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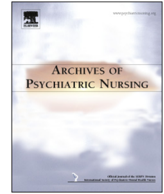

Concept Analysis: Resilience

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A B S T R A C T

This paper will systematically analyze the concept of resilience using an integrated review of literature. The historical perspective, attributes, antecedents, and consequences of resilience will be reviewed. A theoretical and operational definition will be provided. The Walker and Avant method will be used to describe the cases. Finally, the use of concept map will capture the relationships among the attributes, antecedents, consequences, and empirical indicators through clustering and chaining.

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PURPOSE OF THE CONCEPT ANALYSIS

Resilience is a concept that has been applied to research and practice in nearly every possible area of life and academia - from science to sociology, psychology, nursing, and medicine to business and ecology. With an understanding of its derivation and definition, an integrative literature review was conducted from the perspective of its relationship to psychology and mental health using Walker and Avant (2011). As a consequence of this literature review, the characteristics or 'defining attributes' of resilience most often described by investigators in the area of psychiatry and social behavior were identified (Holaday & McPhearson, 1997). The explanation of antecedents and consequences was incorporated into the case presentations focusing on HIV/AIDs population who are faced with adversity and have the potential for resilience.

HISTORICAL PERSPECTIVES

The etymologic derivation of the word 'resilience' is from the Latin resiliens, which means 'to rebound, recoil' (Harper, 2012, online) and provides the basis for its application to a variety of areas. Dictionary.com defines resilience as an ability to recover readily from illness, depression, adversity or the like (online) (Resilience, 2013a). Merriam-Webster dictionary (online) states resilience is the ability to recover from or adjust easily to misfortune or change (Resilience, 2013b). While the commonality of all definitions is the ability to recover from an altered state, they offer no explanation of the mechanisms by which resilience occurs.

Historically, the concept of resilience has been applied to every level of biology and human activity where mechanisms may vary significantly. Thus, for particular mechanisms of resilience, one must look to a more limited scope of the literature. For the purpose of this analysis, the focus of exploration is the mental health arena.

An extensive literature review was performed using search words and terms; resilience, protective factors, psychological well being, concept mapping, and nursing concept. Psychological resilience was the primary focus. No specific population or ages of individuals were requested in order to obtain the broadest scope of information. As a result over fifty books and articles were found using online databases but only about thirty-five were reviewed for this concept analysis. We excluded the remaining articles because they were not relevant for the population that we studied. Our inclusion criteria included studies that used resilience scales, research articles related to resilience and HIV/AIDs, articles focusing on global responses to traumatic events such as earthquakes, tsunamis, and violent acts and nurse's response. Search engines that were used included PubMed, CINAHL, ProQuest, PsycINFO and Google Scholar.

Garmezy is considered one of the pioneers of research on resilience in the area of psychology. His work was built on his earlier research in competence, schizophrenia, and the psychopathology of children in stressful conditions (Waters & Sroufe, 1983). In 1973, he published one of the first epidemiologic studies related to resilience (Garmezy, 1973). His interest in studying disease states led him to investigate why some patients could 'bounce back' and do well in life and others could not. While both groups of patients were 'stressed' by their diagnosis and psychological condition, one group demonstrated positive behavioral adaptation and the other did not. This work identified differences in the backgrounds of the two groups of patients. Garmezy suggested that the availability of psychosocial resources might contribute to counteracting the negative influence of an adversity such as schizophrenia, and promote positive behavioral adaptation (Garmezy & Rodnick, 1959). Though not referred to as resilience at the

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time, this study was one of the first to address major issues associated with the concept of resilience. Garmezy and Rodnick (1959) also studied children in poverty and the theory of "cumulative factors" contributing to outcomes was established. They proposed that a personality trait of the individual is not the sole source of an outcome, but rather it is a product of both internal and external factors. This combination of psychosocial elements and biological predispositions combines as risk and 'protective factors' that help to define what is now known as resilience.

In the 1960s, Garmezy's research began to focus on competence in children at risk for psychopathology. Then in the 1970s his research laid the groundwork for the international longitudinal study of resilience, science and developmental psychopathology. This was known as the project competence longitudinal study and continued for more than 20 years. The goal was to learn about resilience and to determine protective processes, measure key aspects of competence and exposure to risks that could explain how children overcome adversity. This study also identified the influence both internal and external factors have on the development of resilience. The groups were those who showed average or above average socioeconomic resources, cognitive skills, openness to experience, drive for mastery, conscientiousness, close relationships with parents, adult support outside the family and feelings of self-worth (Masten et al., 1999; Masten & Tellegen, 2012).

Werner and Smith's (1992) research had a profound impact on the concept of resilience. They conducted a longitudinal study focusing on children in Hawaii born in 1955, who grew up in poverty or were exposed to other adverse conditions such as divorce, alcoholism or mental illness. They examined the long term impact of these adverse influences on individuals' adaptation to life. Psychologists, pediatricians, social workers and public health nurses were involved in monitoring the children from infancy to adulthood. A notable finding of the study was that many of the children developed serious problems as adolescents but were able to turn their lives around and develop into caring and functional adults. These investigators also found that both internal and external factors can strengthen young people and their response to adversity. These internal factors include personality, advanced motor and language skills and 'self help skills'. External factors included family and community. They found that it was important for the child to establish a close bond with a competent emotionally stable person in the family at an early age who was as sensitive to their needs, that is, grandparents, older siblings, and others or someone from the community such as a neighbor and church member of elder mentors. The authors concluded that these protective factors or 'buffers' had a greater impact on life course of these children who grew up under adverse conditions than do specific risk factors or stressful events.

Thus, while much of the earlier research dealt with personal qualities of resilient children, later studies acknowledged the contributions of external and internal factors that cultivate resilience. Subsequent research by authors in the field such as Luthar (1999), Rutter (1987) and Kumpfer (1999) have proposed integrating the concept of protective processes into the framework of resilience research. One can then determine points of intervention in individuals who are at risk for maladaption or not developing resilience, where the course may be changed to a positive behavioral adaptation. Such intervention may include community or church projects, participating in setting goals in school, learning the value of assigned chores.

CURRENT USE OF THE CONCEPT

As described above, many of the historical studies were of a longitudinal design, studying individuals for many years in chronically oppressive environments. The acceptance of posttraumatic stress disorder (PTSD), as a clinical diagnosis in the 1980s, legitimized the psychopathology of these types of shorter duration stressful events. It also expanded the scope of more current research in the field of resilience beyond the developmental issues of children living in chronically stressed environments to issues and characteristics of everyday life of adults and children.

Bonanno (2004) is one whose research on resilience diverged from that of the traditional field and may better address current day issues (unexpected death of a spouse, a terrorist attack, or a natural disaster). He approached resilience from the perspective of 'potentially traumatic events'—acute rather than chronic stressors—which have been reported to occur at least once in an adult's life (Kessler, Somega, Bromet, Hughes, & Nelson, 1995). He suggested that the variable responses could be described by four prototypical trajectories: chronic dysfunction, recovery, delayed reactions, and resilience (Bonanno, 2004).

Bonanno (2004) defined resilience as the ability of adults in otherwise normal circumstances, who were exposed to an isolated and potentially highly disruptive event, to maintain relatively stable and healthy levels of psychological and physical functioning and the capacity for generative experiences and positive emotions. He subsequently extended this description to children with the qualification that resilience in children required more careful monitoring over multiple domains. He emphasized that this definition defined a greater difference between 'recovery' and 'resilience' with the former traditional recovery from traumatic events generally being associated with increased psychological problems for some period of time. Furthermore, he agreed with Masten (2001) that resilience was in fact quite common rather than uncommon as had been proposed by earlier researchers, and a fundamental feature of normal coping skills as manifested by seeking social support from others, moving forward with life and accepting your circumstances with hope. Bonanno aligned his research with his predecessors with respect to it being derived from a combination of risk and protective factors.

In recent years, there has also been an attempt to address the biologic and physiologic aspects of resilience and to integrate this research into the earlier research of 'protective factors'. The phenomenon which Southwick and Charney (2012) have defined as "neuroplasticity" refers to the ability of the human brain to change as a result of one's experiences. They have suggested that neuroplasticity is exhibited throughout an individual's life, and that by practice and training, stress protective factors such as strong social support, altruism and discipline or focus, can be increased, thus, improving adaptation and decreasing chances of depression or a decline in mood, health and general well being. They did, however, propose that there is a time limited window of enhanced neuroplasticity and that interventions made early in the development are likely to have a significant impact on future stress related resilience.

Given the high degree of stress in the medical arena, nursing has become a focus for studies of resilience in the workplace (Tusaie & Dyer, 2004). Similarly, for administration the challenge to recruit and retain nurses according to Hart, Brannan, and deChesnay (2012) is an area where nursing resilience is important. Investigators such as Jackson, Firtko, and Edenborough (2007) and others have taken the approach that resilience can be learned or developed once the characteristics that exemplify resilience are identified. Active participation of nurses through mentorship workshops for critical thinking and building hardiness, aids in the development and strengthening of personal resilience (Jackson et al., 2007 and Hart et al. (2012). Nursing management can facilitate resilience in the workplace through strategies that create work–life balance, assist in critical reflection to problem solve and build resolutions to help guide in future situations, and use shared governance as a nursing care model. Mallak (1998) found critical understanding and effective use of information to be a key factor of resilience. His belief that nurses' understanding of work situation when chaos occurs, knowing the

resources to access, and having confidence in multiple sources of information can be a major strategy for building resilience in nursing. To that end, a number of questionnaires have been developed and employed to determine one's resilience and are used in workplaces to designate appropriate staff for highly stressful positions. Shakespeare-Finch, Gow, and Smith (2005) also described characteristics that support resilience in the work place which include extroversion, openness, agreeableness, conscientiousness, humor, altruism, adeptness at facing fears, and optimism.

Recent traumatic events that happened in New York (World Trade Center attack in 2001; Hurricane Sandy in 2012) as well as other states like Connecticut (Sandy Hook Shooting) and Louisiana (Hurricane Katrina) describe how individuals and families remain resilient despite the traumatic experience. According to Dunkel Schetter and Dolbier (2011), majority of individuals are able to withstand trauma and continue to function reasonably. They also noted common outcomes as a result of traumatic events leading to post-traumatic stress symptom as well as positive outcomes leading to post-traumatic growth.

In the context of terminal illness such as HIV disease, resilience has been a topic of several research papers. Rabkin, Remien, Katoff, and Williams (1993) defined resilience as adaptation and adjustment that occurs despite multiple personal and social losses (De Santis, 2008, p. 277).

Farber, Schwartz, Schaper, Moonen, and McDaniel (2000) defined resilience as the relationship between hardiness (an aspect of resilience) and adaptation to HIV/AIDS. Thompson, 2002 views resilience as a period of uncertainty in which the individual adapts to living with HIV infection as a chronic illness, requiring an adjustment in future thinking that allows the individual an opportunity for consolidation and growth. (p. 280).

For the purpose of this paper, we are focusing on how patients diagnosed with HIV/AIDs have exhibited resilience as part of their disease process.

DEFINING ATTRIBUTES

According to Walker and Avant (2011), defining attributes are characteristics of a concept that are most frequently associated with the concept and allow the analyst the broadest insight into the concept. The following attributes were compiled after doing an extensive literature review of all uses of the term resilience. Although, terminology may change for different uses of the concept, the theme of resilience is the same.

Rebounding

This is a very common term used throughout resilience literature. Rebounding is described as the ability to bounce back after facing a life altering event (Gillespie, Chaboyer, & Wallis, 2007). These individuals are able to acknowledge the adverse event but grow from it and move toward living a new “normal”. Patients living with HIV are able to view the disease as a chronic illness and not a death sentence, gain a sense of control over the disease, and integrate HIV into their life and lifestyle.

Determination

Merriam-Webster Dictionary defined determination as a firm or fixed intention to achieve a desired end (online) (Determination, 2013). In terms of resilience, this is an important characteristic because it gives individuals the belief that they can overcome any hurdles they have to face such as being diagnosed with HIV. Determination will help them face their new situation and live a long healthy life.

Social Support

This has been found to be an important attribute for children and adults (Gillespie et al., 2007). Having at least one positive relationship with a significant person has been identified as an important existence in resilient outcomes. Pivnick and Villegas (2000) looked at a qualitative study of 25 children who were infected with HIV and had at least one HIV-infected parent. Despite facing barriers in life because of the disease, these children responded to these challenges by relying on their social support networks to express their feelings and help them deal with their life situations.

Self-efficacy

Self-efficacy is attributed with many stages, forms, and levels of resilience. Described as the belief in one's own ability to achieve a goal or overcome an event, it is often the reason ‘why some people snap and others snap back’ (Earnovilino-Ramirez, 2007 p. 77; Rutter, 1993). This allows the individual to remain strong when faced with a life changing event, such as being diagnosed with HIV.

MODEL CASE

A model case is an example of the use of the concept that demonstrates all the defining attributes of the concept (Walker & Avant, 2011).

Aaron, a 10 year old African American boy and his two younger sisters Latisha and Ashlee were raised by their mother, Dee, in East Harlem. They are all living with HIV. Their mom was infected through IV drug use and unsafe sex and Aaron and his two sisters were perinatally infected. They were all engaged in care and saw a doctor on a regular basis but Dee sold all of their anti-retroviral (ARV) medications for drugs. Since their mom was usually high, she did not take care of herself or her children.

This continued until Dee ended up dying of complications from AIDs when Aaron was 18. Watching his mom die from this disease, he was determined for him and his sisters not to end up like her. He worked during the day and took college classes at night. He was also the primary caretaker of his two sisters. He diligently took his ARVs and saw his doctor on a regular basis. He met a girl at school and they fell in love and got married. She knew of his status and they were very careful to prevent her from getting infected. They even had two little boys who were both negative. Aaron moved his family out of east Harlem to a nice neighborhood in Queens. Based on this case study, the individual demonstrated positive outcomes and was able to lead a successful life in the community and establish a family despite the death of his mother at such a crucial age in his development and his diagnosis. This is a model case because of Aaron's ability to rebound, his determination to achieve, his ability to find social support in his relationship and community and finally his capability to overcome the hardship of his diagnosis and was able to live a fulfilling life.

ADDITIONAL CASES

Borderline

Borderline case contains most of the defining attributes of the concept being examined but not all of them (Walker & Avant, 2005).

Latisha was 8 years old when their mom passed away. In high school, during her senior year, she met Samuel and fell in love. Samuel is a high school dropout and made a living dealing drugs. Latisha started using drugs socially at first, but then developed a serious crack addiction. Latisha and Samuel lived together for 5 years before she became pregnant. She continued to use drugs during the pregnancy and did not receive prenatal care because she did not want Samuel to

know she was HIV positive. She delivered a baby girl, Desiree at 32 weeks. Desiree was admitted to the neonatal intensive care unit (NICU) because of respiratory distress and withdrawal symptoms. At this time, Desiree was diagnosed with HIV and Samuel was informed. Samuel confronted Latisha and she revealed that she was positive since birth and did not think it was a big deal.

After Samuel was diagnosed, he became very irate and began to physically and emotionally abuse Latisha. When Latisha brought Desiree home, the abuse escalated until she became fearful for her and the baby's life. This prompted her to move out and enter a women's shelter. In the shelter she bonded with another woman, and they decided to share an apartment. While living together, they both completed their graduate education diploma (GED) and got jobs at the local grocery store. One night while working late, Latisha was raped by another employee. She was unable to cope and resorted to using drugs again. This continued for 6 months until her roommate forced her to enter a rehabilitation facility, and threatened to report her to child protective services if she left the program. Although Latisha completed the program successfully, she continues to experience depression and feelings of isolation. She finally sought psychiatric care. This case deviates from the model case wherein Latisha continues to bounce back and forth (rebounding) yet internally, is paralyzed to integrate and cope with her psycho-emotional problem. Therefore, this is a borderline case because Latisha was unable to obtain all of the defining attributes unlike her brother.

Related

Related case is similar to the concept being examined and is related to the concept but does not contain the critical attributes (Walker & Avant, 2005).

Desiree grew up in a bad neighborhood in Harlem. Her mother, Latisha worked as a cashier in a grocery store and tried to raise Desiree in a loving environment. She did not earn a lot of money; therefore, she could not afford the things that Desiree wanted. This angered Desiree and she was envious of her friends and was determined to have everything she wanted when she grew up. She also resented her mother's HIV positive status and blamed her for transmitting the disease to Desiree; therefore she denied her diagnosis and did not engage in treatment. She fell in love with Jason, a leader of a notorious gang, and decided to join. Since Desiree was dating him, she was welcomed into the gang and was well taken care of. She thrived in this life and stayed with Jason, until he was shot and killed. Jason's best friend, Kyle, comforted her. Despite Kyle's abusive behavior, Desiree moved in with him to fulfill her desire in living the life she wanted, which is, getting the financial support to fulfill her material needs. This is an example of a related case because Desiree clearly demonstrates her ability to adapt and thrive in a nontraditional and potentially unsafe lifestyle. She has a need to control individuals around her but has no desire to turn her situation into a positive one. Her survival is fueled by her self-centeredness instead of self-efficacy. Her support mechanisms are unhealthy and she chose to ignore her diagnosis and not seek treatment.

Contrary

Contrary case is a clear example of what is not (Walker & Avant, 2005).

Ashlee was 6 years old when her mother died and she moved in with her brother. Starting in middle school she had behavior problems, was often truant and was sent to a juvenile home. She drifted in and out of juvenile homes, committed crimes, sold herself for drugs and eventually died of an overdose. This demonstrates the lack of adaptation and lack of conscious determination to 'rise' above adversities.

ANTECEDENTS

As per Walker and Avant (2011) antecedents are criteria that must come before the concept in order for it to occur. Throughout the literature, an antecedent that was repeatedly found to be a requirement for the development of resilience was the presence of an adverse or traumatic event. This event could place an individual at risk for compromising their ability to cope and overcome stressors. Secondly, once an adverse event occurs or is present, it must be interpreted as being physically and/or psychologically traumatic. Depending on their response to these stressors, individuals might develop protective factors which can decrease both the effects and negative reactions to risk (Rutter, 1987). Once the individual has a realistic understanding of the circumstances, then, this third antecedent will help them accept their situation and therefore become resilient.

CONSEQUENCES

According to Windle (2011), "Consequences are the end-points that occur as a result of the antecedents and attributes of resilience" (p. 158). The outcomes of resilience should demonstrate effective coping process and sound mind and body even when faced with adverse situations. Many consequences of resilience have emerged in the literature, such as integration, personal control, psychological adjustment, personal growth, and effective coping. However, integration and effective coping clearly demonstrate the outcomes of resilience.

Integration

Windle's (2011) research focusing on children and adolescents noted that, the achievement of age appropriate developmental tasks such as learning to read and write, going to school, and interacting with peers in a positive manner are examples of positive outcomes.

Effective Coping

Effective coping can be best described as successfully dealing with an adverse event and still being able to live life to the fullest. Johansen and Kohli (2012) describe the coping mechanisms of long term HIV survivors living in rural and semi rural areas. They found that spirituality, having a sense of control, and social support were related to positive outlook on life which allowed them to plan for the future, when originally their future appeared to be grim.

THEORETICAL DEFINITION

The theoretical definition of resilience is one's ability to bounce back or recover from adversity. It is a dynamic process that can be influenced by the environment, external factors, and/or the individual and the outcome. Haase and Peterson (2013) discuss that resilience can occur either as a process or as a motivational life force that can be developed in individuals. "Nurses bear witness to tragedy, suffering, and human distress as part of their daily working lives, and because of the stressors associated with assisting others to overcome adversity, resilience is identified as essential for nurses in their daily work" (Tusaie & Dyer, 2004).

In context of the case scenario for people living with HIV/AIDS (PLWHA), the presence of the disease is a traumatic event. PLWHA undergo a process of confronting their own mortality, accepting the fatality of HIV/AIDS, and dynamic adaptation and integration of living with the disease. This adversity leads to post-traumatic growth thus, enabling PLWHA to be resilient.

OPERATIONAL DEFINITION

According to Walker and Avant (2005), a theorist introduces the reader to the critical defining attributes using the theoretical definitions which are usually abstract and may not be measurable. An operational definition is utilized to be able to measure a concept. The operational definition views the positive outcomes in life. According to Karaırmak (2010), "Resilience is a stress-resistant construct in human capacity that is difficult to measure and define. Although there are some measures to quantify resilience in children and adolescents, there are only a few measures intended to assess resilience in adults (p. 351)." In our review of the literature, we were unable to find a scale that directly measured our identified attributes. However, it was noticed that there are similar characteristics that have been demonstrated as a personality trait or as an outcome of one's coping mechanism that is precipitated by a traumatic event. These traits or outcomes can include personal competence, acceptance of self and life, finding meaning in life, perseverance, equanimity or acceptance of events that happen through life and self-reliance (Resnick & Inguito, 2011). The clearest dynamic of resilience are best addressed by quantitative scales that are correlated with outcome measures specific to the population and domain of resilience (Tusaie & Dyer, 2004). For PLWHAs, the operational definition of resilience can be described as the ability of the individual to observe compliance to HART (highly active antiretroviral therapy), capacity to reach out and support other individuals suffering from HIV/AIDS, and consciously avoiding risky behaviors to prevent HIV transmission and acquiring STIs (sexually transmitted infections).

EMPIRICAL REFERENTS

Empirical referents are classes or categories of actual phenomena where their existence or presence demonstrates the occurrence of the concept itself (Walker & Avant, 2011). Based on this definition, the focus of using an empirical instrument is to recognize or measure the occurrence of the defining characteristics or attributes of the concept of resilience. The conceptual definitions of resilience from multiple disciplines (nursing, psychology, and psychiatry), age population, and the context or framework of the study, have to be considered when choosing the survey instrument (Gillespie et al., 2007).

There are multiple self-rating instrument scales that have been developed and used to study diverse populations (children, adolescents, adults, and older adults). During Windle, Bennett, and Noye's (2011) review of nineteen resilience scales they noted that four were refinements of the original measure. In their review they found that the Connor–Davidson Resilience Scale, the Resilience Scale for Adults and the Brief Resilience Scale received the best psychometric ratings.

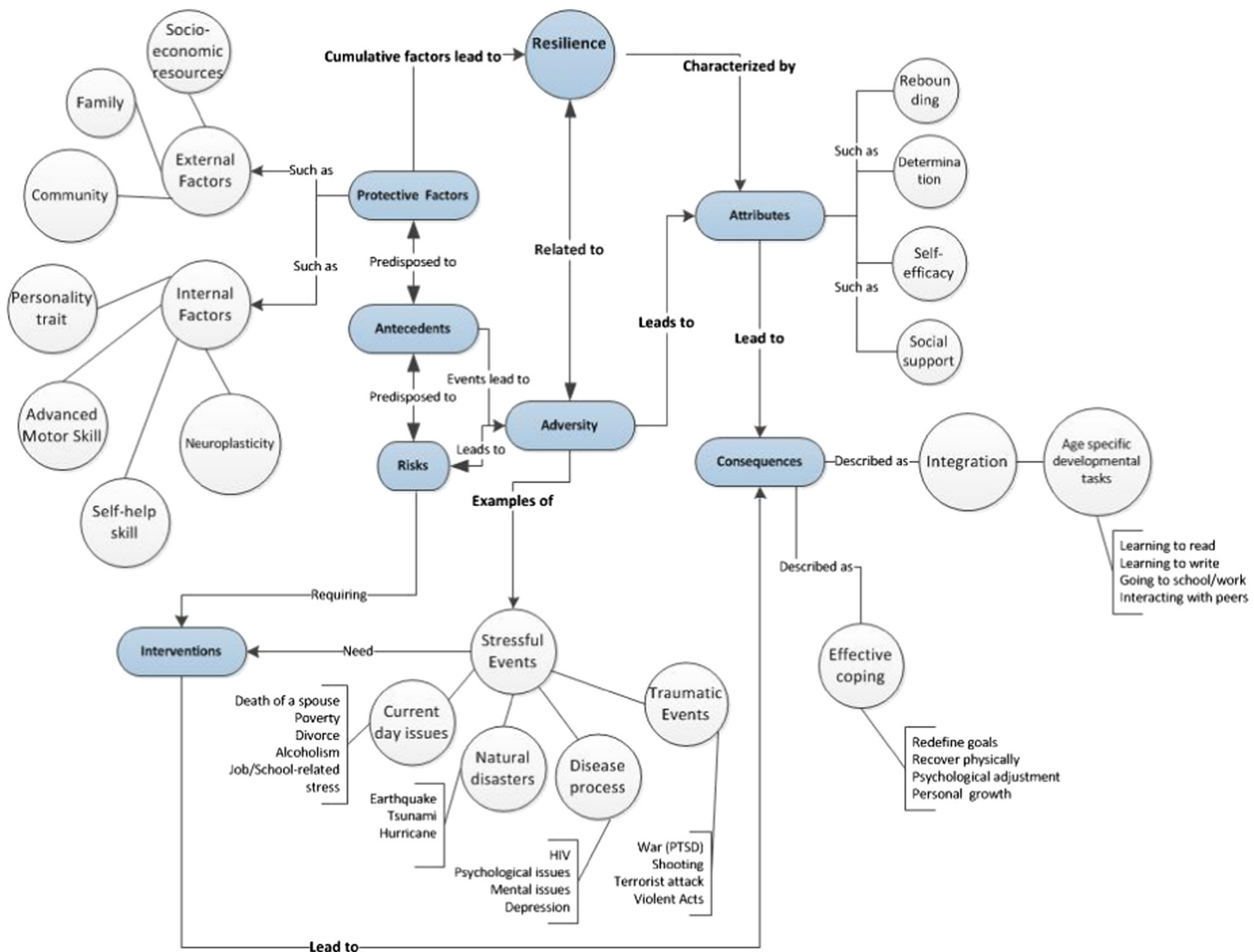

Fig 1. Resilience concept mapping.

1. Connor–Davidson Resilience Scale has been used with clinical and non-clinical populations to measure resilience or capacity to change and cope with adversity using a 25-item scale.
2. Resilience Scale for Adults measures five factors: personal competence, social competence, family coherence, social support and personal structure.
3. Brief Resilience Scale is a four-item on a point rating designed to measure coping tendencies and adaptation: personal coping resources, pain coping behavior, and psychological well-being (Gillespie et al., 2007). This scale is seen as a reliable means of assessing resilience as the ability to bounce back or recover from stress and may provide distinctive and integral information about individuals who are coping with health-related stressors such as HIV/AIDs (Smith et al., 2008).

The Resilience Scale for Adults developed by Wagnild and Young in 1993 is the most frequently used measurement scale with reliability and validity supported by several small studies since 1990: Cronbach's alpha coefficient was consistently acceptable and moderately high ranging from 0.73 to 0.91 (Wagnild, 2009). According to De Santis (2008), Wagnild and Young (1993) has not been used to study resilience in the context of HIV infection, but researcher like Farber et al. (2000) have used the dispositional resilience scale to measure related concepts of hardiness to study resilience in patients with HIV.

CONCEPT MAPPING

Based on the historical perspective, review of literature, attributes, antecedents, and consequences, a concept map of resilience is presented (see Figure 1). Individuals have personality traits, protective factors, and experiences accumulated through life which precipitates resilience to surface from within as a process and/or develops as an outcome. Protective factors can either be internal or external factors. Examples of internal factors include personality traits, neuroplasticity, and acquisition of advanced motor or self-help skills. External factors can include family, community, and socioeconomic resources. These internal and external factors can either predispose to "protect" or place individuals "at risks" leading to resilience or maladaptation (Masten, 1994). Negative antecedents manifested by adversities experienced throughout one's lifetime can impact these risks and protective factors. These adversities are often stressful events such as trauma, natural disasters, current daily issues, and disease processes that are life-changing or terminal. As an outcome of these adversities, resilience either surfaces or develops characterized by attributes such as rebounding, determination, self-efficacy, and social support. As a consequence of these attributes, individuals can either cope effectively and/or integrate back into society. If maladaptation occurs, it is important that individuals seek interventions to help them acquire the attributes of resilience leading to positive consequences. Examples of effective coping include redefining goals, recovering physically, adjusting psychologically as well as personal growth and spirituality. Depending on the age of individuals, integration is manifested by learning to read and write, going to school/work, and interacting with peers. The consequences resulting from these adversities lead individuals to cope effectively and integrate back to the community.

CONCLUSION

Resilience continues to be a relevant concept in literature and in practical application especially in the HIV/AIDs population. This is an important concept not only to patients but also to caregivers who are impacted by this disease. In our review of the literature, we found that additional development needs to be done to measure the resilience of HIV/AID patients and nurses who are involved in their care.

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