

THE EFFECTS OF INTERCESSORY PRAYER ON RESILIENCE

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## **The Effects of Intercessory Prayer on Resilience**

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There are no conflicts to disclose

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**Abstract**

Intercessory prayer has been shown to have positive effects on those who pray and has been linked to reduction of stress as well as feelings of increased social support. This study seeks to determine if praying for others will increase resilience in the person who performs intercessory prayers on behalf of others using the Conner-Davidson Resilience Scale. Scales are administered pre and post experiment; the hypothesis being that those who perform intercessory prayers will report higher scores on the post-experiment scale as compared to their pre-experiment scores on the Conner-Davidson Resilience Scale. The results of the study did not show that intercessory prayer had an effect on resilience. Due to the size of the sample size of the experiment no statistically significant findings were obtained.

*Keywords:* Prayer, Resilience, Religious Practices, Coping

### The Effects of Intercessory Prayer on Resilience

There is a rich history of studying religiosity, the quality or extent of one's religious experience (APA Dictionary of Psychology 2021), and its effects on the psychology of those who are religious (Bade & Cook, 2008; Baesler 2002; Greenway, et al., 2017; Laird, et al., 2004; Lambert, et al., 2010; McCullough and Larson, 1999; Vasiliauskas & McMinn 2013). The earliest studies that focused on religiosity focused mostly on general measures of religiosity, such as amounts of church attendance and prayer. These studies investigated the frequency of church service attendance in a year or the frequency of prayer in a given day, week, or year. From these general measures of religiosity, researchers began to look at more nuanced ways of operationalizing religiosity, such as positive and negative religious coping, religious commitment, and religious problem-solving styles (Lehmann and Steele, 2020; Pargament, 1997; Parenteau and Wu, 2021). In the same way that the study of religiosity became more nuanced, so too did the study of prayer. Many studies document the benefits of an active prayer life (Bade & Cook, 2008; Greenway, et al., 2017; Lambert, et al., 2010; McCullough and Larson, 1999; Vasiliauskas & McMinn 2013). Laird et al. (2004) began investigating the qualitative benefits of particular types of prayer in their analysis of the ACTS prayer system, an acronym for prayer within the Christian faith where each letter represents an element of prayer: Adoration, Confession, Thanksgiving, and Supplication. To continue this tradition of moving from general to more nuanced conceptualizations of prayer, the current study will consider intercessory prayer. Intercessory prayer (IP) is praying to God on behalf of others. There are few studies of IP; fewer still that concern themselves with the effects of IP and psychological resilience. The goal of this study is to determine if IP will improve the

resilience of the individual praying.

### *Prevalence of Prayer*

According to the Pew Research Center, over half of adults in the United States (58%) report praying at least once a day and 75% report praying at least once a week (Pew Research Center 2008). One study found that intercessory prayer (IP) might benefit everyone who engages in prayer, even those who do not believe in the efficacy of prayer, as prayer was found to be a type of social support (Schafer, 2013). One reason to study IP and resilience among college students is to determine if praying, regardless of beliefs about efficacy, provides quantifiable benefits to the person praying. Another reason to study IP and resilience among college students is, according to Pew Research Center (2014), that there has been a significant decline in participation in organized religion over the last several decades, particularly within the Millennial generation and younger. The Pew Research Center (2014) reported that the Millennial generation endorsed the lowest participation rate in organized religion in United States history. Therefore, current undergraduate students (of the Millennial generation and younger) provide a relevant sample to replicate Schafer's findings (2013).

Praying for others is common among religious persons (Masters, et al., 2006). It is more common still in those who are religious and experiencing adversity (suffering from pain or environmental stressors, such as losing a job; Schafer, 2013). Past research on prayer has primarily been interested in the frequency of prayer. Among college students, in a 2006 study, Masters, et. al. reported that 80% of the college sample reported praying privately. Regarding frequency, in another study Laird, et al. (2004) found that of those who reported praying, 70% had prayed in the last month. In addition, Laird, et al. (2004) further found that people in pain

tend to pray more than those who are not in pain, with physical pain linked to the highest amounts of prayers. Regarding other types of adversity, Baker (2008) reported that people in traditionally underprivileged or marginalized groups, such as women, African Americans, and older Americans, pray more often than other individuals. Baker (2008) also found that, of people who pray, people under 40 years old report praying the least frequently, while those over 70 pray the most frequently. Baker further found that the mean frequency of prayer reduced as income and education levels increased (2008). Krause and Chatters (2005) noted that African American Christians were reportedly more involved in prayer across 16 of the 17 different measures of prayer than all other respondents in the study. Similarly, another study found that African American women were more likely to engage in prayer than White/Caucasian, Hispanic, Japanese, and Chinese women (Fitchett et al., 2007).

### ***Reported Benefits of Prayer***

One is considered to have an active prayer life when they report praying once a week to several times a day. Previous studies have shown benefits of an active prayer life in the forms of increased charity (such as monetary gifts to strangers) (Shariff & Norenzayan, 2007), fewer financially-related physical health issues (Krause, 2003), a high-quality sense of support (Krause and Chatters, 2005), increased optimism about the future (Schafer, 2013), increased self-control and self-regulation (Friese, et al., 2014), increased empathy (Vasiliauskas & McMinn, 2013), and better coping (Bade & Cook, 2008). Those who prayed more often reported greater benefits than those who prayed less frequently. According to Laird, "Prayer plays a particularly important role for those coping with stressful life events... different aspects of prayer were found to be significantly correlated with several physical concerns" (Laird et al., 2004). Laird found the

quantity, quality, and type of prayer led to significant physical improvements in those suffering from Arthritis. Laird et al. (2004) also found a positive correlation between prayer and emotional and social well-being, as well as hope. Schafer (2007) found that in addition to the positive effects of praying for others, there are benefits of being prayed for by a close social support network and that those being prayed for are more likely to be optimistic about the future. Ai et al. (2008) found that individual prayer, defined as prayer done by oneself rather than as part of a corporate worship service, has positive effects on mental health and a person's general well-being. Schafer (2007) built on this concept and found that religious and nonreligious persons alike both benefit from praying ties (that is the type of group praying for someone, and the number of people in the respective groups praying for that person). They also found that non-kin prayer ties were the most important grouping of prayer ties in determining optimism about the future. In a study examining intercessory prayer in Christian, African American families, Skipper, Moore, and Marks (2018) found that this population believed their prayers for others helped protect them (those praying for others) against depression, built personal strength by reducing personal stress, strengthened marital bonds, and helped unite their communities. Skipper et al. (2018) stated that those with a genuine belief their prayers will be answered by God gives those praying hope that they are helping reduce the stress of the person for whom they are praying. They also found that "praying for others also helped reduce personal stress" (Skipper, et al., 2018, p 380). Participants in the study reported that intercessory prayers are an important factor in the success and longevity of their marriages, because intercessory prayers were said to preserve, and in some cases, save marriages that would otherwise have failed (Skipper et al., 2018). "As Krause (2003) recognized in a sample of over 1,200 African American Christians, a genuine belief that prayers will be answered gives the praying person an optimism



that they are helping alleviate the stress of the person for whom they are praying...praying for others also helps reduce personal stress” (Skipper et al., 2018 p 380). If both being prayed for and praying for others has such significant effects on optimism, feelings of personal strength, and bonding with others, it is reasonable to expect that praying intercessory prayers on behalf of another could influence one’s personal resilience.

### ***Effects of Spirituality on Resilience and Burnout***

Burnout is the combination of emotional exhaustion, depersonalization, and reduction in personal achievement caused by chronic stress among those who work with other individuals in some way (Maslach et al., 1982). Carneiro et al. determined there was a significant positive relationship between spirituality/religiosity and resilience among (mostly women) employees of a public hospital in Brazil. Because of this positive relationship, these employees are less affected by burnout. In the Carneiro et al. (2018) study, it was observed that the variables of the burnout and resilience domains were negatively correlated with religiosity/spirituality dimensions, and most of the religiosity and spirituality dimensions of the BMMRS scale were also negatively correlated with burnout. In both cases the greater the number of reported personal religious experiences were correlated with fewer reported instances of burnout. Hardiman and Simmonds (2012) noted that clinicians who treat trauma on a regular basis are particularly susceptible to vicarious trauma resulting in burnout and that spirituality has helped the functioning of those clinicians, particularly when treating traumatic cases. In another study, researchers found a significant increase in job satisfaction and mental well-being, as well as a reduction in the levels of depersonalization and emotional exhaustion, as a result of being in the experimental group in which participants performed a Christian

prayer (Chirico et al., 2020). Carneiro et al. found that as the amount of daily spiritual experiences increased, self-reported burnout also decreased. Both Carneiro et al. and Underwood and Teresi defined spiritual experiences as praying, reading the Bible, religious ceremonies and services, feeling God's presence, love of others, admiration for nature, and a desire for closeness to God (Carneiro, et al., 2018; Underwood and Teresi, 2002).

Resilience is defined as internal stability, awareness, and flexibility, all internal resources that enable individuals to cope with stressful situations. DeFord (2015) also found that high levels of resilience were associated with increased hope and reduced stress.

If spirituality as a global index has been found to be associated with hope and resilience, along with reduced stress, it is possible that IP will also be associated with high levels of resilience. IP has been associated with an increase in hope, optimism, and empathy. Prayer generally has been correlated with similar outcomes. It is reasonable to expect that IP will increase resilience for two reasons. First, praying for another redirects focus from self to others. This type of shift in thinking allows people who have been through a traumatic event to gain a new perspective, which may help to increase resilience. In particular, DeZutter et al. (2011) found that within the Transactional Theory of Stress and Coping (TTSC), religion, and more specifically prayer, may be used to positively re-assess the meaning or nature of the pain and trauma being experienced. Second, prayer has been shown to be a source of comfort and support to the person praying. According to Greene et al., (2003) "Belief in something larger than oneself, and ability to develop meaning following a traumatic event were often discussed as important characteristics in the development of resilience" ( p 78). IP then may also improve resilience because, according to Carneiro et al. (2019), spirituality generally, and prayer specifically, increases internal stability and flexibility, both integral components of resilience.

### ***Present Study***

The purpose of this study is to examine the effects of intercessory prayer on resilience. There has been much previous work that has focused on one of these variables or on a particular aspect of one of these variables (prayer leading to greater/lesser generosity for example), but there is limited research focusing on the effects of intercessory prayer on resilience. Due to the positive effects previous studies have found of prayer generally, and intercessory prayer specifically on optimism, hope, and feelings of strength and endurance, it is reasonable to expect that intercessory prayer will enhance resilience.

## **Method**

### **Participants**

The sample consisted of undergraduate twenty-six ( $N=26$ ) undergraduate students at a public midsize Southeastern university who completed the experiment in return for partial course credit.

### **Measures**

***Demographic questionnaire.*** Participants provided information on age, sex, race, academic class, marital status, family income, religious affiliation, and church attendance to be used as control variables.

***Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2020):*** This is a 25- item scale that measures one's ability to emotionally recover after many physical traumas (burn injury patients, cancer patients, amputees, etc.) and psychological traumas (PTSD,

depression, concussive experiences, etc.) and is being used as the dependent variable.

Regarding reliability, The CD-RISC has an acceptable test-retest reliability of  $r = 0.87$  (Davidson, 2021). Test-retest reliability was also found in Japanese students (Ito, et al., 2009), by Baek et al. (2010) in Korean subjects ( $r = 0.70$ ), and by Tsigkarpoulou et al. (2018) and in Greek subjects ( $r = 0.925$ ) with a Chronbach's alpha of 0.92. Regarding construct validity, the CD-RISC has been compared to many other measures that relate to aspects of resilience (e.g., hardiness, social support, stress-coping ability, positive and negative affect, etc.) (Davidson, 2021). The construct of resilience would indicate that those who have significant psychological disorders such as depression, anxiety, substance use disorders, PTSD, and suicidal symptoms would be less resilient than those who do not suffer from these types of diagnoses (Davidson, 2021). Davidson (2021) goes on to report that construct validity for the CD-RISC comes from multiple studies that examined different aspects of resilience. A study of 252 veterans of Iraq and Afghanistan wars that was completed by Roberts et al in 2007. Roberts et al. (2007) found that "those with higher resilience were less likely to develop PTSD, and of those who did have PTSD, resilience was uniquely associated with decreased PTSD severity" (Roberts, et al., 2007; Davidson, 2021). Davidson also points to a study by Roy et al. (2007) that "showed that the CD-RISC score was lower in substance abusers with a history of attempted suicide than those with no such history... and that the risk of suicide attempt was predicted by the CD-RISC" (Roy, et al., 2007; Davidson, 2021). Finally, Davidson points to a study by Youssef et al (2013) where the "CD-RISC scores predicted suicidality at three-year follow-up to a greater extent than did PTSD or alcohol use" (Youssef et al., 2013; Davidson 2021). Regarding convergent validity, the CD-RISC was significantly

correlated with Wagnild and Young's Resilience Scale-25 ( $r = 0.60$ ), the RS-14 ( $r = 0.87$ ), and the 25-item 5x5 resilience scale developed by DeSimone et al in 2016 ( $r = 0.79$ ) (Davidson, 2021; Sarubin et al., 2015; Sanchez-Teruel and Robles-Bello, 2015; DeSimone et al., 2016).

***The Duke University Religion Index (DUREL;*** Koenig & Büssing, 2010): This is a five-item measure of religious involvement. The instrument assesses the three major dimensions of religiosity: religious activity, non-organized religious activity, and intrinsic or subjective religiosity. The DUREL has a test-retest reliability (intra-class correlation = 0.91) and a Cronbach's alpha's = 0.78-0.91, as well as convergent validity with other religiosity measures ( $r$ 's = 0.71-0.86) (Koenig and Büssing, 2010). A correlational analysis was run to determine if the general religious views and practices of the participants had an effect on the resilience measure in the current study.

***Intercessory prayer:*** The experimental group will be performing the following intercessory prayer (This prayer was adapted from a prayer website: [crosswalk.com](http://crosswalk.com)) as the independent variable manipulation.

I come to you today and thank you for the privilege of praying for others. I've been the recipient of others' prayers so often, I understand how powerful intercessory prayer can be.

I lift up those in my neighborhood, in my city, and in my family. Begin with those who follow you, and help them influence others for good. Let them be salt and light, pointing others to you. Deepen their love for you and for the people around them.

Strengthen my own family, and those closest to me, God. May our love for you help us to love and forgive others and make a difference in our world.

I pray for teachers, for students, and for all those in authority and leadership, both

locally and throughout the world. Give them your mind, and surround them with godly counselors who will exercise integrity and work for justice, morality, and freedom. Help them to esteem you, not dismiss you.

I pray for the hurting, the lonely, the sick, the bereaved, and those who are imprisoned-behind both visible and invisible walls. Send your comfort, your peace, and your calming presence to those who are without hope. Protect the defenseless, and hold them close to your heart.

Amen

***How-To Manual:*** The control group will be given a packet containing instructions on how to perform an air filter change in a car that will be read in lieu of an IP:

### Step-by-Step Instructions

#### Step One

- Open your car's hood and find the engine air filter housing. It's a black plastic box that sits on top of or to the side of the engine. You will see a large hose sticking out of its side.

#### Step Two

- Open the air filter housing and take out the old air filter (use caution when removing the housing cover as it may have wiring harness and electrical components attached to it). The air filter housing can be fastened together with screws, clips, clamps or wing nuts. Take note of what kind of fasteners are used and select the appropriate tool to remove them. To open the air filter housing, you simply remove the fasteners, remove the top of the air filter housing and

take out the air filter. Remove any dirt or debris that is in the housing by wiping it out with a rag.

#### Step Three

- Inspect the old engine air filter to make sure that it is dirty and needs changing. Look inside the pleats, if you see a lot of dirt, it is time to change the air filter. You can also tap the filter and if dirt falls out, your air filter is past its prime and needs replacing.

#### Step Four

- Place the new engine air filter in the filter box. Insert it with the rubber rim facing up. Ensure that it is seated correctly.

#### Step Five

- Put the top of the housing back on and put the fasteners back on. That's it!

**Memory Recall Task:** When the participants return to the lab after completing either the experimental or control protocol, they will be asked to perform a memory recall task where they write, from memory, as much of either the control or experimental script down. This is to be used as a check on the independent variable manipulation to assess whether or not the IP was being performed correctly throughout the experiment.

### **Procedure**

Institutional Review Board (IRB) approval was attained prior to collecting any data for this study. Undergraduate students enrolled in Introduction to Psychology courses were recruited for this study via the Sona System website. The recruitment information posted on the Sona System website will inform the participants the experiment is designed to learn more about memory and information recall. After participants register, they came to the psychology research

lab at their scheduled appointment time, signed the informed consent form, filled out the demographic, DUREL, and Conner-Davidson Resilience self-report measures. Once all participants completed their questionnaires, they randomly selected envelopes marked with either the letter “C” or “E.” The envelopes marked with the letter “C” contain the control text, a “how to” instructional passage on changing the air filter in a car, and those envelopes marked with an “E” contain the experimental text, a manualized intercessory prayer. After all participants had been randomly assigned to either the control or experimental group by selecting envelopes, they were instructed to wait to read the contents of their envelope when they are alone. They were also instructed not to share the contents of the envelopes with others as doing so could have a negative effect on the experiment. Finally, participants were instructed to read their passage at the same time each day and in the same location for a period of sixteen days. After sixteen days, the participants in both the control and experimental groups returned to the research lab and completed the Connor-Davidson Resilience Scale a second time, performed a memory recall task, were debriefed (See Appendix D) and dismissed.

## **Results**

The current study employed a mixed factorial design with a 2 (Script Type: IP vs. Control) X 2 (Resilience Measure 1 vs. Resilience Measure 2) repeated measure test in which Resilience Measures one and two were within-subject variables and Script Type was a between-subject variable. The data was initially analyzed using an independent sample t-test the which indicated mean of the control group was higher in resilience than was the mean of the experimental group (see Tables 1 and 1.1).



**Table 1: Group Statistics**

	Group	N	Mean
Pre-Experiment Measure	Control	13	73.46
	Experimental	13	72.15
Post-Experiment Measure	Control	10	74.9
	Experimental	13	69.77

**Table 1.1: Independent Samples Test**

	Sig. (2-tailed)	Mean Difference
Pre-Experiment Measure	0.815	1.308
Post-Experiment Measure	0.316	5.131

The next analysis was a paired sample t-test. Due to the sample size the results were not statistically significant, and the results are most likely a result of error. However, the results of paired sample t-test were, at times, moving in the direction of the hypothesis indicating that further studies with more participants may yield results closer to the hypothesis predication. (see tables 2 and 2.1).

**Table 2: Paired Sample Statistics**

Group		Mean	N
Control	Pair 1	Pre-Experiment Measure	77
		Post-Experiment Measure	74.9
Experimental	Pair 1	Pre-Experiment Measure	71.33
		Post-Experiment Measure	69.92

**Table 2.1: Paired Samples Test**

Group			Mean	Sig. (2-tailed)
Control	Pair 1	Pre-Experiment – Post-Experiment	2.1	0.276
Experimental	Pair 2	Pre-Experiment – Post-Experiment	1.417	0.57

**Discussion:**

This study's aim was to answer the question: does performing an IP increase resilience in the person performing the prayer? Due to the low power of this study ( $N = 27$ ) the results were not statistically significant, and the results were attributable to error. The scores on the CD-RISC were, at times, moving in the direction of the hypothesis and so future studies should increase the sample size to determine if IP has an effect on resilience, or acts as a moderator on resilience. This experiment employed a recall task where participants were instructed to write, from memory, as much as they could remember from their scripts (either the IP or the "how to" instructions). Many of the participants were unable to write more than a sentence or two of what they had been assigned to read over the past sixteen days. This could indicate that this manipulation check on the IV was ineffective or that the participants were not properly attending to the IP throughout the experiment. Future studies should incorporate a different and perhaps more effective check on the independent variable manipulation (IP). A correlational analysis was also run on both the control and experimental groups to determine if the demographics and religious beliefs and actions of the participants (DUREL) effected the outcome of the study, and no such effects were detected.

**Limitations & Future Research**

This research is not without its limitations. The most significant limiting factor was the sample size of this study. A G\*Power (Faul et. al., 2007) analysis was performed and indicated that a sample of roughly 200 participants was required to provide a high enough power for this experiment to make a statistically significant conclusion regarding the effects of IP on resilience. Due to time restrictions and the global COVID-19 pandemic it was not possible to obtain a sample prescribed by the G\*Power analysis. As such, future studies should increase the sample

size in order to increase the power of the current study. Future studies could be performed to with larger sample sizes to determine if IP acts as a moderator on resilience. Future studies should also use a more effective control of the participants throughout the experiment to determine if the experimental and control protocols are being correctly performed daily as the manipulation check in this study may or may not have been effective. One such protection could be having participants log into a video journal and perform the control or experimental scripts while recording themselves. This would provide significant data regarding the attention of the participants while they are performing their respective protocols.

**Conclusion:**

Based on the results of this study it cannot be concluded that IP increases resilience in the person performing the prayer. Given the size of the sample, no statistically significant change in resilience can be reported as a result of performing the experimental condition (IP). Prayer may act as a moderator on resilience given the direction of the numbers on the resilience scales reported by the participants; however, more participants are required to determine if IP works as a moderator on resilience.

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## Appendix A

### I. Informed Consent

Auburn University at Montgomery (*Psychology*)

**INFORMED CONSENT**  
**Concerning Participation in a Research Study**  
(*Memory*)

You are invited to participate in a study examining memory in recalling information.

#### **Research Purpose & Procedures:**

We hope to learn more about memory and how the brain stores and recalls information. You were selected as a possible participant because you are enrolled in a section of Introductory Psychology at AUM. If you decide to participate, we, James Perry - Principal Investigator, Dr. Stacy Parenteau - Associate Professor of Psychology at AUM and thesis advisor, and her research associates, Angela Kelley and Chloe Miller, will distribute packets of questionnaires to be completed. Once completed participants will select a sealed envelope containing each person's specific memory task as well as instructions on what to do with your assignments. Participating in this study will take roughly 3 hours to complete over the course of 16 days and require coming to the psychology lab twice. Upon arrival in the lab you will fill out questionnaires then be instructed on how to complete the memory task. The first in-lab day will take no longer than 60 minutes. You will then perform the assigned protocol once daily for a period of 16 days. The daily activity will not take more than 10 minutes. After two weeks you will return to the psychology lab, fill out another questionnaire, perform a memory task, and be debriefed on the experiment.

Please keep your particular task to yourself. Do not share your assignment with other students in your class or others who may participate in the study as divulging this information could spoil the results of other participants.

#### **Risks or Discomforts/Potential Benefits:**

- II. You may experience some discomfort in responding to questions pertaining to your moods and emotions. If you experience any distress due to participating in this study, you are encouraged to contact the AUM Counseling Center, contact information for which is provided below.
- III. You will receive 2 PREP credits for participating in this study.
- IV. You will be contributing to the field of psychology by participating in new research in the area of memory.

**Provisions for Confidentiality:**

Any information obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission.

**Management of Research-related Injury:**

The AUM Counseling Center offers free counseling services for students. If you are in need of such services, please contact the center at 334.244.3469. You can also email the center ([counselingcenter@aum.edu](mailto:counselingcenter@aum.edu)) or stop by in person (Taylor Center Room 316).

**Contacts for Additional Information:**

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the principal investigator, James Perry, B.S. (334.467.3036; [jperry4@aum.edu](mailto:jperry4@aum.edu) ). If you have any questions about your rights as a volunteer in this research, contact Debra Tomblin, Research Compliance Manager, AUM, 334-244-3250, [dtomblin@aum.edu](mailto:dtomblin@aum.edu).

**Voluntary Participation & the Right to Discontinue Participation without Penalty:**

If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty. If you decide later to withdraw from the study, you may also withdraw any information that has been collected about you. Your decision whether to participate will not prejudice your future relations with Auburn University at Montgomery. The researcher may discontinue the study at any point. The researcher may terminate your participation from the project at any point.

We will give you a copy of this consent form to take with you.

YOU ARE MAKING A DECISION WHETHER TO PARTICIPATE. YOUR SIGNATURE INDICATES THAT YOU HAVE DECIDED TO PARTICIPATE, HAVING READ THE INFORMATION PROVIDED ABOVE.

Participant's date & signature

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Investigator's date & signature

---

**Appendix C**

**Packet 1 Cover Sheet**

**V. Packet 1 (pre-experiment/control condition):**

Packet 1 Cover sheet

Demographic Questionnaire

The Duke University Religion index (DUREL)

Connor-Davidson Resilience Scale (CD-RISC)

Intercessory Prayer Script (Experimental protocol)

How to Install an Engine Air Filter (Control protocol)

**VI. Packet 2 (post-experiment/control condition):**

Packet 2 Cover Sheet

Connor-Davidson Resilience Scale (CD-RISC)

Free recall memory task of Experimental/Control protocol scripts

## Packet 1

**Name:** \_\_\_\_\_ **Birthdate** (mm/dd/year): \_\_\_\_\_

**Date:** \_\_\_\_\_

**Investigator Use Only:** Participant Code # \_\_\_\_\_

Experimental Group  Control Group

Demographic Questionnaire

VII. **Age:** \_\_\_\_\_

**2. Gender:**

\_\_\_\_\_ Male    \_\_\_\_\_ Female    \_\_\_\_\_ Other (please describe: \_\_\_\_\_)

**3. Ethnicity:**

a) Are you Hispanic or Latino?    \_\_\_\_\_ No    \_\_\_\_\_ Yes

b) Which of the following best describes your race?

\_\_\_\_\_ White

\_\_\_\_\_ Black or African American

\_\_\_\_\_ Asian

\_\_\_\_\_ American Indian/Alaskan Native

\_\_\_\_\_ Native Hawaiian/Pacific Islander

\_\_\_\_\_ Biracial/multiracial

**4. Academic Class**

\_\_\_\_\_ Freshman

\_\_\_\_\_ Sophomore

\_\_\_\_\_ Junior

\_\_\_\_\_ Senior

**5. Marital status:**

\_\_\_\_\_ Never married

\_\_\_\_\_ Married

\_\_\_\_\_ Divorced

**6. Family Income:**

- 0-20,000/year
- 20,001-40,000/year
- 40,001-60,000/year
- 60,001-80,000/year
- 80,001-100,000/year
- > 100,000/year

**1. Religious Affiliation:**

- Catholic
- Protestant
  - Lutheran
  - Baptist
  - Methodist
  - Evangelical
  - Episcopal
- Other Christian
- Jewish
- Buddhist
- Islam
- Hindu
- Mormon
- Unitarian
- Atheist/Agnostic
- Other Faith Tradition
- Non-denominational

**DUREL**

1) How often do you attend church or other religious meetings? \_\_\_\_\_

<b>Never</b> 1	<b>Once a year or less</b> 2	<b>A few times a year</b> 3	<b>A few times a month</b> 4	<b>Once a week</b> 5	<b>More than once/week</b> 6
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2) How often do you spend time in private religious activities, such as prayer, meditation or religious text study (e.g. Bible, Quran, etc.)? \_\_\_\_\_

<b>Rarely or never</b> 1	<b>A few times a month</b> 2	<b>Once a week</b> 3	<b>Two or more times/week</b> 4	<b>Daily</b> 5	<b>More than once a day</b> 6
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*The following section contains 3 statements about religious belief or experience. Please mark the extent to which each statement is true or not true for you.*

3) In my life, I experience presence of the Divine (i.e. God, Allah, etc.). \_\_\_\_\_

<b>Definitely not true</b> 1	<b>Tends not to be true</b> 2	<b>Unsure</b> 3	<b>Tends to be true</b> 4	<b>Definitely true of me</b> 5
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4) My religious beliefs are what really lie behind my whole approach to life. \_\_\_\_\_

<b>Definitely not true</b> 1	<b>Tends not to be true</b> 2	<b>Unsure</b> 3	<b>Tends to be true</b> 4	<b>Definitely true of me</b> 5
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5) I try hard to carry my religion into all other dealings in life. \_\_\_\_\_

<b>Definitely not true</b> 1	<b>Tends not to be true</b> 2	<b>Unsure</b> 3	<b>Tends to be true</b> 4	<b>Definitely true of me</b> 5
---------------------------------	----------------------------------	--------------------	------------------------------	-----------------------------------



## **Packet 2**

**Name:** \_\_\_\_\_

**Birthdate** (mm/dd/year): \_\_\_\_\_

**Date:** \_\_\_\_\_

### **Investigator Use Only:**

Participant Code # \_\_\_\_\_

Experimental Group     Control Group

**Free Recall Memory Task**

For this portion of the experiment please write, using the same language as was in your script, as much as you can remember of your assigned script.

## Appendix D

### **I. Debriefing Form**

#### Debriefing Form

Thank you very much for participating in our study. We want to take this time to tell you a little bit more about the purpose of this study. Our main objective is to determine if performing intercessory prayers on behalf of another will increase resilience in you, the person doing the praying, and not as we stated, to perform a memory experiment.

After signing the Informed Consent form, you were randomly assigned to either the experimental group or the control group based on the sealed envelope you selected on your first day in the psychology lab. If you chose an envelope with the letter “e”, you were in the experimental group and performed a manualized intercessory prayer (IP) for 16 days. If you chose an envelope with the letter “c” you were in the control group and you read a “how to” instructional guide on changing a car air filter for 16 days. It is expected that participants who performed an IP will experience an increase in resilience as compared to those who read the how to guide on air filters. Deception was a necessary part of the the study as a manipulation check and to keep participants from guessing what the experiment was actually testing which could negatively impact the results of the study.

Again, thank you for participating in our study. In order to maintain the integrity of this study, I ask that you please not share any of the information provided in this debriefing form with any other students.

Sincerely,

---

James Perry B.S.  
Principal Investigator

Graduate Student  
Auburn University at Montgomery












# Final Thesis Final

Final Audit Report

2021-12-13


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