

Case study: risk and resilience



There have been two main research strategies for measuring resilience; the variable-based approach and the individual-based approach. The variable-based approach does not directly measure resilience as a construct instead it looks at the relationship between variables. Specifically, it examines risk and protective factors and patterns of stress and competence associations thus inferring resilience based on patterns and statistical associations (Luthar, 1999). The aim of this approach is to describe the interaction between variables and it frequently uses moderators and mediators to explain the effects of protective factors on outcomes.

The individual-based approach on the other hand involves the “ isolation of a subset of individuals based on high risk and high competence” (Luthar, 1999). It uses categorical variables based on level of risk and can directly determine how many people can fall into the “ resilient” category. Therefore, this approach is able to provide descriptive data on these individuals so one can examine who they are, what protects them from risk and makes them different than the rest of the sample or population.

These approaches differ in the types of research questions they can answer and in their limitations. One is not necessarily better than the other although, the variable-based approach is the more traditional and prevalent approach in the resiliency literature. Luthar & Cushing (1999) offered some insight into the issues with measurement using these approaches in resilience research. For the variable-based approach the first limitation they identified was the “ lack of information on the actual number of individuals who faced high risk and were highly competent within the sample.” Their point being that there may be few individuals in the sample who actually

meet the stated criteria for resilience. This may also become an issue due to the variation within each sample. The individuals who are showing resilient characteristics may be considered in the top 10% on both risk and competence but this cut off is only meaningful in relation to the other individuals in that study's particular sample which may or may not be representative of the population. The second limitation identified by Luthar and Cushing (1999) on the variable-based approach is the "instability of findings involving such interaction effects" meaning it's instability as a measure of the resilient process due to the small effect sizes typically associated with interaction effects in statistical models. They feel that to be credible these types of findings would need to be replicated across many studies using similar measures and samples.

For the individual-based approach one area of concern is the amount of variability within the specifications used for categorizing high risk individuals as resilient. A few examples of the various requirements researchers have set for labeling resilient individuals include using the top third of distributions, top 16% of adjustment scores, and functioning better than the mean within the sample. The second problem identified was in the extent of domains that the individuals were required to be functioning well in. For example, does one label an individual resilient if they are high functioning in one or two domains but doing poorly in another? Some researchers look at the overall scores while others only look at specific domains in order to categorize resilient individuals. These discrepancies can be seen as a limitation to this approach. A further concern is that although it can be seen as a strength that the individual-based approach is able to identify the

number and characteristics of the subset of individuals categorized as resilient and provide a descriptive account; one must be careful not to assume that these “resilient” individuals will continue to be resilient without end or in the face of other types of adversity.

Each of these approaches lends themselves to different types of research designs. The individual-based approach requires that the constructs involved be categorical. For example, the presence vs. absence of pathology is a dichotomous categorical variable. But the variable-based approach can be used to analyze continuous measures of risk and competence which are more frequently used by resilience researchers.

Examples of the variable-based approach can be found in Marshall’s (2000) article analyzing peer influence on adolescent alcohol use. A second example would be the Luthar et al. (1993) article in which they conducted a variable-based analysis of stress and sociability predicting depression. The Vitaro et al. (1996) article is a good example of an individual-based approach in their study of personal and familial characteristics of resilient sons of male alcoholics. The Bolger (2003) analysis of peer relationships amongst maltreated children is another example of an individual-based approach.

Questions # 4

In simple terms resilience can be defined as, “successful adaptation despite risk and adversity” (Masten, 1994 as cited in Kumpfer, 1999). It can also be described as a dynamic process of positive adaptation that involves protective factors at the individual, familial, and contextual levels. In studying the resilience literature one realizes that this is a complicated

construct that can be defined and measured in numerous ways, consequently one must be cautious in the interpretation and generalization of findings from any given study. Resilience is clearly not a uni-dimensional domain. The three main issues to consider when examining the multidimensional nature of resilience are as follows:

Resilience may not be a reflection of global adaptation across all domains thus high scores in one domain do not necessarily translate to high scores in another domain. Some findings may even indicate that some high-risk children exhibit competence in some domains but exhibit problems in other areas. This can be seen in Luthar's (1993) study of inner city adolescents. He found that out of 25 children classified as "resilient" based on positive adaptation in one domain 15 of them were actually exhibiting extremely low competence in another domain. For that reason, I urge policy makers to consider the limitation of using the domains of high school graduation and employment to conclude global competence or resilience.

Resilience is not a static state of being (Luthar, 2000). All individuals show fluctuation over time within various adjustment domains. Luthar et al. (2000) states that, "Individuals at high risk rarely maintain consistently positive adjustment over the long term". Therefore just because individuals show high scores in one domain at one point in time this does not guarantee that they will maintain high scores in that same domain over time. High risk individuals may be faced with new vulnerabilities or previously effective protective factors may no longer be present thus one must be critical in assessing long term resilience from a cross sectional design that may merely point to a resilient trajectory. Vitaro (1996) conducted a longitudinal study of <https://assignbuster.com/case-study-risk-and-resilience/>

sons of male alcoholics and followed them from age 6 through 14. This study showed that children showed resilience and problem behaviors in different domains as they aged. It showed how considering different age periods will allow for examination of trends and can help to identify when maladjustment could occur and prevention efforts could be made before this time.

Variables that serve as a protective factor may not be consistent across all outcomes. O'Donnell's (2002) study of urban children exposed to community violence found that outcomes were independent and had different predictors depending on the level of risk factors. O'Donnell found that positive support from parents and schools were positively associated with resilience in children exposed to violence and these associations increased as the child's level of exposure to violence increased. She found that different types of support have different effects on children and that the effects varied based on level of exposure to violence. Most notably that peer support was negatively associated with resilience in the outcome domains of substance abuse and delinquency.

Question #6

1a) Although some researchers use the terms moderator and mediator interchangeably there are some important distinctions between these two types of variables. Moderators occur when the relationship between two variables is modified by a third variable. The modifying can either offset the impact or exacerbate the impact of the relationship between X and Y variables. A moderator variable can be qualitative or quantitative and it affects the direction or strength of the relationship between the independent

and dependant variables (Baron & Kenny, 1986). A moderator effect is said to occur when the relationship between these two variables is reduced or reversed when the moderator variable is added. So, the relationship between two variables changes as a function of the moderator variable.

The mediator variable is an intervening variable that makes it so the relationship between variable X and variable Y can be accounted for fully or partially by the third mediating variable. According to Barron & Kenny (1986) a mediator variable must meet three conditions:

Variations in levels of the independent variable must account for large portions of the variation in the mediator

Variation in the mediator must account for large portions of the variation in the dependant variable

When the mediator variable is controlled for then a previously significant relationship between the independent and dependant variable becomes considerably less significant

So, to establish mediation there must be a strong relationship between the mediating variable and the independent variable as well as the mediating variable and the dependant invariable. Thus, a variable is labeled as a mediator when it accounts for the relation between the independent and dependant variable. Moderator variables specify when certain effects will hold true and mediators specify how or why such effects occur (Baron & Kenny, 1986). Mediators explain the mechanism or underlying process of how X is related to Y.

1b) Typically one would test for a mediating variable when there is a strong correlation between the independent or predictor variable and the dependant or outcome variable. In contrast, moderator variables are introduced when you find an unexpectedly weak relationship between the predictor and outcome variable. This can occur when one has subpopulations within the same sample or one may find a relationship between two variables in one setting but not another.

2) Protective factors were described by Kumpfer (1999), as “ processes that are predictive of successful life adaptation in high-risk children (populations)”. These protective factors offset risk, buffer or lessen risk and negative outcomes. Garmezy (1983) described them as “ those attributes of persons, environments, situations, and events that appear to temper (mediate) predictions of pathology based upon an individual’s at- risk status.” Some researchers argue that protective factors can only be meaningful in the presence of risk therefore Sameroff (1999), offered an improved phrase to describe the positive pole of a risk factor; promotive factors. These promotive factors can be found in both high risk and low risk populations and have direct main effects on positive outcomes or lessening of negative outcomes. This is in contrast to protective factors which have an interactive effect and actually lessen the risk factor itself. Promotive factors help with positive outcomes regardless of the risk factor (no risk factor is necessary), but they also do not actually offset the risk factor. The same variable can be a protective and promotive factor, but protective factors would generally have “ no effect in low risk populations or be magnified in the presence of risk variables” (Gutman, 2002).

3) Conceptual Models

Mediation:

Alcohol Use of Adolescent Girls

Drug Using Peer Group Affiliation

Moderation: Maternal support has a moderating effect on the alcohol use of adolescent girls.

Maternal Support

Promotive Factor Effect: African American Adolescents

of risk factor

+

of school absences

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Parental Involvement

Protective Factor Effect: