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Research Paper

Theoretical Conceptualization and Development of the Multi-dimensional Scale of Resilience- Hindi (MDRS-H)

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ABSTRACT

The article gives a detailed description of the Multidimensional Resilience Scale's- Hindi (MDRS-H) theoretical conceptualization and development. Resilience is the ability to 'bounce back' and adapt positively in a stressful situation and is extensively being studied both in research and its measurement. Past research was studied to gain an understanding of the concept and 6 existing tools of Resilience were critically analysed on the basis of their conceptual capacity and applicability on an Indian population. Based on resilience literature ten dimensions that may serve as determinants of Resilience: Internal Locus of Control, Self-acceptance, Assertiveness, Hardiness, Forgiveness, Sociability, Optimism, Emotional maturity, Humour, and Mindfulness, were selected. The domains also serve as important protective factors playing a crucial role in building resilience. Item selection was done in a phased and multi-level manner. Reliability and Validity of the tool were established. MDRS-H is standardized on both female and male urban Indian population (N=484) along 3 age groups (18-35 years), (36-50 years) and (51 to 65 years). Age-wise percentile norms were calculated.

Keywords: *Resilience, Measurement*

Psychological resilience has gained interest with the shift of mental health research's growing interest in the field of positive psychology. Resilience has garnered considerable attention by researchers in the past few decades (Craver, 1998; Charney 2004; Masten, 2001), yet there is not one definition that may do justice to the much-studied concept. Therefore, the construct of psychological resilience has often met with scrutiny as it lacks an explanation that is universally accepted by researchers. This in turn complicates the matter further when it comes to the measurement and systematically applying the understanding of the concept (Luthar, Ciccheti & Becker, 2000).

Moeller-Saxone, Davis, Stewart, Diaz-Granados, and Herrman (2015) stated that resilience is a dynamic process in which an interaction of "psychological, social, environmental and biological factors" assist an individual in developing and maintaining a positive mental health despite hardship. Connor & Davidson (2003) have defined resilience as the personal qualities that make it possible for a person to thrive during trying times. However, these attributes may

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not be easily identifiable or generalized and vary with one's cultural background, financial condition, social system that one grows up in, familial environment, style of parenting, gender, age etc. Hence, stressful situations may have a debilitating effect on a person's life, yet the same stressor might not affect everyone in the same way even with the same severity. According to Masten and Reed (2002), resilience proves to be an important factor in facilitating mental hygiene in developing children and adolescents as it enables one to positively adapt in situations that pose a threat to one's well-being. An individual is said to possess resilient features if they respond in a healthier than expected manner in a damaging environment.

As reasoned by various researchers, it is impossible to lead a life devoid of hardships. However common it is for people to experience stress and trauma, it is essential to understand an individual's journey. How a person would react to a given stressor would depend on their psychological resilience, which in turn depends on a number of factors like their socio-cultural upbringing, gender, the era and the life conditions they grow up in (Garmezy and Rutter, 1985; Rutter et. al., 1985; Seligman and Csikszentmihalyi, 2000). Luthar, who repeatedly described the concept as a form of constructive adjustment within the context of significant adversity is the most used definition in the past decade for resilience involving 'positive adaptation despite adversity' as the most striking quality (Luthar et al., 2000). Hence, to sum up the conditions under which an individual's psychological resilience evolves the most is when adverse life conditions do not permanently assault their developmental process. It helps them further to positively adapt through it, making resilience an important concept to study as a 'psychological state' and studying it through the lense of various 'protective factors', which may be attributed to external conditions. It may be viewed as 'trait' resilience, which enables a person to respond to stress in a positive manner, or a 'process' through which an individual learns to respond favourably under adverse circumstances. In recent researches it is studied as an amalgamation of both, where an individual's mental make-up that can be of benefit is studied so that the areas that they may need some training in could be worked on (Singh and Khullar, 2017). A large number of resilience researches align with this definition and explain how certain 'cognitive sets' have proven to help individuals during adversity (Rutter, 1994).

Resilience Assessment: A Review of Previously Constructed Resilience Tools

Measurement in the field of psychological resilience is still in its infancy with only a handful of measurement tools having an adequate and theoretical understanding of the construct. The growing need to find an appropriate tool that could be instrumental in explaining both risk and potential in adapting to stress and trauma can be experienced in the present times more than ever before. Hence, it becomes even more important to use a resilience tool, which suits the research needs and is both reliable and valid. Most of the existing assessment tools on resilience do not seem to cover the multi-domain nature of resilience thoroughly or in a unidimensional manner as a stable characteristic (Windle, Bennett and Noyes, 2011). But to construct a new assessment measure it was important to study the existing psychometric tools. Six existing resilience assessment tools were reviewed:

1. The Dispositional Resilience Scale (Bartone, 1989) is exclusively developed from hardiness literature. It has been designed to measure psychological resilience along Commitment, Control and Challenge and was mainly used to assess change over time. As its biggest disadvantage, the scale does not take in account the dynamic process of mental toughness or resilience.
2. The Ego Resiliency Scale (ER 89) (Block and Kreman, 1996) measures resilience on the basis of "ego-resiliency" alone, which is regarded as one of the important factors

in aiding resilience. Ego-resiliency in personality psychology has been rigorously researched in the past and has found to play a role in adjustment and adaptation but cannot be studied as the only indicator of psychological resilience.

3. The Resiliency Attitudes and Skills Profile by Hurtes and Allen (2001) derives its rationale from Wolin and Wolin's (1993) work on family counselling, which mainly focused on identifying the strength within family life as opposed to needs and deficits existing in them. The generalisability of the scale drawn from a western community life experiment, which only focuses on the positive family climate makes its usage in an Indian family system debatable.
4. The Connor-Davidson Resilience Scale by Connor & Davidson (2003) has been considered to be the closest to the gold standard of resilience measures in current times. It lacks theoretical clarification in relation to why domain-items from certain other authors were not considered or included in the final tool (Windle, Bennett & Noyes, 2011). Connor and Davidson's scale also does not include humour and forgiveness as resilience markers, which play a crucial role in assessing resilience (Singh and Khullar, 2017).
5. Psychological Hardiness Scale (PHS- SA) Hindi Version by A. K. Singh (2008) too follows Kobasa's (1982) 3-factor explanation of a hardy-behaviour i.e., Commitment, Control and Challenge. The 30-item scale directly measures behaviour along Kobasa's given domains and is well-suited for an Indian population but its only drawback lies in not serving as a global construct for Psychological Resilience as it does not touch upon the more dynamic aspect of resilience, which is adaptability.
6. Ungar, Liebenberg, Boothroyd, Kwong, Lee, Leblanc, Duque and Maknach (2008) maintain that the biggest challenge in measuring resilience is its cultural appropriateness as resilience differs in definition across cultures and even societies. Stressing on the 'emic' perspective, which does not study a concept in isolation but rather through the lens of respective populations and civilizations, resilience thus, may not be comparable across various cultures. Ungar and colleagues also lay importance on significant resilience markers that are common universally but may appeal to individuals differently across cultures, making the need for cultural suitability of an assessment tool highly significant.

Development of the Scale

Conceptualizing the dimensions of resilience

Psychological research in the field of resilience focused on the individual's negative attributes that were chiefly responsible for their general maladjustments in life. However, a big shift in 70s enabled positive psychology research to identify the protective factors that shielded an individual from developing those maladjustments in the first place and hence overturn the deficit-focused models (Patterson, 2002). These protective factors that focused on strengthening an individual's positive adaptation lower the risk of trauma and developing mental health problems when exposed to difficult situations. Fredrickson's (1998) broaden-and build theory of positive emotions that explored both positive and negative emotions among people, regarded positive emotions as an important tool in healthy adaptation during adversity, while negative emotions give one a shallow and unrealistic understanding of a situation (Fredrickson, 2001). The positive emotions, according to Fredrickson broadens or expands an individual's range of behavioural responses and builds their physical, behavioural, cognitive as well as social tools to take on a challenging situation.

After researching personality and social correlates rigorously, it is safe to say that no two persons would react to a novel stressor in exactly the same way, neither would it affect them in an identically similar manner. However, past research points out certain attributes that are common among resilient people. To study traits and enable resilience training, it is important to assess an individual's resilience on a multi-dimensional scale and the MDRS or the multi-dimensional resilience scale entails 10 protective factors or correlates of resilience:

Internal Locus of Control

Rotter (1971) gave the concept of Internal and External Locus of Control to explain a person's perception of- what or who is responsible for a life circumstance or a situational outcome at any given moment. This subjective perception may not be absolute and exists on a continuum with internal locus of control and external locus of control on either side. Internal locus of control refers to a belief that one's life does not work on the 'luck' or 'chance' principle and one's own ability and actions are responsible for the events occurring in one's life, while external locus of control refers to a belief that outcomes in their life are attributed to chance or powerful others. A person with a high internal locus of control tends to take charge under a stressful condition and someone with a low internal locus of control easily gives up in the face of adversity (Seligman, 1975).

An internal locus of control is most attributed to an empowered individual with their ability to move on from a state of powerlessness to having control of their difficult life situation (Keiffer, 1984). Zimmerman (2000) further explained that since internal locus of control is associated with both increased social action and lower stress levels, it makes it a very effective tool for empowerment. Individuals higher on internal locus of control tend to be socially competent (Luthar, 1991), highly motivated, mentally tough (Spector, 1982), self-determined, and deem themselves personally responsible for their situation (Andrews et al., 2003; Bandura, 1977). Internal locus of control has proven to be especially important among individuals, who have positively adapted after being exposed to traumatic events (Frazier, Keenan, Anders, Perera, Shallcross, & Hintz, 2011).

Self-acceptance

Sagone and Caroli (2014) suggested that a person with self-acceptance has a positive way of looking at various aspects of self, either good or bad they accept it in its entirety; while a person lacking self-acceptance often feels disappointed under unfavourable situations are over-critical about their shortcomings and even qualities that they feel do not amount to much in the real world. A person low on self-acceptance may wish they could wake up as someone else instead of fighting an adverse event using their strengths, hence indulging in unhealthy coping. Resilience protects against faulty coping and Individuals with lower levels of self-acceptance tend to have avoidant and maladaptive coping. Lower levels of resilience serve as a barrier in self-acceptance (Plexico et al., 2019).

A person who has an objective judgement of the self and possesses an understanding of one's past and how it may or may not help them to build a better present or future, shows a positive attitude even under unfavourable circumstances (Cong and Gao, 1999). They not only thrive in such situations but tend to live happier and fulfilling lives (Chen et al., 2017). Self-acceptance is also interlinked with numerous positive mental health abilities and traits that draw its roots from Ryan and Deci's (2001) "eudaimonic perspective". It helps individuals to be in tune with oneself, identify their personal needs and strive towards personal growth

hence, proving to be an important marker in their journey to become resilient individuals (Sagone and Caroli, 2014).

Assertiveness

Assertiveness as a character strength is crucial in taking control of the situation either by comfortably disagreeing with someone's point of view and denying them unwarranted favours while not being aggressive (Anastácio, 2016) or by defending one's beliefs, rights and feelings in an open and appropriate manner (Lange et al., 1976). Clear observations based on past research suggests that assertive children and adolescents undergo healthy development with lesser behavioural problems (Werner & Smith, 1982). Mental health researchers have stressed on the importance of assertiveness training as part of social skill-set among adolescents to help them grow up as resilient individuals (Agbakwuru & Stella, 2012).

Assertiveness training in the form of psycho-education is one of the ten dimensions of Cognitive Trauma Therapy for Formerly Battered Women with PTSD (CTT-BW), and the victims who had undergone the training reported to retaliate when experienced future abuse (Kubany and Watson, 2002). Women who are low on assertiveness are more stressed and look at stress as a threat, while highly assertive women tend to experience lower stress in general (Tomaka et al., 1999). Whiffen et al. (2000) reported that among men with experiences of childhood sexual abuse low levels of assertiveness has been found to mediate depression.

Hardiness

Hardiness was first introduced as a protective factor for resilience by Kobasa and Maddi in the 80s through the hardiness construct, which was an interlink between the three C's namely, an individual's sense of commitment, control and challenge at the face of adversity. the construct helps the individual find a way to turn around a stressful situation into something that proves to be significant in their growth and serves as a learning experience. A person lacking in the construct may feel overwhelmed and alienated (Maddi & Kobasa, 1981, 1984). Hardiness has also emerged as an important factor in shielding combat patients from posttraumatic stress disorder and trauma (King et al., 1998; Waysman et al., 2001).

According to Kobasa and Puccetti (1983), 'personality hardiness' has cognitive as well as behavioural aspects entwined, which plays a major role in stress resistance thus alleviating illness. Cognitively hardy people maintain that they have better control over circumstances and treat change as an opportunity to drive these situations in their own way. Hardy people feel deeply connected in their interpersonal relationships or even their own commitment to self (Kobasa, 1979) and have a better quality of life in general (Hoge, Austin, & Pollack, 2007). Hence, apart from stress-illness mitigation, cognitive hardiness safeguards individuals from major stressors (Maddi et al., 2006) making it a relevant characteristic to possess when faced with highly demanding situations (Bartone, Roland, Picano, & Williams, 2008).

Forgiveness

Forgiveness has been regarded as an important component in resilience studies (Broyles, 2005; Faison & Womack, 2007) as it is strongly linked with one's mental health and well-being (Karremans, Lange, Ouwerkerk, & Kluwer, 2003). The studies on resilience that have laid importance on 'protective factors' have regarded forgiveness as one of the most crucial aspect in aiding well-being (McCullough, Emmons, & Tsang, 2002). It is seen that an individual, who forgives, in a way cuts the negative memory of the situation that was brought about and is able to thus avoid the negative consequences in their life that may have followed

had it been left unresolved (Zechmeister and Romero (2002). Therefore, the act of forgiveness rids one of the negative feeling of holding on to hurtful experiences and fosters healing (Wolin and Wolin, 1993). It makes use of emotion-focused coping thereby lowering both physical and mental health risks (Worthington Jr. & Scherer, 2007).

In their research entitled "Dispositional forgiveness of self, others, and situations", Thompson, et. al. (2005) found that the level of mental health indicators like anxiety and depression are lower among highly forgiving individuals and they have a higher level of overall life satisfaction as well. It was further inferred that forgiveness helped one to cope with unpleasant experiences and traumatic life situations and makes one able to move on in order to 'see the good' that may come after a period of distress (Anderson, 2006).

Sociability

According to the American Psychiatric Association (2013) a social exchange is extremely important for survival and to thrive in life. The nature of this exchange could be both positive or negative and each would carry its own consequences. While positive social interactions like 'reward' facilitates well-being, a negative social exchange or social withdrawal on the contrary may impede one's mental hygiene. Such a person may experience loneliness, impulsive behaviour, use drugs or alcohol to escape the situation (Baumeister et al., 2005; Williams, 2007) and develop more serious psychiatric disorders (Slavich et al., 2010).

An individual measuring high on the construct of sociability is comfortable with people and adaptable in a range of social situations. Sullivan (1938) identified healthy social and interpersonal relationship building as an important skill-set in treating psychiatric disorders. Sociability is also regarded as an important factor in assessing a person's personality, coping style (Costa and McCrae, 1992) and to predict pervasive social dysfunction in later life (Schmidt & Schulkin, 1999). Highly sociable people are proficient in resolving conflicts in a social situation and make good team players. Supportive actions from one's social circles make it easy for the person to identify support thereby enhancing coping (Lakey & Cohen, 2000) and has been regarded as a key protective factor for building resilience (Valentine et. al., 1993).

Optimism

Seligman (2002) defined optimism as the style one adapts to explain their life situations as they occur. A highly optimistic person would view difficult life situations as impermanent and superficial, whereas someone with a negative outlook or a pessimistic approach may regard them as permanent, pervading and damaging to the self. Optimists attribute events and circumstances to a positive outcome that they believe awaits their future (Seligman, 1998). Keeping an optimistic outlook in life enables a person to stay hopeful and feel mentally secure even during difficult situations. Rasmussen, Schier, & Greenhouse (2009) reported that apart from adapting extremely well to stressors, individuals showcasing high level of optimism in their personality are protected from developing serious illnesses.

Optimism as an expectancy that the future beholds some good, nurtures psychological resilience. Extensive research points that optimism pacifies the overall reaction to adverse life circumstances among adolescents facing serious stress (Tusaie-Mumford, 2001), severe burn injury patients (He et. al., 2013) and prisoners of war (Segovia, Moore, Linnville, Hoyt and Hain, 2012). For individuals under highly challenging circumstances like in a military conflict, staying optimistic as a coping mechanism keeps them mentally tough. In a research

carried out on the US military troops in Iraq by Michigan State University (2011), combat personnel with a positive outlook had a lower chance of developing anxiety and depression.

Emotional Maturity

Kessler and Staudinger (2010) noted that past research in the field of resilience is often found using the constructs of emotional maturity and resilience interchangeably to define 'emotional resilience', which is different from physical and cognitive resilience. Studies have clearly shown a positive correlation between resilience and emotional stability (Friborg et al., 2005; Raje & Srivastava, 2014), meaning a person who has the ability to regulate their emotions can effectively use them in a more positive way in stress provoking situations (Ong, Bergeman, Bisconti, Wallace & Kimberly, 2006).

Stein (2008) noted that among young people leaving care, the ones who stood out with their resilient attitude indulged in extra-curricular activities that fostered emotional maturity and emotional competency. These adolescents and children were able to reframe a difficult situation in a way that instead of getting emotionally intimidated by adversity, they remained headstrong while identifying the damaging effects of a given situation. Newman & Blackburn (2002) in their list of resilience factors reported emotional dimensions such as certain emotional coping skills like empathy that influence an individual's overall resilience. An individual who makes use of emotional intelligence under a range of circumstances, tends to be emotionally mature.

Humour

A "good sense of humour" is often found to be a sought-after trait when choosing long-term partners. Such people find it easy to find joy, construct a joke or understand someone else's by appreciating it and laughing at it (Pande, 2014). This habit may also extend to one's life and during stressful situations. Laughter is the best therapy and the most resilient people are found to have this trait in common (Werner & Smith, 1992). As mentioned, having a sense of humour includes making other people laugh and heartily laughing at a joke, but more importantly- not taking oneself too seriously and making light of the matter. People with higher levels of humour as a trait are comparatively more satisfied with their personal roles and respond in a non-defensive and healthy manner under challenging situations (Kuiper, Martin & Dance, 1992).

Humour, as a resilience building strategy has proven to be highly effective as it directly impacts an individual's psychological well-being by alleviating stress. Individuals show resilience in dealing with adversity when they approach the issue in hand from a light hearted perspective (Hughes, 2008). Since indulging in a harmless and humorous banter every now and then makes coping within a group easier (Clompus & Albarran, 2016) significant positive relation between resilience and humour has been found among adolescents (Pande, 2014), army officers (Madigan, 2013), health care professionals (Bhattacharyya, Jena & Pradhan, 2019; McCann et al., 2013) and among employees dealing with workplace stress (Greifer, 2005). Lyttle (2007) suggested that individuals using positive humour to cope with maladaptive thoughts were fairly successful in doing so hence making humour an essential element in fighting stress.

Mindfulness

Stress relieving techniques have often relied heavily on mindfulness practices to manage a range of mental health conditions. Zinn (1994) described mindfulness as the awareness that

emerges when one sits with the present moment, giving it their purposeful and non-judgmental attention. An individual when confronted with an extremely stressful situation, reacts emotionally to it, which is biologically expressed as a prolonged activation of the amygdala. Paulson and colleagues found that mindfulness practice helped the amygdala to heal faster playing a key role in fostering resilience (Paulson, Davidson, Jha, and Kabat-Zinn, 2013).

Mindfulness can further be explained as the practice of being in the present moment to keep the mind from spiraling back to unpleasant events and feared experiences. Ryan and Deci (2000) reported that people tend to engage their thoughts and consciousness automatically in a hurtful past or a threatening future, the moment they lose awareness of the present. Such cognitive habit may become a chronic pattern, which keeps playing on its own if not regularly checked. Goldhagen and colleagues assessed the impact of mindfulness-based resilience intervention, and the training showed a drop of perceived levels of stress among resident physicians experiencing burnout (Goldhagen, Kingsolver, Stinnett & Rosdahl, 2015). Studies have also shown a positive correlation between mindfulness practice and resilience (Pidgeon and Keye, 2014; Jha, Stanley, Kiyonaga, Wong, and Gelfland, 2010).

Keeping the aforementioned protective factors in perspective, the items for the MDRS (Hindi) scale were constructed:

METHOD AND RESULTS

Item Selection

The development of the multi-dimensional resilience scale was based on the methodological review of the existing tools on resilience and then constructing a tool appropriate for the adult Indian population. The protective factors identified through a meta-analytical review of past resilience studies helped frame the dimensions of the present tool. A list of items under each dimension was constructed or drawn from the pre-existing tools for the identified dimensions. Hence the first draft of the items contained 10 lists of 178 items, but after realising an overlap and repetitiveness the item-list was extensively filtered and a total of 79 items were identified, which were distinct from the others on their respective dimension-list.

The items were arranged under dimension-wise lists without making any alterations. Every dimension was also given a detailed description what it wanted to measure in the tool citing the theoretical definitions and how it acted as protective factor in the study of resilience. Five subject experts from reputed institutions, who were familiar with the literature were acquainted with the purpose of the tool were given the list and definitions of the dimensions and were asked to score each item on a scale of 5. Items that were referenced to the same domain by at least 3 experts from the lists were retained. Items that were referenced by only 3 experts were put under the list of 'dispute items' and were further discussed with experts and reconsidered and retained only after rewording and minor changes. The items retained in the revised list had 50 items, 5 under each domain.

The purpose for the development of the present scale was to construct a tool that would effectively measure resilience as a personal as well as a trainable quality by focusing on the protective factors for resilience and not the vulnerabilities or risks associated with it. For this purpose, a methodical approach was followed while reviewing past research in the area to zero on significant domains and constructing items that would make the scale adequately reliable as well as valid. It was important to study the existing tools, their deficiencies and critical summary after charting out the purpose and the specific dimensions that the authors were

interested in studying. Once the outline of the tool was defined, the item content was designed with the help of existing tests measuring the dimensions within the construct.

The scale was developed in hindi and five subject matter experts from the field of psychology and psychometrics evaluated the initial draft. Each expert scored the items under each dimension and only the items favourably scored by 60% of the experts were included in the draft. The existing items hence maximized content validity as the expert review scored the items based on their relevance to the content dimension, use of language on the basis of clarity and conciseness and respondent sensitivity. The minimum cut-off score for each item, as mentioned was 60%. The close-ended statement items, which were to be both negatively and positively scored were then arranged in a list. The scale responses followed the Likert-scaling format (Likert, 1932, 1952) in a continuous scale design, with 5 options in Hindi that translated to- "strongly agree". "agree". "neither agree, not disagree", "disagree", "strongly disagree".

Table 1 : Numerical weights for the five alternative responses given in rating scale:

Statement	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Participants

The sample was randomly selected from an urban population with a total of (N=484) participants, comprising of 241 male participants and 243 female participants divided into 3 age groups i.e., 18-35 years, 36-45 years and 46-65 years.

Procedure

The test was conducted in a span of 2 years, individually and in clusters of 4-5 individual test takers. Each participant was comfortably seated and given necessary instructions to fill the questionnaire i.e., the time limit, the response structure and what each response meant. Before the participants started the test they were informed that the questionnaire would be a part of an ongoing doctoral research and is currently in its developing phase. The participants were assured that their individual results shall be kept confidential.

Table 2: Descriptive values:

		Total (n=484)	Male (n=241)	Female (n=243)	t-ratio
Age	M SD	172.32 16.79	173.38 17.72	171.27 15.74	0.09
Age groups	18-35 years 36-45 years 46-65 years	200 151 133	98 76 67	102 75 66	0.14 0.018 0.014
Kurtosis		0.11	-0.14	0.29	
Skewness		-0.19	0.03	-0.56	

Validity and reliability: Content validity of the resilience scale was evaluated by experts and the items scoring low by atleast 40% of the experts were dropped from the final draft. All the

items included in the scale have been scored by the experts and hence, said to possess content validity.

To calculate the concurrent validity the researchers validated the final draft against Psychological Hardiness Scale (PHS-SA) Hindi version (A. K. Singh, 2008). PHS-SA is said to measure the psychological hardiness or mental toughness and it yielded a correlation of 0.658, which is a high positive correlation.

To calculate the item-total reliability, the item-total correlation was calculated for the 50 items in the initial draft of the resilience scale. 27% top scorers and 27% bottom scorers were identified among a total of 120 participants (i.e. 32 top scorers and 32 lowest scorers= 64). In the shortlisted score chart, the items possessing a low item-total correlation were discarded. The final draft of the scale hence, came down to a 46-item scale.

The Cronbach Alpha coefficient, which is the total mean of all split-half reliabilities for the scale is 0.816. It denotes that the scale has internal consistency.

The split half reliability using the Spearman-Brown coefficient method is 0.798, and the Guttman Split half coefficient for the scale is 0.796.

Scoring Instructions

All the statements are jumbled and each item is given 5 response options, namely- Strongly Agree, Agree, Neither agree nor disagree, Disagree, Strongly Disagree. The positive statements (denoted with P next to the item no. in Table-3) must be scored 5 for Strongly Agree, 4 for Agree, 3 for Neither Agree nor Disagree, 2 for Disagree, and 1 for Strongly Disagree, while all the Negative statements (denoted with N next to the item no. in Table-2) have to be scored in a reverse manner. i.e., 1 for Strongly Agree, 2 for Agree, 3 for Neither Agree Nor Disagree, 4 for Disagree, and 5 for Strongly Disagree. Maximum score for the scale is 230, and minimum is 46.

Table-3: Dimension-wise item description and scoring

Dimension	**Item numbers (P=Positively rated items, N=Negatively rated items)**
Internal Locus of Control	1(P), 7(P), 18(N), 21(P)
Self-Acceptance	30(P), 35(P), 42(N), 45(P)
Assertiveness	2(P), 5(N), 9(P), 19(P), 33(N)
Hardiness	3(N), 8(N), 14(N), 17(N), 46(P)
Forgiveness	4(P), 6(P), 10(P), 13(P)
Sociability	11(P), 23(P), 27(N), 34(N)
Optimism	12(N), 20(P), 24(P), 26(P), 28(N)
Emotional Maturity	16(N), 25(P), 29 (P), 31(P), 36(N)
Humour	22(P), 32(N), 37(P), 39(P), 43(N)
Mindfulness	15(N), 38(P), 40(P), 41(N), 44(N)

Table 4: Age-wise Percentile Norms for the Multi-Dimensional Resilience Scale

	18-35 yrs		36-45 yrs		46-65 yrs		Interpretation
	Male	Female	Male	Female	Male	Female	
P95	196.25	191	208	195.8	200.6	190.65	
P90	190	189.7	200	192.4	200	188.6	High
P80	180.2	185	194.6	186.8	194.4	184	
P75	178	181.25	190.5	185	192	183	
P70	177	180	187.8	184	189.6	181.9	
P60	171.4	174	181	180.6	183.6	179	Average
P50	167	170.5	174.5	175	177	175	
P40	164	165.2	171.8	171	170.4	169	
P30	155.7	163.9	168	160.8	166.4	167	
P25	154	160.5	165	159	165	163.75	
P20	151.8	157.2	161.4	158.2	163.6	159.2	Low
P10	147.6	149	160	143.4	159	154.7	
n	98	102	76	75	67	66	

Table 5: Sample Items under each domain:

Internal Locus of Control	(1)कठोर मेहनत करके मनुष्य कुछ भी पा सकता है (7)मैं अपने परिश्रम, प्रयत्न और योग्यता के बल पर कुछ भी कर सकता/ सकती हूँ
Self Acceptance	(30) मुझे अपनी क्षमताओं तथा योग्यताओं का ज्ञान है, तथा वक़्त पड़ने पर उनको उपयोग में लाने की समझ भी है (35) हम सभी के भीतर किसी ना किसी तरह की सुंदरता छिपी होती है
Assertiveness	(2)मैं पूरी सच्चाई से अपने विचार व्यक्त करने में नहीं झिझकता/ झिझकती (5)मैं दूसरों की धौंस सह लेता/ लेती हूँ
Hardiness	(3)किसी नई जगह अकेले जाने में मुझे खो जाने का भय रहता है (8)दूसरों को अपने मित्रों, परिवार, में मस्त देखकर मुझे अकेलेपन का आभास होता है
Forgiveness	(4)यदि कोई आपके साथ छल करता है तो उसकी गलती को क्षमा करके भूल जाना ही अच्छा है (6)किसी को पीड़ा सहते देख मुझे तकलीफ होती है चाहे वह मेरा सबसे बड़ा दुश्मन ही क्यों न हो
Sociability	(11)मैं आसानी से दोस्त बना लेता/ लेती हूँ (23) एक समूह में रह कर इंसान वह सीख सकता है जो वह अकेले रह कर नहीं सीख सकता
Optimism	(12)मुझे सदैव ऐसा लगता है जैसे कुछ बुरा होने वाला है (20) चुनौतियों के बावजूद भी मैं आशावान रहता/ रहती हूँ
Emotional Maturity	(16)मैं भावनाओं में बहकर अपना व्यावहारिक नियंत्रण खो बैठता/ बैठती हूँ (25) तनाव में भी मेरा दिमाग ठंडा रहता है

Humour	(22) मैं हास्यमय बातों से दूसरों को गंभीर परिस्थितियों से निकालने की कोशिश करता/ करती हूँ (32) मुसीबत के समय मैं अपना मज़ाकिया स्वभाव खो बैठता/ बैठती हूँ
Mindfulness	(15)अक्सर कोई परेशान करने वाला विचार मेरे मन में घर कर लेता है (38) मैं जो भी करना चाहता/ चाहती हूँ, उसे पूरा करने के लिए हमेशा आगे बढ़ता/ बढ़ती हूँ

DISCUSSION AND CONCLUSION

The Multi-Dimensional Scale for Resilience (Hindi) is a self-rated scale, which may give an individual the insight into their own healthy and unhealthy ways of coping. The ten theoretically established protective factors being assessed in the scale may be practiced by individuals and help them acknowledge the maladaptive behaviours that one engages in sub-consciously. The daily habits in-turn color our overall personality and the way we react to trauma. The scale makes clear that our reaction to a situation can be improved if only one works on their 'strengths' pro-actively defying the old resilience models that focused on vulnerability as a precursor to identifying where one's true strength lies (Richardson, 2002). On correlating the MDRS-H results on a sample of (N=120) with results from the same sample on an already established similar measure (PHS-H) yielded a high criterion validity. Thus, highlighting that the present scale (MDRS-H) has a high internal consistency. It also shows that by assessing an individual along ten different psychological domains, it best serves as a wholesome and global measure of Psychological Resilience. MDRS-H has a theoretically interpretable dimension-list and a high Inter-item correlation, further suggesting consistency between the items from different dimensions measuring resilience.

The Multi-dimensional Scale of Resilience also satisfies the three core issues that were present in the existing measures of the construct, which are:

1. The measure makes use of ample theory backing item selection, with clear findings. Resilience is a vast concept and studying it along various abilities and psychological concepts was deemed important (Singh & Khullar, 2017). All the ten dimensions of the MDRS-H tool have a clear relationship with Psychological Resilience conceptually. In selecting these domains, each was examined along existing literature.
2. It does not focus singularly on measuring the resilient response as a fixed trait. MDRS-H measures the concept of psychological resilience as a function of more dynamic psychological concepts. Abilities that are not strictly innate in nature but are trainable.
3. MDRS-H is standardized on an Indian population of (18yrs-65yrs) on female and male individuals. It avoids the cultural gap in its content as against the majority of existing Resilience tools reviewed with item-construction more suited for a western population.

The scale is also significant in a setup involving clinical practice or research, where resilience intervention can be used. The scale focuses on measuring the protective factors of an individual, making it highly trainable as a construct as one can work on polishing their positive attributes to not just fight but also accept a tough situation. Moreover, the dimension-wise scores may individually provide a better understanding of the training needs in resilience training programmes that aim to explore, study and nurture these factors that directly affect an individual's psychological resilience (Rak, 2002). Individuals seeking psychiatric treatment, psychotherapy or professional counselling who often undergo self-doubt and

confusion may incorrectly identify their strengths as their vulnerabilities and vice-versa. With the help of a competent clinician, the Multi-Dimensional Scale of Resilience may help them in identifying or exploring these strengths and gain an objective perspective on their life before starting a more personalized therapy and training programme.

The challenge as accounted earlier in the review of existing measures of resilience lies in the tool's rationale, focus and applicability of the research instrument. A multi-dimensional scale specifically constructed for the Indian population may be beneficial for identifying and incorporating strategies to cope with trauma and give resilience training taking an individual's personal attributes into consideration. Resilience is an ever-changing interplay between individual personalities and the circumstances that they interact with. As posited by Newman & Blackburn (2002), resilience building strategies show significant potential in bringing mental health benefits in the lives of adolescents and children. Teaching them coping strategies through training via a support network or workshops to help them identify various dimensions of resilience may aid healthy mental development for children as well as emotionally resilient adults.

(The purpose of the resilience scale construction was based on the researchers' academic needs and the sample being studied was mainly hindi-speaking. The development of an English version of the scale is under process.)

REFERENCES

Agbakwuru, C., & Stella, U. (2012). Effect of assertiveness training on resilience among early-adolescents. *European Scientific Journal*, *8*(10), 69-84.

American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders* (American Psychiatric, Arlington, VA), fifth edition.

Anastácio, Z. C. (2016). Self-esteem, assertiveness and resilience in adolescents institutionalized. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology.*, *1*(1), 315-322.

Anderson, Mauren A., (2006). "The Relationship Among Resilience, Forgiveness, and Anger Expression in Adolescents". Electronic Theses and Dissertations. Paper 416.

Andrews, S. L., Tres Stefurak, J., & Mehta, S. (2011). Between a rock and a hard place? Locus of control, religious problem-solving and psychological help-seeking. *Mental Health, Religion & Culture*, *14*(9), 855-876.

Anthony, E. J. (1987). Risk, vulnerability, and resilience: An overview. *The invulnerable child*, 3-48.

Bandura. A. (1977) Self-efficacy: toward a unifying theory of behavior change. Psychological Review, 84, 191 -215.

Bartone, P. T., Roland, R. R., Picano, J. J., & Williams, T. J. (2008). Psychological hardiness predicts success in US Army Special Forces Candidates. International Journal of Selection and Assessment, 16, 78-81.

Baumeister, R. F., DeWall, C. N., Ciarocco, N. J., & Twenge, J. M. (2005). Social exclusion impairs self-regulation. *Journal of personality and social psychology*, *88*(4), 589.

Bhattacharyya, P., Jena, L. K., & Pradhan, S. (2019). Resilience as a Mediator Between Workplace Humour and Well-being at Work: An Enquiry on the Healthcare Professionals. *Journal of Health Management*, *21*(1), 160-176.

Broyles, L. C. (2005). Resilience: Its relationship to forgiveness in older adults.

Burton, N. W., Pakenham, K. I., & Brown, W. J. (2010). Feasibility and effectiveness of psychosocial resilience training: a pilot study of the READY program. *Psychology, Health & Medicine*, *15*(3), 266-277.

Chamberlain, J. M., &Haaga, D. A. F. (2001a). Unconditional self-acceptance and psychological health. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 19, 163–176.

Chamberlain, J. M., &Haaga, D. A. F. (2001b). Unconditional self-acceptance and responses to negative feedback. Journal of Rational-Emotive & Cognitive-Behavior Therapy, 19, 177–189.

Chen, S. Q., Liu, J. E., Zhang, Z. X., & Li, Z. (2017). Self-acceptance and associated factors among Chinese women with breast cancer. *Journal of Clinical Nursing*, *26*(11-12), 1516-1523.

Clompus, S., & Albarran, J. (2016) Exploring the nature of resilience in paramedic practice: A psycho-social study. International Emergency Nursing, 28(5), 1–7.

Cong, Z., Gao, W.F., 1999. The development of self-acceptance questionnaire and the test of its reliability and validity. Chin. J. Behav. Med. Sci. 8, 20–22.

Faison, M. W. (2007). *The relationship of forgiveness to psychological resilience and health among African American women* (Doctoral dissertation, CAPELLA UNIVERSITY).

Flett, G. L., Besser, A., Davis, R. A., & Hewitt, P. L. (2003). Dimensions of perfectionism, unconditional self-acceptance, and depression. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, *21*(2), 119-138.

Frazier, P., Keenan, N., Anders, S., Perera, S., Shallcross, S., & Hintz, S. (2011). Perceived past, present, and future control and adjustment to stressful life events. *Journal of personality and social psychology*, *100*(4), 749.

Friborg, O., Barlaug, D., Martinussen, M., Rosenvinge, J. H., & Hjemdal, O. (2005). Resilience in relation to personality and intelligence. *International journal of methods in psychiatric research*, *14*(1), 29-42.

Goldhagen, B. E., Kingsolver, K., Stinnett, S. S., & Rosdahl, J. A. (2015). Stress and burnout in residents: impact of mindfulness-based resilience training. *Advances in medical education and practice*, *6*, 525.

Greifer, A. N. (2005). Occupational resilience: Protective factors among clinical social workers. Dissertation Abstracts International Section A: Humanities and Social Sciences, 65(12), 4721.

Hoge, E. A., Austin, E. D., & Pollack, M. H. (2007). Resilience: Research evidence and conceptual considerations for post traumatic stress disorder. Depression and Anxiety, 24, 139-152

Hughes, L. W. (2008). A correlational study of the relationship between sense of humor and positive psychological capacities. Economics & Business Journal: Inquiries & Perspectives, 1(1), 46–55.

Ivtzan, I., Niemiec, R. M., & Briscoe, C. (2016). A study investigating the effects of Mindfulness-Based Strengths Practice (MBSP) on wellbeing.*International Journal of Wellbeing*, *6*(2).

Jha, A. P., Stanley, E. A., Kiyonaga, A., Wong, L., &Gelfand, L. (2010). Examining the protective effects of mindfulness training on working memory capacity and affective experience. *Emotion*, *10*(1), 54.

Karremans, J. C., Lange, A. M. V., Ouwerkerk, J. W., & Kluwer, E. S. (2003). "When forgiving enhances psychological well-being: The role of interpersonal commitment". Journal of Personality and Social Psychology, Vol. 84(5), pp.1011-1026.

Keiffer, C. (1984). Citizen empowerment: A developmental perspective. Prevention in Human Services, 3(16), 9-35.

Kessler, E. M., & Staudinger, U. M. (2010). Emotional resilience and beyond: A synthesis of findings from lifespan psychology and psychopathology.

Keye, M. D., & Pidgeon, A. M. (2013). Investigation of the relationship between resilience, mindfulness, and academic self-efficacy. *Open Journal of Social Sciences*, *1*(06), 1.

King LA, King DW, Fairbank JA, Keane TM, Adams GA. 1998. Resilience-recovery factors in post-traumatic stress disorder among female and male Vietnam veterans: hardiness, postwar social support, and additional stressful life events. J Personality Soc Psychol 74:420–434.

Kobasa, S. C. (1979). Stressful life events, personality and health: an inquiry into hardiness. Journal of Personality and Social Psychology, 37, 1–11.

Kobasa, S. C. (1982). The hardy personality: Toward a social psychology of stress and health. *Social psychology of health and illness*, *4*, 3-32.

Kobasa, S. C., & Puccetti, M. C. (1983). Personality and social resources in stress resistance. *Journal of personality and social psychology*, *45*(4), 839.

Kubany, E. S., & Watson, S. B. (2002). Cognitive trauma therapy for formerly battered women with PTSD: Conceptual bases and treatment outlines. *Cognitive and Behavioral Practice*, *9*(2), 111-127.

Kuiper, N. A., Martin, R. A., & Dance, K. A. (1992). Sense of humour and enhanced quality of life. *Personality and individual differences*, *13*(12), 1273-1283.

Lange, A., Jakubwski, P & McGovern, T. (1976). Responsible assertive behavior: cognitive/behavioral procedures for trainers. Research Press.

Likert, R. (1932). A Technique for the Measurement of Attitudes. Archives of Psychology, 140, 1-55.

Likert, R. A. (1952). A Technique for the Development of Attitude Scales. Educational and Psychological Measurement, 12, 313-315.

Luthar, S. S., &Zelazo, L. B. (2003). Research on resilience: An integrative review. *Resilience and vulnerability: Adaptation in the context of childhood adversities*, *2*, 510-549.

Lyttle, J. (2007). The judicious use and management of humor in the workplace. Business Horizons, 50(3), 239–245.

Maddi, S. R., & Khoshaba, D. M. (1994). Hardiness and mental health. *Journal of personality Assessment*, *63*(2), 265-274.

Maddi, S. R., & Kobasa, S. C. (1981). Intrinsic motivation and health. In *Advances in intrinsic motivation and aesthetics* (pp. 299-321). Springer, Boston, MA.

Maddi, S. R., & Kobasa, S. C. (1984). *Hardy executive*. Dow Jones-Irwin.

Maddi, S. R., Harvey, R. H., Khoshaba, D. M., Lu, J. L., Persico, M., & Brow, M. (2006). The personality construct of hardiness, III: Relationships with repression, innovativeness, authoritarianism, and performance. Journal of Personality, 74, 575-598.

Madigan, E. (2013). 'Sticking to a Hateful Task': Resilience, Humour, and British Understandings of Combatant Courage, 1914–1918. *War in History*, *20*(1), 76-98.

Masten, A. S., & Reed, M. G. J. (2002). Resilience in development. In Snyder, C. R., & Lopez,. S. J. (Eds.), Handbook of Positive Psychology (pp. 74–88). Oxford: Oxford.

McCann, C. M., Beddoe, E., McCormick, K., Huggard, P., Kedge, S., Adamson, C., & Huggard, J. (2013). Resilience in the health professions: A review of recent literature. International Journal of Wellbeing, 3(1), 60–81.

McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). "The grateful disposition: A conceptual and empirical topography". Journal of Personality and Social Psychology, Vol. 82(1), pp. 112-127.

Meredith, L. S., Sherbourne, C. D., &Gaillot, S. J. (2011). *Promoting psychological resilience in the US military*. Rand Corporation.

Michigan State University. (2011, January 5). Resiliency on the battlefield: Soldiers with a positive outlook less likely to suffer anxiety, depression. Science Daily. Retrieved from http://www.sciencedaily.com/releases/ 2011/01/110104101340.htm

Moeller-Saxone, K., Davis, E., Stewart, D. E., Diaz-Granados, N., & Herrman, H. (2015). Promoting resilience in adults with experience of intimate partner violence or child maltreatment: a narrative synthesis of evidence across settings. Journal of Public Health, 37(1), 125-137.

Newman, T., & Blackburn, S. (2002). Transitions in the Lives of Children and Young People: Resilience Factors. Interchange 78.

Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of personality and social psychology*, *91*(4), 730.

Pande, N. (2014). Effect of sense of humour on positive capacities: An empirical inquiry into psychological aspects. *Global Journal of Finance and Management*, *6*(4), 385-390.

Paulson, S., Davidson, R., Jha, A., & Kabat-Zinn, J. (2013). Becoming conscious: the science of mindfulness. *Ann NY Acad Sci*, *1303*(1), 87-104.

Pidgeon, A. M., & Keye, M. (2014). Relationship between resilience, mindfulness, and pyschological well-being in University students. *International Journal of Liberal Arts and Social Science*, *2*(5), 27-32.

Plexico, L. W., Erath, S., Shores, H., & Burrus, E. (2019). Self-acceptance, resilience, coping and satisfaction of life in people who stutter. *Journal of fluency disorders*, *59*, 52-63.

Raje, D., & Srivastava, N. (2014). A study of emotional maturity and resilience among thejuvenile delinquents and non-juvenile delinquents. *Indian Journal of Health & Wellbeing*, *5*(9).

Rak CF. 2002. Heroes in the nursery: three case studies in resilience. J Clin Psychol 58:247–260.

Rasmussen, H., Schier, M., & Greenhouse, J. (2009). Optimism and physical health: A meta-analytic review. Annals of Behavioral Medicine, 37, 239– 256. doi:10.1007/s12160-009-9111-x

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of clinical psychology*, *58*(3), 307-321.

Rotter, J. B. (1971). External control and internal control. Psychology Today, 5, 37–59.

Ryan, M.R. & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. Annual Review of Psychology, 52, 141-166.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. American Psychologist, 55, 68–78.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of personality and social psychology*, *57*(6), 1069.

Sagone, E., & De Caroli, M. E. (2014). Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences*, *141*, 881-887.

Segovia, F., Moore, J. L., Linnville, S. E., Hoyt, R. E., & Hain, R. E. (2012). Optimism predicts resilience in repatriated prisoners of war: A 37-year longitudinal study. *Journal of traumatic stress*, *25*(3), 330-336.

Seligman, M. (1998). Learned optimism. New York: Pocket.

Seligman, M. E. P. (2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment. New York: Free Press/Simon and Schuster.

Seligman, M. E., &Csikszentmihalyi, M. (2014). *Positive psychology: An introduction* (pp. 279-298). Springer Netherlands.

Shifren, K., & Hooker, K. 1995. Stability and change in optimism: A study among spouse caregivers. Experimental Aging Research, 21: 59-76.

Singh, A. K. (2008). Psychological Hardiness Scale (PHS-SA). Agra: National Psychological Corporation.

Singh, S., & Khullar, S. (2017). Resilience: A detailed overview (1175675312 881010967 D. K. Upadhyay & 1175675313 881010967 M. Agrawal, Eds.). In *Youth mental health well-being and development issues* (1st ed., pp. 3-25). New Delhi: Bharti publications.

Slavich, G. M., O'Donovan, A., Epel, E. S., & Kemeny, M. E. (2010). Black sheep get the blues: A psychobiological model of social rejection and depression. *Neuroscience & Biobehavioral Reviews*, *35*(1), 39-45.

Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological bulletin*, *91*(3), 482.

Stein, M. (2008). Resilience and young people leaving care. *Child Care in Practice*, *14*(1), 35-44.

Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S., Heinze, L.,Neufeld, J. E., Shorey, H. S., Roberts, J. C., & Roberts, D. E. (2005). "Dispositional forgiveness of self, others, and situations". Journal of Personality, Vol.73, pp.313-359.

Tomaka, J., Palacios, R., Schneider, K. T., Colotla, M., Concha, J. B., &Herrald, M. M. (1999). Assertiveness predicts threat and challenge reactions to potential stress among women. *Journal of Personality and Social Psychology*, *76*(6), 1008.

Tugade, M. M., Fredrickson, B. L., & Barrett, L. F. (2004). Psychological Resilience and Positive Emotional Granularity: Examining the Benefits of Positive Emotions on Coping and Health. *Journal of Personality*, *72*(6).

Tusaie-Mumford, K. (2001). Psychosocial resilience in rural adolescents: Optimism, perceived social support and gender differences (Doctoral dissertation, University of Pittsburgh).

Ungar, M., Liebenberg, L., Boothroyd, R., Kwong, W. M., Lee, T. Y., Leblanc, J., Duque, L., & Makhnach, A. (2008). The study of youth resilience across cultures: Lessons from a pilot study of measurement development. *Research in Human Development*, *5*(3), 166-180.

Valentine, L., &Feinauer, L. L. (1993). Resilience factors associated with female survivors of childhood sexual abuse. *American Journal of Family Therapy*.

Vincke, J., & Bolton, R. (1994). Social support, depression, and self-acceptance among gay men. *Human Relations*, *47*(9), 1049-1062.

Waysman M, Schwarzwald J, Solomon Z. 2001. Hardiness: an examination of its relationship with positive and negative longterm changes following trauma. J Traumatic Stress 14:531–548.

Whiffen, V. E., Thompson, J. M., & Aube, J. A. (2000). Mediators of the link between childhood sexual abuse and adult depressive symptoms. *Journal of Interpersonal Violence*, *15*(10), 1100-1120.

Williams, K. D. (2007). Ostracism. *Annu. Rev. Psychol.*, *58*, 425-452.

Windle, G., Bennett, K. M., & Noyes, J. (2011). A methodological review of resilience measurement scales. *Health and quality of life outcomes*, *9*(1), 1-18.

Wolin, S. J., & Wolin, S. (1993). The resilient self: How survivors of troubled families rise above adversity. New York: Villard Books.

Worthington, E. L., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypotheses. *Psychology & Health, 19*(3), 385-405.

Zechmeister, J. S., & Romero, C. (2002). "Victim and offender accounts of interpersonal confl ict: Autobiographical narratives of forgiveness and unforgiveness". Journal of Personality and Social Psychology, Vol. 82, pp.675-686.

Zimmerman B. J., (2000), Self-Efficacy: An Essential Motive to Learn, Contemporary Educational Psychology n. 25.

Zinn, J. K. (1994). Wherever you go, there you are: Mindfulness meditation in everyday life. *Hyperion*, 78-80.

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