

Validation of the Health Efficacy and Assertiveness Scale

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Abstract

Recently, health care has required the role of "patient" to change from a receptive role to an active one. Patients' responsibilities for discussing health with their physicians require greater health assertiveness and efficacy. There is not a validated survey examining patient assertiveness and self-efficacy. This study addresses this issue.

Problem

Recent changes in health care are changing the role of "patient" from a receptive role to an active one. (a) Health care information has become ubiquitous on the internet. (b) The "patients as partners" or "family centered care" initiatives (Beach et al., 2005; Stewart, 2012) encourage patients to be assertive and demonstrate self-efficacy with their health care needs. (c) The Affordable Care Act leads primary care providers (PCP) to cover mental health as well as physical health care (Kocher et al., 2010). As a result of these changes, patients are increasingly responsible for discussing health care needs with their PCP, therefore greater patient healthcare assertiveness and efficacy are required. However, there is not currently a validated survey instrument that examines both patient assertiveness and self-efficacy, while incorporating questions related to information seeking.

Purpose

Given the increasing expectation for the patient to be actively involved in his/her own health care than has been traditionally the case, validated measurements reflecting these evolving nuances in patient responsibility are warranted. The present study addresses this need through the development and validation of the Health Efficacy and Assertiveness Scale (HEAS) that incorporates aspects of self-efficacy and patient assertiveness.

Relevant Literature

Self-efficacy is defined as people's beliefs in their own abilities to manage upcoming situations and unexpected events (Bandura et al., 1996). Adherence to difficult medical regimens by patients is more consistent and longer lasting in those patients whose beliefs in their abilities to affect their health are high (Leary, 1985).

Health assertiveness is the ability to express one's health related thoughts, feelings, beliefs, and rights in an open, honest, and appropriate way. It has been associated with a desire for information (Braman & Gomez, 2004). It also may influence relationship preference with physicians.

Research Questions

1. Does the Health Efficacy and Assertiveness Scale (HEAS) show face and content validity?
2. Does the HEAS show construct and factorial validity?
3. Does the HEAS show concurrent validity?

Procedures

Participants and Recruitment

Two separate samples were recruited in order to validate the survey. The first sample of 205 individuals was recruited through a modified collaborative research method (Stadtlander et al., 2013). This method is commonly used to recruit hard to reach populations (Knight et al., 2009). In the collaborative method, members of a targeted group are considered research collaborators and recruit members from their community. The modified method's targeted collaborators (Research Assistants [RAs]) asked individuals from their social network to participate in the online survey.

The second sample, of 188 individuals was recruited through the Walden University participant pool over a period of 18 months. Walden University's Institutional Review Board approved this project: approval #01-21-14-0786474.

Concurrent Validation Measures

- 1) The Generalized Self-Efficacy scale (Schwarzer & Jerusalem, 1995).
- 2) Multidimensional Locus of Control scale (Levenson, 1973)
- 3) Multidimensional Health Questionnaire (MHQ; Snell & Johnson, 1997): Health Efficacy Subscale, Health Assertiveness Subscale, Health Illness Management Subscale, Internal Health Control Subscale.

Findings

Demographics

During the 18-month recruitment period, of the 393 individuals giving online consent, 340 (86.5%) completed the entire survey. Twenty participants lived outside the United States; 40 states were represented in the United States. The total sample was predominantly (77.6%) female, 67.4% were Caucasian, with a mean age of 46.8 years (SD =12.54), 47.1% had a master's degree. The majority (81.2%) reported being in good to excellent health, 65% had private insurance, 72.4% reported their primary health provider was a medical doctor (MD).

Findings, Cont.

RQ1. Does the HEAS show face and content validity?

Initial survey questions were developed from existing self-efficacy and assertiveness scales and modified to reflect health related issues; additional questions were added that addressed information seeking within a health context. Feedback from experts and a focus group was incorporated into a revised draft. After checking content validity and face validity, 21 items were retained in the final scale.

RQ2. Does the HEAS show construct and factorial validity?

Exploratory factor analysis was used to summarize data by grouping together variables that are inter-correlated (Munro 2005). The results of exploratory factor analysis with varimax rotation indicated Bartlett's test of sphericity was significant ($X^2= 4537.96, p = 0.0001$), and the calculated Kaiser-Meyer-Olkin measure of sampling adequacy value was 0.94, indicating that the sample was large enough to perform a satisfactory factor analysis. Finally, two factors were revealed, which together accounted for 56.33% of total variance. The two subscales included: "Assertiveness in Health," and "Self-Efficacy in Health."

RQ3. Does the HEAS show concurrent validity?

To test the concurrent validity, the General Self Efficacy Scale (Schwarzer & Jerusalem, 1995), Locus of Control (Scale (Levenson, 1973), and Four subscales of the Multidimensional Health Questionnaire (Snell & Johnson, 1997) were used. Table 1 shows the Cronbach's Alpha and Pearson's Correlations of these scales with the HEAS.

Table 1. Cronbach's Alpha and Pearson's Correlation between Concurrent Validity Scales and the HEAS Subscales

	Cronbach's Alpha	HEAS- Assertiveness	HEAS- Self Efficacy
General Self Efficacy Scale	.869	.434**	.521**
Locus of Control			
Internal Subscale	.324	.267**	.243**
Chance Subscale	.683	-.207**	-.158**
Powerful Others Subscale	.736	-.198**	-.146**
Multidimensional Health Questionnaire			
Health Efficacy Subscale	.893	.467**	.571**
Health Assertiveness Subscale	.879	.632**	.503**
Health Illness Management Subscale	.707	.378**	.438**
Internal Health Control Subscale	.859	.365**	.448**
Health Efficacy and Assertiveness Scale			
Assertiveness	.900	-	.648**
Self-Efficacy	.913	.648**	-

Limitations

The questions were derived through a reliance on past scales, rather than a ground up approach; thus, conceptualization of these variables may be limited. The validation surveys were lengthy and available on the computer, thus, only persistent people with computer access were included. The validation sample was more educated than the general United States population, thus additional research is needed.

Conclusions

The HEAS shows face, content, construct, factorial, and concurrent validity using a sample of 340 participants. The 3 concurrent validity scales were consistently related in the expected directions with the HEAS. The Pearson's correlations between all of the scales are significant and strong, though not perfect correlations thus supporting the HEAS subscales as separate and unique constructs.

Social Change Implications

With the implementation of the Affordable Care Act, health care providers are expected to enter into a partnership with their clients. The HEAS can be used by researchers and practitioners to better understand the impact of health efficacy and assertiveness in patients' responses to care and treatments. Both health efficacy and assertiveness are teachable and learnable skills, with the increasing self-reliance of healthcare practice, such skills will be needed and may require instruction.