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Stress Perception and Measurement in Missionary Populations

Abstract

Christian missionaries experience numerous stressors across multiple domains. To understand their unique experiences, a targeted assessment is required. There is no known psychometrically tested measure that captures the nuances of stress for this population. To that end, as part of a larger study, the quantitative CHOPS Stress Inventory, a new tool for measuring missionary stress was developed and showed good initial psychometric qualities when compared to an established stress measure. Furthermore, the Analysis of covariance (ANCOVA) of survey findings on 267 cross-cultural evangelical missionaries noted that both age and sex demonstrated significant effects on perceived stress scores. Implications for missionary member care services and recommendations for future research are discussed.

Keywords: stress perception, missionary member care, cross-cultural stress measurement

Stress Perception and Measurement in Missionary Populations

Serving as a missionary can be one of the most enriching (Foyle, 2001) and life-shaping experiences (Eenigenburg & Bliss, 2010), bringing great joy and rewards along with accelerated spiritual growth, deepening of faith, and an increased dependence on God. Yet, those who respond to this call and go into cross-cultural contexts often encounter extraordinarily difficult and stressful circumstances (O'Donnell & Lewis -O'Donnell, 1988, 1992, 2009, 2012). Schaefer et al. (2007) report that while pursuing purposes they strongly believe in, missionaries and aid workers expose themselves to adjustment challenges, health risks, and increased risks of trauma.

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Missionary Stressors and Member Care Services

A number of researchers have identified the high degree and types of stressors missionaries encounter (Bagley, 2003; Carter, 1999; Gish, 1983; Foyle, 1987, 2001; Irvine, Armentrout, & Miner, 2006). This stress can exist on a continuum from mild to severe and from normative to non-normative across the lifespan of the missionary. Due to the nature of cross-cultural service, missionaries often encounter both internal and external stressors across several domains simultaneously. Too much stress over an extended period of time can lead to a number of negative health and interpersonal consequences (Cohen, Janicki-Deverts, & Miller, 2007; Cozolino, 2010; Gurung, 2014; Jennings, 2007) and it is typically the accumulation of stressors that impair missionary service (Befus, 2018; Chester, 1983; Schwandt & Moriarty, 2008).

Despite the number of stressors, numerous studies suggest that missionaries may be reluctant to share their vulnerabilities (Eenigenburg & Bliss, 2010; Mills, 2008; Strand, Pinkston, Chen, & Richardson, 2015, Vanderpol, 1994). Chester

(1983) suggests they are under no more stress than others in the helping professions but may be unaware or unwilling to report the level of stress and may under report it (Carter, 1999). Consistent with studies on stress-related growth (Joseph & Linley, 2005; Tedeschi & Calhoun, 2004), missionaries may report positive changes as a result of the stress even when the stress is trauma-related (Irvine et al., 2006). In fact, missionaries appear to have a high degree of resilience and may expect stress as part of their calling (Bagley, 2003, Schaefer et al., 2007). This resilience may in turn buffer the amount of perceived stress (Alim, Feder, Graves, Wang, Weaver, Westphal, & Charney, 2008), allowing missionaries to continue being effective in their ministries despite the difficulties. Resiliency factors may also be implicated in the underreporting of stress in this population. Notwithstanding, all of these factors must be taken into consideration in evaluating and interpreting stress in missionary populations.

In response to the high degree of stressors reported, mission agencies have made a concerted effort to both assess the stress and provide targeted interventions across the life span of the missionary. This care referred to as member care, which is now a global effort, is described by O'Donnell and Lewis -O'Donnell (2016) as an interdisciplinary, international, and multi-sectoral field that focuses on supporting the diversity of mission/aid personnel and sending groups. This care involves the provision and development of quality resources to promote wellbeing, resiliency, and effectiveness. It includes pre-field training, field coaching, personnel departments, pastoral counselors, crisis support, and reentry preparation (O'Donnell & Lewis-O'Donnell, 2016).

Stress Measurement Tools for Missionary Populations

Numerous studies have been conducted to measure the types of stressors missionaries encounter with a variety of different measures. Gish (1983) developed a 65-item scale, which was replicated in Carter's study (1999). Bosch (2014) created a comprehensive survey tool with over one hundred multiple categories of stress, areas of need, member care concerns

or factors contributing to attrition. Dodds and Dodds (1993; 1997) implemented a modified version of the Holmes-Rahe Social Readjustment Rating Scale (Holmes & Rahe, 1967) called a 'stress-event scale' to accommodate for cross-cultural realities. Studies have also included other stress-related tools that directly or indirectly measure stress, components of stress or related factors such as burnout (Chester, 1983), trauma or posttraumatic stress disorder (PTSD) (Bagley, 2003; Schaefer et al., 2007); hassles (Navarra & James, 2002); hostility (Taylor & Maloney, 1983); or well-being (Keckler, Moriarty & Blagen, 2008). Many studies focus on cross-cultural adjustment stressors (Cerny Smith Assessment, 2018) while others address depression, anxiety or other psychological components (Pinkston, Chen & Richardson, 2015; Strand et al., 2015). Many of these studies used multiple assessment tools concurrently. In addition to these stress measures, several researchers have used case studies (Gardner, 1987) self-reports and mixed methods (Bikos, et al., 2009) that yield rich data from which to examine the types and severity of reported stressors.

Despite the number of stress measures and studies evaluating missionary stress to date no research could be located where a measurement tool specific for missionary stressors had been tested and statistically compared to existing measures. One purpose of the present study was to test a newly designed quantitative instrument, the CHOPS Stress Inventory, developed to assess missionary stress and compare it to the 10-item Perceived Stress Scale (PSS, Cohen, Karmarck, & Mermelstein, 1983), that has established psychometric qualities.

CHOPS Stress Inventory

O'Donnell and Lewis O'Donnell (2009, 2012) have identified 10 common areas of stress cross-cultural workers encounter. These 10 overlapping areas, that bear research support are represented by the acronym CHOPS, include Cultural, described as getting one's needs met in unfamiliar ways; Crises, potentially traumatic events; Human, relationships; Historical, unresolved past areas of personal or social struggles; Occupational, related to job specific challenges and stressors; Organizational, governance and

management; Physical, the overall health and factors that affect it ; Psychological, the overall emotional stability and self-esteem; Support, the resources to sustain one's work and Spiritual relationship with the Lord. The research literature well-supports each of these areas as critical missionary stressor domains; Cultural (Foyle, 2001); Crises (Bagley, 2003; Human (Ritchey & Rosik, 1993); Historical (Schubert, 1992); Occupational (Vander Pol, 1994); Organizational (Carter, 1999); Physical (Lindquist, 1997); Psychological (Barnett, Duvall, Edwards, & Lewis Hall, 2005); Support (Taylor & Maloney, 1983); and Spiritual (Parshall, 1987).

The CHOPS Stress Inventory helps missionaries and humanitarian -aid workers assess themselves across the 10 areas of stress. The inventory also provides a reflective section where workers can identify struggles, successes and strategies (O'Donnell & Lewis -O'Donnell, 2009). The 2009 version of CHOPS assessment was updated in 2012 to include areas of stress identified in the A4 regions: America-Latina, Arabic-Turkic, Africa, and Asia (O'Donnell & Lewis O'Donnell, 2012). A quantitative version of the 2012 CHOPS Stress Inventory (Tone, 2015) was developed for the present study and is described in the Methods section.

Stress and Coping

There are several theories identifying the stress response in humans, including the models first proposed by Cannon (1914) and the Selye's (1956) General Adaptation Syndrome. Both of these theories involve the physiological stress responses of the nervous and endocrine systems. For the purposes of this study, we will consider the psychological model proposed by Lazarus (1966) involving the cognitive appraisal systems. Lazarus saw stress as the imbalance between the demands placed on the individual and their resources to cope. The experience of stress differs significantly depending on how the stress is interpreted (Gurung, 2014). In other words, it is rarely the stressor itself but rather the perception of stress that can lead to negative results (Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988).

A review of the literature on missionary populations reveals that what may be stressful for one

missionary may be considered a challenge to another, which largely depends on the perception (Gish, 1983; Huff, 2001). Gish (1983) points out that stress depends in part on whether or not the missionary appraises a given situation as benign, neutral, or stressful and adds that even if the situation is appraised as stressful, it may not result in distress, as some may view it as a challenge. Gish (1983) notes that if a person does see harm, loss, or threat in the stress, the result may be different.

Perception of Stress

Generally speaking, the perception of stress, as a construct, is found within the framework of the appraisal and coping literature. Lazarus and Folkman (1984) described stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being. The cognitive appraisal process includes a primary appraisal in which the person evaluates potential harm or benefit to self or loved ones, goals, values, or commitments. In a secondary appraisal, the person evaluates what can be done to prevent harm or improve benefits, and what coping options are available (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). How well a person copes with stress depends on a variety of factors such as the internal resources of mastery, self-esteem, and external resources such as social support (Bovier, Chamot, & Perneger, 2004). Notwithstanding, any one of these internal and external support networks may be disrupted in a cross-cultural experience (Dodds & Dodds, 2003; Sweatman, 1999), leaving the missionary vulnerable to ineffective or maladaptive coping mechanisms and negative sequelae.

Perception of stress, however, is not a monolithic construct. Multiple confluent factors can influence how stress is both perceived and how one chooses to cope. This delicate balance can make the difference between a positive and negative sojourn for the missionary worker. Identifying and understanding the amount of and types of stress can be the first step in stress management and coping initiatives. This study aimed to evaluate the perception of stress in a population known to experience a high degree

of stressors by evaluating the utility of a new measure for missionary stress and comparing it to an established stress measure.

Methods

In a survey-based cross-sectional design conducted via the internet, a newly adapted stress measure specific for this population was compared to a known stress perception instrument.

Participants

Missionaries meeting the following criteria were included in the sampling: Evangelical missionaries currently serving cross-culturally with at least three months of service outside their home or passport country and who were at least 18 years of age at the time of the study. Three main methods of selection were employed. Several evangelical missionary organizations granted permission and agreed to send the link to their constituents. Secondly, snowball sampling was employed. The researcher forwarded the email link to known missionaries serving in cross-cultural settings and asked participants to complete the survey and forward it to others in their organizations. Additionally, the request with the link to the survey was sent to several list serves including Brigada Today and Member Care Associates. In an effort to protect participants who may serve in restricted countries, the wording on all correspondence and surveys was changed from “missionary” to “cross-cultural worker.” Participants who received the survey through multiple sources were asked to complete it only one time. Participants were provided a time-sensitive link (30 days) to complete the anonymous survey through the Survey Monkey website. Their responses remained anonymous, data was not linked to the email addresses and results were only viewed by the principal researcher and statistics consultant. Participants were given an opportunity to win one of ten gift cards. Winners were chosen by random selection and notified.

Instruments

Perception of Stress Scale. Stress perception was measured using the 10-item Perception of Stress Scale (PSS; Cohen et al., 1983). Items are designed to tap into how unpredictable, uncon-

trollable, and overloaded respondents find their lives. The questions in the PSS ask about feelings and thoughts during the last month, and respondents are asked how often they felt a certain way in each situation (Cohen et al., 1983; Cohen & Williamson, 1988). For example, one question asks, “In the last month how often have you felt nervous or ‘stressed?’” Respondents can report 0 as “never” up to 4 “very often.” In a survey study conducted by Cohen and Janicki-Deverts (2012), psychological stress was assessed in three national surveys, the 1983 Harris Poll and the 2006 and 2009 eNation Surveys. Internal reliabilities for the Chronbach’s alphas for the PSS-10 were .78 in the Harris Poll sample, and .91 in both the 2006 and 2009 eNation samples.

Quantitative Stress Inventory. Stress perception was concurrently measured using the 17-item CHOPS Stress Inventory (O’Donnell, Lewis-O’Donnell, & Tone, 2015), an adapted stress measurement tool designed for the study and specific for the population of interest. The newly adapted CHOPS Stress Inventory (2015) is based on findings by O’Donnell and Lewis-O’Donnell’s (2012) inventory that identifies 10 areas of stress known to be an issue with cross cultural workers. The inventory provides a convenient checklist to identify the level of stress in each of the 10 areas along with possible experiences related to that area (see Appendix A). In the quantitative version, participants are asked to rate their level of stress over the past month in the 10 categories along with an overall summary of stress in a Likert-style rating system from 1 “minimal” to 5 “extreme.” There is an additional question to rate the top three stressors as well as write in 3-5 specific stressors that caused distress regardless of being one of the 10. The new quantitative measure designed with permission and consultation with the O’Donnells (personal communication August 6, 2014), lacked psychometric testing, therefore it was analyzed alongside the psychometrically supported PSS (Cohen et al., 1983) instrument. Marlowe -Crowne Social Desirability Scale. Previous research suggests that missionaries are reluctant to share vulnerabilities (Chester, 1983; Eenigenburg & Bliss, 2010; Mills, 2008). Therefore, a social desirability scale was utilized to

explore response bias. Social desirability factors were examined using the 13-item Short Form C of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982). This shortened -version in a true/false response format provides the closest language to missionary populations and was found in studies by Reynolds (1982) to be reliable and valid.

The Institutional Review Board (IRB) of Liberty University approved this study prior to its initiation. Participants' data was collected through the Survey Monkey website, downloaded to an Excel spreadsheet, and analyzed using Systat statistical software.

Results

Participant Characteristics

During the one-month time frame, 361 participants accessed the survey via the internet. Of those, 94 were eliminated due to incomplete responses or they did not meet eligibility for the study. This resulted in 267 valid surveys. The majority (70%) of the study sample were females. Individuals between the ages of 31 to 40 comprised the largest age group of the sample (31%). Seventy percent (70%) of the sample reported being currently married with 80% reporting their spouse was from the same country of origin. The sample was homogenous in

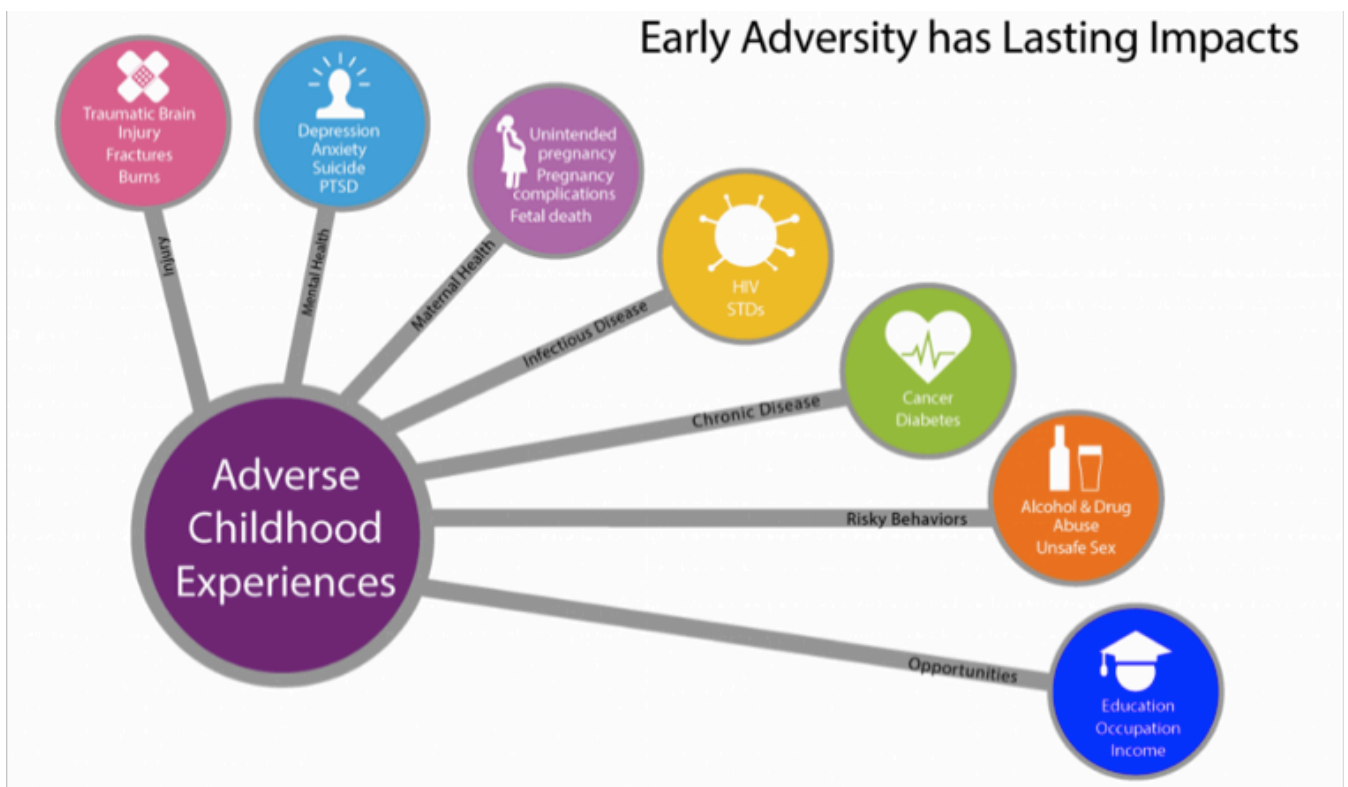
terms of ethnicity, with 93% reporting white non-Hispanic. The majority (82%) of the sample reported the United States of America as their home or passport country. The countries or geographical areas of service span the globe with 92% of respondents reporting that their country of service felt relatively stable and safe, or if unstable still felt relatively safe. Only 28% reported language proficiency as either poor or beginner/survivor level.

There was a wide range of previous cross-cultural experience before the current term. This range varied from 0-3 months (25%) up to more than 20 years (11%). There was also a wide range of time frames in the current assignment with the most frequent response of 3-5 years (27%).

In this sample 82% reported having member care services available or available upon request. In this sample the following percentages were reported as agreeing or strongly agreeing that they felt supported by family back home (82%), friends (73%), and by their organization (73%). Based on scales used to measure response bias, the participants answered the questionnaire in an unbiased fashion.

Perception of Stress

Analysis of covariance (ANCOVA) noted that



both age and sex demonstrated significant effects on PSS total score (Age: $F = 2.46$, $df(7,186)$, $p = 0.02$; Gender: $F = 6.05$, $df(1,186)$, $p = 0.02$). For sex females ($M = 17.88$, $SD = 5.30$) had significantly higher PSS total scores than males ($M = 15.77$, $SD = 5.25$) $t = 2.98$, $df(265)$, $p = 0.003$, $d = 0.59$). There was no significant difference between married females and single fe-

males on perceived stress scores ($p = 0.89$). For age, the 26 to 30 group had significantly higher PSS total scores than the 51 to 60 ($p = 0.008$), 61 to 65 ($p = 0.04$), and 66 to 80 ($p = 0.02$) age groups.

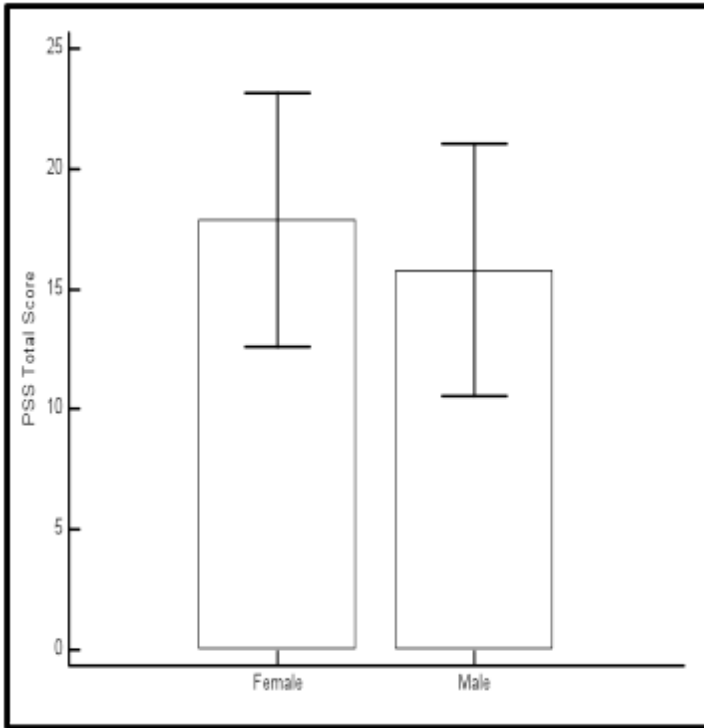


Figure 1. Gender Difference for PSS Total Score. Error bars are standard deviation.

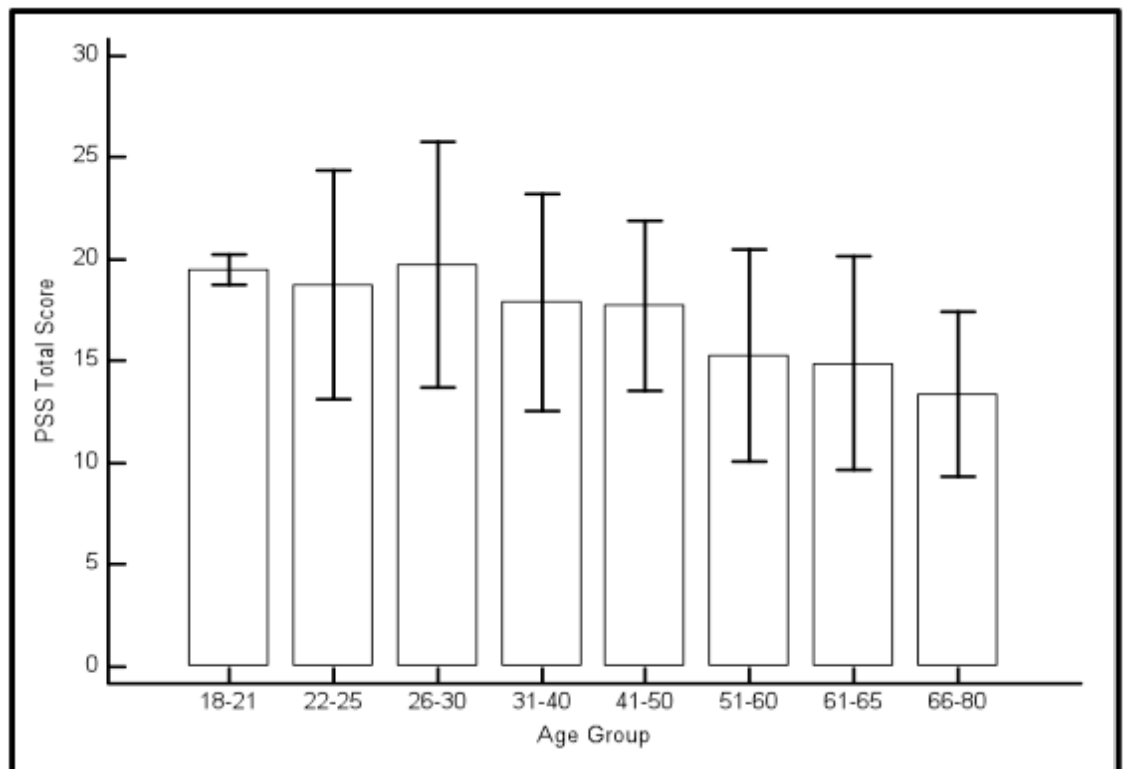


Figure 2. Age-Group Difference for PSS Total Score. Error bars are standard deviation.

Exploratory Analysis of the CHOPS Stress Inventory

The analyses of the CHOPS Stress Inventory (O'Donnell et al., 2015) were aimed at assessing its initial psychometric support. Internal consistency was good (Cronbach's $\alpha = 0.82$), and correlation with PSS total score was moderate ($r = 0.62$, $p < 0.001$).

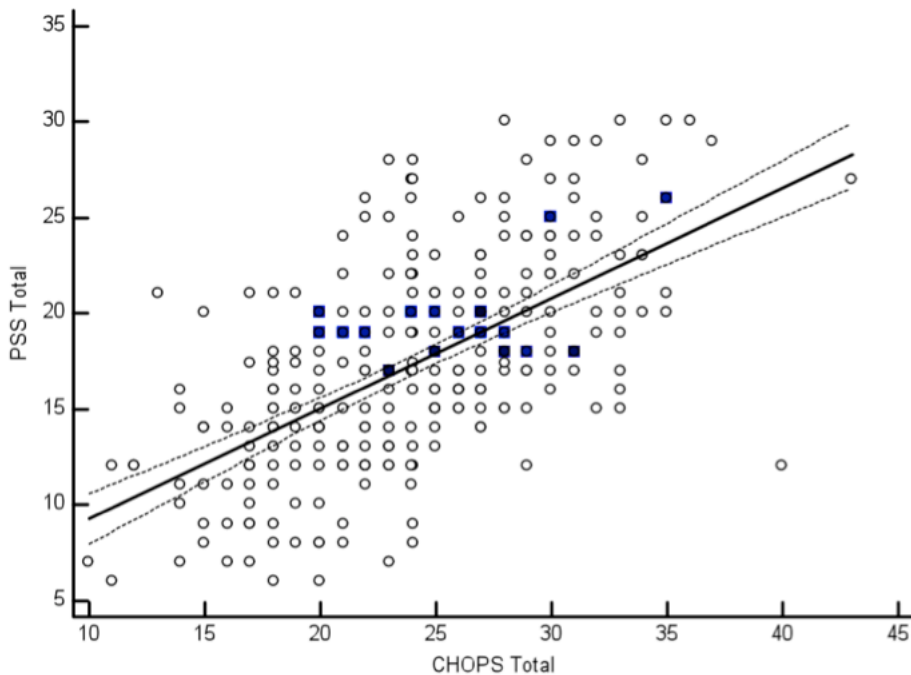


Figure 3. Scatterplot of CHOPS Stress Inventory with PSS Total Score. $r = 0.62$, $p < 0.001$

The categories of the CHOPS Stress Inventory were assessed as to which of the ten categories representing various stressors (Cultural, Crises, Historical, Human, Occupational, Organizational, Physical, Psychological, Support, and Spiritual) were rated to be most stressful. The participants were also asked to rate their overall level of stress over the past month in a summary question. In each of the categories, the participants were asked to rate the level over the past month as minimal, low, moderate, high, or extremely high. The rounded-off percentages of the moderate, high, and extremely high ratings of stress indicate the top categories for this sample were: Occupational (72%), Human /Interpersonal (65%), Psychological (57%), Cultural (52%), and Spiritual (46%). Sixty-eight percent (68%) of the sample rated the overall stress of the past month as moderate, high, and extre-

mely high. In the comments section, 294 of the respondents provided specific stressors. These were not categorized or rated according to the ten areas, but some of the stressors listed include weather-related stressors such as oppressive heat and tornadoes, daily hassles, government red tape, visa issues, addictions, friends dying while on the field, deaths in close family members or friends back home, missing events back

home, serious health issues, work issues, re-entry issues, financial problems, marriage problems, problems child-rearing or schooling, aging parents, corruption, loneliness, depression, other mental health issues, power outages, dangerous traffic, safety in country, sexual assault, assaults, interpersonal and team conflicts, conflicts with leaders, spiritual warfare, armed conflict, political or military conflict, terrorism and terrorist attacks.

Validity of Survey Responses

In order to determine the extent to which respondents' answers may have been driven by social desirability, the Short form C Marlowe-Crowne scale (Reynolds, 1982) was embedded into the survey questions. The Marlowe-Crowne scale showed weak correlations with the PSS ($r = 0.25$, $p < 0.001$) and the CHOPS ($r = 0.21$, $p = 0.003$).

Discussion

This study found that both age and sex demonstrated significant effects on the perception of stress in the missionary population. In addition, the newly developed quantitative CHOPS Stress Inventory demonstrated good initial psychometric features when compared to an established stress measure (the PSS), which makes it a potential instrument to use in cross-cultural missionary populations. The results of the CHOPS Stress Inventory suggested that work-

related (occupational) stress and interpersonal stress were the highest endorsed categories for stress in this sample. These findings will be discussed in further detail below.

Occupational and Spiritual Stress

Seventy two percent (72%) of this sample reported moderate, high, or extremely high work-related or occupational stress. Forty-six (46%) of the sample rated spiritual stress as moderate, high or extremely high. Based on the spiritual nature of this occupation, these results will be discussed concurrently. The findings are congruent to many studies on missionary stress (O'Donnell, 1995). The high volume of work and limited resources most missionaries experience make this a reasonable stressor to endorse. Several authors also note a greater sense of "spiritual warfare" around this occupation (Anyomi, 1997; Kim, 2009; Ng, 1997; O'Donnell & O'Donnell, 1992, 2009, 2012; Taylor, 1997). Missionaries may experience doubts, disappointments, and disillusionments, and have unmet expectations of God (Eenigenburg & Bliss, 2010). Moreover, missionaries often live in a "fishbowl" (Eenigenburg & Bliss, 2010; Foyle, 2001) in which their lives are continually in view of others. They are expected to be "spiritual giants"; therefore, some of their own spiritual needs may go unrecognized or unmet (Ng, 1997).

Interpersonal Stress

Sixty-five percent (65%) of the sample reported moderate, high or extremely high levels of interpersonal stress over the previous month. The men and women in this sample were consistent with other studies in this finding (Foyle, 1987). In fact, a central factor in studies of intercultural effectiveness/competence and adjustment of expatriates is the development of appropriate interpersonal relationships (Cerny, Smith, Ritchard, & Dodd, 2007).

Missionaries are surrounded by a web of relationships (Ritchey & Rosik, 1993). These relationships hold the power to promote health and wellness or sickness and stress for the missionary. If the relationships are positive in nature, then they provide a major source of support and care that sustains missionaries throughout

their careers. However, if these relationships are conflict-ridden and draining, then their impact contributes to the stress experienced by missionaries (Ritchey & Rosik, 1993). Such stressors may contribute to early departure from the mission field (Allen, 1986; Taylor, 1997; Trimble, 2006). Therefore, the results of this study indicate this continues to be an area needing attention.

Perception of Stress: Age and Sex

Women (married and unmarried) reported higher levels of stress than men in this sample. The lack of significant difference based on marital status warrants further exploration. Sweatman (1999) suggests that in this population marriage may serve as a buffer for stress or exacerbate stress depending on the quality of the relationship. Since marital quality was not assessed in this study, further interpretation of this finding is limited. Overall, the results on this sample related to sex and perceived stress are consistent with the literature and invite further inquiry into the role of the marital relationship in perceived stress.

Younger missionaries may be more susceptible to stress. The 26 to 30 age group had significantly higher PSS total scores compared to missionaries in the 51-80 range. In fact, others that have suggested that age may be an important factor in determining the magnitude of the stress response (Carpenter, Tyrka, Ross, Khoury, Anderson, & Price, 2009; Kidd, Hamer, & Step-toe, 2011; Lupien, McEwen, Gunnar, & Heim, 2009). Therefore, the current study is congruent with other research that has suggested that both age and sex are important factors in the perception of stress.

CHOPS Stress Inventory

This newly adapted stress measurement tool for missionary populations shows good initial psychometric qualities. It is the first quantitative stress measure targeted specifically for missionaries. It is brief in its scope with only 17 items and has the potential to be readily accessible in that both member care and missionaries can utilize it free of charge. As more psychometric research is done on the CHOPS, it may eventually be used as an outcomes measure during

checkups to gauge growth or implement changes. Further studies can help determine the clinical utility of this tool.

Implications for Member Care

Age and Sex Considerations in Member Care Age.

Given that age was a significant factor in the perception of stress, member care initiatives focused on better preparing the younger workers for the realities of cross-cultural service may be warranted. With increasing volatility worldwide, younger workers will be exposed to more traumatic stressors while serving overseas (Bagley, 2003). Younger workers are more vulnerable to permanent negative change due to traumatic stress (Irvine et al., 2006). Member care workers are reporting that the newer generation of missionary candidates (Donovan & Myers, 1997) are coming to the field more “bruised” with unresolved family of origin issues (Schubert, 1992). This can lead to emotion regulation problems, which can be a determining factor in overall success in missionary service (Cousineau, Hall, Rosik, & Hall, 2010). Younger generation missionaries may not have honed the necessary emotional regulation skills to mitigate fluctuating stress reactions. Therefore, member care should focus more on this area. Coping practices that include relaxation practices (see Befus, 2018), Scripture-based meditation techniques (Garzon, 2005), Christian Mindfulness Techniques (Ford & Garzon, 2017; Garzon & Ford, 2016), and other emotion regulation interventions (see Kring & Sloan, 2010) may be beneficial.

Sex.

Given the observed sex differences in the experience of stress on the mission field, member care should continue to address the specific needs of female missionaries. Member care may provide additional resources for women on relationships and specifically for coping with the realities of missionary life. In addition, member care services would benefit to recognize the overall lack of recognition for women on the mission field (Bowers, 1984, 1985; Crawford & DeVries, 2005). This may add to their stress. For example, Crawford and DeVries (2005) observe that women face difficulties in child rearing,

resistance from men and other women on the field, differing expectations, and role ambiguity. These factors can reduce the amount of positive recognition received. Mission agencies should create an “ethos” whereby women’s choices in the roles they have on the mission field are recognized and honored (Crawford & DeVries, 2005). This idea is consistent with Hall and Duvall’s (2003) findings that women with the freedom to choose their own role in missionary work had a greater sense of well-being. Therefore, member care initiatives could ensure roles are clearly defined, match the spiritual gifting of the missionary, and are recognized.

Limitations and Recommendations for Future Research

A large percentage of respondents (93%) reported their ethnicity as white, non-Hispanic, and eighty-two percent were sent out from the United States of America, so surveys with a more diverse population and with a population sent out by other countries are necessary. Another limitation is that 70% of the respondents were female and another 70% married. Self-reports, the most commonly used measures, have inherent limitations (Kazdin, 2003; Mallinckrodt & Wei, 2005). However, the inclusion of a social desirability scale was helpful to establish the results were not significantly influenced by social desirability bias.

Overall, large gaps exist in the research on missionary populations (Hawley, 2004; Keckler et al., 2008; Kim, 2009; Navara & James, 2002, 2005; O’Donnell, 1995). Current trends for mission work are for shorter terms (Tennett, 2003) and younger workers (Donovan & Myers, 1997). A large percentage of females are in the mission work force, so targeted attention should be given to the younger missionaries and women in future studies.

The CHOPS Stress Inventory is one of the first tools to provide a quantitative scale with stressors specific to cross-cultural workers and has a total of 17 items. It demonstrated good preliminary psychometric qualities so further psychometric evaluations should be done. These could solidify the measure as a key resource for future research and missionary stress assessment in member care.

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Appendix

CHOPS Stress Inventory©

The following 10 categories list areas of stress that are often experienced by humanitarian, mission, and development workers. Using the scales below please rate how stressful each of the following areas were/are during the past month. Consider the examples of possible experiences to guide your responses. Note that many of these stressors can be both a source of stress and/or a symptom of stress.

Area	Possible Experiences	Level of Stress During Past Month				
1. Cultural	Getting needs met in unfamiliar ways: Housing, food, transportation, etc. language learning, culture shock, reentry, feeling rejected, overlooked, or undervalued by the dominant international culture, gender bias, prejudice, lack of opportunity/freedom...	Minimal	Low	Moderate	High	Extreme
2. Crises	Potentially traumatic events: Natural disasters, wars, accidents, evacuations, disease outbreaks, death of someone close to you, political instability, protracted armed conflicts and physical threats, one's own community and/or country affected...	Minimal	Low	Moderate	High	Extreme
3. Historical	Unresolved past areas of personal and social struggle: Family of origin issues, personal weaknesses, lack of educational, health, economic opportunities...	Minimal	Low	Moderate	High	Extreme
4. Human	Relationships: With family members, colleagues, nationals, raising children, couple conflict, struggles with team members, social opposition, caring for aging parents, few school options, human rights violations, harassment, persecution, discrimination, stigma...	Minimal	Low	Moderate	High	Extreme
5. Occupational	Job-specific challenges and pressures: Work load, travel schedule, exposure to people with problems, job satisfaction, more training, government "red tape", job insecurity, short-term contracts, work not understood or respected, seeing problems that are complex/that I can't help...	Minimal	Low	Moderate	High	Extreme
6. Organizational	Governance and management: Incongruence between one's background and the organizational ethos, policies, work style, management practices, expectations, incompetence, corruption, abusive leadership, dysfunction, disability practices, legal protection, training...	Minimal	Low	Moderate	High	Extreme
7. Physical	Overall health and factors that affect it: Nutrition, climate, illness, aging, environment, no medical resources/insurance and inadequate nutritional options, injuries/road traffic accidents...	Minimal	Low	Moderate	High	Extreme
8. Psychological	Overall emotional stability and self-esteem: Loneliness, frustration, depression, unwanted habits, developmental issues/stage of life issues, transition, grief, loss, cumulative impact of "adverse life events"...	Minimal	Low	Moderate	High	Extreme
9. Support	Resources to sustain one's work: Finances, housing, clerical/technical help, donor contact, minimum pay and/or financial support, finances used for survival and not just for one's work...	Minimal	Low	Moderate	High	Extreme
10. Spiritual	Relationship with the Lord: Devotional life, temptations, time with other believers, spiritual warfare, finding meaning, evil, inner growth, practices/disciplines, lack of trust/respect for spiritual leaders...	Minimal	Low	Moderate	High	Extreme
Summary	How would you rate your overall level of stress over the past month?	Minimal	Low	Moderate	High	Extreme
	Please mark the 3 categories that were/are the most stress producing over the last month.	<input type="checkbox"/> Cultural	<input type="checkbox"/> Crises	<input type="checkbox"/> Historical	<input type="checkbox"/> Human	<input type="checkbox"/> Occupational
		<input type="checkbox"/> Organizational	<input type="checkbox"/> Physical	<input type="checkbox"/> Psychological	<input type="checkbox"/> Support	<input type="checkbox"/> Spiritual
	Please identify 3-5 specific stressors that caused distress over the past month. They may or may not be listed in the possible experiences or 10 categories.	<ol style="list-style-type: none"> 1. 2. 3. 4. 5. 				

Reference: CHOPS Stress Inventory ©Adapted from O'Donnell, K. & Lewis O'Donnell, M. (2012) CHOPS.

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Note: You can also use the results of this inventory to discuss how you are successfully managing stress now and your strategies for dealing with stress in the future. It can thus be a tool to explore struggles, successes, and strategies related to your adjustment/growth.