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The relationship of the professional quality of life coping strategies of staff and volunteers working with refugees in resettlement

Dr. Kalumbula, K. and Dr. Stones A.

NorthCentral University, San Diego, California, USA, SCHOOL OF SOCIAL AND BEHAVIORAL SCIENCES.

ABSTRACT

Compassion fatigue (CF), a combination of burnout (BO) and influence the QOL of helpers of secondary traumatic stress (STS), is common among helpers refugee background populations. who are exposed to indirect trauma; therefore, it affects their **Keywords**: Relationship; The quality of life (QOL). Professional Quality of life (ProQOL) and professional quality of life; Coping Coping Orientation to Problems Experienced (COPE) are strategies identified as essential constructs in understanding health or quality of life of helpers working with survivors of trauma. The *Correspondence to Author: purpose of this quantitative, correlation study was to investigate Dr. Stones A. the relationship between professional quality of life and coping NorthCentral University, San Diego, strategies of helpers who interact with individuals from the California, USA, SCHOOL OF SOrefugee background in resettlement. Data were collected via CIAL AND BEHAVIORAL SCIENCan online survey link distributed through gatekeepers of the ES. refugee resettlement agencies to measure the relationship, if any, between QOL and coping strategies utilized by helpers How to cite this article: working with people from a refugee background and to increase Dr. Kalumbula, K. and Dr. understanding of the types of coping strategies helpers can Stones A. The relationship of the use to facilitate better work environment, better professional professional quality of life and quality of life, and slower burnout rates so as to contribute to the coping strategies of staff and theory of migration, traumatology, and professional quality of life. volunteers working with refugees in Participating helpers indicated their preferred coping strategies resettlement. International Journal and their quality of life which were calculated using SPSS of Social Research, 2019; 3:35 version 24 for Windows. There was a strong positive correlation (p>.05) among dimensions of the ProQOL and coping strategies. Most helpers reported average to high compassion satisfaction (CS) and low BO and STS. The findings suggest that teaching eSciPub LLC, Houston, TX USA. and increasing awareness of these predictors might positively Website: http://escipub.com/



Introduction

This study investigated the relationship between coping strategies and the professional quality of life of helpers who interact with refugees in resettlement. According to Newell and MacNeil (2010) and Sodeke-Gregson, Holttum, and Billings (2013), mental health should be a concern of those that work with clients who are experiencing complex trauma, and how exposure to traumatic material can impact the professional quality of life of service providers by increasing compassion fatigue (Avieli, Ben-David, & Levy, 2016; Dombo & Blome, 2016; Ray, Wong, White, & Heaslip, 2013). However, researcherss Smart et al. (2014) stated little is understood about the dynamics of compassion fatigue and compassion satisfaction, the two complementary factors that determine professional quality of life. Avieli, Ben-David, and Levy (2016) studied both volunteers and professionals who work with severe trauma survivors and established that more research is needed to understand whether there is a difference between how volunteers and professional caregivers respond to the effects of helping trauma survivors. They discovered that longevity in working with trauma survivors was related more to compassion satisfaction and less to compassion fatigue; whereas, moderate and short experience was associated with the opposite. Additionally, they reported that compared to volunteers, professional therapists adhered more to ethical codes and reported more compassion satisfaction and less compassion fatigue. Furthermore, coping was measured through the COPE Inventory and correlated to professional quality of life. Beck (2011) stated there is a lack of published studies on compassion fatigue in those who often care for traumatized patients (Figley, 1995; Klimecki & Singer, 2012; Najjar, Davis, Beck-Coon, & Doebbeling,

2009; Smart et al., 2014; Thomas, 2013). Smart et al. (2014) called for future studies that explore how compassion fatigue and compassion satisfaction, the two dimensions of the professional quality of life, are related to other outcomes, such as for those who work with refugees.

While there have been studies of compassion fatigue and compassion satisfaction in professionals working with various trauma types, such as rape and domestic violence, or in various professionals such as nurses, social workers, case managers, psychologists, and mental hea-Ith providers (Bride & Kintzle, 2011; Ray, Wong, White, & Healslip, 2013; Thomas, 2013; Thielman, & Cacciator, 2014), only a handful of studies have been conducted on those who work with refugees (Cohen & Collens, 2013; Craig & Sprang, 2010; Lusk & Terrazas, 2015; McKim & Smith-Adcock, 2014). None of these studies to the best of the researchers's knowledge have investigated the professional quality of life (compassion fatigue and compassion satisfaction) and coping strategies of staff and volunteers who interact with refugees in resettlement.

Thieleman and Cacciatore (2014) conducted research on professional quality of life components and suggested some of the factors that affect compassion satisfaction and compassion fatique, such as supportive work environment, contribute to high levels of compassion satisfaction and low levels of compassion fatigue. Meanwhile, Mehus and Becher (2015) found high compassion fatigue levels were related to prior experiences of trauma. Despite an extensive literature review encompassing compassion fatigue, compassion satisfaction, and other factors that could affect the quality of life and coping strategies of helpers working specifically with traumatized clients (Samios, Abel, & Rodzik, 2013; Yoder, 2010), there exists a gap in

literature about the correlation between professional quality of life and coping strategies of staff and volunteers working with refugees in resettlement. The problem addressed by this study was that it was not known if and to what degree there was a relationship between professional quality of life and coping strategies of staff and volunteers while working with refugees in resettlement. This quantitative research filled the gap in current knowledge of understanding staff and volunteers who work with refugees by helping better understand the relationship of the participants' compassion fatigue and compassion satisfaction for better work environments.

Purpose of the Study

The purpose of this correlational quantitative study was to examine if there was a relationship between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement in Michigan.

A minimum of 42 staff and volunteers was recruited using a convenience and snowball sampling from resettlement centers in Michigan. The staff and volunteers completed the inclusion and exclusion criteria, the demographic data, the ProQOL, and the COPE inventory to measure the correlation between coping and professional quality of life using the Statistical Package for Social Sciences version 24 for windows (SPSS). The researchers performed a Pearson's correlations between professional quality of life and coping strategies. Understanding this relationship constituted a contribution to traumatology and migration studies and professional quality of life theories.

Theoretical Framework

The framework of this study is grounded in the positivism and post-positivism theoretical underpinnings. Positivism teaching does not make claims about issues that lie beyond people's real

observations (Mackenzie, 2011). Post-positivism affirms that scientific thinking and common sense do not follow specific procedures to make certain that observations are verifiable, accurate, and consistent; scientific thinking follows procedures. Post-positivism is a psychological theory that challenges the long-held view of absolute truth of knowledge (Creswell, 2009). Post-positivism paved the way for a variety of tools, such as the notion of internal functions to assist in the development of theory (Stamm, 2007). Postpositivism theorists begin research with a theory. They collect data that either supports or rejects the theory, and then they make the necessary adjustments before conducting further tests. Post-positivism reduces ideas into hypotheses and research questions (Creswell, 2009).

The study built on the aforementioned two theories (post-positivism and transactional theory of stress and coping) as the researchers investigated the correlation between the professional quality of life of staff and volunteers who interact with refugees in resettlement, and the coping strategies they use to deal with the stress of their work. It contributes to the study of migration, traumatology, and the professional quality of life theories.

Nature of the Study

The nature of this quantitative correlational study was to investigate the relationship between the professional quality of life and coping strategies staff and volunteers used when working with refugees through resettlement to avoid stress-related risks such as compassion fatigue. Using a purposive non-probability sampling method (Trochim & Donnelly, 2008), the study covered a range of demographic data of participants, such as age, gender, ethnicity, education, years of experience working with refugees, history of trauma, and supervision. Data from a

minimum of 42 staff and volunteers working with refugees in resettlement in the United States (USA) was collected, and the researchers administered the Professional Quality of Life (Pro-QOL) scale (Stamm, 2010) to measure the levels of compassion fatigue and compassion satisfaction and the Cope inventory (Carver, Scheier, & Weintraub, 1989) to measure coping strategies used to cope with the stress of helping refugees in resettlement.

Research Question

RQ1. What is the relationship, if any, of the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement?

Hypotheses

H1o. There is no significant correlation between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement

H1a. There is significant correlation between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement.

Significance of the Study

The study addressed an important gap in literature by investigating the relationship between coping strategies and the professional quality of life of helpers who deal with negative effects from working with survivors of refugee-related trauma. While professional quality of life has been investigated in professionals engaging with a variety of trauma survivors, such as child protective services, social workers, teachers, fire and rescue service workers, health care professionals, and clergy, this study is important for various reasons. First, to this researchers's knowledge, it is the first study to investigate the relationship between coping and the quality of life of helpers who work with refugees in

resettlement. Second, the current wave of migration around the world and the complexities of migration crises necessitate an understanding of how helpers can work with refugees and migrants in their host locale. Third, the understanding of this relationship constitutes an important contribution to the study of migration, traumatology, and professional quality of life theories.

In addition, the findings of this investigation initiate important discussions about the possible improvement of the lives of helpers who assist those struggling with refugee-related trauma. Furthermore, this research study has the potential of offering some direction to educators, supervisors, and agencies that engage services of various helpers who work with refugees on how to best prepare, supervise, and attend to the needs of those who serve refugees in the critical stage in their resettlement. Finally, this research study has the potential to assist helpers to manage their stressors of working with trauma survivors, and to make them more impactful and effective helpers.

Research Methodology and Design

The problem addressed by this study was that it was not known if and to what degree there was a relationship between professional quality of life and coping strategies of staff and volunteers while working with refugees in resettlement. The purpose of this quantitative correlational study was to examine if there was a relationship between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement in Michigan. Few studies have investigated the relationship between professional quality of life and other factors helpers use to cope while working with complex trauma survivors (Samios, Abel, & Rodzik, 2013; Smart et al., 2014); this is more so for the

professional quality of life and coping strategies of helpers who interact with refugees in resettlement. This quantitative correlational research study measured the strength of the relationship between the professional quality of life (Stamm, 2010) and coping strategies of helping professionals and volunteers (Carver, Scheier, & Weintraub, 1989) that interact with refugees in resettlement after they have experienced various types of traumatic incidents. The most prevalent incidents included being in war, seeing grotesque dead bodies, witnessing the death of a close relative, family violence, humiliation, torture, accidents, dispossession, sexual assault, and rape (Abbot, 2016; Baarnahielm, 2016; Herman, 1992; Lindert, 2016; Rzeszutek, Partyka, & Golab, 2015; Young & Chan, 2015). The researchers used quantitative rather than qualitative research methods mainly because of the limited and inconsistent quantitative evidence covering the concept of CF (Sodeke-Gregson et al., 2013). In addition, most of the research in this area focused on the deleterious rather than the salutary nature of trauma work that might foster positive experiences in those who help refugees, such as staff and volunteers (Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2015). Finally, this researchers was not interested in exploring the cause and effect of the negative impact of working with refugees on the staff and volunteers, but rather with identifying the correlation between their coping strategies and their quality of life.

Quantitative method was chosen for this research because it is best suited to find a correlation between the variables of this study. However, most of the research that has investigated the professional quality of life of helpers working with trauma survivors has been either qualitative or mixed research methods (Lusk &

Terrazas, 2015; Veronese, Pepe, & Afana, 2016; Wachter, Heffron, Snyder, Nsonwu, & Busch-Armendariz, 2016). The researchers proposed a theory-driven research which contributes to the theory of professional quality of life (Stamm, 2010) and to the theory of transactional stress and coping (Lazarus & Folkman, 1984). In addition, quantitative method provided a structured sequential process from start to finish. The researchers used a Pearson's correlation to detect the relationship between coping strategies and professional quality of life. The understanding of this relationship constitutes a contribution to migration, traumatology, and professional quality of life theories. Additionally, studying this relationship offers some direction to educators, supervisors, and agencies that engage services of various helpers who work with refugees.

Research Design

To seek access to the staff and volunteers comprising the sample for this research, the researchers connected with the gatekeepers, supervisors, and program managers of the resettlement agencies, and a school district that serves resettled refugees. Staff and volunteers who work with refugees in resettlement were recruited to participate in this research. The researchers endeavored for sex and age balance. and other inclusion criteria which consisted of helpers who were: (a) older than 18 years of age, (b) working with refugees for at least six months, (c) able to read and understand English, (d) able to follow instructions and respond to inventory questions, and (c) willing to freely participate in this research.

A survey designed methodology was used with the following two validated data collection instruments: Coping Orientation to Problems Experienced (COPE) Inventory (Carver, Scheier, & Weintraub, 1989) and Professional Quality of Life (ProQOL) (Stamm, 2010) to measure the correlation between coping and professional quality of life. Participants were emailed a link to qualtrics, an online survey platform, to complete the instruments in order to quantitatively measure professional quality of life and coping strategies. They also answered the research question to identify the relationship or levels of professional quality of life as measured by the ProQOL instrument correlated with coping strategies as measured by the COPE Inventory for staff and volunteers working with refugees through resettlement.

The researchers adopted the snowball sampling and respondent-driven sampling methods because these designs are similar to what other researcherss have used when researching a hard-to-reach population (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015; Heckathorn, 1997; Johnston & Sabin, 2010; Johnston, McLaughlin, Rouhani, & Bartles, 2017; Sulaiman-Hill, & Thompson, 2011). These methods begin by identifying professionals and volunteers who meet the criteria to be included in the study, and through them to secure information to reach other potential participants, until the researchers reaches the desired number of participants (Trochim & Donnell, 2008). The choice of these designs was due to the following factors: they enable researcherss to obtain results relatively more quickly than other designs; their findings are able to be generalized to real-life settings; they are easier to carry out; they are cost-effective and also suitable for graduate student research projects compared to experimental design; and they are best for descriptive analysis, although not limited only to descriptive information (de Vaus, 2001; Ellard-Gray, Jeffrey, Choubak, & Crann, 2015). These designs present weaknesses due to their lack

randomization, which affected generalizability of the result. However, they had the advantage of great- er external validity, and they could be carried out more easily than experimental design and with limited time and location. Snowball sampling and respondent-driven methods appeared to be the best designs for this research study.

Population and Sample

Participants were recruited through the agency members of the Freedom Flight Refugee Task Force (FFRTF). The FFRTF is an association of agencies in Grand Rapids that welcomes and serves refugees from all parts of the globe each year and who resettle in West Michigan. It is an outgrowth of the Freedom Flight Refugee Center (FFRC) which was formed in the mid-1970s in Grand Rapids, Michigan, in response to the plight of Southeast Asian refugees (Murray, 2012). According to my personal communication with Chandra Colley, the facilitator of the FFRTF, its current membership stands at 25 agencies offering a variety of services to refugees through staff members and volunteers. Its members and others who provide help to the refugees and their children in West Michigan were appropriate participants in this study. The researchers aimed to recruit 200 helpers comprised of volunteers (unpaid) and paid staff who work with refugees through resettlement agencies located in and around a large Midwestern metropolis in West Michigan. An extensive snowballing process between gatekeepers and possible participants contributed to reach the minimum sample size of 42 participants to obtain a small effect. Based on a priori calculation of the G*power estimate (Faul, Erdfeller, Lang, & Buchner, 2007; Mayr, Erdfeller, Buchner, & Faul, 2007). This sample size is considered typical for correlation analyses, and it is also the size at which correlations stabilize (de Winter, Gosling, & Potter, 2016).

The program managers and volunteer coordinators of these resettlement agencies were contacted as gatekeepers. These contacts initially consisted of an email explaining the research project and seeking to identify potential participants for the study. This was followed by phone conversations and in-person visits to their sites to explain the research and to seek permission to use the staff and volunteers at their sites as participants in the research study. These contacts resulted in securing site permission letters from the following eight sites: African Resource Center, Bethany Christian Services, Church of the Servant, the West Michigan Friendship Center, Samaritas, Kent County Health Department, Refugee Education Center, and Wayfinder Refugee Ministries.

The goal of the study was to recruit over 200 participants in order to ascertain a large effect size for this research study, a priori G*power analysis was conducted using an alpha of .05, a power level of .95, and two variables (Faul, Erdfelder, Lang, & Buchner, 2007). This calculation revealed that 134 participants were needed to reach the medium effect size conventions of 0.03. The power analysis was set above .80 in keeping with what other researcherss, such as Cieslak, Shoji, Douglas, Melville, Luszcynska, and Benight (2014), and Ray et al. (2013) had used. The choice of Pearson's correlation was supported by prior similar studies (de Winter, Gosling, & Potter, 2016). Pearson's correlation was used to assess the strength of a linear association between continuous variables. The researchers reached 136 participants to achieve a medium effect. In addition, demographic data such as age, gender, ethnicity, education, years of experience working with refugees, history of trauma, and supervision were collected to run a correlation between professional quality of life and coping strategies of staff and volunteers. Finally, additional analysis was completed using the demographic data to identify other contributing factors that answered the research question of this study.

Participants in this study included staff and volunteers working with refugees in West Michigan. The inclusion criteria consisted of staff and volunteers who were: (a) older than 18 years of age, (b) had been working with refugees for at least six months, and (c) were willing to voluntarily participate in the study. Each participant received the following: (a) an email introducing the study and containing the link to the survey, (b) the screening questionnaire, (c) the explanation of the confidential nature of the research, (d) the informed consent form, (e) the ProQOL inventory, and (f) the COPE Inventory. Participants were asked to complete an electronic form of the Professional Quality of Life Questionnaire (ProQOL) to measure CF and CS and the COPE Inventory to measure what individuals usually do when faced with or, are experiencing stressful events related to helping refugees.

Materials/Instrumentation

The first inventory used in this research is the ProQOL. It is a validated instrument developed by Stamm (2010) for measuring the levels of compassion fatigue and compassion satisfaction. Figure 1 is the subdivision of the ProQOL. ProQOL is a validated 30 question instrument with a five-point Likert scale ranging from 1 indicating never, to 5 denoting very often, for each sub-scale: CF, BO, STS, and CS. The ProQOL was selected due to its wide use in measuring the constructs of CF (secondary traumatic stress and burnout) and CS in professionals working with traumatized clients. Participants were

asked to rate how often they have felt or experienced each of the items on the Likert scale (1 denoting never, to 5 indicating very often). CS is about the joys and pleasures emanating from making a difference in another person's life (α = .88, Stamm, 2009). A few examples item from the CS dimension are: "I am happy that I chose to do this work" and "I get satisfaction from being able to help people." Burnout, a sub-dimension of CF, taps into the feelings attached to discouragement and the challenge of doing one's job effectively (α = .75, Stamm, 2009). Some items from the BO scale include "I feel trapped by my job as a helper" and "I am a very caring person." Finally, STS looks into work-related secondary exposure to traumatic material ($\alpha = .81$, Stamm, 2009). Some examples of items representing this sub-dimension include: "I am preoccupied with more than one person I help" and "I feel depressed because of the traumatic experiences of the people I help." Although the ProQOL was originally designed to measure the quality of life of therapists, it has been widely used with a diverse group of helpers such as child and family workers, healthcare workers, school personnel, and other paid employees or volunteers who have been exposed to other people's potentially traumatizing materials as a result of their work (Beaumont et al., 2016; Van Hook & Rothenberg, 2009). The developer of the ProQOL has made it available for use free of charge as long as the author is credited, no changes are made to the instrument, and it is not sold.

The second inventory is the COPE Inventory. It is a 60-question inventory with a 15 4-point Likert scale ranging from 1 indicating I usually don't do this at all to 4 denoting I usually do this a lot. This inventory is theoretically based, and it consists of 15 subscales, each with five items. Participants responded to items regarding how

they cope with the stressors in their lives associated with helping or caring for refugees. Some COPE Inventory responses are expected to be dysfunctional, and others are expected to be functional (Carver, Scheier, & Weintraub, 1989). Some examples of COPE Inventory are classified as problem-focused coping, such as "planning." Planning is coming up with action strategies to address the issue at hand ($\alpha = .80$, Carver, Scheier, & Weintraub, 1989). Another example of the COPE Inventory is emotion-focused coping; this includes a subscale of "focusing on and venting of emotions." Focusing on and venting of emotions can be either maladaptive when a person focuses mainly on the feeling of being upset that is evoked by the situation, or it can be adaptive when focusing on and venting of emotions lead to a solution when an individual channels the emotion to solving the issue at hand (α = .77, Carver, Scheier, & Weintraub, 1989). The searcher selected COPE Inventory due to its internal and test-retest reliability, which makes it useful for both research and practical purposes (Carver, Scheier, & Weintraub, 1989). This inventory was developed for use in a clinical setting, and yet its data is heavily sourced from student samples. Therefore, it is not clear whether its internal structure is maintained in clinical samples (Ortega, Goma-i-Freixanet, & Due, 2016). COPE Inventory is not the final word on measuring coping skill; however, its theoretical approach is a robust contribution to understanding how people cope, and is consistent with other coping scales. It is impossible to know with certitude that the staff and volunteers are reporting on the stressors originating solely from helping refugees. The researchers used this instrument to assess coping strategies of staff and volunteers who work with refugees because, to his knowledge, this

instrument had not been used with staff and volunteers who deal with refugees in resettlement. The developers of the COPE Inventory have made it available for use as long as the authors are credited, and it is not sold.

Study Procedures

First, the researchers sought and secured approval to conduct the study from the Northcentral University Institutional Review Board (IRB), and the administration of the Freedom Flight Refugee Task Force (FFRTF). In addition, the researchers approached nine gatekeepers from among members of the FFRTF in order to reach as wide a range of participants as possible, to reduce selection bias, and to provide a large number of contacts. Second, the researchers followed specific steps to recruit the potential participants. Since participants who work with refugees are considered a hard-to-reach population, the researchers identified the gatekeepers of the resettlement agencies in West Michigan and established relationships with them. The researchers sought site permission letters. These led to the dissemination of the recruitment materials to potential participants who were encouraged to complete the survey and, using a snowball technique, forward it to others within their agencies whom they thought might qualify to participate (Shoji et al., 2014).

Third, the researchers used snowball sampling and respondent-driven sampling methods to maximize the recruitment process (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015; Heckathorn, 1997; Johnston & Sabin, 2010; Johnston et al., 2017; Sulaiman-Hill & Thompson, 2011) of potential participants in this research. Snowball sampling and respondent-driven sampling are non-probability sampling designs used to gather participants in this research. Sulaiman-Hill and Thompson (2011) used the snowball design

when addressing sampling challenges in a study examining socially invisible refugee groups in resettlement. Snowball sampling facilitated the recruitment of refugees and asylum seekers through the resettlement agency. Veronese, Pepe, and Afana (2016) used this design to recruit helpers living and working in two Palestinian cities as they researched the well-being of these helpers who were operating in war-like situations. Wagaman, Geiger, Shockley, and Segal (2015) also used a snowball sampling technique by asking the field instructors to support this sampling method as they forwarded the invitation to participate in the study to other service providers in their agencies and communities. Finally, Heckathorn (1997) used the respondentdriven sampling method to recruit a sample of active intravenous drug users in a study of AIDS prevention education and HIV testing counseling. The respondent-driven recruitment method functions under the assumption that participants are best positioned to access other members of their hidden populations, since these are their peers.

Fourth, the researchers encouraged staff and volunteers to participate in the study by completing the inventories and asked the identified staff and volunteers to forward the survey link to make referrals or to invite others who work with refugees and who might be willing to participate in the research. The administration of the instruments required approximately 20 minutes to complete. The researchers strove for gender and age balance, but he could not guarantee it due to snowball sampling technique or nature of the survey's distribution. Inclusion criteria consisted of helpers who were: (a) older than 18 years of age, (b) working with refugees for at least six months, (c) able to read and understand the consent form and follow instructions.

and (d) willing to freely participate in the study. In order to examine the severity of STS disorder symptoms and their relationship to temperament traits and social support in a sample of trauma therapists in Poland; Rzeszutek, Partyka, and Golab (2015) recruited participants from private practices or crisis intervention centers and clinics in public mental hospitals. Avieli et al. (2016) used a snowball sampling method as they recruited volunteers and caregivers for their study on predicting professional quality of life among professional and volunteer caregivers through several assistance organizations. The researchers used both methods in tandem to recruit professionals and volunteers who help refugees resettle.

A link to the survey containing the inclusion and exclusion criteria, the consent form, the demographic questions, and the two inventories was shared with gatekeepers, who passed that on to participants to complete it using snowball sampling and respondent-driven methods to recruit other helping volunteers and paid staff who work with refugees. This was done to measure the relationship between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement. The researchers contacted gatekeepers and program managers of these resettlement agencies and a local public school to seek access to their staff and volunteers who made up the sample for the study. These staff and volunteers who work with refugees in resettlement were recruited to participate in this research. They voluntarily and anonymously filled out the survey with no compensation for their time.

The researchers adhered to the IRB guidelines and to the APA code of conduct throughout the research process. Extreme caution was exercised for ethical considerations to protect the identifying information of both the referring and referred staff and volunteers. This process was repeated until the researchers reached the desired sample size. However, since research involved more than the static guidelines provided by professional associations, the researchers anticipated other ethical dilemmas that might arise at different stages during the course of the research process (Creswell, 2009). For example, during the formulation of the research problem, the researchers identified a significant problem of importance to the participants, which was understanding the coping and quality of life of staff and volunteers in order to eventually positively impact their health and that of others besides the researchers. Ethical issues could have arisen during the formulation of the purpose and research questions as well as during data collection. In the case of data collection, the researchers preempted ethical issues through the development of the informed consent. The researchers also anticipated ethical issues in data collection and analysis and interpretation, as well as issues that could have arisen during the writing and dissemination of the results of the research.

In addition to anticipating the issues in the above mentioned stages of the research process, the researchers paid attention to the following. First was the principle of beneficence. The researchers explained the purpose of the study to all potential participants and the fact that the study had no direct benefits to them and to other helpers who work with refugees in resettlement. However, there were potential benefits to educators and trainers of human service providers, as well as supervisors of staff and volunteers who work with refugees. The researchers presented and secured informed consent as participants clicked the hyperlink to

indicate their consent to participate. Regarding the ethical principle of autonomy, participants were given the freedom to choose not to participate in the research and, in addition, they were free to drop out at any point during the study. The researchers showed respect to participants by informing them of the confidentiality and anonymity of their individual results as they received the research questionnaires (Hugman, Pittaway, & Bartolomei, 2011). However, if participants desired to sign their names on the informed consent, they were provided that option. The researchers was the only one who knew the identifying information of the participants. Others who could have access to the participants' identifying information were the researchers's chair and members of the IRB. When the participants opened their email from the listserv email blast and completed the survey, they were assigned a participant number. However, the participants' results were included in the final report without mentioning their names. In order to allow participants to maintain the ownership of their voices and to exercise their independence, the researchers also gave participants the freedom to choose to have their identity not remain confidential (Creswell, 2009). They were also made aware of the potential risks of non-confidentiality. In order to minimize risk or discomfort, the researchers thoroughly detailed the process of participation to potential participants. The researchers worked diligently to create the least hardship to participants by conducting the research in a convenient location for them via the survey link that they could access in the privacy of their own computers and time. However, in case participants found completing inventories distressing, they were encouraged to stop and/or to reach out to the researchers to receive counseling referral information.

Collected data was stored and locked in a cabinet at the office of the researchers and will be retained for a period of seven years to enhance confidentiality and security of participants' information (Jenkins, Mitchell, Baird, Whitfield, & Meyer, 2011). The researchers, his chair, and the IRB are the only ones who had access to identifying information which the researchers separated from data before publication and dissemination of the results.

Data Collection

In keeping with the recommendations offered by Ellard-Gray, Jeffrey, Choubak, and Crann (2015)), the researchers established trust with the potential participants as he developed relationships with gatekeepers to the refugee resettling agencies. Through these relationships, the researchers secured access to the potential participants by arranging meetings with gatekeepers to explain the research study that was extended to their staff and volunteers. The researchers exercised extreme caution toward confidentiality. He worked to create the least hardship to the participants by emailing the link to the online survey that was shared by the gatekeepers with participants. Participants completed the inclusion and exclusion criteria and the screening questions. They agreed to the informed consent and completed a demographic questionnaire answering questions about age, gender, race/ethnicity, education level, years of experience working with refugees, history of trauma, and supervision. Finally, participants filled out the ProQOL and the COPE Inventories. After participants agreed to the terms of participation and signed the informed consent, data was collected from December 11, 2017, to January 27, 2018. It took participants approximately 20 minutes to complete the questionnaire.

The researchers then explained the purpose of

the study and its benefits to the field of refugee resettlement. In addition to describing how the participants could gain access to the online link to the survey, an email containing the survey link was sent to the gatekeepers to distribute to their staff and volunteers. When the participants clicked the link, they answered inclusion and exclusion criteria. They then needed to consent to taking the survey. Participants did not have to provide any of their personal information unless they chose to include their first and last names. Potential participants were encouraged to use a trusted personal email account or to create a special email account instead of using a work email for their own confidentiality (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015). In order to prevent ballot stuffing, a participant could only take the survey once.

After the staff and volunteers accepted the invitation and completed the inventories, participants were asked to forward the email containing the link to other helpers through the snowball sampling method, a type of non-probability sampling technique used to research a hard-to-reach population willing to participate in the study. This method was used in conjunction with the respondent-driven sampling method (Heckathorn, 1997; Johnston & Sabin, 2010). Both methods proved to be useful in recruiting or reaching participants who in turn identified others they knew could potentially participate in the research. This process is similar to what other researcherss have used when researching a hard-to-reach population (Ellard-Gray, Jeffrey, Choubak, & Crann, 2015; Sulaiman-Hill & Thompson, 2011). The researchers requested the gatekeepers repeat the process of presenting the research information to participants within their resettlement agency until he reached the targeted minimum number of 42 participants.

Participants were contacted no more than twice to complete these instruments. The COPE Inventory (Carver, Scheier, & Weintraub, 1989) and Professional Quality of Life (ProQOL) (Stamm, 2010) instruments were used to measure the correlation between coping and professional quality of life.

Analysis

After downloading data from qualtrics into a spreadsheet and then uploading and analyzing it by using SPSS version 24 (IBM SPSS), the researchers performed a statistical analysis using the SPSS package and a Pearson's correlation between professional quality of life and coping strategies to see if there was a relationship between coping strategies and levels of professional quality of life. According to de Winter, Gosling, and Potter (2016) numerous research papers describe the differences between Pearson's correlation and Spearman's rank correlation, which confirmed that Pearson's correlation has attractive robustness properties and is applicable across a broad spectrum of normal and non-normal distributions. The researchers used Pearson's correlation because it is a powerful tool to investigate the degree of association of two quantitative variables (Aggarwal & Rangabathan, 2016). Pearson's correlation analysis was used with data from variables that had been measured on a continuous scale, and not with data deriving from an ordinal scale. Likert scales in this study were treated as continuous variables so the researchers could use Pearson's correlation. These two techniques are often used in psychological research, especially when involving human behavior. Therefore, to determine which technique to use, this researchers made a scatter plot for the data and visually inspected it for nonlinear relationship, obvious subgroups, and outliers (Aggarwal &

Rangabathan, 2016).

Ethical Assurances

The researchers sought and secured approvals from the Northcentral University IRB and from the appropriate participating agencies prior to collecting data. This research had minimal risk to participants in the form of psychological distress that may surface as a result of answering survey questions. There was no deception in the process, and participants fully knew the purpose of the study. Participants were informed of the purpose of the research, asked for their consent to participate, and were guaranteed confidentiality and anonymity (Hugman, Pittaway, & Bartolomei, 2011). According to the principle of autonomy cited by Klitzman (2012), the researchers informed participants they could withdraw from the study at any time during the process. The participants' identities were protected by reporting the findings only as an aggregate score. Once the research was completed, analyzed, and the result interpreted, identifying information was removed from the final report to protect participants as promised in the assurance of confidentiality and informed consent forms (Hear & Becher, 2012), unless the participants indicated to include his or her name with the findings.

The researchers truthfully reported the result of the research in keeping with Section 8.10 of the "Ethical Principles of Psychologists and Code of Conduct" (www.apa.org, 2017). In order to maintain and enhance confidentiality and security of the information of the participants, all the

collected data was stored in a locked cabinet at the office of the principal researchers, and will be kept stored and locked for a period of seven years, after which time it will be destroyed. The electronic form of data was and will be securely stored with a password on the computer of the researchers for a period of seven years. All participants' identifying information will be shredded after seven years. Finally, in anticipation of the potential reaction to the nature of the guestions explored through the ProQOL and Cope Inventory, such as emotional or psychological distress in the form of flash backs, nightmares, intrusive thoughts, and a heightened level of arousal (Bjorn, Gustafsson, Sydsjo, & Bertero, 2013), participants were informed they could ask for a counseling referral.

Findings

The variables of Professional Quality of Life (ProQOL) and Coping strategies (COPE) that staff and volunteers enlisted to deal with and to understand the types of coping strategies that are best or that are useful to improve the quality of life of staff and volunteers working with re-fugees in resettlement were found to be reliable. The statistical analysis of the data collected from eight agencies led to testing of the study hypothesis. The researchers conducted the study among staff and volunteers from agency members of the FFRTF located in Metro Grand Rapids, Michigan. There were 136 respondents in this study, among whom 134 staff and volunteers yielded usable data and two respondents were outliers.

Table 1 Descriptive characteristics of participants (n = 134).

Participant Demographics	n	%
Gender		
Male	25	18.4

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	remaie	109	81.6	
	Age			
	18 to 24	15	11	
	25 to 34	29	21.3	
	35 to 44	38	28.7	
	45 to 54	23	16.9	
	55 to 64	17	13.2	
The majority	65 and up	12	8.8	41.2%; n =
of respond-	Race/Ethnicity			55 reported
ents were	Asian/Pacific Islander	1	0.7	history of
whites com-	Black/African American	13	9.6	trauma. Just
prising	Hispanic	2	1.5	over half
85.3%; n =	Other	4	2.9	56.6%; n =
114 of partic-	White/Caucasian	114	85.3	77 of the re-
ipants, and	Education Level			spondents
females,	Associates	6	4.4	indicated re-
81.6%; n =	Bachelor	60	44.9	ceiving su-
109. The rest	Doctorate	5	3.7	pervision for
of the re-	HS Graduate or GED	1	1.5	their work
spondents	Master	45	33.1	with refu-
were 9.6 %;	Professional	3	2.2	gees, and
n = 13 blacks	Some College or No Degree	14	10.3	the majority
or African	Working with Refugees in Years			had a bache-
Americans,	Less than 1 year	16	11.8	lor's degree
and the re-	1 to 5	67	50.7	or higher
mainder	6 to 10	34	25	with 49.9%;
5.1%; n = 7	11 to 15	12	8.8	n = 60 re-
was divided	16 to 20 or more	5	3.7	porting hav-
among	History of Trauma			ing received
Asians, His-	No	79	58.8	a bachelor's
panics, and	Yes	55	41.2	degree and
others.	Supervision			39%; n = 53
There were	No	57	43.4	having com-
more female	Yes	77	56.6	pleted a
than male				masters or
participants wi	th 81.6%; n = 109 and 18.4%; n =	doctorate degree.		

participants with 81.6%; n = 109 and 18.4%; n 25 respectively. Their ages ranged from 18 to 65 years old. Staff and volunteers who had been working with refugees between one to five years made up 50.7%; n = 67, and approximately

Female

The analysis revealed that two among the respondents were outliers, because their response patterns were not indicative of individuals who were paying attention to the wording of

81.6

the items, and direction of the items. For instance, they answered positive to negatively worded items which was inconsistent with the rest of their responses.

Validity and Reliability of Data

Descriptive statistics were used to examine the data and to confirm the assumptions of the correlation prior to starting statistical analysis. Most of the scales and subscales showed adequate reliability. The overall Cronbach's alphas for COPE and ProQOL were $\alpha = 0.85$, and $\alpha = 0.72$ respectively (see table 2 below). This is within the good to acceptable range according to George and Mallery (2003) rules of thumb on

inter-item correlation. Thomas (2013) reported CS of α = 0.91, CF of α = 0.86, and BO of α = 0.78 among a sample of clinical social workers, while Baumstarck et al. (2017) reported a range of α = 0.71 to α = 0.82 for Cronbach's alpha coefficients for the 4-factor structure of the French version of the Brief COPE. Finally, Hinder et al. (2014) reported simalar Cronbach alphas (CS, α = 0.92; CF, α = 0.83; BO, α = 0.75) for a sample of nurses when studying their levels of BO, CF, and CS. Table 2 below shows means, standard deviations, and Cronbach's alphas for this study.

Table 2 Descriptive Statistics

Variables	Mean	Standard Deviation	Cronbach's Alpha	n
ProQOL	2.74	0.27	0.72	134
COPE Inventory	2.40	0.23	0.85	134
Compassion Satisfaction	4.08	0.51	0.87	134
Burnout	2.07	0.48	0.75	134
Secondary Traumatic Stress	2.06	0.53	0.80	134
Positive Reinterpretation and Growth	3.07	0.51	0.67	134
Mental Disengagement	2.01	0.54	0.54	134
Focus on and Venting of Emotions	2.28	0.45	0.69	134
Use of Instrumental Social Support	3.12	0.59	0.77	134
Active Coping	2.30	0.49	0.61	134
Denial	1.21	0.36	0.67	134
Religious Coping	3.03	1.00	0.94	134
Humor	1.93	0.74	0.87	134
Behavioral Disengagement	1.50	0.46	0.71	134
Restraint	2.56	0.48	0.58	134
Use of Emotional Social Support	2.93	0.71	0.83	134

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Substance Use	1.16	0.44	0.92	134
Acceptance	2.70	0.52	0.56	134
Suppression of Competing Activities	2.43	0.50	0.50	134
Planning	3.25	0.54	0.78	134

There is no need to standardize the two scales even though they use different Likert scaling values. For example, ProQOL is on a 1 to 5 scale, and COPE uses a 1 to 4 scale. However, prior to conducting a Pearson's r correlation analyses, there are four major assumptions that should be met in order to be confident in the results. The first assumption is that the two variables must be measured at interval or ratio levels. The two scales used to measure the dimensions of the quality of life and the coping strategies are both measured on Likert-type scales. The second assumption is to establish that a linear (not a curvilinear) relationship exists. The inspection of the scatterplot in figure 2, linear relationship between ProQOL and COPE, demonstrates the linear relationship between the two variables. The third assumption is that there are no outliers. Pearson's correlation coefficient r is very sensitive to

outliers. However, there were two outliers in participant number 23 and participant number 93 (in SPSS these were their case numbers). These two participants were clearly outliers and were deleted from all analyses. After reviewing their data, it was obvious that their response patterns were not indicative of individuals who were paying attention to the wording and direction of the items (for example, they answered positive to negatively worded items, which was inconsistent with the rest of their responses). The fourth assumption is to test for normality shown in Table 3 below. Both variables were normally distributed as assessed by Shapiro-Wilk's test (p > .05). If the p value is less than .05 a violation has occurred. In this study p value was greater than .05; therefore, we reject the null hypothesis and retain the alternative hypothesis.

Table 3 Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-V	Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.	
PROQOL	.076	134	.058	.991	134	.503	
COPE	.088	134	.013	.983	134	.100	

a. Lilliefors Significance Correction

In summary, there is strong evidence that the data is valid and reliable. All scales are reliable, and our data meets all statistical assumptions necessary to run analyses. Prior to conducting the analysis, all variables were examined for

normality, homoscedasticity, and linearity. An examination of skew and kurtosis statistics and normal P-P Plots showed that the data were normally distributed, and scatterplot suggested no problems with linearity necessitating data

transformation. Further examination of tolerance and variance inflation factors (VIF) indicated no issues with collinearity for any variables, including in the regression analyses.

All data analyses were performed using SPSS version 24 for windows. After an examination of Zero-order correlations among all study variables, simultaneous entry ordinary least squared (OLS) regression was used to examine which measure demonstrated the strongest association with each of the three dependent (outcome)

variables: CF, BO, and STS. Planning, positive reinterpretation and growth, and suppression of competing activities were associated with CS; mental disengagement, religious coping, and positive reinterpretation and growth were associated with BO; and focus on and venting of emotions, mental disengagement, and behavioral disengagement were associated with STS. These seven COPE subscales were included in the three models of multiple regressions (see table 4 below).

Table 4

Summary of Regression Analysis for Variables Associated with Compassion Satisfaction, Burnout, and Secondary

Traumatic Stress (n = 134)

Variable	В	SE B	β	t	р
Model 1: Compassion Satisfaction					
Planning	.076	.020	.319	3.764	.000
Suppression of competing activities	.063	.022	.246	2.829	.005
Mental disengagement	051	.019	215	2.717	.007
Model 2: Burnout					
Mental disengagement	.068	.017	.311	4.020	.000
Positive reinterpretation and growth	058	.019	247	-3.052	.003
Religious coping	022	.009	181	-2.280	.024
Model 3: STS					
Planning	052	.022	207	2.377	.019
Mental disengagement	.085	.020	.345	4.220	.000
Suppression of competing activities	.054	.024	.204	2.278	.024

The research survey included two established scales that revealed the aspects of professional quality of life and coping strategies employed to ensure CS and to avoid CF. The professional quality of life was assessed using the English version of ProQOL R-5 (Stamm, 2009), and the coping strategies were assessed using the COPE (Carver, Scheier, & Weintraub, 1989)

to measure coping strategies used to manage the stress of helping refugees in resettlement.

Results

The result section provides a discussion of the descriptive statistics and how the professional quality of life is correlated to coping strategies of the respondents in addition to showing the levels of the ProQOL severity categories in table 5.

	Compassion Satisfaction		Burnout		Secondary Stress	Traumatic
ProQOL frequency	n	%	n	%	n	%
Low	1	.74	96	72	94	70
Average	75	56	38	28	40	30
High	58	43	0	0.0	0	0.0

Note: ProQOL = Professional Quality of Life Scale; STS = Secondary Traumatic Stress; BO = Burnout

The developers of the ProQOL recommended that the relationship of each of its three dimensions (CS, BO, and STS) be examined separately. This is the same for the 15 subscales of the COPE. All the scales of COPE and their relationships to the professional quality of life were examined separately. Although there is no significant correlation with all the scales of coping strategies to all the measures of the quality of life, there is evidence of significant correlation between five coping strategies and quality of life. That is there enough evidence to reject the null hypothesis. Therefore, there is enough evidence to support the alternative hypothesis mainly. There is a significant correlation between the professional quality of life and coping strategies of staff and volunteers who interact with refugees in resettlement.

Bi-variate Correlations

The researchers was interested in examining the associations of ProQOL as CS, BO, and STS; and in each of the 15 coping strategies as independent (predictor) variables, bi-variate correlation is computed as presented in Table 9 correlation matrix for all study variables. There is correlation and a significant relationship between subscales of ProQOL with COPE. Observed from the matrix, it is clear that BO and STS are significantly negatively correlated with CS (r = -.59, p < .01, and r = -.21, p < .01, respectively). The subscales of COPE, such as

positive reinterpretation and growth (r =.41, p < .01), is positively correlated to CS; whereas, positive reinterpretation and growth is negatively correlated to burnout (r = -.36, p < .01 planning (r = .44, p < .01), suppression of competing activities (r = .33, p < .01), and active coping (r =.31, p < .01) have significant relationships with CS. Also, mental disengagement is positively correlated to both BO and STS (r = .37, p = < .01; r = .41, p< .01 respectively). Finally, behavior disengagement is correlated to both BO and STS (r = .23, p < .01); religious coping (r = -.27, p < .01) and is negatively correlated to BO.

Multiple Regression Analyses

To further test the associations, multiple regression was conducted with each of the dimensions of the ProQOL as dependent (outcome) variables: CS, BO, and STS; and each of the 15 coping strategies as independent (predictor) variables. All the scales of COPE and their relationships to each of the professional quality of life subscales were examined separately. The results of testing the significance of association when using multiple independent (predictor) variables as predictors yielded three models. In order to run these multiple regressions, the data has to meet the following six assumptions of multiple regression. The first assumption is that there is independence of errors. The second is that there is a linear relationship between the independent variables and the dependent variable. The third assumption is the homogeneity of variance. The fourth assumption is the absence of multicollinearity. The fifth assumption is not having significant outliers. Finally, the sixth assumption is the approximation of normal distribution. The data met all the above mentioned assumptions, allowing the researchers to conduct multiple regression analyses of the data.

Compassion satisfaction. The first regression analysis examined the relationship between CS with all independent variables. This reveals that planning was significantly correlated to CS (r = .44, p < .01), and that CS was significantly

correlated to suppression of competing activities (r = .33, p < .01) and positive reinterpretation and growth (r = .41, p < .01). A multiple regression was run to predict CS from planning, suppression of competing activities, and positive reinterpretation and growth. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals as assessed by a Durbin-Watson statistic of 1.842 shown below in table 6 in the summary of the model of compassion satisfaction. This denotes that all residuals were approximately normally distributed with values ranging between 0 to 4 (Chen,I Ender, Mitchell, & Wells, 2015).

Table 6 Summary of Compassion Satisfaction Model

Model Summary ^b							
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson		
1	.507ª	.257	.240	4.469	1.842		

Predictors: (Constant), Planning, Suppression of competing activities, Mental disengagement

Dependent Variable: Compassion Satisfaction

There was homoscedasticity as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity as assessed by tolerance values greater than 0.1. There were no studentized deleted residuals greater than ±3 standard deviations, no leverage values greater than 0.2, and values for Cook's distance above 1. The assumption of normality was met as assessed by Q-Q plot. The multiple regression model statistically significantly predicted CS F (3,130) = 14.988, p = .000, adj. R2 = .240. This explains 24% of the variance in CS scores. These three variables

added statistical significance to the prediction, p < .05. Regression coefficients and standard errors can be found in Table 4.

Planning (β = .319, p = .000) demonstrated the strongest association with CS, with higher planning scores correlating higher levels of CS. Suppression of competing activities also had a positive relationship with CS (β = .246, p = .005), which suggests that regardless of the strong bivariate correlation between planning and suppression of competing activities (r = .42), and mental disengagement (β = -.215, p = .007), each of these three coping strategies made significant contributions to variance in CS scores.

Burnout. The second regression analysis examined regression coefficient for the model association with BO. The total number for burnout was significantly correlated to mental disengagement (r = .37, p < .01) positive reinterpretation and growth (r = -.36, p < .01), and religious coping (r = -.27, p < .01). A multiple regression was run to predict burnout from mental disengagement, positive reinterpretation and growth, and religious coping. There was

linearity as assessed by partial regression plots and a plot of studentized residual against the predicted values. There was independence of residuals as assessed by Durbin-Watson statistic of 2.251 shown below in table 7 in the Summary of Model of Burnout. This denotes that all residuals were approximately normally distributed with values ranging between 0 to 4 (Chen, Ender, Mitchell, & Wells, 2015).

Table 7 Summary of Model of Burnout.

Model Summary ^b								
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson			
1	.503ª	.253	.235	4.166	2.251			

Predictors: (Constant), Religious coping, Mental disengagement, Positive reinterpretation and growth

Dependent Variable: Burnout

There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were no studentized deleted residuals greater than ±3 standard deviations, no leverage values greater than 0.2, and values for Cook's distance above 1. The assumption of normality was met as assessed by a Q-Q plot. The multiple regression model statistically significantly predicted BO F (3,130) = 14.650, p = .000, adj. R2 = .235. This explains 23.5% of the variance in burnout scores. The three variables added statistical significance to prediction, p < .05. Regression coefficients and standard errors can be found in Table 4. Mental disengagement (β = .311, p = .000) demonstrated a strong positive association with BO, with higher

mental disengagement scores correlating with high levels of burnout. This suggests that the higher the score on positive reinterpretation and growth (β = -.247, p = .003) the lower the level of BO. Religious coping (β = -.181, p = .024) is associated with lower levels of BO.

Secondary Traumatic Stress. The third regression analysis reported in table 4 presents the model examining STS. A multiple regression was run to predict STS from mental disengagement, behavioral disengagement, and focus on and venting of emotions. There was linearity as assessed by partial regression plots and a plot of studentized residuals against the predicted values. There was independence of residuals, as assessed by Durbin-Watson statistic of 2.191 (see table 8 below). This denotes that all residuals were approximately normally distributed with values ranging between 0 to 4 (Chen,

Ender, Mitchell, & Wells, 2015).

Table 8 Summary of Model of Secondary Traumatic Stress

Model Summary ^b							
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate	Durbin-Watson		
1	.459ª	.210	.192	4.807	2.191		

Predictors: (Constant), Mental disengagement, Suppression of Competing activities, and planning

Dependent Variable: Secondary Traumatic Stress

There was homoscedasticity as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1. There were no studentized deleted residuals greater than ±3 standard deviations, no leverage values greater than 0.2, and values for Cook's distance above 1. The assumption of normality was met, as assessed by Q-Q Plot. The multiple regression model statistically significantly predicted STS, F (3,130) = 11.549, p = .000, adj. R2 = .192. This explains 19.2% of the variance in STS. These three variables added statistically significantly to the prediction, p < .05. Regression coefficients and standard errors can be found in Table 4. Suppression of competing activities (β = .204, p = .024) has a significant association with STS, with a higher score on suppression of competing activities is relating to a higher score STS. Mental disengagement (β = .345, p = .000) had a significant positive association with STS. This suggests that the higher the scores on mental disengagement, the higher the scores on secondary traumatic stress. Planning (β = .-204, p = .019) had a significant negative association with secondary traumatic. This suggests that the higher the

scores on planning, the lower the scores on STS.

Evaluation of Findings

This section provides a discussion of the findings in the context of the literature. The study is grounded in the positivism and post-positivism theoretical framework (Mackenzie, 2011). Positivism teaching does not lay claim to issues that are beyond people's real observation. Post-positivism affirms that scientific thinking and common sense do not follow specific procedure to make sure that observations are verifiable, accurate, and consistent: whereas scientific thinking follows procedures. The two theories that guided this research study were the transactional theory of stress and coping by Lazarus and Folkman (1984) and the professional quality of life by Stamm (2010). These theories were used to further the understanding of the relationship between coping and the professional quality of life (Cronin & Klimoski, 2011; Harlow, 2009). Pearson's r correlation and multiple regression analyses were conducted to determine whether a relationship exists between professional quality of life and coping strategies among staff and volunteers who work with refugees in settlement to predict coping strategies that impact compassion satisfaction and compassion fatigue.

The findings suggest that the coping strategy of

positive reinterpretation and growth positively impacts BO; and planning impacts CS and STS. Suppression of competing activities impacts CS and CS. Religious coping impacts BO. Finally, mental disengagement impacts all dimensions of the professional quality of life (CS, BO, and STS). The results also reveal a strong positive correlation between burnout and STS (r = .55, p < .05), two sub-dimensions of CF. Similar to the strong negative correlation between BO and CS (r = -.55, p < .01) that Mehus and Becher (2015) found when studying STS, BO, and CS in a sample of spoken language interpreters, this research found a significant negative relationship between BO and CS (r = -.59, p < .05) Additionally, Mehus and Becher also found that 71% of the respondents to their study indicated high levels of stress, as they scored in the upper quartile of STS. The same respondents scored in the upper quartile of CS, denoting a great deal of satisfaction with their helping or caring role. Wagaman, Geiger, Shockley, and Segal (2015) investigated the role of empathy and the dimensions of the ProQOL among social workers, and discovered that social workers who had been in the profession longer had lower levels of burnout and higher levels of CS. The same was true in the study of Lusk and Terrazas (2015) when examining those who work with migrants. It was discovered the more years a helper works with migrants, the higher his or her CS. Similarly, Cocker and Joss (2016) reported that age and years of working with survivors of trauma protected against CF. This research study did not look at other variables such as age, ethnicity, education, or age, but rather only at the relationship among various COPE strategies and Pro-QOL in staff and volunteers working with refugees in resettlement. It was discovered that n = 75, 56% scored average in CS, n = 96, 72%

scored low in BO, and n = 94, 70% scored low in STS. Sheppard (2015), while assessing the level of CF in second year doctoral nursing learners, discovered that 81% of these nurses reported moderate to high levels of BO, and 74% had a moderate to high level of STS. Concurrently, 71% of the nurses reported moderate to high CS. In their study of factors that influence the quality of life of professionals and volunteers, Avieli, Ben-David, and Levy (2016) discovered professionals who had longer experience helping others had a better a chance of experiencing a higher CS and less BO as opposed to professionals moderate and short experience.

Smart et al. (2014) found that there is a significant difference in the ProQOL subscale of BO when they compared it to caregivers for critical patients to those caregivers working within a noncritical care unit. Similarly, the findings from this study discovered that 72% of respondents had low levels of BO among the staff and volunteers who help refugees. This was very high in comparison to 58.1% level of burnout that Lusk and Terrazas (2015) reported among their sample of professional and para-professional helpers who worked with refugees. Seventy percent of respondents in this study reported low level of STS; whereas, Lusk and Terrazas reported 45.2% had low levels. Finally, the findings reported 75% average levels and 58% high levels of CS, compared to Lusk and Terrazas who reported 38.7% and 61.3%, respectively. In their study of self-care practice among social workers, Bloomquist, Wood, and Kim (2015) investigated self-care and professional quality of life among MSW practitioners and they discovered that psychological self-care predicted higher STS and higher BO scores. However, those practitioners who had more years of experience after completing their MSW training had more

positive perceptions of self-care, and thus yielded more professional and emotional self-care, as well as more years of practice experience after MSW, which led to CS. In reality, more years of practice experience following the completion of MSW had impact on all three dimensions of the professional quality of life.

Implications, Recommendations, and Conclusions

This study had several limitations. First, because of the uncertainty in the political climate following a vitriolic U.S. presidential campaign that saw an erosion in the support for welcoming refugees, asylum seekers, and immigrants, the level of stress was presumed to be high among staff and volunteers working with refugees in the U.S. (Schweitzer, Van Wayk, & Murray, 2015). This in turn had the potential for finding high CF. Second, the non-probability nature of data collection through the snowball sampling and the use of a convenient non-random sampling made it difficult to generalize the result. Third, the non-experimental correlation study did not indicate causal relationships. However, the purpose of the study was to investigate the relationship, if any, between the professional quality of life and coping strategies employed by staff and volunteers who work with refugees in resettlement. Fourth, the self-selective nature of the respondents had a potential for systematic response bias, such as giving socially desirable responses. Individuals who chose to participate might differ from those who chose not to participate in their perception of their own professional quality of life or in coping strategies they employ to cope with indirect trauma. Fifth, it is impossible to pinpoint whether the indirecttrauma was strictly from working with refugees, as most respondents might have been working with other trauma survivors in addition to

refugees. Finally, as in proportion of the U.S. population, highly-educated Caucasian female respondents were over-represented, in turn reduces the level of generalizability of the result to other populations and even occupation groups (Crocker & Joss, 2016), such as Blacks/African Americans, Hispanics, and Asian/Pacific Islanders, who were under-represented.

The possible ethical issues for this study were somewhat limited. In addition, each participant agreed to the informed consent. The research presented minimal risk to participants. Participants were given referral information in case they experienced psychological and or emotional distress as a result of answering questions about their work with refugees. Participants were also advised to skip any questions that they did not feel comfortable answering, or they could stop taking the survey altogether. Regarding participants' anonymity, privacy, and confidentiality, the identities of participants were kept confidential and anonymous, and the reporting of the findings was done only in an aggregate score. Furthermore, in order to maintain confidentiality, the collected data were kept in a locked cabinet at the office of the principal investigator, and electronic copies were secured with a password on the researchers's computer for a period of seven years. The researchers was cognizant of his volunteer relationship with the FFRTF and how that could have impacted participants. To minimize any potential negative implications, data were collected through qualtrics, an online data collection platform, which enhanced confidentiality and anonymity of participants.

The aim of the study was to investigate the relationship, if any, between professional quality of life and coping strategies employed by staff and volunteers who work with refugees in resettlement.

Considerations and Implications

Generalization of the results. The study focused on investigating the relationship between the professional quality of life and coping strategies that helpers use to cope with indirect trauma (compassion fatigue, burnout and secondary traumatic stress) of helpers working with refugees in resettlement. The study was limited to agencies that are members of the FFRTF, a group of helpers located in metropolis Grand Rapids, Michigan. Furthermore, self-selection bias may have influenced the findings in that helpers who felt good about helping refugees might have been the ones who chose to participate in the study. Therefore, the result of the study may not be generalized to helpers in other regions of the country. However, the study revealed that helpers working with refugees experienced higher levels of CS and average to low levels of BO and STS. It also revealed that five of the 15 coping strategies of COPE Inventory had significant relationships with the dimensions of the professional quality of life.

Implications of the hypothesis testing associated with the research question. Testing showed how the professional quality of life is significantly correlated to coping strategies of the respondents. It also reveals the levels of professional quality of life. The developers of the ProQOL recommended that the relationship of each of its three dimensions (CS, BO, and STS) be examined separately. This is the same for the developers of the COPE Inventory who recommended that the fifteen scales of COPE be examined separately as well. This study contributes to the nascent literature that focuses on understanding the levels of threats that come with exposure to indirect trauma (Crocker & Joss, 2016), especially, trauma from clients of refugee

background. The study adds to identifying predictive coping strategies that might help in assisting helpers working with trauma survivors in combatting CF and increasing CS. It also contributes significantly to reducing the cost associated with employee turnover, and increase the retention of healthier and productive workers (Croker & Joss, 2016). Upon further examination of the associations of the dimensions of ProQOL, and each of the fifteen scales of COPE. the results of testing showed significant associations, and when using multiple independent variables as predictors, it yielded three models. The first model showed that CS was significantly correlated to planning, to suppression of competing activities, and mental disengagement where 24% explained the variance in CS scores, and they added statistical significance to the prediction, p < .05. Planning (β = .076, p = .000) demonstrated the strongest association with CS, with higher planning scores correlating higher levels of CS. Suppression of competing activities also had a positive relationship with CS (β = .063, p = .005), which suggests that regardless of the strong bivariate correlation between planning and suppression of competing activities (r = .42), and mental disengagement $(\beta = -.051, p = .007)$. Yoder (2010) found that nurses who were interpersonally fulfilled scored high on CS. They were able to avoid brooding and were not trapped in negative thoughts. In essence, these nurses practiced positive reinterpretation and growth and therefore, scored higher on CS. Each of these three coping strategies made significant contributions to variance in CS scores.

The second model revealed that BO was significantly correlated to mental disengagement (r = .37, p < .01), positive reinterpretation and growth (r = -.36, p < .01), and religious coping (r = -.36)

= -.27, p < .01), where about 23.5% explained the variance in BO scores. These three variables added statistical significance to prediction, p < .05 to BO. Mental disengagement (β = .068, p = .000) demonstrated a strong positive association with BO, with higher mental disengagement scores correlating with high levels of BO. Positive reinterpretation and growth indicated that the higher the score on positive reinterpretation and growth ($\beta = -.058$, p = .003), the lower the level of burnout. Religious coping ($\beta = -.022$, p = .024) is associated with lower levels of BO. This was case as well for the nurses who prayed often in Yoder (2010)'s study. Nurses who reported that they prayed more often as a coping strategy, reduced their BO score.

The third and final model showed that STS was associated with mental disengagement, behavioral disengagement, and focus on and venting of emotions. This explains 19.2% of the variance in STS scores. These three variables added statistical significance to the prediction, p < .05 to STS. Planning (β = -.052, p = .019) has a significant association with STS, with a higher score on planning relating to a lower score on STS. Mental disengagement (β = .085, p = .000) had a significant positive association with STS. This suggests that the higher the scores on mental disengagement, the higher the scores on STS. Suppression of competing activities (β = .054, p = .024) had a significant positive association with STS. This suggests that the higher the scores on behavioral disengagement, the higher the scores on STS.

Of the 15 coping strategies investigated in this study, five proved to be significant predictors of the professional quality of life: focus on and venting of emotions, mental disengagement, planning, religious coping, and positive reinterpretation and growth. The findings have

implications for the agencies to encourage teaching and training that emphasize the development of the coping strategies that seem to predict better professional quality of life. This research also provided interesting insight into coping strategies of helpers who work with refugees in resettlement. Mental disengagement was the most frequently cited strategy to cope with stressors of helping refugees in resettlement. This strategy was followed by planning and suppression of competing activities. Religious coping and positive reinterpretation and growth came in third place. To the knowledge of this researchers, this was the first study to investigate the relationship between professional quality of life of helpers who work with refugees and the coping strategies they use to cope with indirect-trauma in helping refugees.

Other researcherss, such as Adeyemo et al. (2015), investigated factors that influence professional quality of life of mental health professionals in a mental health setting in Nigeria. They found a positive correlation between CS with a better psychological health which could indicate a better professional quality of life, and a negative correlation between CS and a higher score on the GHQ, an instrument that generally assesses for psychological distress. BO and STS were also positively correlated to higher scores on the GHQ. Experience of violence and psychological distress in mental health professionals tended to influence the presence of poor professional quality of life. Thus, it is important to reduce the prevalence of violence, whether real or vicarious, in order to have a healthy mental health professional.

Recommendations

Based on the findings from the study, recommendations are offered for practice and for future research. Practical recommendations are based on how refugee resettlement agencies and human services educators can better train their staff and volunteers by teaching them about the risk and cost of working with traumatized individuals and how that can affect their ability to help (Harr & Moore, 2011). This training can maximize CS and reduce CF and, therefore, support helper sustainability and retention (Adeyemo et al., 2015; Bloomquist et al., 2015, Knight, 2018; Robinson, 2013). Future research recommendations need to focus on how to continue to enhance our understanding of other contributing factors to the development and maintenance of CS and their impact on the fields of traumatology, migration, and professional quality of life. The focus should be on incorporating background variables to discover which other factors might predict CS or CF in helpers working with refugee trauma survivors. Practical recommendations. The findings reveal five coping strategies that are significant predictors of professional quality of life. Individual helpers can focus on cultivating, enhancing, and increasing CS and, therefore, reducing CF. Hinderer et al. (2014) showed how nurses utilized specific coping strategies to combat CF and to increase CS. Beaumont, Durkin, Martin, and Carson (2016) showed the importance equipping helpers with needed self-help skills as they prepare to enter the helping profession. The same can be said of agencies that resettle refugees. These agencies can promote activities that enhance a better quality of life by teaching, training, and equipping its staff and volunteers to hone the skills to master the coping strategies that increase compassion satisfaction and decrease vulnerability to professional burnout (Newell & MacNeil, 2010). The openness to the infusion of teaching material that deals with trauma will facilitate the breaking of the

conspiracy of silence which perpetuates CF (Knight, 2018).

It is interesting to see this study and previous other studies such as Lusk and Terrazas (2015) that have looked at professional and para-professional helpers working with refugees and to find that respondents scored zero on high BO and also on high STS. They also scored 45% on high and 56% on average on CS. There are a few possible explanations to these findings. First, it might be that these helpers feel very satisfied with their work and their ability to help others through what they do. Second, this could be due to the respondent desirability bias, because unfavorable responses were rarely selected. Third, it could be that less satisfied staff and volunteers chose not to participate in the research. Despite these possible explanations, it is worth honing the coping strategies that enhance CS.

Recommendations for future research. Going forward, future research should continue to build on the understanding that there are other factors, such as the role of supervision and selfcare that influence the quality of life of helpers who work with trauma survivors, especially those of the refugee backgrounds (Bloomquist et al., 2015; Schweitzer, Van Wyk, & Murray, 2015). Since this research looked strictly at the relationship between ProQOL and COPE, it is recommended that future researcherss investigate how background variables such as the demographics of the participants (eg. age, gender, education level, years of experience working with refugees, history of trauma, and supervision) might impact the level of the professional quality of life of staff and volunteers who work with refugees. Additionally, they investigated the impact of self-care activities in the following domains: physical, professional, spiritual, psychological, and emotional that might prove to be beneficial in improving the professional quality of life of helpers who work with refugees. This might also be helpful to be integrated into the training and educational process of future helpers.

Conclusions

This study was the first attempt at investigating the important topic of the relationship between professional quality of life and coping strategies utilized by helpers who work with refugees in resettlement in Michigan. In light of the current surge of unrest, violence, and migration around the globe, we are most likely to experience an uptake in the number of refugees (Schweitzer, Van Wyk, & Murray, 2015). It is important to understand how helpers who work with clients of refugee backgrounds cope with indirect-trauma as they work with trauma survivors. This study is important because its results have the potential to improve the lives of helpers who work with refugees and provide a sense of direction to helping professionals, educators, and resettlements agencies. The study also identifies five among the fifteen coping strategies of the COPE Inventory that predicts CS, BO, and STS in helpers working with refugees. While the majority of reported findings in literature concurs with other researcherss who have reported that helpers who work with trauma survivors score high on both CS and low to average on BO and STS, this includes those who work with refugee trauma (Avieli, Ben-David, & Levy, 2016; Lusk & Terrazas, 2015; Sheppard, 2015; Wagaman, Geiger, Shockley, & Segal, 2015).

The findings of the study also contribute to the field of traumatology in that many professionals, such as those in family therapy, psychology, social science, and medicine, are leaving the helping professions for lack of adequate training on how to handle indirect exposure to trauma. This

study positively adds to the understanding of the traumatology (Figley, 1995) by identifying specific coping strategies that have the potential to improve the quality of life of these practitioners (Figley, 2002). It is important to note that no other background factors were considered among the predictors of CS, BO, STS, nor the levels of the relationship between professional quality of life and coping strategies. There is an enormous benefit in this study to social service educators, supervisors, and agencies that engage in refugee resettlement. Refugee helpers themselves can glean from this study hints on which coping strategies are best when dealing with refugee trauma survivors and integrate them into the training and educational process of future helpers.

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