They care for others, but what about themselves? Understanding selfcare among DSPs' and its

relationship to professional quality of life

John M. Keesler, Jess Troxel

Corresponding Author:

John M. Keesler, PhD

jkeesler@iu.edu

Indiana University Bloomington

School of Social Work

1127 E. Atwater

Bloomington, IN 47401

United States

Jess Troxel, LMSW

Indiana University Bloomington

Bloomington, IN 47401

United States

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Direct support professionals (DSPs) are the "most costly and valuable resource" for

organizations as the foundation for service delivery to individuals with intellectual or

developmental disabilities (IDD) (Devereux, Hastings & Noone, 2009, p.561; Disley, Hatton &

Dagnan, 2009; Schuengel, Kef, Damen & Worm, 2010). They are paid personnel who provide

one-on-one support to individuals across a myriad of environments, including residential, day,

employment, and community settings. Although the DSP position frequently has minimal

education requirements (i.e. high school diploma or its equivalent), DSPs have extensive

responsibilities: to meet individuals' basic health, safety and care needs; to support the

development and achievement of individuals' personal goals and relationships; and, to support

individuals in becoming active community participants (Bogenschutz, Hewitt, Nord, &

Hepperlen, 2014; Hewitt & Larson, 2007; Miller & Chan, 2008).

Given the scope of responsibilities, stress and burnout are common among DSPs and

present a significant risk to the quality of services for individuals (Chung & Harding, 2009;

Devereux et al., 2009; Lernihan & Sweeney, 2010). Despite vast knowledge regarding burnout,

additional attention is warranted regarding positive aspects of DSP experiences (Lunsky,

Hastings, Hensel, Arenovich & Dewa, 2014) and strategies to combat burnout. The present

study explores selfcare behaviors among DSPs and seeks to understand the relationship between

selfcare behaviors and professional quality of life, a construct that includes burnout, secondary

traumatic stress, and compassion satisfaction (Stamm, 2010). Furthermore, this study seeks to

understand the influence of resilience on the relationship between selfcare and professional

quality of life, which may be instrumental in buffering the impact of work-related stress.

Stress and Burnout

Direct support professionals experience high rates of stress, burnout, and emotional exhaustion amid a low sense of personal accomplishment, dissatisfaction with compensation and opportunities for advancement, and feelings of under-benefit (Disley et al., 2009; Hensel et al., 2012; Mascha, 2007; Skirrow & Hatton, 2007; Tartakovsky, Gafter-Shor, & Perelman-Hayim, 2013).   Stress and burnout can have a significant negative impact on service delivery, either indirectly through: high staff sickness and poor mental health (e.g. depression and anxiety), reduced job satisfaction and commitment, absenteeism and turnover; or, directly through a reduction in positive interactions between staff and individuals (Devereux et al., 2009; Mutkins, Brown, & Thorsteinsson, 2011; Skirrow & Hatton, 2007; Willems, Embregts, Stams, & Moonen, 2010). As requirements for DSP employment have remained stagnant amid increased responsibilities, organizations contend with annual turnover rates ranging from 45-70% (Bogenschutz et al., 2014; Braddock et al., 2011; Schuengel et al., 2010). High turnover and inability to hire qualified employees often result in recurrent job vacancies and increased organizational strain such as additional responsibilities for remaining DSPs and disrupted services for individuals with IDD (Hamilton, Sutherland, & Iacono, 2005; Larson, Hewitt & Lakin, 2004; Murphy, O'Callaghan, & Clare, 2007).

There is a lack of clarity regarding which aspects of direct support work are most stressful (Mutkins et al., 2011), however, various factors have been related to stress and burnout, including: personal characteristics (i.e. coping strategies, personality type, perceived inability to make a difference and work-private conflict); work conditions (i.e. excessive workload, understaffing, lack of collaboration; lack of support from colleagues and management, inadequate training and role ambiguity; lack of influences on administrative

decisions); and, the nature of the job (e.g. individuals' challenging behaviors; minimal

employment requirements; low pay and low status) (Chung & Harding, 2009; Hewitt et al.,

2008; Ingham, Riley, Nevin, Evans, & Gair, 2013; Kormann & Petronko, 2004; Kowalski et al.,

2010; Mills & Rose, 2011; Mutkins et al, 2011; Skirrow & Hatton, 2007; Sondenaa,

Whittington, Lauvrud, & Nonstad, 2015; Thompson & Rose, 2011). Given that many aspects

of direct care work are influenced by external factors, there is opportunity to consider the utility

and implications of more individualized and internal resources such as selfcare and resilience to

buffer the impact of the work environment and to augment one's perspective of their work.

Selfcare and resilience will be explored later in this paper.

Professional Quality of Life

Some researchers in the IDD field have called for greater emphasis on positive aspects of

direct support work (Lunsky et al., 2014). Stamm (2010) put forth a model and measure for

professional quality of life (ProQOL) that encompasses positive and negative outcomes of work

experiences in helping professions: compassion satisfaction and compassion fatigue (Lawson &

Myers, 2010; Stamm, 2010). The construct of professional quality of life has utility in

understanding the experiences of DSPs as it expands upon burnout. Furthermore, it responds to

the call for a greater emphasis on positive experiences through a measure of compassion

satisfaction.

Compassion satisfaction reflects the degree to which a person derives benefit, pleasure

and satisfaction from helping others. It is associated with overall wellness, job satisfaction,

invigoration, and belief that one can contribute to their workplace and society (Lawson & Myers,

2010; Mason & Nel, 2012; Stamm, 2010; Yan & Beder, 2013; Zeidner & Hadar, 2014). In

contrast, compassion fatigue is comprised of two subscales: burnout and secondary traumatic

stress. With empathy and emotional energy as driving forces in effective service delivery (Figley, 2002; Stamm, 2010), burnout is the result of chronic strain associated with insufficient resources, unclear professional boundaries and roles, employee relational challenges, and excessive work demands (Lawson & Myers, 2010; Newell & MacNeil, 2010; Yan & Beder, 2010). Burnout manifests in increased anger, frustration, rigidity, poor job performance, tardiness, and absenteeism (Bridgeman, Bridgeman, & Barone, 2018; Newell & MacNeil, 2010). Secondary traumatic stress results from indirect exposure to trauma and is a sudden adverse reaction to helping or wanting to help someone who has experienced trauma (Bride, Radey & Figley, 2007). Secondary traumatic stress is characterized by re-experiencing the person's traumatic event, avoidance of reminders and numbing, and hyper-arousal (Bride et al., 2007; Jenkins & Baird, 2002). It negatively influences both the wellbeing of the worker and the quality of care received by the client (Bloomquist et al., 2015).

As previously stated, the ProQOL measure was developed for use among helping professions, yet it has rarely been used in the field of disabilities (Booker, Julian, Webber, Chan, Shawyer & Meadows, 2013; Hickey, 2014; Sondenaa, Whittington, Lauvrud, & Nonstad, 2015). When it has been used among workers in the disability field, research findings are limited by the lack of population specificity (i.e. type of disability services; Booker et al., 2013) and potential regional differences (i.e. Norway and nursing staff; Sondenaa et al., 2013, 2015). However, limited use of the ProQOL in IDD research may be influenced by the measure's sensitivity to trauma, an area that has only recently emerged in the IDD field (Wigham, Hatton, & Taylor, 2011a, 2011b; Keesler, 2018). Thus, when considering compassion fatigue, it is unclear the extent to which DSPs may experience secondary traumatic stress, however, DSPs do have experiences that are often at the root of secondary traumatic stress. Research suggests that DSPs

are exposed to violence in the workplace and have their own adverse histories (Hensel et al., 2014; Keesler, 2018). In addition, DSPs have access to individuals' documented histories and may be involved with organizational investigations of abuse. Documentation and investigations may involve exposure to details of traumatic experiences – a precipitant to the development of secondary traumatic stress (Bride et al., 2007).

Selfcare

Research has identified a relationship between selfcare and professional quality of life, with poor selfcare associated with greater compassion fatigue (Butler, Carello, & Maguin, 2017; Figley, 1995). Selfcare is the practice of behaviors that promote well-being and counter work-related stress among the helping professions (Lee & Miller, 2013). Selfcare ensures that the fundamental needs of a person are met, such as food and sleep, and enables one's ability to respond to conflict, overcome challenges, and cope more effectively with stress (Barker, 2010). With the impact of burnout well-cited (e.g. Lawson & Meyers, 2011), selfcare is a "critical issue" as organizations seek new ways to foster employee retention amid growing demands to do more with less (Lee & Miller, 2013, p.96).

The purpose and conceptualization of selfcare differs across the literature. For example, in the medical field, selfcare developed in response to a neglect of basic needs among providers in favor of focusing on patient treatment (Lauder, 2001), whereas in nursing selfcare embraces a holistic approach to wellness and the acquisition of health-promoting behaviors (Denyes, Orem, & Bekel, 2001). Barker (2010) and Lee and Miller (2013) provide two conceptualizations of selfcare, both suggesting two different domains. Barker (2010) defined selfcare as a combination of *reflective* (i.e. focusing on a specific conflict or how one is being) and *kind* (i.e. soothing or nurturing practices) behaviors and suggested that a balance was important to foster

positive interactions with others. Lee and Miller (2013) identified a conceptual framework for selfcare comprised of *personal* (i.e. physical, psychological, emotional, social, leisure, and spiritual dimensions) and *professional* (i.e. work-related dimensions such as time management, role, professional support, and professional development) dimensions.

Selfcare has been explored among various helping professions, including counselors, social workers, and childcare workers. It has been associated with increased compassion satisfaction and wellness, and lower levels of burnout and secondary traumatic stress (Bloomquist et al., 2015; Lawson, 2007; Lawson & Myers, 2011). Results have shown that behaviors such as a hobby, taking trips or a vacation, feeling supported outside of work, and reading for pleasure are associated with lower compassion fatigue (Eastwood & Ecklund, 2008).

Selfcare is most effective when practiced "proactively and intentionally" (Lee & Miller, 2013, p. 98), and is reinforced by self-awareness and a positive perspective of selfcare such that those who hold a favorable view of selfcare engage in selfcare and intentionally allocate time to selfcare (Bloomquist et al., 2015; Devenish-Meares, 2015; Eastwood & Ecklund, 2008; Lawson & Meyers, 2011; Orellana-Rios et al., 2018). Although employees may not independently or routinely engage in selfcare, research has demonstrated the efficacy of work-based programs in promoting employee selfcare. For example, Orellana-Rios, Radbruch, Kern, Regel, Anton, Sinclair, and Schmidt (2018) implemented a 10-week compassion-based meditation program for palliative care providers. The program was well-received and resulted in improved selfcare and interpersonal skills with reductions in stress, anxiety, and burnout; and, increased job satisfaction (Orellana-Rios et al., 2018).

Resilience

Resilience, as a correlate of selfcare (Rees et al., 2016; Sondenaa et al., 2015), has merit in the discussion of DSP retention and job satisfaction, yet it has been largely absent from the IDD literature. Resilience is a dynamic and multidimensional construct, influenced by individual, biological, cognitive and interpersonal factors, that refers to the adaptive ability to withstand adversity and stress (Foureur, Besley, Burton, Yu, & Crisp, 2013; Poole, Dobson, & Pusch, 2017). It buffers the effects of stressful situations and lends to the experience of positive emotions amid adversity (Masten, 2001; Poole et al., 2017; Tugade & Fredrickson, 2004).

There is a dearth of research focusing on resilience among DSPs. Noone and Hastings (2009) explored the efficacy of a brief intervention to combat work stress and promote resilience among DSPs. The 2-day training focused on the impact of negative thoughts and emotions, coping strategies and avoidance reduction, and how to be mindful. A booster session was provided several weeks later. The training was associated with a significant reduction in DSPs' psychological distress, despite a small increase in perceived work stressors (Noone & Hastings, 2009). Noone and Hastings (2009) suggested that if DSPs can develop greater resilience and increase capacity to cope effectively with stress, they are likely to show more positive interactions with the individuals they support.

To augment the discussion of resilience, it is necessary to consult the literature from related fields. Among college students, resilience has been correlated with self-esteem, selfcare, self-efficacy, and lower levels of anxiety (DeRosier, Frank, Schwartz, & Leary, 2013; Bender & Ingram, 2018). Among nurses, resilience - characterized by personal strength, the ability to plan, sociability, and social resources – has been associated with increased quality of patient care and greater respect for clients (Williams, Hadjistavropoulos, Ghandehari, Mallow, Hunter, & Martin, 2016). Further, increased resilience has been associated with positive coping strategies among

nurses, as well as increased compassion satisfaction, decreased burnout, and decreased secondary traumatic stress (Hegney, Ress, Eley, Osseiran-Moisson, & Francis, 2015; Rees et al., 2016).

Research has demonstrated the efficacy of trainings to increase resilience, as was similarly noted with selfcare. Foureur and colleagues explored the implications of a mindfulness-based stress reduction program for nurses and midwives (Foureur, Besley, Burton, Yu, & Crisp, 2013). Comprised of a 1-day training and daily meditation practices for 8 weeks, the program was associated with significant improvements in general health and ability to cope with stress, as well as decreased self-reported stress. Similarly, Slayter and colleagues conducted a controlled trial with nurses to determine the impact of a resiliency training. The brief mindful selfcare and resiliency (MSCR) intervention consisted of a 1-day training followed by three weekly mindfulness exercises and home-based practice exercises. Nurses who participated in the training experienced a significant decrease in burnout with small-to-moderate effect that persisted six months after the intervention. In addition, the nurses experienced increased compassion satisfaction and quality of life (Slayter, Craigie, Heritage, Davis, & Rees, 2018).

Purpose

DSPs are critical to the quality of life for many individuals with IDD, yet organizations continue to struggle with their recruitment and retention amid various systemic challenges. Additional and alternative methods are needed to increase organizational capacity and to respond to the ongoing and historic challenges with DSP turnover. The present study is a preliminary effort to explore selfcare behaviors among DSPs and the relationship between selfcare, resilience, and professional quality of life. More specifically, the research sought to answer the following questions: (a) What selfcare behaviors do DSPs engage in? (b) How is selfcare related to DSPs' professional quality of life? (c) If there is a relationship between selfcare and professional quality of life, does resilience moderate this relationship?

Methodology

Overview

The present study was conducted in a not-for-profit agency in a midwestern state in the United States. The agency provides supports to over 2000 individuals with IDD and their families through residential programs, employment and day services, as well as outpatient psychiatric and other clinical services. The agency has an operating budget of approximately $21.5 million with approximately 50% of its income generated from the HCBS waiver. The agency has an estimated annual turnover rate of 60%. At the time of this study, the primary researcher was developing a relationship with this community agency. The agency's director of human resources assisted the researcher by creating an online survey using an internal electronic platform. The online survey included information for informed consent and multiple measures, including demographic items, selfcare behaviors, resilience, and professional quality of life. The survey was comprised of 108 items and took approximately 15-20 minutes to complete. After review by the researcher's university institutional review board and the agency's human subjects review board, the survey link was emailed to 392 employees, including residential site managers, whose jobs were categorized as DSPs. Respondents were eligible to receive a $5 e-gift card as an incentive and were prompted to provide their contact information via a separate link at the end of the survey to ensure anonymity of responses. Recruitment lasted for approximately two months during which time a recruitment email with the survey link was sent a total of four times. The results of the study are from 153 DSPs and represent a 39% response rate.

Measurement

Demographics. Several items were constructed by the primary researcher to query respondents' demographic information, including gender, level of education, and length of time

as a DSP. Demographic items were limited (e.g. ethnicity was not solicited) to protect the identity of respondents given the lack of diversity in the organization.

      Selfcare Behaviors. Selfcare behaviors were assessed using an adaptation of the *Selfcare Assessment* (Saakvitne & Pearlman, 1996). It is comprised of 71 items across 7 domains (i.e. physical, psychological, emotional, spiritual, relational, workplace, and overall balance) and an additional "other" option after five of the domains (i.e. physical through relational) which afforded respondents the opportunity to identify any behaviors in which they engaged that were not included on the measure. Examples of items include: "get regular medical attention", "say no to extra responsibilities", "read/listen to inspirational material", and "ask for help when I need it". Items are scored using a Likert-type scale ranging from *I never do this* (1) to *I do this a lot* (5). No psychometric properties are available on this measurement. For the present study, two items (i.e. be curious and access psychotherapy) from the psychological domain were omitted by error from the online survey and the "other" option was presented only once after all items were listed in the current survey to decrease repetition. Domains were not specified in the online survey to avoid potentially influencing responses.

      Scores were calculated for each domain using the mean of individual item scores. Domain scores were moderately ($r = .541$, $p<.001$) to strongly ($r = .741$, $p<.001$) correlated. Given the preliminary nature of this study and the number of selfcare behaviors, principal component analysis was used to assess the viability of data reduction and resulted in a scree plot suggesting one or two factors. Thus, a composite selfcare score was calculated from the mean of all items on the measure. Preliminary evidence indicates strong reliability ($\alpha = .96$), however limitations of Cronbach's alpha are noted (Agbo, 2014).

Resilience. Resilience was measured using the *Response to Stressful Experiences Scale-4* (RSES-4; De La Rosa, Webb-Murphy, & Johnston, 2016). This 4-item instrument is a brief version of a 22-item instrument with preliminary psychometric testing supporting its validity and reliability ($\alpha = 0.877$). With a lead-in statement of "During and after life's most stressful events…" the four items include: "I tend to find a way to do what's necessary to carry on."; "I tend to know I will bounce back."; "I tend to learn important and useful life lessons."; and, "I tend to practice ways to handle it better next time." Likert-type scaled responses range from 1 'not at all like me' to 5 'exactly like me'. Reliability for the RSES-4 in the present study was acceptable ($\alpha = 0.788$).

Professional Quality of Life. This manualized instrument is comprised of 30 items across three subscales: *compassion satisfaction* (CS; i.e. the pleasure one derives from work), *burnout* (BO; i.e. exhaustion, frustration, anger and depression), and *secondary traumatic stress* (STS; i.e. negative feelings driven by fear and work-related trauma; Stamm, 2010). The latter two subscales comprise *compassion fatigue*. Each subscale is comprised of 10 items with a total of five reverse scored items. Items are scored using a Likert-type scale ranging from *never* (1) to *very often* (5). Examples of items include: "I am preoccupied with more than one person I help" and "I jump or am startled by unexpected sounds". Five items are reverse scored. Each subscale has a mean of 50 and a standard deviation of 10, with acceptable reliabilities (CS: $\alpha=.88$; BO: $\alpha=.75$; and, STS: $\alpha=.81$). The measure has demonstrated good construct validity with each scale measuring separate constructs. However, the BO and STS subscales have shared variance of 34% (r=.58). For the present study, subscale scores were computed according to the manual (i.e. the sum of scores for items on each subscale are converted to z scores and then to t scores;

Stamm, 2010). Reliability of the scales using data from the present study were acceptable (CS: α=.93; BO: α=.80; and, STS: α=.83).

Data Analysis

All data was analyzed using IBM SPSS Statistics 25. All respondents completed the survey in its entirety with no missing data. Univariate analyses of demographics, selfcare behaviors, resilience, and ProQOL subscale scores (i.e. CS, BO, and STS) included frequencies and measures of central tendency. Bivariate analyses included correlations between mean selfcare, mean resilience, and ProQOL subscale scores.

After ruling out any possible multicollinearity between variables, a series of analyses were conducted to investigate if resilience mediated the relationship between selfcare and professional quality of life. Generally, mediation is thought to occur when the effects of the independent variable (i.e. selfcare) on the dependent variable (i.e. professional quality of life) decreases when a control variable (i.e. resilience) is added to the regression model. The authors followed the analytic procedures recommended by Baron and Kenny (1986) to examine this relationship. First, a regression analyses was conducted to analyze the effect of selfcare behavior on resilience. Next, hierarchical regression analyses were conducted to examine the mediating effects of resilience on DSPs' professional quality of life. Three models were estimated to account for each ProQOL subscale (i.e. CS, BO, and STS). The accuracy of the mediation effect was further tested using R 3.4.3 using sem() function in the lavaan package for mediation analysis (Rosseel, 2012). The Sobel test was used to test the significance of any mediation effects, that is, to determine if the reduction in the effect of the selfcare, after including resilience, is a significant reduction (Sobel, 1982).

Results

Demographics

The total sample was comprised of 153 DSPs. Demographic information is displayed in

Table 1. Respondents were predominantly women (71.2%) with an average age of 36.4 years

old (SD = .483). Most had less than a two-year college degree (68%) and had been working as a

DSP for at least one year (72.9%).

Selfcare Behavior

Selfcare behaviors are described in Table 2. Percentages reflect DSPs who rated each

behavior as a 4 "frequently" or 5 "a lot". On average, DSPs engaged in 25 behaviors (M =

24.96, SD = 14.64), and ranged from one to 60 behaviors across the physical, psychological,

emotional, spiritual, relational, and workplace domains. Fifteen selfcare behaviors were

endorsed by more than one-half of DSPs, including: wearing preferred clothing (71.2%), finding

things that make them laugh (63.4%), identifying what is meaningful to self (63.4%), staying in

contact with others (62.7%), being aware of non-material aspects of life (60.8%), spending time

with pets (58.2%), setting limits with clients and colleagues (58.2%), singing (56.9%), spending

time with others (56.2%), listening to one's self (55.6%), being open to not knowing (54.9%),

being open to inspiration (53.6%), cherishing optimism (51.6%), getting needed medical care

(51.0%); and, calling or visiting relatives (50.3%). The largest number of behaviors ($n = 6$) are

within the spiritual domain. When considering selfcare behaviors related to work or those

behaviors that have the potential to impact the workday, less than one-half of DSPs indicated that

they get enough sleep (37.9%), ask for help when it is needed (31.4%), get regular supervision

(24.8%), take a break during the work day (21.6%), take time off when sick (20.3%), take

vacations (16.3%), and say no to extra responsibilities (17.0%).

In addition, means and standard deviations are presented in Table 2 for each selfcare

domain. The mean is the sum of scores for each behavior (i.e. 1 – 5) divided by the total number

of behaviors in the domain. The means ranged from 2.86 (SD = .69) in the relationship domain

to 3.31 (SD = .79) in the spiritual domain. The mean score for striving to balance work

responsibilities during the work day and work life with personal life was 3.44 (SD = .99). Thus,

on average, DSPs "occasionally" to "frequently" seek a balance in their life.

Resilience

The mean resilience score was calculated from the sum of scores for each item divided by

the total number of items on the scale. The mean resilience score for DSPs was M = 4.14 (SD =

.64), thus suggesting that DSPs believed that the items were very consistent with their practices.

A statistically significant positive correlation was noted between resilience and selfcare ($r = .34$,

$p<.01$).

Professional Quality of Life

The compassion satisfaction (CS), burnout (BO), and secondary traumatic stress (STS)

scores were standardized ($M = 50; SD = 10$) according to the manual (Stamm, 2010). The range

of scores, as well as percentages for DSPs in lower and upper quartiles, for each subscale are

presented in Table 3. Although 28.8% of DSPs derive considerable satisfaction from their work,

26.8% of DSPs identified feelings of burnout and 23.7% of DSPs identified concerns related to

secondary traumatic stress.

Correlations between ProQOL subscale scores, selfcare, and resilience are displayed in

Table 4. All correlations were statistically significant ($p<.01$). Compassion satisfaction was

positively correlated with selfcare ($r = .35$) and resilience ($r = .49$). In contrast, BO and STS

were negatively correlated with selfcare and resilience.

Mediation Analyses

The initial step of mediation analyzed the effect of selfcare on resilience. Selfcare

significantly predicted resilience [$\beta = .36$, $t(151) = 4.49$, $p < .001$], and explained a significant

proportion of variance in resilience, $R^2 = .12$, $F(1, 151) = 20.14$, $p < .001$. Next, hierarchical regression analyses were conducted to ascertain if the relationship between selfcare and each ProQOL subscale (i.e. CS, BO, and STS) was mediated by resilience.

The analyses for CS are displayed in Table 5. Model 1a indicates that selfcare is significantly associated with higher CS ($p<.001$). Model 1b indicates that resilience mediated the effects of selfcare on CS ($p < .001$). The results of the Sobel test indicate that the association between CS and selfcare is significantly mediated by resilience with the indirect effect of 2.381 ($z = 3.550$, $p < .001$). The direct effect of selfcare, however, is still significant ($z = 2.870$ and $p <.01$). Thus, resilience is a partial mediator. The results indicate the two predictors, selfcare and resilience, explained 28% of the variance in CS scores.

The analyses for BO are displayed in Table 6. Model 2a indicates that selfcare is significantly associated with lower BO ($p < .001$). Model 2b indicates that resilience mediated the effects of selfcare on BO ($p < .001$). The results of the Sobel test indicate that the association between BO and selfcare is significantly mediated by resilience with the indirect effect of -1.549 ($z = -2.883$, $p < .01$). The direct effect of selfcare, however, is still significant ($z = -5.134$, $p < 0.001$). Thus, resilience is a partial mediator. The result indicates the two predictors, selfcare and resilience, explained 28% of the variance in BO scores.

The analyses for STS are displayed in Table 7. Model 3a indicates that selfcare is significantly associated with lower STS ($p < .01$). Model 3b indicates that resilience mediated the effects of selfcare on STS ($p < .01$). The results of the Sobel test indicate that the association between STS and selfcare is significantly mediated by resilience with the indirect effect of -1.556 ($z = -2.713$, $p < .01$). The direct effect of selfcare is not significant ($z = -1.697$, $p >.05$).

Thus, resilience is a full mediator. The result indicates the two predictors, selfcare and resilience, explained 12% of the variance in STS scores.

Discussion

To the authors' knowledge, this is the first study to explore and describe selfcare behaviors, and the relationship of selfcare to DSPs' professional quality of life. Findings suggest considerable variability and frequency in selfcare behaviors among DSPs. Spiritual behaviors were among the most prevalent selfcare strategies. It can be argued that many of the behaviors identified in the spiritual domain are of critical importance to the nature of DSP work. For example, being open to not knowing and being hopeful might translate into greater patience when working with individuals with IDD who exhibit challenging behavior or who might struggle to achieve their goals. A sense of optimism, an additional behavior within the spiritual domain, might sustain DSPs and provide them with a different lens through which to interpret work experiences. Chang and Chan (2015) noted that nurses who were more optimistic reported less burnout. Optimism was associated with greater likelihood of utilizing resources to contend with stress and less vulnerability to the impact of stress.

DSPs least often endorsed getting supervision, taking a break, taking time off when ill, and declining additional responsibilities – factors that are directly related to work experiences. It is possible that supervision was not readily available for DSPs (AAIDD, 2016). Further, a growing number of DSPs work by themselves in family and individual homes, with increased distance from other DSPs or managers who, in other settings like group homes or day programs, might otherwise be able to provide support (Braddock, Hemp, Tanis, Wu, & Haffer, 2017). In addition, DSPs frequently fill the gaps created by vacant positions (Bogenschutz et al., 2014; Larson et al., 2004). Requests from management to fill open shifts and DSPs' commitment to

the individuals might compromise or limit opportunities to take time off or a break during their shift. Such considerations provide a broader contextualization for the lack of engagement in work-related selfcare among DSPs in the current study.

As previously discussed, burnout results from an imbalance between an employee and the demands of work and can have significant implications for one's professional and personal life (Lawson & Myers, 2011). Lack of supervision and support, taking on additional responsibilities, and the lack of personal resources have the potential to result in increased burnout and turnover (Willems et al., 2010). Selfcare is one strategy to increase personal resources, sense of agency in managing stress, and an opportunity for DSPs to take "ownership of their health and well-being holistically…[in their] personal and professional lives" (Lee & Miller, 2013, p.96). However, research has highlighted the importance of promoting selfcare at the organizational level and fostering opportunities for workers to engage in selfcare (Lee & Miller, 2013; Orellana-Rios et al., 2018).

The present study highlights the importance of selfcare toward wellbeing and buffering the impact of burnout and secondary traumatic stress among DSPs. In the broader literature, research has found a similar relationship between selfcare and professional quality of life (Bloomquist et al., 2015; Bulter et al., 2017; Figley, 1995; Orellana-Rios et al., 2018). Although selfcare contributed to DSP wellness, the relationship between selfcare and compassion satisfaction, as well as selfcare and burnout, was partially mediated by resilience. Selfcare and resilience accounted for 28% of the variance in compassion satisfaction and in burnout. In contrast, the relationship between selfcare and secondary traumatic stress was fully mediated by resilience, thus suggesting that the relationship between selfcare and secondary traumatic stress was best explained by resilience. Together, selfcare and resilience accounted for 12% of the

variance in secondary traumatic stress. Although much is known about burnout, there is a dearth

of research on secondary traumatic stress among DSPs. With a growing interest in trauma and

trauma-informed care in the IDD field (Wigham & Emerson, 2015; Keesler, 2014), secondary

traumatic stress is a corresponding area for further inquiry.

The contribution of selfcare to professional quality of life is greatest for burnout, and to a

lesser degree compassion satisfaction and secondary traumatic stress. From a definitional

perspective, this makes sense given that selfcare refers to practices and behaviors intended to

counter work-related stress and overcome challenges (Barker, 2010; Lee & Miller, 2013). It is

likely that selfcare contributes to compassion satisfaction such that those who engage in selfcare

are investing and nourishing themselves. When people take time for themselves, do things that

they enjoy, and strive for balance, they are likely to have an increased sense of wellbeing (Lee &

Miller, 2013). Notably, engaging in selfcare is both preventative and restorative (Butler et al.,

2017).

Secondary traumatic stress, although related to burnout, is specific to indirect exposure to

trauma. Although little is known about the prevalence of secondary trauma among DSPs, the

present study suggests evidence that warrants further inquiry. Findings indicate that the

relationship between selfcare and secondary traumatic stress is different from the relationships

between selfcare and compassion satisfaction or burnout. The relationship between selfcare and

secondary traumatic stress is best explained by resilience. Resilience is a complex construct

influenced by individual, biological, cognitive, and interpersonal factors that not only buffers

stress but also lends to positive emotions amid adversity (Foureur et al., 2013; Poole et al.,

2017). It is plausible that as DSPs are indirectly exposed to traumatic experiences, resilience

fosters their ability to acknowledge and contain or frame the adversity and have greater

optimism. For example, if a DSP is exposed to details regarding the sexual assault of an

individual with IDD that they support, resilience would enable the DSP to move beyond the

horrific nature of the experience to recognize the assault as a past event, and identify factors to

buffer the emotional charge of the event (e.g. individual received treatment; the individual

continues to go to work; the DSP can continue supporting the individual, etc.).

Resilience is an important factor to consider in understanding DSPs' ability to withstand

stress and burnout, while experiencing greater satisfaction. Because of this, it warrants further

consideration. For example, although selfcare contributes to resilience, what else bolsters DSPs'

resilience? Preliminary research has noted a higher prevalence of early life adversity among

DSPs than in the general population (Keesler, 2018). Relevant literature suggests the potential

for adversity to contribute to a persons' resilience and ability to thrive, as well as the ability of

resilience to contribute to subsequent wellbeing (Hamby, Grych, & Banyard, 2018; Holtge,

McGee, Maercher, & Thoma, 2018; Poole, Dobson, & Pusch, 2017). In the current study, DSPs

had relatively high levels of self-reported resilience.

A large body of literature highlights the implications of burnout on DSP turnover and the

quality of services for individuals with IDD. Efforts to promote professional quality of life while

also fostering resilience to buffer the stress associated with DSP work are very much needed.

Initiatives to increase support to DSPs through additional trainings and professionalization of this

line of work have been promoted by various national organizations (e.g. The National Alliance

for Direct Support Professionals, 2013; National Association for the Dually Diagnosed, 2018).

Further, statements have been issued by the American Association of Intellectual and

Developmental Disabilities (AAIDD, 2016), as well as the President's Committee for People

with Intellectual Disabilities (2017), that highlight factors contributing to the stability of the DSP

workforce: low wages and limited benefits, limited training and opportunities for credentialing, and lack of good supervision and organizational support. Although efforts are being made at local, state, and federal levels, each organization is responsible for its workforce and its commitment to adequately serve individuals with IDD. As organizations seek ways to bolster their workforce amid broad systemic challenges, the development of trainings to promote selfcare and empower DSPs with opportunities to engage in selfcare may be additional strategies to buffer the impact of stress.

It is important for those in helping professions, like DSPs, to be emotionally self-aware. With greater insight, workers can identify when they are getting worn down and increase selfcare to avoid worsening fatigue and burnout (Killian, 2008). As such, increased self-awareness has been associated with the search for work-life balance and greater work satisfaction (Lawson, 2007). Historically however, "[the] emotional and psychological risks associate(d) with being a provider…to vulnerable populations and professional selfcare in response to these risks have been overlooked issues in…practice, training, and education" (Newell & MacNeil, 2010, p.58). Newell and MacNeil (2010) noted an association between a lack of knowledge regarding risks of direct practice and the benefits of preventative strategies such as selfcare increase the vulnerability of service providers to the impact of adverse outcomes like burnout.

The efficacy of trainings to increase selfcare and resilience has been noted in the literature (Foureur et al., 2013; Noone & Hastings, 2009; Orellana-Rios et al., 2018; Slatyer et al., 2018). Although increasing resilience is critical given its contribution to professional quality of life, focusing on selfcare may be more practical to promote through trainings (Bender & Ingram, 2018). In order to increase the potential success of selfcare trainings, it is critical for organizations: to understand the importance of selfcare to professional quality of life; to foster

awareness of selfcare among DSPs through education; to promote and reward selfcare practices among DSPs; and, to provide opportunities for the integration of selfcare into daily routines (Foureur et al., 2013; Williams et al., 2016). Trainings need to be accessible and organizations need to proactively strategize staff attendance at workshops and ensure coverage of work shifts (Noone & Hastings, 2009). In addition, when developing selfcare trainings, it is important to consider individual and workplace factors (e.g. current practices, organizational culture), as well as work-family conflict, which often compromise a worker's ability to cope (Slatyer, 2018b). Foureur and colleagues (2013) noted the collective impact of selfcare for the individual worker and the organization: "(t)he potential of staff who engage in selfcare…and contexts that enable [selfcare]…in day-to-day work, is the building of resilience both for the individuals involved and the workplace in general" (p.122).

Limitations

Although the present study provides much needed insight regarding DSPs' selfcare and professional quality of life, it is not without limitations. The sample was comprised of DSPs from one agency in the Midwest who work with individuals with IDD across various settings, including: day habilitation, community living, employment, and agency group homes. It is possible that the present findings do not generalize to direct support professionals in other settings (e.g. institutional, for-profit, etc.). Similarly, DSPs' selfcare behaviors, resilience, and professional quality of life could reflect unique aspects of the specific agency and local culture. For example, spirituality has been found to be more prevalent in the Midwest than in other regions of the United States (Furman, Benson, & Canda, 2004). Perhaps this explains the predominance of selfcare behaviors in the spiritual domain.

Across the United Sates, more than 50% of DSPs are people of color, and 33% to 66% have a high school level education (Gray-Stanley & Muramatsu, 2011; Hewitt et al., 2008). Given the potential for increased stress and adversity associated with these demographics, and the importance of recognizing the contribution of cultural diversity, a more diverse sample of DSPs is necessary to fully understand the relationship between selfcare, resilience, and professional quality of life. However, a more diverse sample may have implications for measurement. For example, although the ProQOL has been used extensively (Stamm, 2010) with studies supporting its psychometric properties across cultures and its sensitivity to cultural differences (Galiana, Arena, Oliver, Sanso, & Benito, 2017; Shen, Yu, Zhang, & Jiang, 2015), some scholars argue for increased exploration of its cross-cultural utility (Heritage, Rees, & Hegney, 2018). Similarly, selfcare and resilience can be influenced by culture, with resilience often presenting with moral, social, and structural factors (Ikeda et al., 2018; Panter-Brick, 2015). Therefore, the findings of the present study should be considered within the context of the respective culture.

Data analysis did not consider the breadth and depth of various factors that could contribute to DSPs' professional quality of life. It is possible that other factors within DSPs' personal lives and the broader context of IDD service delivery contribute to ProQOL subscale scores. Considerations such as length of work shifts, communication styles, worker maturity, supportiveness of management, and social support have been found to contribute to ProQOL scores (Granek et al, 2017; Khan, Khan, & Bokhari, 2016; Mohsin, Shahed, & Sohail, 2017; Sodeke-Gregson, Holttum, & Billings, 2013). In addition, the selfcare measure used in the present study has multiple dimensions that were collapsed into a single score for data analysis. Although a composite score facilitated analysis, it resulted in the loss of nuances associated with

individual selfcare behaviors. Previous research noted a differential impact of various selfcare

strategies on professional quality of life. For example, Killian (2008) noted the importance of

participating in supervision and social interactions with work colleagues in lowering perceived

work stress, as compared with strategies such as venting.

Overall, there is a dearth of research regarding selfcare, resilience, and professional

quality of life in the broader body of IDD literature which presents some limitation with

contextualizing and interpreting the current findings. Findings from related research have been

used where feasible and appropriate. Results should be interpreted within the context of the

study limitations and understood as a preliminary foundation for subsequent research.

Conclusions

Organizations supporting individuals with IDD continue to struggle with their DSP

workforce due to high rates of burnout and turnover amid low wages, lack of training and

supervision, and other organizational and personal factors. Given the integral role of DSPs in

promoting the quality of life for individuals with IDD, and the fundamental stress associated

with caregiving exacerbated by extensive responsibilities, it is important for organizations to

identify ways to promote DSPs' professional quality of life while also urging systemic changes

at the state and national levels.

The current study highlighted the relationships between selfcare, resilience, and

professional quality of life. Organizational strategies to develop a culture that embraces the

importance of selfcare and empowers DSPs with opportunities to engage in selfcare may be one

strategy to increase DSP resilience and decrease burnout amid the context of significant

stressors. Although DSPs may naturally engage in some selfcare behaviors, trainings can be

provided by organizations to increase awareness of the importance of selfcare and to promote its

use. Given the relationship between selfcare and resilience, and findings from previous research, it is possible that when organizations promote selfcare, DSPs may experience gains that carry over into aspects of their personal lives.

This study is an initial investigation of selfcare, resilience, and professional quality of life. It provides a preliminary foundation for subsequent discussion and inquiry within the broader context of challenges associated with the DSP workforce. Multiple and varied strategies at all levels are warranted to address the complexity of problems the field faces. Greater attention to selfcare and efforts to promote DSP resilience may be a viable strategy to contribute to broader efforts in response to an historic and immediate concern.

References

Agbo, A. A. (2014) Cronbach's alpha: review of limitations and associated recommendations.

   Journal of Psychology in Africa, 20(2), 233-239. DOI 10.1080/14330237.2010.10820371

American Association of Intellectual and Developmental Disabilities (2016). *Direct support*

   professionals (DSP) workforce. Retrieved from http://aaidd.org/news-

   policy/policy/position-statements/direct-support-professionals-(dsp)-workforce

Barker, M. (2010). Selfcare and relationship conflict. *Sexual and Relationship Therapy, 25*(1),

   37-47. https://doi.org/10.1080/14681990903479904

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social

   psychological research: Conceptual, strategic, and statistical considerations. *Journal of*

   Personality and Social Psychology, 51, 1173-1182. DOI

   https://doi.org/10.1037/0022-3514.51.6.1173

Bender, A., & Ingram, R. (2018). Connecting attachment style to resilience: contributions of

   selfcare and self-efficacy. *Personality and Individual Differences, 130*, 18-20. DOI

   https://doi.org/10.1016/j.paid.2018.03.038

Bride, B. E., Radey, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social*

   Work Journal, 35(3), 155-163. http://dx.doi.org/10.1007/s10615-007-0091-7

Bogenschutz, M. D., Hewitt, A., Nord, D., & Hepperlen, R. (2014). Direct support workforce

   supporting individuals with IDD: Current wages, benefits, and stability. *Intellectual and*

   Developmental Disabilities, 52(5), 317-329. doi:10.1352/1934-9556-52.5.317

Braddock, D. L., Hemp, R. E., Tanis, E. S., Wu, J., & Haffer, L. (2017). State of the states in

   intellectual and developmental disabilities (11th ed.).   Washington, DC: American

   Association on Intellectual and Developmental Disabilities. DOI

https://doi.org/10.3109/13668250.2016.1235141

Chang, Y., & Chan, H. (2015). Optimism and proactive coping in relation to burnout among

nurses. *Journal of Nursing Management*, *23*(3), 401–408. https://doi-

org.proxyiub.uits.iu.edu/10.1111/jonm.12148

De La Rosa, G. M., Webb-Murphy, J. A., Johnston, S. L. (2016). *Development and validation of*

a brief measure of psychological resilience: an adaptation of the response to stressful

experiences scale. Military Medicine, 181(3), 202 – 208. DOI

https://doi.org/10.7205/MILMED-D-15-00037

Denyes, M. J., Orem, D. E., & Bekel, G. (2001). Selfcare: A foundational science. *Nursing*

Science Quarterly, 14(1)|, 48-54. DOI https://doi.org/10.1177/089431840101400113

DeRosier, M. E., Frank, E., Schwartz, V., & Leary, K. A. (2013). The potential role of

resilience education for preventing mental health problems for college students*.*

Psychiatric Annals, 43(12), 538-544. DOI https://doi.org/10.3928/00485713-20131206-

05

Devenish-Meares, P. (2015). Call to compassionate selfcare: Introducing self-compassion into

the workplace treatment process. *Journal of Spirituality in Mental Health, 17*, 75-87. DOI

https://doi.org/10.1080/19349637.2015.985579

Eastwood, C. D. & Ecklund, K. (2008). Compassion fatigue risk and selfcare practices among

residential treatment center childcare workers. *Residential Treatment for Children &*

Youth, 25(2), 103-122. DOI https://doi.org/10.1080/08865710802309972

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.,

…Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to

many of the leading causes of death in adults. The Adverse Childhood Experiences

(ACE) Study. *American Journal of Preventive Medicine, 14*(4), 354–364. DOI

https://doi.org/10.1016/S0749-3797(98)00017-8

Foureur, M., Besley, K., Burton, G., Yu, N., & Crisp, J. (2013). Enhancing the resilience of

nurses and midwives: pilot of a mindfulness-based program for increased health, sense of

coherence and decreased depression, anxiety, and stress. *Contemporary Nurse, 45*(1),

114-125. DOI https://doi.org/10.5172/conu.2013.45.1.114

Furman, L. D., Benson, P. W., & Canda, E. R. (2004). Religion, spirituality, and geographic

region in the USA: an examination of regional similarities and differences among social

workers in direct practice. *Social Work & Christianity*, *31*(3), 267–294.

Galiana, L., Arena, F., Oliver, A., Sansó, N., & Benito, E. (2017). Compassion satisfaction,

compassion fatigue, and burnout in Spain and Brazil: ProQOL validation and cross-

cultural diagnosis. *Journal of Pain & Symptom Management, 53*(3), 598-604. DOI:

10.1016/j.jpainsymman.2016.09.014.

Granek, L., Nakash, O., Cohen, M., Ben, D. M., Ariad, S., & Ben-David, M. (2017).

Oncologists' communication about end of life: the relationship among secondary

traumatic stress, compassion satisfaction, and approach and avoidance

communication. *Psycho-Oncology*, *26*(11), 1980–1986. doi: 10.1002/pon.4289.

Gray-Stanley, J. A., & Muramatsu, N. (2011). Work stress, burnout, and social and personal

resources among direct care workers. *Research in Developmental Disabilities, 32*(3),

1065–1074. https://doi.org/10.1016/j.ridd.2011.01.025

Hamby, S., Grych, J., & Banyard, V. (2018). Resilience portfolios and poly-strengths:

Identifying protective factors associated with thriving after adversity. *Psychology of

Violence*, *8*(2), 172–183. doi:10.1037/vio0000135

Hegney, D. G., Ress, C. S., Eley, R., Osseiran-Moisson, R., & Francis, K. (2015). The

    contribution of individual psychological resilience in determining the professional quality

    of life of Australian nurses. *Frontiers in Psychology, 6,* 1-8. DOI

    https://doi.org/10.3389/fpsyg.2015.01613

Heritage, B., Rees, C. S., & Hegney, D. G. (2018). The ProQOL-21: A revised version of the

    Professional Quality of Life (ProQOL) scale based on Rasch analysis. *PLoS ONE, 13*(2):

    e0193478. https://doi.org/10.1371/journal.pone.0193478

Hewitt, A., Larson, S., Edelstein, S., Seavey, D., Hoge, M., & Morris, J. (2008). A

    synthesis of direct service workforce demographics and challenges across

    intellectual/developmental disabilities, aging, physical disabilities, and behavioral

    health. Retrieved from

    http://rtc.umn.edu/docs/CrossDisabilitySynthesisWhitePaperFINAL.pdf

Höltge, J., Mc Gee, S. L., Maercker, A., & Thoma, M. V. (2018). A salutogenic perspective on

    adverse experiences: The curvilinear relationship of adversity and well-being. *European*

    Journal of Health Psychology, *25*(2), 53–69. doi:10.1027/2512-8442/a000011

Ikeda, K., Fujimoto, S., Morling, B., Ayano, takahara, S., Harashima, S., Uchida, Y., & Inagaki,

    N. (2018). Cross-cultural comparison of predictors for self-care behaviors in patients with

    type 2 diabetes. *Journal of Diabetes Investigation*, *9*(5), 1212–1215.

    doi:10.1111/jdi.12822.

Keesler, J. M. (2014). A call for the integration of trauma-informed care among intellectual and

    developmental disability organizations. *Journal of Policy and Practice in Intellectual*

    Disabilities, 11(1), 34–42. DOI https://doi.org/10.1111/jppi.12071

Keesler, J. M. (2018). Adverse childhood experiences among direct support professionals.

Intellectual and Developmental Disabilities, 56(2), 119-132. DOI

https://doi.org/10.1352/1934-9556-56.2.119

Khan, A. A., Khan, M. A., & Bokhari, S. A. (2016). Association of specialty and working hours

with compassion fatigue. *Pakistan Armed Forces Medical Journal*, (66), 143–146.

Lauder, W. (2001). The utility of selfcare theory as a theoretical basis for self-neglect. *Journal of*

Advanced Nursing, 34(4), 545-551. DOI https://doi.org/10.1046/j.1365-

2648.2001.01784.x

Lawson, G. & Meyers, J. E. (2011). Wellness, professional quality of life, and career-sustaining

behaviors: What keeps us well? *Journal of Counseling & Development, 89*, 163-171.

DOI https://doi.org/10.1002/j.1556-6678.2011.tb00074.x

Lawson, G. (2007). Counselor Wellness and Impairment: A National Survey. *Journal of*

Humanistic Counseling, Education & Development, *46*(1), 20-35. DOI

https://doi.org/10.1002/j.2161-1939.2007.tb00023.x

Lee, J. J. & Miller, S. E. (2013). A selfcare framework for social workers: Building a strong

foundation for practice. *Families in Society: The Journal of Contemporary Services,*

94(2), 96-103. DOI https://doi.org/10.1606/1044-3894.4289

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American*

Psychologist, 56, 227–238. DOI https://doi.org/10.1037/0003-066X.56.3.227

Matarese, M., Lommi, M., & De Marinis, M. G. (2017). Systematic review of measurement

properties of self-reported instruments for evaluating selfcare in adults. *Journal of*

Advanced Nursing, 73(6), 1272-1287. DOI https://doi.org/10.1111/jan.13204

Mohsin, Z., Shahed, S., & Sohail, T. (2017). Correlates of professional quality of life in

nurses. *Annals of King Edward Medical University*, *23*(4), 1–5. DOI

10.17582/journal.akemu/2017/23

National Alliance for Direct Support Professionals. (2013). *Credentialing Guidebook for Direct*

Support Professionals. Retrieved from https://www.nadsp.org/wp-

content/uploads/2016/08/NADSP_Credentialing_Guidebook_FINAL_8.23.13.pdf

National Association for the Dually Diagnosed. (2018). *The NADD Accreditation and*

Certification Programs. Retrieved from http://acp.thenadd.org/index.htm

Noone, S. & Hastings, R. (2009). Building psychological resilience in support staff caring for

people with intellectual disabilities. *Journal of Intellectual Disabilities, 13*(1), 43-53.

DOI https://doi.org/10.1177/1744629509103519

Orellana-Rios, C. L., Radbruch, L., Kern, M., Regel, Y. U., Anton, A., Sinclair, S. & Schmidt, S.

(2018). Mindfulness and compassion-oriented practices at work reduce distress and

enhance selfcare of palliative care teams: A mixed-method evaluation of an "on the job"

program. *BMC Palliative Care, 17*(3), 1-15. DOI 10.1186/s12904-017-0219-7

Panter-Brick C. (2015). Culture and resilience: next steps for theory and practice. In: Theron L.,

Liebenberg L., Ungar M. (Eds.), *Youth Resilience and Culture. Cross-Cultural*

Advancements in Positive Psychology (pp. 233-244). Springer, Dordrecht.

Poole, J., C., Dobson, K. S., & Pusch, D. (2017). Childhood adversity and adult depression: the

proactive role of psychological resilience. *Child Abuse & Neglect, 64,* 89-100. DOI

https://doi.org/10.1016/j.chiabu.2016.12.012

President's Committee for People with Intellectual Disabilities. (2017). *America's Direct*

Support Workforce Crisis: Effects on People with Intellectual Disabilities, Families,

Communities and the U.S. Economy. Retrieved from

https://acl.gov/sites/default/files/programs/2018-

02/2017%20PCPID%20Short%20Report.pdf

Rees, C. S., Heritage, B., Osseiran-Moisson, R., Chamberlain, D., Cusack, L., Anderson, J.,

Terry, V., Rogers, C., Hemsworth, D., Cross, W., & Hegney, D. G. (2016). Can we

predict burnout among student nurses? An exploration of the ICWR-1 model of

individual psychological resilience. *Frontiers in Psychology, 7*, 1-11. *doi:*

10.3389/fpsyg.2016.01072

Saakvitne, K.W., & Pearlman, L.A. (1996). *Transforming the Pain: A workbook on Vicarious*

Traumatization. New York: W.W. Norton.

Shen, J., Yu, H., Zhang, Y., & Jiang, A. (2015). Professional quality of life: A cross-sectional

survey among Chinese clinical nurses. *Nursing & Health Sciences, 17*(4), 507-515.

http://dx.doi.org.proxyiub.uits.iu.edu/10.1111/nhs.12228

Skovholt, T. M., Grier, T. L., & Hanson, M. R. (2001). Career counseling longevity: Selfcare

and burnout prevention strategies for counselor resilience. *Journal of Career*

Development, 27(3), 167-176. DOI https://doi.org/10.1177/089484530102700303

Slatyer, S., Craigie, M., Heritage, B., Davis, S., & Rees, C. (2018a). Evaluating the effectiveness

of a brief mindful selfcare and resiliency (MSCR) intervention for nurses: a controlled

trial. *Mindfulness, 9,* 534-546. DOI https://doi.org/10.1007/s12671-017-0795-x

Slatyer, S., Craigie, M., Rees, C., Davis, S., Dolan, T., & Hegney, D. (2018b). Nurse experience

of participation in a mindfulness-based selfcare and resiliency intervention. *Mindfulness,*

9, 610-617. DOI https://doi.org/10.1007/s12671-017-0802-2

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation

models. *Sociological Methodology, 13,* 290–312. DOI https://doi.org/10.2307/270723

Sodeke-Gregson, E. A., Holttum, S., & Billings, J. (2013). Compassion satisfaction, burnout, and

secondary traumatic stress in UK therapists who work with adult trauma

clients. *European Journal of Psychotraumatology*, *4*, 1–10. DOI 10.3402/ejpt.v4i0.21869

Stamm, B. H. (2010). *The Concise ProQOL Manual, 2ⁿᵈ Ed.* Pocatello, ID: The ProQOL.org.

Retrieved from http://www.proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf

The National Alliance for Direct Support Professionals (2018). *Services and Programs*.

Retrieved from https://www.nadsp.org/services-and-programs/

Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to

bounce back from negative emotional experiences. *Journal of Personality and Social

Psychology, 86* (2), 320-333. DOI https://doi.org/10.1037/0022-3514.86.2.320

Wigham, S., & Emerson, E. (2015). Trauma and life events in adults with intellectual disability.

Current Developmental Disorders Reports, 2(2), 93-99. DOI

Willems, A., Embregts, P., Stams, G., & Moonen, X. (2010). The relation between intrapersonal

and interpersonal staff behavior towards clients with ID and challenging behavior: A

validation study of the Staff–Client Interactive Behavior Inventory. *Journal of

Intellectual Disability Research, 54,* 40-51.

Williams, J., Hadjistavropoulos, T., Ghandehari, O. O., Mallow, D. C., Hunter, P.V., & Martin,

R. R. (2016). Resilience and organizational empowerment among long-term care nurses:

effects on patient care and absenteeism. *Journal of Nursing Management, 24,* 300-308.

Yves Rosseel (2012). lavaan: An R Package for Structural Equation Modeling. *Journal of

Statistical Software*, 48(2), 1-36. URL http://www.jstatsoft.org/v48/i02/

Table 1

Demographics

Demographic	n (%)
Gender[a]	
Female	109 (71.2)
Male	40 (26.1)
Education[b]	
High School/GED	28 (18.3)
Some College	76 (49.7)
Associates Degree	14 (9.2)
Baccalaureate Degree	25 (16.3)
Length of Time DSP	
≤ 6 Months	22 (14.4)
6 – 12 Months	21 (13.7)
1 – 2 Years	35 (22.9)
3 – 4 Years	21 (13.7)
≥ 5 Years	54 (35.3)

Note. (N = 153). [a] Nonbinary (n=4; 2.6%). [b] Graduate degree (n =10; 6.5%).

Table 2

Selfcare Behaviors among DSPs

Behavior	% Behaviors ("frequently" – "a lot")	Domain M (SD)
Physical		3.03 (.62)
Wear clothes I like	71.2	
Get medical care when needed	51.0	
Eat regularly	47.7	
Take time to be sexual	43.8	
Eat health	41.8	
Get enough sleep	37.9	
Fun physical activity (e.g. dance, swim, sports)	37.3	
Get regular medical attention (prevention)	34.0	
Exercise	30.7	
Take time off when sick	20.3	
Take vacations	16.3	
Get massages	9.2	
Psychological		2.86 (.69)
Listen to own thoughts, beliefs, feelings, etc.	55.6	
Read literature (unrelated to work)	43.8	
Time for self-reflection	39.9	
Attend to minimizing stress in my life	34.6	
Time away from phone, email, etc.	28.1	
Do something I am not an expert in/in charge of	28.1	
Engage my intelligence in a new area	26.8	
Say no to extra responsibilities	17.0	
Take day trips	16.3	
Write in a journal	7.8	
Emotional		3.26 (.73)
Find things that make me laugh	63.4	
Stay in contact with important others in my life	62.7	
Spend time with others	56.2	
Identify/seek sources of comfort (e.g. activities)	47.7	
Love myself	42.5	
Re-read favorite books/re-watch favorite movies	39.2	
Give myself affirmations	28.1	
Allow myself to cry	25.5	
Express my outrage in social action, marches, etc.	14.4	
Spiritual		3.31 (.79)
Identify what is meaningful to me	63.4	
Be aware of non-material aspects of life	60.8	
Sing	56.9	

Be open to not knowing	54.9	
Be open to inspiration	53.6	
Cherish my optimism/hope	51.6	
Pray	43.8	
Experience awe	41.8	
Try at times not to be in charge	39.9	
Read/listen to inspirational material	39.9	
Contribute to causes in which I believe	37.9	
Make time for reflection	37.3	
Spend time in nature	37.3	
Find a spiritual connection/community	35.3	
Meditate	21.6	
Relationship		2.92 (.75)
Spend time with my companion animals	58.2	
Call/see my relatives	50.3	
Make time to see friends	39.2	
Share with someone I trust	37.9	
Schedule regular dates with my partner/spouse	32.0	
Ask for help when I need it	31.4	
Stay in contact with faraway friends	27.5	
Schedule regular activities with my children	26.8	
Make time for email and letters	26.1	
Allow others to do things for me	19.0	
Enlarge my social circle	17.6	
Workplace		2.97 (.73)
Set limits with clients and colleagues	58.2	
Make quiet time to complete tasks	43.8	
Arrange work space so it is comfortable	43.8	
Identify projects that are exciting/rewarding	43.1	
Take time to chat with co-workers	40.5	
Balance my caseload	32.7	
Get regular supervision	24.8	
Take a break during the workday (e.g., lunch)	21.6	
Have a peer support group	15.0	
Negotiate for my needs (benefits, pay raise)	11.8	
Strive for Balance		3.44 (.99)
Within my work-life & work day	49.0	
Among work, family, relationships, play, & rest	49.0	
Total		3.08 (.60)

Note. (*n* = 153).

Table 3

ProQOL

Subscale	Range	Lower Quartile	Upper Quartile
CS	14.62 – 64.18	20.9%	28.8%
BO	29.47 – 88.23	28.8%	26.8%
STS	33.64 – 91.23	16.5%	23.7%

Note. (N = 153).

Table 4

Correlations between Selfcare, Resilience, and ProQOL

	Selfcare	Resilience	CS	BO
Resilience	.34**			
CS	.35**	.49**		
BO	-.47**	-.40**	-.72**	
STS	-.23**	-.32**	-.44**	.62**

Note. ($n = 153$). **$p<.01$.

Table 5

Hierarchical Regression Predicting Compassion Satisfaction (CS)

Predictor variable	Model 1a – CS				Model 1b – CS with Resilience			
	B	SE	β	*p*	*B*	SE	β	*p*
Constant	31.97	3.96	.00		12.39	4.98	.00	
Selfcare	5.85	1.26	.35	<.001	3.47	1.22	.21	.005
Resilience					6.51	1.15	.42	<.001
R^2		.13				.28		

Table 6

Hierarchical Regression Predicting Burnout (BO)

| Predictor variable	Model 2a – BO				Model 2b – BO with Resilience			
	B	SE	β	*p*	*B*	SE	β	*p*
Constant	73.84	3.74	.00		86.58	4.97	.00	
Selfcare	-7.74	1.91	-.467	<.001	-6.20	1.22	-.37	<.001
Resilience					-4.23	1.14	-.27	<.001
R^2		.22				.28		

Table 7

Hierarchical Regression Predicting Secondary Traumatic Stress (STS)

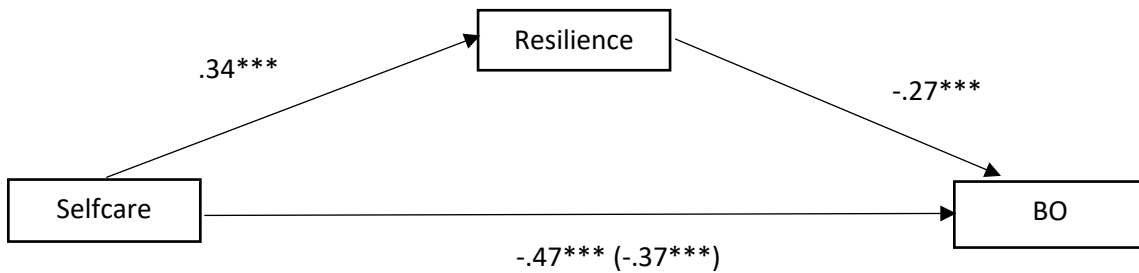| Predictor variable	Model 3a – STS				Model 3b – STS with Resilience			
	B	SE	β	*p*	*B*	SE	β	*p*
Constant	61.78	4.12	.00		74.579	5.51	.00	
Selfcare	-3.83	1.31	-.231	.004	-2.27	1.35	-.137	.095
Resilience					-4.25	1.27	-.27	.001
R^2		.05				.12		

Figure 1

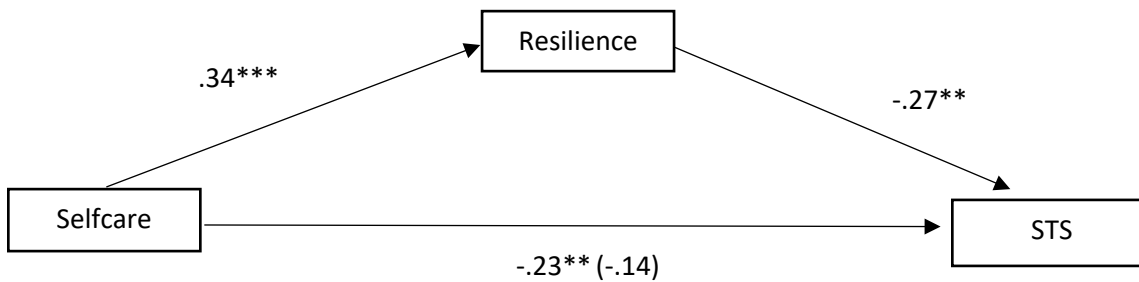*Mediation Models for Selfcare and ProQOL*

Compassion Satisfaction
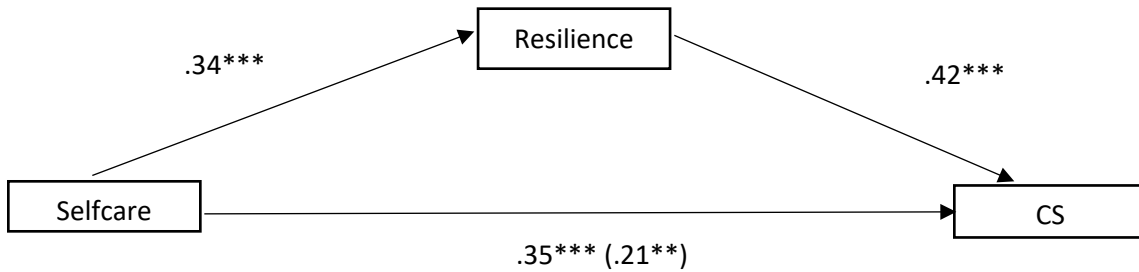
Burnout

Secondary Traumatic Stress

Note. The above figures depict the mediation models for selfcare and the three subscales of ProQOL, incorporating resilience as a mechanism. In the paths from selfcare to each of the ProQOL subscales, the first coefficient represents the direct path ([a]) while the coefficient in parentheses represents the relationship once the indirect path is added to the model. ** $p<.01$. ***$p<.001$.