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Health Responsibility in Community College Students

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Community college students are less healthy than 4-year college students, and they tend to have a higher allostatic load than their 4-year counterparts. Although research demonstrated that community college students are at greater risk for physical and mental illness, a better understanding of how community college students perceive their health responsibility was needed. A basic qualitative approach was employed to study how community college students experience health responsibility. Self-determination theory and the health belief model were used to guide the development of a semistructured interview and analysis plan. Thirteen adult credit-seeking students were interviewed. Data were analyzed using a top-down approach, and seven themes were identified that represented the autonomy, stress, and positive and negative motivators for self-care: nobody is going to take care of me; taking "good" care; a little help from my "friends;" cue to action; barriers; tech help; and what I want to improve. The results revealed the importance of technology to access health information and seek help, and indicated the oppositional forces of knowing what to do versus confronting personal and structural barriers to self-care. Implications for positive social change include updating institutional policies and training to support students' self-determined health responsibility behaviors with the understanding that helping students manage health risks improves their opportunities for a successful educational experience.

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Dedication

This project is dedicated to all the women who did not believe they were smart enough, capable, or worthy of the accomplishment of earning a PhD because they were told to get their MRS degree to fall back on and marry someone who can keep them in the lifestyle they are accustomed to.

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I would like to thank my friends and family for cheering me on throughout my entire journey, especially during the most trying moments when I wanted to quit. Deep gratitude goes to my chair, Dr. Susan Marcus, for her unfailing encouragement that spurred me to continue and guidance developing a study I feel proud of. Thanks also go out to my second committee member, Dr. King, who supported the process as well.

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Chapter 1: Introduction to the Study

A common colloquialism is “health is wealth”; in other words, good health is one of the greatest human commodities. Health responsibility (how a person takes care of their health) is a multifaceted construct that contains aspects of socioeconomic standing, personal values, religious beliefs, and cultural influences (Avci, 2016). Furthermore, informed consumerism, social norms, and a person’s community all factor into health-related decision making and behaviors (Rose et al., 2018).

Young adults age 18–26 have been identified as being less healthy than adolescents and having a worse health profile than adults in their late 20s and early 30s (Stroud et al., 2015). Community college students fit that demographic and have a higher allostatic load compared to their 4-year counterparts and a higher incidence of mental illness (American Association of Community Colleges, 2017). Respondents of a national college survey reported that in 2018 12.1% had attempted suicide and 28.2% had considered it at some point; 49.7% reported it was difficult or traumatic to handle the stress of academics, 30.5% had intimate relationship problems, 29.8% had problems with family, and 32.1% had difficulties with sleep (American College Health Association, 2018). Bachik and Kitzman (2020) emphasized the importance of understanding the deleterious issues college students experience in relation to better serving their health and wellness needs for services the institution provides as well as in the health-related curricula they offer.

With attendance at community colleges increasing at a higher rate than at 4-year institutions (National Center for Education Statistics, 2020) along with community college students’ increased risk for physical and mental illness and lack of on campus health resources (Stroud et al., 2015), it is important to understand the phenomenon of health responsibility in community college students before designing support programs and interventions to improve their health. However, due to the COVID-19 pandemic, enrollment numbers have changed for all higher education institutions with community college enrollment declining 15% since Fall 2019 (Sedmak, 2021) . In Chapter 1, I discuss the background of health responsibility in the literature, what the problem is, why this study was important to conduct, and the conceptual and theoretical frameworks. I then discuss the nature of the study, definitions of key terms, assumptions, scope, delimitations, limitations, and significance.

Background

Health literacy and self-care have been the subject of much research and discussion (Ayres & Pontes, 2018; Office of Disease Prevention and Promotion, n.d.; Patil et al., 2021; Uysal et al., 2020). The phenomenon of health responsibility has not been studied as thoroughly, although some research has been done in areas such as physical activity and sexual health (Kockanat & Bekar, 2018; Lechner et al., 2013; Rose et al., 2018), the transition from pediatric to adult health care of chronic diseases, and a case study of one female African American community college student (Estelle-Brazzell Horton, 2014).

Health responsibility is the duty and accountability a person has to ensure their health and well-being are achieved and maintained (Avci, 2016) through mindful awareness of themself and the use of informed consumerism (Rose et al., 2018). The research community has studied the various constructs that health responsibility encompasses such as mental health (Hughes & Byrom, 2019), sexual health (Grace-Leitch & Shneyderman, 2016), physical activity (Ball et al., 2017), weight management (Das & Evans, 2014), vaccination adherence (Fall et al., 2018), and alcohol and drug abuse prevention (Böke et al., 2019) in community college students. However, an understanding of the meaning and experience of the overarching construct of health responsibility was lacking.

The current study was needed to expand the scope of understanding of how individuals perceive and navigate taking care of their physical, mental, and emotional well-being to further public health and health education knowledge (Rose et al., 2018). Study findings may serve to inform college administrators and stakeholders of the areas in which community college students may need assistance from the institution. Community college students comprise the demographic of a population that has been identified as less healthy than individuals both older and younger (Neinstein & Erwin, 2013). Stroud et al. (2015) recommended that young adults age 18–26 should be treated as a "distinct subpopulation in policy, planning, programming, and research" (p. 1) and, according to the Institute of Medicine and National Research Council (2014), carries a priority for developing evidence-based practices to improve the transition from pediatric to adult medical and behavioral care.

Problem Statement

Managing stress, getting routine health care checkups, knowing self-biometrics, exercising regularly, and eating healthfully are all part of health responsibility.

Individuals vary greatly with respect to how they view and approach their health responsibility and for initiating and maintaining good health. When people are aware of and participate in health promoting and enhancing behaviors, their quality of life improves (Medvedev & Landhuis, 2018). Knowledge of disease prevention and management as well as health awareness influences health responsibility and leads to better self-care in a variety of populations and settings (Önal & Yilmaz, 2020; Rose et al., 2018; Ulla Díez et al., 2012). In addition, health responsibility has been shown to have a positive impact during the transition from adolescent to adult care of chronic illnesses (Reed-Knight et al., 2014).

Community college students are part of an identified subpopulation of young adults age 18–26 at risk for overall poorer health (Stroud et al., 2015) and have been shown to differ from their 4-year counterparts due to greater risk of dropping out; developing mental illness; and experiencing food, housing, and financial insecurities (Boke et al., 2019; Katz & Davison, 2014). College administrators reported that the physical and mental well-being of their students is important (Chessman & Taylor, 2019). With a projected increase in community college attendance compared to 4-year institutions (National Center for Education Statistics, 2020) coupled with a lack of access to on-campus health care centers and licensed mental health care providers (Böke et al., 2019), community college students are at a significant disadvantage for maintaining good health. Recent research has focused on specific aspects of health responsibility such as sexual health (Grace-Leitch & Shneyderman, 2016), healthy alcohol consumption (Richards et al., 2020), or physical activity levels (Sengul et al., 2019) rather than a more inclusive perspective that encompasses all of those constructs of health and more. Therefore, it is important to understand how community college students experience health responsibility to inform college administration and staff who decide on what health choices, disease prevention, and other wellness options will be offered to their student body (Estelle-Brazzell Horton, 2014).

Purpose of the Study

In this basic qualitative study, I sought to explore the experience of health responsibility in community college students in a Midwest four-campus community college. Health responsibility is a concept that encompasses many aspects of health and does not have a standard definition in the literature (Estelle-Brazzell Horton, 2014). Health responsibility has been used as an item in survey research (Sengul et al., 2019) and as the target of understanding the health behaviors of urban adolescents (Ayres & Pontes, 2018). Health responsibility has also been used to examine the transition of adolescent to adult care of chronic diseases (Reed-Knight et al., 2014) and in a case study of one African American female college student (Estelle-Brazzell Horton, 2014), but it had not been examined in a broader study among community college students. Concepts related to health responsibility that have been widely studied include health literacy (Kim et al., 2020; Patil et al., 2021; Uysal et al, 2020) and self-care (Diebold et al., 2018; Feng et al., 2019; Hancerlioglu et al., 2019), but studies have not addressed the major concept of accountability in seeking out that care. More specifically, the overarching understanding of how community college students experience health responsibility was missing.

Research Question

How do community college students experience health responsibility?

Theoretical and Conceptual Framework

Self-determination theory (SDT) was the theoretical foundation of this study. The social motivational factors behind the tenets of SDT (Deci & Ryan, 2008) are autonomy, connectedness, and competence. These have been shown to be effective in understanding health behaviors and health-related change (Ball et al., 2017; Rodrigues et al., 2018; Sheeran et al., 2020). For example, Rodrigues et al. (2018) found in a meta-analytical study that interventions based on the tenets of SDT were effective in the initiation of increased physical activity as well as long-term maintenance.

The health belief model (HBM) was the conceptual framework for this study. Rosenstock's (1966) HBM constructs include perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy. These constructs are believed to emerge from a need to avert illness and disease and a belief that intentional behaviors can be preventative or treatment for illnesses and disease. This conceptual framework has been used extensively in health-related research to understand and predict why people engage in health-related behaviors such as screenings (Che et al., 2019), vaccinations (Fall et al., 2018), and prevention of sexually transmitted infections (Grace-Leitch & Shneyderman, 2016). For example, Sulat et al. (2018) found in their meta-analysis that all of the tenets of the HBM were effective in predicting behavior change in areas of health behaviors including medication compliance, clinic utilization, and health screenings. Some had more influence than others; however, all were shown to have a moderating effect.

SDT and the HMB include in their tenets intrinsic and extrinsic motivational factors along with personal values and beliefs as well as other influential factors surrounding a person’s health behaviors and behavior change strategies. I used them both to examine health responsibility among community college students in a qualitative study to encourage a deeper understanding of the phenomenon of interest. A detailed explanation of both frameworks is provided in Chapter 2. Both SDT and the HBM were used in the development of interview questions, and key constructs were linked to related interview questions.

Nature of the Study

I chose a basic qualitative design to explore the phenomenon of health responsibility in community college students, which allowed for a broad inquiry into the experience that would avoid the confines of quantitative and other qualitative designs (see Thorne, 2008). This methodological approach enables researchers to explore the influences of the social contexts of health and has broader applications in health matters (Stephens, 2011). The concept of health responsibility, or the way in which individuals take accountability for their overall health and well-being (Avci, 2016), is a multifactorial construct that includes informed consumerism, a highly variable attribute (Rose et al., 2018). Qualitative research provides the necessary freedom to conduct deep inquiry that can elicit elaborate responses, providing a depth of data (Thorne, 2008). College students from a large, four-campus Midwest community college were the target of the current study. Participants were over the age of 18 and enrolled in at least one credit class at the institution. I conducted Zoom video meetings as well as phone interviews, deferring to the preference of the participant. All sessions were voice recorded, transcribed, and summarized. The analysis plan included a top-down approach to identify broader patterns and relationships, and the more traditional approach of coding to create categories and themes (see Thorne, 2008). Data included the transcribed interviews and my notes and reflexive journaling recorded prior to, during, and after the study. Patterns of themes were allowed to emerge from the data to construct meaning and attenuate personal bias in the inductive analytical approach (see Saldaña, 2016). This helped me understand the complex construct of health responsibility in community college students, especially what types of personal behaviors, college resources, community resources, obstacles, and barriers influenced their duty to take care of their health.

Definitions

Community college: A public postsecondary institution of higher learning that may provide vocational training, certificates of completion, and associate degrees in various disciplines with students having the ability to transfer to institutions that grant higher degrees (Barringer & Jaquette, 2018).

Health beliefs: The combination of a person's own perceptions about the susceptibility, severity, barriers, benefits, internal cues, and external cues for health-protective behaviors that can be influenced by sociodemographic variables such as race, ethnicity, gender, age, and socioeconomic status (McArthur et al., 2018).

Health literacy: The ability to understand and utilize the information and services accessed with the intent to make health-related decisions and actions across all health domains (Uysal et al., 2020).

Health responsibility: The duty and accountability a person has to take care of themself physically, mentally, and emotionally with awareness of their health and informed health consumerism (Avci, 2016; Rose et al., 2018). Other related constructs of health behavior such as self-care do not have the component of accountability because they all pertain to the individual.

Self-care: Intentional actions performed to improve a person's own health and well-being and can include mental, physical, emotional, social, and spiritual needs (Richards et al., 2020; Spaling et al., 2015).

Assumptions

The first assumption for the study was that individuals would be willing to talk about the study topic, health responsibility. Although this topic was of interest to me, I had a difficult time recruiting enough individuals who were interested in talking about it with me. I had positive regard when discussing my study with potential participants and detached from the outcome of that interaction. I remained positive when individuals chose not to participate and continued to recruit having the best possible outcome in mind. The second assumption was that individuals would be able to share their experiences of health, self-care, and what it means to take personal health responsibility in a deep and meaningful way. This assumption was the foundation of this basic qualitative study. The third assumption was that I would be mindful of preconceived assumptions and biases so that the responses from participants could be heard as they were intended. I did everything I could do to attenuate the impact personal bias had on my study via reflexivity (see Thorne, 2008) throughout the study process. The use of journaling enabled me to reflect on the process, my thoughts, my biases, as well as my actions and reactions. I also journaled and reflected on my observations of the participants. Audit trails provided the foundation to this process. I used digital prompts in my research process to remind myself to think critically about my coding process and procedures to enhance objectivity in data gathering and analysis.

Scope and Delimitations

Working with community college students was important because they are underrepresented in the literature related to college students in general and are not comparable to their 4-year counterparts when it comes to many health-related aspects such as socioeconomic status, mental health issues, academic performance issues, and housing and food insecurity issues (American College Health Association, 2018). College Credit Plus students (students in grade 7-12 who achieve high enough grades that allow them to take classes for free at any state-funded institution of higher education) were excluded unless they were 18 years of age or older.

I explored using the transtheoretical model of behavior change as part of my theoretical and conceptual framework (see Prochaska et al., 2004). However, because I was looking not only at health behavior change but at a broader scope of health behaviors and beliefs that could include behavior change, I decided that the combination of SDT and HBM would provide a more encompassing foundation of health responsibility inquiry. I included college students from one Midwest community college, which may have made transferability more difficult. However, readers may make their own assessment of transferability when reviewing my population and design (see Shenton, 2004).

Limitations

Qualitative research requires attention to trustworthiness that required me to evaluate the credibility, transferability, dependability, and confirmability of the findings (see Shenton, 2004). To address issues of credibility, I researched and reviewed methods of studying the phenomenon and determined that a basic qualitative approach was the best option given the research question addressing community college students' experiences of health responsibility (see Estelle-Brazzell Horton, 2014). I had a working understanding of community college students because I am an assistant professor of sport and exercise studies, health, and physical education at the institution where I sought to recruit participants. Although I could not ensure triangulation of data sources, I attempted to recruit a heterogenous student sample of varying ages, races, and genders from all four campuses giving equal opportunity to all students to participate. I attempted to restrain my biases regarding what I believed about health responsibility during my interactions with participants as well as potential participants by practicing protocols with friends and colleagues and eliciting feedback. To address issues of progressive subjectivity, I used journaling throughout the process, reflections during interviews and at the end, and member checks during and after the interviews, allowing participants to review my written summaries of their interviews.

Transferability, or the extent my findings can be applicable to other community colleges, was addressed in my results and discussion sections. I described my population and study methods in detail so that the practitioner would be able to discern whether it is appropriate to make that transfer. This places generalizability responsibility on the reader, not the researcher.

To address issues of reliability, I made sure to include the details of how I designed my study, how it was implemented at the institution, how I collected my data using individual interviews, how I analyzed the data, and how I reflected on the effectiveness of the process. Lastly, my biases about the importance of taking responsibility for health in every aspect of a person's life could have been in some way be reflected in the tone of my voice or the manner in which I asked the participants questions or analyzed my data. To attenuate my personal biases, I practiced my interviewing techniques with friends before working with study participants. Using their feedback in addition to reflexive strategies of journaling and checking in to assess myself, I hopefully mitigated those biases. The bracketing, journaling, and rigorous self-monitoring that I undertook during the research process aided in maintaining the integrity of the study.

Significance

Taking care of health is an important part of self-care and personal development and is a major component of a person's quality of life. Individuals may not have access to healthy role models because their parents or caregivers may be overweight or have preventable health conditions such as high cholesterol or heart disease. Stroud et al.

(2015) discussed the unhealthiness of young adults age 18–26 and noted that age group is also a critical developmental period that requires unique research, policy, planning, and programming. The areas of greatest need are helping individuals transition from pediatric to adult behavioral and medical care as well as developing sound evidence-based practices. Stroud et al. (2015) discussed how the Institute of Medicine and National Research Council supported the improvement in the health and well-being of young adults because they are more likely to binge drink, use illicit drugs, contract sexually transmitted diseases, smoke cigarettes, eat fast food, and not get routine medical checkups.

According to the National Center for Education Statistics (2020), in 2019 overall college enrollment of individuals age 18–24 was 41% with enrollment at 2-year institutions projected to increase greater than at 4-year institutions. Community colleges have a diverse population of individuals who attend their institutions and develop transferable skills for career and workforce endeavors as well as develop self-care habits that contribute to lifelong self-responsibility (Feng et al., 2019). Better self-care practices employed by college students contribute to improved health-related quality of life, which can lead to improved longevity. Community colleges are positioned to impact an individual's health knowledge and behaviors via the programming and services they offer and make part of their curriculum and educational outcomes (Bachik & Katzman, 2020). Results of the current study may influence positive social change by informing administrators and stakeholders at the college about how their students enact their personal health responsibility, which could elucidate ways in which the institution can better serve the health and well-being of their students, especially the LGBTQ community. Additionally, the study may add to the base of knowledge in the fields of public health and health education.

Summary

Using SDT and the HBM as frameworks to guide the methodology, I sought to understand health responsibility in community college students, an at-risk population that is a prime target for health-related interventions and programming. Because the literature lacked studies that focused on the broad experience of health and well-being among community college students, findings may contribute in a significant way to the body of knowledge. Although I did not identify the impact the institution had on students, I did explore the financial and logistical challenges students face when seeking to take care of themselves, including how health care coverage influences their ability to seek medical and mental care. Findings also revealed the disparate experience of an individual in the LGBTQ community had with the health care system. Chapter 2 provides the background of the health-related research and key constructs that were investigated as well as the theoretical and conceptual frameworks guiding the study.

Chapter 2: Literature Review

Community college students differ from their 4-year institution counterparts, suffering from higher stress loads that place them at increased risk for developing mental and physical health issues, having difficulty completing work on time, and dropping out (Katz & Davidson, 2014). Some of the factors contributing to community college students' allostatic load include financial issues, food and housing insecurities, academic deficiencies requiring remedial math and English coursework lengthening the time to attain degrees, and familial responsibilities such as caring for children or being the breadwinner (Böke et al., 2019). Many community colleges lack access to on-campus health care centers staffed with appropriate medical professionals to provide acute care when students are feeling ill or have an accident on campus, as well as licensed mental health care workers to provide personal counseling services for acute or chronic issues. Additionally, recent research has shown that this age group (18–26) is typically less healthy than adolescents and adults age 35 and older (Neinstein & Irwin, 2013; Park et al., 2014).

According to the National College Health Association (2020), respondents of a 2020 survey revealed 32.1% had sleep difficulties, 30.5% had intimate relationship problems, 49.7% thought it was traumatic or very difficult to handle academics, 29.8% had family problems, and 29.7% had difficulties with other relationships. In addition, 28.2% had considered suicide at some point in their lives, 12.1% had attempted suicide at some point in their lives, and 12% had attempted suicide in the past year.. Because community college students are a critical and growing population, the community college environment is a prime setting for programming and interventions. By community colleges including health and well-being as educational and learning outcomes, overall public health will improve (Lederer & Oswalt, 2017).

Despite college administrators' beliefs that physical and mental health and well-being are important from an administrative perspective (Chessman & Taylor, 2019), little has been done to address them from an institutional perspective. There is a lack of understanding in the scholarly community of how community college students perceive the concept of health responsibility. The projected continual increase in community college enrollment intensifies the need to address the well-being of young adult students who have poorer health, are subject to increased stress, and have a lack of access to medical and mental health services on campus.

Health responsibility is defined as the duty a person has to take care of themself physically, mentally, and emotionally (Avci, 2016). The construct has not been widely studied among college students or other adult populations, but similar constructs such as self-care and health literacy have been studied in investigative survey research (Uysal et al., 2020). Another area that has been studied in college students is disease prevention and management of sexually transmitted diseases such as human papillomavirus (HPV; Kockanat & Bekar, 2018; Rose et al., 2018). Researchers have also explored how adolescent populations transition from parental to personal responsibility for chronic health conditions (Reed-Knight et al., 2014), how adolescents see themselves in relation to their neighborhood and its environmental influences (Ayres & Pontes, 2018), and how adult females prevent cervical cancer (Önal & Yilmaz, 2020).

Research has indicated that knowledge of health awareness and disease prevention and management influences health responsibility and better self-care in a variety of settings and populations (Kockanat & Beckar, 2018; Önal & Yilmaz, 2020; Rose et al., 2018; Ulla Díez et al., 2012). However, few studies directly addressed health responsibility among community college students. More research was needed to understand what health responsibility means to this population of students so that institutional stakeholders can be more responsive to their students' well-being and to increase the knowledge base of health psychology and health promotion (Estelle-Brazzell Horton, 2014; Pelletier et al, 2016). This chapter includes a discussion of my literature search strategy, the theoretical foundation, and the conceptual framework. Key concepts are also discussed followed by a summary and conclusion.

Literature Search Strategy

The databases and search engines used for this literature review were Thoreau, APA Psych Articles, ProQuest Central, and Google Scholar. The primary search terms included *health responsibility*, *personal health responsibility*, *health behaviors*, *health literacy*, *self-care*, *college students*, *community college students*, *young adult*, *self-determination theory*, and *health belief model*.

Initial searches to determine the body of knowledge on college students in general with relation to SDT and the HBM individually as well as collaboratively were conducted. *Meta-analysis* was then added to the search terms in all databases for rigor. The process was repeated with the term *community college students* because that was the target population for this study.

Health responsibility and *young adult* were used in all databases to determine the depth of research on those topics. A few articles were found relating to young adults but there was a lack of articles related to college students, including community college students. As a result, *self-care* and *health behavior* were added to the search terms and more articles were found but few related to the current study topic of health responsibility in community college students. Then the terms *illness* and *chronic illness* were added to search terms *health responsibility* and *young adult* in the Thoreau search engine to flesh out research in that population related to the age group of community college students. Lastly, *health behavior* and *community college students* were also used in Thoreau to search for articles related to the target population.

Literature Review Related to Key Variables and/or Concepts

Self-Care

Because the term health responsibility has little representation in the literature, one of the terms used to gather information about how college students make healthy behavior choices was self-care. Self-care is defined as the purposeful action to improve a person's health and well-being by addressing physical, mental, emotional, spiritual, and social needs (Richards et al., 2020). It is also a factor of health responsibility.

Hancerlioglu et al. (2019) used self-care in the examination of different populations with a major emphasis on chronic disease management. They also studied medication compliance, dietary compliance, and other factors related to individual disease management of diseases such as congestive heart failure, diabetes mellitus, and chronic obstructive pulmonary disease. They found that individuals who rated highly on self-care management scales had higher levels of disease management including medication and dietary compliance Psychosocial and physiological problems also had an impact and needed to be accounted for when addressing potential interventions (Hancerlioglu et al., 2019).

Self-care and variations of self-care such as mindful self-care have been studied both quantitively and qualitatively in community college students.. For example, Feng et al. (2019) examined the relationship between mindful self-care and perceived stress with quality of life in college students over 18 and found that although mindful self-care was not positively correlated to improved physical well-being, there was a positive correlation to psychological well-being.

Seeking to understand how students take care of themselves to manage the stress and demands of their educational pursuits to develop intervention strategies within the curriculum, Diebold et al. (2018) targeted graduate students in social work. They qualitatively inquired about graduate students' perceptions of self-care by asking what self-care meant to them and what types of material they would want included in their coursework to support their self-care efforts. Diebold et al. identified that because students in that particular discipline will be exposed to mentally and emotionally taxing careers, it was important to understand their concept of what self-care entailed and that the institution had no idea how students perceived their stressors or their self-caretaking behaviors and strategies. The most important theme was health, which study participants expressed included not only disease management but also strategies to manage stress, prevent burnout, and prevent other deleterious health conditions (Diebold et al., 2018).

Ayala et al. (2018) examined stress and self-care practices and the relationship between physical and psychological well-being among medical school students in the United States. Analyzing data from a national multicomponent wellness survey, Ayala et al. found that students who engaged in self-care practices had a decreased relationship between perceived stress and quality of life. It was found that it would be beneficial to study students at different stages of their educational careers to better understand the unique needs at those times so the institutions may address those needs appropriately (Ayla et al., 2018).

Health Literacy

Health literacy is another term that is closely related to health responsibility and was used in the research to a greater extent with community college students. Health literacy is defined as the degree to which an individual has the ability to access, understand, and use information and services that inform health-related actions and decisions in all domains of health (Uysal et al., 2020). Patil et al. (2021) included the terms *digital* and *eHealth* to health literacy when studying college students due to the fact that college students spend considerable time online, use social media networks extensively, and consider the internet their primary source of health information.

Uysal et al. (2020) used the European Health Literacy Scale and Health Promoting Lifestyle Behaviors Scale to collect data on nursing, Islamic science, and law department students. Uysal et al. found that low levels of health literacy were correlated with less preventive care, increased hospitalizations, and decreased health in general, and recommended incorporating health literacy into the curriculum as an educational outcome at the college level. Patil et al. (2021) looked at how health literacy and digital health literacy affected college students' response to the COVID-19 pandemic and what types of health-related behaviors they participated in, including willingness to get vaccinated. Higher *digital* health literacy, not merely health literacy, was correlated with increased vaccination intentions though at the time of the study vaccinations were not readily available so vaccination compliance was not assessed (Patil et al., 2021) could not assess vaccination compliance.

Kim et al. (2020) examined mental health literacy among Korean college students to better understand mental health help-seeking behaviors. They found that increased social support was important in mental health seeking behaviors and helped decrease stigma in seeking help. Higher mental health literacy was also found to decrease mental health-seeking stigma and fostered help-seeking behaviors among college students (Kim et al., 2020).

Health literacy is also a component of the Office of Disease Prevention and Health Promotion (n.d.)Healthy People 2030 and has been updated to include language that acknowledges organizations have a responsibility to address health literacy and that individuals need to use the information they get, not merely understand it. It includes communication between health care provider and patient, the reading of online digital medical records, and patient's queries regarding diagnoses and care. The aim is to increase health literacy in the general population as well (Office of Disease Prevention and Health Promotion, (n.d.)

Health Responsibility

Health responsibility was the main construct explored in the current qualitative study and was defined as a person's duty to themself for health and well-being (see Wikler, 2002). Avci (2016) defined health responsibility as a duty to maintain physical, mental, and social well-being and agreed with Resnik's (2007) definition that society is partly responsible for the health and well-being of its constituents and that the environment has an influence as well. Additionally, Avci stated that other factors such as health literacy, self-management, sociocultural factors, government, and nongovernmental agencies have an influence. Avci pointed out that the varying aspects of the term *responsibility* add a nuanced layer to inquiries about how people consider and take action regarding their health. In the target population of community college students, the research related to health responsibility was mainly quantitative and related to chronic illnesses, sexually transmitted diseases, or substance use and abuse prevention and the overarching theme has not been examined.

Early research addressing college administrators indicated the need to examine the responsibility of alcohol, tobacco, and other drug use among college students (Charney, 1994). Charney questioned the extent to which the university was responsible for contributing to poor health choices by not having dry campuses, allowing the use of tobacco products at sporting events, and prescribing medications for prolonged periods of time without reassessing if they were necessary. This was one of the first inquiries into health responsibility among college students from a rhetorical standpoint, not an empirical standpoint. Formal inquiries into community college students came much later.

Rose et al. (2018) examined the perception of health responsibility in relation to behaviors related to the prevention of infection of the HPV. Rose et al. examined the impact of vaccine knowledge on HPV vaccine uptake and differences by gender in the knowledge, attitudes, and perceptions of HPV among university students framed within the HBM. Using survey data from a convenience sample of university students, Rose et al. found that knowledge of the vaccine and knowledge of the disease were significant predictors of vaccine uptake and that females were more likely to get the vaccine than males. There was a greater sense of responsibility for self-prevention in females than in males, who are less likely to contract HPV or experience adverse symptoms (Rose et al., 2018).

Lechner et al. (2013) used a go-along study method to examine the difference between 2- and 4-year college students' expectations regarding the institution's responsibility for sexual health on campus. Because of this qualitative approach, this study was a good source of preliminary research on what sexual health responsibility means among community college students as well as the differences between 2- and 4-year students. By using guided questions along with environmental interaction with the study subjects in a one-on-one fashion, Lechner et al. were able to extract data that highlighted the differences and found that students at 2- and 4-year colleges have differing expectations of their respective institutions. Two-year college students expected less from their institution in regard to physical resources and had less knowledge of community resources available to them. Both groups felt that sexual health was an important part of general health, and that resources should be supported by their institution Lechner et al. (2013).

Hadas and Midlarsky (2000) examined health responsibility in relation to mental health seeking in older adults using a vignette in which adults over the age of 65 were asked to imagine experiencing specific symptoms and were assessed their perception of responsibility of the problem, their willingness to seek help, and their preferred treatment given that scenario. Hadas and Midlarsky found that perceived responsibility was better at predicting the source of help for medical problems but not psychological problems. Hadas and Midlarsky proposed that a person is less responsible for psychological problems and is less likely to take action.

The last major area of research directly related to health responsibility is in understanding the transition of adolescents to legal adults in the management of chronic illnesses. Reed-Knight et al. (2014) analyzed the current literature to understand the key factors that are influential in successful transition from parent to adult child taking a developmental systems approach with the intention to inform future intervention planning. Reed-Knight et al. found that the relationship between the parents and child, as well as with the caregiver, often influences how the child addresses their disease management. In addition, the concepts of self-efficacy, psychological adjustment, personal autonomy, and disease knowledge were constructs reviewed in this meta-analysis, finding that the higher the levels of autonomy and self-efficacy, the better the individual managed their condition. Reed-Knight found that high levels of individual knowledge of the disease and psychological adjustment aided in greater self-responsibility for health.

There were two studies in which health responsibility was a component of their survey research. Sengul et al. (2019) utilized convenience sampling of university students who completed three questionnaires, the *Healthy Lifestyles Behavior Scale* (HLBS) and the *International Physical Activity Questionnaire* (IPAQ) which are previously validated tools for this population*,* and an *Information Form*, which they developed specifically for their study. The HLBS has 52 items and six sub-factors, of which *health responsibility* is one. It was found among these predominantly female college students that females scored significantly higher on health responsibility than males but that males scored higher on physical activity levels. The authors suggested that females scored higher on health responsibility due to the traditional societal norm women have in taking care of others. Additionally, Ulla Díez et al. (2012) examined a health promotion intervention on college students in Mexico as a means to promote increased physical activity and nutrition as a means to prevent Type 2 diabetes and the associated health decrements, a major chronic illness that plagues Mexican adults. Ulla Diez et al. found that students in the intervention group had a significant improvement in their overall health profile score, physical activity levels, stress management, nutrition and health responsibility.

The concept of health responsibility has not been used extensively in the literature when describing the actions and behaviors leading to health and wellbeing but rather terms like self-care, or self-management. When looking at health responsibility specifically, researchers have often taken the approach of narrowing the focus to specific health domains like chronic disease management (Reed-knight et al. 2014), alcohol and substance use (Charney, 1994), vaccination (Fall et al., 2018) and sexual health (Lechner et al., 2013; Rose et al., 2018).

Being able to discern specific aspects of the motivational factors behind vaccination adherence using the health belief model or how self-determination factors into choosing to be physically active help illuminate some of the *why* which helps inform intervention approaches, but it does not paint a complete picture of the individual's behaviors. Health responsibility is not limited to managing a chronic illness or making healthy choices when it comes to sexual health or substance use. Using individual survey tools like a physical activity questionnaire or HBM scales limit the concepts that can be discerned when understanding behaviors due to the specificity of survey research (Thorne, 2008), .

Viewing health from the macro-level of the whole individual as opposed to broken down into individual domains may give the researcher greater insights into those areas that need to be addressed and require interventions. Survey research is limited to the questions that are asked and does not allow for the individual to shed light on their *grey areas* or items they may want to qualify or answer little differently. It also does not allow the individual to ask questions for clarity, so they understand exactly what the researcher is wanting to know (Ravitch & Carl, 2016).

Health responsibility has been studied in regard to the transition from parent to adult child for chronic illness management, (Reed-Knight et al., 2014) sexual health (Kockanat & Bekar, 2018; Lechner et al., 2013; Rose et al., 2018), and physical activity and healthy life behaviors (Sengul et al., 2019). Estelle-Brazzell Horton (2014) pioneered the examination of personal health responsibility in a 20-year-old single, black co-ed studying at a 4-year public institution. Her case-study approach to understanding what personal health responsibility means was innovative and integral to the development of this study. Estelle-Brazzell Horton recommended that future research include studying more diverse populations as well as the barriers and facilitators to personal health responsibility.

Theoretical Foundation

This study will incorporate SDT and HBM. Both theories have been used to describe the relationship between health behaviors, intentions, and change in the general population as well as in community college students (Sulat et al., 2018; Vasconcellos et al., 2020).

Self-Determination Theory

Deci and Ryan (1985) introduced SDT theory as an organismic approach to behavior change, in that motivation is based on the belief that there is an intrinsic drive to engage in curiosity-based, active exploration to overcome challenges and grow the self. It was the aim of the seminal researchers to integrate the cognitive, behavioral, and post-modern theorists with the humanistic, psychoanalytic, and developmental theorists to account for the influence internal structures have on behavior. The basic tenets of SDT are based on the individual’s psychological need for *competence, connection or relatedness, and autonomy*, and include such constructs as intrinsic and extrinsic motivation, autonomous versus controlled motivation, energy, vitality, life aspirations and goals, social influences, and non-conscious processes. These tenets are the groundwork for describing the *types* of motivation over the amount or quantity of motivating factors. Understanding what motivates a person to take action, or more importantly, take responsibility for their health, helps to illuminate their understanding and experience of health responsibility (Estelle-Brazzell Horton, 2014).

Basic Tenets

The need for *competence* is the desire to be effective when interacting with a person's environment and having a positive impact. It includes the total accumulation of the individual's interactions with their environment, curious exploration, adaptation, and learning, and is said to bring about a sense of accomplishment that in turn spurs future like-action. Building upon previous experiences, the individual feels a sense of accomplishment and ability.

The need for *connection or relatedness* stems from Maslow's (1943) research on basic human needs and that this primary drive is intrinsic which results from integrated internalizations that drive the energization of intrinsically motivated behavior. Being part of a greater system and having a sense of belonging are components of this construct but seems to have less influence on intrinsic motivation than autonomy and competence (Deci & Ryan, 2000).

The need for *autonomy* is based on the premise that individuals need to perceive control over their actions and act from a state of independence. It is the basis of intrinsic motivation and said to elicit feelings of excitement and enjoyment for performing the behaviors. Internalization and self-regulation are components of autonomy that reflect the individual’s values as well as awareness of interpersonal and intrapersonal dynamics is foundational in internal locus of control which is a factor that sets SDT apart from other motivational theories (Deci & Ryan, 2000).

Application

Researchers have used SDT to study various health-related behaviors and behavior change in young adults generally as well as targeting college students specifically. For example, LaCaille et al. (2020) examined weight changes and eating behaviors of emerging adults, Richards et al. (2020) studied drinking behaviors among college students, Farmanbar et al. (2013) analyzed how the tenets of SDT predicted exercise behavior among Iranian college students, and Migliorini et al. (2019) examined how SDT could be applied to individuals faced with health innovation challenges. These authors used SDT to examine correlates of specific health related behaviors that factor into how one chooses to take care of that particular component of health, and thus sheds light on how they perceive health responsibility based on their actions. LaCaille et al. (2020) expressly used the Basic Psychological Needs Satisfaction and Frustration Scale to measure frustration and general satisfaction of competence, connection and autonomy needs, the Treatment Self-Regulation Questionnaire to determine readiness to change, the Body Shape Satisfaction Scale to measure body satisfaction along with eating and weight control behaviors to assess 875 U.S. university undergraduate students age 18-25. Their aim was to examine the relationship between needs being met (autonomy, relatedness, and competence) correlated to food choice, body satisfaction and weight gain/loss in college students. LaCaille et al found a consistency that general need frustration was associated with controlled regulation and inversely related to body satisfaction as well as autonomous regulation was positively associated with body satisfaction and the consumption of healthy foods in the form of vegetable and fruit consumption.

Evolution of the Theory

As the theory evolved, four mini theories have been identified and are now considered to be a part of the umbrella of SDT theory (Deci & Ryan, 2008). These mini theories include *cognitive evaluation theory*, *causality orientations theory, organismic integration theory*, and *basic needs theory*. While they typically are not used separately, some researchers will focus on certain tenets as they relate to their research to help explain the phenomenon they are exploring (Migliorini et al., 2019; Sheeran et al., 2020).

Cognitive evaluation theory is based on the belief that the needs for autonomy and competence are fundamental to intrinsic motivation and that such contextual events like an imposed deadline or offering rewards, decrease a person's intrinsic motivation and have a negative influence on intrinsically motivated behavior whereas positive feedback have positive effects on intrinsically motivated behaviors. Additionally, *perceived competence*; when something increases perceived competence then intrinsic motivation is improved and the converse is true, when something decreases perceived competence then intrinsic motivation is decreased.Additionally, *perceived locus of causality;* when something prompts a change in perception towards more internal perceived locus of control intrinsic motivation in increased, and conversely when something prompts a change in perception towards a more external locus of control intrinsic motivation decreases.

Causality orientations theory (COT) (Deci & Ryan, 1985) focuses on the differentiation of extrinsic motivation and internalization as well as the social contexts of the internalization of extrinsic motivation. COT is based on the understanding that individuals have varying degrees of three basic orientations, *autonomous, controlled,* and *impersonal causality.* These factors influence behaviors such that autonomy-oriented individuals were more positively correlated to the various personality aspects and the control-oriented individuals were negatively correlated. The general causality orientation scale was developed to measure these individual differences and revised over the years (Deci & Ryan, 1985; Legault & Inzlicht, 2013) and appropriately validated for applications among various populations such as assessing orientation in clinical depression in the Chinese population (Lei et al, 2019) and Turkish university students (Şen & Dağ, 2016) as well as languages like Canadian French (Vallerand, et al., 1987).

Organismic integration theory postulates that individuals internalize and integrate their experiences as a means of self-regulation. This is done on a continuum and as such the degree to which they internalize extrinsic factors correlates to the amount of intrinsic motivation is influenced. The greater the experiences are integrated into their sense self, the greater the extrinsic motivation becomes intrinsic. What motivates individuals to act responsibly towards their health helps frame how they perceive health responsibility.

Lastly, basic needs theory factors in the influence the pursuit of life goals and daily behaviors have. This is especially related to the essential role basic needs has on psychological well-being and overall health. Needs satisfaction is seen as a means to promote health and well-being that is also recognized as being variable depending on factors such as gender, age, and culture. The theory looks at the relationship between the experience of need satisfaction and well-being over time, the relationship between the pursuit and attainment of specific goals and well-being, and need satisfaction across cultures such that needs satisfaction will relate to well-being regardless of culture. These four mini theories explain a set of motivationally based phenomenon that emerged from the field and formulate the basis of SDT as it is known today. They collectively help guide an understanding of the individual's beliefs and experiences about their health, what they feel they are able to control and take actions towards, and what they feel is their responsibility towards their personal health.

In order to assess the degree a person's actions are self-determined and a result of various aspects of behavior and personality, general causality orientation scales were developed (Deci & Ryan, 2002). The orientations that were assessed include *autonomy orientation,* or the degree to which an individual is inclined towards intrinsic motivation as well as integrated extrinsic motivation, *controlled orientation,* or the extent to which someone is oriented towards deadlines, directives of others, rewards and ego-involvements, and *impersonal orientation,* which relates to the amount of amotivation and lack of intentional action. These scales in turn aid in understanding and being able to predict healthy outcomes of interventions as well as the likelihood a person will act in a positive way regarding healthy behaviors. The general causality orientation scales relate to well-being indicators, behavioral outcomes, aspects of personality, and regulatory styles and have been adapted for various domains like physical activity (Ball et al., 2017; Vasoconcellos et al., 2020), education (Deci et al., 1991; Krainer et al., 2019), and vaccination behavior for sexually transmitted HPV and influenza (Fall & Chakroun-Baggioni, 2018) as well as health-related behaviors as a result of innovations in health care Miglorini et al., 2019). These scales, validated for each domain, illuminate the levels of competence, autonomy, and relatedness the subjects report, allowing the researcher to quantitatively analyze the data to determine the correlation to each construct and the potential one will make healthy behavioral choices.

Consistencies/Conflicts

The meta-analytical reviews have shown that SDT is an effective theoretical framework when used to quantitatively study motivations around health behavior and behavior change as well as in the formulation of behavior change interventions in the field of physical education (Vasoconcellos et al., 2020) as well as other health behavior change such as smoking cessation, sedentary behavior, diet, dental care, alcohol consumption, asthma management and cancer screening (Ng et al., 2012: Sheeran et al., 2020). For example, Ntoumanis and Standage (2009) found that subjects were more likely to participate in physical education classes when autonomy was supported and Richards et al., (2020) found that college students who had dispositional autonomy were less likely to drink excessive amounts of alcohol.

Among the three major tenets autonomy and competence had the most significant influence on intrinsic motivation whereas relatedness had less (Migliorini et al., 2019). Other components of the theory like amotivation and internalization, locus of control and causality were identified as having various degrees of influence in different populations and domains thus necessitating an understanding of the individual experience to elucidate potential explanations (Sheeran et al., 2020). Of note, relatedness has been shown to have the greatest variability in SDT based interventions signifying the individual experience has greater influence over most health-related behaviors (Lei et al., 2019; Migliorini et al., 2019; Sheeran et al., 2020).

Rationale for SDT as a Theoretical Framework

A major rationale for including the SDT in the current study is due to how the three tenets of SDT, competence, connection, and autonomy, are influential in health-related behaviors and behavior change (Ball et al., 2017 & Rodrigues et al., 2018; Sheeran et al., 2020). These constructs account for the socio-cognitive influences of autonomous motivation on the adoption of a particular health behavior or behavior change (Fall et al., 2018). For example, LaCaille et al., (2020) found that the greater the autonomous motivation college students had the more likely they were to have healthier eating behaviors and Farmanbar et al., (2013) found that autonomous motivation was the strongest predictor of physical activity adoption in Iranian college students.

It has been recommended that to understand what health responsibility means to community college students a qualitative analysis will allow for the free-flow sharing of that experience leading to data that has greater depth and breadth than quantitative analysis can provide (Estelle-Brazzell Horton, 2014). Additionally, SDT has not been used to investigate the experience of health responsibility specifically in community college students. SDT will be used to guide the development of interview questions including questions that pertain to perceptions of autonomy, relatedness, and competence associated with their perceptions of their healthy actions as well as their health responsibility.

Conceptual Framework

Health Belief Model

The Health Belief Model was originally developed in the early 1950's by researchers at the US Public Health Service as a means to understand why individuals failed to adopt disease prevention strategies and utilize screenings for early detection for tuberculosis prevention (Hochbaum & Rosenstock, 1952). Rosenstock's (1966) seminal work sought to understand why and under what conditions individuals will take actions to prevent, seek diagnosis, or treat a disease. He was committed to the belief that health care professionals in the realm of public health needed to understand behavior in order to effectively program interventions at the various stages of the health continuum. The goal of the research was to understand and predict behavior in attempts to prompt people for healthy behavior change. It was, however, acknowledged that a behavior could be changed without a complete understanding of its original cause.

The early iterations of Rosenstock's model were based on the belief that behaviors are driven by the individual's value of an outcome and expectations that a specific action will elicit that outcome. In addition is the belief that the barriers to perform that action are low, and the severity of inaction is high. The initial constructs of the model that are said to predict behavior include: *perceived susceptibility, perceived severity, perceived benefits*, and *perceived barriers,* and *cue to action.*

Perceived susceptibility refers to an individual's perception about their risk of developing or contracting the disease or condition. If an individual thinks the likelihood that they will contract a disease or become ill is low, they will not change their behavior. Conversely it is believed that if the risk is high, healthy behavior change is more likely to occur. Susceptibility can also be described as vulnerability and is highly variable amongst populations. This construct has also been found to have more influence when examining preventative behaviors as opposed to disease treatment (Jones et al., 2015).

Perceived severity refers to a person's feelings on the seriousness of the symptoms and outcomes of contracting an illness or leaving it untreated. It relates to how dangerous the consequences are and the impact the disease may have on their lives. It also includes whether the individual perceives their life may be at risk. While the severity of a disease can have a profound impact on the quality of life of an individual, perceived severity has often been found to be the least powerful predictor of participation in preventative health behaviors (Jones et al., 2015). Additionally, perceived susceptibility and perceived severity often are combined and labeled as *perceived threat* (Champion & Skinner, 2015)

Perceived benefits refers to the thoughts and beliefs one has regarding the reduction of threat of the disease or ability to cure it once action is taken. It has to do with whether the individual believes that a positive outcome will happen if they make a behavior change. There may be non-health-related positive outcomes that are considered as well. This is the first part of the decisional balance or weighing of the pros and cons of action the individual contemplates. The benefits, or pros, must outweigh the cons for action to occur.

Perceived barriers refers to the obstacles one believes exist that would prevent them from taking action and how difficult it might be to participate in the behaviors. They may be real barriers such as a lack of medical insurance to cover the cost of a screening, or a lack of knowledge that they are even at risk for the disease. This is the second component of the decisional balance aspect of behavior change, or the cons. If the cons are outweighed by the pros, then action will occur. Perceived barriers, and the ability to overcome them, have been shown to be one of the most important predictors of healthy behavior change (Jones et al., 2015).

Cue to action, while not one of the initial constructs, was added very soon after and refers to any impetus that spurs action. It can be internal like experiencing chest pain, or external like receiving a post card in the mail to schedule the next mammogram. Cue to action has not been rigorously empirically studied, however, is still a factor in the model (Champion & Skinner, 2015).

As the model developed over time, the 1980's saw the inclusion of Bandura's (1977) social-cognitive theory research on self-efficacy and behavior change. S*elf-efficacy* is the individual's belief that they can initiate and sustain a behavior change. The inclusion of this construct helped fill in a gap in the initial theory development due to the four ways in which self-efficacy affects human behavior: (a) cognitive; (b) motivational; (c) affect; and (d) mood (Bandura, 1997). *Cognitively*, individuals with high self-efficacy tend to be better able to visualize their success and are more ambitious; *motivationally*, individuals set high goals and expect positive outcomes with actions plans to meet those goals; and *mood* and *affect* are related to how an individual believes they can cope with any difficult situation that may arise from the pursuit of their goals (Bandura, 1997). It was believed that the addition of this construct allowed for researchers to factor in the role of observational learning through modeling the behavior of others has on health motivation as well as the belief that one is capable of making the change, thus making it a more robust theory. It should be noted that these six constructs, perceived risk, perceived severity, perceived barriers, and perceived benefits, cue to action, and self-efficacy are often referenced when defining the HBM today yet cue to action is not empirically studied (Sulat et al., 2018) and is a component that Rosenstock confers in his writings is challenging to study effectively.

Application of the Model

Over the years, the HBM has been a foundational theory model has been widely used to study various health related behaviors like breast cancer screening, colorectal cancer screening, and risky sexual behavior in several different populations. Champion's (1984, 1993) seminal research in developing scales to test the validity of perceived susceptibility, severity, benefits, and barriers to breast self-examination using the HBM proved challenging and saw the removal of the scale for perceived severity due to a lack of predictive power and variance. In 1993, Champion revised the scales once again, adding the construct of self-efficacy to improve the predictive power of the research. In 1999 the initial scales of perceived barriers and benefits were revised once more to focus on mammography-specific behaviors (Champion, 1999). All scales were tested for construct and content validity as well as test-retest reliability and internal consistency with Cronbach’s alpha’s ranging from .73 to .94. Over the years these revised scales were modified and translated to include such populations as African Americans (Vadaparampil et al., 2003), Koreans (Lee et al., 2016), Turkish women (Yilmaz, & Sayin, 2014), and Malaysian women (Che et al., 2019). The preponderance of evidence from the most recent meta-analysis showed that HBM variables were consistently related to the health behaviors but that the strength of the correlations were varied (Sulat et al., 2018). Perceived benefits and perceived barriers still were the strongest predictors of behavior change, and perceived severity was the weakest (Sulat et al., 2018).

Other early investigators looked at how HBM may inform public health professionals about healthy dietary behaviors (Becker et al., 1977; Maiman, 1977) as well as sexual health behaviors (Katatsky, 1977; McCammon, 1982; Simon & Das, 1984) and chronic disease prevention (Ludvigsson et al., 1980; Redeker, 1988) in adults. Later on it was utilized in research on the more deleterious health behaviors based on addiction like smoking and drug usage (Kaufert et al., 1986; Reid & Christensen, 1988; & Abraham et al., 1996).

While these tenets are important to understanding how individuals think about the threats and consequences of their behaviors around disease prevention and reduction, there are a few important limitations. Despite being one of the most widely used theories used in health behavior change research, is not an all-encompassing theory (Janz & Becker, 1984; Sulat et al., 2018). Following are a few of the major areas where the model falls short and the rationale for including the use of Self-Determination theory in this study. First, the model does not account for a person's beliefs, attitudes or individual determinants that dictate a person's *acceptance* of a health behavior or personal behaviors that are *habitual*, like smoking, or are performed for social or cultural reasons. *Environmental* and *economic* factors that may promote or prohibit recommended action like accessibility to low or no cost screenings like mammograms and colonoscopies, or sexually transmitted infections like HIV and HPV are also not factored into the model. Additionally, there is an *assumption* that health is the main goal in the decision-making process as opposed to external motivators like pleasing a spouse or winning a contest (Sulat et al., 2018). Another limitation of the model is the influence moderators that are very difficult to measure might have on the behavior change like time between intervention and when behavior change is measured (Sulat et al., 2018). Lastly, continued use of the direct-effects version of the HBM scales is not recommended due to the weaknesses of the correlation of variables (Carpenter, 2010) because it is not known whether constructs mediate relationships in tandem with a moderator (moderated mediation), comparably (parallel mediation), or in sequence (serial mediation) (Jones, et al., 2015).

Despite its limitations (Janz & Becker, 1984; Sulat et al., 2018), the Health Belief Model is an excellent framework to utilize in this qualitative analysis seeking to understand how community college students perceive health responsibility. Examining how community college students understand what their responsibility is for their own health and wellness and how they perceive their health behaviors, what motivates their healthy behaviors as well as why and how they made healthy behavior changes fall well within the framework of the HBM combined with SDT.

Summary and Conclusions

In sum, health responsibility has not been well studied as a phenomenon. Rather, related concepts like self-care and health literacy have been used, mainly in relation to the qualitative analysis of the management of chronic diseases like diabetes (Seah et al., 2020), chronic obstructive pulmonary disease (Clari et al., 2016) and heart failure (Spaling et al., 2015). Community college students have not been widely studied qualitatively in relation to health responsibility (Estelle-Brazzell Horton, 2014).

Rationale to use Self-Determination Theory and Health Belief Model

Self-determination theory allows for the exploration of how the level of personal needs fulfillment affects behavior choices in any given health domain. The constructs of autonomy, or how free one feels to act independently, connectedness, or a person's need to belong and relate to others, along with competence, or a person's ability to engage in and be effective in a behavior do not consider their perceptions of how likely they are for getting sick or contracting a particular disease is or how their actions may affect their health, per se, they are related more to internal states of ability to act. The health belief model, on the other hand, does utilize the individual's perceptions of disease threat, perceived barriers, perceived benefits, and self-efficacy for predicting the likelihood they will make healthy choices and accounts for some social influences on motivation for healthy behaviors.

College students have been studied using the HBM for various health-related behaviors like HPV prevention (Grace-Leitch & Shneyderman, 2016) and weight management (Das & Evans, 2014; MacArthur et al., 2018), and some researchers included SDT with HBM in their research with this population like Fall et al. (2018) when examining vaccination intention. Combining the needs fulfillment aspects of SDT along with HBM's use of disease threat, benefits, and barriers as well as self-efficacy, allows the researcher to have a more wholistic approach for developing research questions and thus a richer understanding of health responsibility.

Because community college students have increased risk of developing stress-related diseases like diabetes, depression, obesity, and asthma (Liu et al., 2017) it is important to fully understand how they perceive their accountability and responsibility to attain or maintain their health. It is not well known how they perceive who is ultimately responsible for their health and well-being, and as such, stakeholders may be errantly missing potential areas to design interventions, provide education, and perhaps even program services that would serve the students' right for health and wellness.

In Chapter 3, I present the research methods and analysis plan to address the gaps in the literature.

Chapter 3: Research Method

The purpose of this basic qualitative study was to understand how community college students perceive responsibility for their health and well-being. The intent was to provide results that would inform stakeholders of potential areas for interventions and possible areas needing further study. I sought to add to the knowledge base in the areas of health psychology and public health regarding how an identified subpopulation of less healthy individuals experience taking responsibility for their health. The research design and rationale, role of the researcher, methodology, ethical considerations, and issues of trustworthiness are discussed in this chapter.

Research Design and Rationale

The research question was the following: How do community college students experience health responsibility? The primary concept of the study was health responsibility. Although that specific concept had not been widely investigated, it had been included in related domains that had been studied (e.g., self-care and health literacy). Other concepts that have been explored are autonomy, connectedness, and competence because they are constructs that are relevant to SDT along with the tenets of the HBM: perceived susceptibility of disease or illness, perceived severity, perceived benefits, and perceived barriers (Fall et al., 2018). These conceptual and theoretical frameworks provided the foundation for developing the interview questions because they had been used to study health behaviors (see Fall et al., 2018; Farmanbar et al., 2013).

The research approach was basic qualitative. I sought to understand how the individual creates meaning by interacting socially and having influences from a variety of sources including but not limited to society and culture (see Merriam & Grenier, 2019). Because health responsibility is a personal and social concept that requires the individual to cultivate and act on the awareness of health concerns (preventative and treatment), along with informed consumerism or the ability to make a sensible decision based on the knowledge and insight about a product or service, a qualitative approach was suited for exploring how participants described and experienced those concepts. Quantitative research has been conducted to study health beliefs and self-care from the perspective of attitudes, beliefs, and outcomes (Das & Evans, 2014; Sheeran et al., 2020); however, by focusing on the identification and measurement of key constructs a priori, the researcher misses the opportunities to have the study participants inform the researcher of their holistic experience (Merriam & Grenier, 2019).

I used Thorne's (2008) interpretative description as the guide for the basic qualitative approach. This approach emerged from research done in the field of nursing and other health sciences, where the intent was to work within the contextual reality of the phenomenon to better under the people who experienced it. Interpretive design has also been used in medical education research as a viable framework to explore complex experiential questions without sacrificing methodological integrity.

I also considered a phenomenological approach, which has as its primary goal to uncover and understand the lived experience of a phenomenon (see Worthington, n.d.). I did not assume that individuals had a common experience of health responsibility, but rather wanted to investigate their varied and unique experiences. Therefore, I concluded that a phenomenological design was not a good fit.

Role of the Researcher

As an assistant professor at the community college where I collected my data, I was both an observer and a participant in the research context. I chose this topic because I wanted to understand how community college students perceive their health and well-being because they are important components of overall health and wellness. I thought health and wellness were relevant to their overall academic success as well as their quality of life and life satisfaction.

I planned to recruit participants from the community college where I teach. There are four campuses and one satellite facility in another county as well as some students who attend classes virtually. To improve credibility, I did not recruit my current students as participants and sought to find individuals who did not have me as their instructor at any point during their matriculation at the institution. Also, I ensured that confidentiality was maintained by using the following procedures: a password-protected computer so no one would have access to the data, use of pseudonyms, and reporting of results in such a way as to minimize the risk of being able to recognize any of the participants. By using students who did not have me as an instructor, I minimized the risk of bias to answer in a particular way because students knew me, my beliefs and preferences, and what would please me.

In qualitative analysis, the concept of researcher as instrument is an integral component of trustworthiness and credibility (Morrow, 2005). To aid in the rigor of my study, I conducted three reflective self-analyses. First, I participated in a bracketing experience that included an exploration of my potential biases and preconceptions including emotions, interests, values, theories, and assumptions, which may have tainted my research process (see Tufford & Newman, 2010). This research technique allowed for deeper reflection and contemplation during all aspects of the research process from the selection of the topic and population to the research design, data collection, and data analysis. The aim was to have an extensive and multifaceted analysis to enhance the credibility of the research.

In addition to bracketing, I also participated in extensive note taking (memoing) by recording what I experienced before, during, and after the interview process, including the emotional experience of data collection and potential “ah ha” moments of research. Using the method of debriefing, I paused during the session and had the participant confirm what they shared via summary reflections. These pauses also allowed time for participants to reflect more and think deeper about their responses. During the end of the session, I asked if they had anything else they wished to share. I did not provide an oral summary at the end of the interview but rather sent all participants a written summary of their interview to review, comment on, and return to me to increase the dependability of the findings. Trustworthiness is an important concept in qualitative research and performing these three tasks enhanced the rigor and quality of such aspects as social validity, reflexivity, and subjectivity as well as adequacy of data and interpretation (see Morrow, 2005).

I had a professional and personal relationship with the topic because I teach health, physical education, and exercise science courses, and health is a requisite factor I attend to on a daily basis. To reduce potential conflict of interest, I did not recruit any current or former students and continued to have conversations with my direct supervisors as to the nature of my study and methodology. In addition, I offered a $10 dollar gift card to thank students for their time when they were finished with the interview. I informed them that if they chose to stop the interview at any time, they would still receive the gift card and would not be penalized in any way.

Methodology

Participant Selection Logic

Community college students differ from their 4-year counterparts in many significant ways, are a subpopulation of college students and warrant an exclusive study. Although it would have been ideal to determine the exact demographic profile of the institution and attempt to obtain a similar profile in the sample, or what was considered a representation (see Thorne, 2008), it was not realistic in the current study design. I intended to use maximum variation sampling (see Patton, 2015) to obtain a diverse, heterogenous group of participants from each of the four campuses and online students. The rationale was that community college students have varied backgrounds, and each participant from a specific demographic would help enrich the understanding of the experience of health responsibility so I could determine whether there were any shared aspects defining their core experiences (see Patton, 2015).

Thorne (2008) pointed out that interpretive descriptive studies do not have set sample sizes and that sample size can be quite arbitrary. In the current study, the aim was to interview 15–20 students from all four campuses. Thorne also pointed out that that saturation is realistically not possible in interpretive description studies; however, the goal was to recruit a diverse sample of students and acquire sufficiently rich, thick descriptions to illuminate the phenomenon under study.

Saturation, or the point at which there are no new themes or information that is observed in the data (see Guest et al., 2006), was a goal I attempted to meet when recruiting those who agreed to participate in the study. Participants were 61% men, 39% women, 54% White, 29% African American, 6% Hispanic, 1% Native American, 3% Asian American, 2% Multiracial, and 5% unknown. Guest et al. (2006) suggested that for a maximum variance sampling strategy that looks for possible disconfirming evidence, a sample size of 12–20 is recommended. My sample size of 13 was assumed to be sufficient. However, Thorne (2008) emphasized that epistemologically to believe that no new themes or variations could emerge is “antiethical” (p. 98).

Recruitment Strategies

The invitation flyers (see Appendix A and B) presented the introduction to the study, how to contact me, and notice of the $10 thank you gift card rendered in appreciation for participating. I sent an electronic copy of the invitation to colleagues across all four campuses and asked them to post the flier in their announcement page on the Blackboard Learning Management sites. The college allows for academic freedom, and instructors may post what they wish to their sites. I received confirmation emails from many colleagues across the college stating they would share it. I believe many others simply shared it without letting me know to aide in confidentiality of their potential student participants. I was unable to use the social media sites that are associated with the college because they are monitored by the institution and required permission that I did not have prior to the study. Additionally, I posted the hard copy invitation (see Appendix B) on bulletin boards on all campuses that had pull off tabs at the bottom with my contact information. Any student who was enrolled in at least one academic course was eligible for the study. Students interested in the study reached out to me via email, text, and phone to discuss their potential participation in the study. Students were then emailed the consent form and, once replies of “I consent” were returned, interviews were set up.

Instrumentation

Data collection consisted of individual interviews via phone or Zoom using an interview guide of questions and a reflective journal in which I noted self-observations as well as observations of the study participants. I changed my original plan to ask the main research question first and instead asked participants to share some things they currently did to take care of themselves. I wanted to get them to think about the ways in which they take care of themselves to encourage a reflective mindset because I did not think they would be able to come up with a deep answer as to what health responsibility meant to them at the beginning of the interview. I also decided the question might help in establishing rapport so that they would feel comfortable sharing in deep and meaningful ways. I continued to consult the field guide of questions based on the concepts of the theoretical and conceptual frameworks, and at the end of the conversation asked the main research question addressing what health responsibility meant to them. I met with the participants for approximately 1 hour over the phone or via Zoom conferencing. The Zoom room was password protected, and the session was locked before the interview began.

The questions for the interview guide are presented in Table 1. The major theoretical and conceptual constructs from the HBM and SDT were incorporated into their development. Reflections and probing questions were also used throughout the interview to aid in content validity and accuracy of understanding. It was my hope that all participants would answer all questions honestly. In addition, if the event that a participant shared that they had limited time to participate, I prepared one big question (see Patton, 2015) to capture information related to the study topic. Only one participant reported having limited time but was able to share their responses to most of the questions and gave extensive and rich responses.

Table 1

Field Guide

Concept	Citation (notes)	Question
Health and well-being	Basic assessment of what one does to be healthy (Estelle-Brazzell Horton, 2014)	How do you take care of yourself? (Probe: eating, sleep, exercise, stress management) Can you tell me about a recent health issue or concern?
Autonomy	Migliorini et al. (2019) – how people make decisions and act, independence	So tell me about a time where you had to do something specifically to take care of your health.(Had flu-like symptoms, had stomach pains that felt like more than just gas bubbles) How did you respond?
Connectedness	LaCaille et al. (2020) - how people act as a means for connection and relatedness	Tell me about a time when you did something that you thought was a healthy choice because you wanted to be a part of a group or have connection. Did you keep doing it for the health benefits?
Competence	LaCaille et al. (2020) - How people need to feel one has the ability to accomplishment something positive as a result of interacting with their environment	Tell me about a time when you made a decision to do something that you considered healthy because you knew you were able to do it. Where do you go for health-related information? Where do you go when you need medical help or treatment?
Perceived susceptibility	Jones et al. (2015) - how one feels they are at risk for developing or contracting diseases or other illnesses	What are you most concerned about for your health? e.g., Getting sick? (prompt: Getting overweight and getting diabetes or other disease?)
Perceived severity	Sulat et al. (2018) - how one feels they will be negatively impacted as a result of contracting or having a disease or illness	What are your thoughts about your risk of getting sick or contracting diseases in general? Follow up: catching a virus like the flu or Corona virus.
Perceived benefits	Sulat et al. (2018) - how one feels they will benefit from a particular health related behavior	What do you think about preventative approaches to health like regular checkups for teeth, eyes, blood pressure, etc.? How about getting vaccines like the flu, updated tetanus, etc.?
Perceived barriers	Sulat et al. (2018) - how one perceived how difficult it will be to take action to prevent or treat a disease or illness	What have some of your biggest challenges been to taking care of your health and wellbeing? What was the biggest barrier you experienced? Probe: other barriers Was there another big challenge? What was the biggest barrier there?
Cue to action	Sulat et al. (2018) - that factor that sparks the motivation to act, can be very ambiguous and varied intraindividually	Tell me about a time when you made a healthy behavior change like quitting smoking or getting more exercise. What made you do that?
Self-efficacy	Grace-Leitch and Shneyderman (2016) - the belief that one can begin and sustain a behavior change	Tell me about a time you were motivated to do something good/healthy for yourself? What kept you motivated to do it?
Health responsibility	Estelle-Brazzell Horton, (2014)	Given all we have talked about, what does health responsibility mean to you? Is there anything else you want to share with me?
	ONE BIG QUESTION - if they do not have a lot of time	What does *health responsibility* mean to you? (probes to clarify)

Procedures for Recruitment, Participation and Data Collection

I collected data from students attending a four-campus Midwest community college. Upon receiving Walden University Institutional Review Board (IRB) approval number for this study, 02-08-22-0776536 expiring February 7, 2023, along with the Community Partner, I recruited participants by posting fliers around campus and sending digital copies to colleagues to share with their online students. Students expressed interest by responding to the flier via email, text, or phone to me directly. When I responded, I reviewed the purpose of the study, the criteria for inclusion, and logistics of participation (Zoom link or phone number to be used, time, thank you gift card, and member checking). I then emailed the consent form to all study participants who qualified for the study. The consent form indicated participants may ask questions prior to giving consent, and I reiterated that in the body of the email. Participants were instructed that if they fully understood the study parameters and had no questions, they should reply to the email with the words “I consent.” I then scheduled individual, one-on-one interviews over the phone or via Zoom, whatever participants preferred. I advised participants to be in a private location in which they felt safe and comfortable to talk freely. Interviews lasted approximately 1 hour and took place over the course of 4 weeks to accommodate participants’ diverse scheduling needs.

I digitally recorded each session as well as took observational notes. A debriefing at the end of the interview was conducted to review the member checking procedures and communicate how a summary of results and thank you gift card will be shared. After I transcribed the session, as a means of member checking I sent a summary for participants to review and offer the opportunity to confirm its accuracy or provide clarifications and corrections via email. I did not get the desired 15-20 participants and asked participants if they would be willing to share the invitation to participate with peers at the college but did not get any additional participants. Data will be retained in a secured location for 5 years upon which they will be destroyed professionally.

Data Analysis Plan

Once each interview was complete it was transcribed and summarized. I transcribed the data myself for phone interviews and utilized the live transcription option in Zoom to initially record the interview but reviewed all recordings for accuracy and coding purposes in order to be more fully engaged with it. A copy of the summary was emailed to each participant to check for accuracy. In addition to the traditional steps in data analysis of preparation, organization, management and presentation, Thorne (2008) discussed the importance of working with the data conceptually in the following steps: *comprehension,* or learning as much as one can about the study participants and the environment in a nonjudgmental way; *synthesis,* or determining what gets included in the data set; *theorizing,* or using educated guessing about what the data means; *and recontextualizing,* taking the information full circle and bringing it to the larger body of study as newly generated knowledge. By engaging with the data like I did, I attempted to work with the data conceptually as well.

While Thorne (2008) suggested that coding is one of the traditional ways in which to organize data and is an inevitable component of qualitative data analysis, data from an interpretive design may benefit from a “top-down” approach that is broader in scope and rigor. Thus, I looked for higher-order patterns that emerged from the data and then organized them into relationships. Analytic notes and documentation also were incorporated (Thorne, 2008).

Trustworthiness

Credibility, rigor, validity, or *trustworthiness* speak to the goodness (Morrow, 2005) of qualitative research. Shenton (2004) suggests in addition to subjectivity, including *dependability,* or the systematic use of a process; *triangulation,* respecting and capturing multiple perspectives; *researcher reflexivity,* or the ability of the researcher to understand how their own understandings and experiences affect the research process; *particularity,* honoring the uniqueness of certain cases; and *dialogue,* the importance of various perspectives brought about by context, rapport, and culture. I will discuss each in detail.

Credibility

Due to the personal nature of self-care and health related behaviors that individuals may or may not participate in, individual interviews via phone and Zoom video conference were used. I recruited participants across the four campuses as well as those completely virtual students to enhance credibility via triangulation. I had hoped to attain a heterogeneous sample of 15 - 20 students to obtain an adequate level of saturation, however, I found that I had a richness of data from a smaller sample as I observed multiple commonalities among participants (Thorne, 2002) and felt I had adequate data to proceed to formal analysis.

As I practiced interviewing on colleagues and friends, I utilized those outside observer's input and found that my processes and techniques were adequate. Member checks throughout the actual interview process were conducted and the digitally recorded information verified at the end of each interview. Summaries were emailed to participant to confirm accuracy. Reflexive notes were journaled throughout the duration of the study as well (Shenton, 2004).

Transferability

In order to facilitate transferability I first sought to recruit a heterogeneous sample of students. I strived to include as much detail about the process and focus of my study. I included the background information and information about the institution, the data collection methods, number of participants, and length of the study as well. The use of thick description should other researchers in determining the applicability of my study (Shenton, 2004).

Dependability

Based on my literature review, I determined that a basic qualitative approach was best suited to the study design and resulting research question (Shenton, 2004). I described in detail data collection techniques and the experiences I had in the field. I included a reflective appraisal of my study to judge the effectiveness of my endeavor and outcomes.

Confirmability

I attempted to quell my biases by first pondering any I may have and journaled about them. Being aware that I may infuse my biases in my data analysis I utilized participant verified summaries and my reflective commentary noted in my journal to review for accuracy and validity. My audit trail is abundantly clear in my write-up for readers to ascertain study credibility (Shenton, 2004).

Ethical Procedures

IRB approvals were attained at both Walden University and the institution I teach at prior to the collection of any data. Participants were recruited from all four campuses via print and digital fliers. I emailed digital fliers to my friends and colleagues at the college to aid in publicizing the study. Paper fliers were posted on public bulletin boards around all of the campuses for students who are physically on campus.

Individuals opted in to participate by contacting me directly. No other campus entities or individuals were informed of their participation. I gained written consent via email before we meet for the interview, and I informed volunteers they may take whatever time they need to review the document and have all questions answered prior to giving consent. Volunteers were told to choose a private interview site that would not incur the risk of others' learning of their participation. Interview transcripts and email communications were de-identified and stored in password protected files. Transcripts were only shared with my committee chair. Identifying information about individual participants such as name, major, or campus were not included in the analyses or presentation of results. Data will be saved for 5 years, upon which it will be professionally destroyed.

I did not recruit any current or former students to help prevent bias or coercion. I also apprised my supervisors of my research, so they were aware of my actions. I ensured that participants understood that regardless of whether they participated or chose to leave the study there would be no adverse actions or negative repercussions. I also let them know that I would not discuss their participation with their professors or other individuals at the college. Because community college students have very busy schedules, and their free time often is limited, I distributed a $10 gift card as a thank you for their interest in my study. This amount is not exorbitant but meaningful as a way to show appreciation for consideration as well as time and effort. I also let participants know should they wish to end the interview at any time they would still receive the thank you gift card.

As a health professional I am required to report information of child/elder abuse to the authorities of the institution. I was not, however, required to report illegal use of substances unless it was conducted on school property. I did not need to report any misconduct on campus, and thus did not need to report anything to the Student Concerns Reporting System that is directed to the Dean of Student Affairs. To attenuate any harm or discomfort a participant may have had as a result of the interview process, I included a listing of health-related resources both locally and at the institution regarding counseling and addiction in the consent form. This alleviated any hesitancy or trepidation about asking for such resources should the need have arose as a result of participation.

Summary

Rigor in qualitative research is integral as the researcher is also an instrument in the research and requires a deeper level of analysis (Ravitch & Carl, 2016). In chapter 3 I identified that a basic qualitative design was the best fit for the study and that Thorne's (2008) Interpretive Design was the guide for the approach. I discussed my role as the researcher and included how I maintained objectivity and ethical practices using reflexivity. I further discussed in detail my methodology including how I recruited participants from all four campuses and attempted saturation by interviewing 13 participants. I referenced my recruitment fliers, consent form, and field guide of questions as well. I ended the chapter discussing the credibility, transferability, dependability, and confirmability of the study along with the ethical considerations of conducting the study at my place of employment. Chapter 4 is a summary of my data and findings.

Chapter 4: Results

The purpose of the study was to understand how community college students experience health responsibility, or the duty a person has to act to take care of their health and well-being. The research question was the following: How do community college students experience health responsibility? In this chapter, I discuss the conditions surrounding data collection, detail the data collection process including recruitment and the qualitative interview process, and describe the demographics of the 13 participants. I then explain in detail the data analysis process, provide supporting evidence of the credibility and trustworthiness of the research, and share the results. I end with a summary and transition to Chapter 5.

Setting

Participants were 18 years of age or older and enrolled in at least one course at the institution. There were no further delimiting criteria except that participants could not be current or former students of mine to attenuate researcher influence and bias. The spring semester had started 2 weeks prior to my recruitment efforts, so students were getting settled into the semester but were not overloaded with midterm exams and projects. The study invitations were distributed in paper and digital formats (see Appendix A and B) over the course of 1 week. Digital invitations were emailed to faculty across the college to post to their Blackboard online learning management sites and to announce in class, and paper invitations were posted on all of the campuses' public bulletin boards. Social media at the college were not used because an approval process was required, and that protocol was not anticipated at the onset of the study.

Demographics

The 13 college students who participated in the study were all enrolled at the community college for at least one course with most meeting full-time status, or 12 credit hours. Of the 13 participants, 10 identified as female, two as male, and one as trans male. Not all participants shared their age beyond meeting the participation criteria of being at least 18 years old, but for those who did, ages ranged from 18 to 38 years, with seven participants being 26 years or younger. Of the participants who shared their insurance status, six were on Medicaid from the state, four had their own insurance, two were on their parent's insurance, and one had no insurance. Three of the participants were parents and had children living with them in their home. Of the remaining participants who shared where they lived, five lived with their parents, three lived alone, and two had at least one roommate.

Some of the participants shared that they were managing chronic health problems. Five of the participants reported having mental illness diagnoses, and four shared they were managing chronic health diseases such diabetes, gastroesophageal reflux disease, celiac disease, and hypertension. With regard to employment status, four participants were unemployed at the time of the interview, and of the remaining nine, three stated they worked full-time in addition to being college students.

Data Collection

I completed 13 individual interviews, three by Zoom video conferencing and the remaining via the phone. I did not detect any discernible differences in the interviews or quality of responses between the two methods. Participants were given the option of the two formats, and I deferred to their preference. Within the first week of recruitment, three participants responded via text message indicating their interest in participating. Consent forms were emailed to each once their age and status of not being a current or former student was verified. Upon receiving their email stating "I consent" and their preferred method of interaction, I scheduled phone interviews in such a way that the second and third interviews would be a week after the first interview. My chair recommended we review the first interview transcript together so I knew I was able to obtain the data I sought and ensure nothing needed revising. I used the app called Rev Recorder on my password-protected phone to record the interviews. The app has privacy policies that encompass data collection requirements. The only identifying information that was stored in the app was the day, time, and duration of the call. I allotted an hour and a half of time for each interview to allow for technology or other issues that may have arisen. I asked my IRB-approved set of questions in addition to follow-up questions to elicit deeper responses and took paper notes during the interview. I transcribed the initial interview and reviewed the process with my chair. After she approved the process and results, I met with the other two participants and continued to schedule interviews as individuals reached out.

During the first week of recruitment, I received three text messages from students wanting to participate. During Week 2 I received three texts and four emails, and during weeks 3 and 4 I received three texts and three emails. During Weeks 5 and 6 I had no contact. Week 7 I received one email from a student who had participated and stated they would share the invitation with fellow students. I waited for one more week but did not receive any further interest. Fifteen participants made appointments to complete the interview. One student cancelled twice and did not follow up to reschedule. After the second cancellation despite my reaching out via email to reschedule, one student revoked consent.

Each interview began with establishing rapport and thanking the student for participating. I assured the student that their information would be confidential and informed them that I would be taking observational notes regarding their facial expressions and body language (if by video) as well as tone and emotional state. I assured them that I would keep all handwritten notes locked in my personal file cabinet and all documents would include a number instead of any identifying information such as a name or email address on their digital data. At the conclusion of each interview, the participant was reminded about the summary they would be emailed to confirm its accuracy. I then sent them a digital $10 Amazon thank you gift card to their phone number. I personally transcribed the interviews that were conducted over the phone and used the live transcription option in Zoom to transcribe the interviews from that platform. The Zoom meeting was password protected and conducted on my password -protected personal laptop. Upon starting the Zoom meeting, I locked the meeting to prevent any other person from entering to ensure confidentiality for the participant. I reviewed and edited the live transcriptions from Zoom to ensure accuracy.

As part of my audit trail, I kept a reflexive journal in which I included my thoughts and feelings about the process, what the students were sharing, and how I felt about their answers. I reflected on not only the process of data collection but also how I was impacted by the data. Reflexive journaling aides in mitigating researcher bias and enhances credibility of the study (Shenton, 2004). I strove to be aware of how my biases might influence the tone of my questions and what I heard the participant say. The reflexive journal had no identifying information about the participants but rather was labeled with a number specific to each individual. I maintained this journal in a locked file cabinet in my home office.

Upon completion of the interviews, I transcribed the audio files verbatim from the app on my phone, and I reviewed the Zoom captioned file while rewatching the interview to take note of nonverbal communication. I had to rewind the audio often during the transcription process and was deeply immersed in the data, hearing them over and over. I read both the transcriptions and the summaries I wrote for each individual numerous times during the coding/recoding stages to aid in the coding process of categories and themes (see Thorne, 2008).

Interviews were initially set for 1 hour per the participant requirements stated in the invitation. I found that most interviews lasted approximately that long. Only two went over the hour, two lasted approximately 50 minutes, and one lasted 30 minutes due to an unforeseen schedule conflict for the participant. I had initially planned to collect data from 15–20 students; however, I was unable to use the college’s social media page, which I feel hindered data collection. Some participants stated they would share the invitation with fellow students; however, that did not result in any additional student participation beyond the 13.

Data Analysis

I used a top-down approach to data analysis as suggested by Thorne (2008) to allow for the identification of broader patterns and relationships. Because I chose to immerse myself in the data and transcribe all of the interviews myself, I feel I had a head start on the process as I immediately noticed some commonalities in the interviews. In addition, I took copious notes during the process of how the data seemed to relate to the conceptual and theoretical frameworks. I read and reread the interviews numerous times along with the summaries I wrote to get a sense of what the interviews were telling me. This amount of contact with the data contributed to the trustworthiness of study.

Once I determined I was not going to have any more participants, I began the process of formally coding the data. I opened digital copies of each interview, void of any identifying information, in Word documents. The first and second round of coding took 4 weeks to complete. The first round consisted of reading and comparing responses of each participant and highlighting common phrases in specific colors (Creswell, 2014; Saldana, 2016). I reflected on the meaning those common phrases seemed to indicate as they related to the tenets of HBM and SDT and developed the initial five themes (see Thorne, 2008). I then typed those themes out on separate Microsoft Word documents for each theme and entered quotes from the participants under each theme. Fourteen days later, I reviewed the transcripts again to ensure consistency from the first round of coding, reflected on what the data seemed to represent from the frameworks, and determined two additional themes were needed. During the final round of coding, I reviewed the data in each theme and discovered that subthemes were needed for four of the main themes. The coding process is presented in Table 1. To further support credibility and confirmability, I sought out discrepant cases but none were revealed. However, I identified five interesting and unique responses. They are discussed in the results section in the corresponding themes.

Table 2

Coding Process Example

Theme	Subtheme	SDT*/HBM** tenet	Raw data
Nobody is going to take care of me		Competence*/autonomy*/self-efficacy**	"before I'd be really nervous to do that and just leave and not say anything but now, I have to 'cause there's no one else that's gonna do it for me."
Taking "good" care	Physical activity/exercise Mental health/Stress management Health coverage/routine exams Nutrition Personal hygiene/ Dental health Sleep	Perceived benefit** /autonomy*	"I think just getting away. Mostly just getting away. Like when I exercise, I go to the basement where I know no one goes. My husband, knows that Mondays I have Monday night by myself
A little help from my "friends"		Self-efficacy/connectedness	"He doesn't smoke and so that helped. Like being with someone who didn't smoke so I did not smoke."
Cue to action	Self-efficacy Family history of disease Fear of poor health later in life Avoiding medication Autonomy/competence Negative factors Feeling/looking better Mandated What I was thinking	Cue to action/perceived benefit/perceived threat/self-efficacy/autonomy /competence	"I obviously started after I couldn't visit the dentist anymore; I started doing it twice a day. I got a Waterpik flosser."
Barriers	Lack of something Negative prior experience	Perceived barriers**	"So I don't really have a lot of time to do things that I would like to do. Like, you know, painting or writing, which is something that I love, but I just haven't had a chance."
Tech help	Apps Telehealth Google YouTube/TikTok Online websites	Self-efficacy/connectedness/autonomy/perceived threat/	"I use My fitness pal to keep up with the calorie intake."
What I want to improve		Cue to action/perceived benefit/autonomy	"I should take vitamins. I used to take vitamins but I never I never want to buy them for myself, but I should."

Trustworthiness

As Patton (2015) discussed, a rigorous study accounts for each component of trustworthiness. To address credibility, I attempted to obtain a heterogeneous sample of participants to capture as many perspectives as I could, giving rise to a diversity of experiences. Because I was able to interview individuals who were of varying ethnic and cultural backgrounds, marital status, employment status, insurance coverage status, and gender status, I felt that the 13 interviews afforded adequate representation of the institution. Data saturation was achieved because there were enough diverse responses that revealed much repetition and had an enriched coverage of what I found. Thematic saturation was achieved via sufficient depth of data in each theme (see Guest et al., 2006; Shenton, 2004). I maintained researcher reflexivity via handwritten journaling and thoughtful reflection before, during, and after the interviews and remained mindful of how my feelings, beliefs and biases may affect the interviewee and process in general. I asked all participants the same questions from the field guide and used member checking during the interview process to confirm understanding of participants' responses and via emailed summaries for each participant.

Transferability, or the extent to which there is generalizability or external validity (Morrow, 2005), was addressed through an audit trail in which I discussed my role as researcher and an instrument in the process, provided context to the interviews and characteristics of the participants, and detailed the process of data collection so that the reader would have adequate knowledge to determine transferability for themselves (see Shenton, 2003). In addition, I gave background information on the institution and details regarding the data collection techniques, number of participants, and length of the study. I attempted to provide sufficient transparency in describing the data analysis process and how I arrived at the results.

Dependability was approached prior to the study as I participated in bracketing, a process by which I explored my potential biases and preconceptions about health responsibility and health-related behaviors in general. I included my emotions, values, and interests as well as my assumptions to avoid tainting my research process (see Tufford & Newman, 2010). I practiced my interviewing skills on friends and colleagues to discern any potential biases I may have felt during the actual data collection process and obtained feedback from the practice subjects. During the study, the reflexive journaling and extensive audit trail contributed to dependability as I adhered to the field guide of questions and remained focused on the topic of health and the experiences the participant had regarding responsibility for their health.

Confirmability was accounted for using reflexive journaling and implementation of the audit trail to allow the process of data analysis and findings to accurately reflect the data collected. I delineated how the codes and themes emerged, giving the reader the information needed to support the reporting of the participants' experiences over my opinions (see Shenton, 2004).

Results

The 13-participant dataset used for this analysis were rich in information and lead to the development of 7 main themes and subthemes. The main themes include *Nobody is going to take care of me*; *Taking "good" care*; *A little help from my "friends;" Cue to* *action*; *Barriers; Tech help*; and *What I want to improve*. The subthemes are as follows: taking “good” care subthemes are *physical activity/exercise; mental health/stress management; health coverage/routine care; nutrition; sleep*, cue to action subthemes are s*elf-efficacy; family history of disease; fear of poor health later in life; avoiding medication; autonomy/competence; negative factors; feeling/looking better; employment; mandated;* barriers subthemes are l*ack of something; negative prior experience; and t*ech help *subthemes are apps; telehealth; Google; YouTube/TikTok; online websites*. I will discuss the findings according to themes and subthemes along with the five interesting data points: Under the barriers theme one participant shared that living at home their parents were a barrier to seeking mental health help of seeing a therapist; under the taking good care theme one participant shared that they intentionally chose to start smoking again for stress management and another participant started a podcast to foster mental health and connection; under nobody’s going to take care of me theme one participant shared they decided that going back to school was the best way to manage their mental health crisis and be able to take care of their children, because they were divorced and had lost their mother five years previously; and under cue to action subtheme autonomy/competence one participant shared their experience of being hospitalized due to a mental health crisis and eventually hitting rock bottom and intentionally chose to a commitment to adopting healthy behaviors following recommended guidelines for eating, sleeping, exercise in addition to seeking therapy.

It should be noted that the college does offer a variety of health-related services including the following: Help is Here app for mental health resources at the college and in the community; aid in finding childcare, Preventative Care Centers on two of the four campuses; low-cost massage therapy clinic on one campus; physical therapy services, dental clinics, and an optical dispensary on one campus. No participants mentioned utilizing any of the aforementioned resources. One participant did share that they intended to use the free bus passes the institution gives students to get to their medical appointments.

Theme 1: Nobody Is Going to Take Care of Me

Participants reported that, as adults, it became clear that they were now responsible for ensuring their health and wellbeing. Participants could not rely on others to care for them, and they connected this experience to how they experience their health responsibility, and the underlying duty to act autonomously. All 13 participants expressed some form of this belief in their interviews when they discussed health related behavior changes, when speaking about taking care of themselves in general, and as part of what health responsibility meant to them. Participant 9 said succinctly, “That, it’s your responsibility to be a healthy person. Nobody is gonna be, do that for you.” Participant 6 expressed their experience of how it felt, referencing specifically how it was transitioning to a legal adult, “And after you know, turning 18 and realizing I, well, I gotta make doctor’s appointments alone. I gotta, you know, grow up a little bit. My mom can’t hold my hand through everything.” Participant 7 stated, “Taking accountability that I am responsible for my own health and just having knowledge and not being ignorant to what can affect me in a negative way.” Additionally, Participant 8 expressed how she grew to get to the point of that realization and action, “...before I’d be really nervous to do that and just leave and not say anything but now, I have to ‘cause there’s no one else that’s gonna do it for me.” Participant 9 offered a unique response, expressing the need to care for themselves because they had no one else children that needed their care also:

> It was spring of 2020. I decided to go back to school. It was the 5-year marker basically of my mom’s passing and it was three years after I was divorced. And I just kind of took a look at myself and told myself I was worth more than what I was actually giving myself. I didn’t have a lot of money. I was getting food stamps. And I was. I still am getting health care through the government. So, I didn’t. I don’t want to raise my kids like that. I never wanted to be a single mom. I always told myself if I was going to be a single mom, I would rather not have children because I can’t raise them myself. I can’t provide for them. well it’s a little too late because they are already here. I need to figure out how I can survive with them on my own

All participants expressed the knowledge that no one was going to sign them up for an exercise class, make their dental exam appointments, or make sure they are compliant with their medications, that they were the ones responsible.

Theme 2: Taking “Good” Care

Theme 2 emerged as a result of responses to the initial question of *how do you take care of yourself* as well as in response to the final interview question of what does health responsibility means to you? All 13 participants expressed engaging in intentional, healthful behaviors, both for their current health and wellbeing and for their future health.

The responses to these questions varied in nature of the behaviors, so that six subthemes were identified to further describe the theme.

Subtheme 1: Physical Activity/Exercise

Ten of the 13 participants shared they were purposely physically active as a means of taking care of their health with four participants stating they exercised formally either at a gym or with an app and six participants stated they engaged in informal physical activity like walking or hiking. Participant 10 stated, "I work out 4-5 times per week…I don't think I had any goals in the beginning, I think I just wanted to try different types of exercise and see what works best for me." Participant 2 stated "Now I work out just to be healthy" and Participant 4 stated, "I do have a treadmill at home. I have a little gym in the basement, so I do a workout for at least 30 minutes every day except for weekends."

Subtheme 2: Mental Health/Stress Management

The actions participants participated in to take care of their mental health varied, with all participants sharing they were aware of their mental health and attempted to do things to take care of it. Music was a common way in which participants managed stress. Participant 6 shared, "Drums take off a lot of stress. It's a healthy coping mechanism. You know, you are hitting things, but not out of anger, you are reducing stress by hitting the drums and feeling the music," and Participant 7 shared, "actually music is a very vital part of my life. I don't think there is anytime I am not listening to music." and Participant 2 shared, "I'll meditate or listen to some music." Pets were also used to manage stress, Participant 13 shared, "my cat really is a stress reliever," and Participant 10 shared, "I also have a Guinea pig who definitely provides a lot of emotional support, that has been a really big part of my life in the past few years have been helpful."

It should be noted that Participant 1 was unique in their response. Despite being in a health-related career program they chose to start smoking at the beginning of the pandemic to manage their stress and anxiety. They did say they quit "cold turkey" 2.5 weeks prior to the interview because their desired occupation screens for nicotine, not because it was an unhealthy behavior they wanted to cease. They shared:

> And then the pandemic happened, and I was extremely stressed out. You know, I had gone through a very, very stressful divorce, two young kids. And my ex-husband finally got it together enough to start taking my kids and having some time in custody time with them. And it was kind of one of those things where it was like, I never get any time to myself. What can I do that's just for me? And I chose smoking, which is weird. Like, you would think, I mean, there's a million other things that I could do, but that's when I was like, What is one thing that I can't do around the kids? It's just for me. And it was smoking

Another interesting response was from Participant 5 who shared that as a means to elevate their mental health and also generate a sense of connection during the pandemic started a podcast with a group of their friends. They shared, "We were tired of sitting around and we decided to start talking. Something that we just did for fun to entertain ourselves since we weren't, couldn't get out and do anything else." The participants shared a diverse response to their stress management preferences.

Subtheme 3: Health Coverage/Routine Care

The subtheme of health coverage/routine exams relates to the finding that participants felt that having insurance helped them be able to take care of their health and that routine exams were important but often very difficult to schedule. Participant 2 shared, “it covers everything…” and Participant 4 shared, “Uh, I think that definitely having health insurance is so big help. For me, having health insurance, I don’t think I will be able to get all the help I can because financially it’s just a lot to afford.” Participant 12 shared what helped them take care of their health most was having insurance:

> Actually me having insurance. I have Medicaid, so I never worry about- yeah, I go to the doctors or the ER, I don’t ever have to worry about how much it is going to be, like $1000 for the room. I never have to worry about the cost. I am thankful for it”
>
> and Participant 5 shared, “I’m lucky enough my job covers my health insurance. So that’s amazing. I don’t have any issues getting to appointments

Also, many participants shared that routine care is an important component to their acute and chronic health conditions. For example, Participant 6 shared, “my doctor gave me a referral to a psychiatrist. So I went to go visit my psychiatrist and I haven’t stopped since. I just wanna stay on top of it.” And Participant 11 shared:

> I try to always go to at least some sort of doctor at least once a year. I have a gynecologist and I’ve seen her a few times because I need to see her to keep up

> my like birth control prescription and stuff like that. Or at least I am in contact with her, and she's there if I have any other general health questions as well

Participant 12 shared:

> So I started getting physicals. And I started getting like other checkups, like something weird was happening. Like I know one time I was driving over to the gym. I started feeling like severe chest pain. So, I got an EKG to check that out. I started being more responsible. I started the yearly or six-month checkups for all of those

Some participants also shared that they knew routine care was very important but that for various reasons they were unable to schedule those visits they were aware were part of their health responsibility.

Subtheme 4: Nutrition

There were a few participants who were currently on a weight loss program and used dietary changes to facilitate that goal. Participant 13 shared how they were able to use the internet to create an eating plan for weight loss, "I organized a healthy diet of my own for myself I just lost about 8 to 10 pounds myself." Participant 4 shared, "Like I mentioned the most challenging part for me is the 1200 calories a day. So I proportionally eat like 1 cup of vegetable, ½ cup of protein and ⅓ or ¼ of carbohydrate."

Some participants also needed to monitor their dietary intake to help treat chronic health conditions. Participant 10 shared:

> And so at first, it was definitely a change to eat gluten free and have to learn about all of that. And it did entail a lot more doctors' appointments, procedures, and

> things. It has become a lot easier over the past years to manage and it's it really doesn't impact me anymore

where participant 8 shared, "thing is really being prone to UTIs, so I drink cranberry juice." Participant 3 shared the dietary changes they were advised about after having a kidney stone:

> I never drink coffee, yeah, I quit soda. I used to drink tea, but I don't really drink that either anymore. Also kidney stone related they told me basically when I had kidney stones, the urologist basically gave me a pamphlet and said, well you're young. He handed me a pamphlet that told me to basically stop eating and drinking a whole bunch of things I neither ate nor drank. So I basically said like no coffee and stop drinking beer. I don't drink beer, I don't I drink alcohol, it just makes me sleepy, it's not that fun

Others shared an awareness that eating healthy is an important part of their health responsibility. Participant 12 shared "Also I also try to eat well. Especially like, you know, like not fast food and such like taking certain supplement replacements, just little things like that to try to take care of my physical health," Participant 6 shared:

> I really used to eat a lot of bad food and stuff, even fast food. But now once a week or so, I only eat fast food, maybe twice, twice a month or so. For meat and such, you know, I try to avoid pork. Pork is really fatty. And you know the big thing red meats are high in cholesterol.

Participants expressed knowledge about how important the foods they consume on a regular basis impact their overall health, contribute to disease risk, as well as can affect their mood.

Subtheme 5: Personal Hygiene/Dental Health

The majority of the participants shared an awareness of the importance of personal hygiene, and many spoke specifically about dental health. Participant 9 shared, “I am very big into brushing teeth,” and Participant 5 shared, “I am very, very serious about my dental health. I always make sure my teeth are brushed or I’m showered like hygiene. This is important, no matter how busy I am” speaking about the how important personal cleanliness is. Participant 11 shared how they were able to improve their dental health by figuring out how to be consistent with flossing regularly:

> I’ve been doing that. I’ve actually started keeping it in my makeup bag over where I do my makeup. And so I’ll just real quick do it before I start my makeup instead of doing it before I brush my teeth because I always forget then later or something. Yeah, so that’s hack that I found to get myself to remember to floss

Participant 8 shared, “I mean just like taking regular showers and making sure I’m clean everywhere ‘cause I’m really, really prone to UTIs” Understanding the connection between cleanliness and disease prevention was expressed and examples given by most participants.

Subtheme 6: Sleep

Sleep, a major influence on a person’s physical and mental wellbeing was deemed important by most of the participants. Sleep deprivation in community college students is common, especially those who work jobs, or care for elderly parents or children while attending school. Many participants expressed the importance of sleep and their attempts to obtain adequate levels, though not all successfully. Participant 1 shared:

> I definitely try to get enough sleep. That is something that is always a challenge because, you know, I get very limited time where I don't have my kids and some of that time is when my kids are in bed. So then it's like sometimes I find myself doing a lot of schoolwork from like 8 to midnight. You know what I mean? It's like one of those things where, you know, some nights I'm just like, I have got to sleep because I feel so sleep deprived all the time

Participant 12 stated that was the only thing they felt they were doing for their health and wellbeing, "I mean. Not a lot right now. Just sleeping to be honest." Participant 11 shared, "definitely sleeping enough is one that I struggle with, but I try to be consistent kind of time that I am going to bed and waking up, trying to keep it more regulated." Participant 9 said, "I don't get very much sleep. I don't sleep very well, so I do take something like a melatonin, or I can take a Tylenol 'cause I get headaches a lot. I'll take a Tylenol PM just so I can go to sleep." And Participant 2 shared, "I started going to sleep at the same time every night I was getting like seven hours sleep" and was a part of the behaviors they incorporated when they chose to take their health seriously by improving their daily habits. Participant 11 shared how their choice to stop caffeine aided their ability to sleep:

> But when I was quitting, I weaned myself off a little bit and instead of espresso I would just have like a normal brewed coffee or an iced coffee that's a lot less

> intense. And that was mostly just to keep the headaches down, because I started sleeping a little bit better, I was like okay if I'm gonna stop drinking coffee I need to make sure I get enough sleep because I can't rely on that to zap me back up. So, yeah, I would sleep, I started sleeping better

Theme 3: A Little Help From My "Friends"

Vicarious experience, social persuasion and role models were mentioned by all of the participants as events or experiences that influenced their health responsibility. Everyone shared how someone they knew, whether a friend or family member, impacted their ability to participate in health-related behaviors and/or behavior change. Participant 1 shared how important it was to be able to confide in another to aide in their mental health:

> Well, I think there's only so much that you can deal with yourself. You know, I think it's important to have the perspective and guidance with someone who is very so connected with you. I think a lot of one thing that makes sense to me is you know we can just speak to us about anything

And Participant 6 shared:

> If I ever do have or are really over thinking about something, then I would just like probably text my sister. I was really hard on myself and really like stressing myself out and she's like no it's OK because you're gonna try again, stuff like that, so that's like the only outlet that I really can have

Participant 3 shared how important it was when staring to implement an exercise routine,

> I don’t think I really set any goals in the beginning. I think I more just wanted to try it. Try different types of exercise and see what works best for me and I did discuss it a little bit with my parents. It was at a time when my mom was also getting a little bit more into the Apple Fitness as well, and so we were able to discuss it back and forth, which ones we were preferring - I think that was helpful. Have someone else at the same time starting

And Participant 7 shared “So I think it just motivates me even more, you know, how determined that she is,” voicing her experienceof someone being a role model as well. They also shared their experience that represented SDT’s tenet of connectedness factored into their desire to exercise and how that can be stress relieving:

> And then I also enjoy exercising with my sister because even if it’s just aerobics. But it’s something that, I don’t know, that I feel is bonding and it allows me to release some pent up you know, stress from today and it’s something that I do enjoy

Participant 5 shared, “We motivate one another or when we feel weak or, you know, wanna quit for a second. You know, the other one pushes the other one. Or if we mess up together, we just keep going, you know. Accountability partners. That’s it.” And Participant 12 shared:

> I think it’s very important for people to feel like they’re not alone…. Like even that little, tiny reach out, even if they don’t like, you know, start talking about everything right then and there, they might, like, start thinking, maybe now I

> should do something" speaking to the benefit connection can have in sparking change in someone.

And lastly, Participant 6 shared:

> Along with, like, you know, my sister is like one of my best friends, she's one of my main supports and I have a lovely girlfriend I've been with for three years and she gives me an immense amount of motivation…But obviously I got help from my girlfriend and my sister to start reaching out and it made me feel a lot better supporting the social aspects of health behavior

In addition to emotional support, there is also physical support people often need to ensure their health and wellbeing. Participant 3 shared, "I made my boyfriend drive me all the way to a Metro Health emergency room" and Participant 6 stated, my girlfriend would drive me or my sister and my mom."

Only Participant 1 mentioned anything about the college aiding in their ability to enact their health responsibility in any fashion:

> My mom would let me borrow her car and ….. also gives like free bus passes. So I know I'm gonna be primarily using that next semester. A bus pass every place I go to they give bus vouchers for people, so like I mean I like I can take the bus and a car. That's not a barrier, thankfully, yeah

Theme 4: Cue to Action

Theme 4 emerged because it represents how all participants shared a reason why it was important for them to engage in the health-related behavior or behavior change. Participants discussed behaviors that were important for their current and future health and had both positive (perceived benefits/autonomy/competence/connection) and negative (perceived threat/fear of poor health in the future) attributes, necessitating nine subthemes.

Subtheme 1: Self-Efficacy

Self-efficacy is a tenet of HBM and a factor of SDT that drives behavior change. Many participants shared that belief related to various types of desired changes. For example, Participant 4 shared:

> Yeah, for my health, my own health, yes. And I was struggling with weight loss weight a couple of years, you know. So this year I devoted myself for a big weight loss journey. I can do it; I've done it before. I lost 30 pounds three months, so I can do that

in relation to losing weight and Participant 5 stated, "This weight loss journey, I mean, I knew I could do it. It's something I've done before." Participant 1 said, "And I quit cold turkey, just like I did the last time" expressing confidence in their ability to repeat a prior success.

Participant 9 shared a unique response to how they managed a recent health concern that was based on self-efficacy:

> So finally, when I had enough time to kind of go through my processes, I said at the end I figured I am something - I am worth something. I am gonna be something and I'm gonna take care of my kids. So a big thing that pushed me was to be able to care of my children. Just my children on my own because I had no financial help. And I needed it to become something to show them that you can,

> and school is important. You need an education, get a good job and make sure you are able to take care of yourself. And you see why I started back in school in 2020. It's not only did I go through a divorce, but I really thought I was basically gone. And so a big part of me was I needed to keep my mind busy and so I wanted to go back to school. I know I'm 38 years old, but people don't understand. I have to keep my mind busy and the only way to keep it busy is if I keep going because I had shut down and wasn't doing anything. I didn't even want to be a mom. I didn't want to do anything. So, you know, going back to school was a big deal for me in that aspect

Vicarious experience and role models were represented in the data as ways to increase self-efficacy. For example, Participant 5 shared their vicarious experience of seeking information about how other individuals handled the same diagnosis and procedure:

> Well, one thing I was worried about was the procedure and I wanted to know what, like real people say it about their experience. So um. Like maybe what were their experiences as far as the procedure. I just. I needed to know a little more. And I mean I like to ask questions. I need to know. This is my body. I wanna know what's happening, you know. I have a family history of cancers and things like that. So when I hear that word cancer immediately it causes me anxiety. So seeing that people were successful, and you know what, if there were any kind of complications or, you know, whatever they had is, I think that's a really great way for some peace of mind for sure

Subtheme 2: Family History of Disease

When individuals are not aware of family predisposition, as can be in the case of adoption, getting screenings for blood pressure, cholesterol, etc. are even more important to determine risk levels. The participants in this study reported being aware of family history of disease and many stated it was a factor in their health-related behaviors. Participant 3 stated," especially knowing that like teeth health and gum health is related to heart health, and a lot of people in my family die of heart disease" is such an example and falls within the HBM tenet of perceived threat as a motivating factor in health-related behaviors. Participant 4 shared:

> Being almost at the obese level and it runs in our family for cholesterol and high diabetes. So, every so often I can go get checked out for that, make sure I am OK 'cause it's just runs in my family, mom, my parents, my grandparents, and my great grandparents as well. I try and keep myself healthy, you know. Push myself

Participant 12 stated, "The first things that comes to mind is like my family has a history, heart disease. So it's more like, you know, not eating as much fats and staying active." Knowing about family history of disease is important for individuals to make informed decisions about specific dietary and physical activity needs as well as the potential for regular ongoing health care appointments.

Subtheme 3: Fear of Poor Health Later in Life

Some participants shared about their concerns for their overall health in the future, not necessarily related to any history of disease. Participant 4 shared, "So I'm just motivating myself for my health reasons now. I am only 22, so I need to be a healthier person for when I grow older so I have less risk factors.” and Participant 4 stated, “I always say that take care of yourself when you are younger, so you are healthier when you are older” sharing their awareness of how current health can significantly influence future health. Participant 2 shared common concerns for a lack of awareness of their current health, “I was like, you know, I need to go see if I have anything wrong with me that I have been ignoring for the past couple of years” as well as “Oh, it just doesn’t reverse itself? Oh, man, that needs to be stopped.” And Participant 12 shared their desire to not be a burden as well later in life, “I mean my fear is just mobility, being able to walk when I am older. I don’t want to depend on others I just want to be able to take care of myself my whole life.” There was significant awareness of the connection between what they are doing now for their health and the desire to be healthy in the future.

Subtheme 4: Avoiding Medication

Some described how medications can be difficult to manage and coordinating the interactions can snowball causing the prescription of more medications to manage side effects of others. Participant 6 was concerned about having to take more medication and shared, “For me personally, I do not want to take high cholesterol medication. I already have enough medication to kill a horse it feels like” and was a major factor for their present behavior. Additionally, other participants were aware of a potential genetic link for disease and the possibility medication would be required to manage regardless of interventions. Participant 5 stated:

> I don’t want to have to rely on like blood pressure medicine or anything. Even though, you know, I understand some things are genetic and both parents have

> blood pressure problems, I don't. I would, like, if it's genetic then fine, but if there's something that I am in complete control of then I don't want to have to take it

And Participant 4 stated, "Yes, I prefer counseling over taking any type of depression or anxiety pills."

Subtheme 5: Autonomy/Competence

Autonomy, or the need to act independently and the basis of intrinsic motivation, was described in many participants for varying behaviors. Participant 12 shared, "Um, so I make all my appointments on my own. I live with my mom, but I am pretty independent. I make everything on my own for my own appointments." Gaining knowledge is related to competence as well as factor of health literacy. It also factors into health responsibility in that individuals were aware of their lack of information and how gaining information increased their confidence and feelings of competence. For example, Participant 4 shared, "I wanted to help of myself and to learn more about the Human body. I can learn what to start you for myself." Participant 5 shared:

> So I think that's a big part of it too. And that, like I said, kind of blends the line of mental and physical health because you need your rest, physically, as well as you shouldn't be letting people kind of dictate how you spend your time, and where you put your mind space and all that

For those participants who had recently become a legal adult and now were responsible for their appointments and healthcare for the first time shared their experiences. Participant 10 shared:

> It’s nice to be in control of my own schedule and to have like, be the one asking questions and things like that to build that relationship with the doctor and really take my health into my own hands I guess

Participant 1 described a unique response when as a result of a mental health crisis which led to a hospitalization and subsequent continued lack of self-care once released, decided that they had had enough, and they were going to take complete charge of their health and well-being:

> I am going to preface this with I’m like crazy because when I talk to other people, they don’t really think about this, at least in my age group. I’m like 24. OK, so. A while ago, like you know, I started, like, realizing I should care myself. And the way I figured was I gotta start somewhere and I think the easiest one was physical. So I started eating three meals a day with snacks instead of one giant meal at night. I started going to sleep at the same time every night, I was getting like seven hours sleep and then I started working out three to four times a week. And then when I started getting all that physical stuff out of the way, I got a therapist and I spoke to her for a while, which she thanked me she’s like, wow, most of the time, people come in here and they’re sleeping one hour and night, eating no food. And they’re like, why am I sad so like? I knew I was taking like the right steps in order for that. And then she recommended something called ACA, and I’ve been doing group meetings. Um, I started volunteering. Just like a whole host of like things.

Participants shared how their need for autonomy and competence were met through various health behaviors and behavior change.

Subtheme 6: Negative Factors

Some participants described a negative experience, i.e., that their motivation came from a place of being negative. Participant 2 engaged in health-related behaviors explained "So it's like it kind of started in like this kind of like spiteful way, like OK, I'm not gonna do this" referring to their family of origins behaviors they wished not to mimic. Participant 9 had an academic experience that motivated them to act in healthier ways:

> So I failed one of my math classes and you know that got me really discouraged and I started doing more things for myself instead of for other people… I started, you know, focusing more on myself and trying to help myself

and Participant 8 shared:

> whenever I was driving especially at night, was not good for me and I was like having a lot of trouble seeing the signs when I was driving. So that would make me get nervous and I was like this it's not worth getting nervous over, so I went

Subtheme 7: Feeling/Looking Better

Participants described physical and emotional benefits to regular exercise and consuming a healthy diet. Participant 7 shared, "So that's one reason why I started, you know, exercising just because of my own desires, but of how I want to, you know, look physically, feel physically…" Other participants were aware of how changes in their diet were helpful. Participant 11 said:

> Like I said I would get really bad migraines, if I didn't have coffee in me, which was a red flag because I was like I shouldn't be, to the point where I need it to feel okay. And also, like I said, I got to the point where for it to even work I had to have like four or five, six shots of espresso. And at that point, that's where it was finally waking me up, but I would start like shaking and my heart rate would be crazy. And I was like this is extremely unhealthy even though it's like just coffee it's that's really not good for you and I was like, I can't keep doing this. If I'm going to feel like garbage, both before having coffee and after having coffee there's no reason to continue drinking so much coffee

Participant 3 was aware of how diet affected them from an early age:

> I'm a vegetarian. Yeah, that was actually entirely for my health. I did that when I was eleven. I made that choice when I was 11 after I noticed that pretty much every time I eat meat I was getting sick, like my stomach felt bad and nauseous and I stopped eating meat and problem went away

Subtheme 8: Mandated

Several participants described scenarios where they felt they had no choice but to comply with the required medical protocol or they would be negatively impacted, i.e., "then for work I had to get the COVID vaccines," Participant 5; "I had a physical because the health careers program at … forced me to do so" Participant 1 and Participant 4 shared:

> since I am on hormones they get checked very, very, very frequently. So I get really frequent blood tests and everything because it's like I don't know if it's

> state or national law or something, they have to check it every few months to a year, so they have to keep tabs on me no matter what

Subtheme 9: What I Was Thinking/Reflection

Many participants described the process of thinking about making changes for a while before they act. Participant 12 shared:

> And then I was like, how am I, why do I keep on repeating these cycles of very low lows and very high highs. So that's when I started kind of like reflecting and like kind of like going, 'What am I doing wrong' and 'what are others doing wrong' and started like realizing what I'm doing wrong

Participant 6 shared "I just got my motivation from basically myself just reflecting on certain situations and past experiences and realizing, hey, if I just spoke up, none of this would have happened," and Participant 10 shared:

> I guess it probably helped to decide to reach out just because I wasn't sure from my research. I guess, what it was or what I should do. So, I knew that wasn't something that I could do on my own or like take care of

In the case of the one participant who did not have any health insurance coverage at the time of the interview shared their critically thought solution, "well for me whenever I save enough money I can see the eye doctor, then I'll try to find the cheapest one I can and then save money to get my wisdom teeth out." Participant 2 shared their experiences with the thoughts in their head:

> Yeah, it kind of, 'cause, if you don't change your thoughts, you gotta change your process. Like if you have a process where you're geared to always hate yourself,

> you’re gonna be very negative, very negative thoughts coming out of there. If your process is to try to find the best or like be optimistic, then you have a higher chance of having positive thoughts

Theme 5: Barriers

Perceived barriers is a tenet of the HBM that influences an individual’s belief they can act in healthful ways. All participants described barriers they confronted and the ways in which they were able to overcome them, and others indicated they were unable to overcome the barrier and thus unable to act healthfully. The multiple barriers were broken down into subthemes and are described below.

Subtheme 1: Lack of Something

The participants described a variety of instances that identified lack of “*something*” that can impact motivation, self-efficacy, and the ability to engage in health-related behaviors. A lack of time was the most common reason individuals cite for not exercising regularly as Participant 8 shared:

> As of right now honestly, I don’t have time to do anything. Because I can’t get to the gym, and I could if I wanted - but’s it’s just so hard right now. I have zero time right now just no time and so that’s pretty much what I do

Participant 6 shared its impact on their ability to get to a physician:

> as far as managing my personal health care right now has been very much like, crisis management, like if something’s happening, I’ll take care of it, but if it’s not, I’m not doing a whole lot as far as routine exams. You know, it’s just really

> difficult to find the time to schedule things and you know, really honestly, just to find the time. I don't feel like there's time

Participant 9 shared about their current status of having post-Covid disease issues, "I just don't have the time to get to a physical provider at this moment. So, I've kind of not really been addressing it like I should." Time also is a perceived barrier in managing routine health care. Participant 1 states, "Unfortunately, as far as preventative, I mean, I went years and years and years and didn't even have a physical." And Participant 5 shares their struggle for self-care as it relates to mental health, "No, I don't have much time for like a self-care as far as like mental health."

A lack of money, or low socioeconomic status, was expressed as a common concern for community college students and represented in this study as almost half the participants are on state medical assistance programs. Participant 3 spoke about the benefits of being on state assistance, "uh I obviously had issues getting health care because I'm a student. I have $0.00 in income. Whether it says you know low cost, my idea of low cost should be free. I'm a student, I have no income. If my insurance is more than my income, I can't afford it." However, Participant 8 shared they made too much money to qualify for state aid but did not earn enough to afford their own coverage, "No, it's honestly just about how much money I have to spend on health care."

A lack of confidence was shared by Participant 2:

> So I think a lot of people, they are so unused to like talking on the phone, but that itself is a barrier because they kind of want to know everything going on, even

> though that's not really possible. I can empathize like you know; I can go back in time with my past self. I was terrified of the phone

and Participant 8 shared, "I didn't really know how to fax things and I didn't want to go into the doctor by myself and say 'hey can I have all my medical records' I don't know; I just didn't feel comfortable especially because he declined like sending all of my records," and Participant 7 shared, "I went from 17 to 18 in just one day. Now it's like, oh, you're an adult now and you have to behave as such. It was a very dramatic change. And, you know, that's something that I am still trying to grasp."

Lack of support was also identified as a common barrier to self-care when children are involved, and parents need to go to medical appointments alone. Participant 1 shared, "I don't have any family in Ohio at all. My support system is amazing, but is 10 hours away, you know, and whatever. So, you know, that complicates things. You can't just call your mom and be like, I have to go to the doctor."

Participant 11 shared how their young age impacted their experience seeking medical care:

> I have definitely noticed, especially, both as a college student and as a woman, sometimes, like, even though I'm 22, sometimes my mom will still come with me if I go to see somebody who is not somebody I've seen before, just because I feel like with the young people especially they kind of just like zip you through the system sometimes and you don't really have time to be like okay but like what I have questions, I know you're, you're just kind of write me a prescription for some antibiotics, but like, what's going on, I don't really, you know, and they

> kind of just want to get you in and out. But if my mom or my dad is there, they take more time to be like, explaining things and actually I don’t know just communicating with the process

And sometimes medical benefits do not cover the procedures the individual wants as in the case of Participant 1:

> You know very, very, very frustrating, very frustrating because you know you wanna take care of it and you’re like, I’m in this pain and they’re like, you know, I don’t know, it’s very frustrating. Like, why do we have to live with that? You know, and is my current situation a reason why doctors would be dismissive or whatever, you know, of it? You know, ‘cause, I really had to fight. I was just like; I want a tubal so that I can get off of these pills ‘cause I think that the pills are making it worse. And they’re like, oh well, you know? And like my Medicaid insurance doesn’t wanna pay for it, you know, and stuff like that. So it’s frustrating. It’s very frustrating

Lastly Participants also reported a “lack of energy” to do what one wants to for their health is often cited. Participant 5 shared:

> Honestly, having the energy to do it when I do have time, if I do get a moment. Sometimes I don’t have the energy to do anything else, you know, for myself or anyone else for that matter. Sometimes it’s just, nothing happens

Subtheme 2: Negative Prior Experience

While not all of the participants had similar negative prior experiences, these two responses are very representative of issues around individuals from the LGBTQ community and those with more severe mental illness. Participant 3 shared:

I made my boyfriend drive me all the way to a metro health emergency room because the last time I went to like a University Hospital they were awful to me the whole time I was there and I just did not want to put myself through that again… a lot of discrimination, literally haven't been back to University Hospitals since…a lot of trans people do struggle to go to their doctor like in the first place because they know that these issues exist and they don't want to deal with them for anything less than I am dyingAnd Participant 9 shared:

> I'm gonna be 100% honest. I feel like having a medical chart that has a lot of mental health in the background, I feel I'm pushed off a lot. People do not believe things that I say. So, I'm not very confident in the health system. Because a lot of times I feel they just kind of brushed me off. And I've just learned to kind of try to figure it out by myself and take care of it, because I just feel like I waste so much time if I go to the doctors and then they're just gonna say, oh, you're OK, we'll just keep an eye on it. You know, there's nothing we can do right now for it. If it gets worse come back and see us. But I feel inside Why am I having this pain?

Theme 7: Tech Help

Health literacy is a factor of health responsibility and is often developed through the use of technology like the internet itself along with various search engines as well as via apps that are accessed on smartphones. Technology has also advanced in the physical and mental health care field enabling patients to be seen by a provider virtually, eliminating the need for transportation. The ways in which technology was utilized by the participants was varied so subthemes were needed.

Subtheme 1: Apps

Smartphone apps are a popular way for people to track health-related data, learn new things, and even communicate with their physicians and schedule appointments. Many participants shared how they utilized technology in this way. Participant 4 shared, “I use My FitnessPal to keep up with the calorie intake” and Participant 5 shared,

> Yeah, I’m trying to make sure that I pay attention to those notifications I am receiving from like on my MyChart or from whatever hospital I am using or whatever service. I make sure that whenever they send me a notification that it’s time or this is needed now, I make sure to stay on top of those things and try to schedule them in
>
> Participant 2 shared their digital use, “I have a checklist and I have a calendar. And I put things for my checklist on the calendar, so I kind of like work around that” and Participant 10 shared how they incorporated multiple apps for their success, “But I was easier for me to write on the phone my breakfast, lunch and dinner, how much water I take in, my footsteps and I just have an Apple Watch to maintain my exercise intake.” And 2 younger participants shared their experiences, “And then once I got the MyChart access at 18, I started being the one you know, messaging about medication. Then making the appointments,” Participant 10, and “Planned Parenthood app also has like a section where you if you have a UTI so they can prescribe you medicine for that too,” Participant 8.

Subtheme 2: Telehealth

Covid had some positive outcomes, one of which is the increased offering of telehealth visits Many participants shared how helpful and conducive that made being seen by their provider. Participant 4 shared, “I usually call the clinic and usually get virtual meeting” and Participant 9 shared, “Currently what really helped is, so I suffer from attention deficit disorder. I have obsessive compulsive disorder, anxiety, and PTSD. And so what really helped me starting college was the televisit.” And Participant 6 shared, “Even to just getting something checked, you know? I can send a picture.”

Subtheme 3: Google

Google is a search engine developed years ago and has colloquially become a verb meaning to look up information on the internet. Participant 2 shared, “I started Googling things and I was like, oh, this isn’t normal,” as well as “and also like through Googling like, like how-to videos.” Participant 5 shared a very common occurrence after receiving a diagnosis and not having enough time with their provider to ask all of their questions,

> I know I shouldn’t, but I turn to the Internet. When I don’t understand something, or I would like to learn more like especially with this issue that I’m having now which is the reason why I need the procedure. I didn’t quite know exactly what my doctor was saying, I just knew, you know, I got kind of scared and maybe assumed too much, so I went straight to Google. Which is never a good thing, but unfortunately, it’s there and it’s no reason for us to not have knowledge when knowledge is right in front of us

and Participant 10, “Yeah, I did. I did do some Googling to kind of see if I could figure out a little bit of what was going on.”

Subtheme 4: YouTube/TikTok

Another popular resource participants accessed for a variety of reasons is informational videos. Participants in the study utilized YouTube and TikTok as a means to improve their understand of exercise routines and even motivation to quit vaping. Participant 2 shared, “So I started, I did like YouTube videos” and Participant 4 shared, “YouTube and TikTok. I have gotten so many routines from TikTok, there are so many options.” Participant 3 also said, “I have a social media thing called TikTok and TikTok has a lot of really good people on there that will share the routines and what they do and how to do the exercise without hurting yourself.” Participant 11 shared, “There’s like ads on YouTube and on TV for different numbers you can text for like young adult and teen vaping, who are vapers who are trying to quit.”

Subtheme 5: Online Websites

The basic use of the internet to seek health related information also is common in society and for the participants of the study. Participant 6 shared:

> And that’s why I go on the Internet, and I see people talk about it and they have it. You know, I’ll talk to some people on Reddit and relate with them and it gives it gives me comfort to know that, you know, I’m not alone in this…I mainly get a lot of my stuff off the Internet

Participant 7 shared “So um like maybe what was also one thing like Quora,” whereas Participant 10 shared that they prefer websites from reputable sources like medical facilities

> I think I was on like a website from the Cleveland Clinic. And then other than that, I don’t remember specifics, but it was probably pretty early on in the like Google searches that popped up. It’s what I looked at.

Theme 8: What I want to Improve

A major part of health responsibility entails the knowledge of what one needs to do for a person’s health and wellbeing as well as intent to engage in those behaviors and activities. As such, this final theme emerged to represent that many participants were aware they could be doing more for their health and wellbeing. Some expressed the barriers preventing them from acting and others just shared their awareness of wanting and needing to do more to enact their health responsibility. For example, Participant 8 who did not have insurance at the time of the interview stated, “‘cause I can’t really pay for things like I need to. I’m thinking about going back to that therapy ‘cause I need it, and I still have her number, but I can’t because I can’t afford it,” and Participant 6 shared, “It’s hard to go to like the gym or anything because all of them cost money. I’d love to be able to do something like that a little bit more.” Some shared the need for routine health care such as Participant 7, “Dentists honestly, I need to go to the dentist. It’s been a while. Some of those specialized ones are really hard to get to.”

Summary

The purpose of the study was to understand how community college students navigate taking care of their physical and mental health and well-being, including the barriers they experience and the ways in which they are able to overcome them. The research question was how community college students experience health responsibility. In response to a semi-structured interview guide, the 13 participants shared their experiences of how they took care of their health and wellbeing. Each described what it meant to them in varying ways, and each response included behaviors that addressed mental and physical health.

They shared their challenges and triumphs along the way. The results had considerable correspondence with the tenets of SDT (autonomy and competence) and the tenets of the HBM (perceived barriers, perceived benefits, and self-efficacy).There was an overarching understanding expressed during the interviews that participants' health and wellbeing ultimately was their responsibility, and all expressed participating in self-determined health-related behaviors to varying degrees. Additionally, expressed barriers such as a lack of time or scheduling conflicts with providers did prevent some from taking action. Each participant gave the impression that their physical and mental wellbeing was important and many attempted to engage in health promoting behaviors not only for their current health, but also for their future health. All participants shared barriers of some kind, some were surmountable, others were not.

There were 5 participants who shared unique responses that were not discrepant but were unlike the other participants. The first was a participant who is in a health career program and who chose to start smoking during the pandemic to manage their stress. They had to quit recently for employment reasons, not for health reasons. The second was a participant who started a podcast with their friends during the pandemic to stay connected and improve their mental health. The third one was a participant who chose to go back to school as a means to help manage their mental health, as they had experienced the death of their mother and recently gotten divorced and determined that the best thing for them was to focus on school and moving forward to create a better life for themselves and their family. The fourth finding of note was only one student shared that living at home with their parents was the reason they were not able to seek psychotherapy because their parents did not approve of that medical intervention. The last unique finding was of a student who hit “rock bottom” and was deliberately making his physical and mental health a priority. Also, despite the fact that the college has various health programs and services available to students and community as well, no participants mentioned using any of them. These cases will be discussed more in Chapter 5 along with how the findings relate to the literature and frameworks, limitations and trustworthiness, recommendations for future research, social change implications and conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this basic qualitative analysis was to understand how community college students experience health responsibility because this overarching concept had not been studied extensively in community college students nor was there a consistent definition of health responsibility in the literature (see Estelle-Brazzell Horton, 2014). A basic qualitative approach (see Thorne, 2008) was chosen using the theoretical framework of SDT (Deci & Ryan, 2008) and conceptual framework of the HBM (Rosenstock, 1966). Seven themes were identified using the data analysis process described in Chapter 4. These included nobody is going to take care of me, taking good care, a little help from my friends, cue to action, barriers, tech help, and what I want to improve. Four of the themes were complex and revealed subthemes. Taking good care subthemes were physical activity/exercise, mental health/stress management, health coverage/routine exams, nutrition, personal hygiene/dental health, and sleep. Cue to action subthemes were self-efficacy, family history of disease, fear of poor health later in life, avoiding medication, autonomy/competence, negative factors, feeling/looking better, mandated, and what I was thinking. Barriers subthemes were lack of something and negative prior experience. Tech help subthemes were apps, telehealth, Google, YouTube/TikTok, and online websites.

The answer to the research question was reflected in the students’ reports of events and efforts that represented the various aspects of health responsibility. All participants indicated varied levels of self-determined behaviors related to competence and autonomy when acting for their physical and mental health. Perceived threat for disease, a tenet of the HBM, was also an important motivating factor. Self-efficacy, the belief that a person can initiate and sustain a behavior change and a principle of both HBM and SDT, was also observed. Each participant was able to share ways they took care of themselves, which included maintaining personal hygiene and dental health, listening to music or reaching out to someone if they were wanting to improve their mood. Participants also shared the barriers they experienced and the extent to which they were able to overcome them. Participants shared that they often struggled to get enough sleep, eat healthy foods, and maintain a consistent schedule of routine health care such as dental and vision.

Interpretation of Findings

Findings Relevant to the Literature

Previous inquiries into college students' health-related behaviors focused on constructs such as sexual health (Grace-Leitch & Shneyderman, 2016), substance abuse prevention (Böke et al., 2019), or physical activity (Ball et al., 2017). Most of the studies were quantitative in nature and on 4-year students, not community college students. Community college students differ from their 4-year counterparts in significant ways including increased risk of financial, food, and housing insecurity as well as increased risk of mental illness (American Association of Community Colleges, 2017). The participants in the current study supported these findings as most were on state-funded medical benefits, and some had to live at home for financial reasons. At time of the present study, only one case study was found that addressed the overarching construct of health responsibly in one community college student, fostering the need to expand the inquiry to include a larger sample size (see Estelle-Brazzell Horton, 2014). Estelle-Brazzell-Horton (2014) noted that future research should include an inquiry into the barriers community college students experience as well as factors that enhance their ability to enact their duty for physical and mental health. In addition, Bachik and Kitzman (2020) suggested that a person must understand the adverse issues college students experience to better identify ways the institution may be able to develop curricular and programming interventions to foster increased health and well-being.

Community college students have been described in the literature as having a greater risk for mental and physical health issues (Katz & Davidson, 2014) as well as financial insecurity compared to their 4-year institution counterparts (Boke et al., 2019). Of the 13 participants in the current study, seven were on state-funded Medicaid for their health insurance, one has no medical coverage, and six had diagnosed mental illnesses. Many of the participants were managing a chronic disease such as diabetes, hypertension, autoimmune disorders, and gum disease, supporting the findings from previous studies.

Participants who were parents with children under the age of 18 living in their home expressed a greater difficulty in finding the time to meet some of their health needs such as exercise, getting enough sleep, or getting to doctor visits in person. This increased allostatic load was discussed by Katz and Davidson (2014) as well. The National College Health Association (2020) survey results indicating sleep difficulties in approximately 33% of respondents were consistent with the findings of the current study as well. Participants shared the use of caffeine in various forms to stay awake in addition to feeling sleep deprived on a regular basis.

Some of the participants who turned 18 recently shared some of their challenges in transitioning to being personally responsible for their health care and included things such as not knowing what their parent's insurance covered, what provider they could see, or if they had coverage. Transitioning participants who had to manage a chronic illness and were successful expressed that their ability increased their self-efficacy by taking notes about their symptoms so they could speak to the provider with greater confidence, increased their autonomy by using the MyChart app to schedule their appointments, and enhanced their ability to communicate with their provider. Reed-Knight et al. (2014) found that personal autonomy, disease knowledge, and self-efficacy regarding the ability to manage conditions were helpful during the transitional phase, and current participants' experiences supported these findings. One participant shared the difficulties they were having during the transition even though they did not have any chronic conditions:

> Since turning 18 I've been you know, just really, not struggling, but that I think it has been quite a journey accepting this stage and these new responsibilities. I went from 17 to 18 in just one day. Now it's like, oh, you're an adult now and you have to behave as such. It was a very dramatic change. And, you know, that's something that, you know, I'm still trying to grasp. I think especially when they've always been like, your parents tell you, you know, you're the child not an adult, you know you don't need to worry about things. It's just things like that or constantly being referred to you know as a child and now all of a sudden, it's the other way around. In like just a little, very little time,"

Reed-Knight et al. (2014) found that when children are not given responsibilities in the home to foster a sense of self and competence, they experience greater difficulties taking responsibility for their health. Ayres and Pontes (2018) also discussed the importance of encouraging adolescents to be active participants in managing their own health behavior as a means of fostering health behaviors.

The concept of health responsibility has been described in the literature as the duty a person has to act in addition to informed consumerism and awareness of their health and includes concepts such as self-care and health literacy (Avci, 2016; Rose et al., 2018). Each participant in the current study expressed some awareness of their current state of health including expressing the need to decrease body fat due to a family risk of diabetes, the need to quit caffeine, and the need to engage in stress management via music, meditation, or exercise. Participants also expressed ways in which they took care of themselves or conducted self-care as it is referred to in the literature (Ayala et al., 2018; Diebold et al., 2018; Feng et al., 2019). Participants listen to music or play with a pet to de-stress, they reach out to a family member or friend when feeling emotional upset, they are physically active to increase physical health, and they are mindful of the substances they are putting in their body to maintain a balanced, homeostatic feeling. One participant shared that they were dedicated to maintaining high levels of physical and mental health and had made that their number one priority. They stated they hit rock bottom after continuing to make poor health decisions after being released from a treatment facility for a mental health crisis. They decided to make a major change and enact their health responsibility by methodically addressing their physical, mental, and emotional needs. They are the epitome of how self-determined action expressed as being autonomous, competent, and connected aides in a person's overall health and well-being.

Findings Relevant to the Frameworks

SDT and the HBM have been used extensively in health research examining a variety of health-related behaviors and behavior change. I combined these two models because SDT encompasses the social-emotional aspects of behavior that HBM does not. The HBM includes the ability to investigate how the individual perceives their environment and the threat that engaging or not engaging in certain behaviors elicits. SDT does not address how or what the individual perceives as being a barrier or threat but rather whether and how a person overcomes barriers/threats and engages in the desired behavior. Because Estelle-Brazzell Horton (2014) recommended including an exploration of barriers and enhancers to health behaviors and behavior change, I used this combination to allow for that deeper exploration.

Self-Determination Theory

Autonomy, connectedness, and competence are the underlying tenets of SDT and represent the interrelated and independent social influences individuals have on each other and themselves in health-related behaviors and behavior change. The need for autonomy and competence has more influence over intrinsically motivated health behaviors (Deci & Ryan, 2000), and this was seen in the findings of the current study. For example, the participants who were transitioning from adolescence to adulthood and assuming responsibility for their health and well-being expressed the desire to be autonomous and experience competence. They expressed the desire to be able to manage the health care system on their own by using the technology of telehealth visits, hospital-sponsored apps such as MyChart, and reaching out to their health professionals to schedule appointments and ask questions about their current conditions as well as to gain other health-related information. Similarly, participants shared experiences of using the internet to seek answers to their health-related questions to be empowered to act.

All participants seemed to have varying degrees of self-determined behaviors, which supported the findings that Deci and Ryan (2002) in relation to the continuum of self-determined behavior. Participants who shared they were trying to lose weight loss or quit smoking expressed their self-efficacy with phrases such as “I did it before, I can do it again,” which was consistent with the findings that LaCaille et al. (2020) and Vasconcellos et al. (2020) that when self-efficacy is high, individuals have a greater chance for success in initiating and sustaining the healthy behaviors.

One participant who shared a unique experience of living a life of high stress, poor diet, and poor sleep and exercise habits took a self-determined approach to change their state of health. They systematically progressed from improving eating habits to improving sleep and then seeking professional mental health, building upon their previous successes as they forged ahead on their journey to health. They shared they were consistently checking in with themselves demonstrating awareness of self (Deci & Ryan, 2002) and determining what actions needed to be taken to remain in a state of health enhancement or maintenance. They shared a sense of accomplishment and gratitude to have been able to make such positive strides in their health and well-being compared to where they were 2 years ago.

Health Belief Model

The HBM is based on the individual’s perception of their risk for disease along with perceived benefits, barriers, cue to action, and self-efficacy (Rosenstock, 1966). This model has been used to understand under what circumstances an individual will take actions to prevent or seek treatment of a disease. Perceived susceptibility has been shown in the literature as being more influential in preventive behaviors as opposed to the treatment of diseases (Jones et al., 2015). All of the current participants expressed concern for their future health, some due to family history of disease, others wanting to be fully functional and independent as they age. Perceived severity has been shown to be the least influential predictor of behavior and was not mentioned much in the current study. Perceived benefit refers to the beliefs a person has regarding reducing the threat or influence of treatment for a disease. All current participants shared how their healthy behaviors were beneficial in preventing disease and treating current physical and mental conditions. All of the participants shared barriers affecting their ability to act on desired health behaviors. These included lack of money, time, confidence, and insurance with varying degrees of impact. One participant shared their unique barrier being their parents’ lack of supporting their desire to seek psychotherapy. This participant was a legal adult completely supported by their parents and, as such, was unable to seek what they felt they needed. Although this was a unique response in this study, many community college students still live at home and may experience this unanticipated barrier. Many participants shared ways in which they overcame barriers, which prompted the theme of a little help from my “friends” and includes aspects of increasing self-efficacy such as role models, vicarious experience, and mastery experiences (see Bandura, 1997) and was a subtheme for cue to action. Increased self-efficacy increases success rates for initiating and sustaining behavior change. I was impressed at the extent to which all participants shared their resiliency in wanting to engage in healthy behaviors to take care of themselves and sought ways to increase their chances for a favorable outcome.

Limitations of the Study

One possible limitation was not knowing the extent to which the sample was heterogenous. Although I attempted to recruit from all four campuses, I did not ask which campus participants attended or whether they were remote access only students. Additionally, due to the nature of qualitative inquiry, the participant responses and researcher data analysis were subjective and open to interpretation and bias. Although researcher bias was rigorously monitored, this could have been further managed by including another person to code the data or review the results, or to triangulate with the use of software to see if a different set of results could be produced. I tried to minimize the risk of influencing the participant's answers while simultaneously encouraging rich, descriptive replies by using perceptive reflections during the interview and not allowing current or former students to participate. I emailed each participant a summary of the interview for member checking, and no one replied that changes needed to be made.

Recommendations

I asked students to generate resources and strategies but did not inquire into their familiarity and use of college resources. Only one participant shared that they intended to use the college's free bus pass for transportation. No one mentioned any of the other resources the colleges offered that were health and/or wellness related. One area of future research is to inquire about the resources that the college offers and explore how students use them to enact their health responsibility. This would give the institution a much clearer picture of how they are impacting their students' health and well-being and may reveal possible new programming and intervention ideas. Institutional research is also needed to investigate how to recognize the needs of the students and offer services to be proactive in aiding students' health responsibility.

I found that "cues to action" or the motivating reasons driving behaviors and behavior change were varied and that individuals could readily identify why they chose to act the way they did. "Cues to action" is a component of the HBM and has not been well-studied (Champion & Skinner, 2015). There is some research to suggest that directing and personalizing messages (e.g., text messaging) enhances the intervention experience (Burner et al., 2014; Clarke et al., 2021) and I recommend that future intervention studies for this population incorporate the effectiveness of technology-sourced programs to provide cues, and coaching to fostersustained health-related behavior change.

The last area of research I recommend investigating is how the health and wellbeing of the LGBTQ community is impacted by gender bias, negative perception and lack of awareness interacting with individuals in this community. One participant expressed such concerns, and the current literature is limited. Recommendations for further inquiries has been recommended by others as well (Mayfield et al., 2017; Zamani-Gallaher & Choudhuri, 2011).

Methodological Recommendations

Understanding the longitudinal relationship from awareness to action in health responsibility in community college students has not been well studied. Myqualitative study represents a first step, but further research needs to be done to examine what barriers community college students experience and what aides in enacting health responsibility (Estelle-Brazzell Horton, 2014). A mixed methods approach to this question would offer the methodological breadth and depth of contextualized understanding from the qualitative data, and the ability to assess longitudinal changes in behavior that can be examined with quantitative data. For example, survey research could track utilization of college health related services over time, as well as self-report of awareness of those services. The qualitative part could examine what creates awareness and motivation to act within the context of the community college setting.

Recommendations for Other Theoretical Frameworks

Other approaches to the study of health responsibility in community college students that may elicit compelling data in future studies by incorporating other frameworks like the polarities of democracy model (Benet, 2013) and Erikson's Eight stages of development theory (Gould & Howson, 2021).

Democracy has been the impetus driving positive social change in the areas of economic, environmental, and other domains, and the polarities of democracy model uses ten elements presented as 5 paired polar opposites (Benet, 2013). These pairs include *freedom & authority, justice & due process, diversity & equality, human-rights &*

communal-obligations, and participation & representation which are used to guide sustainable, healthy social change endeavors.

The model is based on the aim of gaining the best of both opposites while avoiding the pitfalls each can bring (Benet, 2013). It is thought that there is inherent good in both perspectives from a *tradition-bearer* on one side and *crusader* on the other. When used together they form the foundation of mutually agreeable definition of democracy and can serve as a guide for all of the stages of social change efforts. Using this model for investigating health responsibility would be helpful as much of the current research on access to healthcare has demonstrated a substantive inequality in access to services, particularly for those in lower SES and rural areas (Courtemanche et al., 2018).

Community college students have been identified in the literature as having increased risk of dropping out of college, being diagnosed with a mental illness, having food, housing and financial insecurities as well as requiring remedial math and English coursework. All of these factors could be considered in the polarities of democracy model. It would also allow for the understanding of how community college students experience the polarities and how that might impact their ability to enact their health responsibility and elucidate a way in which to plan, implement and evaluate positive social change.

’Erikson’s eightstages of development theory represent the developmental phases one goes through to become autonomous, competent individuals (Gould & Howson, 2021). The stages span the lifetime and represents psychosocial crises that an individual either overcomes or carries with them the negative impact that affects development in the future. This influence is known as epigenetics and a popular area of research in its own right. The stages are akin to the polarities of democracy tenets as they too are pairs of opposites. The stages are: stage 1(0-1.5 yrs.) is *trust vs. mistrust*, characterized by hope and possibility; stage 2 (1-3 yrs.) is *autonomy vs. shame*, characterized by the tug between wanting to act independently and feeling hesitant to do so; stage 3 (3-6 yrs.) is *initiative vs. guilt* and marks the transition to independence; stage 4 (5-12 yrs.) *is industry vs. inferiority* and is about developing self-awareness; stage 5 (11-18 yrs.) is *identity vs. role confusion* and focuses on the individual's mean-making activities and tests and individual's role and social position; stage 6 (30-50 yrs.) is *intimacy vs. isolation* and is correlated to the development of intimacy with others; stage 7 (50+ yrs.) is *generativity vs. stagnation* and is about being self-absorbed as opposed to caring about the next generation's needs; and stage 8 is *ego integrity vs. despair* and associated with self-evaluation (Gould & Howson. 2021). Also part of the theory is the belief that sense of identity and ego are fluid over the lifetime and that people can recover from traumas by resolving issues that stemmed from these experiences later in life. These stages end in late adulthood and are characterized by the unique circumstances under which they were influenced, including how they were raised, nurtured, and educated within their environments and cultures.

Using this broadened lens of psychosocial development over the lifespan and concepts of identity development may help to understand how community college students come to enact their health responsibility in the present day. This exploration into gaining insight into the early influences of behaviors would deepen the richness of inquiry into how individuals develop habits and healthy (or unhealthy) behaviors. Erikson's' psychosocial model also includes the social, cultural, and biological aspects of aging and how behaviors and identity earlier in life can influence the health and fitness pursuits in older adulthood (Maree, 2021).

Implications

The desire for positive social change was a major driver for this study. Initially the thought was to examine if there is a need to and possible ability to improve the overall health and well-being of community college students in general. And while that endeavor still remains as an area in need, what else came out of the study was a little more focused in what I will call a "broken system." While it was only one participant from the LGBTQ community, their story was deeply impactful. The participant shared significantly more barriers, negative experiences, and difficulties enacting their health responsibility than their non-LGBTQ counterparts. They also shared stories of fellow LGBTQ friends' negative experiences as well. Their exact words were, "I felt garbagy" about their experiences seeking health care and the lengths they took to avoid going to specific medical facilities where they were severely mistreated.

The experiences of this participant drove me to the literature where I discovered somecompelling studies. Sekoni et al. (2017) described how individuals in the LGBTQ community have poorer health outcomes compared to the general population, and experience more discrimination, denial of care, disrespect and abuse. Sekoni et al also discuss how they endure more negative attitudes and behaviors from providers and a lack of privacy and confidentiality in care, confirmed by my participant's shared experiences .

Sekoni et al. further discuss the need for curricular and training improvements for healthcare students and currently practicing health care providers on LGBTQ issues and need for inclusion to reduce the discrimination and stigma LGBTQ patients experience.

The other compelling finding was Zamani-Gallaher and Choudhuri (2011) study about how students in the LGBTQ community are marginalized and subject to bias from college staff and faculty. Zamani-Gallaher and Choudhuri shared a story about a student who came out to their parents that they were gay and got kicked out of the house and the college advisor they went to seeking help refused because it conflicted with advisor's religious views.Educational and medical professionals are often seen in a position of power and authority. For individuals to experience bias, judgment, or worse, rejection based on sexual orientation from those they are seeking help from can have a significant negative impact. Those individuals are less likely to graduate from the college they are attending and less likely to seek the medical care they need (Sekoni et al., 2017; Zamani-Gallaher & Choudhuri, 2011)

I searched the literature looking for studies using the search terms *gender bias* and *health care professionals* and found 2 studies. I then used the search terms *implicit LGBTQ bias* and *healthcare professionals* with 5 results. The first search included implicit gender bias and career roles in how women and men are perceived in the practice of medicine (Salles et al., 2019) and Collins et al. (2021) study of racial bias of community pharmacists. Both studies utilized Implicit Association Tests (IAT) only. To truly focus the study on the LGBTQ community the emphasis needs to be on their specific gender biased issues and include more than the use of the IAT. Mayfield et al.

(2017) discussed howLGBTQ people are subject to health disparities due to a lack of provider training and inadequate access to health care. Mayfield et al. further discussed how examining implicit biases in medical students using the IAT in conjunction with training in sexual history taking and general care of patients with differing sexual orientation can improve health care student's comfort level and ability to interact with professionalism and compassion. Mayfield et al. also suggested that future research and interventions include a more robust set of case studies and to assess bias of the faculty teaching the curricula. I believe that utilizing this study as a foundation of future research into expanding healthcare provider education in addition to training professional in higher education would be a significant impetus for social change in the health disparities of lesbian, gay, bi-sexual, transgender, and queer individuals.

It is my belief that there needs to be intentional action to address the disparaging experiences of this community. I believe there needs to be efforts to include LGBTQ training programs for staff already employed at institutions and medical facilities along with improvements to the current curricular programming and training. Future and current health care workers as well as college faculty and staff need to bring the same empathy, respect, and attention to care for all individuals regardless of gender identity or any other factor. Individuals in the LGBTQ community have been marginalized long enough, it is time for positive social change.

Conclusion

Health responsibility is a multifactorial concept that includes the duty one has to act to take care of oneself. There are psychosocial, cognitive, and cultural influences and barriers. The participants in this study shared a variety of positive health enhancing behaviors and the barriers they experienced trying to enact their health responsibility. I believe that everyone should be able to enact their right to take care of their physical and mental wellbeing without undue burden from those individuals who are supposed to support that endeavor. Individuals in the LGBTQ community are at a greater risk of suicide, dropping out of college and inadequate health care (Sekoni et al., 2017; Zamani-Gallaher & Choudhuri, 2011) which was seen in my results. There is a societal responsibility to address the disparities these individuals face and develop ways to correct the errors. Ensuring those individuals responsible for caring and helping LGBTQ people are *doing no harm* is an important step in aiding the health and wellbeing of the LGBTQ community. Additionally, community colleges are positioned to be significantly impactful in helping establish lifelong health related habits by not only programs and services, but also within the curricula and educational outcomes of the institution.. Connecting the belief that the institution also has a duty to assist the students’ ability to enact their health responsibility is of the utmost importance for the students attending age 18–26.

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Appendix A: On Campus Flier

Let's Talk about Health!

There is a new study called *"Health responsibility in community college students: A qualitative inquiry"* that is part of the doctoral study for Christine Phillips, a Ph.D. student at Walden University.

About the study:

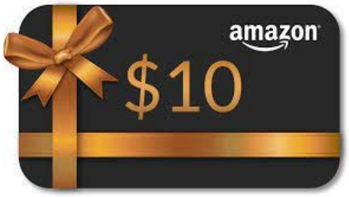
- One 60-minute interview via Zoom or phone, your choice!
- Review digital summary of interview via email (20-30 min max)
- Receive a $10 gift card for your time!

Volunteers must meet these requirements:

- 18 years old or older
- Currently enrolled at XXX in a credit course towards a degree, certificate, or transfer.

To volunteer, email, text, or call:

Receive a $10 gift card for participating!



Appendix B: Online Flier

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