

Resilience during a pandemic: Using spirituality to manage employee stress

Uday Shinde
Governors State University

Jay Shinde
Eastern Illinois University

ABSTRACT

This paper examines the impact of individual spirituality on employees during the COVID-19 pandemic. Applying the work of Lazarus & Folkman (1986) to the relationship between spirituality, stress and resilience, it creates and tests a mediation model that suggests a positive influence of spirituality in the workplace in the midst of a crisis. The overall framework is tested on two samples of predominantly working populations, one of students and another of individuals practicing spirituality under the guidance of the Spiritual Science Research Foundation (SSRF), a registered Not-for-Profit organization in the United States and Europe. An independent samples t-test, and regression and mediation analyses demonstrate significant differences between the samples for all three variables. Results and implications are discussed and future directions are suggested.

Keywords: Employee resilience, employee stress, spirituality, pandemic, comparative study

INTRODUCTION

The year 2020 has seen tumultuous events largely attributable to the COVID-19 pandemic that have resulted in abrupt and far-reaching changes globally. The changes in the economy and workplace have been quite dramatic, in terms of not only job loss, but also the shift from face-to-face interaction to the online space. In a study that compares uncertainty in multiple economic indices in the United States and the UK, Altig and colleagues (2020) state that uncertainty values for most indicators have showed huge jumps. Barero et al. (2020) in a similar vein, point to the sobering statistic that 42% of the U.S. labor force is now required to work from home. This is more than twice the number from previous years. Moreover, the chances of a larger shift to the work-from-home system are expected to increase four-fold in the near future.

As can be expected, such dramatic changes have a powerful effect on individuals. Hobfall (2001, 1989) suggests that when change occurs, individuals can perceive a loss of resources to adapt to it, which results in rising perceptions of stress. And this does not take into consideration the stress created by the pandemic itself. Average reported stress levels according to a poll conducted by the American Psychological Association shows that there is a substantial increase in adult stress levels during 2020 compared to previous years. Seventy percent of participants indicated that work and economy related stress has increased significantly (matching levels of the recession in 2008). Quite importantly, an equal proportion of employed adults, also reported that work is a major stressor in life compared to previous years (“Stress in America 2020”, 2020).

Under such dismal circumstances, the question then arises – can we bounce back from this crisis? The ability of individuals to face difficulties and still perform is also known as resilience. While individual resilience has been a topic of interest for researchers and practitioners for some time now (Luthans et al, 2007), it assumes an altogether new level of importance in light of the current situation. This paper explores the possibilities of taking on the present crisis by positing spirituality as a resilience resource for the individual worker. The reasoning behind this premise mainly lies in previous research in related disciplines such as mental health, which links spirituality and its components (such as belief, spiritual practices like mindfulness meditation, and universality) to individual wellbeing outcomes including increase in positive emotions and decreased negative affect (Roeser et al., 2013; Koenig et al., 2001; Hayward et al., 2012; Roche et al., 2014).

Research related to Spirituality and Religiosity in the Workplace (SRW) has taken a number of divergent paths over the past two decades, ever since it was deemed worthy of interest by researchers in the Management area. These include attempts to understand the theoretical and conceptual development of the construct (Forniciari et al., 2007; Houghton et al., 2016), its relevance to the organization (Fry, 2003; Mitroff & Denton, 1999; Milliman et al., 1999), and also its implication for the workforce (Giegle, 2012; Karakas, 2010; Kolodinsky et al., 2008). While the present paper will approach spirituality and its theoretical underpinnings as suggested by Shinde et al., (2018), its main contribution will be in the last category as related to the impact of spirituality on the individual worker, what Karakas (2010) calls the human resource perspective. The primary focus being on exploring how spirituality impacts worker stress and resilience in the context of a COVID-19 stricken world. As such the basic question presented by the paper is: Can individual spirituality have positive implications for the employee’s resilience and stress? This question has been examined in the past (Reutter et al., 2014; Gall et al., 2005)

however, what differentiates the present study from previous attempts at understanding this relationship are the following factors:

1. This study uses data collected during the peak of the COVID-19 pandemic (late 2020).
2. It approaches this relationship from a comparative perspective, examining the differences between samples of spiritually committed and non-committed populations. Each sample has a very high proportion of currently employed workers or those who have such experience.
3. Its approach to and measure of spirituality is comprehensive and holistic – neither denying nor requiring affiliation to religion as a requisite for spirituality thereby addressing the conundrum of researchers in the MSR area.
4. In studying the relationship between stress and resilience in the context of a multi-factor construction of spirituality, it extends the Transactional model of stress (Lazarus and Folkman, 1986).
5. Unlike previous studies it conceptualizes and measures stress and resilience separately and not analogously (by measuring closely associated constructs like depression and anxiety). To the best of our knowledge this has not been done in the context of individual spirituality.

SPIRITUALITY

To understand spirituality at the individual level, it is important to use a definition that is as inclusive as possible, such as the one developed by Shinde and colleagues (2018). They define individual spirituality as “the degree to which the individual believes in a transcendent power, and prioritizes understanding this aspect of life through consistent spiritual practice, while incorporating a universal outlook.” They conceptualize spirituality as a three-dimensional construct emphasizing a belief in a transcendent resource (such as God, Universe or Self), consistent practice (notwithstanding the form this might take) to actualize this belief, and finally a sense of universality that allows for all paths and practices (theistic or otherwise) to be considered. This definition and the Universal Spirituality Scale (USS) that was developed to measure spirituality allows for an understanding that does not abandon the historical connections between religiosity and spirituality (Koenig, 2008; Hicks, 2003) while at the same time, removing the sectarian aspects of religion.

Having defined spirituality, the next step is to consider the research so far in the domains of spirituality, stress and resilience, and examine how these concepts might be related to each other.

The Inverse Relationship between Stress, and Spirituality and Resilience

What is spirituality?

As the field of SRW has evolved over the years, an area of interest within this domain that has received some attention has been the study of the impact of spirituality on individual wellbeing. At least three reviews of the field converge on this point (Karakas, 2010; Geigle, 2014; Pietersen, 2014). For the most part, this impact has been salutary to individual outcomes. This is very similar to the conclusions found by researchers in the areas of health and wellness

(Kim & Seidlitz, 2002; Koenig et al., 2001; Pargament et al., 1998). Koenig and colleagues document hundreds of empirical studies that show the usefulness of religiosity (and spirituality) on health-related factors (Koenig et al., 2012a, 2012b). Aspects of wellbeing that are beneficially impacted by spirituality include stress (Baldacchino & Draper, 2001; Carlson et al., 1998), resilience (Pargament, 1997, Pargament et al., 1998) and associated factors like negative affect, depression and anxiety (Maton, 1989).

In general, each of the three dimensions of spirituality envisaged in this study – belief, practice and universality have been related to positive mental health outcomes. Several studies link belief in a transcendent resource to resiliency factors like coping and stress reduction (Mann et al., 2010; Csiernik & Adams, 2002; Koenig, 2004; Tuck et al., 2006). Spiritual practices including those of a theistic, religious nature (prayer, church attendance) and those of a more non-religious character (mindfulness, yoga) have shown similarly beneficial results (Commerford & Reznikoff, 1996; Hayward et al., 2012; Goyal et al., 2014; Roche et al., 2014; Roeser et al., 2013; Eberth & Sedlmeier, 2012). Universality is the sense of openness and acceptance of others' values, beliefs, and methods that is characterized by a lack of negative judgement. This is akin to empathy, which has also shown to reduce stress levels (Ho et al., 2014; Park et al., 2015).

The Transactional Model of Stress and its Relationship with Spirituality and Resilience

From the abovementioned research, it may seem that spirituality is directly and negatively related to mental stressors or closely associated factors like depression and anxiety. But there is a little twist to this plot: spirituality can also act as a mediator between stress and wellbeing outcomes including resilience.

Stress in this study is conceptualized as a mental construct (perceived stress) more than the stressful event itself. In line with the classic definition of Lazarus and Folkman (1984), stress is the perception or the appraisal of a situation that individuals consider beyond their ability to cope with and therefore, as harmful to their wellbeing. From this perspective (also known as the transactional theory of stress), stress is perceived by individuals as they initially appraise the stressful event and the level of challenge posed by it; this stage is also called the primary appraisal stage in the stress process. The primary appraisal is followed by the second step of evaluating coping strategies for stress mitigation (with concomitant questions such as “what can I do?” and “what resources do I have?”). Lazarus and Folkman point out that during secondary appraisal, individuals evaluate the resources available to them to deal with the stressor. These resources can take the form of beliefs regarding locus of control, self-esteem, and self-efficacy.

Depending upon the secondary evaluation, there can be a reappraisal of the situation. Appraisals can be considered as an ongoing, dynamic process of interaction between the primary and secondary stages (Dewe & Cooper, 2007) and can play a mediating role between coping resources, and coping behavior itself (Jerusalem, 1993; Nicholls et al., 2012). The appraisal stage can thus act as a mediator between the stressor and the coping strategy (stress-resilience), and also between the stressor and the coping outcome (stress-wellbeing). Folkman and Lazarus (1988) for example, found that coping mediates between stressors and four types of emotions (worry/fear, disgust/anger, confidence, pleasure/happiness).

At this point, it is not hard to conceive of spirituality as exactly such a coping resource (Koenig, 2010; Gall et al., 2005, Delongis et al., 1988; Nelson et al., 2009). The belief in a transcendent resource that is ever available to help and the perception that this resource can be

brought into play via specific practices could bolster one's confidence in handling the stressful stimulus (self-efficacy). As such spirituality could act as a mediator between stress and resilience.

Resilience has been defined by researchers as an individual's ability to positively deal with and move on from adversarial circumstances (Tugade & Fredrickson, 2004; Jackson et al., 2007). It has been closely associated with health outcomes such as resistance and recovery from illness and adaptation to adversity, which have been used as proxies for resilience in earlier research (Nelson et al., Reutter & Bigatti, 2014). And in a context that is very germane to the current paper, Reutter and Bigatti (2014) demonstrate that spirituality mediates between stress and depression and anxiety, which they posit as resilience resources.

But the current study differs from such an understanding because it conceptualizes and measures resilience more pointedly, in line with the recommendation of Smith and colleagues (2008), who approach it as a separate construct from other factors such as depression and anxiety, which may be related to resilience but are in fact, distinct phenomena. These authors contend that the ability to come back from stressful events is at the very heart of the meaning of resilience (as against other closely associated constructs) and as such needs to be fleshed out for more accurate measurement in studies. Towards this end, they develop the Brief Resilience Scale (BRS), which is also used in the present investigation.

Since resilience itself has been defined as an individual's ability to adapt and cope with adverse (and therefore stressful) situations, by definition, the greater the perception of stress, the lesser the ability to cope with it (resilience). This inverse relationship between stress and resilience has been established by previous studies (Avey et al., 2005; Luthans et al., 2005).

Keeping in mind the above discussion and linkages based on previous theory and research, the following model and hypotheses are posited (as indicated in Figure 1 in the appendix).

H1) Spiritually committed participants in the study will show lower levels of stress than the student group.

H2) Spiritually committed participants in the study will show higher levels of resilience than the student group.

H3) Overall, spirituality will mediate the relationship between stress and resilience.

H4) For each sample – (students, members of spiritual organizations, and combined):

H4a) As spirituality increases, perceived stress decreases.

H4b) As perceived stress increases, resilience decreases.

H4c) As spirituality increases, resilience will also increase.

METHODS

To test our model, relationships and sample differences, it was decided to gather data from two different samples that were spiritually distinct from one another – one that was overtly dedicated to spirituality, and therefore expected to have higher levels of spirituality, and the other

from a mixed group of participants who had no overt affiliation to spiritual values. It was thought that such a marked difference would be easier to measure in terms of effects of spirituality on stress and resilience. All data was collected in the last quarter of 2020 in the post pandemic period thereby maintaining the COVID-19 stressor as a constant.

Measures

Spirituality was measured using a shortened version of the Universal Spirituality Scale (USS) containing 11 items (Shinde, 2018). Factor analysis showed that the construct validity of the USS held up well even with fewer items than the original version of 21 items. The shortened version still provided a clean 3-Factor solution and demonstrated greater than acceptable levels of reliability ($\alpha=0.78$).

Perceived Stress was measured using Cohen's 4-item Perceived Stress Scale (1994). This instrument has been tested across various populations and continues to show strong psychometric properties ($\alpha=0.78$). The Perceived Stress Scale (PSS) is particularly well suited to the current study considering that it is arguably the most tested measure of the perception of stress.

Finally, resilience was measured using the Brief Resilience Scale (BRS) developed by Smith and colleagues (2008). The BRS has also shown strong psychometric properties across a variety of populations. In their review of nineteen resilience measures, Windle et al. (2011) found the BRS to be psychometrically amongst the soundest. The BRS has also demonstrated the ability to model the distinctiveness between stress and resilience as independent constructs (Kyriazos et al., 2018) making it more appropriate for the purpose of this study. For the current sample it demonstrated a high reliability ($\alpha=0.86$).

Data Collection

Sample 1 consisted of working undergraduate students from a Midwestern US university and Sample 2 was collected from the Spiritual Science Research Foundation, a Not-for-Profit organization based in the US, Europe and Australia. The SSRF is expressly devoted to spiritual values emphasizing belief in a transcendent reality, systematic methods (practices) to actualize this belief, and a universal perspective that neither requires nor prevents religious (theistic or otherwise) affiliation. All requisite Institutional Review Board permissions were acquired prior to data collection. Altogether 80 student surveys and 148 SSRF member responses were usable after screening the data for missing values, outliers, kurtosis, skewness, and multicollinearity. Statistical methods employed include testing for mean differences (independent samples t-test), regression, and mediation analyses. For group differences, a random sample of 80 participants was chosen from the 148 responses (SSRF). Sample Demographics are given in Table 1 (Appendix)

RESULTS AND DISCUSSION

Testing for Differences (H1, H2)

An independent samples t-test ($N = 80$) was used to test the differences between the two groups (students, and members of SSRF). Levene's test for homogeneity indicated that the variances were not equal for the samples for each of the constructs – spirituality (and its

dimensions), resilience, and stress ($p < .05$). Based on this, the results showed that the student group on average had significantly lower spirituality, and resilience scores as well as higher perceived stress levels than the group practicing spirituality with medium to high effect sizes (r). The results are tabulated in Table 2 (Appendix).

Examining for differences within spirituality itself, it was found that the biggest difference between the two samples was in terms of the spiritual dimension of practice although there were significant differences ($p < .01$) for the dimensions of belief and universality as well. The spiritual group ($M = 4.53$, $SE = .07$) differed most from the student participants in the amount of effort it put into actualizing spiritual beliefs and values ($M = 3.41$, $SE = .11$). The difference was significant ($p < .001$) with a large effect size ($r = .59$) indicating that 35% of the variance in the result could be accounted for by the efforts being put in by the spiritual group towards spiritual practice. This difference is further discussed and analyzed in the sections to follow.

Mediation 1: Stress - Spirituality – Resilience (H3) – Combined Sample

The hypothesis relating to spirituality's role as a mediator between stress and resilience (H3) was analyzed using the Process Model for Regression Analysis (PMRA) in SPSS created by Andrew Hayes (2016). The PMRA evolves from the traditional Baron and Kenny (1986) approach to mediation in that it emphasizes the indirect effect caused by the inclusion of a mediator. However, the overall principles remain the same. Mediation is said to have occurred when *all* of the following conditions (paths) are met (significant): Path a. the independent variable (X - stress) predicts the mediator (M - spirituality), Path b. the mediator (M - spirituality) predicts the dependent variable (Y - resilience), Path c. the independent variable (X - stress) predicts the dependent variable (Y - resilience) without the mediator (spirituality) also called the total effect, and Path c^1 - The independent variable (stress) predicts the dependent variable (resilience) with less strength upon introduction of the mediator (spirituality) also known as the direct effect. Quite importantly, the effect of the mediator (indirect effect, $c - c^1$) should be significant (expressed at a 95% confidence interval that does not contain zero values). In the present study, it is noted that all these conditions are met, indicating support for the mediation hypothesis ($n = 228$):

Stress (X) predicts spirituality (M), path a
 $b = -.07$, $t(220) = -5.52$, $p < .001$

M (spirituality) predicts Y (resilience), path b
 $b = .20$, $t(219) = 3.30$, $p < .001$

X (stress) predicts Y (resilience) without M (spirituality), path c (Total effect)
 $b = -.13$, $t(220) = -10.29$, $p < .001$

X (stress) predicts Y (resilience) through M (spirituality), path c^1 (Direct effect)
 Direct effect = $-.12$, $t(223) = -10.29$, $p < .001$

Finally, the indirect effect, which explains the role played by the mediator (spirituality) was significant:

Indirect effect = $-.07$, 95% CI $[-.11, -.025]$.

Since the confidence interval does not contain zero, it can be assumed that mediation has occurred (Field, 2018). Demographic factors like gender, age, education and employment status were tested as covariates, and none of these predicted resilience in the total effect model at significant levels. Thus, the total effect (path c) of stress upon resilience ($b = -.13$) is reduced ($b = -.12$) upon introducing the mediator, spirituality (direct effect, path c^1) at significant levels ($p < .001$). The effect created by the mediator ($b = -.07$) is significant at 95% confidence interval (indirect effect). This partial mediation (since the total effect was not reduced to zero) is captured in Figure 2 (Appendix).

To further understand this effect, the overall sample was separated into two groups and the mediation was performed again. This would enable a better examination of group differences, if any. It was found that spirituality mediated the relationship between stress and resilience for the spiritual group. However, the mediation did not occur with the student group at all. Mediation differences in the groups are captured in Table 3 (Appendix).

In the student sample, spirituality did not mediate between stress and resilience because stress did not predict spirituality ($p > .05$) thus failing to fulfill the first condition for mediation set by Baron and Kenny (1986). All other conditions in this sample were met. For example, spirituality and stress both predicted resilience, confirming previous studies indicating that spirituality and stress are strong predictors of resilience as shown in the discussion in the previous section. The failure of spirituality as a mediator in the case of students might be explained through a couple of possibilities: First, mediation is generally indicative of a variable (mediator) that plays an internal role within the relationship of a predictor and criterion as opposed to say, a moderating variable that impacts the relationship from the outside (Baron & Kenny, 1986). This suggests that students have not internalized spirituality to the degree that those actively participating in a spiritual organization have, which is to be expected.

The above explanation is borne out of the significantly lower scores of students on spirituality as pointed out by the independent samples t-test. It is also supported by the mediation analysis, where the relationship between stress and spirituality is not only highly significant for the spiritual sample, but also produces a much greater impact ($b = -.08$, $p < .001$) than in the student sample ($b = -.05$, $p > .05$). Furthermore, the indirect effect is also strongest in this relationship ($-.09$). Nevertheless, even in the case of the student sample, the indirect effect of stress on resilience (via spirituality) was still valid at a 95% CI $[-.038, -.0002]$ albeit for a very small effect ($-.02$). In toto, it could be said that the general direction of the relationship remains the same. Second, small differences in significance levels do not always indicate the overall nature of the relationship and could be a function of the statistical inputs more than anything else (Field, 2018). This is discussed below via additional regression analyses.

Regression Analysis (H4a-H4c)

A simple linear regression for each of the samples mostly supported our hypotheses (H4b, H4c) that spirituality predicts resilience and stress as indicated in the mediation analysis (paths a and b) as well. Similar to the results of the mediation, stress did not act as a predictor of spirituality only in the student sample and therefore, H4a was only partially supported. Apart from the reasoning offered in the previous section and given that higher confidence levels mandate larger sample sizes, another reason that spirituality could not predict stress at significant

levels for students may be a result of a relatively small sample size ($n = 80$). Power benchmarks suggest that for a test to accurately predict results (power), the sample size should be sufficiently large. Green (1991) suggests that the minimum sample size for a single predictor is 104. Even a single predictor should have a sample of up to 400 participants in order to detect a small effect (Field, 2018). Perhaps with larger sample sizes, more significant results could be obtained. For each of the samples the regression results are given in Table 4 (Appendix).

Further Analysis & Discussion

To explore in greater detail the differences in impact caused by each of the three dimensions of spirituality – belief, practice and universality on both stress and resilience, a multiple regression was carried out for each dependent variable. In light of the earlier finding of spiritual practice being the differentiating factor between the spiritual and student group, it was expected that this dimension would be most predictive of both stress and resilience. However, regression results supported such a predominant role of spiritual practice only in the relationship with stress ($b = -.86, p < .001$). In the case of resilience, it turned out that individual belief in the transcendent was the most impactful and significant factor ($b = .24, p < .001$). Interestingly, universality did not predict either stress or resilience at significant levels once belief and practice were introduced in the model despite having strong correlations to each outcome.

That spiritual practice was highly related to stress is not surprising, considering that numerous studies point in this direction as shown earlier. However, its eclipse by belief in the relationship with resilience was not expected. This suggests that stress reduction (and correspondingly increased spiritual practice) can result in stronger belief systems, which can in turn increase resilience. Incidentally, this would also support the traditional, philosophical conceptualization of the relationship between these variables, which suggests that spiritual practices like prayer, chanting and meditation can increase faith. This is also corroborated from some of the earlier studies that link belief systems to resilience as a coping outcome (Koenig, 2006; Moreira-Almeida & Koenig, 2006; Graham et al., 2001). For instance, Graham and colleagues (2001) found that students who expressed spirituality through a strong belief system showed more immunity (resilience) to stressful situations compared to those who did not.

When the results of the current study are put together with the abovementioned research findings and also the transactional model of stress (Lazarus & Folkman, 1986), it would not seem out of place to view belief as a mediating intermediary between spiritual practice and resilience. The next question then is, does spiritual practice have a positive impact on belief and thereby on resilience? To find out, another mediation analysis was performed using PMRA (Hayes, 2007). The results indeed corroborate the above premise - belief does mediate between practice and resilience. The indirect effect (.13) caused by belief is significant at a 95% CI [.07, .19] indicating that the introduction of the mediator (belief) in the relationship between practice and resilience reduces the total, independent effect of practice on resilience from (.24, $t(226) = 5.97, p < .001$) to (.11, $t(226) = 2.14, p < .05$), also called the direct effect (see Figure 3 in the Appendix).

CONCLUSIONS, FUTURE DIRECTIONS AND LIMITATIONS

This paper set out to explore whether individual spirituality can act as a coping resource against the stress caused to workers by external situations such as the ongoing COVID-19

pandemic, thereby allowing them to bounce back from the crisis. To test this question, a framework was developed based on the transactional model of stress conceived by Lazarus & Folkman (1986). As such, spirituality was thought of as a mediator between stress and resilience. The results of testing two samples of largely working populations, one explicitly dedicated to spirituality, and the other, more generic, suggest that spirituality can indeed play a beneficial role under the currently straitened circumstances in which individual workers find themselves. The difference in stress and resilience levels between those who practice spirituality, and those who do not, is marked and significant. This leads us to conclude that spirituality as conceived in this study, which allows for religiosity but prevents its sectarian connotations, can empower workers to be resilient, and therefore, more contributive. As such, workplaces would do well to consider using spiritual interventions and values to empower their workforces.

In this regard, the salience of spiritual practice is noteworthy. Emphasizing beliefs and values that are transcendent and universal could lead to increased resilience, but the differentiating variable between the two samples was that of spiritual practice and effort. It is an indication perhaps that belief needs practice to strengthen it to a point where it contributes to making the individual more resilient. This position was indeed supported by a secondary mediation analysis between practice, belief and resilience.

To further understand this phenomenon, interviews were conducted with four members of SSRF who hold executive leadership positions in the organization. Their responses suggest that spiritual beliefs and practices can be developed in the workplace that are entirely in keeping with various traditional systems without compromising on the secular nature of the workplace. Further, interviewees stated that such beliefs and methods are crucial to a variety of organizational outcomes, including a positive and open organizational climate that fosters teamwork, unity and morale amongst SSRF members. One such practice is called the Personality Defect Removal (PDR) method that relies on identifying difficult individual traits, and rectifying the situation through honest sharing, open feedback, and the use of auto-suggestions. When this practice is combined with other techniques such as meditative chanting, the results have been quite impressive. The current president of SSRF pointed out that these practices have allowed the workforce of SSRF to pivot very effectively and quickly to online operations. Such flexibility during crisis is one of the three hallmarks of resilience according to Coutu (2002). Focus groups with mid-level employees confirm the statements of leaders and suggest that workers in SSRF find the climate supportive, engaging and meaningful, which increases their satisfaction and commitment.

This can have a number of implications for both practitioners and academicians. If workplaces can introduce spiritual practices like meditation and chanting, it might help to lessen the burden faced by today's worker. This can be done in at least two ways – 1. By creating time and space for workers to engage in spiritual activities – regular guided sessions can be made available to employees and 2. By engaging outside experts who can train and instruct the workforce in these matters. This need not incur additional burdens on the organization since many spiritual consultations can be procured at minimal fees, and even at no cost. SSRF for example, has consulted with corporates like Cisco Systems or groups such as the World Economic Forum without charge. Finally, a third option might be to actually hire staff who are experts in the field of spirituality. Considering the costs of worker stress on organizations in terms of employee absenteeism, turnover and disengagement, such investments might well pay for themselves. Similarly, adopting and encouraging values that promote meaningfulness and

transcendence could further individual resilience not just directly, but also supplementally by fostering a positive organizational climate.

A contribution of this paper also lies in the examination of spirituality as a holistic construct, which does not negate religiosity and faith while simultaneously allowing for a non-religious ethos as well. The use of the USS particularly allows for such a measurement, and in doing so, it also fleshes out each dimension of spirituality and the mechanism of its corresponding impact on resilience and stress. This is something that has not been done earlier to the best of our knowledge. The sequential role of stress, practice, belief and resilience is demonstrated empirically, thereby enlarging upon previous studies (Gall et al., 2005; Reutter & Bigatti, 2014) and also extending the Transactional Model of Stress (Lazarus and Folkman, 1986). Similarly, the use of the Brief Resilience Scale (Smith, 2008) distinguishes this study from previous research that has tended to conceive and measure resilience through closely associated factors like depression and anxiety, especially in the context of spirituality.

For the research scholar, the current study encourages further exploration of spirituality not only as an antecedent to individual outcomes, but also organizational ones. Such an investigation needs to flesh out and study the impact of individual elements within the larger construct. Do belief, universality and practice, all play an equally important role? Our findings suggest that practice and beliefs are sequential, but their adoption by workplaces needs more scrutiny via future research. Also, scholars and workplaces may need to find means and ways whereby universal beliefs and values could be incorporated by workplaces. Furthermore, the link between spirituality and positive organizational behavior as espoused by scholars like Luthans and colleagues (2007) needs to be studied. What does spirituality mean for positive emotions at an individual level (conceived as states or as traits)? For instance, in light of Frederickson's Broaden and Build Framework (2001), can spirituality be considered an enabler of resilience, and thereafter, wellbeing in the short term (state) or in the long-term (trait)? Interviews with SSRF members suggests that spirituality can play a key role in fostering a positive organizational climate, which also opens up the possibility of investigating the impact of spiritual values and culture on positive organizational climate.

In terms of limitations, this paper perhaps suffers most from the use of a relatively small sample. That each group of participants is a result of convenience sampling also has its own drawbacks and raises questions about generalizability of the findings. Nevertheless, this also opens up opportunities for future research into workspaces where spirituality is adopted and encouraged.

REFERENCES

- Altig et al., (2020) D. Altig, S.R. Baker, J.M. Barrero, N. Bloom, P. Bunn, S. Chen, S.J. Davis, J. Leather, B.H. Meyer, E. Mihaylov, P. Mizen, N.B. Parker, T. Renault, P. Smietanka, G. Thwaites. Economic uncertainty before and during the COVID-19 pandemic. *National Bureau of Economic Research*, Cambridge, MA. NBER Working Paper 27418
- Avey, J. B., Luthans, F., & Jensen, S. M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human resource management*, 48(5), 677-693.
- Baldacchino, D., & Draper, P. (2001). Spiritual coping strategies: A review of the nursing research literature. *Journal of Advanced Nursing*, 34(6), 833-841.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- José María Barrero, Nick Bloom, and Steven J. Davis. "COVID-19 is also a reallocation shock," *Brookings Papers on Economic Activity*, June 25, 2020.
- Carlson, C. R.; Bacseta, P. E.; & Simanton, D. A. (1988). A controlled evaluation of devotional meditation and progressive relaxation. *Journal of Psychology and Theology*, 16, 362-368.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1994). Perceived stress scale. *Measuring stress: A guide for health and social scientists*, 10, 1-2.
- Commerford, M. C.; & Reznikoff, M. (1996). Relationship of religiosity and perceived social support to self-esteem and depression in nursing home residents. *Journal of Psychology: Interdisciplinary and Applied*, 130(1), 35-50.
- Csiernik, R., & Adams, D. W. (2002). Spirituality, stress and work. *Employee Assistance Quarterly*, 18(2), 29-37.
- Coutu DL (2002).. How resilience works. *Harv Bus Rev*. May;80(5):46-50, 52, 55 passim. PMID: 12024758.
- DeLongis, A., Folkman, S., & Lazarus, R. S. (1988). The impact of daily stress on health and mood: psychological and social resources as mediators. *Journal of personality and social psychology*, 54(3), 486.
- Eberth, J., & Sedlmeier, P. 2012. The effects of mindfulness meditation: A meta-analysis. *Mindfulness*, 3: 174-189.

Geigle D (2012) Workplace spirituality empirical research: A literature review. *Business and Management Review*. 2 (10): 14-27.

Goyal M, Singh S., Sibinga E.S., et al. Meditation Programs for Psychological Stress and Well-being: A Systematic Review and Meta-analysis. *JAMA Intern Med.*2014;174(3):357-368.

Graham, S., Furr, S., Flowers, C., & Burke, M.T. (2001). Religion and spirituality in coping with stress. *Counseling & Values*, 46(1), 2–13.

Flannelly, K. J., Koenig, H. G., Ellison, C. G., Galek, K., & Krause, N. (2006). Belief in life after death and mental health: Findings from a national survey. *The Journal of nervous and mental disease*, 194(7), 524-529.

Field, A. (2018). *Discovering statistics using IBM SPSS statistics*. Sage publications

Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of personality and social psychology*, 54(3), 466.

Folkman, S., & Lazarus, R. S. (1984). *Stress, appraisal, and coping* (p. 460). New York: Springer Publishing Company.

Fornaciari C J, Lund Dean K (2004) Diapers to car keys: The state of spirituality, religion and work research. *Journal of Management, Spirituality and Religion*. 1(1): 7-33.

Fry L W (2003) Toward a theory of spiritual leadership. *Leadership Quarterly*, 14(6): 693-727.

Hayes, A. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.

Hayward, R.D., Owen, A.D., Koenig, H.G., Steffens, D.C., & Payne, M.E. (2012). Religion and the presence and severity of depression in older adults. *American Journal of Geriatric Psychiatry*, 20, 188-192.

Hicks, D. A. (2003). *Religion and the workplace: Pluralism, spirituality, leadership*. Cambridge University Press.

Ho, S. S., Konrath, S., Brown, S., & Swain, J. E. (2014). Empathy and stress related neural responses in maternal decision making. *Frontiers in neuroscience*, 8, 152.

Houghton J, Neck C, Krishnakumar S (2016) The what, why, and how of spirituality in the workplace revisited: a 14-year update and extension. *Journal of Management, Spirituality and Religion*, vol. 13, no. 3: 177-205.

Karakas F (2010) Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94, 89–106

Kim, Y., & Seidlitz, L. (2002). Spirituality moderates the effect of stress on emotional and physical adjustment. *Personality and Individual Differences*, 32, 1377-1390.

Koenig, H. G. (2004). *Religion, spirituality, and medicine: Research findings and implications for clinical practice*.

Koenig, H. G.; McCullough, M. E.; & Larson, D. B. (2001). *Handbook of religiosity and health*. Oxford: Oxford University Press.

Koenig, H. G. (2006) In the wake of disaster: Religious responses to terrorism and catastrophe. *Philadelphia: Templeton Foundation Press*.

Koenig, H. G. (2008). Concerns about measuring 'spirituality' in research. *The Journal of nervous and mental disease*, 196(5), 349-355.

Kolodinsky R W, Giacalone R A, Jurkiewicz C L (2008) Workplace values and outcomes: Exploring personal, organizational, and interactive workplace spirituality. *Journal of Business Ethics*, 81, 465–480.

Kyriazos, T. A., Stalikas, A., Prassa, K., Galanakis, M., Yotsidi, V., & Lakioti, A. (2018). Psychometric evidence of the Brief Resilience Scale (BRS) and modeling distinctiveness of resilience from depression and stress. *Psychology*, 9(7), 1828-1857.

Lund Dean K, Forniciari C J (2007) Empirical research in management, spirituality & religion during its founding years. *Journal of Management, Spirituality and Religion*. 4(1): 3-34.

Luthans F, Avolio BJ, Walumbwa FO and Li W (2005) The Psychological Capital of Chinese Workers: Exploring the Relationship with Performance. *Management and Organization Review* 1(2).

Mann, J. R.; Mannan, J.; Quiñones, L.; Palmer, A. A.; & Torres, M. (2010). Religiosity, spirituality, social support, and perceived stress in pregnant and postpartum Hispanic women. *Journal of Obstetric, Gynecologic, & Neonatal Nursing: Clinical Scholarship for the Care of Women, Childbearing Families, & Newborns*, 39(6), 645-657.

Maton, K. I. (1989). The stress-buffering role of spiritual support: Cross-sectional and prospective investigations. *Journal for the Scientific Study of Religiosity*, 28, 310-323.

Milliman J, Czaplewski A J, Ferguson J (2003) Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management*, 16(4), 426-447.

Mitroff I, Denton E (1999) *A spiritual audit of corporate America: Multiple designs for fostering spirituality in the workplace*. Jossey-Bass, San Francisco.

Moreira-Almeida, A., & Koenig, H. G. (2006). Retaining the meaning of the words religiousness and spirituality. *Social Science & Medicine*, 63(4), 840–845.

Pargament, K. I. (1997). *The psychology of religiosity and coping: Theory, research, practice*. New York: Guilford Press.

Roche, M., Haar, J. M., & Luthans, F. 2014. The role of mindfulness and psychological capital on the well-being of leaders. *Journal of Occupational Health Psychology*, 19: 476-489.

Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Oberle, E., Thomson,

K., Taylor, C., & Harrison, J. 2013. Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105: 787-804.

Reutter, K. K., & Bigatti, S. M. (2014). Religiosity and Spirituality as Resiliency Resources: Moderation, Mediation, or Moderated Mediation? *Journal for the Scientific Study of Religion*, 53(1), 56–72.

U. Shinde, H.J. Nelson, J. Shinde. (2018). To be or not to be: A multidimensional spirituality in the workplace. *Journal of Human Values*, 24 (3) (2018), pp. 185-207.

Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. *International journal of behavioral medicine*, 15(3), 194-200.

Southern Medical Journal, 97(12), 1194-1200. Park, K. H., Kim, D. H., Kim, S. K., Yi, Y. H., Jeong, J. H., Chae, J., ... & Roh, H. (2015). *The relationships between empathy, stress and social support among medical students. International journal of medical education*, 6, 103.

Stress in America™ 2020: Stress in the Time of COVID-19, Volume One. (n.d.). Retrieved January 12, 2021, from <https://www.apa.org/news/press/releases/stress/2020/report>

Tuck, I., Alleyne, R., & Thinganjana, W. (2006). Spirituality and stress management in healthy adults. *Journal of Holistic Nursing*, 24(4), 245-253.

Windle, G., Bennett, K. M., & Noyes, J. (2011). A Methodological Review of Resilience Measurement Scales. *Health and Quality of Life Outcomes*, 9, 1-18.

APPENDIX**Tables and Figures**

Table 1: Demographics

Variable	Spiritual (n = 148)	Student (n = 80)
Age		
18-29	10 (7%)	63 (79%)
30-44	78 (53%)	13 (16%)
45-59	46 (31%)	4 (5%)
60 and above	13 (9%)	-
Gender		
Male	55 (37%)	39 (49%)
Female	94 (63%)	41 (51%)
Education		
Masters	62 (42%)	-
Bachelors	55 (37%)	6 (7%)
Associate	6 (4%)	67 (84%)
High School	18 (18%)	7 (9%)
Missing	7 (5%)	
Employment Experience		
Currently Employed	111 (75%)	64 (80%)
Past experience	32 (22%)	15 (19%)
Never worked	5 (3%)	1 (1%)

Table 2: Independent Samples T-Test Results (H1 and H2)

	Group (n = 80)	M	SE	t	Sig	r
Spirituality	Spiritual	4.47	.05	7.41	.000	.52
	Student	3.83	.07			
Resilience	Spiritual	4.01	.06	4.38	.000	.33
	Student	3.61	.07			
Stress	Spiritual	8.86	.27	-3.49	.000	.27
	Student	10.24	.30			

Table 3: Mediation Differences in Groups

Group	Mediation Conditions (Baron & Kenny, 1986)	<i>b</i>	effect	<i>t</i>	<i>p</i>
Spiritual (<i>n</i> = 148)	X > M (stress predicts spirituality), path a	-.08		-5.65	.000
	M > Y (spirituality predicts resilience), path b	.18		2.0	.04
	X > Y (total effect), path c	-.12		-7.86	.000
	X > M > Y (direct effect), path c^1		-.10	-6.35	.000
	Indirect effect (effect of mediator), $c - c^1$		-.09		95% CI[-.13, -.005]
Student (<i>n</i> = 80)	X > M (stress predicts spirituality), path a	-.05		-1.86	.07
	M > Y (spirituality predicts resilience), path b	.22		2.31	.02
	X > Y (total effect), path c	-.15		-6.91	.000
	X > M > Y (direct effect), path c^1		-.14	-6.47	.000
	Indirect effect (effect of mediator), $c - c^1$		-.02		95% CI[-.038, -.0004]

Table 4: Group Differences via Regression

Sample	<i>b</i>	SE	β	<i>p</i>
Student (<i>n</i> = 80)				
Resilience	.34	.11	.32	.003
Stress	-.89	.48	-.21	.07
Spiritual (<i>n</i> = 148)				
Resilience	.41	.09	.35	.000
Stress	-2.34	.41	-.42	.000
Overall (<i>n</i> = 228)				
Resilience	.41	.09	.35	.000
Stress	-1.84	.27	-.41	.000

FIGURES

Fig. 1. Spirituality mediates between stress and resilience.



Fig 2. Mediation via Spirituality between Stress and Resilience

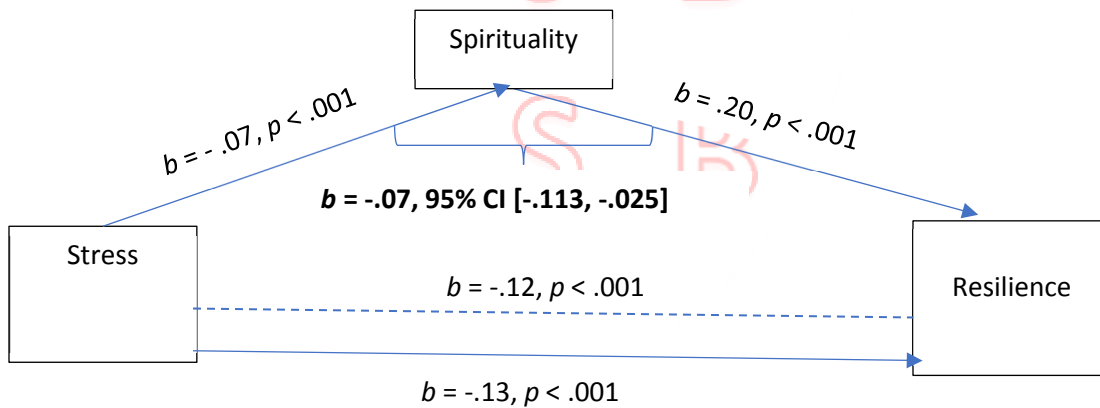


Fig. 3. The Mechanism between Individual Spirituality Dimensions and Resilience

