Knowing Participation in Change, Engagement, and Satisfaction with Healthcare Decision-Making

Kathleen R. Sheikh, Ph.D., FNP-BC, CNE
Assistant Professor of Nursing
Widener University, Chester, PA
Widener University

Acknowledgements: Society of Rogerian Scholars, Martha E. Rogers Scholars Fund

ABSTRACT
The purpose of this study was to investigate the relationships power as knowing participation in change, engagement, and satisfaction with healthcare decision-making as theoretical manifestations of patient equipoise. This study was based the theoretical foundations of Barrett’s Theory of Power as Knowing Participation in Change and Hibbard and Mahoney’s Theory of Activation. This descriptive correlational study, analyzed data from 98 participants. Findings revealed moderate to high participant scores on measures of power as knowing participation in change, engagement, and satisfaction with decision-making and significant correlations, with moderate positive magnitude among these variables. Stepwise multiple regression revealed the linear combination of the freedom dimension of power and engagement was a significant indicator of satisfaction with decision-making.

Keywords: Power as knowing participation in change, equipoise, healthcare decision-making, patient engagement, patient satisfaction
Background

Participation in healthcare decision-making is an expectation for patients in the emerging healthcare delivery systems. Healthcare system reform presents opportunity for innovation in healthcare, and healthcare should be a mutual process of exploration and decision-making with the patient as an active participant in the process (Gold, 1997). Moving toward a paradigm shift in the healthcare of people should be based on health promotion, substantive nursing knowledge, and a philosophy of helping patients to knowingly participate (Barrett, 1994). Considering the patient as the center of care is based on a deep respect for patients as unique living beings, and the obligation to care for them on their own terms (Epstein, 2011).

The purpose of this study was to investigate the relationships among patients’ power as knowing participation in change, engagement in healthcare decision-making, and satisfaction with healthcare decision-making as theoretical manifestations of patient equipoise. In this study, the concept of equipoise was considered within the context of individual patient’s healthcare decisions. Through concept analysis completed by Sheikh (2012), equipoise is defined as a balance at a decision point in a patient’s healthcare care, and is constructed uniquely by each individual regarding their own healthcare decision-making. The nature of equipoise is not fixed, but fluid and evolves to reflect an individual’s well-being.

This study utilized the four dimensions of power as knowing participation in change, and the knowledge, skills, and confidence of patient activation, reflecting patient engagement as antecedents and indirect measures of the concept of equipoise in patient healthcare decision-making.

Barrett (1983) described that power as knowing participation is being aware of what one is choosing to do, feeling free to do it, and doing it intentionally. Power is connected to a
patient’s sense of well-being and progression toward self-defined health promoting behaviors. Patient activation compliments power by informing the degree to which patients understand they must play an active part in managing their own healthcare, and the extent to which they feel able to accomplish that role (Hibbard & Mahoney, 2010).

Insight into participants’ capacity to negotiate healthcare decisions will influence the nursing care needed for patients to achieve their own sense of what constitutes health, well-being, and desired healthcare outcomes. Connecting nursing knowledge with patient health outcomes will enable nurses to participate as sculptors in designing and carrying out nursing’s unique science-based services (Barrett, 1994).

**Theoretical Framework**

Theoretical foundations used for this study were this researcher’s synthesis and blending of the theory of Power as Knowing Participation in Change (Barrett, 1983) and the Theory of Activation (Hibbard & Mahoney, 2010). Equipoise is abstract and cannot be directly measured but appreciated in terms of how the two theories contribute to patient satisfaction with healthcare decision-making. The relationships among patient’s awareness, choices, freedom to act intentionally, and involvement in creating change, in conjunction with the patient’s knowledge, skills, and behaviors contributed to satisfaction with healthcare decision-making were explored as theoretical manifestations of patient equipoise at a decision point in a patient’s healthcare.

**Research Design**

A descriptive correlational design was used to explore the relationships among patients’ power as knowing participation in change, patients’ engagement in healthcare decision-making, and patients’ satisfaction with healthcare decision-making as theoretical manifestations of equipoise.
Characteristics of Sample

Following institutional review board approval, a snowball sampling approach was used to recruit participants who met the inclusion criteria of 18 years of age or older, completion of a high school education, able to read and speak English, and at least one diagnosed chronic condition. Chronic illness, as inclusion criteria was used to reflect literature regarding patients and healthcare decision-making. Recruitment was initiated on two university campuses.

Sample Size

The sample size was based on a moderate effect size of .13, statistical significance at the 0.5 level, a power of .80, and five predictor variables. A minimum sample size of 92 participants was required for this study, and the actual sample size obtained was (N = 98).

Instrumentation

Four research instruments were employed for this study: 1) Demographic Data Questionnaire (DDQ), 2) the Power as Knowing Participation in Change tool (PKPCT) Version II (Barrett, 1998) to measure patients’ power as knowing participation in change, 3) the Patient Activation Measure, 13-item (PAM-13) (Hibbard et al., 2005) to measure patients’ engagement in healthcare decisions, and 4) the Satisfaction with Decision Scale (SWD) (Holmes-Rovner et al., 1996) to measure patients’ satisfaction with healthcare decision-making. All questionnaires were compiled into one, research booklet for participants’ convenience.

The researcher-developed Demographic Data Questionnaire (DDQ) consisted of 12 items. Demographic information collected included age in years, gender, marital status, ethnicity, race, level of education, employment status, healthcare insurance status, persons involved in healthcare decisions, self-reported state of health, and diagnosed chronic conditions.
The Power as Knowing Participation Tool (PKPCT) Version II is a 52-item, 7-point semantic differential instrument used to measure power as knowing participation in change. The Patient Activation Measure (PAM-13) is a 13-item, 4-point Likert scale patient-completed questionnaire that was used as a theoretical measurement of patient engagement in healthcare decision-making. Patient activation is conceptualized as involving four sequential stages. In Stage 1, patients believe they have an important role to play in managing their conditions. In Stage 2, they have the knowledge needed to manage their health. In Stage 3, patients take action, using skills and behaviors to maintain their well-being. In Stage 4, patients are able to stay the course under stress (Skolasky et al., 2011). A patient’s level of activation may provide insight into how likely a patient is to engage in positive health behaviors that increase the prospect of positive outcomes.

The Satisfaction with Decision scale (Holmes-Rovner, 1996) is 6-items on a 5-point Likert scale, and measures three attributes of an effective decision: 1) was the decision informed, 2) if the decision was consistent with the person’s values, and 3) if the decision was carried through.

**Study Sample**

Two hundred research booklets were printed and distributed. A total of 112 (56%) of the research booklets was returned. Eleven of the research booklets were unusable because at least one of the inclusion criteria was not met. Three research booklets were excluded from the data set due to more than 10% missing data. Raw data from 98 (49%) complete research booklets were used for this study.

Descriptive statistics for categorical demographic data were computed, and include the frequency and percentage for gender, marital status, ethnicity, race, level of education,
employment, health insurance, limited treatment, healthcare decisions, state of health, and diagnosed chronic condition.

**Findings**

Research booklets were examined for completeness prior to data analysis, and yielded 98 completed, useable research booklets. Data from completed research booklets were entered into SPSS version 22. Four research questions and three hypotheses were addressed in this study.

Research Question One posed: What are patients’ perceptions of power as knowing participation in change, patients’ engagement in healthcare decision-making, and patients’ satisfaction with healthcare decision-making? Research Question One is descriptive; therefore, no hypothesis was warranted. Research Question One was answered by computing descriptive statistics for scores on the three research instruments. The findings revealed moderate to high scores on all three research instruments. The high scores lend support as theoretical manifestations of patient equipoise with healthcare decision-making.

Barrett (1994) identified power as one way in which human beings participate in patterning their potentials toward well-being, and power is essential to an individual’s experience of well-being (Barrett, 1983; Larkin, 2007; Kim et al., 2008; Kim, Smith, & West, 2012). Participant scores reflected the higher end of the total possible power score, inferring a perception of increased power to participate knowingly in decision-making, therefore a greater potential for well-being, and affirms power as a theoretical manifestation of patient equipoise; a balance at a decision point in healthcare.

**Research Question Two/ Hypothesis One**

A Pearson correlation matrix was computed to answer the second research question: What are the relationships among patients’ power as knowing participation in change, patients’
engagement in healthcare decision-making, and patients’ satisfaction with healthcare decision-making? The directional hypothesis for this research question was: There are positive relationships among patients’ power as knowing participation in change, patients’ engagement in healthcare decision-making, and patients’ satisfaction with healthcare decision-making.

The computed correlation matrix of power, engagement, and satisfaction with decision yielded all significant correlations at $p < .001$ (1-tailed) with moderate positive magnitude (.42 to .48 range). Research Hypothesis One was supported, there are positive relationships among patients’ power as knowing participation in change, patients’ engagement in healthcare decision-making, and patients’ satisfaction with healthcare decision-making.

Establishing initial, significant relationships among the research variables, as proxy variables of patient equipoise, lends preliminary foundational support to the use of the blended theory in this study. London (2007) proposed the concept of equipoise can be constructed around central issues that include a dimension of equipoise that regards the evaluative focus of the decision maker’s concern. A one-dimensional view of equipoise focuses attention on a single attribute of the intervention; usually the efficacy of the intervention. In comparison, a multidimensional view of equipoise encompasses all things when evaluating the attractiveness of an intervention. This study incorporated a multidimensional view of equipoise, and the selection of the proxy variables in this study were intended to reflect aspects of equipoise: a balance at a decision point in a patient’s healthcare.

**Research Question Three/ Hypothesis Two**

Research Question Three posed: What are the relationships among the four dimensions of patients’ power as knowing participation in change and patients’ engagement in healthcare decision-making? Research Question Three was answered by testing the hypothesis: The linear
combination of the four dimensions of power as knowing participation in change (awareness, choices, freedom to act intentionally, and involvement in creating change) will predict patient engagement in healthcare decision-making better than any one dimension alone. A stepwise multiple regression analysis was computed to test Hypothesis Two.

Research Hypothesis Two was not supported. Only the dimension freedom was significant at $p < .001$ with $R = .45$ and $R^2$ explained 20% of the variance in patient engagement in healthcare decision-making. The remaining power dimensions failed to enter the multiple regression equation due to multicollinearity. Hypothesis Two was not supported, but the relationship of freedom and engagement support the assumption that the nature of equipoise is not fixed, but uniquely constructed.

Feeling free to act as one wishes is critical to power; it impacts on the potency, and kinds of choices, including choosing the particular changes one is involved in creating (Barrett, 2003). In this study, participants’ freedom to act intentionally was significantly related to engagement, the knowledge, skills, and confidence, in their own healthcare decision-making.

**Research Question Four/ Hypothesis Three**

Research Question Four was: What are the relationships among the four dimensions of power as knowing participation in change, patients’ engagement in healthcare decision-making and patients’ satisfaction with healthcare decision-making? Research Question Four was answered by testing the hypothesis: The linear combination of the four dimensions of power as knowing participation in change (awareness, choices, freedom to act intentionally, and involvement in creating change) and patient engagement in healthcare decision-making will predict patient satisfaction with healthcare decision-making better than any one dimension alone.
Analysis of the linear combination of the four power subscales and engagement on satisfaction with decision supported research Hypothesis Three at \( p < .001 \) with engagement and freedom (Table 1). Even though the three power dimensions failed to enter the multiple regression equation due to multicollinearity, the combination of freedom and engagement was a positive indicator of satisfaction with decision better than any one dimension alone. The study findings are represented in (Figure 1).

**Limitations**

The snowball technique of sampling does not recruit a random sample, and may not be truly representative of the population, thus decreasing the generalizability.

**Conclusions**

The proxy variables of power, engagement, and satisfaction with decision-making emerged as important theoretical manifestations of patient equipoise with healthcare decision-making. Findings revealed power, engagement, and satisfaction with healthcare decision-making were significantly, positively related, and the combination of freedom to act intentionally and engagement was a positive indication of participants satisfaction with decision-making.

**Implications for Nursing Knowledge**

Exploration of the concept of equipoise in healthcare decision-making creates the potential for translation of theory into practice. The nature of equipoise is not fixed, and is uniquely constructed by all patients regarding their own health care decision-making. This study supports the use of Barrett’s power as knowing participation in change theory, and contributes to the understanding of how a patient’s power profile is associated with their healthcare decision-making. Blending of power as knowing participation and the theory of patient activation expanded the view of the concept equipoise. Increasing nursing’s awareness of power and
engagement in healthcare decision-making may contribute to true patient-centered care, and in creating environments conducive to patient equipoise. Promoting the understanding of the theory is central to theory-guided practice, and connecting nursing knowledge with patient health outcomes will enable nurses to participate as sculptors in designing and carrying our nursing’s unique science-based services (Barrett, 1994).

**Knowledge Translation**

Continual translation of theoretical knowledge into human service provides the foundation for nursing practice (Rogers, 1970). To develop and expand the foundation for practice, nursing theories provide knowledge that can be utilized to design models of care, examine healthcare innovations, and patient priorities for well-being, meaning, and respect through the healthcare experience (Vincent & Reed, 2014). The initial research findings begin the exploration of the concept of equipoise. Further research is needed to develop and refine the concept of equipoise in the context of patient well-becoming, nursing and healthcare.

**References**


Table 1

*Stepwise Multiple Regression of the Four Power Subscales, and Engagement on Satisfaction with Decision-Making*

<table>
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<tr>
<td>2. Freedom</td>
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Figure 1. Application of Barrett’s Theory of Power as Knowing Participation in Change and Hibbard and Mahoney’s Theory of Activation based on study findings.