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Self-care agency and self-care practice in youth workers reduces burnout risk and improves compassion satisfaction

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Abstract

Introduction and Aims. Youth work specialises in helping vulnerable young people face life challenges during critical stages of their development. It is a complex and demanding role and factors influencing occupational stress in youth workers are rarely investigated. This study examined whether youth alcohol and other drug workers with greater compassion satisfaction, self-care practice and self-care agency experienced different rates of occupational stress including burnout and secondary traumatic stress. **Design and Methods.** A convenience sample of 258 Australian youth alcohol and other drug workers completed an online questionnaire battery. A four-stage data analysis was conducted utilising multivariate analysis of variance, bivariate correlations, linear multiple regression models and mediation modelling. **Results.** Burnout and secondary traumatic stress exhibited moderate negative correlations with compassion satisfaction, self-care practice and the different forms of self-care agency. Further, a decrease in lacking power for self-care, a form of self-care agency, was the strongest contributor to both burnout and secondary traumatic stress. Support was found for a mediation pathway whereby self-care agency led to greater self-care practice, which in turn increased compassion satisfaction, lowering burnout and secondary traumatic stress. **Discussion and Conclusions.** The findings suggest that it would be beneficial for self-care agency to be a key focus of youth worker training and professional development programs. [Hallam KT, Leigh D, Davis C, Castle N, Sharples J, Collett JD. Self-care agency and self-care practice in youth workers reduces burnout risk and improves compassion satisfaction. *Drug Alcohol Rev* 2021;40:847–855]

Key words: youth worker, burnout, compassion satisfaction, compassion fatigue, self-care agency.

Introduction

The role of a youth worker is to support and empower young clients by advocating for their rights and facilitating their independence and participation in society [1]. Youth alcohol and other drug (AOD) workers provide support services to vulnerable and marginalised youth engaging in substance use. The youth AOD work environment is diverse and comprises working in assertive street outreach, designated youth service providers and community health centres. Youth AOD workers liaise with family members and support services as well as working with youth clients directly. The period of development from adolescence to young

adulthood is particularly critical, with developmental milestones typically achieved during this time including individuation; identity formation; autonomy; self-management; physical, psychological and emotional health; ethical behaviour; life skills; educational and occupational attainment; and social competence [2]. Assisting young people in need can therefore yield positive lifelong consequences by improving skills for wellbeing and mitigating risks that may have otherwise steered them away from their developmental trajectory [3].

The youth work field has not yet undergone professionalisation and does not have standardised approaches to worker training, supervision and support

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[4]. Perhaps reflecting the relative infancy of the youth work field internationally, research into the specific needs of youth AOD workers is lacking, despite their central role supporting vulnerable young people at critical stages of development. Organisational demands (e.g. working hours, management, administrative processes, caseload), emotional investment and severity and complexity of cases mean that youth AOD workers are at a high risk of occupational stress [5–7].

Occupational stress occurs when the requirements of an employment role exceed the training, expertise and/or internal or external resources of the employee [8]. Occupational stress may increase risks of mental health issues [9] and decrease job satisfaction [10], self-esteem and work performance [11]. Occupational stress is viewed as a negative aspect of professional quality of life, a concept reflecting individual wellbeing within an employment context that has been specifically applied to helping professions [12].

Severe levels of occupational stress are associated with compassion fatigue. Compassion fatigue is characterised by workers feeling confused, disempowered and traumatised by their work [12,13] and encompasses two core constructs: (i) *burnout* and (ii) *secondary traumatic stress* [14]. Burnout refers to a syndrome of negative reactions experienced due to the nature of helping work, including exhaustion, cynicism, inefficacy, reduced fulfilment, occupational impairment and feelings of hopelessness [15]. Secondary traumatic stress refers to distress and trauma reactions resulting from helping clients who have experienced trauma [7,16] and characterised by feeling unsafe, intrusive images, sleep disruption, hypervigilance, mood disturbance and social isolation [11,17–20]. Although strongly correlated [17], Newell and MacNeill [21] recommended that burnout and secondary traumatic stress are investigated as separate constructs in order to acknowledge their complexity.

Compassion fatigue can result in client harms and impact the effectiveness of service delivery. The specific impact of compassion fatigue on youth AOD workers has yet to be studied, but evidence from Ewer, Teesson, Sannibale, Roache and Mills [22] with adult AOD counsellors showed that increased secondary traumatic stress was associated with a larger caseload of traumatised clients, less clinical supervision and higher worker anxiety levels. Broader evidence indicates that burnout has been increasing in the human services sector over the past 30 years [23] and is endemic to professions working with chronic stressors [24] and maltreated children [25].

In summary, evidence suggests that a variety of human services roles and helping professions are risks for compassion fatigue [13]. As there is a demonstrated risk in similar fields [13,22,23], this study

examines the impact of burnout and secondary traumatic stress in the youth AOD workforce. Given the potential negative impact of compassion fatigue on youth AOD workers, it is equally important that research examines factors that work to protect against it [13]. Two protective factors that may aid in reduction and management of compassion fatigue are compassion satisfaction [12] and wellbeing-maintaining self-care practices [26].

Compassion satisfaction describes feelings of pleasure or fulfilment derived from using one's own emotional resources to help clients recover from traumatic experiences [12]. Compassion satisfaction [see 27] has been consistently identified as a protective factor associated with reduced compassion fatigue in child protection workers [7,20], social workers [11], mental health workers [13], nurses [28], AOD counsellors [22], psychologists and social workers specialising in the treatment of trauma [29], and helping professionals more broadly [18]. Compassion satisfaction increases resilience to compassion fatigue by instilling motivation, stamina and a sense of workplace achievement, representing the positive component of professional quality of life [30]. Craig and Sprang [29] found higher levels of compassion satisfaction to be predicted by greater length of professional experience as well as adherence to using evidence-based practices.

Helping professionals can actively improve their compassion satisfaction through self-care practice that also improves mental health and reduces burnout [31]. Self-care practice describes engagement in remedial activities to maintain an acceptable level of functioning, usually following recognition of detrimental changes to mental or physical health [32]. In a sample of 104 child welfare workers, Salloum *et al.* [7] found that higher levels of self-care practice were associated with higher levels of compassion satisfaction and lower levels of burnout. Similarly, Bloomquist, Wood, Friedmeyer-Trainor and Kim [33] found positive perceptions of self-care practice to be associated with decreased compassion fatigue in a sample of 786 social workers working with traumatised clients. It is possible that self-care practice exerts a protective effect on burnout by increasing compassion satisfaction.

Self-care agency refers to the ability to meet one's own self-care requirements and may influence occupational stress beyond the effect of self-care practice [34]. Whereas self-care practice encompasses direct engagement in self-care behaviours, self-care agency captures the psychological readiness for self-care, being comprised of the physical, mental and emotional skills needed to deliberately engage in activities to maintain one's physical and psychological health [34]. This is a skill set that builds throughout one's lifetime and can be influenced by various factors, such as age,

sociocultural environment and health status [35]. Orem [34] suggested that self-care practice mediates the effect of self-care agency on goal-oriented outcomes.

As with compassion fatigue, no previous study has assessed compassion satisfaction and self-care in youth AOD workers. This means that the interplay between compassion fatigue, compassion satisfaction and self-care has not been investigated within the youth AOD work context. Findings in other human services professions suggest that helping professionals with higher self-care agency will engage in more self-care practice, and that this in turn may lead to a reduction in adverse mental health outcomes such as compassion fatigue [13]. It is important that compassion fatigue, compassion satisfaction, self-care practice and self-care agency are examined in youth AOD workers, addressing the current gap in knowledge.

The aim of the present research was to address the gap in knowledge of compassion fatigue, compassion satisfaction and self-care in Australian youth AOD workers, in order to inform organisational strategies that can reduce the negative personal and occupational outcomes associated with compassion fatigue. It was hypothesised that: (H1) compassion satisfaction would be moderately negatively correlated with both burnout and secondary traumatic stress; (H2) compassion satisfaction would be a significant mediator of the relationship between self-care practice and burnout; and (H3) the effect of self-care agency on compassion satisfaction would be mediated by increased self-care practice.

Methods

Participants

A convenience sample of youth AOD workers was collected from volunteers (via e-mail invitation) across three Australian service providers and at the 2017

Australian Youth AOD Conference. The inclusion criteria were informed consent and current employment as a youth AOD worker. No exclusion criteria were set, assuming individuals could complete the written survey. Participation was voluntary and no incentives were provided. A total sample of 315 responses was collected with 57 discarded as they had not provided consent or had not filled in any survey questions. The final sample was 258 youth AOD workers, 185 female ($M = 36.4$ years, $SD = 10.4$ years), 69 male ($M = 40.0$ years, $SD = 11.1$ years) and 4 identifying as other ($M = 31.3$ years, $SD = 2.9$ years). Additional participant characteristics are described in Table 1.

Measures

Participants completed a questionnaire battery assessing burnout, secondary traumatic stress, compassion satisfaction, self-care practice and self-care agency. Age, gender, employment loading, training to work with complex needs clients, self-care training and perceived work capacity were assessed using a demographic questionnaire.

Professional Quality of Life Scale-version 5 (ProQOL-5). The 30-item ProQOL-5 measures compassion fatigue and compassion satisfaction (10 items, Cronbach's $\alpha = 0.88$) [12]. Compassion fatigue is composed of burnout (10 items, Cronbach's $\alpha = 0.75$) and secondary traumatic stress subscales (10 items, Cronbach's $\alpha = 0.81$). Responses are provided on a five-point Likert scale ranging from 1 (never) to 5 (very often). Total scores are standardised with a mean of 50 and a standard deviation of 10, placing participants into low (<23), moderate (23–41 inclusive) or high (>41) ranges [12].

Table 1. Participant characteristics as demographic group frequencies, N = 258

| Demographic variable | Categorical group frequencies | | |
|-------------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| Gender | <i>Female</i> 185 (71.7%) | <i>Male</i> 69 (26.7%) | <i>Other</i> 4 (1.6%) |
| Employment | <i>Full-time</i> 166 (64.3%) | <i>Part-time</i> 74 (28.7%) | <i>Casual</i> 16 (6.2%) |
| Complex needs training | <i>Completed</i> 212 (82.2%) | <i>Not completed</i> 46 (17.8%) | |
| Self-care training | <i>Completed</i> 123 (47.7%) | <i>Not completed</i> 135 (52.3%) | |
| Perceived work capacity | <i>Beyond capacity</i> 47 (18.2%) | <i>Full capacity</i> 160 (62.0%) | <i>Spare capacity</i> 50 (19.4%) |

Table 2. Descriptive statistics and scale correlations, N = 256

| | Cronbach's α | M (SD) | BO | STS | CS | SC | SCA1 | SCA2 | SCA3 |
|------|---------------------|--------------|--------|--------------------|-------|-------|-------|-------|------|
| BO | 0.74 | 18.64 (3.95) | — | — | — | — | — | — | — |
| STS | 0.83 | 21.20 (5.33) | 0.60* | — | — | — | — | — | — |
| CS | 0.87 | 40.59 (4.85) | -0.27* | -0.21 ^a | — | — | — | — | — |
| SC | 0.71 | 18.12 (6.83) | -0.31* | -0.26* | 0.35* | — | — | — | — |
| SCA1 | 0.81 | 23.11 (3.64) | -0.25* | -0.18* | 0.26* | 0.57* | — | — | — |
| SCA2 | 0.71 | 20.66 (2.76) | -0.29* | -0.29* | 0.27* | 0.45* | 0.61* | — | — |
| SCA3 | 0.72 | 12.09 (3.35) | -0.35* | -0.39* | 0.25* | 0.53* | 0.50* | 0.39* | — |

$P < 0.001$ for all significant correlations (denoted *) except ^a ($P = 0.001$). BO, burnout; CS, compassion satisfaction; SC, self-care practice; SCA1, self-care agency: having power for self-care; SCA2, self-care agency: developing power for self-care; SCA3, self-care agency: lacking power for self-care; STS, secondary traumatic stress.

Self-Care Assessment Worksheet. Five domains of self-care practice were drawn from the Self-Care Assessment Worksheet [36]. These domains were: (i) *bio-behavioural practices*; (ii) *cognitive practices*; (iii) *relational practices*; (iv) *spiritual practices* and (v) *workplace practices*. Responses were provided on an eight-point Likert scale ranging from 0 (*I did not do any self-care in this category*) to 7 (*Every day*).

Appraisal of Self-Care Agency Scale—Revised. The 15-item Appraisal of Self-Care Agency Scale—Revised assesses self-care agency as a total score, or as three 5-item subscales of self-care agency: (i) *having power* (i.e. capacity) *for self-care* (Cronbach's $\alpha = 0.86$); (ii) *developing power for self-care* (i.e. preparedness) (Cronbach's $\alpha = 0.83$); and (iii) *lacking power for self-care* (i.e. insufficient energy or time) (Cronbach's $\alpha = 0.79$) [26]. Responses are provided on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

Procedure

Ethics review and approval was provided from Victoria University Human Research Ethics Committee (HRE 16–242). An invitation to participate was sent via email, together with the participant information statement and online questionnaire link. The questionnaire took approximately 15 min to complete. A paper version of the questionnaire battery was also distributed to youth AOD workers at networking events. Informed consent was granted using a checkbox at the beginning of the online questionnaire or a signed form for paper questionnaires. Consent forms were immediately separated from the surveys to ensure data anonymity. Data were

entered into the Statistical Package for the Social Sciences, Version 22 (IBM, Chicago, USA), for analysis.

Analysis

Following data-screening, a four-stage data analysis process was implemented, with burnout and secondary traumatic stress analysed separately (in accordance with Newell and MacNeill, 2010) [21]. First, multivariate analysis of variance was used to compare categorical demographic groups for differences across all of the continuous variables, to check whether it was appropriate to control for these variables during hypothesis testing. Second, descriptive data and bivariate correlations were examined. Third, hierarchical linear multiple regression models were run separately for the compassion fatigue outcomes of burnout and secondary traumatic stress. Finally, mediation modelling was conducted to test hypothesised mediating pathways. Missing values (0.29%) were managed via listwise deletion.

Results

Before hypothesis testing, multivariate analysis of variance was used to check whether each of the continuous variables were affected by participant gender (male, female, other), employment loading (full-time, part-time or casual), training to work with complex needs clients (completed or not completed), self-care training (completed or not completed) and perceived work capacity (beyond capacity, full capacity, spare capacity). Significance levels were set at 0.01 to reflect the testing of five categorical variables. No significant multivariate effects were identified. Only one significant between-groups effect was identified. Participants who

Table 3. Separate hierarchical multiple regression analyses with burnout and secondary traumatic stress entered as the dependent variables, each controlling for self-care training, N = 256

| | B (SE of B) | β | t | P | Semi-R ² |
|-----------------------------------|---------------|----------|-------|-------|---------------------|
| <i>Burnout</i> | | | | | |
| Step 1 | | | | | |
| Self-care training | 0.37 (0.49) | 0.05 | 0.75 | 0.453 | >0.01 |
| Step 2 | | | | | |
| Self-care training | 0.02 (0.46) | 0.00 | 0.03 | 0.973 | >0.01 |
| CS | -0.13 (0.05) | -0.16* | -2.57 | 0.011 | -0.02 |
| SC | -0.05 (0.04) | -0.08 | -1.08 | 0.280 | > -0.01 |
| SCA1 | 0.04 (0.09) | 0.04 | 0.50 | 0.619 | >0.01 |
| SCA2 | -0.21 (0.11) | -0.14 | -1.95 | 0.053 | 0.01 |
| SCA3 | -0.27 (0.08) | -0.23** | -3.25 | 0.001 | 0.03 |
| <i>Secondary traumatic stress</i> | | | | | |
| Step 1 | | | | | |
| Self-care training | -0.43 (0.67) | -0.04 | -0.65 | 0.519 | > -0.01 |
| Step 2 | | | | | |
| Self-care training | -1.00 0(0.62) | -0.09 | -1.61 | 0.108 | -0.01 |
| CS | -0.10 (0.07) | -0.09 | -1.43 | 0.155 | -0.01 |
| SC | -0.02 (0.06) | -0.03 | -0.34 | 0.736 | > -0.01 |
| SCA1 | 0.21 (0.12) | 0.14 | 1.77 | 0.079 | 0.01 |
| SCA2 | -0.40 (0.14) | -0.21** | -2.84 | 0.005 | 0.03 |
| SCA3 | -0.58 (0.11) | -0.36*** | -5.22 | 0.000 | 0.09 |

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$. CS, compassion satisfaction; SC, self-care practice; SCA1, self-care agency: having power for self-care; SCA2, self-care agency: developing power for self-care; SCA3, self-care agency: lacking power for self-care.

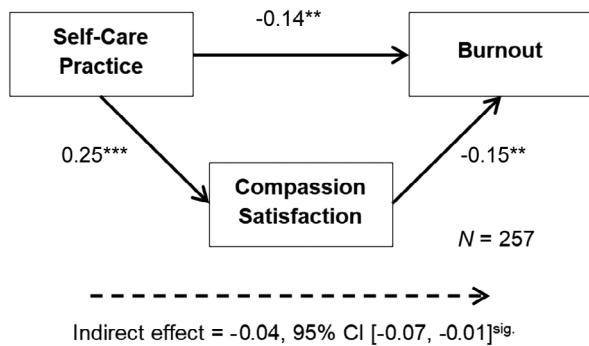
completed self-care training were higher in having power for self-care, a form of self-care agency, than participants who had not, $F(1,223) = 7.43$, $P = 0.007$, mean square error = 12.75, partial $\eta^2 = 0.03$, observed power = 0.78. Accordingly, self-care training was entered as a covariate during regression and mediation analyses. Descriptive statistics and correlations are shown in Table 2.

Table 2 demonstrates that all continuous variables were significantly correlated. As expected, burnout and secondary traumatic stress were strongly correlated as the two subscales of compassion fatigue. Both were weakly negatively associated with compassion satisfaction. Self-care practice was moderately positively associated with the three forms of self-care agency, which themselves possessed moderate to strong correlations with one another. All other correlations were between weak to moderate in strength.

Hierarchical multiple linear regression was used to assess which variables were most important in contributing to compassion fatigue outcomes. Separate regression models were run with burnout and secondary traumatic stress entered as the dependent variables, with self-care training, identified as a potential covariate via multivariate analysis of variance, controlled for in the first step of the regression. The results of these analyses are shown in Table 3. The contribution of self-care training was not significant in either step of

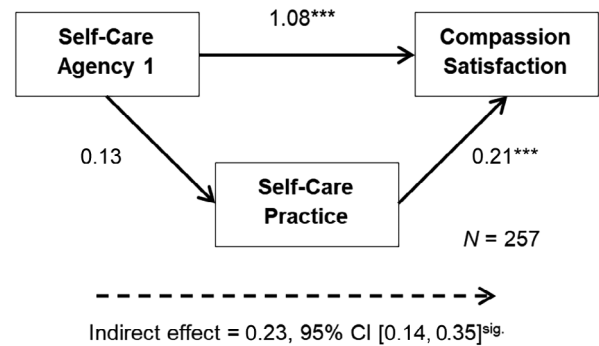
either model. A significant proportion of variance was explained in the second step of both regression models, burnout $R^2 = 0.18$, $F(6,249) = 9.11$, $P < 0.001$, secondary traumatic stress $R^2 = 0.20$, $F(6,249) = 12.60$, $P < 0.001$. For both dependent variables, lacking power for self-care, a self-care agency variable, was the primary significant contributor, albeit in the negative direction. Compassion satisfaction was a significant contributor for burnout but not for secondary traumatic stress. Another self-care agency variable, developing power for self-care, was a significant contributor to secondary traumatic stress. Squared semi-partial correlations were very low for all variables, indicating a low unique contribution.

Finally, mediation path models [37] were used to test the second and third hypotheses. Bootstrap sampling was set to 5000 samples. Significance for the indirect (mediating) pathway was defined as the indirect effect confidence interval not crossing zero [37]. Self-care training was controlled as a covariate but did not exhibit a significant effect for any model. Five models were tested (see Figures 1–5) and all mediation pathways were significant. For the models predicting burnout and secondary traumatic stress, partial mediation occurred, with the indirect pathways being of very weak effect. For the models predicting compassion satisfaction via self-care agency and self-care practice, mediation occurred for all three forms of self-care agency. The



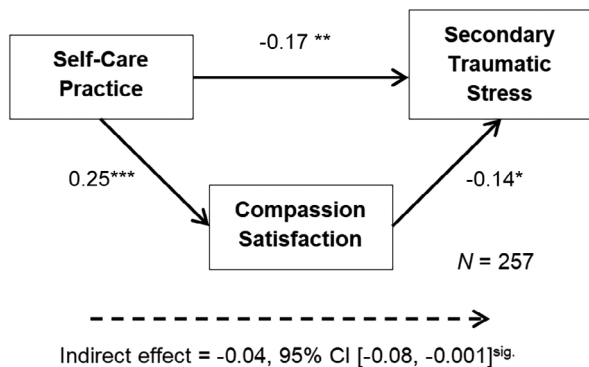
* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$
 sig. Significant based on bootstrapped confidence interval

Figure 1. Bootstrapped mediation pathway where compassion satisfaction mediated the relationship between self-care practice and burnout, with self-care training controlled for as a potential covariate. CI, confidence interval.



* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$
 sig. Significant based on bootstrapped confidence interval

Figure 3. Bootstrapped mediation pathway where self-care practice mediated the relationship between having power for self-care (self-care agency 1) and compassion satisfaction, with self-care training controlled for as a potential covariate. CI, confidence interval.



* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$
 sig. Significant based on bootstrapped confidence interval

Figure 2. Bootstrapped mediation pathway where compassion satisfaction mediated the relationship between self-care practice and secondary traumatic stress, with self-care training controlled for as a potential covariate. CI, confidence interval.

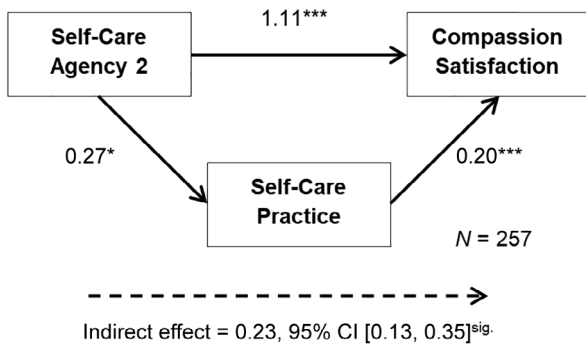
effects of having power for self-care and lacking power for self-care on compassion satisfaction were fully mediated by self-care practice, with the unique effect of the direct pathway non-significant, while the effect of developing power for self-care was partially mediated. These results are summarised in Figures 1–5.

Discussion

The aim of the present research was to examine compassion fatigue, compassion satisfaction and self-care

in an Australian youth AOD worker sample. The first hypothesis, that compassion satisfaction would be correlated with both burnout and secondary traumatic stress, was partially supported. Burnout and secondary traumatic stress were both weakly negatively associated with compassion satisfaction; however, compassion satisfaction was a significant contributor to burnout but not secondary traumatic stress when examined via regression. The second hypothesis, that compassion satisfaction would be a significant mediator of the relationship between self-care and burnout, and the third hypothesis, that the effect of self-care agency on compassion satisfaction would be mediated by increased self-care practice, were supported, although the indirect pathway predicted in the second hypothesis was weak.

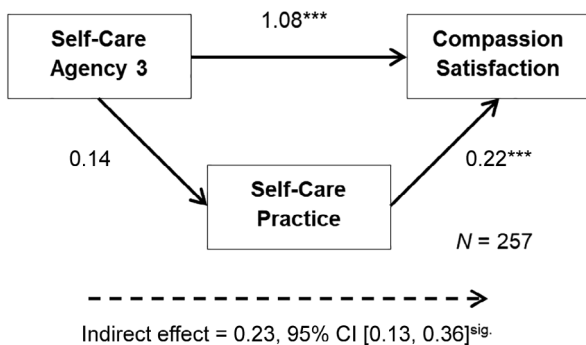
Compassion fatigue scores were low overall, which indicated that compassion fatigue was not a significant issue for the majority of youth AOD workers in this sample. Compassion satisfaction was associated with burnout and secondary traumatic stress in the youth AOD worker sample. This indicates that for youth AOD workers, compassion satisfaction may operate as a protective factor reducing exhaustion and cynicism, as per similar professions [7,22,29]. However, this correlation was significant yet weak, indicating other factors significantly impact compassion fatigue. Contrary to expectations [30], when entered into a regression model with self-care and self-care agency, compassion satisfaction significantly predicted decreased burnout, but did not significantly predict secondary traumatic stress. This may suggest that compassion satisfaction is only a protective factor for secondary traumatic stress when it is preceded and facilitated by active self-care



* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

^{sig} Significant based on bootstrapped confidence interval

Figure 4. Bootstrapped mediation pathway where self-care practice mediated the relationship between developing power for self-care (self-care agency 2) and compassion satisfaction, with self-care training controlled for as a potential covariate. CI, confidence interval.



* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$

^{sig} Significant based on bootstrapped confidence interval

Figure 5. Bootstrapped mediation pathway where self-care practice mediated the relationship between lacking power for self-care (self-care agency 3) and compassion satisfaction, with self-care training controlled for as a potential covariate. CI, confidence interval.

practices. Although correlated with both compassion fatigue variables, the regression data suggest that organisational practices and interventions that grow compassion satisfaction are more likely to ameliorate burnout than secondary traumatic stress.

Mediation modelling demonstrated that the indirect pathway linking self-care practice to burnout and secondary traumatic stress via compassion satisfaction was present, broadly supporting previous findings [7,33], but was quite weak. This suggests that enhancing self-care practice alone in order to reduce compassion fatigue is not sufficient. Instead, professional development covering both self-care practice and compassion satisfaction as

separable constructs is needed, as both exhibited stronger direct effects on compassion fatigue. In contrast, the effect of self-care agency on compassion satisfaction largely operated through an increase in self-care practice, as evidenced in the mediation modelling and by the pattern of results in the regression. The lack of effect of self-care practice during the regression may even suggest that self-care practice alone is unlikely to alleviate compassion fatigue unless it is engaged in with an appropriate mindset, represented by self-care agency [34]. Overall, these findings suggest that organisational interventions and training programs targeting self-care agency could provide an efficient trickle-down effect impacting self-care practice, compassion satisfaction and compassion fatigue, but that care needs to be taken to enhance compassion satisfaction directly also.

Limitations influence the results of the present study. Youth AOD workers with lower levels of compassion fatigue may have been more likely to participate in the research [38] and attend professional conferences (for people who participated in person). Although a large sample was recruited, with a distribution of compassion fatigue comparable to that of other helping professions (e.g. [39]), there is a risk that youth AOD workers with higher occupational stress have self-excluded from participation due to time constraints or lack of engagement. The recruitment process also means that the findings may be more applicable to youth AOD workers working within larger agencies.

The study was also limited by conceptual scope. This study integrated two compatible taxonomies of wellbeing in the helping professions: (i) professional quality of life, encompassing compassion fatigue and compassion satisfaction; and (ii) self-care practice and self-care agency. The degree of conceptual overlap and intercorrelation between these constructs raises issues of definition and redundancy [17,40]. Although a plausible sequence of variables was tested via mediation modelling, correlational analyses alone cannot discern causality [41], and it is likely that in reality the constructs examined affect one another in a complex process of feedback and interaction. Unanswered questions remain regarding how these traits are situated within broader trait models relevant to the helping professions, such as those which classify emotion regulation [42], coping skills [43] and empathic responding [44], which is a particular risk factor for compassion fatigue [14,40]. In addition to psychological variables, there are many concrete environmental variables that would be useful to incorporate into a larger holistic study. These include youth AOD worker perception of organisational support, perceived support for engaging in self-care and supportive workplace relationships [11].

The findings of the study have implications for current practices in youth work. The lack of compassion fatigue differences based on working hours and

perceived capacity suggests that reducing high case-loads is not sufficient to reduce compassion fatigue. Alternatively, the negative correlation between compassion fatigue and self-care agency demonstrates that youth AOD workers who feel more empowered to engage in self-care practice have a lower risk of burnout and secondary traumatic stress.

It is important that training practices that boost compassion satisfaction and self-care are necessary for youth AOD workers are integrated into workplaces [31] and modelled by senior staff members [45]. Rather than starting with one training paradigm, such as increasing self-care agency alone and assuming positive flow-on effects, it is recommended that professional development programs treat compassion satisfaction and self-care as separate focus areas. This may be integrated with other areas of focus, with recent evidence suggesting a positive contribution of mindfulness to both compassion satisfaction and self-care [46], and emphasising that the identification and removal of barriers to self-care within the work-life ecology is just as important as increasing self-care practice [47]. Development of these protective factors can be thought of differently at different points within the youth AOD worker career cycle, from recruitment of new candidates through to experienced professionals in positions of oversight [48].

Conclusion

The present study shows that this youth AOD worker sample was affected by burnout and secondary traumatic stress in a manner similar to other helping professions, and these negative outcomes were consistently negatively associated with the protective factors of compassion satisfaction, self-care practice and self-care agency. Importantly, self-care agency was the most important contributor to compassion fatigue, with mediation modelling showing that it can improve compassion satisfaction by increasing self-care practice. These findings underscore the need for continued emphasis on growing self-care agency during professional development, balanced by on compassion satisfaction directly as well.

Conflict of Interest

The authors have no conflicts of interest.

References

- [1] Australian Youth Affair Coalition (2013). The AYAC definition of youth work in Australia. Available at: <https://ayac.org.au/uploads/131219%20Youth%20Work%20Definition%20FINAL.pdf> (accessed 18 June 2017).
- [2] Ryan RM, Deci EL, Grolnick WS. Autonomy, relatedness, and the self: their relation to development and psychopathology. In: Cicchetti D, Cohen DJ, eds. Wiley series on personality processes. Developmental psychopathology, Vol. 1. Theory and methods. Oxford: John Wiley & Sons, 1995:618–55.
- [3] Steinberg L. Cognitive and affective development in adolescence. *Trends Cogn Sci* 2005;9:69–74.
- [4] Emslie M. Toward a youth work profession. *Child Youth Serv* 2013;34: 125–38.
- [5] Everly GS Jr, Lating JM. A clinical guide to the treatment of the human stress response, 3rd edn. New York: Springer Science & Business Media, 2013.
- [6] McFadden P, Campbell A, Taylor B. Resilience and burnout in child protection social work: individual and organisational themes from a systematic literature review. *Br J Soc Work* 2014;45:1546–63.
- [7] Salloum A, Kondrat DC, Johnco C, Olson KR. The role of self-care on compassion satisfaction, burnout and secondary trauma among child welfare workers. *Child Youth Serv Rev* 2015;49:54–61.
- [8] Travis DJ, Lizano EL, Mor Barak ME. 'I'm so stressed!': a longitudinal model of stress, burnout and engagement among social workers in child welfare settings. *Br J Soc Work* 2016;46:1076–95.
- [9] Radeke JT, Mahoney MJ. Comparing the personal lives of psychotherapists and research psychologists. *Prof Psychol Res Pr* 2000;30:82–4.
- [10] Lizano EL, Mor Barak M. Job burnout and affective wellbeing: a longitudinal study of burnout and job satisfaction among public child welfare workers. *Child Youth Serv Rev* 2015;55:18–28.
- [11] Wagaman MA, Geiger JM, Shockley C, Segal EA. The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Soc Work* 2015;60:201–9.
- [12] Stamm BH. (2010). The concise ProQOL manual. Available at: https://www.proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf (accessed 16 July 2017).
- [13] Ray SL, Wong C, White D, Heaslip K. Compassion satisfaction, compassion fatigue, work life conditions, and burnout among frontline mental health care professionals. *Traumatology* 2013;19:255–67.
- [14] Figley CR. Compassion fatigue: psychotherapists' chronic lack of self care. *J Clin Psychol* 2002;58:1433–41.
- [15] Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol* 2001;52:397–422.
- [16] Jenkins SR, Baird S. Secondary traumatic stress and vicarious trauma: a validation study. *J Trauma Stress* 2002;15:423–32.
- [17] Cieslak R, Shoji K, Douglas A, Melville E, Luszczynska A, Benight CC. A meta-analysis of the relationship between job burnout and secondary traumatic stress among workers with indirect exposure to trauma. *Psychol Serv* 2014;11:75–86.
- [18] Zerach G. Compassion fatigue and compassion satisfaction among residential child care workers: the role of personality resources. *Resid Treat Child Youth* 2013;30:72–91.
- [19] Elwood LS, Mott J, Lohr JM, Galovski TE. Secondary trauma symptoms in clinicians: a critical review of the construct, specificity, and implications for trauma-focused treatment. *Clin Psychol Rev* 2011;31:25–36.
- [20] Conrad D, Kellar-Guenther Y. Compassion fatigue, burnout, and compassion satisfaction among Colorado child protection workers. *Child Abuse Negl* 2006;30:1071–80.
- [21] Newell JM, MacNeil GA. Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. *Best Pract Ment Health* 2010;6:57–68.
- [22] Ewer PL, Teesson M, Sannibale C, Roche A, Mills KL. The prevalence and correlates of secondary traumatic stress among alcohol and other drug workers in Australia. *Drug Alcohol Rev* 2015;34:252–8.
- [23] Thomas M, Kohli V, Choi J. Correlates of job burnout among human services workers: implications for workforce retention. *J Sociol Soc Welf* 2014;41:69–90.
- [24] Maslach C. Burnout: the cost of caring. California: ISHK, 2003.
- [25] Stevens M, Higgins DJ. The influence of risk and protective factors on burnout experienced by those who work with maltreated children. *Child Abuse Review* 2002;11:313–31.
- [26] Sousa VD, Zauszniewski JA, Bergquist-Beringer S, Musil CM, Neese JB, Jaber AF. Reliability, validity and factor structure of the Appraisal of Self-Care Agency Scale-Revised (ASAS-R). *J Eval Clin Pract* 2010;16:1031–40.
- [27] Figley CR, Stamm BH. Psychometric review of compassion fatigue self test. In: Stamm BH, ed. Measurement of stress, trauma & adaptation. Lutherville: Sidran Press, 1996:127–30.

- [28] Craigie M, Osseiran-Moisson R, Hemsworth D *et al.* The influence of trait-negative affect and compassion satisfaction on compassion fatigue in Australian nurses. *Psychol Trauma* 2016;8:88–97.
- [29] Craig CD, Sprang G. Compassion satisfaction, compassion fatigue, and burnout in a national sample of trauma treatment therapists. *Anxiety Stress Coping* 2010;23:319–39.
- [30] Stamm BH. Measuring compassion satisfaction as well as fatigue: developmental history of the compassion satisfaction and fatigue test. In: Figley CR, ed. *Psychosocial stress series*, no. 24. *Treating compassion fatigue*. Brunner-Routledge: New York, 2002:107–19.
- [31] O'Halloran MS, O'Halloran T. Secondary traumatic stress in the classroom: ameliorating stress in graduate students. *Teach Psychol* 2001;28:92–7.
- [32] Sidani D, Doran DI. Development and validation of a self-care ability measure. *Can J Nurs Res* 2014;46:11–25.
- [33] Bloomquist KR, Wood L, Friedmeyer-Trainor K, Kim H-W. Self-care and professional quality of life: predictive factors among MSW practitioners. *Adv Soc Work* 2016;16:292–311.
- [34] Orem D. *Nursing: concepts of practice*, 6th edn. St. Louis: Mosby Inc, 2001.
- [35] Çiftçi B, Yıldırım N, Altun ÖŞ, Avşar G. What level of self-care agency in mental illness? The factors affecting self-care agency and self-care agency in patients with mental illness. *Arch Psychiatr Nurs* 2015;29:372–6.
- [36] Pearlman L, Saakvitne K. *Transforming the pain: a workbook on vicarious traumatization*. New York: W. W. Norton & Company, 1996.
- [37] Preacher KJ, Hayes AF. SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behav Res Methods Instrum Comput* 2004;36:717–31.
- [38] Sabin-Farrell R, Turpin G. Vicarious traumatization: implications for the mental health of health workers? *Clin Psychol Rev* 2003;23:449–80.
- [39] Kraus VI. Relationship between self-care and compassion satisfaction, compassion fatigue, and burnout among mental health professionals working with adolescent sex offenders. *J Couns Clin Psychol* 2005;2:81–8.
- [40] Turgoose D, Glover N, Barker C, Maddox L. Empathy, compassion fatigue, and burnout in police officers working with rape victims. *Traumatology* 2017;23:205–13.
- [41] Clark LA. Temperament as a unifying basis for personality and psychopathology. *J Abnorm Psychol* 2005;114:505–21.
- [42] Gross JJ. The emerging field of emotion regulation: an integrative review. *Rev Gen Psychol* 1998;2:271–99.
- [43] Carver CS, Scheier MF, Weintraub JK. Assessing coping strategies: a theoretically-based approach. *J Pers Soc Psychol* 1989;56:267–83.
- [44] Blair RJR. Responding to the emotions of others: dissociating forms of empathy through the study of typical and psychiatric populations. *Conscious Cogn* 2005;14:698–718.
- [45] Barnett JE, Baker EK, Elman NS, Schoener GR. In pursuit of wellness: the self-care imperative. *Prof Psychol Res Pr* 2007;38:603–12.
- [46] Hotchkiss J. Mindful self-care and secondary traumatic stress mediate a relationship between compassion satisfaction and burnout risk among hospice care professionals. *Am J Hosp Palliat Care* 2018;35:1099–108.
- [47] Xu Y, Harmon-Darrow C, Jacobson Frey J. Rethinking professional quality of life for social workers: inclusion of ecological self-care barriers. *J Hum Behav Soc Environ* 2019;29:11–25.
- [48] Goldfried MR. *How therapists change: personal and professional reflections*. Washington: American Psychological Association, 2001.