

## SPIRITUAL WELL-BEING - A PROACTIVE RESILIENCE COMPONENT: EXPLORING ITS RELATIONSHIP WITH PRACTICES, THEMES, AND OTHER PSYCHOLOGICAL WELL-BEING FACTORS DURING THE COVID-19 PANDEMIC IN CISM-TRAINED FIRST RESPONDERS

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**Abstract:** Research suggests spiritual resilience may ameliorate the negative effects of exposure to traumatic events among disaster mental health first responders. Our study examined the relationship between spiritual wellness and associated resilience factors among four groups of first responders (law enforcement, fire services, emergency medical services and 911 dispatchers) trained in Critical Incident Stress Management (CISM) during a global pandemic. Utilizing a mixed methods-survey with transcendental phenomenological design, data was collected from 107 participants with membership in the International Critical Incident Stress Foundation (ICISF) or the Michigan Crisis Response Association (MCRA). Participants completed the Connor-Davidson Resilience Scale, Spiritual Well-Being Scale-Shortened Version, Scales of Psychological Well-Being, a COVID-19 Social Disruption Questionnaire, and a structured written interview question to identify themes related to practices that maintain spiritual wellness through an online platform. Frequency of engaging in spiritual practices and having positive relationships with others were significantly associated with spiritual well-being for law enforcement, while frequency of engaging in spiritual practices and purpose in life were associated with spiritual well-being for 911 dispatchers. Spiritual well-being was not significantly related with social disruption due to COVID-19 among all four groups. Frequency of engaging in spiritual practices and having positive relationships with others were significant predictors of spiritual well-being for law enforcement only. Transcendental phenomenological analysis identified six themes: prayer, attending religious services, participating in religious study groups, exercise, outdoor activities and spending time in nature. Prayer was the most common spiritual well-being routine. We discuss recommendations for developing spiritual resilience training programs for CISM-trained first responders.

**Keywords:** psychological body armor, spiritual well-being, resilience, first responders, CISM, COVID-19

### Spiritual Well-being - A Proactive Resilience Component

*Exploring its Relationship with Practices, Themes, and other Psychological Well-being Factors during the COVID-19 Pandemic in CISM-Trained First Responders*

Emergency first responders (i.e., law enforcement, firefighters, emergency medical service, and 911 dispatchers) trained in and providing Critical Incident Stress Management (CISM) interventions are not only susceptible to exhibiting adverse reactions to the critical incidents that they respond to as part of their primary profession, but are more at risk for developing vicarious or secondary traumatization due to the nature of providing disaster mental health services to their peers and others exposed to traumatic events (Cieslak et al., 2013; Figley, 1995; Motta, 2008; Pearlman & Saakvitne, 1995). Previous literature has noted that

such trained disaster mental health responders are not only susceptible to developing secondary traumatic stress, but also other negative indirect trauma exposed related problems such as compassion fatigue and burnout (Burnett, 2017; Burnett & Wahl, 2015; Myers & Wee, 2005). On the other hand, factors such as spiritual resilience may play a role in ameliorating the dangerous effects of direct and indirect trauma exposure among CISM-trained first responders.

#### *Spirituality and Spiritual Well-Being*

Spirituality can have many interpretations and is practiced differently among individuals. Moreover, approximately 90% of the world population engages in some form of religious or spiritual practice (Koenig, 2009). Spirituality can encompass a personal journey of feelings and behaviors that result in creating hope and peace that maintain connections with others, nature, a higher power, and or with God. Having a sense of hope and a healthy

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spiritual relationship strengthens coping techniques and enhances overall mental well-being of an individual (Aten et al., 2019; Peres et al., 2007; Tuck, 2009). Furthermore, a systematic review of 51 empirical articles regarding spirituality and disaster research generally found that spirituality leads to positive outcomes (i.e., resilience and posttraumatic growth, positive religious involvement, increased levels of well-being and lower levels of anxiety and depression) among disaster survivors (Aten et al., 2019).

Generally, spirituality is considered a broader and personal concept that is free of confining rules and responsibilities associated with organized religion, while religion involves doctrines, practices and rituals related to the sacred (Koenig, 2009). Conversely, spiritual well-being is considered one's perceived quality of spiritual life in a religious and existential sense that is motivated by achieving a state of being spiritual (Paloutzian et al., 2021; Paloutzian & Ellison, 1982). For the purposes of our study, spirituality is used interchangeably with spiritual well-being and is generally defined as proactive behaviors that build and maintain a perceived quality state of spiritual well-being/wholeness/life that provides one with a sense of meaning and purpose often exhibited through a variety of activities such as prayer, meditation, attending religious services, participating in religious study groups that foster a sense of relational connectedness, reading spiritual/religious literature, fitness, engaging in outdoor interests, spending time in nature and other associated behaviors.

### *Psychological Body Armor and Spirituality*

Everly (2017) posited the theoretical framework of psychological body armor (PBA), which he defines as a "unique form of human resilience." According to Everly, PBA consists of two pathways (proactive resilience and reactive resilience) that contribute to one's overall resilience. Reactive resilience centers on a person's ability to bounce back from adversity, however proactive resilience encompasses one's immunity to crisis reactions that is constructed through several mechanisms, including setting realistic expectations, fostering active optimism and self-efficacy, and enhancing neurophysiological immunity (Everly, 2017).

Therefore, spirituality may function as an aspect of proactive resilience through the form of neurophysiological immunity because it incorporates both, controlling one's physiology and behavior. Consequently, neurophysiological immunity incorporates the process of down-regulation that serves to diminish the human stress response process (i.e., activation of the sympathetic nervous system) through the continuous relaxation practice of several techniques, including spiritual

well-being activities such as repetitive prayer and meditation (Everly & Lating, 2013; Hartwick & Kang, 2013).

### *Spirituality and Resilience*

Generally, resilience is one's ability to utilize multiple pathways to maintain consistent, healthy levels of physical and psychological well-being after exposure to a traumatic event (Bonanno, 2004). These pathways may include hardiness, maintaining a positive mindset that fosters optimistic thinking and positive emotions, fostering social support networks, exhibiting high self-acceptance, mindfulness and/or having a purpose in life (Bonanno, 2004; Conn, 2018; Rutter, 1985; Thompson et al., 2011).

Spirituality can be a component of resilience among individuals who have experienced traumatic events as a way to restore meaning and reduce the development of a posttraumatic stress disorder (e.g., Aten et al., 2019; Fernando & Ferrari, 2011; Hayes et al., 2017; Park et al., 2017; Stephens et al., 2013). For instance, Koenig (2009) has noted that religious coping is common among psychiatric populations since "religious beliefs provide a sense of meaning and purpose during difficult life circumstances that assist with psychological integration" (p. 285). He further suggests that religious beliefs can assist with cultivating an optimistic worldview and promote hope, as well as offer a social support community that encompasses both the human and divine. Finally, several studies have shown that engaging in spiritual relaxation activities such as repetitive prayer and meditation helps to reduce high stress arousal (see Burnett et al., 2019, pp. 33-34).

### *Emergency First Responders and Spirituality*

Generally, emergency first responders (i.e., law enforcement, fire services, emergency medical services (EMS) and 911 dispatch/communication services) are often exposed to traumatic crisis events on a daily basis. Sadly, this makes these responders more susceptible in displaying negative stress reactions (i.e., burnout, depression, suicide, substance abuse, and a crisis in faith) in response to a singular or multiple trauma incidents (Everly & Mitchell, 2017; Tuck, 2009).

#### Law Enforcement.

Law enforcement officers are often exposed to trauma during the course of their duties which can lead to developing an inability to cope and maintain their physical, psychological, emotional and spiritual well-being both on- and off-duty (Feemster, 2009). This inability to manage their overall psychological well-being may lead to changes in pre-existing "invisible factors" such as, spirituality beliefs, meaning of and purpose in life, self-acceptance and strategies for coping (Park et al., 2017; Peres et al., 2007; Tuck, 2009). Additionally,

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Conn (2018) noted that lack of supportive personal and community relationships, as well as experiencing a conflict between their idealistic expectations about policing and the reality of the job may also influence spiritual wellness.

### Fire Services.

Along with police officers, firefighters are also exposed daily to high stress work environments and potentially traumatizing incidents. Hence, firefighters have an increased risk for developing posttraumatic stress related disorders and suicide (e.g., Del Ben et al., 2006; Boffa et al., 2017; Soo et al., 2011). On the other hand, firefighters who have healthy coping techniques and surround themselves with systems of support, show better signs of recouping from traumatic stress (Janas, 2012). For instance, one study that utilized the Spirituality in Everyday Life Survey to assess firefighter physical and mental well-being and overall quality of life found that poor mental well-being was correlated with lower levels of social bonding and connectedness, which in turn, negatively impedes quality of life, social bonding, and belongingness (Carey et al., 2011). Therefore, having social bonding and connections can be key ingredients to build mental health for maintaining overall spiritual resilience among firefighters.

### Emergency Medical Services and 911 Dispatch/Communication Services.

In regard to EMS responders and 911 dispatchers, literature to support spiritual practices within these two groups is sparse. However, these two groups of first responders share similar responsibilities as law enforcement and fire services, and therefore, can share similar symptoms of psychological and traumatic stress reactions. (e.g., Golding et al., 2017; Lawn et al., 2020). Conversely, EMS responders who had increased frequencies of church or synagogue attendance and prayer were highly correlated with perceived happiness (Backus et al., 1995), while dispatchers who relied heavily on physical activity, humor, spirituality or found enjoyment in their work were better able to cope overall with workplace stress (Horsford, 2012). Lastly, Milstein (2019) showed that individuals with lower signs of depressive symptoms were more involved in religious support networks.

### Critical Incident Stress Management-Trained Responders

Disaster mental health responders represent a cross-section of various professional disciplines (i.e., psychologists, social workers, emergency first responders, nurses, chaplains, etc.) who have specialized training in trauma-related crisis intervention services. One such trauma-related training system that has been utilized for over 25 years to provide early crisis intervention and

psychological first aid among a variety of populations impacted by disasters and other tragedies has been the CISM model. CISM is a comprehensive and multicomponent crisis intervention system that was originally developed to mitigate the effects of traumatic stress and cumulative stress among emergency first responders (Everly & Mitchell, 1999; Myers & Wee, 2005). Although the effectiveness of the critical incident stress debriefing component of CISM has been mixed in the literature, the model remains a viable disaster mental health intervention (see Everly & Mitchell, 2017).

Unfortunately, CISM-trained responders are susceptible to vicarious traumatization based on the nature of providing crisis intervention support services to those that have been exposed to traumatic events. In fact, Wee and Myers (2003) found that trained CISM providers reported an array of stress reactions, which can include a variety of negative spiritual reactions (i.e., a crisis of faith or cessation of faith-related practices) (Everly & Mitchell, 2017; Myers & Wee, 2005).

### Critical Incident Stress Management-Trained Emergency First Responders

CISM-trained emergency first responders are a cross-section of law enforcement officers, firefighters, EMS professionals, and 911 dispatchers that are trained in CISM and other related crisis intervention services. These responders are often voluntary members of a local CISM team that are deployed to provide early crisis intervention and psychological first aid to their peers who have responded to community-based traumatic events. As mentioned previously, emergency first responders may experience a broad range of physical and psychological consequences as a result of their work-related exposure to traumatic events (Benedek et al., 2007). Since CISM-trained emergency first responders continue to work in their primary profession on a regular basis, it is safe to assume that their work-related exposure to disaster events, as well as their indirect exposure to trauma-related narratives through providing CISM service, makes them more vulnerable to developing traumatic stress reactions, including spiritual distress (Burnett, 2017; Burnett & Wahl, 2015; Cieslak et al., 2014; Craig & Sprang, 2010; Figley, 1995; Halpern & Vermeulen, 2017; Ray et al., 2013).

### *COVID-19 Pandemic*

In March 2020, the World Health Organization declared the SARS-CoV-2 coronavirus disease (COVID-19) a global pandemic. Shortly thereafter, U.S. President Donald Trump declared COVID-19 a national emergency in the United States which eventually resulted in many states implementing stay-at-home orders at affected non-essential businesses, schools and the delivery of services at all

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levels of government. Gruber et al. (2020) indicated that COVID-19 presents significant local and global social, economic, and medical challenges. Since the outbreak began in November 2019, there have been over 570 million positive cases and over 3 million deaths worldwide. Unfortunately, the novelty of COVID-19 will have an impact on a sequelae of psychological factors such as increases in stress, depression, anxiety, traumatic stress reactions, substance use disorders, suicide and severe mental disorders (Gruber et al., 2020). Gruber and colleagues further indicated that first responders provide direct services to the public and are at increased risk of exposure to individuals with COVID-19, thus becoming more vulnerable to exhibiting traumatic stress reactions due to restricted access to social support systems as a result of self-isolating.

### Present Study

Based on the preliminary research of Burnett, et al. (2020), our study utilized a mixed-methods design to examine the spirituality component of PBA's proactive resilience pathway. Specifically, our study examined the relationship between spiritual well-being and other associated variables (i.e., overall resilience, frequency of spiritual practices, purpose in life, self-acceptance and positive relationships with others) among CISM-trained first responders (i.e., law enforcement, firefighters, EMS and 911 dispatchers). We hypothesized that all of these variables are positively associated with and predict spiritual well-being among these four groups. Our study further explored which spiritual wellness routines these groups practice to maintain resiliency. We hypothesized that there will be a variety of responses; however, there should emerge several common themes among all groups. Finally, we also examined how social disruption due to the COVID-19 pandemic has

impacted spiritual wellness among these responders. We hypothesized that an inverse relationship should emerge between spiritual well-being and the degree of social disruption experienced among all responder groups.

## Method

### Participants

Data was collected from a convenience sample of 343 participants who held general membership from either the International Critical Incident Stress Foundation (ICISF) or the Michigan Crisis Response Association (MCRA) approximately eight months into the global COVID-19 pandemic. However, our study utilized 107 of the 343 participants who represented a cross-section of four emergency response professions (law enforcement services, fire services, emergency medical services, and dispatch/911 communications services) who are trained in CISM interventions. Participation in the study was voluntary. Regarding gender, 55.1% were female and 44.9% were male. The age of participants ranged from 24 to 70 years of age ( $M_{age} = 46.6, SD = 9.21$ ). Approximately 84% were White (non-Hispanic), 5.6% were Latino or Hispanic, 3.7% Asian/Pacific Islander, 2.8% were African American, 1.9% were American Indian/Alaskan Native, and 1.9% were Other. Approximately 69% were married, 42.1% were college graduates, and 28% were Protestant. Economically, 64.5% had an income that ranged from \$37,501 to \$112,600. Overall, for all four first responder professions, years of experience in their current profession ranged from 1 to 43 years ( $M = 19.8, SD = 8.88$ ), while years of experience in providing CISM services ranged from less than one year to 32 years ( $M = 7.80$  years,  $SD = 7.37$ ). Ninety-nine percent of participants were considered essential workers during the coronavirus pandemic. See Table 1 for further descriptive statistics.

**Table 1**

*Descriptive Statistics for Four Groups of Trained CISM First Responders (N = 107).*

	Law Enforcement Services (n= 55)	Fire Services (n= 17)	Emergency Medical Services (n= 18)	Dispatch/911 Communication Services (n=17)
<b>Gender</b>				
Male	24	12	9	3
Female	31	5	9	14
<b>Age</b>				
Mean	46.4	48.5	49.7	41.8
SD	8.99	8.26	10.1	9.52
Range	26 - 63	35 - 65	26 - 70	24 - 61
<b>Ethnicity</b>				
American Indian/Alaskan Native	1	1	0	0

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African American	3	0	0	0
Asian/Pacific Islander	3	0	0	1
White (non-Hispanic)	42	16	18	14
Latino or Hispanic	4	0	0	2
<b>Religion</b>				
None	8	8	5	3
Protestant	16	2	8	4
Catholic	14	5	2	4
Muslim	1	0	0	0
<b>Marital Status</b>				
Single	5	1	2	1
In a dating relationship	4	0	1	3
Engaged	4	0	0	1
Married	39	16	9	10
Divorced	3	0	6	2
<b>Education</b>				
Some high school	1	3	0	0
High school graduate	2	0	1	3
Some college	12	0	2	4
Trade/technical/vocational training	1	3	1	0
College graduate	23	6	7	9
Some post graduate work	3	1	4	0
Post graduate degree	13	4	3	1
<b>Income Status</b>				
Less than \$37,500	0	0	1	1
\$37,500 - \$112,600	29	10	12	14
Above \$112,600	26	7	5	2
<b>CISM Experience</b>				
Mean	6.41	8.88	11.9	3.97
SD	6.66	9.07	9.17	4.59
Range	<1 year	2 - 30	<1 year to 32	<1 year to 17
<b>Years of Experience in Profession</b>				
Mean	17.7	21.9	22.9	16.7
SD	7.9	7.55	9.87	10.1
Range	1 - 36	12 - 40	8 - 43	3 - 42
<b>Are you an essential worker?</b>				
Yes	54	17	18	17
No	1	0	0	0

### Measures

*Spiritual Well-Being Scale-Shortened Version (SWBS).*

This study utilized a shortened version of the SWBS (Malinakova et al., 2017) that was originally developed by Paloutzian and Ellison (1982). The SWBS contains 7-items that measure spiritual well-being utilizing a 6-point Likert scale ranging from 1 (“strongly agree”) to 6 (“strongly disagree”).

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Responses for each of the items are summed up to produce a total score, ranging from 7 to 49, with higher scores indicating greater spiritual well-being. Malinakova et al. (2017) reported an overall internal consistency of .81 for their 7-item shortened version. The internal consistency for our study was .89.

### *Connor-Davidson Resilience 10-Item Scale (CD-RISC 10)*

Resilience was measured using the CD-RISC 10 (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003). The CD-RISC 10 utilized a 5-point Likert scale (ranging from 0 “not true at all” to 4 “true nearly all the time”) to rate 10 statements (e.g., “I can deal with whatever comes my way” and “I tend to bounce back after illness, injury, or other hardships”) in the context of the past month. Total scores range from 0 to 40, with higher scores representing greater levels of resilience. The CD-RISC 10 is purported to have good construct validity and reliability (Campbell-Sills & Stein, 2007). Internal reliability for our study was .79.

### *Scales of Psychological Well-Being (SPWB)*

The Scales of Psychological Well-Being (Ryff, n.d.; Ryff, 1989) consist of several 20-item scales that measure six dimensions of psychological well-being. Our study utilized the following SPWB scales: Personal Relationship (PRWO), Purpose in Life (PL) and Self-Acceptance (SA). Participants responded to a 6-point Likert scale for each item ranging from 1 (“strongly disagree”) to 6 (“strongly agree”). Scores ranged from 9 to 54 on each scale. Higher scores are indicative of that scale’s intended outcome. Examples of items on these scales include “I enjoy personal and mutual conversations with family members or friends” (PRWO); “I enjoy making plans for the future and working to make them reality” (PL); and “I like most aspects of my personality” (SA). Content validity for the SPWB theoretical framework and internal consistency for each scale have been well-established (see Burnett et al., 2019, p. 35). Internal reliability for our study were .86 (PRWO), .77 (PL) and .84 (SA).

### *COVID-19 Social Disruption Questionnaire (SDQ)*

At the time of our study, there were no measures that specifically assessed how social disruption due to COVID-19 has impacted individual well-being. Based on the social disruption component of Prime et al. (2020) conceptual framework on how the current pandemic will influence children’s adjustment, we developed a 5-item scale that assessed job loss, financial insecurity, social distancing and confinement. A 5-point Likert response format was used for job loss (e.g., “This happened to me because of the coronavirus outbreak”) ranging from “Was already unemployed or not working prior to the outbreak” (scored 1),

“Neither lost my job nor took a cut in pay” (scored 2), “Did not lose my job but had to take a cut in pay” (scored 3), “Been laid off or furloughed” (scored 4), to “Lost my job” (scored 5). A 7-point Likert response format was used, ranging from 0 (“Has not affected my life at all”) to 7 (“Has severely affected my life”) for financial insecurity (e.g., “How much has financial insecurity affected my life after the coronavirus outbreak”), social distancing (e.g., “How much has maintaining social distancing affected my life during the coronavirus outbreak”), confinement (e.g., “How much has having to remain confined to home affected my life during the coronavirus”), and general social disruption (e.g., “Overall, how much has the coronavirus outbreak affected my life”). The mean is calculated of these five items, with higher scores indicative of the severity of social disruption due to COVID-19. Reliability analysis of the SDQ for this study was decent at .77.

### *Spiritual Wellness Question*

Participants were asked to write freely and extensively to the following spiritual wellness question regarding spirituality activities they engage in: “There are many ways in which people maintain their spiritual wellness. Please describe, how do you maintain your spiritual wellness? Feel free to write in as much detail as possible.”

### *Demographic Questionnaire*

Participants were asked to respond to several demographic questions regarding age, gender, ethnicity, occupation, years of experience, etc.

## Procedure

This study utilized a mixed methods/survey with transcendental phenomenological design. Participants who volunteered to complete the study were provided an email invitation and corresponding link to the online platform for the survey. Informed consent was given by participants prior to completing the study. Human Subjects Institutional Review Board approval was acquired before conducting the study (IRB renewal Protocol #17-143).

## Results

### *Bivariate Correlational Analysis*

Table 2 provides the means, standard deviations, and ranges for all variables in our study. Bivariate correlational analysis examined the relationship between overall spiritual well-being and several resiliency components among the four groups of first responders trained in CISM (see Table 3). Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity were present.

**Table 2**

*Means, Standard Deviations, and Ranges for Spiritual Well-Being, Resilience, Purpose in Life, Self-Acceptance, Positive Personal Relationships with Others and Social Disruption due to COVID-19 among Four CISM-Trained First Responder Groups (N = 107).*

	<i>N</i>	<i>M</i>	<i>SD</i>	<b>Range</b>
<b>Law Enforcement Services</b>	55			
Spiritual Well-Being Scale		32.0	9.27	10 - 42
Resilience		31.7	5.42	15 - 40
Purpose in Life		45.4	7.84	24 - 54
Self-Acceptance		44.4	8.18	12 - 54
Positive Personal Relationships with Others		41.6	10.3	15 - 54
Social disruption due to COVID-19		2.45	1.58	.40 – 6.0
<b>Fire Services</b>	17			
Spiritual Well-Being Scale		28.5	10.5	25 - 39
Resilience		31.3	4.30	13 - 42
Purpose in Life		44.8	6.00	31 - 52
Self-Acceptance		42.2	7.81	23 - 51
Positive Personal Relationships with Others		42.1	9.03	25 - 54
Social disruption due to COVID-19		3.08	1.49	.40 – 5.2
<b>Emergency Medical Services</b>	18			
Spiritual Well-Being Scale		32.6	8.66	14 - 42
Resilience		32.3	4.86	22 - 40
Purpose in Life		46.3	5.31	33 - 54
Self-Acceptance		44.1	8.09	20 - 52
Positive Personal Relationships with Others		42.2	9.91	25 - 54

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Social disruption due to COVID-19		2.47	1.34	.40 – 5.0
<b>911 Dispatch/Communication Services</b>				
	17			
Spiritual Well-Being Scale		32.2	8.86	13 - 42
Resilience		32.6	4.37	23 - 38
Purpose in Life		46.5	5.99	34 - 54
Self-Acceptance		44.8	6.15	35 - 54
Positive Personal Relationships with Others		43.3	7.23	28 - 53
Social disruption due to COVID-19		2.24	1.53	.40 – 5.6

**Table 3**

*Bivariate Correlations between Spiritual Well-Being and Resilience, Frequency of Spiritual Practices, Purpose in Life, Self-Acceptance, Positive Personal Relationships with Others and Social Disruption due to COVID-19 among Four CISM-Trained First Responder Groups (N = 107).*

	Law Enforcement Services (n= 55)	Fire Services (n= 17)	Emergency Medical Services (n= 18)	911/Dispatch Communication Services (n=17)
SWB → RESL	-.038	-.095	.238	.379
SWB → SPPRAC	.479***	.428	.251	.516*
SWB → PL	.193	.032	.012	.495*
SWB → SA	.229	.275	.325	.418
SWB → PRW	.406**	.246	.224	.435
SWB → SDQ	-.147	-.420	-.416	-.318
SPPRAC → RESL	-.024	.117	-.060	.639**
SPPRAC → PL	.149	.027	-.145	.453
SPPRAC → SA	.175	.201	-.050	.305
SPPRAC → PRW	.242	.066	-.280	.270
SPPRAC → SDQ	-.186	-.394	.260	-.508*
PL → RESL	.509***	.374	.120	.484*
PL → SA	.621***	.635**	.684**	.588*
PL → PRW	.477***	.594*	.660**	.326
PL → SDQ	.061	-.041	-.332	-.224
SA → RESL	.606**	.509*	.042	.637**
SA → PRW	.585**	.607**	.751***	.613
SA → SDQ	-.013	-.064	-.603***	-.300
PRW → RESL	.404**	.335	.334	.061
PRW → SDQ	-.045	.235	-.551*	-.140
SDQ → RESL	.008	-.212	-.286	-.325

*Note.* SWB = spiritual well-being; RESL = resilience; SPPRAC = frequency of spiritual practices; PL = purpose in life; SA = self-awareness; PRW = positive relationships with others; SDQ = social disruption. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Regarding law enforcement services responders, spiritual well-being was only significantly associated with frequency of engaging in spiritual activities ( $r = .48, p < .001, r^2 = .23$ ) and positive personal relationships with others ( $r = .41,$

$p < .01, r^2 = .16$ ). In other words, frequency of engaging in spiritual activities explained 23% of the variance in spiritual well-being scores, while positive personal relationships with others explained an additional 16% of the variance in spiritual well-



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being scores among CISM-trained law enforcement service providers. There was no significant relationship found between spiritual well-being and resilience ( $r = -.04, p = .78$ ), purpose in life ( $r = .19, p = .16$ ) and self-acceptance ( $r = .23, p = .09$ ). Regarding spiritual well-being and social disruption due to COVID-19, there was no significant relationship between these two variables ( $r = -.15, p = .28$ ).

Regarding fire services responders, there was no statistically significant relationship between spiritual well-being and resilience ( $r = -.10, p = .72$ ), frequency of spiritual practices ( $r = .43, p = .10$ ), purpose in life ( $r = .03, p = .90$ ), self-acceptance ( $r = .28, p = .29$ ) and positive personal relationships with others ( $r = .25, p = .34$ ). Regarding spiritual well-being and social disruption due to COVID-19, there was no significant relationship between these two variables ( $r = -.42, p = .09$ ).

Regarding emergency medical services responders, there was no statistically significant relationship found between spiritual well-being and resilience ( $r = .24, p = .34$ ), frequency of spiritual practices ( $r = .25, p = .32$ ), purpose in life ( $r = .01, p = .96$ ), self-acceptance ( $r = .35, p = .15$ ) and positive personal relationship with others ( $r = .22, p = .37$ ). Regarding spiritual well-being and social disruption due to COVID-19, there was no significant relationship between these two variables ( $r = -.42, p = .09$ ).

Regarding 911 dispatch/communication services, spiritual well-being was only significantly associated with frequency of engaging in spiritual activities ( $r = .52, p < .05, r^2 = .27$ ) and purpose in life ( $r = .50, p < .05, r^2 = .25$ ). In other words, frequency of engaging in spiritual activities explained 27% of the variance in spiritual well-being scores, while purpose in life explained an additional 25% of the variance in spiritual well-being scores among CISM-trained dispatch/911 communications service providers. There was no significant relationship found between spiritual well-being and resilience ( $r = .38, p = .13$ ), self-acceptance ( $r = .42, p = .10$ ), positive personal relationships with others ( $r = .44, p = .08$ ) and social disruption due to COVID-19 ( $r = -.32, p = .21$ ).

### *Hierarchical Regression Analysis*

Hierarchical multiple regression was used to explore five control variables (frequency of spiritual practices, purpose in life, self-acceptance, positive relationships with others and social disruption due to COVID-19) to predict spiritual well-being, after controlling for the influence of resilience for all four first responder groups (see Table 4). Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

**Table 4**

*Hierarchical Regression Analysis Summary for Frequency of Spiritual Practices, Purpose in Life, Self-Acceptance, Positive Relationships with Others and Social Disruption due to COVID-19 Predicting Spiritual Well-Being among Four CISM-Trained First Responder Groups (N = 107).*

Step and Predictor Variable	B	SE B	$\beta$	R <sup>2</sup>	$\Delta R^2$
Law Enforcement Services (n = 55)					
Step 1:					
Resilience	-.07	.23	-.04	.001	.001
Step 2:					
Frequency of Spiritual Practices	1.66	.58	.36**	.36**	.36
Purpose in Life	.07	.18	.06	.36**	.36
Self-Acceptance	.09	.20	.08	.36**	.36
Positive Relationships with Others	.31	.13	.34*	.36**	.36
Social Disruption	-.08	.14	-.07	.36**	.36
Fire Services (n = 17)					
Step 1:					
Resilience	-.23	.63	-.10	.01	.01
Step 2:					
Frequency of Spiritual Practices	.84	1.23	.16	.56	.55
Purpose in Life	-.62	.52	-.36	.56	.55
Self-Acceptance	.46	.43	.35	.56	.55
Positive Relationships with Others	.61	.36	.52	.56	.55
Social Disruption	-.80	.36	-.57	.56	.55
Emergency Medical Services (n = 18)					
Step 1:					
Resilience	.42	.43	.24	.06	.06

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Step 2:					
Frequency of Spiritual Practices	1.79	1.36	.35	.37	.31
Purpose in Life	-.53	.62	-.32	.37	.31
Self-Acceptance	.27	.55	.25	.37	.31
Positive Relationships with Others	.11	.36	.13	.37	.31
Social Disruption	-.50	.42	-.39	.37	.31
911/Dispatch Communication Services ( <i>n</i> = 17)					
Step 1:					
Resilience	.77	.48	.38	.14	.14
Step 2:					
Frequency of Spiritual Practices	1.71	1.85	.35	.44	.30
Purpose in Life	.22	.48	.15	.44	.30
Self-Acceptance	.35	.53	.24	.44	.30
Positive Relationships with Others	.32	.32	.26	.44	.30
Social Disruption	-.03	.33	-.03	.44	.30

*Note.* \* $p < .05$ . \*\* $p < .01$ .]

Concerning law enforcement services responders, resilience was entered at Step 1, explaining 0.1% of the variance in spiritual well-being. After entry of frequency of spiritual practices, purpose in life, self-acceptance, positive relationships with others and social disruption due to COVID-19 at Step 2 the total variance explained by the model as a whole was 35.7%,  $F(6, 48) = 4.44$ ,  $p < .01$ . The five control measures explained an additional 36% of the variance in spiritual well-being, after controlling for resilience,  $R$  squared change = .36,  $F$  change (5, 48) = 5.31,  $p < .01$ . In the final model, the only variables that were statistically significant were the following in descending order: frequency of spiritual practices ( $beta = .36$ ,  $p < .01$ ) and positive relationships with others ( $beta = .34$ ,  $p < .05$ ).

Regarding fire services responders, resilience was entered at Step 1, explaining 0.9% of the variance in spiritual well-being. After entry of frequency of spiritual practices, purpose in life, self-acceptance, positive relationships with others and social disruption due to COVID-19 at Step 2 the total variance explained by the model as a whole was 56.3%,  $F(6, 10) = 2.15$ ,  $p = .14$ . The five control measures were not statistically significant in spiritual well-being, after controlling for resilience,  $R$  squared change = .55,  $F$  change (5, 10) = 2.53,  $p = .09$ . Thus, in the final model none of the five variables were statistically significant.

Concerning emergency medical responders, resilience was entered at Step 1, explaining 6% of the variance in spiritual well-being. After entry of frequency of spiritual practices, purpose in life, self-acceptance, positive relationships with others and social disruption due to COVID-19 at Step 2 the total variance explained by the model as a whole was 36.8%,  $F(6, 11) = 1.07$ ,  $p = .44$ . The five control variables were not statistically significant in spiritual well-being, after controlling for resilience,  $R$  squared change = .31,  $F$  change (5, 11) = 1.08,  $p$

= .42. Thus, in the final model none of the five variables were statistically significant.

Regarding 911 dispatch/communication services responders, resilience was entered at Step 1, explaining 14% of the variance in spiritual well-being. After entry of frequency of spiritual practices, purpose in life, self-acceptance, positive relationships with others and social disruption due to COVID-19 at Step 2 the total variance explained by the model as a whole was 44.3%,  $F(6, 10) = 2.52$ ,  $p = .13$ . The five control variables were not statistically significant in spiritual well-being, after controlling for resilience,  $R$  squared change = .30,  $F$  change (5, 10) = 1.07,  $p = .43$ . Thus, in the final model none of the five variables were statistically significant.

### *Transcendental Phenomenology Data Analysis*

Regarding the analysis of responses to our spiritual wellness question, Moustakas' (1994) transcendental phenomenological methodology was utilized. From 107 verbatim responses, 82 significant statements were extracted. Arranging the formulated meanings into clusters resulted in six themes: prayer, attending religious services, participating in religious study groups, exercising (fitness), outdoor activities, and spending time in nature.

**Theme 1: Prayer.** In this theme, first responders focused on prayer as a practice in maintaining their spiritual well-being. In this sense prayer was described as behavioral routines stated as, "prayers," "daily prayers," "I reach out in prayer to God" and "private prayer".

**Theme 2: Attending Religious Services.** In this cluster, participants focused on attending religious services. These religious services consisted of attending them online and/or in person. Responses from first responders ranged from, "Going to church," "attend Mass occasionally," "Going to

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church as often as possible,” and “watching church sermons online.”

**Theme 3: Participating in Religious Study Groups.** In this theme, participants maintained their spiritual wellness by participating in religious study groups. Responses from first responders ranged from, “I attend a Bible study groups several times,” “Bible study, meeting, class,” and “We have a weekly bible study at work.”

**Theme 4: Exercise (fitness).** In this cluster, first responders mentioned that they use exercise and/or any form of fitness in maintaining their spiritual well-being. Responses included, “exercise programs,” “I do and teach yoga,” “physical activity” and “exercise.”

**Theme 5: Outdoor Activities.** In this theme, outdoor activities can be characterized as any physical activities outside and/or in nature. First responders mentioned their outdoor activities as, “fishing and hiking,” “Spending time outdoors tends to fill my soul the most, so I fly fish, hike, mountain bike, cross country ski, camp and or hunt as much as I can,” “hiking, camping, and canoeing,” and “Long hikes, kayaking, and camping trips all refresh my soul and make me feel like an intrinsic and important tiny part of this world.”

**Theme 6: Spending Time in Nature.** In this cluster, spending time in nature is characterized as devoting time with nature. Responses included, “I have also just found peace in wandering in the nature and listening to the birds, frogs, and other animals”, “alone in nature”, “Getting out in nature” and “I still consider myself very spiritual and that mostly comes from immersing myself in nature.”

In this study, CISM-trained first responders provided narrative responses of their practices and routines which they deemed important in maintaining their spiritual well-being through the proactive resilience pathway. The responses resulted in six common themes of prayer, attending religious services, participating in religious study groups, exercise (fitness), outdoor activities, and spending time in nature routines across all four groups, law enforcement, fire services, EMS, and 911/dispatch communications.

Frequencies were determined for all four first responder groups based on their narrative responses of their practices and routines which they deemed important in maintaining their spiritual well-being through the proactive resilience pathway (see Table 5). Among law enforcement officers, 27% indicated using prayer, 20% attend religious services, 4% participate in religious study groups, 4% exercise (fitness), 5% engage in outdoor activities, and 11% spend time in nature. For fire services, 24% indicated practicing prayer, 6% attend religious services, 6% participate in religious study groups, 18% exercise (fitness), 6% engage in outdoor activities, and 6% spend time in nature. Among EMS responders, 39% indicated using prayer, 33% attend religious services, none participate in religious study groups, 6% utilize exercise (fitness), 11% engage in outdoor activities, and 6% spend time in nature. In regard to 911 dispatch/communications services, 53% stated engaging in prayer, 6% attend religious services, 6% participate in religious study groups, 12% exercise (fitness), and 6% engage in outdoor activities.

Table 5

*Frequency of Spiritual Wellness Routines for Four Groups of CISM-Trained First Responders (N = 82).*

	Law Enforcement (n = 55)	Fire Services (n = 17)	Emergency Medical Services (n = 18)	Dispatch/911 Communication Services (n = 17)
Prayer	15	4	7	9
Attending religious services	11	1	6	1
Participating in religious study groups	2	1	0	1
Exercise/fitness	2	3	1	1
Outdoor activities	3	1	2	2
Spending time in nature	6	1	1	1

## Discussion

Our study utilized a mixed-methods design to investigate the spirituality component of PBA's proactive resilience pathway, which included identifying practiced spiritual wellness routines to maintain resilience among CISM-trained emergency first responders (i.e., law enforcement, firefighters, EMS and 911 dispatchers) during the COVID-19 pandemic. Empirical results indicated that spiritual well-being was significantly related to several associated variables for only law enforcement and 911 dispatch/communication services. Spiritual well-being was not affected by social disruption due to the COVID-19 pandemic. Qualitative analysis was able to identify six common spiritual wellness themes practiced among all four groups.

Among all CISM-trained first responders, we found that prayer was the most common spiritual wellness routine employed. However, the frequency of engaging in spiritual practices such as prayer was a significant predictor of spiritual well-being only for law enforcement responders. Thus, our results partially support the limited literature that indicates prayer is utilized by first responders (i.e., Backus et al., 1995; Janas, 2012; Robinson, 2019). In general, participating in prayer and meditation behaviors has a positive effect on psychological and spiritual well-being (Newberg et al., 2018; Wintering et al., 2021), which is key in managing the effects of traumatic stress. The significance of our study is that it strengthens the research literature regarding the importance of building PBA immunity through the proactive resilience pathway by engaging in spiritual wellness practices that include prayer and other related behaviors (i.e., meditation) among CISM-trained first responders.

Our study also showed through qualitative analysis that attending faith-based services, participating in religious study groups, exercising, engaging in outdoor activities and spending time in nature are important practices in building spiritual wellness resilience. This was supported empirically through a hierarchical regression analysis that found frequency of participating in spiritual activities and positive personal relationships with others significantly predicted spiritual well-being but for only CISM-trained law enforcement responders. In general, Conn (2018) suggested that engaging in such activities is important in building resilience against the negative effects of responding to traumatic events for law enforcement and other emergency response personnel. Furthermore, these routines also provide the opportunity for these responders to build positive social support networks

through their faith communities. In fact, many of the activities that responders can do within each of the identified themes can be done with others. Research has shown that having access to social supports before and after a traumatic event reduces one's vulnerability to developing acute and chronic stress reactions (Charuvastra & Cloitre, 2008). In essence, spiritual well-being is partially an interactive combination of both participating in spiritual routines and interacting with important social support systems.

One of the unexpected findings of our study from the quantitative analysis was the lack of significant findings between spiritual well-being and the impact of social disruption due to COVID-19 among CISM-trained first responders. The literature suggests that first responders and other essential workers who provide direct services to individuals with COVID-19 are at greater risk of exhibiting traumatic stress reactions (Gruber et al., 2020). Hence, we hypothesized that social disruption due to the current pandemic would not affect those with higher levels of spiritual well-being and its associated variables (i.e., purpose in life, self-acceptance, and positive personal relationships with others). Our hypothesis was not supported. One plausible explanation for this finding is that the majority of the responders in our study reported that they were not severely impacted by the social disruption aspect of the pandemic since they were considered essential workers and had to work. This suggests that these responders treated COVID-19 as any other traumatic event that they may respond to on a daily basis. Thus, "it is part of doing business as usual" in the first responder world. Furthermore, their scores for spiritual well-being, resilience, purpose in life, self-acceptance, and positive personal relationships with others were above average which may indicate some pre-existing protective immunity before the onset of the pandemic. However, a more plausible explanation is that our participants are highly trained and experienced in CISM techniques. In fact, Burnett et al. (2020) found that having professional CISM training contributed more to strong overall resilience which made the proactive immunity pathway of PBA irrelevant. Thus, the CISM training our responders received may have better prepared them to manage crisis events more effectively (i.e., COVID-19), which includes having a better self-conceptualization of knowing when to seek help when they feel overwhelmed by a traumatic stressor.

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### *Limitations*

There were several limitations to our study. A major limitation of our study was a lack of participants from fire services, EMS, and 911 dispatch/communication services. Each of these groups had less than 20 subjects compared to law enforcement which was nearly twice that amount. This limited the variability of responses, as well as reduced statistical power when examining these groups. Future research comparing these four CISM-trained first responder groups should utilize larger sample sizes. Second, due to the COVID-19 pandemic, adequate follow-up interviewing to our structured spiritual wellness question could not be completed. This would have provided us with more in depth and clarified responses from participants. Third, our study utilized a convenience sample from ICISF and MCRA to recruit participants. Hence, the interpretation of our results is limited to CISM-trained emergency first responders from these organizations. Lastly, pre-existing data on our variables prior to the onset of the pandemic was not available. Thus, the ability to compare pre and post data involving our participants could not be completed. This comparison data would have provided us with a better understanding about the impact of COVID-19 on spiritual wellness over time after its onset. In other words, we would have been able to observe any changes in their spirituality in response to coping with COVID-19 as it progressed among CISM-trained first responders.

### *Implications and Recommendation*

The major implication of our study is twofold. First, disaster mental health organizations and CISM teams should actively encourage CISM-trained emergency first responders to participate in activities that develop and reinforce their spiritual wellness which is vital to enhancing their PBA immunity. Second, disaster mental health and other crisis response organizations are strongly encouraged to continuously develop, enhance, and implement evidence-based training programs that advocate for, as well as strengthen spiritual resilience behaviors among all CISM responders.

Therefore, based on the findings of our study there are several recommendations that CISM-trained first responders and disaster mental health organizations can participate in to build and reinforce their PBA proactive resilience immunity through spiritual well-being practices. One significant recommendation is to encourage some form of involvement in prayer related behaviors. Prayer and meditation build resilience against the negative effects of trauma by strengthening existing values, reestablishing/redefining life purpose and meaning, and increasing the feeling of being grounded in one's beliefs, as well as decreasing levels of stress, PTSD, or symptoms leading to

PTSD (Conn, 2018; Newberg et al., 2018; Park et al., 2017; Wintering et al., 2021).

Another important recommendation is to encourage/maintain attending religious services, participating in religious study groups, and identifying essential faith-based community social support networks to draw near to before, during, and after times of crisis. This serves two vital purposes. First, having this type of spiritual wellness foundation provides CISM-trained first responders the ability to access and engage in social support relationships, as well as provide interactive opportunities in sharing and clarifying theological/religious/spiritual questions and conclusions that diminishes or prevents developing a crisis of faith. Second, having access to similar faith services is beneficial in dampening the negative effects of occupational and CISM-related stressors, thereby strengthening healthy coping behaviors which counterbalances the onset of mental health symptoms (Aten et al., 2015).

A final important recommendation is to encourage CISM-trained first responders to engage in some form of physical fitness (i.e., yoga), participate in outdoor activities (i.e., camping and kayaking) and spend time in nature (i.e., nature walks and hiking). Numerous research studies and self-help books (e.g., Gilmartin, 2002; Willis, 2019) have advocated for and expound on the benefits of these activities on physical, psychological, emotional and spiritual wellness. Generally, physical activity, spending time in nature, and partaking in outdoor activities is beneficial for better sleep quality, promotes stronger self-esteem, improves mental clarity, reduces stress, increases emotional strength, builds positive relationships with others, and boosts overall immunity (Conn, 2018; Park, 2017).

In conclusion, our study provides further insight regarding the spiritual wellness component of proactive resilience among a sample of CISM-trained emergency first responders during a global pandemic. Spiritual wellness is a vital aspect in building one's PBA resilience immunity to help mitigate the negative effects related to working in the disaster mental health field. Further research is needed to provide further clarification pertaining to the spiritual wellness practices and routines among CISM-trained firefighters, EMS personnel, and 911 dispatchers since our sample was small for these groups. Unfortunately, the potential risk of developing a crisis of faith through providing CISM services to those exposed to traumatic incidents remains a constant threat to CISM-trained first responders due to the very nature of working in both professions. Therefore, it is essential for CISM-trained first responders to incorporate regularly several of the recommendations offered in this study to strengthen and maintain their spiritual wellness,

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thereby building a more resilient PBA immunity to crisis reactions.

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