha = .82 for extraversion; alpha = .74 for openness; alpha = .87 for conscientiousness; alpha = .76 for agreeableness).

Social Support. Social support is one's belief that they can turn to others for assistance or comfort. It was measured with three separate scales: emotional support scale (Dean & Lin, 1977); social network scale (Donald et al., 1978); and the instrumental support scale (Strogatz, 1983). All of these subscales demonstrated good reliability. For this study, Cronbach's alpha was .71 for the social network scale, .61 for the instrumental support scale, and .83 for the emotional support scale.

Predictors: Second Order Scales

Due to a large number of first-order predictor scales, Chen and Smith (in preparation) combined many of these predictors into five second-order scales through a combination of exploratory factor and cluster analysis. The second order scales created were maladaptive beliefs, self-efficacy/mastery, religious beliefs, emotional awareness, and social orientation. Maladaptive beliefs combined neuroticism, self-esteem instability, perfectionism- evaluative concerns, self-esteem (reverse scored), psychological flexibility (reverse scored), powerful others LOC, chance LOC, optimism (reverse scored), TMMS-mood repair (reverse scored), sense of coherence (reverse scored), and tolerance of ambiguity (reverse scored; alpha= .92). Self-efficacy/mastery combined mastery, conscientiousness, internal LOC, commitment,

perceived competence, general self-efficacy, and perfectionism- striving ($\alpha=.87$). Religious beliefs included religiosity and spirituality ($\alpha=.91$). Emotional awareness combined mood awareness and the TAS (reverse scored) ($\alpha=.81$). Social orientation combined agreeableness, network size, extraversion, sense of connectedness, adequacy of emotional support, availability of instrumental support, alienation (reverse scored), loneliness (reverse scored), and shyness (reverse scored; $\alpha=.86$).

These were analyzed along with the trait mindfulness first order scale. Openness was another first order scale that was initially included in the analysis. However, the latter was removed when it was revealed that the predictor did not significantly correlate with either DAE or resilience. Furthermore, all of these predictors had a good internal consistency. Cronbach's alpha for maladaptive beliefs was .92; religious beliefs was .91; social orientation was .86; emotional awareness was .81; self-efficacy/mastery was .87.

Resilience

Resilience is the ability for an individual to bounce back from stress and trauma. This concept was measured two ways through the Brief Resilience Scale (BRS; Smith et al., 2008) and a brief version of the Connor-Davidson Resilience Scale (CD-RISC; Campbell-Sills & Stein, 2007). For both scales used in this analysis, there was good reliability. These two scales were combined into a single second-order scale representing resilience with an alpha of .83.

Dispositional Accommodative Efficacy

Dispositional accommodative efficacy (DAE) is one's ability to mentally adjust to an unchangeable situation. It was measured through a DAE Likert scale and through an item from a

multidimensional measure of appraisal style. These two scales were combined into a single second-order scale representing resilience with an alpha of .74.

Dispositional Problem Focused Efficacy

Dispositional problem focused efficacy (DPFE) is linked to dispositional accommodative efficacy but focuses on one's ability to change an unwanted situation. It was investigated similarly to DAE through a DPFE Likert scale and an item from a multidimensional measure of appraisal style. These two scales were combined into a single second-order scale representing resilience with an alpha reliability of .75.

Results

Preliminary Analyses

Before the main analysis, we ran a preliminary set of analyses to determine which of the predictors met the preconditions for potential mediation with DAE. To do so, we examined the correlational structure of the data. First, as predicted, DAE was discovered to be strongly correlated with resilience ($p < .001$). Next, we investigated which predictors were significantly correlated with both DAE and resilience. As mentioned previously, the openness predictor was excluded due to lack of correlation with DAE and resilience, leaving six predictors for the primary analyses.

Primary Analyses

For the primary mediational analyses, we used multiple regression (using jamovi 2.3.28.0, windows version) to examine whether and to what degree DAE mediates the relationship between resilience and each primary predictor variable: trait mindfulness, maladaptive beliefs, self-efficacy/mastery, religious beliefs, emotional awareness, and social orientation. We ran a separate set of analyses for each of the predictor variables by

themselves. *Overview of Primary Analyses*

To start, we analyzed the relationships between the predictors and DAE. Afterward, we used linear regression to predict the relations between resilience and the predictors. In the final step we used both the predictor and DAE to predict resilience. It should also be noted for these analyses and all analyses going forward that raw estimates were used. These initial analyses showed that the data are consistent with at least partial mediation if the predictor significantly predicts DAE, and DAE predicts resilience with the predictor in the equation. This pattern implies mediation if the indirect effect of the predictor through DAE is significant, which was calculated through a Sobel calculator (Sobel, 1982). Furthermore, with DAE in the equation, the direct effect of the predictor on resilience should be reduced. If this effect was no longer statistically significant, then the analyses would have been consistent with full mediation.

To truly see the importance of this partial mediation between DAE and resilience, we also analyzed the relationship between DPFE, resilience, and the predictor variables. Due to the previously mentioned strong correlation between DAE and DPFE, we expected that the two efficacies would demonstrate similar mediational relationships with resilience. However, we mainly wanted to investigate if the significant mediational relationships would remain once DAE and DPFE were combined into a single analysis. Would both efficacies still show reliable mediations or only one of them? If DAE consistently showed mediational relations to resilience in these analyses than did DPFE, it would be consistent with DAE having an especially close relation to resilience.

Primary Analysis Results

The results of these combined analysis results are demonstrated in figures 1 through 6, respectively. Using the trait mindfulness predictor as an example, when DAE and resilience was analyzed through this factor through a single mediator analysis, $p < .001$ (Figure 1). Since the

direct effect between trait mindfulness and resilience was significant and the residual direct effect was not, there appeared to be full mediation for that predictor. Additionally, trait mindfulness, when analyzed with DPFE and resilience, had a high p-value, $p < .001$ similar to the DAE solo analysis (Figure 1).

However, when DAE and DPFE were analyzed together in a combined analysis trait mindfulness, the common variance the two shared was removed, and the distinctions between the two displayed DAE with a higher effectiveness as a partial mediator than DPFE. More specifically, the relationship between DAE and resilience had a consistently high significant relationship, $p < .001$, close to the p-value from the single mediator analysis (Figure 1). The full mediation effect was consistent as well in this new analysis due to the continued significance. On the other hand, the relations between DPFE and resilience became nonsignificant or marginally significant (Figure 1). And as predicted, the full mediation effect displayed in the DPFE solo analysis was no longer present. Since DAE predicts resilience when controlling for DPFE, but DPFE does not predict resilience when controlling for DAE, this implies that it is some property unique to DAE that is primarily responsible for the relations between DAE and resilience, making this relation especially close and noteworthy.

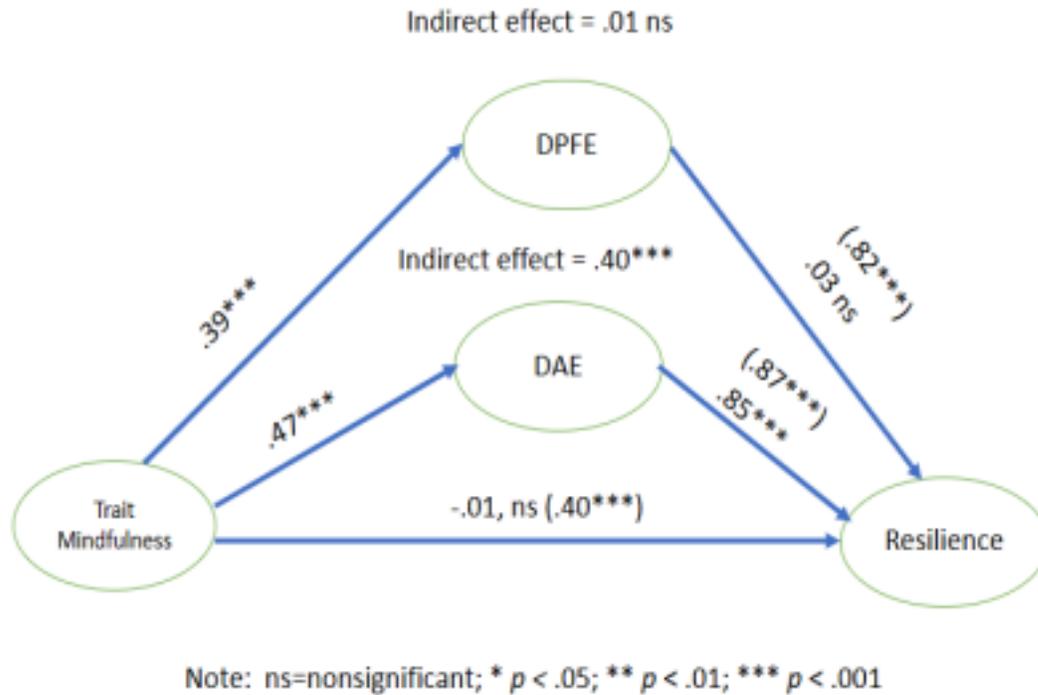


Figure 1. DAE and DPFE analyses for trait mindfulness and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect of trait mindfulness on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

For the other predictor variables, two of them besides trait mindfulness also demonstrated a full mediation effect between the predictor and resilience: emotional awareness and religious beliefs. They also had a statistically significant direct effect and a non significant residual direct effect. The other three displayed a partial mediation effect: maladaptive beliefs, social orientation, and self-efficacy/mastery. Therefore, they had a significant direct effect and residual direct effect.

Additionally, a majority of the other predictor variables: maladaptive beliefs, religious beliefs, emotional awareness, and social orientation also displayed a decrease to nonsignificance

between DPFE and resilience when DAE and DPFE were combined. The same absence of significance applied to the effect of each predictor on resilience as mediated through DPFE.

Only the self-efficacy/mastery variable displayed marginal significance, $p < .10$, when the two efficacies were analyzed together, which also applied to the mediative effect of DPFE (Figure 3).

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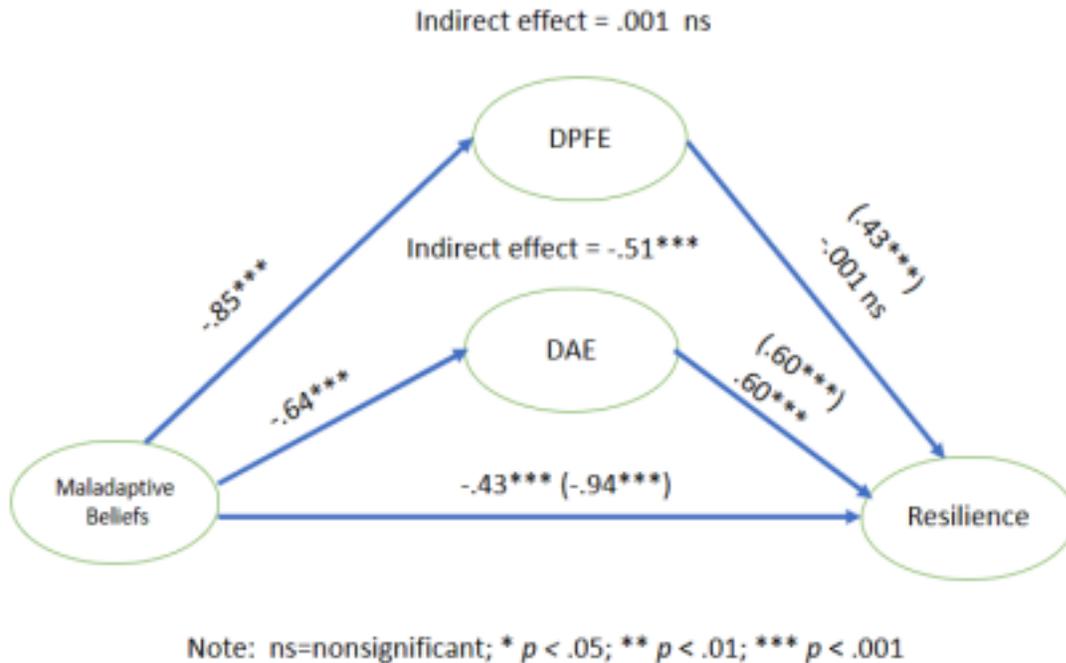


Figure 2. DAE and DPFE analyses for maladaptive beliefs and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect of maladaptive beliefs on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

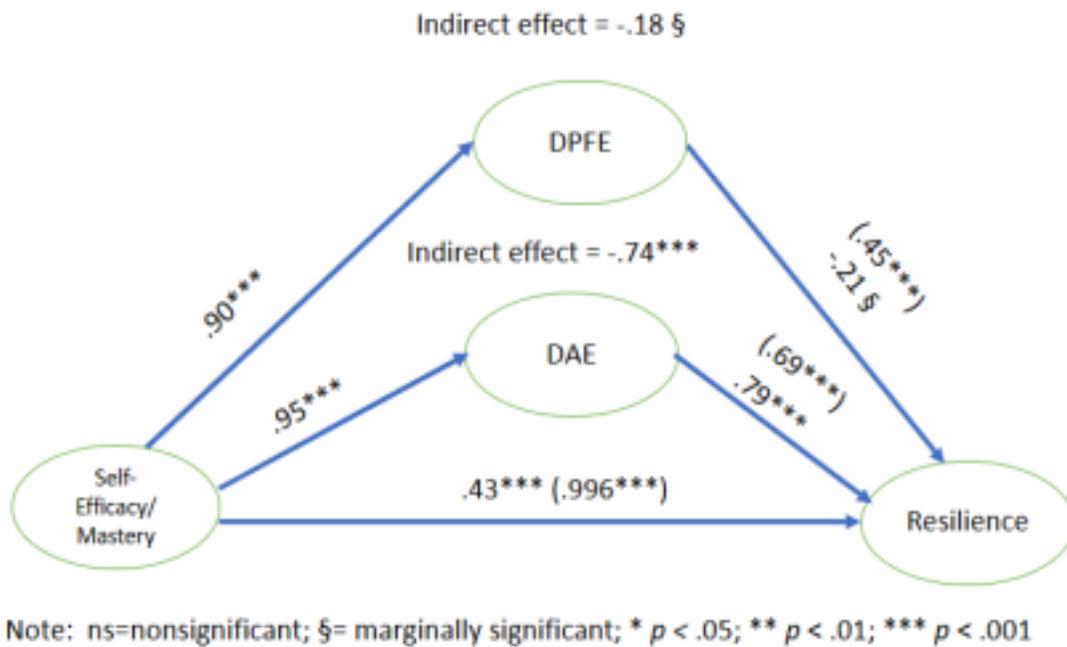


Figure 3. DAE and DPFE analyses for self-efficacy/mastery and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect self-efficacy/mastery on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

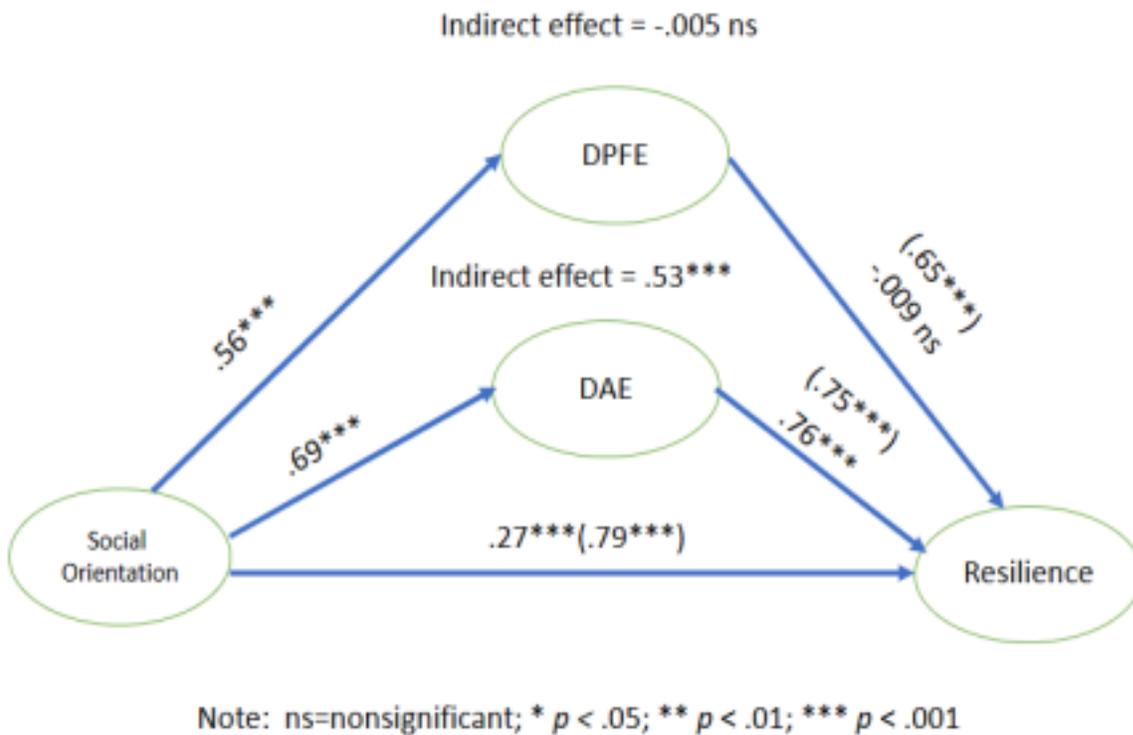


Figure 4. DAE and DPFE analyses for social orientation and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect of social orientation on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

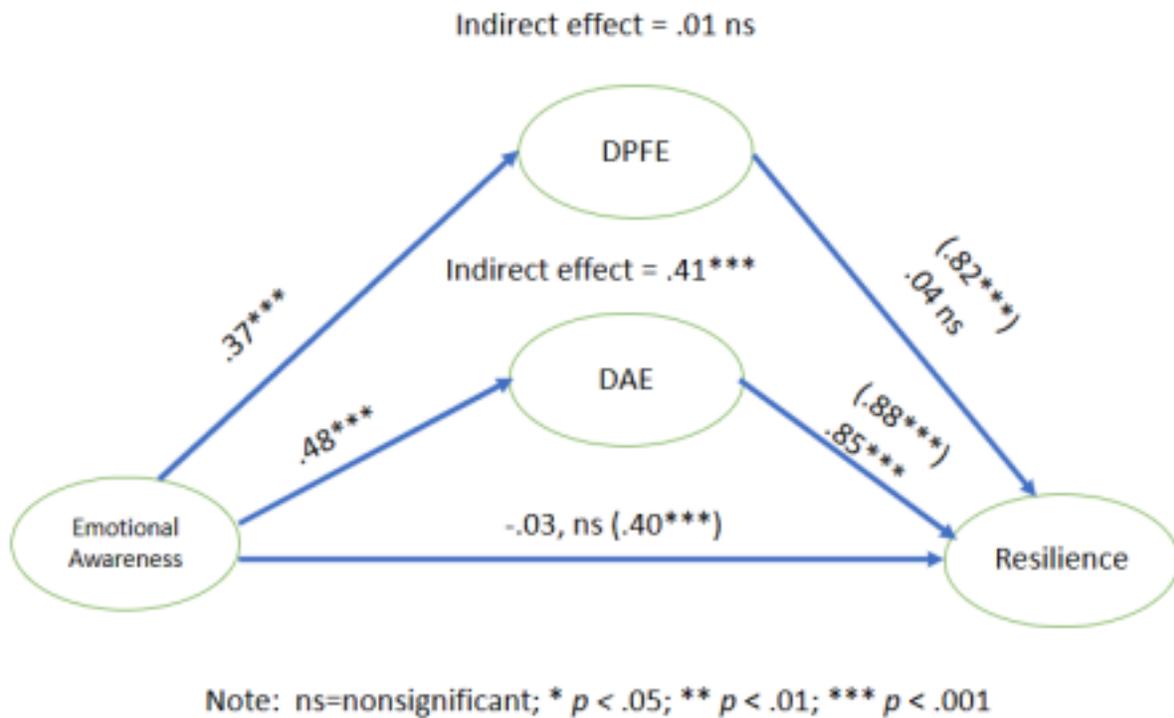


Figure 5. DAE and DPFE analyses for emotional awareness and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect of emotional awareness on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

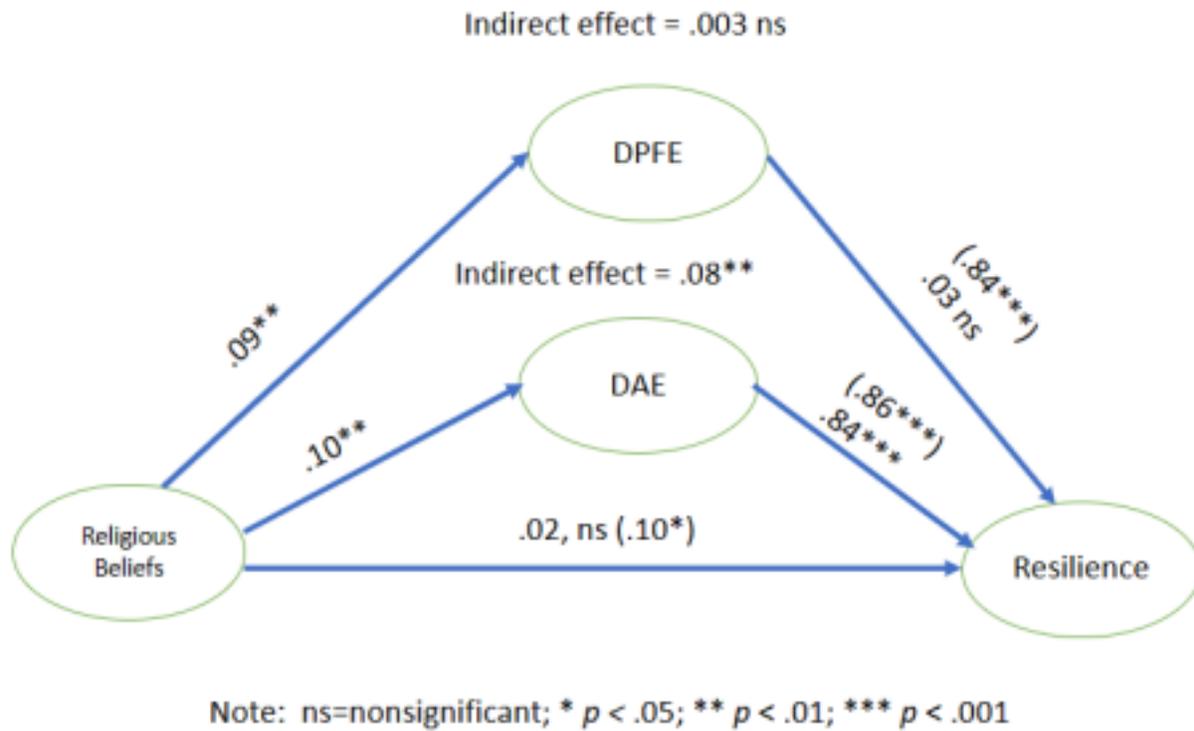


Figure 6. DAE and DPFE analyses for religious beliefs and resilience. The coefficients in parentheses between DAE/DPFE to resilience are from the solo mediational analyses. The coefficients without parentheses are from the final combined analysis. For the direct effect of religious beliefs on resilience, the two coefficients come from the combined analysis, with the coefficient in parentheses being the total direct effect on resilience, and the coefficient outside the parentheses indicating the residual direct effect after entering both DAE and DPFE into the analysis. Similarly, the indirect effects shown are only from the final, combined analysis.

Discussion

The presented study has examined whether dispositional accommodative efficacy (DAE) strongly correlates with resilience. In addition, our study investigated the degree to which the effects of other predictors on resilience were at least partially mediated through DAE. From the results, there is highly suggestive evidence that DAE displays a strong relationship to resilience, and at least partially mediates the relation between each of the following predictors and resilience: trait mindfulness, maladaptive beliefs, self- efficacy/mastery, emotional awareness, religious beliefs, and social orientation.

Moreover, this relationship remains significant when DAE analyses are combined with dispositional problem-focused efficacy (DPFE.) DPFE is based on the belief that one can fix one's situation. Compared to DAE, this means that this efficacy relies more on what can be done to fix an unwanted scenario, in order to create the ideal outcome, instead of mentally adjusting to the scenario to make it acceptable. Conceptually, DAE should be more closely related to resilience than DPFE because bouncing back from difficult stressors should be more closely related to accommodating to a situation that can't be changed (DAE), than getting things to be the way you want (DPFE). And as displayed in the results, while both efficacies have significant connections to each predictor variable and resilience on their own, the significance between DPFE and resilience for each variable decreases to little or no significance when DAE and DPFE are analyzed in relation. Such a drastic change provides further evidence that some aspect of DAE is unique, relative to DPFE, that is closely related to resilience. Therefore, these results in particular demonstrate that the relationship between DAE and resilience is special.

These effects are essential when considering how disposition impacts resilience, since the results of this study could possibly lead to the formation of interventions that could increase the resilience in less resilient individuals. This consequence could be particularly important for people with trait anxiety and emotional disorders like depression. Even people with chronic diseases, such as cancer, could benefit since numerous studies have been done about the relationship between resilience and cancer survivability (Min et al., 2013; Seiler & Jenewein, 2019; Ludolph et al., 2019). Additionally, the results of this study suggest that assessment of one's level of DAE could help clinicians better understand individual differences in depression and anxiety. An additional potential research question would be whether interventions increasing DAE might be effective in alleviating depression and anxiety.

Despite these positive outcomes, it is necessary to acknowledge two main limitations of this study. The analyses were done from self-report data, which for some, might call the study's validity into question. Participants of this study could have fallen to particular biases, such as social desirability bias, and given falsified reports. However, it is also important to note that this was not highly probable since the data portrayed consistent trends, in that the measures for the dispositions provided evidence for long-lasting relationships between DAE/DPFE and resilience, resilience and the predictors, and DAE/DPFE and the predictors. More importantly, this applies to the main finding that DAE and resilience had similar high alpha reliabilities, whether through a solo analysis or a combined analysis with DPFE.

The second main limitation was that this study was cross-sectional, which does not allow us to classify the relationships discovered as causal. It also does not allow us to examine the effects of these dispositional connections over time to observe a long-term effect. However, with the conclusions the study has provided, there are other ways we can observe the effectiveness of DAE in future studies.

We know that DAE has been shown to be more effective than DPFE, and to be closer to the concept of resilience, which involves one's ability to recover from stress. Furthermore, the intervention studies mentioned previously include testing, in part, if DAE is involved in that active recovery process. Another associated question allows for the investigation of whether and how DAE can act as a stress buffer. This investigation would look into people with high DAE to examine if they react to a given stressor less strongly than people who have lower DAE. Since there is a mediative effect with DAE, its efficiency in reducing the impact of stressful situations is highly probable. If this is true, and there is a solid connection between DAE and stress

reduction, this finding would also benefit individuals who struggle with anxiety and a low stress threshold.

To reiterate the main point of this study, DAE offers a lot of potential benefits for improving resilience due to the close and significant relationship it has with resilience.

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