Coping with Compassion Fatigue and Burnout in Genetic Counselors using The Provider Resilience Mobile Application

Lindsey Kelley, MS, MPH, CGC

Susan Capasso, MS, EdD, LCGC, and Jennifer Duffy, PhD

Bay Path University

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Abstract

Introduction: Genetic counselors often work with patients in distress, which can take an emotional toll. Qualities that make genetic counselors effective, such as compassion and empathy, can leave them susceptible to experiencing burnout and compassion fatigue. There is a strong need for genetic counselors to be aware of their levels of burnout, and to make the commitment to incorporate self-care into their practice. This is particularly important as the daily workload and demands on genetic counselors continue to increase. The Provider Resilience mobile application (PR app) is a mobile app designed to help mental health professionals do just that, and consequently reduce their levels of burnout.

Methods: This study sought to determine the effectiveness of the PR app in reducing burnout and compassion fatigue in genetic counselors. A total of 36 clinical genetic counselors were recruited to participate in the study via email in February 2019. They were asked to download and use the PR app "regularly" for one month time. They were also asked to complete pre and post surveys before and after using the app, measuring their levels of burnout and compassion fatigue (using the Professional Quality of Life scale). A paired sample t-test was used to assess significant differences in scores from the pre and post survey.

Results: Study participants averaged 3.5 years (SD = 4.7) genetic counseling experience, and were overall satisfied with their position (47% satisfied; 44% somewhat satisfied; 6% somewhat dissatisfied; and 3% dissatisfied). Their baseline Compassion Satisfaction and Burnout scores were in the average range, while their Compassion Fatigue scores were in the low range. Results of the paired samples t-test indicated significant decreases in the Compassion Fatigue scores ($t(34) = 2.299$, $p = .028$), but Compassion Satisfaction and the Burnout scores did not

significantly change after using the app for the month ($t(34) = -.855$, $p = .398$ and $t(34) = 1.724$, $p = .094$ respectively).

Conclusion: Overall, this sample of genetic counselors appeared to be psychologically healthy, endorsing average levels of compassion fatigue and burnout and generally satisfied in their current position. While there was not much change in compassion satisfaction and burnout scores, there was a significant decrease in compassion fatigue after using the app. The Provider Resilience app appears to be easy to use and allows convenient and consistent availability of daily reminders to engage in self-care, which may help to reduce burnout in genetic counselors.

Introduction

Genetic counselors often work with patients in distress, which can take an emotional toll. Qualities that make genetic counselors effective, such as compassion and empathy, can leave them susceptible to experiencing burnout and compassion fatigue (Figley, 1995). While the two phenomena are similar, they have distinct differences, and can be experienced together or separately. The symptoms of compassion fatigue are the same symptoms as burnout, but also include flashbacks, nightmares, and intrusive thoughts (Figley, 1995). Burnout can be thought of as the overall effect of working in a stressful job or an emotionally demanding situation, while compassion fatigue develops in response to specifically working closely and empathetically with patients, and thus experiencing their suffering.

Burnout is a risk factor for experiencing compassion fatigue, and thus the two phenomena are often examined together. Burnout and compassion fatigue cause physical and emotional exhaustion, as well as cynicism, and reduce the individual's ability to be empathetic (Maslach et al. 2001). This reduces the provider's ability to deliver compassionate care to their patients. Mental health providers who are experiencing burnout have higher rates of depression, anxiety, sleep problems, memory problems, physical health problems and higher rates of substance use in then those providers who are not experiencing burnout (Morse et al. 2012). These mental health providers are also more likely to be absent from work and have higher turnover rates than providers who were not experiencing burnout (Morse et al. 2012).

Problem Statement

Genetic counselors often work with patients in distress, which can take an emotional toll. Qualities that make genetic counselors effective, such as compassion and empathy, can leave

them susceptible to experiencing burnout and compassion fatigue (Figley, 1995). Bernhardt et al. (2009) found that Genetic Counselors were nearly four times more likely to think about leaving their career than clinical nurses. The 2016 Professional Satisfaction Survey conducted by the National Society of Genetic Counselors found that of those who had left the field or were considering the field, over 42% cited burnout and compassion fatigue as the reason. There is a strong need for genetic counselors to be aware of their own levels of burnout, and to make the commitment to incorporate self-care strategies into their daily lives.

Purpose Statement

The purpose of this study was to examine the effectiveness of the Provider Resilience app in reducing burnout and compassion fatigue in genetic counselors. This was a quantitative analysis of genetic counselors burnout and compassion fatigue scores before and after using the Provider Resilience app for a one month period.

Research Question

Research Question: Is there a (statistically) significant difference between compassion fatigue and burnout scores of genetic counselors before and after using the Provider Resilience mobile app for 1 month?

H0: There is no (statistically) significant difference between compassion fatigue and burnout scores of genetic counselors before and after using the Provider Resilience mobile app for 1 month.

HA: There is a (statistically) significant difference between compassion fatigue and burnout scores of genetic counselors before and after using the Provider Resilience mobile app for 1 month.

Definition of Key Terms

Burnout - a psychological syndrome that develops in response to emotionally demanding situations. It is characterized by emotional and physical exhaustion, depersonalization, and feelings of ineffectiveness or lack of accomplishment (Maslach, 2001).

Compassion fatigue - develops as a response to working with victims of trauma, and is often described as "secondary traumatic stress".

External locus of control - individuals who are more likely to believe that overall outcomes in life are out of their control, or controlled by fate or some other force.

Mindfulness - a moment-to-moment nonjudgmental awareness of living in the present moment.

Distressing clinical events - Events that may make a clinician more likely to experience compassion fatigue, such as delivering "bad news" to patients, experiencing the death of a patient, or feeling burdened or helpless knowing a patient's test results.

Literature Review

Compassion fatigue was first examined in genetic counselors by Benoit et al. (2007), who determined that genetic counselors experience levels of compassion fatigue at or above the levels of other health professionals. Several recent studies have found that over 44% of genetic counselors were at high risk for burnout (Injeyan et al. 2011) and 39-83% were at moderate to

high risk of developing compassion fatigue (Benoit et al. 2007, Lee et al. 2005, Injeyan et al. 2011, Udipi et al. 2008). Some of these studies also found that burnout and compassion fatigue had a negative impact on the retention of genetic counselors in the profession. Injeyan et al (2011) found that 26.6% of genetic counselors have considered leaving their job due to symptoms of compassion fatigue. Bernhardt et al. (2009) found that Genetic Counselors were nearly four times more likely to think about leaving their career than clinical nurses. The 2016 Professional Satisfaction Survey conducted by the National Society of Genetic Counselors found that of those who had left the field or were considering the field, over 42% cited burnout and compassion fatigue as the reason.

This negative impact of retention in the profession is especially concerning in the already understaffed field of genetic counseling. Technological innovations in genetics are increasing the demand for genetic counselors. Between 2014 and 2015, 63% of genetic counselors saw an increase in patient volume, and this pattern is expected to continue (NSGC 2016). While The US Bureau of Labor Statistics (2018) projects a 29% growth in the employment of genetic counselors between 2016 and 2026, the demand for services is expected to exceed that. A study of the genetic counseling workforce predicts that there will be a shortage of between 791 and 1,879 certified genetic counselors by the year 2026 (Dobson et al. 2016). This underscores the critical nature of not only training more professionals in the field, but retaining them despite the challenging nature of the work and risk of compassion fatigue.

Several studies have looked at the factors that make a Genetic Counselor more prone to experiencing compassion fatigue. Udipi et al. (2008) first looked at the phenomena in a case study of 12 genetic counselors. In this study they found that compassion fatigue was associated with increased levels of burn out, larger case-loads, and experiencing a higher amount of

distressing clinical events (Udipi et al. 2008). There were also characteristics that made genetic counselors more at risk of experiencing compassion fatigue, including being more likely to blame one's self or to give up in distressing situations (Udipi et al. 2008). Injeyan et al. (2011) further expanded upon this research and found that there were several personality traits of genetic counselors that made them more likely to experience compassion fatigue. In particular, those who have external locus of control (Injeyan et al. 2011). This study also found that compassion fatigue was associated with lower levels of dispositional optimism (Injeyan et al. 2011). Similarly, Lee et al. (2015) found that genetic counselors who are more anxiety-prone are more likely to experience high levels of burnout and compassion fatigue.

While personality traits remain relatively stable throughout one's life, interventions that are aimed at raising awareness of signs and symptoms of burnout and compassion fatigue, and supportive work environments that encourage healthy self-care, can help to mitigate the effects of these syndromes (Much et al. 2005). The American Counseling Association encourages counselors to engage in the regular practice of self-monitoring and self-care activities to prevent burnout and compassion fatigue (Much et al. 2005). Self-monitoring includes paying close attention to and regularly evaluating one's own levels of burnout and compassion fatigue. Counselors also need to engage in the same self-care they advocate for in their clients in order to combat burnout.

Figley (2002) suggests that compassion fatigue is the result of a person not incorporating effective coping strategies when faced with stressful experiences. Coping and self-care strategies that have been found to reduce burnout include seeking emotional and social support, planning, using humor, exercising, healthy eating, and participating in leisure activities (Wallace, 2009). A systematic review of the literature has also found that practicing mindfulness is associated with

decreased burnout and increased well-being in healthcare providers (Lomas et al. 2015). A recent study of genetic counselors found mindfulness was also associated with increased empathy and work engagement; protective factors that tend to be correlated with decreased burnout and compassion fatigue (Silver et al. 2018).

One promising new mobile application (app) could help genetic counselors to both monitor their levels of burnout while also encouraging them to engage in self-care activities. The Provider Resiliency app was originally developed by The National Center for Telehealth & Technology (T2) to prevent burnout in military health care providers working with service members and veterans. The app is free to download, and it is available for use on Android and Apple mobile devices. It was "designed to fit easily into the busy lives of health care workers and remind them to be mindful of their own emotional health" according to Dr. Robert Ciulla (2013), psychologist and director of T2's mobile health program. It allows providers to measure their levels of burnout and compassion fatigue, and when these levels start to decline, the app offers a "Toolbox" to help the provider address this. This includes reminders to take breaks, review the positive aspects of their job, or choose from a variety of built in self-care techniques. Recently, a pilot study of 30 mental health providers, conducted by Woods et al. (2017), examined the usability and effectiveness of the Provider Resilience app. The study found that providers who utilized Provider Resilience for a month reduced their burnout and compassion fatigue scores, and the app scored in the "excellent" category for usability.

Data Collection

This was a quantitative study of genetic counselors currently practicing direct patient care. Study procedures were approved through the Bay Path University Institutional Review Board in

December 2018. Study participants were recruited to participate via email through the National Society of Genetic Counselors (NSGC) Student Research Survey Program in February 2019. An email was sent to all members of the NSGC email list serv, asking them to participate in a study about a mobile application designed to reduce burnout and compassion fatigue (see Appendix A). This email served as the informed consent for the study. If individuals chose to participate, they followed the link in the email to an online survey administered through survey monkey.

The initial survey asked participants to develop a unique ID by providing the last four digits of their phone number followed by the number of siblings that they have. This ID was used to link pre- and post-survey responses. They were also asked to provide demographic data as well as information about their career history as a genetic counselor and willingness to download and use the Provider Resilience (PR) app for one month (see Appendix B). Participants needed to be currently providing direct clinical care to patients as a genetic counselor, and willing to download the PR app, use for 1 month, and complete follow up survey. If participants did not own a personal smartphone they were excluded from the study.

Participants that met inclusion criteria then completed the Professional Quality of Life-Revision IV (ProQOL; Stamm 2005), a 30-item self-report measure with a 5 point Likert scale measuring three items: Burnout, Compassion Fatigue and Compassion Satisfaction (see Appendix D). Participants also completed the Maslach Burnout Inventory (MBI; Maslach 1997), a 22-item self-report questionnaire that evaluates three subscales of burnout: emotional exhaustion, depersonalization, and reduced sense of personal accomplishment (see Appendix E). Participants were then given instructions of how to download the PR app to their smartphone and how to use it (see Appendix C). Participants were directed to use the app “regularly” and answer a follow up

survey after one month of use. Participants then provided their email address to be reached for follow up 1 month later.

At follow up, 1 month later, all participants who provided email addresses were emailed and asked to complete a follow up questionnaire through survey monkey. They were asked to provide their unique ID (last four digits of their phone number followed by the number of siblings they have) and complete the same Professional Quality of Life-Revision IV and the Maslach Burnout Inventory surveys again. Additionally they were asked to provide quantitative and qualitative feedback about the Provider Resilience app, including how often they used the app, and how they found its usability (see Appendix F). Participants who complete the follow up survey were asked if they want to enter their email address for a chance to win one of three $25 Amazon gift cards.

To evaluate effectiveness of the PR app, paired-sample t tests was conducted on the Professional Quality of Life and the Maslach Burnout Inventory scores before and after using the app for a one month period. Additionally, an analysis of covariance on these scores will be conducted to determine if frequency of use of the app over the month impacted outcome on the ProQOL and the MBI scores. Data was analyzed using the statistical software, SPSS to identify statistically significant differences in scores before and after using the mobile app. SPSS is a widely used program for statistical analysis in social science. It allows for complex data manipulations and analyses, and presenting results in high quality tabular and graphical outputs.

Results

A total of 63 genetic counselors met inclusion criteria and completed the first survey. Of those participants, a total of 36 genetic counselors (92% female) completed the follow up survey. They had an average of 3.5 years (SD = 4.7) working in their current genetic counseling position. Genetic counselors who participated in the study worked in the fields of prenatal (42%), pediatrics (31%), cancer (19%), and other specialties (8%). The sample was 94% Caucasian and 6% Asian. Participants' satisfaction with their current position was as follows: 47% satisfied; 44% somewhat satisfied; 6% somewhat dissatisfied; and 3% dissatisfied.

Baseline mean scores on the ProQOL revealed Compassion Satisfaction (M = 39.97, SD = 5.12) was in the average range (between 23 and 42), Burnout (M = 23.00, SD = 5.36) was in the average range (between 23 and 41) and Secondary Trauma (M = 20.58, SD = 5.26) was in the low range (below 23). Results of a paired samples t test on the subscales of the ProQOL indicated significant decreases in the Compassion Fatigue/ Secondary Trauma subscale (see Table 1). The Compassion Satisfaction and the Burnout subscale did not significantly change over time.

Baseline mean scores on the MBI revealed Emotional Exhaustion averaged 22.56 with a standard deviation of 9.68. Depersonalization baseline scores averaged 5.69 with a standard deviation of 4.25, and Personal Accomplishment baseline scores averaged 38.97 with a standard deviation of 5.41. Results of a paired samples t-test on the subscales of the MBI indicated that none of the three subscales significantly changed overtime (see Table 1).

Table 1: Paired Sample T Test; Follow up scores and baseline scores

Quantitative Measures	Baseline Mean±SD	Follow Up Mean±SD	t	df	p
ProQOL					
Compassion Satisfaction	39.97±5.12	40.37±5.42	-.855	34	.398
Burnout	23.00±5.36	22.09±5.05	1.724	34	.094
Secondary Trauma	20.58±5.26	19.11±4.82	2.299	34	.028
MBI					
Emotional Exhaustion	22.56±9.68	22.97±9.97	-.502	34	.619
Depersonalization	5.69±4.25	6.20±5.10	-1.005	34	.322
Personal Accomplishment	38.97±5.41	39.80±5.43	-1.704	34	.098

Participants were instructed to use the app "regularly" for one month time. 36% of the participants reported using the app rarely (never or only once), 39% reported using it occasionally (weekly or a few times a month), and 25% reported using it frequently (a few times a week or daily). The participant group was divided into these three user groups to determine if frequency of use impacted outcome on the ProQOL and the MBI scores. Analysis of covariance based on the frequency that the app was used over the month found no statistically significant differences in the pre- and post-subscale scores for either the ProQOL or the MBI (see Table 2).

Table 2: Analysis of Covariance; Correlations between follow up scores and frequency of use of the app.

Quantitative Measures	Mean Square	F	df	sig
ProQOL				
Compassion	10.087.	1.351	(1, 2)	.274

Satisfaction				
Burnout	4.534	.491	(1, 2)	.617
Secondary Trauma	22.984	2.580	(1, 2)	.092
MBI				
Emotional Exhaustion	24.277	1.296	(1, 2)	.288
Depersonalization	13.944	2.301	(1, 2)	.117
Personal Accomplishment	.787	.079	(1, 2)	.924

Discussion

The work of genetic counselors demands a balance of caring for one's patients as well as caring for one's own personal needs. There is a strong need for genetic counselors to be aware of their own levels of burnout, and to make the commitment to incorporate self-care strategies into their daily lives. This is particularly important as the daily workload and demands on genetic counselors continue to increase. The Provider Resilience app may help to do just that, and consequently reduce the levels of compassion fatigue in the field of genetic counseling. While this study did not find any statistically significant improvements to burnout and compassion fatigue scores for genetic counselors who used the app for one month, previous studies have still shown positive effects for providers who use the app on a regular basis.

Overall, this sample of genetic counselors appeared to be psychologically healthy, endorsing average levels of compassion fatigue and burnout, as measured by the ProQOL and the MBI. There may have been a self-selection bias, however, in that genetic counselors who were more likely to volunteer to participate in a study may also have been genetic counselors who were feeling less burnt out and more available to invest spare time in a research study. A potential

issue with sampling a relatively healthy population is that a potential effect of the intervention may not be seen if improvements are not needed. This could be one factor in the lack of statistically significant improvements in compassion fatigue and burnout scores after using the app for one month.

The relatively psychologically healthy sample of participants at baseline could also be a factor in the participants' low ratings of usefulness of the app. While the majority of participants found the app easy to use, most did not find it useful. Perhaps that is due to their overall low levels of burnout and compassion fatigue to begin with. Comments indicated that participants found the ratings of burnout and resilience within the app the most beneficial. This feature is designed to increase the participant's awareness of their own level of burnout, indicating that it may be that simply raising the participant's awareness of their level of burnout may motivate them to improve their self-care strategies. Other comments indicated an interest in modifying the countdown clock to countdown to next vacation rather than from the previous vacation, and an interest in modifying the app to not be specifically geared towards military providers. Future modifications to the PR app may wish to incorporate these suggestions.

Limitations of this study include a small sample size, lack of control group, and a relatively psychologically healthy sample of self-selected participants. The small sample size did not allow for secondary analyses on the impact of demographic factors such as profession, length of time at their current position, and satisfaction with their current position on the potential treatment effect. Additionally, the small sample size may have not allowed for enough power to find significance between frequency of use of the app and outcomes on the ProQOL and MBI scales.

One potential benefit of the app is its ease of access. Traditional programs designed to reduce burnout usually require attendance at a workshop or seminar, which is an additional burden on an already hectic schedule. For genetic counselors who are feeling burnt out from their work responsibilities, finding time to attend a workshop may feel like it will be more harmful than beneficial. Thus, genetic counselors who might most benefit from burn out reduction programs, may be the least able or willing to access these programs. The Provider Resilience app allows consistent availability, accessibility, and convenience, all at the palm of their hand. This has potential to reach overburdened genetic counselors who would most benefit from the intervention.

Overall, the Provider Resilience app appears to be easy to use and has initial data suggesting efficacy in reducing burnout and compassion fatigue in military mental health care providers. Future studies of the usefulness of this app in genetic counselors should include a larger sample size, a control group design, and genetic counselors with more significant levels of burnout and compassion fatigue.

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Appendix A

Email/Informed Consent

Dear NSGC Member,

My name is Lindsey Kelley, and I am a genetic counseling student at Bay Path University. I am inviting you to participate in a research study that explores the use of a free mobile application to reduce burnout and compassion fatigue. This study aims to examine if using this mobile app for one month reduces genetic counselors levels of burnout and compassion fatigue.

Eligible participants must be practicing genetic counselors who provide direct services to patients in a clinical setting, and have access to a smartphone. Responses to the survey are anonymous. Participation is voluntary and you may exit the survey at any time.

Study participation involves an online survey that is estimated to take 10 – 15 minutes, followed by downloading a mobile app onto a smartphone and using it regularly for one month (estimated at 15-20 minutes per week). Following this month, a follow up survey will be sent that will take about 10 minutes to complete. For your participation, you will have the option to enter a raffle for one of three $25 Amazon gift cards upon follow up survey completion. Your email submission will not be connected to the submitted survey responses, and identifying contact information will be deleted once the gift cards have been distributed.

Please click (link to Survey Monkey) to access the survey.

Thank you for your time,
Lindsey Kelley
lkelley@baypath.edu

Appendix B

Survey Demographic Information

- Unique ID (please provide the last 4 digits of your phone number followed by the number of siblings you have. If you have no siblings, please enter "0". For instance, if your phone number is 555-555-5555 and you have 2 siblings, your ID will be: 55552): _____
- Are you a practicing genetic counselor?: (yes/no)
- Do you currently practice in a clinical setting with direct patient care?: (yes/no)
- Are you willing to download a free mobile app to your smartphone and use it for one month to help monitor and address your levels of burnout and compassion fatigue?: (yes/no/I do not use a smartphone)
- What is your gender identity?: (male/female/prefer not to answer)
- What is your race?: (American Indian or Alaskan Native/ Asian/ Asian Indian/ Black or African American/ Native Hawaiian or Other Pacific Islander/ White or Caucasian/ Other/ Prefer not to answer)
- What population do you primarily work with? (preconception/prenatal/pediatrics/cancer/adults/other_____)
- How long have you been at your current position (in years)?: ____ years
- How satisfied are you with your current position?: (satisfied/somewhat satisfied/neither satisfied nor dissatisfied/somewhat dissatisfied/dissatisfied)

Appendix C

Instructions for downloading and using the Provider Resilience Mobile application

The Provider Resilience Mobile app is available free of charge on the App store or google play. Please download the app to your smartphone and use regularly (daily or weekly) over the next month.

Once the app is downloaded, please go to the Dashboard and select "Update Burnout". In the next screen, move the sliding bars to your level of satisfaction for each item. Next, go back to the Dashboard and select "Update ProQOL". This will ask you about a series of 30 items, and will produce a score of your levels of compassion satisfaction and burnout. Finally, go to the settings and turn on daily reminders. The app will remind you to check in with your scores daily. You can also explore the daily "Resilience Builders and Killers" in the Dashboard, as well as the Tools section, which includes videos by patients describing the positive impact health care providers had on their lives, stretches, daily reflection cards, and Dilbert comics.

Please use the app over the next month to track your levels of compassion fatigue and burnout, as well as the tools to help build resilience and bust stress. If you have any questions or concerns, please contact me at lkelley@baypath.edu

Please provide your email address to be contacted in 1 month for a follow up survey. Your email address will not be connected to any of your survey responses or data, and it will be destroyed once the study data collection is complete. Once you complete the follow up survey, you will have the option to enter a raffle for one of three $25 Amazon gift cards to compensate you for your time.

Appendix D

The Professional Quality of Life Scale

When you *[help]* people you have direct contact with their lives. As you may have found, your compassion for those you *[help]* can affect you in positive and negative ways. Below are some-questions about your experiences, both positive and negative, as a *[helper]*. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the *last 30 days*.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

_____ 1. I am happy.
_____ 2. I am preoccupied with more than one person I *[help]*.
_____ 3. I get satisfaction from being able to *[help]* people.
_____ 4. I feel connected to others.
_____ 5. I jump or am startled by unexpected sounds.
_____ 6. I feel invigorated after working with those I *[help]*.
_____ 7. I find it difficult to separate my personal life from my life as a *[helper]*.
_____ 8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I *[help]*.
_____ 9. I think that I might have been affected by the traumatic stress of those I *[help]*.
_____ 10. I feel trapped by my job as a *[helper]*.
_____ 11. Because of my *[helping]*, I have felt "on edge" about various things.
_____ 12. I like my work as a *[helper]*.
_____ 13. I feel depressed because of the traumatic experiences of the people I *[help]*.
_____ 14. I feel as though I am experiencing the trauma of someone I have *[helped]*.
_____ 15. I have beliefs that sustain me.
_____ 16. I am pleased with how I am able to keep up with *[helping]* techniques and protocols.
_____ 17. I am the person I always wanted to be.
_____ 18. My work makes me feel satisfied.
_____ 19. I feel worn out because of my work as a *[helper]*.
_____ 20. I have happy thoughts and feelings about those I *[help]* and how I could help them.
_____ 21. I feel overwhelmed because my case [work] load seems endless.
_____ 22. I believe I can make a difference through my work.
_____ 23. I avoid certain activities or situations because they remind me of frightening experiences of the people I *[help]*.
_____ 24. I am proud of what I can do to *[help]*.
_____ 25. As a result of my *[helping]*, I have intrusive, frightening thoughts.
_____ 26. I feel "bogged down" by the system.
_____ 27. I have thoughts that I am a "success" as a *[helper]*.
_____ 28. I can't recall important parts of my work with trauma victims.
_____ 29. I am a very caring person.
_____ 30. I am happy that I chose to do this work.

Reference

Stamm, B. H. (2005). *The ProQOL Manual: The Professional Quality of Life Scale: Compassion Satisfaction, Burnout & Compassion Fatigue/Secondary Trauma Scales*. Baltimore, MD: Sidran Press.

Appendix E

Maslach Burnout Inventory

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way.

How often: 0 = Never

1 = A few times a year or less

2 = Once a month or less

3 = A few times a month

4 = Once a week

5 = A few times a week

6 = Every day

How often 0-6: Statements:

1. _____ I feel emotionally drained from my work.

2. _____ I feel used up at the end of the workday.

3. _____ I feel fatigued when I get up in the morning and have to face another day on the job.

4. _____ I can easily understand how my recipients feel about things.

5. _____ I feel I treat some recipients as if they were impersonal objects.

6. _____ Working with people all day is really a strain for me.

7. _____ I deal very effectively with the problems of my recipients.

8. _____ I feel burned out from my work.

9. _____ I feel I'm positively influencing other people's lives through my work.

10. _____ I've become more callous toward people since I took this job.

11. _____ I worry that this job is hardening me emotionally.

12. _____ I feel very energetic.

13. _____ I feel frustrated by my job.

14. _____ I feel I'm working too hard on my job.

15. _____ I don't really care what happens to some recipients.

16. _____ Working with people directly puts too much stress on me.

17. _____ I can easily create a relaxed atmosphere with my recipients.

18. _____ I feel exhilarated after working closely with my recipients.

19. _____ I have accomplished many worthwhile things in this job.

20. _____ I feel like I'm at the end of my rope.

21. _____ In my work, I deal with emotional problems very calmly.

22. _____ I feel recipients blame me for some of their problems.

Reference

Maslach C, Jackson SE, Leiter MP. (2016) Maslach Burnout Inventory Manual. 4th ed. Place of publication not identified: Mind Garden.

Appendix F

Follow up questions

1. How often did you use the Provider Resilience app over the past 30 days? (daily/a few times a week/ weekly/ a few time a month/ once/ not at all)

2. How would you rate the usability of the app? (easy to use/somewhat easy to use/ neither easy nor difficult to use/ somewhat difficult to use/difficult to use)

3. How would you rate the usefulness of the app? (useful/somewhat useful/ neither useful nor non useful/ somewhat non useful/non useful)

4. Would you like to provide any additional feedback on the app? _____