

Sample only

Statement of the problem/topic of the research or creative work:

(example 1)

Cancer is a major health concern of our day and thus is a topic of much research. Numerous studies have investigated the psychosocial impacts of cancer on young adults, however; little research has examined the impact from the cancer patient's own perspective. The proposed project will explore the experiences of young adult cancer survivors using photovoice, a participant driven research approach. Photovoice is an innovative qualitative research approach to conduct participant driven research through photography and narratives. This approach will allow the participants to document photographic images of their experiences, and identify important aspects of their cancer survivorship. Photography serves as the catalyst to discuss emergent themes and personal experiences. After sharing images captured from the week, participants will identify one theme using group consensus, and will then discuss how it relates to their experience. The discussions will be recorded and used for analysis. The images and narratives documented will be used in photo exhibits, town hall meetings, and publications. This research will be used for future interdisciplinary follow up studies with the Huntsman Cancer Institute and the College of Social Work.

(example 2)

About 40 to 50 percent of married couples in the United States divorce and the divorce rate for subsequent marriages is even higher (American Psychological Association, 2017). The leading cause of divorce is infidelity (Amato, Previti, 2003). Consensual Non-Monogamy (CNM) offers a possible alternative for couples who are struggling to live a traditional married lifestyle but still want to preserve their relationships. Past studies have shown that on average, non-monogamous relationships fair similarly to monogamous couples in terms of relationship quality and commitment (Seguin, Blais, Goyer, Adam, Lavoie, Rodrigue, Magontier, 2016). However, the success of CNM relationships may depend in part on people's reasons for entering them. Our preliminary data suggest that CNM relationships are more successful when they were chosen for authentic reasons (i.e., a genuine desire to engage in new relationship experiences) and less successful when they are motivated by existing relationship problems. In my proposed research that I will undertake this summer under the supervision of (redacted), I will conduct a prospective study to examine how people's motivations for entering a CNM relationship predict changes in their relationship quality over time.

(example 3)

According to the World Health Organization (2017), at least 15.3 million people have drug use disorders, and the harmful use of alcohol results in 3.3 million deaths each year. With more than 1 in 7 Americans ages 12 and older dealing with a substance abuse problem, this is a significant health issue (National Center on Addiction and Substance Abuse, 2015). Recent advancements in neuroscience, brain imaging, and behavioral research show that addiction is a complex brain disease that affects behavior in several ways. Therefore, standard treatment methods may not fit every individual. Given the serious health implications connected with substance abuse and the number of individuals impacted by this condition, it is imperative to explore new and innovative treatment methods. Multisensory interventions provided in multisensory environments (MSE), multisensory rooms, or Snoezelen® rooms could be explored as a possible treatment for this population. Originating in Sweden in the 1970's for use with individuals with disabilities (Snoezelen, 2017) MSE interventions have been used for a variety of therapeutic purposes. Generally designed to stimulate the senses, these rooms may include low and colorful lighting, fiber optic light strands, music, color-changing bubble columns, projected images, aromatherapy diffusers, swings, and tactile stimulating objects. Depending on how therapeutic interventions are structured, this stimulation of the senses can induce either a calming or energizing effect. MSE interventions have been linked to decreases in anxiety, agitation, and pain in individuals with diverse health conditions. Since many individuals with substance abuse

issues experience anxiety, agitation, and pain, this population could potentially benefit from MSE interventions.

(example 4)

Evidence suggests that high intra-abdominal pressure (IAP) created during strenuous physical activity increases risk for developing pelvic floor disorders (PFD) in women. Although PFD is widespread (1 in 4 women are affected), little is known about the correlation between PFD and a women's activity level. The Motherhood and Pelvic health (MAP) project aims to better understand this correlation using a novel intra-vaginal pressure transducer; the MAP sensor. This pressure transducer allows us to accurately measure a woman's intra-abdominal pressure while she performs a wide variety of activities; something that was not feasible using conventional methods.

To capitalize on this new method of measuring IAP, we are developing a more robust method of comparing the pressure data collected alongside the activities in a substudy of the MAP project; the Strenuous Activity Substudy. In this study, we plan to film subjects performing physically strenuous activities while they wear the MAP sensor, and then synchronize the playback of the pressure data with the recorded video afterwards. This method of data analysis has shown promise, but it is in the early stages of development. Writing code to playback the data accurately is challenging, as the playback depends greatly on the speed of the computer processor running the code. For this analysis to be useful, the playback must match exactly with the video taken, and currently this method of playback can vary as much as a second in either direction during a 30 second interval. If propagated through a 2-3 minute video, this variance would make the playback very inaccurate.

The aim of this study is two-fold; develop an accurate and precise method of synchronizing pressure data with its corresponding recorded video, and use this method of analysis to further understand the relation between IAP and strenuous physical activity. Using this method to analyze the data allows the analyst to view the direct correlations between specific natural movements in an activity and the IAP created by those movements, adding significantly more detail than viewing the data alone and potentially giving us greater insight to why strenuous activity increases risk for PFD in women. In addition this synchronized video with pressure readings will provide the preliminary data needed to motivate a larger biomechanical study where motion capture technology can be used to correlate body position, body movement and intra-abdominal pressure.