

## Protocol

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### *“Influence of Dual Process Decision Making Theory in Patients Diagnosed with Cancer”*

#### **I. ABSTRACT**

Clinical and non-clinical factors influence medical decision making. Increases in the complexity of treatment options, social media access, and the dynamics of patient support systems further complicate the treatment decision making process. Identifying and understanding the many factors that influence informed consent process between patient and practitioner is needed. Recent studies have offered findings that warrant expanding research focused on dual process theory as it relates to decision making.

#### **II. BACKGROUND/RATIONALE**

According to the American Cancer Society nearly 1.7 million individuals in 2016 were thrust in to the decision-making process after receiving a new diagnosis of cancer. Leading oncology organizations agree that patients diagnosed with cancer convey feeling stunned or overwhelmed, and experience interruptions in care, financial challenges, and seclusion from family and friends.<sup>i,ii,iii,iv,v,vi</sup>

Researchers have identified major categories associated with patient decision-making including but not limited to; shared decision making, provider communication, messaging, and patient directed care. An extensive literature review produced multiple gaps in understanding factors that influence decision-making and the increasing use of Dual Process Theory to understand the patient decision-making process.

Helping patients who are recently diagnosed with cancer navigate the decision-making process is complex and continues to grow in complexity and warrants additional study. The study gap in the proposed research focuses on the association between verbatim and gist recall and utilizes Fuzzy Trace Theory.<sup>vii</sup>

#### **III. OBJECTIVES/STUDY AIMS**

The objective of the proposed study is to contribute to the growing body of scientifically validated research that explores dual process theory and the impact on decision-making. In addition, to understand and recognize the evolving needs of patients diagnosed with cancer and their support system.

#### **IV. ELIGIBILITY**

##### **Participant Eligibility Criteria:**

- *Ages 25 to 80*
- *Without cognitive impairment*
- *First diagnosis of Cancer*
  - *No previous history of cancer.*
  - *Close to date of diagnosis.*
  - *Within the first course of treatment is acceptable*
- *Living in California at the time of diagnosis*

## **V. SUBJECT ENROLLMENT**

### **1. Recruitment and Advertising**

*Recruitment is continuous until the sample size is reached and involves:*

- *Social media; Support groups; Organizations supporting the distribution of research flyers and Organic personal interactions*

*Advertising will be attempted within all California cities.*

### **2. Recruitment materials**

*The Invitation to Participate is provided as a flyer.*

*The Informed consent is another form provided to potential participants.*

### **3. Screening and Consent**

*Upon contact by the potential participant, the researcher will conduct screening and ensure consenting occurs prior to interview.*

*Screening questions and consent form available upon request.*

## **VI. STUDY DESIGN/PROCEDURES**

The proposed qualitative study utilizes the multiple case study approach and employs replicated interviews, member checking, and prolonged contact to assist in generalizing and validating the findings.

### **1. The theoretical framework focuses on memory, reasoning, judgement, and decision making**

- *Fuzzy Trace Theory (FTT)*
  - *“captures the conflict between emotion and cognition”<sup>7</sup>*
  - *recognizes gaps and overlaps that exist in cognition (verbatim) and emotion (gist).*
  - *has been associated with cancer decision making research in the past.*
  - *And continues to be developed to identify “the precise loci of interactions between emotion and cognition to improve cancer decision making.”<sup>7</sup>*

## **VII. SPECIMEN/ LABORATORY/ DATA COLLECTION/PROCEDURES**

Not applicable. No specimens will be collected and there is no request for access to records or other record review.

## **VIII. STATISTICAL CONSIDERATIONS**

**Sampling Strategies –**

*Purposeful Sampling and Snowball or Chain Sampling will be used.*

**Sample Size-**

*The proposed qualitative study includes a minimum of 20 participants that complete the full study requirements. The sample size was approved by the research committee and IRB. Recruitment will exceed 20 to account for potential participant drop outs.*

## Research Questions-

*Each of the interview questions were mapped to the applicable research question and vetted through an expert panel review and the IRB process.*

## Data Collection

- 1. The data will be collected through in-person, in-depth interviews. All contact will be made by the primary researcher will collect all data.*
- 2. Data collection will occur in three segments:*
  - 1. Interview*
  - 2. Journal Notes*
  - 3. Follow-up call*

## Data Analysis

- 1. Initial thematic analysis will be conducted by hand coding on all in-person interviews, journal notes, and follow-up call notes after transcribed.*
- 2. Software tools will be used to create word mapping and clusters for analysis and identification of themes in the data.*
- 3. A naming structure and graphical representation will transpire during review and transition raw data into data that can be analyzed for themes.*
- 4. Themes will be developed and re-evaluated as the naming structure emerges.*

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i American Society of Clinical Oncology, (2015). The state of cancer care in America:2015. Retrieved from <http://www.asco.org/sites/www.asco.org/files/2015ascostateofcancercare.pdf>

ii Epstein, R.M., & Gramling, R.E. (2013). What Is Shared in Shared Decision Making? Complex Decisions When the Evidence Is Unclear. *Medical Care Research and Review*, 70(1), p.94S-112S.

iii Gibbins, J., Bhatia, R., Forbes, K., and Reid, C.M. (2014). What do patients with advanced cancer want from the management of their pain? A qualitative study. *Palliative Medicine*, 28(1), p.71-78.

iv IOM (Institute of Medicine). 2013. *Delivering high-quality cancer care: Charting a new course for a system in crisis*. Washington, DC: The National Academies Press.

v Masters, G., Krilov, L., Bailey, H., Brose, M., Burstein, H., Diller, L., ... Patel, J. (2015). Clinical cancer advances 2015: annual report on progress against cancer from the American society of clinical oncology. *Journal of Clinical Oncology*, 33(7), p.786-809.

vi Reyna, V.F., Brainerd, C.J. (1991). Fuzzy-trace theory and framing effects in choices: gist extraction, truncation, and conversion. *Journal of Behavioral Decision Making*, 4(4), p.249-262.

vii Reyna, V.F., Nelson, W.L., Han, P.K., & Pignone, M.P. (2015). Decision making and cancer. *American Psychologist*, 70(2), p.105-118.