Research Article

Cultivating forgiveness, resilience and positive change: a resilience intervention pilot study among persons with disabilities

Abstract

Resilience is an area of emerging interest and applies to people living with a disability.1–3 However, research suggests that few, if any, resilience interventions have been developed and facilitated among people with disabilities.4,5 To address this void and assist people with disabilities in building resilience-based skills, Stuntzner and Hartley6 developed a 10-module resilience intervention (i.e., Stuntzner and Hartley’s Life Enhancement Intervention: Developing Resiliency Skills Following Disability). The following article is a pilot-study utilizing Stuntzner and Hartley’s 10-module resilience intervention. The intervention was facilitated among a group (N=11) of individuals with varying disabilities. Stuntzner and Hartley’s resilience intervention (SHRI) was used to examine its utility in reducing negative emotions (i.e., depression and anxiety) and increasing forgiveness and resilience. Initial findings indicate that participants experienced significant reductions in depression and anxiety and increases in forgiveness and resilience. The study’s strengths and limitations are discussed. Further research is warranted to help professionals understand the intervention’s use and versatility among people with disabilities.

Keywords: resilience, forgiveness, interventions, positive coping, adjustment to disability, people with disabilities

Introduction

According to the Centers for Disease Control and Prevention,7 26% (1 in 4) of Americans live with a disability. These statistics are an increase from the historical 20% or 1 in 5 people and inform us that people with disabilities comprise a significant portion of our population. Under the Americans with Disabilities Act of 1990, disability is “defined as a physical, sensory, or psychological impairment that limits or impacts one or more major life activities, which include: seeing, walking, communicating, sitting, reading, caring for oneself, and hearing.”8 The CDCP sheds further light on the ways people are affected functionally by a disability (i.e., 13.7% mobility, 10.8% cognition, 6.8% independent living, 5.9% hearing 4.6% vision, and 3.7% self-care). Furthermore, people with disabilities are at increased risk for obesity, smoking, heart disease, and diabetes, and statistics show that 1/3 have unmet healthcare needs due to cost – all which can complicate the process of living with a disability.7

Beyond the prevalence of disability and the associated functional impairments, health concerns and unmet need for healthcare are the personal, societal, financial, familial, and adaptation issues people sometimes encounter. Examples include poor societal attitudes,9 unsolicited derogatory comments,10,11 medical, environmental, learning, and attitudinal barriers,12,13 unemployment/underemployment,9,14 social injustices and discrimination,10,14 poverty, changes in social and familial support,15 lowered self-esteem, and negative coping and adaption (i.e., substance abuse, anxiety, depression, hopelessness). Many of these barriers and issues occur regardless of the specific type of disability. Meaning they represent common issues people experience as a part of living with a disability.16

Despite the abovementioned statistics and issues, many people with disabilities learn to cope and adapt, rise above their circumstances, and find a way to be resilient. However, coping and living well with a disability and its associated circumstances is not an automatic process. Many people find it challenging to live a life well-lived and be resilient following a disability. Compounding the issue is the reality that people are often not given access to skills and tools that could help them restore their life and cultivate resilience. Stuntzner and Hartley (2014b) began to address this need when they developed a resilience intervention specifically designed for people with disabilities. The 10-module resilience intervention was devised to give people a choice in what part of their life (i.e., personal, employment, family, self-advocacy, medical/health, adjustment to disability) they wanted to apply resilience to while learning specific resilience-based skills. These scholars’ hope is that as people learn and apply resilience-based skills to one part of their life, they will utilize these skills and others to enhance other life domains – all of which leads to increased resilience.

Relevant literature

Several factors mentioned throughout the literature are associated with resilience. Some of these factors include locus of control,16,17 mental and emotional regulation, attitude and outlook on life,18 prayer and meditation, spirituality,10,18 forgiveness,10,18 compassion,21 self-compassion, gratitude, meaning-making,22 problem-solving skills,23 social and family support,3 perseverence,24 grit, cognitive flexibility, facing one’s fears, inner strength,25 personal growth and transformation,21 and hope.4 Many of these factors are useful to people with disabilities as...
they happen to be skills and approaches associated with positive coping and adaptation (i.e., positive attitude and outlook on life, forgiveness, spirituality, coping skills, meaning-making; for a full review see Stuntzner, 2019). Of these factors; resilience, attitude and outlook on life, locus of control, mental and emotional regulation, coping skills, spirituality, forgiveness, compassion, self-compassion, personal growth and transcendence, and social and family support are of particular interest due to their dual nature in building resilience and promoting positive coping and adaptation. Furthermore, each of these factors was selected and included in Stuntzner and Hartley’s resilience intervention.

**Stuntzner and Hartley’s resilience intervention**

Stuntzner and Hartley co-developed a 10-module resilience intervention (SHRI) specifically designed for people with disabilities and the accompanying disability-related experiences people encounter. Stuntzner and Hartley’s intervention conceptualizes and defines resilience as:

The ability to learn and enhance personal skills characteristics following the presence of a disability. The skills learned can be used to help people with disabilities effectively cope with the disability and disability-related situations, improve insight and understanding about their ability to address and overcome stressful life events, and live a more fulfilled life. The decisions and choices people make can help reduce negative thoughts and feelings, identify positive ways of coping, and behave in ways more consistent with the life they seek.

Derived from this definition, Stuntzner and colleagues explain six vital points. These points include:

1. Resilience can be learned and is not contingent on a person’s current level of functioning.
2. People may discover they have useful resilience-based skills but forgot to access them. When this occurs, people are encouraged to revisit these skills and strengthen or refine them.
3. Resilience can be applied to various parts of peoples’ lives (i.e., personal, employment, self-advocacy, adjustment to disability). Improvement in one life domain may lead to positive change in another.
4. Through inward examination, people learn more about themselves and cultivate resilience.
5. When actively cultivating resilience, people sometimes learn they can cope with situations better than they thought.
6. As people work on resilience, people learn to reduce negative thoughts and feelings and increase positive ways of coping while practicing resilience-building strategies applied to specific parts of their life.

Resilience as mentioned in the above definition, differs from most explanations provided throughout the literature. Although a unified definition of resilience does not currently exist, resilience scholars’ explanation of resilience adheres to the idea that resilience is achieved when people bounce back from or overcome stressful life events. Similarly, some scholars state that resilience helps people grow and become stronger than they were before the incident.

Both explanations capture essential elements of resilience, but neither fully consider the context of disability and peoples’ lived experiences. More specifically, living well with a disability and the ability to live in a resilient way is not necessarily an event people simply bounce back from. While some people bounce back from the adventurer or diagnosis of a disability, some do not. Others adjust to the disability itself, but later discover they are challenged and plagued by continuous and reoccurring disability-related situations (i.e., unemployment, poor societal attitudes, poverty, being dismissed or told their needs are not valid, lack of access to healthcare or equitable resources). In these instances, people’s ability to be resilient is hindered by the layered and continued hurts often thrust upon them. Due to the multifaceted nature of disability and its associated experiences, Stuntzner and colleagues felt that an expanded definition of resilience is warranted.

Stuntzner and Hartley’s resilience intervention (SHRI) exposes people to 10 resilience-based skills discussed and promoted throughout the literature. The ten modules, presented in the intervention, include “Resiliency and Personal Functioning, Outlook on Life, Perspectives on Locus of Control, Emotional and Mental Regulation, Coping Skills, Spiritual Beliefs and Practices (i.e., spirituality and forgiveness), Compassion for Self and Others, Growth and Transcendence, and Social and Family Support” (pp. 4–7). Within each module, people learn about specific resilience-based skills (i.e., attitude and outlook on life, locus of control, mental and emotional regulation, spirituality, forgiveness, compassion, self-compassion, growth and transcendence, social and family support) and self-assess their current level of functioning in its relation to each skill. Next, people explore the benefits of each skill and personal barriers that inhibit their ability to practice them, followed by application exercises to promote skill cultivation. After each module, people are asked to devise goals and action plans to help them practice the specific resilience-based skill.

The intervention concludes with Module 10, Closing the Loop – Skills Learned. Module 10 provides people with the opportunity to review and assess the skills learned and to reflect on how they applied them to their life and specific set of circumstances. The final module allows people time to share their stories and experiences in cultivating resilience and make a tentative plan on how they might continue to develop and enhance resilience.

Stuntzner and Hartley’s resilience intervention (SHRI) has not been previously studied empirically. This study is the first pilot-study of two conducted on these scholars’ intervention. Stuntzner et al. discussed two participants’ experiences with the intervention and the positive changes they experienced in reducing anxiety and depression and increasing forgiveness and resilience. Stuntzner et al. article is the only other published article to date on this intervention. The second pilot study conducted on this intervention was among women with disabilities, but is not yet published. Therefore, additional research on Stuntzner and Hartley’s resilience intervention (SHRI) is warranted and encouraged.

**Purpose of study**

The purpose of this study was to examine the utility of Stuntzner and Hartley’s resilience intervention in reducing negative emotions and increasing positive coping. More specifically, the study explored whether participants demonstrated decreases in anxiety and depression and improvements in forgiveness and resilience among people with disabilities.
Because the intervention is new, it was not known how participants would perform; thus, much of this study was exploratory. Additionally, this study included people with disabilities who expressed an interest in participating, and who indicated a need and desire to learn about resilience-based skills. Since this is the first study of its kind, the authors wanted to include as many people representing different disabilities as possible. An overarching goal of Stuntzner and Hartley’s resilience intervention is to learn if it can be used among people living with various disabilities. The research questions examined were:

Will there be statistically differences in measures of depression and anxiety from pre-test to post-test for participants who completed SHRI?

Will there be statistically differences in measures of forgiveness and resilience from pre-test to post-test for participants who completed SHRI?

**Methods**

Recruited participants were screened and placed in the resilience intervention group (SHRI). All the participants included in this article completed a 10-week face-to-face resilience intervention co-developed by Stuntzner and Hartley. Throughout the intervention, participants met once a week for 2.5 hours. Each week, participants were educated on a resilience-based skill, completed self-assessment exercises, learned about the benefits and barriers in skill cultivation, application exercises, and homework to promote skill development. Each week, upon return to the group, participants were asked to share their discoveries and observations as they practiced that week’s skill. After the initial check-in and review activity, participants learned about the next resilience-based skill and repeated the same learning process for the coming week. After the intervention, participants reviewed the skills they learned and applied them to their lives. Participants shared their learning and intervention experience with the group and explored ways to continue to resilience cultivation in the future. When the study concluded, participants turned in their folders and applied intervention exercises. All participants completed the Beck Depression Inventory (BDI), State-Trait Anxiety Inventory, Enright’s Forgiveness Inventory (EFI), and Connor’s Resilience Scale pre-test and post-test to determine change in functioning following the resilience intervention.

**Participants**

Participants were recruited locally within the Pacific Northwest area. Fliers were sent to human service and rehabilitation agencies (i.e., Veteran’s Administration, Vocational Rehabilitation, ILCs – Independent Living Centers), hospitals, colleges (i.e., North Idaho College), counselors and mental health professionals, and websites/list-serves that connected counseling professionals in the area. In addition, participants were solicited by putting an ad in the paper to inform people of our desire to find people to participate in the study. Before being accepted for the study, interested participants had to complete a demographic questionnaire, participant psychological screening form, and consent form. Participants, then, briefly met with the primary researcher to discuss the intervention study and process. Eligibility criteria had to be met for people to participate. To be eligible, people had to have lived with a disability (of any kind) for at least a year, be between the ages of 18 and 65, and identify at least one life domain they found challenging as it relates to living with a disability, express an interest in learning new skills, and do not have current, active alcohol or drug abuse issues. Screening for alcohol and drug use was included because research supports that substances are sometimes used as coping approaches for people with disabilities. Thus, people need to be ready to work on positive approaches without the additional issue of recovery from substance abuse.

Nineteen participants were selected, with ten people completing the study. Most of the participants who dropped out of the study withdrew early on. Some participants withdrew immediately after completing the initial pre-tests, while other participants discontinued within the first couple of weeks. Exact reasons for discontinuing the study were not given, but some participants expressed that the assessments were challenging and difficult for them to complete. Others appeared to be unsure if they were ready to commit to the amount of time necessary to participate in this study. The ten participants, who remained, completed the pre-tests, the 10-module resilience intervention and its associated exercises and homework, and the post-tests. Collectively, participants ranged in age from 44 to 57 years (M=51, SD=4.90). Time since disability or diagnosis ranged from 1.5 to 42 years (M = 15, SD=14.30). A range in disabilities and diagnoses was reported among people who participated and completed the study. More specifically, participants reported living with fibromyalgia, kidney failure, Post Traumatic Stress Disorder (PTSD), arthrits, chronic pain, anxiety (i.e., panic attacks), Borderline Personality, Lupus, Chron’s Disease, depression, Manic Depression, Thoracic Outlet Syndrome, and Narcolepsy. In several instances, people were living with two or more disabilities.

**Instrumentation**

**Beck depression inventory**

The Beck Depression Inventory-II is a 21-item self-report instrument. Each item is scored from zero to three with higher scores indicating greater severity of symptoms. Total scores span from 0 to 63. Scoring and level of depression is determined by cut-off scores that indicate minimum, mild, moderate, and severe depression. Empirical support is provided for this instrument’s reliability, and validity as the Beck Depression Inventory is widely used for assessment of depression and its associated symptoms. Official manual, Beck et al. listed high internal consistency for the BDI-II.

**State-trait anxiety scale**

The Spielberger State-Trait Anxiety Scale is a 40-item self-report instrument used to measure change in state and trait anxiety. State-anxiety refers to the way a person feels at the moment, while trait-anxiety describes how a person typically feels. Each scale is comprised of 20 items; each statement is rated on a scale of one to four. Scores range from 20 – 80 with “20” indicating a low score and “80” representing a high score. Higher scores indicate more anxiety than lower scores. The STAI has been studied empirically. The STAI has acceptable reliability and validity and the manual provides additional information.

**Enright forgiveness inventory**

The Enright Forgiveness Inventory is a 60-item instrument designed to measure interpersonal forgiveness. Forgiveness and changes in forgiveness are examined according to a person’s thoughts, feelings, and actions toward another person. Each item is scored with a “1” or a “6” representing the level of forgiveness achieved toward the identified person. Some items are reverse scored. Items that are
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reverse score would suggest that a “1” represents a higher level of forgiveness while a “6” refers to a lower level of forgiveness. Total forgiveness scores (i.e., combining a person’s thoughts, feelings, and behaviors towards another) range from 60 (low forgiveness) to 360 (high forgiveness). The EFI has strong empirical support to support its reliability and validity and test-rest reliability. The Connor-Davidson Resilience Scale consists of 25 items, each of which is rated by respondents on a 5-point scale (0: ‘not true at all’ to 4: ‘true nearly all of the time’). The total score is ranges from 0 to 100, higher the score, greater the resilience. Study of the CD-RISC demonstrated high reliability, and validity in both general population and clinical sample.

Data analysis
A two-way factorial analysis of variance was conducted with the first factor between subjects, that is, groups (treatment conditions) and the second factor within subjects or repeated measures on pre-test subscales and post-test subscales. The null hypotheses will be tested with an F distribution with a working alpha level of .025 and a reporting alpha level of .05. A working alpha level of one half of the reporting alpha level is conservative in terms of a Type I or alpha error. Additionally, effect size was addressed through a partial and full eta squared.

Results
The overarching hypothesis of this study was that people with disabilities could learn and apply resilience-based skills to help them create positive change within their lives. Embedded within this purpose, were two areas of particular interest. One was to explore whether or not people would experience a reduction in depression and anxiety following their participation in a 10-module resilience intervention. The other was to determine if people would achieve an increase in forgiveness and/or resilience. Findings from this study provide support for the hypothesis and two areas of exploratory interest.

Research question one examined changes in depression and anxiety within the group of participants who completed the 10-module resilience intervention. Change in depression and anxiety scores were measured using the Beck Depression Inventory and the State-Trait Anxiety Inventory at pre-test and post-test. Changes in functioning were determined according to mean group scores. Results indicated that participants reduced their depression both clinically and statistically. Group mean depression scores reduced a total of 13.64 points. Change in depression scores indicated that the group began the intervention with moderate depression (BDI = 26.64) and concluded with minimal depression (BDI=13.00). This change in scores demonstrated that the group, as a collective, improved their functioning by reducing the amount of depression experienced by two clinical categories. The partial eta squared of 0.77 indicated that the effect size for the intervention was large. As for the State-Trait Anxiety Inventory, results indicated that the resilience intervention group reduced their state anxiety by 12.97 points (M=50.27 to M=37.30) and trait anxiety by 10.4 points (M =56 to M=45.6) and achieved a statistically significant reduction in anxiety on both scales. The partial eta squared of 0.69 and 0.64 respectively indicated that the effect sizes for the intervention was large.

Table 1: Stuntzner and Hartley’s resilience group (SHRI) scores at pre-test and post-tests

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre-Test (N=11)</th>
<th>Post-Test (N=10)</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Beck-Depression Inventory</td>
<td>26.64</td>
<td>7.16</td>
<td>13</td>
</tr>
<tr>
<td>State-Trait Anxiety—S</td>
<td>50.27</td>
<td>7.58</td>
<td>37.3</td>
</tr>
<tr>
<td>State-Trait Anxiety—T</td>
<td>56</td>
<td>5.85</td>
<td>45.6</td>
</tr>
<tr>
<td>Connor Davidson Scale</td>
<td>59.84</td>
<td>12.01</td>
<td>75</td>
</tr>
<tr>
<td>Forgiveness Scale</td>
<td>179.01</td>
<td>71.81</td>
<td>238.6</td>
</tr>
</tbody>
</table>

Note: **p≤ .01 *p≤ .05

Discussion
Findings from the present study add evidence for White et al. proposed notion that resilience interventions and research applies and is of value to people with disabilities. Before the start of the study, resilience scholars shed light on the relevance of resilience and building resilience among people with disabilities; yet, few resilience interventions have been developed and researched among this population. Stuntzner and Hartley’s resilience intervention (SHRI) was created and pilot-tested to address this void and need.

Data derived from the study indicated that the first research question was successfully achieved. Results from the resilience group indicated that participants decreased their depression scores from pre-test to post-test by 13.64 points. This decrease in depression was...
found to be clinically and statistically significant as participant mean scores also dropped from moderate to minimal depression. Similarly, findings show support for the resilience intervention in assisting people in reducing anxiety. Results indicate participants reduced state-anxiety by 12.97 points and trait-anxiety by 10.4 points from pre-test to post-test. Both scores demonstrate a statistically significant reduction in anxiety. The research intervention, mentioned above, is the first to be performed on SHRI. Thus, there are not any other studies which utilized this intervention available to compare the findings of this study too. For this reason, additional research is warranted to fully understand the value and use of the resilience intervention among people with disabilities in decreasing depression and anxiety.

In addition to the exploration of change in participants’ depression and anxiety, the present study examined whether participants would experience a change in forgiveness and resilience from pre-test to post-test. Findings indicate that research question two was successfully met. Results from the study demonstrated that participants increased in forgiveness by 59.59 points and resilience by 15.16 points. Both increases indicated that participants achieved statistically significant amounts of change from pre-test to post-test.

Collectively, findings from this study are new since this is the first study to be conducted among people with disabilities. Therefore, there is still much to explore on the utility of SHRI among people with disabilities. However, the results reported here are similar to those found in a second pilot study utilizing SHRI among women with disabilities. Unpublished results from the second pilot study demonstrate significant reductions in depression and anxiety with increases in forgiveness and resilience. Similarly, Stuntzner et al. article on two participants’ experience of working through the resilience intervention provides further information and support for the intervention being of help in reducing depression and anxiety while increasing forgiveness and resilience. Despite the resilience intervention being new, these preliminary findings add evidence to the research and literature that resilience interventions can help reduce negative emotions (i.e., depression, anxiety) and improve positive ways of coping (i.e., forgiveness, resilience), but further research is encouraged to substantiate and strengthen the findings.

**Strengths and limitations**

Several strengths and limitations exist as a part of this study. The first strength is the notion that this is the first resilience study performed using the resilience intervention, mentioned above. As previously mentioned, resilience interventions have not historically been available or studied among people with disabilities. Yet, resilience and the opportunity to cultivate resilience is an important life skill particularly when people are dealing with difficult and challenging life events such as disability.

Second, because this study is the first to utilize Stuntzner and Hartley’s resilience intervention (SHRI), the findings from this pilot-study can be expanded on and studied among other groups and disabilities. For example, following this study, Stuntzner and MacDonald pilot-tested the resilience intervention among a group of women with disabilities, a traditionally underserved population. Furthermore, the intervention can be explored among veterans with disabilities who have returned from military combat or who finished with their term of service. The intervention can also be studied among people living with specific disabilities (i.e., spinal cord injury, blindness, multiple sclerosis, Posttraumatic Stress Disorder).

The third strength of this study is that it recruited people living with various disabilities. People who participated in this study often reported more than one disability or diagnosis, which is relevant as some people, throughout society, live with more than one condition. Those reported as a part of this study included fibromyalgia, PTSD, anxiety, depression, Manic Depression, Borderline Personality, kidney failure, heart problems, Narcolepsy, Thoracic Outlet Syndrome, Lupus, Chron’s Disease, chronic pain, gout, and arthritis. Observing that this study attracted people living with various conditions is encouraging as the authors hope the intervention can be utilized across various disabilities.

The fourth strength is that the intervention may be used to provide people with disabilities a cost-effective way to access counseling, mental health, and support services. Stuntzner and Hartley’s resilience intervention was initially developed to assist people with disabilities in building resilience skills and coping skills, but it was also created to devise a way for people to receive assistance cost-effectively. As indicated earlier, disability is a situation that can affect peoples’ employment, finances, and access to health care. As a result, many may not be able to afford mental health services, long-term. Thus, the resilience intervention was developed and pilot-tested to reduce these barriers and help people access cost-effective services.

Similar to strengths, the study also has limitations. The first limitation is related to generalizability. Because this is the first study performed on the resilience intervention and the sparsity of other resilience interventions utilized among persons with disabilities, there are not many interventions available for comparison. Hence, it is the researchers’ hope that the pilot-study can be used as a starting point in building knowledge and a foundation for future research utilizing resilience interventions among people with disabilities.

The second limitation relates to sample size. Initially, 19 people were recruited with 11 participating and 10 people completing the study. With limited resilience intervention research conducted among people with disabilities to compare the study’s findings, a study with a small sample size (N=10) may not be representative of the general population; thus, further research is warranted.

The third limitation relates to the lack of long-term data and a control group. Because this was the first study conducted utilizing the 10-module resilience intervention, much of the authors’ intent was to explore its preliminary usefulness among people with disabilities. The initial starting point was to gather pre-test and post-test data among a group of individuals with a disability. In later studies, as the intervention is used and studied, intervention research utilizing long-term change measures (i.e., follow-up assessments) and control groups (i.e., delayed intervention administration, comparison of intervention to others available) would be of value and is needed. Resilience intervention studies utilizing long-term change data (i.e., follow-up two to three months later) can be help determine if people who learn resilience-based skills can maintain them over time. Studies that include a control group can help determine the resilience intervention’s comparability to other interventions and to people who did not participate in the intervention until a later time.

**Conclusion**

Research scholars, White and colleagues, enhanced professionals’ awareness of the value and potential need for resilience interventions among people with disabilities. However, at that time, such
interventions were sparse. Stuntzner and Hartley’s resilience intervention was developed to address this void and to assist people with disabilities in cultivating resilience and improving positive functioning.

In this article, Stuntzner and Hartley’s resilience intervention was pilot-tested among a group of individuals living with various disabilities (i.e., fibromyalgia, PTSD, anxiety, depression, kidney failure, Lupus, Chronic’s Disease, chronic pain) to determine its effectiveness in reducing anxiety and depression and promoting forgiveness and resilience. Results from this study indicate positive support for the intervention in reducing negative emotions (i.e., anxiety, depression) and increasing positive ones (i.e., forgiveness, resilience). Since few resilience interventions explicitly designed for people with disabilities and the disability-related situations they experience exist, additional research is warranted. Research efforts may include further pilot studies of Stuntzner and Hartley’s resilience intervention in addition to intervention comparison studies. Despite this need for additional research, preliminary findings are encouraging.

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None.

**Conflicts of interest**

The authors declare no conflicts of interest.

**References**


