

# Measures of Resilience and an Evaluation of the Resilience Scale (RS)

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**ABSTRACT:** *The construct of resilience has been studied relative to competence, cognitive variables and protective ecological factors. Several models have been developed to explain resilience and several instruments have been used to operationalize the construct. There are many instruments that are used to study resilience in a variety of populations. The Resilience Scale (RS) was chosen for further evaluation because of its focus on resilience as a positive personality characteristic. Construct validity of the RS was obtained from correlations with theoretically relevant constructs, such as depression (-0.37), life satisfaction (0.30), morale (0.28) and health (0.26) (Wagnild & Young). Despite some limitations, the RS appears to be a valid and reliable instrument, which can be used with a variety of populations in different stages of health and developmental stage.*

**KEYWORDS:** *Resilience, Evaluation, Instruments, Positive attitude*

## BACKGROUND

Resilience is the ability of individuals to successfully function despite significant life adversities (Werner & Smith, 1982; Rutter, 1987). The early work on resilience focuses on children and adolescents and their reactions to extreme stress. Descriptions of resilience include invulnerability (Anthony, 1974), hardiness (Kobasa (1979), competency under stress (Garmezy, 1991), coping appraisal (Garmezy, 1993) and buffers to moderate the negative effects of adverse life events and successful adaptation (Rutter, 1987; Wagnild, 2003).

The concept of resilience has been defined theoretically as a dynamic process, which involves interaction between risk and protective factors that are both internal and external to the individual. Polks' mid-range (2000) theory classifies resilience into four patterns: dispositional patterns (Protective factors), relational patterns (Social skills) and philosophical (Personal beliefs) and situational (Resilient coping patterns). Resilience has been further defined as a process and a personality trait (Werner & Smith, 1982; Wagnild & Young, 1993) that is assisted by individual characteristics, social support and family congruence. Hjemsdal et al., (2006) defined resilience as the protective factors, processes and mechanisms that contribute to good outcomes despite adversity. The construct of resilience has been studied relative to competence, cognitive variables and protective ecological factors. Several models have been developed to explain resilience and several instruments have been used to operationalize the construct. Some of these measures use multiple indicators to study resilience, such

as measures of self-esteem and a sense of coherence. Other studies use instruments that specifically measure resilience (Wagnild, 2009). The following offers a description of select instruments available to measure resilience and an evaluation of the Resilience Scale (RS).

The following online databases were searched for publications conducted between the years of 1970 to the present: Index Medicus (Medline); Cumulative Index to Nursing and Allied Health Literature (CINHAL) and Psychological Information (PSYCHINFO). The search terms used were resilience, resilience and scale, resilience and instruments. The search was further refined to resilience scale and psychometric properties. The search yielded 22 publications specific to this investigation.

There are several instruments that are used to study resilience in a variety of populations. The Connor-Davidson Resilience Scale (CD-RISC) (Connor and Davidson, 2003) is a 25 item scale based on Kobasa's (1979) construct of hardiness, Rutter's (1987) work conceptualizing resilience as a group of protective factors, and Lyon's (1991) concept of patience. The scale was administered to 577 adults who were being treated for anxiety, depression and stress reactions. Connor and Davidson evaluated the instrument to establish reference scores for clinical and general populations. Furthermore, they assessed the reliability and validity of the scale, as well as the factor composition of the CD-RISC. They also analyzed changes in the scores on the CD-RISC with clinical improvement over time. Reliability of the instrument was assessed through test-retest reliability and internal consistency reliability. Convergent validity was assessed by correlating the CD-RISC with measures of hardiness, perceived stress, and stress vulnerability. Test-retest reliability demonstrated a high level of agreement in

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the pretest and posttest data (0.87). The Cronbach alpha for the full scale was 0.89, indicating internal consistency of the instrument. Exploratory factor analysis of the CD-RISC resulted in a five factor solution, broadly interpreted as: personal competence, tolerance of negative affect, positive acceptance of change, control, and spiritual influences. The authors concluded that the CD-RISC had sound psychometric properties and that resilience is quantifiable and influenced by health status. Yu & Zan in their sample of 577 individuals found that the 5-factor structure of the CD-RISC was not verified. Exploratory factor analysis resulted in a three factor solution labeled: tenacity, strength, and optimism. The alpha reliability of the Chinese version of the CD-RISC was 0.91. Concurrent validity of the instrument was satisfied with correlations between the total score on the instrument and the variables of self-esteem and life-satisfaction. The authors concluded that the CD-RISC was applicable for Chinese populations, but needed some cultural modifications.

The Resilience Scale for Adults (RSA) was developed because of the perceived shortcomings of the other instruments in addressing social factor constructs, such as social support and social competence. It measures interpersonal and intrapersonal protective resources that facilitate adaptation to adverse life events. A principal component analysis reduced 195 statements to 45 items, covering five dimensions: Personal competency, social competence, social support, family coherence and personal structure. The Cronbach alpha for the total scale was 0.93 and the alphas for all dimensions ranged from 0.92-0.74 (Hjemdal et al., 2001). In a sample of 59 outpatient psychiatric patients and 276 normal controls, the factor structure of the RSA was successfully replicated. Construct validity was obtained with positive correlations of the RSA with the Sense of Coherence Scale and (SOC) and negative correlations on the Hopkins Symptom Check List-25 (HSCL). Discriminate validity was obtained through positive correlations between RSA and SOC (Friborg et al., 2003).

Friborg et al. (2005) studied the predictive validity of the RSA in a sample of 84 adults who were randomized into two stress conditions: low stress and high stress. All subjects were subjected to ischemic pain with a sphygmomanometer in order to test whether high scores on the RSA implied a protective effect against pain and stress. The low-stress group was provided information and safety information about the tourniquet. In the high stress group, no information was given. Individuals scoring higher on the RSA reported less pain and stress. The results showed that as conceptualized resilience provides protection when individuals encounter stressful situations. This study confirmed the predictive validity of the RSA.

The Resilience Scale for Adolescence (READ) developed by Hjemdal, Friborg, Stiles, Rosenvinge, and Martinussen (2006) is a 28-item summated self-report scale measuring adolescent resilience. Adolescents respond to items on a 5-point scale from 1 (Totally disagree) to 5 (Totally agree). Scores on the summated scale range from 28 to 140, with higher scores indicating higher resilience. All of the items are positively worded. According to Hjemdal (2007), the positively worded items are consistent with resilience theory, which emphasizes protective factors, rather than absence of risk.

Relative to the content validity of the READ, Hjemdal et al. (2006) stated that 41 RSA items were adapted to measure adolescent resilience. The scale was reviewed by seven adolescents. The adolescents had difficulty with the semantic differential response format and the wording of some of the items. For example an item on the RSA "If I encounter significant obstacles, I can succeed by working hard" was changed to "I will reach my goal if I work hard" on the READ. The semantic differential response was changed to a 5 response format and the process yielded 39 items.

Hjemdal et al. (2006) obtained construct validity of the READ in a sample of 425 adolescents, aged 13 to 15, by correlating the Read with the Short Mood and Feelings Questionnaire (SMFQ), a measure of negative mood. The READ total score was negatively related to the SMFQ ( $r=-0.65$ ,  $p=0.01$ ). There were also statistically significant negative correlations between the SMFQ and the READ subscales of personal competence ( $r=-0.65$ ,  $p=0.01$ ), social competence ( $r=-0.35$ ,  $p=0.01$ ), structured style ( $r=-0.46$ ,  $p=0.01$ ), family cohesion ( $r=-0.58$ ,  $p=0.01$ ) and social resources ( $r=-0.51$ ,  $p=0.01$ ).

Hjemdal et al. (2006) performed confirmatory, cross validation factor analysis on the READ in a sample of 425 adolescents, aged 13 to 15. The results showed a good relative fit for the five-factor model with 28 items loading on the factors of (a) Personal competence (8 items), (b) Social competence (5 items), (c) Structured style (4 items), (d) Family cohesion (6 items) and (e) Social resources (5 items). All Factors resulted in adequate model fits of the data.

Sinclair and Wallston (2004) developed the Brief Resilient Coping Scale (BRCS) based on Polk's (2000) theory of patterns of resilience, specifically the dispositional resilience pattern, which includes traits of self-efficacy, optimism, and self-reliance, and Lazarus and Folkman's (1984) stress-coping model. They posited that resilient coping is a salient indicator of dispositional resilience. The items used to develop the scale were administered to two samples ( $n=90$  and  $n=140$ ) of individuals with Rheumatoid Arthritis. The data was subjected to exploratory principal components factor analyses and two factors emerged. The BRCS was based on the four items that loaded on dimension 1 that described resilient coping. Internal consistency of the BRCS was adequate, but only met the minimal standard for research instruments at baseline (0.70) and at the three month follow-up (0.71). The alphas below the minimum standard were 0.69 for the total sample pool, 0.64 at baseline, 0.69 end of program and, for sample 2, the alpha was 0.68. The BRCS showed test-retest reliability through correlation on the post intervention BRCS and scores obtained 3 months later was 0.71 ( $n=87$ ,  $p<0.001$ ). Convergent validity of the BRCS was found with correlations with measures of personal coping, pain coping behaviors, and psychological well-being. The authors concluded that the BRCS may be useful in understanding how resilient coping assists individuals deal with adversity.

The Baruth Protective Factors Inventory (BPFI) (Baruth & Carroll, 2002) was developed based on the theoretical perspective that resilience encompasses the protective factors of: (a) Adaptable personality, (b) Supportive environment, (c) Fewer stressors and (d) Compensating experiences (Luthar, 1991; Rutter, 1987; Garmezy et al., 1984). A pool of potential items representing the

four constructs of resilience were developed and administered to a sample of 98 undergraduate students. The Cronbach alpha of the total scale was 0.83. The reliability of the four subscales was: 0.76 for adaptable personality 0.98 for supportive environment, 0.55 for fewer stressors and 0.83 for compensatory experiences. Based on exploratory factor analysis, which demonstrated that items that loaded on “fewer stressors” did not correlate highly with the other three scales, reliability was recalculated without these items and the adjusted reliability was 0.93. Construct validity of the BPFII assessed by comparing performance on the corresponding constructs of the Multidimensional Health: Psychological Functioning (MI-P-P). Significant correlations were found in three of the four comparisons; the supportive environment scale of the BPFII did correlate significantly with corresponding items on the MI-P-P. The author recommended further research to refine the BPFII.

After a review of the instruments, there seems to be agreement that resilience describes an individual’s ability to successfully function in the face of adversity. The instruments measured the construct of resilience as protective factors (Baruth, 2002), protective resources (Friborg et al., 2003) and stress-coping ability (Connor-Davidson, 2003; Sinclair & Wallston, 2004). The only instrument found in the literature to conceptualize resilience as a personality characteristic that has been used in a variety of age groups is the RS developed by Wagnild & Young (1993).

The RS was chosen for further evaluation because of its focus on resilience as a positive personality characteristic. The instrument was also used in a variety of settings with diverse populations. Its conceptual basis of resilience as perseverance, equanimity, self-reliance and existential aloneness has been used by other researchers in subsequent studies (Wagnild, 2009). Wagnild & Young (1993) developed the RS to assess individual resilience that would enable successful adaptation in the face of adversity. The scale has two dimensions, labeled personal competence and acceptance of self and life. The authors state that the initial scale was not norm-referenced, although scores in relation to the means of previous studies could be compared. The scale is norm referenced in that it measures individual resilience in such a way that there is discrimination among the level of resilience among the subjects (Waltz et al., 2005). Also, assessing an individual score in relation to the means of other scores allows for comparisons (Wagnild & Young).

Conceptually, the RS is based on the five characteristics of resilience that were identified in a qualitative study by Wagnild & Young (1990). The sample consisted of 24 White women, ages 67 to 92 who had adjusted successfully to a loss, evidenced by self-report of adjustment, level of morale, and active participation in a senior center. The women provided qualitative reports of their reactions to loss and successful adaptation. The five themes that emerged were: (1) Equanimity or a balanced perspective of life experiences, (2) Perseverance or persistence in the face of adversity, (3) Self-reliance or a belief in one’s capabilities, (4) Meaningfulness or the realization that individual contributions are valued and (5) Existential aloneness or the realization that some experiences must be faced without others. Wagnild describes resilience as an internal resource much like the protective or buffering factor described by Rutter (1987).

The conceptual basis and underlying assumptions of the RS are congruent with those of subsequent studies. Christopher & Kulig (2000) studied the relationships between resilience, life satisfaction and psychological well-being in Irish Immigrants. Resilience was defined theoretically as an individual resource for adaptation to adversity. It was assumed to be a process that has protective qualities in influencing the well-being of Irish immigrants. They found resilience to be a strong predictor of well-being in Irish immigrants in the United States.

Miller and Chandler (2002) in their study of 200 midlife women who had migrated to the United States from the former Soviet Union examined relationships between acculturation, resilience, and depression. The post immigration Health and behavior change framework was the conceptual basis for the study. The assumption was that resilience was a protective factor ameliorating psychological distress from acculturation to a new environment. Resilience was significantly correlated with English usage and not correlated with the demands of immigration. About one-third of the variance of depression was explained by age, English usage and resilience.

An exploratory study of the relationships between resilience and self-esteem, optimism, religiousness, cultural interdependence and belief in higher education was conducted in a population of 200 elderly Korean women and 170 their daughters (Lee et al., 2008). Resilience was conceptualized as a positive characteristic that leads to adaptation despite adversity. Self-esteem, optimism and control beliefs were identified as resources to a resilient personality. The researchers found that self-esteem, optimism, religiousness and cultural interdependence were significantly related to mother’s resilience. Self-esteem and optimism predicted resilience in both mothers and daughters.

Rew & Colleagues (2001) studied correlates of resilience in a sample of 59 homeless adolescents. Their conceptualization included that resilience was a personal characteristic that centered on self-reliance, independence and protective factors and that resilience influenced adaptation of homeless youth. They assumed that resilience is a moderating factor in times of profound stress, including victimization, acute illness, and lack of housing. They found that lack of resilience was associated with hopelessness and loneliness and that connectedness and hopelessness explained 50% of the variance in resilience.

Lindenberg et al. (2002) used the RS as a measure of resilience in an intervention study focused on reducing substance abuse and risky sexual behavior among low-income Mexican-American Women. The conceptual basis and underlying assumptions were congruent with the conceptualization of resilience by Wagnild & Young. Resilience was considered a positive personality trait that focuses on the domains of equanimity, perseverance, self-reliance, meaningfulness and existential aloneness.

Monteith & Ford-Gilboe (2002) studied the relationships among maternal resilience, family health work (Family health promotion) and mother’s health promoting lifestyle practices in families with preschool children. The Developmental Model of health and Nursing provided a framework for studying the relationships among the variables. In their convenience sample

of 67 mothers of preschool children, the researchers found that resilience and health work were positively related to the mother's health promoting lifestyle.

Wagnild (2003) used samples from three studies to identify the relationships among low income, resilience and successful aging. Resilience was seen as a dynamic personality characteristic that positively influenced indicators of successful aging, such as health-promoting behaviors, life-satisfaction and morale. The findings of the study showed that resilience was significantly correlated with self-rated health in sample 1, but not in samples 2 or 3. Also, resilience was correlated with morale in low-income individuals, but not in the high income sample. Furthermore, resilience was correlated with life satisfaction in samples 1 and 2, with health promoting behavior in sample 3.

Schachman et al., (2004) tested the effects of a four-week prenatal intervention on postpartum maternal role adaptation for military wives. The conceptual basis for the study was the resilience model, which described an individual's adaptation to adversity as being influenced by vulnerability and protective factors. Protective factors were both external and internal to the individual. Resilience was viewed as an internal resource that acts as a protection factor in ameliorating stress and promoting an adaptive outcome.

The conceptualization of resilience as a personal characteristic that allows individuals to adapt to adverse events was found in research on older adults (Nygren et al., 2005). In a sample of 125 older adults, aged 85 or older, Nygen et al. conceptualized resilience as an adaptive capacity having the interrelated characteristics of equanimity, perseverance, self-reliance, meaningfulness and existential aloneness as described by Wagnild & Young (1990). Inner strengths were also conceptualized as a sense of coherence, purpose in life and self-transcendence. The researchers' found that there were significant correlations between scores on scales that measured resilience and the other inner strength variables suggesting that the scales measured some dimension of inner strength and that the oldest old had these dimensions of strength.

Moorhouse & Caltabiano (2007) studied resilience within the context of unemployment in a sample of 77 adults. Resilience was conceptualized within the context of risk and protective factors. Unemployment was assumed to be a major adult adversity and resilience was considered a mediator to this adversity. The components of resilience were conceptualized as personal resources that included the qualities of determination, self-reliance determination, and perseverance. The researchers found that resilience was positively related with likelihood of assertiveness in job searchers and that the depression was predicted by resilience and months of job searching.

In summary, there was agreement in the studies reviewed that resilience is a dynamic, multidimensional personal characteristic that promotes successful adaptation in the face of adversity. Resilience included such factors as self-reliance, perseverance, sense of coherence, and meaningfulness. The construct was objectively measured in all of the reviewed studies with the RS, developed by Wagnild & Young. Resilience was also viewed in the context of risk and protective factors and was studied in a variety of age groups.

## Psychometric Properties

Wagnild & Young (1993) followed acceptable procedures in the development of the resilience scale and in evaluating the psychometrics of the scale. Prior to instrument development, a qualitative study of 24 women aged 67 to 92 years was done in order to describe characteristics of successful adaptation. The themes of equanimity, perseverance, self-reliance, meaningfulness and existential aloneness emerged. The core concept of resilience was seen as a personal strength, describing individuals who are courageous and adaptable despite adversity (Wagnild & Young, 1990). Wagnild & Young (1993) further clarified the definition and conceptual perspective of resilience through a review of the psychological and philosophical literature of the themes identified in the qualitative study. These steps are important in the development of the instrument, which should focus on a well-defined domain (Waltz et al., 2005).

Wagnild & Young purport that a-priori content validity was obtained in the construction of the instrument from the definitions in the literature and interviews of resilient individuals. This is referred to as the development phase of content validation. Since resilience was considered an affective measure, a literature review was appropriate for initial content validation. The second phase of content validity, judgment-quantification, requires obtaining experts to validate the content (Grant & Davis, 1997). Wagnild & Young used two psychometricians and two nurse researchers to evaluate content prior to further testing; however the process the experts used to validate the content was not given. A pilot test was done using the instrument on a sample of 39 undergraduate nursing students for clarity and initial reliability. Internal consistency for the instrument was 0.89 (p. 168).

Initial psychometric evaluation of the 25-item resilience tool was completed with a sample 810 community-dwelling older adults, ranging in age from 53 to 95. The majority of the samples were female (62%), Caucasian (All but 14) and well-educated (66.2%). Principal components analysis, followed by oblimin rotation was done to factor analyze the RS. Reliability and construct validity of the tool was also obtained.

The RS items were selected to reflect the five identified components of resilience. The scree test indicated a cut-off point between Factor I and Factor II. When the Kaiser's criterion was applied using eigenvalues of greater than 1.0 for all un-rotated factors, 5 factors that accounted for 57% of the variance emerged. However, when the five-factor solution was analyzed, there was some vagueness among the factors because of secondary loadings. The rotated analysis found that two factors explained 44% of the variance; they were named Personal Competence and Acceptance of Self and Life (Wagnild & Young, 1993).

The RS had high Chronbach alpha reliability (0.91), indicating internal consistency of the instrument. Construct validity was obtained by correlating the RS with the theoretically relevant constructs of life satisfaction, morale and depression, which encompassed responses to stress, and with perceptions of physical health as an indicator of adaptation. The findings showed that life satisfaction (0.30), morale (0.28), and a lower level of depression (-0.37) and health (0.26) were significantly related to higher

resilience scores, demonstrating construct validity of the instrument (Wagnild & Young, 1993). The authors' use of construct validity was important to the use of the RS in the study of resilience. The measures were consistent with the theory and operationally defined concepts. The alpha reliability coefficient was also used correctly in determining the internal consistency of the instrument because it identified how a response to a single item on the RS was an indicator of performance on other items (Waltz et al., 1993).

The early use and evaluation of the RS was mainly with older adults. It was important to determine if the scale was reliable for other age groups and populations. Lundman et al., (2007) in their study investigated the relationship of resilience to age and gender. They also evaluated the psychometric properties of the Swedish version of the RS. The sample consisted of 1719 Swedish nursing students, aged 44-77. The majority of the participants were women (n=1248). The exploratory factor analysis, using an eigenvalue greater than 1, revealed a five-factor solution; Each factor was labeled in accordance with the Wagnild and Young's resilience theoretical perspective.

Aroian & Norris (2000) used a modified version of RS to study resilience in a sample 450 Russian immigrants in Israel. The modified version of the scale contained 9 items from the personal competence sub-scale of the RS. The reliability of the modified RS was good (Alpha=0.88). Construct validity was also supported by standardized factor loadings (0.46-.81) and significant relationships between resilience and the theoretically linked concepts of psychological well-being and coping ability. Confirmatory factor analysis demonstrated goodness of fit in the model of resilience as a coping style.

In another study of adversity among immigrants to the United States, Lee and colleagues (2008) used the RS to measure the relationships between resilience and the theoretically relevant variables of self-esteem, optimism, religiousness and cultural interdependence. The sample consisted of 280 Korean mothers and 170 of their daughters recruited from senior centers, religious organizations, and community centers. The Cronbach alpha for the RS in this study was 0.95. The researchers found that the mothers and daughters scores on the resilience scale were lower than expected perhaps because the scale did not account for cultural differences. Some construct validity of the scale was evident in that resilience significantly correlated with self-esteem and optimism for mothers and daughters.

In their study of midlife women who had migrated to the United States from the former Soviet Union, Miller & Chandler (2002) used a modified 12 item version of the RS. The sample included 200 women, aged 46-65 years, who were recruited from a community in Chicago. The Cronbach alpha for the modified RS was 0.91. No construct validity was evident.

Two studies using the RS focused on adolescent populations. Black & Ford-Gilboe (2004) used the RS in a sample of 41 adolescent-led families recruited from a city in Canada. The RS demonstrated good reliability (alpha=0.85) and construct validity was observed through positive correlations between resilience and both family health work and mothers' health promoting behaviors, two theoretically linked constructs. Rew & colleagues (2001)

studied correlates of resilience in 59 homeless adolescents, age 15-22, recruited from a community out-reach center in Texas. The Cronbach alpha for the sample was 0.91, demonstrating reliability of the RS in this sample.

Reliability of the RS was also demonstrated in three studies focusing on young to middle-aged women. Monteith & Ford-Gilboe (2002) recruited 67 mothers with pre-school children from three nursery schools in Canada. The Cronbach alpha for the RS in this study was 0.85. No evidence of construct validity was reported, although family health work was positive correlated with mother's resilience, a theoretical link in this study. Humphreys (2006) studied resilience in 50 battered women residing in four battered women's shelters in San Francisco. Cronbach alpha with this sample was 0.94. For the two factors of the RS, personal competence and acceptance of self and life, Cronbach alphas were 0.91 and 0.81 respectively. In an intervention study of 91 pregnant military wives, aged 18-28 years recruited from a military duty station, the RS was used as a measure of internal resources. The reliability of the RS was good with a Cronbach alpha of 0.86 (Shachman et al., 2004).

Additional studies using the RS as a measurement of resilience demonstrated good reliability and some construct validity. In the study of the relationships between coherence, purpose of life, self-transcendence and physical and mental health among the oldest old, Nygren & colleagues (2004) used the Swedish version of the RS. The sample consisted of 125 individuals living in a mid-sized town in Sweden, who were aged 85 to 95. The Cronbach alpha for the scale was 0.83. Construct validity was also obtained through significant positive correlations between resilience and sense of coherence and purpose of life, theoretically linked concepts. Lastly et al., 2007 studied 239 patients at the beginning of radiation therapy for cancer and 208 patients at the end of therapy to assess the relationship between fatigue and resilience. The mean age of the sample was 61.5 years (range 25-85) and consisted of both men (n=77) and women (n=162) recruited from an oncology unit in a University hospital in Germany. There was no reported reliability for the RS with this sample. Resilience was found to predict fatigue at the beginning of RT.

In conclusion, there was acceptable reliability of the RS in initial studies and subsequent studies. Some of the studies report reliability from other studies and not from their own sample, which is problematic in that reliability of their data would have added to the psychometric evaluation of the RS. The reliability of the RS ranged from 0.91 to 0.83 in those studies that report reliability. The RS has been used with different age groups, with males and females, and some variety of ethnic groups. There also some limitations to the RS in that the items may not be culturally sensitive for some groups. Also, the RS has positively worded responses that may contribute to response bias (Wagnild & Young, 1993). Test-retest reliability was not reported, although Wagnild & Young did report that it was done in previous studies. Further work needs to be done in this area. Construct validity of the RS was obtained from correlations with theoretically relevant constructs, such as depression (-0.37), life satisfaction (0.30), morale (0.28) and health (0.26) (Wagnild & Young). Despite some limitations, the RS appears to be a valid and reliable instrument, which can be used with a variety of populations

in different stages of health and developmental stage. The RS by Wagnild has the following website <http://www.resiliencescale.com> that describes the resilience tool and the parameters for use of the tool. The instrument is free to users as long as the user complies with the terms of use. The user's guide costs \$75.00 and is needed for information on administration, scoring and interpreting results.

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