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Mexican American Men Who Have Sex with Men: Cultural Factors and Substance Use

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Walden University

College of Allied Health

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Michael L Garcia

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the review committee have been made.

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Walden University
2024

Abstract

Mexican American Men Who Have Sex with Men: Cultural Factors and Substance Use

by

Michael L Garcia

MS, Walden University, 2020

MS, University of Texas-Pan American, 2005

BS, University of North Texas, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

May 2024

Abstract

Research has shown substance use affects sexual minority communities disproportionately. Studies have shown when individuals are part of ethnic or sexual minority groups, negative attitudes and risk behaviors that can lead to substance use are experienced at a greater scale compared to their majority counterparts. There have not been significant investigations regarding relationships between cultural values and sexual and ethnic minority subpopulations within the United States. The purpose of this quantitative study was to identify relationships between religion, family structure, traditional gender roles, and substance use in terms of Mexican American men who have sex with men (MAMSM) populations. This study involved using Meyer's minority stress theory to explore this issue. A sample of 84 adult MAMSM living in the United States was recruited via social media platforms. Multiple regression analysis revealed cultural values of religion, family structure, and traditional gender roles were not statistically significant predictors of substance use in this population. Findings from this study contribute to positive social change through the existing body of knowledge on ethnic and sexual minorities and substance use. This study identified a need for further understanding of this population and substance use. Moreover, results inform mental health providers in terms of awareness of presumptions they may use in their work with this population.

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Dedication

I dedicate my dissertation work and all my academic achievements to my family, spouse, and fur children.

First and foremost, to the memory of my late parents, Amando and Angelica Garcia, who passed away during the completion of this work. I am forever grateful for their love and support that taught me to rise from the ashes, time and time again. I miss you both beyond words.

Furthermore, to my spouse, JJ Mendoza, who has been a source of strength, patience, and motivation for me throughout this entire experience. Thank you for your love, support, and continuous faith in my ability to pursue my goals through life's obstacles and setbacks. I am truly blessed to have you as my partner in this life journey. I love you.

Next, to my sisters Cynthia and Deborah, who have always been at my side, inspiring me to be fearless in my efforts to make a difference. Thank you for your motivation, love, and support.

Lastly, I dedicate this work to my dearest fur children, Brock, Serena, Zoey, Diego, and Blue, who sat by my side as I completed this work.

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Chapter 1: Introduction to the Study

In the United States, illegal substance use and prescription drug abuse continue to significantly harm society and strain health systems (Loza et al., 2021). Drug addiction can affect anyone of any background and socioeconomic status. People often use substances as a coping mechanism to manage life obstacles (Loza et al., 2021). Using substances as a coping mechanism increases chances of criminal involvement, arrest, and incarceration (Loza et al., 2021). Substance use can increase risks of contracting severe and chronic medical conditions such as HIV and hepatitis C (Kutner et al., 2017). In addition, substance use raises chances of having one or more associated physical issues or concerns involving psychological wellbeing (Burrow-Sánchez et al., 2015). Researchers have examined psychosocial influences and substance use among various populations. However, there is minimal literature evaluating association between cultural factors, substance use, and subpopulations within society.

Background

Individuals who are classified as part of sexual or cultural minority populations) have a higher probability of encountering obstacles that impact substance use (Delucio et al., 2020; Gilbert et al., 2016; Jones et al., 2019; Kutner et al., 2017; Lamb et al., 2019). Many individuals in sexual minority communities endure challenges that are not faced by their majority counterpart populations. These challenges are rooted in others' perceptions and behaviors in response to sexual preference or gender identity (Lamb et al., 2019; Loza et al., 2021). These adverse encounters may lead to shame, discrimination, increased probability of physical and emotional prejudice, aggression, renouncement by

loved ones and peers, inadequate support in terms of education, and community stigma (Lamb et al., 2019; Loza et al., 2021).

Problem Statement

Stress associated with population-specific experiences of cultural minorities and sexual minorities can lead to higher risks involving unfavorable consequences affecting psychological, emotional, and physical wellbeing (Mandal et al., 2018). Individuals look to substances to manage antagonistic cultural and social occurrences (Ma et al., 2017). Substance use affects sexual minority communities disproportionately compared to their majority counterparts (Lamb et al., 2019). Although researchers have investigated substance use in various ethnic Gay, bisexual, transgender, and queer (LGTQ) subpopulations there is minimal literature evaluating relationships between cultural factors and substance use among MAMSM.

Purpose of the Study

Substance use is a psychological issue that presents in different ways for different people. This quantitative study involved gaining insights regarding relationships between religion, family structure, and gender in terms of substance use among MAMSM. Males who have sexual relationships with other men do not necessarily describe themselves as part of the gay community or bisexual (Ma et al., 2017; Zaller et al., 2017). Based on available data, there is an opportunity to understand subpopulations within the MAMSM community and relationships between cultural factors and substance use.

Research Questions and Hypotheses

RQ1: Is there a relationship between religion, family structure, traditional gender roles, and substance use among the MAMSM population?

H₀1: There is no relationship between religion, family structure, traditional gender roles, and substance use among the MAMSM population.

H_a1: There is a relationship between religion, family structure, traditional gender roles, and substance use among the MAMSM population.

RQ2: Does religion have a statistically significant impact on substance use within the MAMSM population?

H₀2: Religion does not have a statistically significant impact on substance use within the MAMSM population.

H_a2: Religion does have a statistically significant impact on substance use within the MAMSM population.

RQ3: Does family structure have a statistically significant impact on substance use within the MAMSM population?

H₀3: Family structure does not have a statistically significant impact on substance use within the MAMSM population.

H_a3: Family structure does have a statistically significant impact on substance use within the MAMSM population.

RQ4: Do traditional gender roles have a statistically significant impact on substance use within the MAMSM population?

H₀4: Traditional gender roles do not have a statistically significant impact on substance use within the MAMSM population.

H_a4: Traditional gender roles do have a statistically significant impact on substance use within the MAMSM population.

Theoretical Framework for the Study

This study involved using the minority stress theory (MST), which was developed by Llan Meyer to understand minority health risk disparities. Minority stress involves struggles minority group members go through due to conflicts between their ideals and those of the majority (Meyer, 1995; Mirowsky & Ross, 1989; Pearlin, 1989).

Tension that is induced by hostile majority cultures contributes to minority health disparities, harassment, maltreatment, discrimination, and victimization, which may eventually impact individual decisions to use substances as coping mechanisms (Goldbach et al., 2014; Marshal et al., 2008; Meyer, 2003). The MST is used to consider high levels of chronic stress that are experienced by socially marginalized or stigmatized social groups (Meyer, 2003). This perspective strongly emphasizes internal and external challenges that influence minority disparities such as substance use (Goldbach et al., 2014). Health disparities can be partly attributed to individual experiences involving prejudice, family expectations, organized religion, internalized homophobia, and psychological distress and physical health problems such as substance use among minorities (Meyer, 2003; Goldbach et al., 2014; Smith et al., 2018). When individuals are part of racial/ethnic or sexual minority groups, negative attitudes and risky behaviors such as substance use are experienced at a greater magnitude compared to people who are

not in these groups (Herek & Garnets, 2007; Polihronakis et al., 2021). Individuals with multiple minority statuses are increasingly susceptible to experiencing sexual orientation-based discrimination, shame, and seclusion. In addition, this population has a higher chance of sexually risky behavior and substance use (Diaz et al., 2006; Goldbach et al., 2014; Meyer, 1995; Meyer, 2003).

Stress-related events involve prejudice, rejection expectations, hiding and concealing emotions, and self-loathing (Meyer, 2003; Pearlin, 1999). Daily challenges and tensions involving prejudice centered on sexual nature or shame re reasons for some individuals to alter their behaviors and adapt to societal norms (Kutner et al., 2017; Lamb et al., 2019). However, those same environmental stressors also generate significant emotional stress for individuals, negatively impacting physical health and mental wellbeing (Dohrenwend et al., 1992). Stress factors are distinctive (faced by only marginalized communities), persistent (connected to community and cultural constructs), and grounded in social interactions, groups, and established social hierarchies (Meyer, 2003).. Further research is needed to address sexual minority populations based on lack of psychological and sociological studies involving such groups.

The MST is used to understand unique stress patterns that have social and personal impacts on different populations. It is essential to address how stigma, prejudice, heteronormativity, rejection, and internalized homophobia contribute to substance use among sexual minorities. There is a link between pressures and adverse social and mental health outcomes, including substance use risks among sexual minorities (Meyer, 2003; Hatzenbuehler et al., 2008; Jones et al., 2019; Kutner et al., 2017).

Nature of the Study

I used logistic regression analysis to gain insights regarding relationship between religion, family structure, traditional gender roles, and substance use in MAMSM populations. Substance use was the dependent variable, and religion, family structure, and traditional gender roles were independent variables. Correlational analysis was used to better understand cultural factors and substance use in this population.

Definitions

Culture: Groups of people that are close to one another and adhere to the same social norms, structures, and languages (Knight et al., 2010).

Drug Abuse: Problems involving drug use that are characterized by recurring severe interpersonal adverse effects that impact social and professional lives (Skinner, 2001).

Gender Roles: Anticipated actions, speech, attire, grooming, and behaviors based on assigned genders (Knight et al., 2010).

Men who have sex with men (MSM): Men who participate in sexual actions with other men, regardless of how they identify. This includes men who refuse to identify as gay, homosexual, bisexual, pansexual, or heterosexual (Marshall et al., 2017).

Mexican Americans: Americans born in Mexico or who have Mexican ancestry. These individuals are residents of the United States (Knight et al., 2010).

Religion: Unique structured framework of attitudes, convictions, and behaviors that includes serving and worshipping God, multiple gods, or divine beings and dedication to one's religious beliefs or practices (Knight et al., 2010).

Substance Use: Use of prescription or over the counter pharmaceuticals that are over the recommended dose, use of drugs for purposes other than medicine (this does not cover alcohol use). This includes marijuana, sedatives, stimulants, hallucinogens, and narcotics/opioids (Skinner, 2001).

Limitations

A potential barrier when using questionnaire data is participants' willingness to complete questionnaires. Social conformity can skew self-reported data (Blashill et al., 2019). Another possible barrier to collecting survey data is the difficulty of recruiting participants who are willing to disclose their experiences. This vulnerable population is marginalized in terms of their sexual orientation, language use, and ethnicity. This study was designed to recognize this and take all precautions to protect confidentiality of subjects. These precautions include providing participants with study information, detailed consent requests, not requiring participants to report any personally identifying data, and securing all data on a password-protected external drive.

Significance

This study contributes to existing research regarding the relationship between cultural factors and substance use among the MAMSM population. Study data builds on support models and extends guidance and mental health services to this community. Clinicians and educators can use this data to support better MAMSM struggling with sexual orientation and substance use. Culturally-informed intervention systems were used to educate and assist in preventing substance use within this population. Interventions focused on specific cultural conflicts can be used to target unique perspectives of

MAMSM. This may alter social and health outcomes, lowering drug abuse rate, alleviating stress, and enhancing resilience.

Summary

I used a quantitative research design to examine data from adult MAMSM who lived in the United States, were 18 or older, and used substances since May 2023. Data concerning participants' levels of substance abuse were collected and analyzed using Statistical Package for the Social Sciences (SPSS). Data about participants' cultural values in terms of religion, family, and gender roles were obtained and examined using SPSS. Multiple linear regression was used to evaluate connections between variables. I explored whether cultural value alignment correlates with substance use among MAMSM. Chapter 2 includes an explanation of my literature search strategies, theoretical framework, conceptual context, analysis of existing research, and critical concepts and variables.

Chapter 2: Literature Review

In the United States, substance abuse continues to strain public health systems and communities (Delucio et al., 2020; Lamb et al., 2019; Loza et al., 2021). According to Lamb et al. (2019), ethnic and sexual minorities are more negatively impacted by substance use than their majority peers. In addition, members of these minority communities experience various challenges based on views and beliefs of surrounding communities and individual specific ethnic and cultural population (Branstrom, 2016; Lamb et al., 2019; Lefevor et al., 2019; Loza et al., 2021). LGBTQ African Americans, Latinos, and Hispanics have been the subject of research on substance use. However, there is insufficient research regarding connections between specific cultural values and drug use among MAMSM. This study involved looking at how gender norms, family structure, and religious beliefs affected substance use among MAMSM. An increasing proportion of MSM do not identify as members of a sexual minority group for various social and psychological reasons (Delucio et al., 2020; Gilbert et al., 2016; Ma et al., 2017). Based on existing research, there is an opportunity to contribute to the topic and understand this subpopulation as well as relationships between cultural influences and substance use.

This chapter includes a thorough analysis of the Mexican American population as an ethnic and sexual minority category, related variables (family, religion, and gender), and substance use. First, I present literature search strategies that were used to identify the gap in research regarding the relationship between unique cultural factors and substance use among MAMSM. Secondly, I discuss the theoretical framework and my

rationale for its use. Lastly, I address empirical research related to substance use, MAMSM, and cultural factors, including religion, family structure, and gender roles.

Literature Search Strategy

In this study, I used the following key words: *Mexican American culture, Mexican American values, Mexican American men who have sex with men, religion and Mexican American men, sexual minorities in the LGBTQ community, substance use disparities within the LGBTQ community, people of color, substance use, mental health, and substance use interventions for MSM*. I used the following databases: LGBTQ+ Source, ERIC, PsycArticles, PsycInfo, and Thoreau. Search results were filtered to include solely peer-reviewed research.

Theoretical Foundation

This study is based on the MST, a recognized theoretical framework developed by Llan Meyer to understand minority health risk disparities. It involves conflicts between minority and dominant majority beliefs and subsequent tensions that are experienced by minority group members (Grigoropoulos, 2022; Jones, 2019; Meyer, 1995; Schwartz, 2016).

Stress that is induced due to hostile majority cultures contributes to minority health disparities, mistreatment, judgment, and oppression, and may eventually affect individual decisions to use substances as a coping mechanism (Goldbach et al., 2021; Grigoropoulos, 2022; Meyer, 2003). People from stigmatized social groups are subjected to excessive stress due to their minority status in society (Lefevor et al., 2019; Meyer, 2003). Individual internal struggles are grounded in social and environmental stressors.

The MST is used for comprehending experiences that are unique to minorities (Goldbach et al., 2021; Lefevor et al., 2019). Social and health disparities can be attributed to experiences involving prejudice, family, religion, internalized homophobia, psychological distress, and physical health challenges among minorities (Goldbach et al., 2021; Kutner et al., 2017; Lefevor et al., 2019; Meyer, 2003; Polihronakis et al., 2021). When a minority racial/ethnic group member is also a sexual minority, negative attitudes and risky behaviors are experienced more frequently than nonmember counterparts (Goldbach et al., 2021; Kutner et al., 2017; Meyer, 2003; Polihronakis et al. 2021). Multiple minority statuses increase likelihood of discrimination, marginalization, rejection, alienation, participating in unsafe sexual conduct, and using substances (Goldbach et al., 2021; Meyer, 1995; Meyer, 2003; Polihronakis et al., 2021).

Many MST concepts overlap, indicating their interconnectedness. Individuals are often compelled to adapt to norms when they experience severe stress due to environmental pressures like prejudice or sexual shaming, which negatively impacts their physical and mental wellbeing (Goldbach et al., 2021; Meyer, 2003; Polihronakis et al., 2021). Stress-inducing obstacles are not experienced by populations that are not stigmatized (Goldbach et al., 2021; Meyer, 2003). Even though this concept has been used to gain insights regarding females, immigrants, the underprivileged, and ethnic and cultural subgroups, there is a need for further research regarding sexual minority populations due to lack of psychological and sociological research pertaining to these populations.

It is also essential to learn how stigma, prejudice, heteronormativity, rejection, and internalized homophobia contribute to substance use among sexual minorities. There is limited research regarding links between ethnic and sexual minority pressures and adverse behavioral and psychological wellbeing. There are conflicts involving homophobia inside racial and ethnic communities, as well as estrangement of gay and bisexual individuals.

Literature Review

Mexican American Values

Cultural values heavily influence many Mexican Americans' daily lives. While some examination of cultural values has been carried out, there are various cultural ideas, values, and behaviors among Latino and Hispanic subgroups, making it critical to identify distinct tendencies in terms of adaptive behaviors of Mexican Americans. Traditional Mexican American values involve family, gender roles, and religion. Limited research has addressed connections between cultural values among who are ethnic and sexual minorities and substances use.

Values are a comprehensive framework for communicating culture. An individual's connection to values is highly regarded as one of the lucrative aspects for an ethnic minority individual identifying with a sexual orientation that is also considered minority status amongst sexual orientations (Barrera et al., 2019; Flores et al., 2014; Valdez et al., 2018; Villarreal et al. 2019). The Mexican American values of religion, family structure, and gender significantly influence interpersonal and intrapersonal behaviors. These ideals then develop into the driving principle for conduct and decision-

making regarding cultural conventions to be adhered to in various circumstances (Barrera et al., 2019; Flores et al., 2014; Jones et al., 2019; Valdez et al., 2018). Limited evidence has linked Mexican American men and cultural values to several critical outcomes, including the use of substances (Barrera et al., 2019; Valdez et al., 2018).

Regarding inequalities that can be linked to the sexual orientation of a person, the literature provides minimal consideration for traditional Mexican American values (Barrera et al., 2019; Delucio et al., 2020; Jones et al., 2019; Lamb et al., 2019; Loza et al., 2002; Valdez et al., 2018; Villarreal et al., 2019). For Mexican American men, adherence to cultural values such as family, gender roles, and religion may prevent an individual from seeking help to cope with areas of life that conflict with traditions. This idea is established on the awareness that values inherent in the Mexican-American culture conflict with psychotherapy principles (Barrera et al., 2019; Flores et al., 2014; Valdez et al., 2018). For instance, bringing outside problems to the family would go against the family's culture. All problems should be maintained within the family framework to prevent the family from being brought into disgrace (Barrera et al., 2019). Similarly, for Mexican American males requesting support could be considered a mark of weakness which is the opposite of the cultural gender role value (Barrera et al., 2019; Valdez et al., 2018). The lack of empirical data on the connection between Mexican American values, sexual alignment, and substance abuse underscores the importance of further examination (Barrera et al., 2019; Flores et al., 2014; Valdez et al., 2018).

Mexican American Men

Between 1960 and 2015, more than 16.5 million Mexicans sought better opportunities in the United States (Jones et al., 2019). According to these numbers, Mexicans form the biggest major group of immigrants in the United States (Flores, 2017; Jones et al., 2019; Villarreal et al., 2019). Flores (2017) explains that individuals classified as Mexican Americans embody 11% of the total population and represent 36 million out of the total of 56 million Hispanic individuals who reside in the United States. The U.S. Bureau of Census (2004) reveals that Mexican Americans account for the sharpest increase in subgroups within the Latino population, reporting 59.3 % of the collective Latino population and 7.4 % of the overall United States inhabitants.

Mexican Americans cope with adjusting to the majority culture while preserving connections to their Mexican culture. Mexican American men frequently face social and emotional pressure to adhere to traditional values while spending time with family. Additional pressure is faced outside the home when these men try to comply with the prevalent societal standards (Delucio et al., 2020; Villarreal et al., 2019). Based on a significant amount of the available research, the difficulties brought on by the dual adaption process pose a significant danger for Mexican American men and may be a factor in developing adverse psychological effects such as substance use. (Burrow-Sánchez et al., 2015; Sanchez et al., 2016). The existing literature requires additional research on specific cultural values within the Mexican American community that may conflict with nontraditional self-identification (Barrera et al., 2019; Burrow-Sánchez et

al., 2015; Delucio et al., 2020; Jones et al., 2019; Lamb et al., 2019; Loza et al. 2021 Sanchez et al., 2016; Valdez et al., 2018; Villarreal et al. 2019;).

Research reveals that immigration and acculturation are primary factors contributing to the increased rate of substance use in individuals of Mexican descent (Flores, 2017; Lamb et al., 2019; Zeglin et al., 2018). However, a lack of literature provides a lucrative base for the need to pursue further insight into the connection between Mexican American Men and the cultural factors of religion, family, gender, and substance use (Barrera et al., 2019; Jones et al., 2019; Zeglin et al., 2018). Even less is known about Mexican American men, who are also categorized or identified as sexual minorities (Jones et al., 2019). According to recent research, psychosocial components such as cultural knowledge, practices, views, perspectives, and ideals are expected to change with cultural adaptation (Barrera et al., 2019; Jones et al., 2019; Valdez et al., 2018). These changes happen throughout the development and socialization of ethnic minorities residing in the U.S. for several generations (Barrera et al., 2019; Jones et al., 2019; Zeglin et al., 2018).

Further examination reveals that adaptation advancements depend on the individual's developmental situation and are not always predictable (Barrera et al., 2019; Sanchez et al., 2016; Valdez et al., 2018). Various studies establish that two-fold cultural modifications can become evident throughout early childhood in comparatively simple changes in parent-directed actions such as dual language fluency, involvement in social exchanges, and awareness of the cultural mainstream customs and traditions (Barrera et al., 2019; Jones et al., 2019; Sanchez et al., 2016; Valdez et al., 2018). However, as they

progress through adolescence and into adulthood, most Mexican Americans are more likely to exhibit more complex, erratic behaviors due to their dual cultural adaption. For example, language preference, autonomy in choosing peers, individual discovery, and selectively acquiring culturally interconnected values (Barrera et al., 2019; Jones et al., 2019; Sanchez et al., 2016; Valdez et al., 2018;). Existing research offers insufficient knowledge about the connection between Mexican American men's cultural adaptation and sexual minorities within the population. Those same sexual minorities do not embrace or integrate traditional expectations and outcomes; thus, the research does not present a complete depiction of the relationship.

Substance Use

Sexual minorities, like ethnic minorities, are consistently at a higher risk of having hazardous substance use experiences than their majority peers. It is estimated that sexual minorities are nearly two times more likely than majority groups to engage in drug usage (Barrera et al., 2013; Choi et al., 2013; Knight et al., 2014; Paul et al., 2014). Additionally, research indicates that sexual minority communities are frequently connected with more severe substance misuse problems and are more susceptible to acquiring substance use and mental health challenges (Choi et al., 2013; Knight et al., 2014; Paul et al., 2014). The research reveals that individuals who classify as sexual minorities have an elevated probability of using substances to manage life obstacles (Ma et al., 2017; Zaller et al., 2017). Existing data support the connection between substance use and various psychological and social characteristics in different population subgroups. However, a gap exists in the research studying the relationship between

cultural variables, substance use, and the various subpopulations that make up society. (Jones et al., 2019; Lamb et al., 2019; Loza et al., 2021; Ma et al., 2017; Zeglin et al., 2018). Thus, it is vital to understand how being an ethnic or sexual minority impacts the potential for substance use.

Men from ethnic minorities who participate in sexual relationships with other men, whether casual or formal, are subject to various types of stigmatization and discrimination, depending on their race and their sexual orientation (Barrera et al., 2013; Choi et al., 2013; Knight et al., 2014; Paul et al., 2014). When examining the link between perceived discrimination based on racial or ethnic origin, sexual orientation, or gender and drug misuse, researchers discovered positive relationships between numerous kinds of discrimination and substance abuse. These investigations explored the link between discriminatory perception and drug misuse (McLaughlin, Hatzenbuehler, & Keys, 2010). Stress is a commonly recognized risk factor for excessive substance use among gay men, and it is directly tied to homophobic views and prejudice (Jones et al., 2019; Knight et al., 2014; Meyer, 1995; Paul et al., 2014). The bulk of the research contributes to understanding white male sexual minorities. There has not been a significant amount of investigation on cultural values' effect on people of different sexual orientations and ethnicities.

The Minority Stress Theory (Meyer, 1995) was developed to make clear the established research outcomes that place cultural and sexual minority populations in increased prevalence of adverse results such as drug abuse, substance use disorders, psychological suffering, and mental health concerns (Barrera et al., 2013; Branstrom,

2016; Choi et al., 2013; Knight et al. 2014; McLaughlin et al. 2010; Paul et al. 2014).

According to discoveries, sexual minorities have unique stress-related experiences that are not experienced by the general population. For example, exposure to oppression and discrimination, potential rejection, and aggression, assumed adverse attitudes and beliefs about sexuality, anxieties about self-disclosure, and suppression of self are all factors that can affect one's well-being. (Knight et al., 2014; McLaughlin et al., 2010; Meyer, 2003).

Some of these features of the pressures faced by sexual minorities are comparable to those faced by people of different races and ethnicities (Meyer, 2003). The experience of many forms of discrimination and an undervalued self-concept increases the likelihood of specific types of shame-related stress, regardless of the type of minority involved (ethnic or sexual). These factors contribute to worsening an individual's psychological discomfort and raise the likelihood that the individual may turn to substance abuse as an avoidant method of coping. (Barrera et al., 2013; Choi et al., 2013; Knight et al., 2010; Knight et al., 2014; Paul et al., 2014).

The link between drug abuse and sexually unsafe conduct among sexual minorities has been well documented throughout the AIDS epidemic (Barrera et al., 2013; Choi et al., 2013). It is known that ethnic minorities are subjected to the stigma of minority status in various social settings. (Barrera et al., 2013; Choi et al., 2013; Knight et al., 2010; Knight et al., 2014; Paul et al., 2014). However, the consequences of cultural influences on substance use among racial, ethnic, and sexual minorities are not fully recognized, documented, or understood (Knight et al., 2010; Knight et al., 2014; Paul et al. 2014). Research focuses on the external psychosocial factors that contribute to the

challenges faced by this community, which includes the mainstream gay population and the general community (Knight et al., 2014; Paul et al. 2014). There is a lack of understanding regarding the cultural norms around family, religion, and gender roles, all of which are thought to be contributors to the internalized stress that can result in substance abuse (Choi et al., 2013; Knight et al., 2014; Paul et al., 2014). Furthermore, there is a lack of significant data that provides insight into the association between the cultural norms of family, religious faith, and gender and substance use and abuse in the MAMSM population.

Family

Cultural traditions are built on values, behaviors, and practices passed down over generations. (Hashtpari, Tao, Merced, Arvizo-Zavala, & Hernández, 2021; Zeiders, 2011). Family is a cultural value that many see as the most important value to influence the lives of Mexican Americans (Valdez, Flores, Ruiz, Carvajal, & Garcia, 2018). As a result of holding this value in high regard, it is preferable to maintain close family ties rather than attempting separation or independence (Krogstad, 2016; Zeglin et al., 2018). Mexican Americans hold their families in high regard, displayed through various behaviors. Examples of such behaviors include compliance and reverence for authority figures, usefulness and trustworthiness, overall generosity concerning the family as a whole, accountability, and struggle through labor of any kind for the family's advantage (Hashtpari et al., 2021; Krogstad, 2016; Lamb et al., 2019; Zeiders, 2011).

The Mexican American family structure places a high value on family, with the unit serving as the individual's leading resource for comfort and assistance and being

their most important source of strength (Krogstad, 2016; Zeiders, 2011). Typically, a Mexican American family serves as their primary support network, and individuals have strong attachments to their extended family and cultural heritage (Hashtpari et al., 2021; Krogstad, 2016; Zeglin et al., 2018). Many Mexican American men adhere to tradition and continue to live in their parents' or extended family's homes until they can establish a home of their own through marriage or other means (Delucio et al., 2020; Lamb et al., 2019; Loza et al., 2021; Villarreal et al., 2019; Zeiders, 2011). Even as adults, many adult Mexican American men continue to maintain regular contact with their extended families, either in person or by phone, at least once a week; some report daily contact with their extended families (Krogstad, 2016; Zeiders, 2011). There are many other members of the Mexican American family system that can be observed in addition to the nuclear and extended families: close friends, neighbors, and other members of the community (Delucio et al., 2020; Lamb et al., 2019; Loza et al., 2021; Villarreal et al., 2019). The family's well-being can often take precedence over the individual's decision-making (Delucio et al., 2020; Lamb et al., 2019; Loza et al., 2021; Zeiders, 2011). A Mexican American man may be obligated to give up a unique chance in his personal life to remain at home to provide protection and care for his parents and relatives at home. Commitment and perseverance toward the family's welfare are stressed over the individual's goals and endeavors (Burrow-Sánchez et al., 2015). Other cultures may view this emphasis on interdependence, cohesiveness, and cooperation as intrusive and maladaptive (Villarreal et al., 2019; Zeiders, 2011). As an impact, knowledge of these

actions within the framework of one's culture, sexual orientation, and the consequences of substance abuse.

Research on traditional Mexican American values tells us that family is an essential value to understand when looking at substance use (Villarreal et al., 2019). The broad range of traditions that shape the family structure is lifelong and multigenerational. It is possible that the patterns of drug use seen by Mexican American men are a reaction to cultural scripts that do not encourage or prohibit diversity in identities (Barrera et al., 2019; Jones et al., 2019). Cultural values have influenced this population's initiation and continued substance use (Barrera et al., 2019; Jones et al., 2019; Lamb et al., 2019). Regarding the challenges Mexican-American males have in conforming to specified sexual orientations and fulfilling prescribed responsibilities, their drug usage habits are inadequately understood. The majority of research has been on Mexican males who self-identify as gay or bisexual and have relocated to metropolitan cities to explore life as a sexual minority. There is a significant shortage of knowledge and understanding involving the function of families on MAMSM (Barrera et al. 2019; Burrow-Sánchez et al. 2015; Delucio et al. 2020; Jones et al. 2019; Lamb et al. 2019; Loza et al. 2021; Sanchez et al. 2016; Valdez et al. 2018; Villarreal et al. 2019). This research is intended to address the literature void by exploring the family values variable and its relationship to drug use behaviors among MAMSM. The findings of this investigation will contribute to the current research and enhance the understanding of the relationship, if any, between the influence that family expectations have on Mexican American males and in beginning drug usage among a sample of MAMSM.

Religion

Religion represents a single significant factor that impacts individuals' value judgment. Religious teachings, faith, and spiritual practices alter how a specific population thinks and shares world views (Roggemans, Spruyt, Droogenbroeck, & Keppens, 2015). The influence of religious doctrine cannot be overlooked when studying the impact on attitudes toward sexual minorities within an ethnic population (Diaz and Ojeda, 2011; Tarrence, 2017). After all, the most common counter-argument against sexual minorities is religious teachings. Findings have shown that religion often correlates with anti-sexual minority prejudice (Roggemans et al., 2015; Eisenman & Negy, 2016).

Research on ethnic differences in religion has provided valuable insights into individuals' motivation and behavior. However, most studies related to religious values and their influence on individuals have focused on Hispanics and Latinos as a whole population (Janssen et al., 2019; Muñoz-Laboy et al., 2019). The membership of religious beliefs differs through Latino-origin subgroups. The percentage of Catholics among Hispanics of Mexican descent is significantly higher than that of Hispanics of other origins (Loza et al., 2021; Muñoz-Laboy et al., 2019; Tarrence, 2017). The literature has limited analysis of the connection concerning religious principles and the subgroup of Mexican American men (Loza et al., 2021; Muñoz-Laboy et al., 2019; Tarrence, 2017). Still, less is known about the correlation between religion and MAMSM (Janssen et al., 2019; Loza et al., 2021; Muñoz-Laboy et al., 2019).

Existing literature describes Mexican Americans as placing religion as an essential piece of culture for the population (Loza et al., 2021; Muñoz-Laboy et al., 2019; Tarrence, 2017). Although Mexican Americans are not a homogeneous group, fundamental cultural influences must be considered when contributing to existing knowledge (Muñoz-Laboy et al., 2019; Tarrence, 2017). Most empirical research on religiosity among Mexican Americans explains that religion intermingles daily life and forms the foundation of strength and coping with life struggles (Loza et al., 2021; Muñoz-Laboy et al., 2019; Tarrence, 2017). According to Loza et al. (2021) and Muñoz-Laboy et al. (2019), Mexican Americans characterize their faith as having close, two-way interactions with God, their families, and their communities.

More than two-thirds of Mexican Americans identify themselves as Catholics. According to Patten (2014), the Catholic Church expresses its position on sexuality by basing the distinction between being a sexual minority and acting on the behavior. Exploring the idea of same-sex sexual encounters would be considered wrongful and sinful (Loza et al., 2021). However, the distinction becomes blurred, and the message that many Catholics hear is that merely being a sexual minority is sinful (Loza et al., 2021; Muñoz-Laboy et al., 2019; Tarrence, 2017). Research explains that this belief is commonly taught in the larger Latino / Hispanic population (Muñoz-Laboy et al., 2019). What is not fully understood is the association of internal pressure rooted in religion and substance use within subgroups of the larger Hispanic culture, specifically Mexican American sexual minorities (Muñoz-Laboy et al., 2019; Tarrence, 2017).

A significant portion of the Mexican American community in the United States is devoutly religious in their daily lives (Janssen & Scheepers, 2019). The expression of one's faith in a higher power is referred to as religious practice, and the act of praying is connected to this higher force (Espinosa-Hernandez et al., 2020; Loza et al., 2021; Noyola et al., 2020;). There is mounting evidence that religiosity is linked to improved mental health outcomes across various societies and populations (Espinosa-Hernandez et al., 2020; Janssen et al., 2019; Noyola et al., 2020; Roggemans et al., 2015). The majority of religions highlight the principle of mutual respect. Paradoxically, most faiths regard same-sex relationships as "unnatural" (Espinosa-Hernandez et al., 2020; Janssen et al., 2019). The religious influence on the day-to-day lives of humans has become less prominent due to trends toward secularization. However, homophobia and other sexual orientation-based discrimination are still prevalent worldwide (Espinosa-Hernandez et al., 2020; Janssen et al., 2019). Many people's lives are still heavily influenced by their religious beliefs and practices. It affects their perspectives because many continue associating with traditional religious practices, symbols, and beliefs (Janssen et al., 2019). This study is concerned with the correlations between the variable of religion and the impact on sexual minority groups and substance use.

Gender Roles

In the overall population, the use of illegal drugs has the propensity to increase and peak among males when they reach 18 to 25 years old (Kulis, Marsiglia, Nagoshi, 2010). Mexican American men could be vulnerable to becoming a high-risk group (Kulis et al., 2010; Llamas et al., 2020; Sanchez, 2020; Updegraff et al., 2014). A national study

conducted in 1992 highlighted the Latino population in the United States as having the most significant annual rates of increased drug use among young men. (Kulis et al., 2010; Llamas et al., 2020). Furthermore, the rates of substance abuse among Mexican American men were significantly higher than men of other ethnic groups (Sanchez, 2020; Updegraff et al., 2014). Culturally established roles related to gender are potential elements that could be associated with vulnerabilities, particularly in the MAMSM population (Kulis et al., 2010). A more profound knowledge of the connection between the cultural expectations of individuals and the adoption and expression of undesirable behaviors like substance use is necessary for the potential prediction of substance use in MAMSM (Kulis et al., 2010; Llamas et al., 2020; Sanchez, 2020; Updegraff et al., 2014).

According to the existing body of research, gender is a system for categorizing characteristics and actions that are typically allocated in a dualistic manner to differentiate between males and females. These qualities and behaviors are defined as being gender-specific (Sanchez, 2020; Updegraff et al., 2014). The population ascribes representations of masculinity and femininity according to the culturally established features and actions associated with the specified masculine and feminine orientations (Kulis et al., 2010; Llamas et al., 2020). Gender roles have been around for centuries and are described as the conventional feelings, thoughts, and actions linked with being male or female (Llamas et al., 2020). Socialization, including social learning and modeling, are the primary means through which gender roles are acquired (Sanchez, 2020). Traditional expectations for men typically encourage them to be functional, uncompromising and express anger, but they are not encouraged to express sadness (Kulis et al., 2010;

Sanchez, 2020). Masculine or instrumental behaviors are associated with traditional male gender roles, according to the literature (Kulis et al., 2010). Women are encouraged to be reflexive, conforming, and express sadness without expressing anger according to traditional gender roles (Kulis et al. 2010). Individuals within the Mexican American culture report the expectation to convey attributes that are considered appropriate for their gender roles (Sanchez, 2020; Updegraff et al., 2014). Early in life, males are encouraged to assume additional masculine traits or active positions, whereas young females are encouraged to embrace additional feminine characteristics or expressive positions (Sanchez, 2020; Updegraff et al., 2014).

The socialization of gender roles impacts individuals' susceptibility to stress and the amount of distress they suffer (Sanchez, 2020). Research on gender roles informs that varying levels of role acclimatization can impact the psychological functioning of individuals within minority groups (Updegraff et al., 2014). Literature highlights that for some individuals, not meeting specific expectations has caused maladaptive functioning, such as depression, anxiety, and social withdrawal behaviors (Sanchez, 2020; Updegraff et al., 2014). The connection between gender roles and substance use has been researched in the general Latino population and within the Mexican American subpopulation (Sanchez, 2020; Updegraff et al., 2014). Research provides a minimal understanding of the connection concerning gender expectations, sexual minorities, and substance use within the Mexican American population.

Mexican culture has traditionally been regarded as encouraging two major gender roles, Machismo (male) and Marianismo (female) (Kulis et al., 2010; Llamas et al., 2020;

Sanchez, 2020; Updegraff et al., 2014). There is a connection between machismo and the Mexican male stereotype of hyper-masculinity. Machismo is a cultural characteristic of men thought to have originated as a result of the Spanish colonization of the Americas and the suppression of native populations in those regions (Llamas et al., 2020). Family structure research identifies marianismo as a concept correlating with individual traits, for instance, the complicity of and forgiveness for abuse, desertion, adultery, aggressive risk-taking behaviors, and substance misuse (Kulis et al., 2010; Llamas et al., 2020; Sanchez, 2020; Updegraff et al. 2014).

An alternative definition of Machismo emphasizes positive characteristics such as regard, dignity, courage, and a strong awareness of responsibility to the family (Sanchez, 2020; Updegraff et al., 2014). The term "hombre" often refers to the beneficial attributes of Machismo that are associated with more compassion and providing. For example, the "hombre's" wife is not suppressed or physically controlled, recognizes family obligations, and is useful around the home (Llamas et al., 2020; Kulis et al., 2010). What is not well-researched in the literature is the impact on traditional gender roles in the Mexican American community and MAMSM.

According to tradition, Marianismo is a source of power for women because it allows them to establish that they are more developed than men and capable of bearing the distress caused by men (Kulis et al., 2010; Llamas et al., 2020). "La Mujer" (the lady) is utilized to portray the positive qualities of Marianismo, which emphasizes an able, robust, and positive individual involved in the support and growth of the family (Kulis et al. 2010; Llamas et al. 2020). She is called "La Mujer abnegada" (the self-sacrificing

lady) because she is peaceful and survives difficult male spouses through awareness and perseverance, putting her wishes aside for the benefit of the family. She is respectful, altruistic, devoted, and achieving the established role of an adult female in loving her children, husband, and home (Kulis et al., 2010; Llamas et al., 2020;). Marianismo can be viewed from two perspectives. First, through the lens of selflessness, love, devotion, and fostering. Second, through the lens of dependence, passivity, and submission (Kulis et al., 2010; Llamas et al., 2020).

There is some evidence that conventional gender characters in Mexico, such as Machismo and Marianismo, may affect the link between adopting and expressing inappropriate actions and substance abuse. Generally, males with more traditional gender beliefs are more prone to take part in reckless conduct and substance use to exhibit machismo or appear masculine. Traditional gender beliefs encourage males to view women as inferior (Kulis et al., 2010; Llamas et al., 2020). Drinking to demonstrate one's machismo or as part of a joyous fiesta emphasizes binge drinking and the capacity to keep one's composure when ingesting vast quantities of alcoholic beverages (Llamas et al., 2020; Kulis et al., 2010). Men in Mexico are encouraged by cultural norms to drink whenever and whenever they like, whereas women face much lower acceptance of excessive drinking (Kulis et al., 2010). According to the results of Llamas et al. (2020), Male Mexican immigrants are more likely to use alcohol than females. Machismo, which promotes emotional suppression, has also been correlated with excessive stress and levels of depression in Mexican American men (Sanchez, 2020; Updegraff et al., 2014). Here is an example of how to present information in a vertical bulleted list:

Summary and Conclusions

Substance use disproportionately affects ethnic and sexual minorities compared to their majority counterparts. Members of these minority communities experience various challenges based on views and beliefs of surrounding communities and specific ethnicity and culture. There is an opportunity to understand MAMSM and relationships between cultural influences and substance use.

For this study, a quantitative research methodology was used to analyze data that were obtained from adult MAMSM. Simple and multiple linear regression were used to evaluate relationships between variables. Data collection and analysis were used to explore if presence of cultural values among MAMSM correlates with substance use. Chapter 3 includes information about the study's research design rationale, methodology, target population, procedures for recruitment, threats to validity, and ethical procedures.

Chapter 3: Research Method

This quantitative research involved examining the relationship between religion, family structure, and traditional gender roles and substance use among MAMSM. This chapter includes information about the study design and rationale, methodology, population, sampling and sampling processes, recruiting, participant engagement, and data collection. I address instrumentation and operationalization of conceptions, methodological assumptions, validity risks, and ethical procedures.

Research Design and Rationale

Research Variables

In this quantitative study, surveys were used to investigate the Mexican American cultural values involving religion, family, and gender roles as factors influencing self-reported drug use among a sample of MAMSM. In this study, the religion, family structure, and traditional gender roles were independent variables, and substance use was the dependent variable.

In this quantitative study, data were gathered using surveys to address research questions.?

Design Choice and Advancing Knowledge

Quantitative research enables conclusions about actions and attitudes based on acquired data (Creswell, 2013). A significant reason for selecting the topic was to provide generalizable results that apply to the greater population. Quantitative research is impartial and involves adhering to tenets of the scientific process (Mertens, 2015). I collected quantitative data to evaluate strengths of connections between cultural factors

and substance use in the MAMSM population. Outcomes of this investigation can contribute to existing knowledge regarding prevention, education, and treatment of drug use disorders.

The nonexperimental research design requires interpretation or observation of data to address causation among variables and analyze outcomes (Field, 20113). For this study, anonymous surveys were administered online to collect data from a sample of adult MAMSM. Collected data were used to interpret religion, family, and gender roles as predictors of substance use among MAMSM to understand and advance knowledge in the field of psychology.

By using this method, I provided insights and information about MAMSM with no direct impact on the research setting. Data that were gathered through surveys included previously unknown knowledge which can lead to future studies.

The survey methodology involves incorporating and measuring factors by questioning participants about a specific topic (Field, 2013). This strategy is used for obtaining information from a limited sample of individuals in order to make conclusions about behaviors of a larger group (Mertler & Vanatta, 2013).

Methodology

Population

The term Latinx was initially used as a term for those of Latin American lineage who were not characterized as single-gender or did not want to be identified by any gender (Taylor et al., 2012). The term includes all descendants from all Latin American countries (Taylor et al., 2012). An estimated 2.3 million Latinx adults live in the United

States (Wilson et al., 2021). According to Wilson et al. (2021) the percentage of Latinx individuals was 5.6% in the United States among those who were 18 and older (Wilson et al., 2021). There is an estimated number of 1.1 million Latinx men and 1.2 million women (Wilson et al., 2021). However, this demographic information does not specifically identify Mexican American populations within total populations. In addition, study reports on men who identify as and acknowledge their same-sex orientation and do not account for MSM do not consistently refer to themselves as gay or bisexual. The actual number of MAMSM is unknown at this time.

I intended to identify and study connections between cultural values of MAMSM and substance use. The study was only open to Mexican American men who were 18 or older. This age range was selected to include multiple stages of development, accounting for various ages. For this study, the term MAMSM is inclusive of adult males who participate in sex with other men, regardless of self-identification. This distinction is essential to this study because, in various sexual minority communities, MSM may not consistently self-classify as gay or bisexual.

It is critical to discuss that the target population of this study is a vulnerable population. Participants were MAMSM who engaged in substance use. . For those reasons, the target population of this study is considered vulnerable and requires special attention in terms of confidentiality. I considered protection of subjects by ensuring no harm to participants, confidentiality and anonymity, informed consent, data protection, and risk limitation. My objectives were to minimize risks to participants, ensure identified populations were selected in an unbiased manner, send informed consent

forms, and put in place adequate safeguards to maintain participants' safety, privacy, and confidentiality. To ensure participants remained anonymous during the data collection process, no personal identifiable information was gathered.

Sampling and Sampling Procedures

I used a nonprobability sampling method. With this collection method, participants have no predetermined chance of being picked. As a result, the collected sample is typically representative (Keith, 2019). One of the most significant advantages of nonprobability sampling is that it reduces both time and money as compared to probability sampling (Winiowski et al., 2020). Nonprobability sampling takes far less time than probability sampling and may be used in situations when probability sampling cannot be carried out (Levine, 2014; Winiowski et al., 2020). A significant drawback of nonprobability sampling is that it can lead to difficulties in terms of knowing how well the entire target population is represented (Wiśniowski et al., 2020). In contrast to other methodologies, purposive sampling makes it possible to make generalizations about the population under study. This is because not all participants in the study have specific traits that were required for research.

Procedures for Recruitment, Participation, and Data Collection

Sample Draw and Exclusion Criteria

The social media outlets Facebook, Instagram, and Twitter have search tools to connect with a specific population or shared interest groups (sexual minority – MSM). The sample draw began with a general search on each social media platform for interest groups. While allowing users to remain physically separate from one another and

maintain their anonymity, each of the three social media platforms provides users with various search options that may be used to interact with one another and share common interests (Gelinas et al., 2017). Social media enables data collection from broader segments of the population that may otherwise be inaccessible. In addition, the social media platforms selected make available search functions for targeting groups based on criteria (Gelinas et al., 2017). Empirical studies on the efficiency of recruiting using social media have been observed in several studies (Akard et al., 2015; Fenner et al., 2014; Frandsen et al., 2014; Gelinas et al., 2017; Shere et al., 2014). To minimize hesitation due to fear of being identified, the recruiting message on social media sites declares that participation is voluntary and strictly anonymous.

An invitation to participate was posted to group chat boards and pages that discuss, inform, and welcome sexual minorities. The announcement introduced the study's purpose and contained a link for interested participants to continue (Appendix B). Participants meet inclusion criteria before accessing measuring instruments: adults 18 years or older who reside in the United States, Mexican American Man who has sex with men, and have participated in substance use in the last 12 months.

Study Information and invitations to participate were posted on the following pages and discussion boards on the Facebook platform: Sexual Empowerment for Men, The Men's Group, Dude's Helping Dudes, Journal of Gay and Lesbian Mental Health, and Latino LGBTQ. Study Information and invitations to participate were posted on the following pages and discussion boards on the Instagram platform: Pride.com, LGBTQ Nation, Love Sex and Relationships, Pink News, and LatinX News. Study Information

and participation invitations were posted on the following pages and discussion boards on the Twitter platform: Gay Times, Lambda Literary Review, Out Magazine, The Advocate Magazine, and Men on the Downlow.

An invitation to participate was posted to group chat boards and pages that discuss, inform, and welcome sexual minorities. The announcement introduced the study's purpose and contained a link for interested participants to continue (Appendix B). Participants meet inclusion criteria before accessing measuring instruments: adults 18 years or older who reside in the United States, Mexican American Man who has sex with men, and have participated in substance use in the last 12 months.

Power Analysis

The suitable sample size for this study was established by conducting a statistical power analysis using G*Power version 3.1.9.7 statistical software. An *a priori* power analysis calculated the sample size N , which is essential for determining the effect size, desired α level, and power level $(1-\beta)$ (Faul et al. 2009). The power evaluation was based on an effect size of 0.15 (moderate-size effect), an alpha level of .05, a power of .80, and three predictors. An F-test family and multiple regression were selected under the statistical dropdown menu. Based on the analysis results, 77 participants are the minimum number of subjects needed for this study to yield statistically significant results.

Recruitment, Participation, and Data Collection

The internet makes available various search tools used to communicate about shared interests and news (Gelinass et al., 2017). For this investigation, volunteers were

sought out and recruited through social media platforms found online, including Facebook, Twitter, and Instagram. This technique allowed participants to keep their physical distance from one another and their anonymity. An invitation to participate will be posted to group pages that discuss, inform, and welcome sexual minorities. To minimize hesitation due to fear of being identified, the recruiting message on social media sites will declare that participation is voluntary and strictly anonymous (Appendix B). To protect the participants' confidentiality, no identifiable information will be collected. The announcement will introduce the study and purpose and contain a link for interested participants to continue (Appendix A, B).

When participants agree to participate, they will select an *I agree* icon at the end of the page. Selecting the *I agree* icon link will route the participant to begin the exclusion criterion on the SurveyMonkey introduction page. The screening page will verify the contributor's suitability and is needed for the participant to continue. The screener questions:

- a) Are you 18 years of age or older?
- b) Do you live in the United States?
- c) Are you a Mexican American Male who has sex with other men?
- d) Have you participated in substance use in the last 12 months?

If an individual responds with a *no* to any of the three inclusion questions, SurveyMonkey software will route the participant to an exit screen displaying a message thanking them for their interest and time. The exit screen will explain that, unfortunately,

they are not a match for the study due to the research concentration on a particular population.

In order to give their "informed consent," study participants confirmed they fully comprehended the obligations and rights that came with their participation. Qualified individuals were linked to the online informed consent featuring two options enabling the person to either *Agree* to participate in this research or *Disagree* to participate.

Participants who selected "Agree" were directed to the following information on the study: participation requirements, the study's objective, a declaration of confidentiality, voluntary nature, and ethical considerations (Appendix A). Participants received information on their device indicating that by selecting the submit button, the participant acknowledged and understood their tasks and rights during the course of the study.

Participants completed an online survey comprised of inquiries from the Drug Abuse Screening Test -10 (DAST-10) and the Mexican American Cultural Values Scale (MACVS) (Appendix H and J). These two assessment tools take approximately 15-20 minutes to complete. Participants are provided with contact information regarding free and confidential information sources of support if the need arises (Appendix K).

Instrumentation

MACVS

In 2010, Knight developed the MACVS to evaluate individuals' cultural connectedness to values held by Mexican Americans. The MACVS consists of 50 questions measuring differential Mexican American cultural expectations. The instrument's evaluation utilizes nine distinct subscales to examine both traditional and

contemporary values. Six subscales indicate traditional values, including family support, family obligations, family reverence, admiration, faith, and gender roles. Three subscales indicate conventional ideals: monetary achievement, autonomy, and individual accomplishment (Knight et al. 2010). In this study, the data collected was analyzed with substance use behaviors, which provided an understanding of the importance placed on each of the studied values within the MAMSM population. The goal was to establish the impact of the relationship between each value and substance use.

To maintain focus on the cultural values included in this study and reduce the likelihood that participants would drop out due to the duration of involvement, an abridged version of the MACVS was utilized. Exclusively incorporated are the subscales for the cultural values: Religion, Family Structure, and Traditional Gender Roles. This study focused on the three traditional Mexican American values subscales designed to assess the presence of religion, family structure, and traditional gender role alignment within the target population. The remaining value subscales were not associations expected to have a connection that would mitigate the relationship between MAMSM and substance use; therefore, they were not included in the analyses. The Religion Values subscale is comprised of 7 items. The Family Structure Values subscale encompasses 3 subscales, which include Family Assistance, Reverance, and Obligations. Finally, the Traditional Gender Roles subscale is composed of 5 items. Participants answer using a 5-point Likert scale ranging from 1 = *not at all* to 5 = *completely*. A higher total score indicates that Mexican American cultural values are more prevalent (Knight et al., 2010). This instrument does not require permission to use, as it explicitly states – that the

instrument may be used for research (Knight et al. 2010).

The specific scales utilized in the MACVS are shown to have internal consistency with overall Mexican American Cultural values subscales. Cronbach's alpha coefficients ranged from .84 to .89 (Knight et al., 2010). The subscale evaluating religious connection, which includes spirituality and belief in something greater than oneself, has an internal consistency range of 0.78 to 0.84 (Knight et al., 2010). The cultural values subscales for Family Support examine participants' propensity to preserve tight relationships with family and show internal reliability of .67 (Knight et al. 2010). The three subscales that collectively measure the depth of connection to Family show an internal consistency coefficient that ranges from .79 to .80 (Knight et al. 2010). The last subscale, customary Mexican American Gender Roles, concentrates on the preconceptions placed on men and has an internal consistency range of 0.78 to 0.84 (Knight et al., 2010).

DAST-10

The DAST-10 was created by Skinner and constructed to detect substance use and severity. The DAST-10 Screening Test is a condensed version of the original DAST-20, a 20-item measure that captures a participant's self-report of drug consumption (Skinner, 2001). The DAST-10 delivers a quantifiable indication of adverse outcomes connected to substance use. The self-reporting measurement tool requires approximately 5 minutes of participants' time to complete (Skinner, 2001). The DAST-10 provides a quantitative look at the seriousness of the encounters associated with substance use. The data gathered by the DAST-10 and the analysis generated generate additional insight into substance-

related challenges in the MAMSM population. The DAST-10 is highly associated with DAST-20 ($r=.98$) and exhibits solid internal consistency reliability for an abbreviated scale (.92 overall participants and .74 substance use) (Skinner, 2001; Veliz et al., 2016).

The DAST is a valuable tool to determine a person's engagement with substances and the difficulties related to substance abuse (Ferre et al., 2015). The self-reporting tool demonstrated strong internal consistency reliability and significant item-total scale connections in varied populations (Ferre et al., 2015; Rigg & Monnal, 2014). An evaluation of the DAST's diagnostic validity revealed a maximum overall classification accuracy of 89%. (Rigg & Monnal, 2014).

Reliability measurements include an instrument's capability to measure theoretical configurations in various sets of people, at separate points, and in various sets (Ferre et al., 2015; Field, 2013; Rigg & Monnal, 2014). An instrument's Cronbach's alpha value determines its inter-item reliability. Cronbach's alpha ranges from -.99 to .99, with a value of 0.70 (Ferre et al., 2015; Rigg & Monnal, 2014), suggesting a greater degree of reliability (Field, 2013). The DAST-10's Cronbach's alpha score was reported at 0.92, indicating solid inter-item reliability (Yudko, Lozhkina, and Fouts, 2007). Similar findings were reported in several studies supporting the DAST-10 (Skinner, 2001; McDonnell et al., 2016). The statistics showed internal and stable reliability of 0.95 for the entire test population and 0.86 for the subsample containing only individuals who abused alcohol (Skinner, 2001). The internal validity of the DAST-10 was 0.92 for the target population and 0.74 for the study model describing substance abuse. Its reliability was $r=.98$, and its internal validity was 0.74. (Skinner, 2001; Skinner & Pakula, 1986).

According to Vogt and Johnson (2016), for instruments to be considered valid, they must have concurrent validity in terms of criterion-related validity, correct forecast, and relationship with the measured constructs. The DAST-10, according to Skinner (2001), uncovered greater baseline validity (.92) for substance use behavior when alcohol was omitted. National Drug Abuse Treatment Clinical Trials Network (CTN) certified the DAST-10 as the recommended evaluation instrument for general medical settings in 2012 (Rigg & Monnal, 2014).

Operationalization of Constructs

Definitions

Culture: a group of people who are close to one another and who adhere to the same social norms, structures, and languages (Knight et al., 2010).

Cultural values: From generation to generation, people carry on their values, customs, and practices (Knight et al., 2010).

Drug abuse: a repetition of problematic drug use evident by persistent, severe societal, professional, criminal, or relational repercussions, such as excessive absenteeism from employment or educational commitments (Skinner, 2001).

Family Structure: maintaining tight family ties should always take precedence over independence or secession. This quality is firmly established in Mexican-American culture and displays itself in a variety of ways. These characteristics include reverence and respect for authoritative persons, aid, loyalty, and charity toward the family unit, as well as enduring vigorous work for the family's welfare (Knight et al., 2010).

Gender roles: anticipated actions, speech, attire, grooming, and behavior based on their assigned gender (Knight et al., 2010).

Men who have sex with men: men who participate in sexual activities with men, independent of their gender identity. They can refuse to identify sexually or as gay, homosexual, bisexual, pansexual, or heterosexual (Marshall et al. 2017).

Mexican American: is a United States citizen or resident of Mexican birth or descent (Knight et al., 2010).

Religion: a unique structured framework of religious attitudes, convictions, and behaviors that includes serving and worshiping God or the divine and dedication to one's religious beliefs or practices (Knight et al., 2010).

Substance use: utilization in the last 12 months, use of prescription or OTC pharmaceuticals over the recommended dose, any use of drugs for purposes other than medicine, and does not cover alcohol use. Marijuana, sedatives, stimulants, hallucinogens, and narcotics/opioids (Skinner, 2001).

Variables

This quantitative research intended to study the connection among cultural factors of religion, family structure, traditional gender roles, and substance use in Mexican American men who have sex with men (MAMSM). This study used the magnitude of stated cultural values to determine the likelihood of determining them as predictor variables. The magnitude of cultural value was calculated as scale scores from the MACVS on the measures for religion, family structure, and traditional gender roles. The dependent variable is scale scores for DAST-10.

Cultural Values

Religion refers to the devotion to an individual's belief system rooted in the faith in a superior force (Knight et al., 2010). Family Support refers to the individual's desire to maintain close relationships (Knight et al., 2010). Gender Roles relate to the expectations for men within the Mexican American Culture (Knight et al., 2010).

Participants use a Likert Scale to answer items related to a personal connection to cultural values. Response to the individual items ranges from 1 (not at all connected) to 6 (Completely connected). To collect data, each response is assigned a numeric value in order to collect data that can be quantitatively examined. Individual responses to Likert-type items on the MACVS are evaluated as ordinal levels. In ordinal scales, every item has a high or low rating. However, the exact differences between the items are not evenly spaced or clearly defined (Field, 2013). To better interpret data, responses are reported under specific subscales for each value (religion, family, gender roles). Subscale scores are treated as interval level. Similarly, interval scales have a specific sequence, but the distance between each point is uniform (Field, 2013). adding the responses to four or more Likert-scale items creates a composite score, and the data can be considered interval.

When each subscale is summed together, it yields a total score for each cultural value. The aggregate score within each subscale indicates an individual's degree of alignment with cultural values. Table 1 shows by what means the MACVS subscale results are clarified regarding the intensity of endorsement of cultural values (see Table 1).

Table 1*Interpretation of Scores on MACVS Subscales***Participant's Level of Alignment with Value (Mean Score)**

0.01 to 1.00	No Alignment with cultural value
1.01 to 2.00	Low Alignment with cultural value
2.01 to 3.00	Neutral Alignment with cultural value
3.01 to 4.00	Moderate Alignment with cultural value
4.01 to 5.00	High Alignment with cultural value

Magnitude of Substance Use

Drug use refers to (a) use in the last 12 months, (b) use of prescribed or nonprescribed medications above the directed dose, (c) any non-health use of substances, and (d) does not include alcoholic beverages. The different groups of substances include cannabis, sedatives, stimulating substances, hallucinogens, or narcotics/opioids.

Contributors answered each inquiry on the DAST-10 with a yes or no indication. Participants' answers were coded with a 1 = *yes* or 0 = *no*. The severity of substance use is specified using values ranging from 0 to 10, which are represented as a continuous variable (Skinner, 2001). The overall frequency of yes responses on the DAST-10 is used to evaluate the extent of substance usage problems. Higher scores indicate drug misuse at a greater level, and lower values indicate less drug abuse. The interpretation of the DAST-10 scores in relation to the degree of drug usage is shown in Table 2.

Table 2*Description of DAST-10 Self-Reported Drug Use Scores*

Score Total	Level of Drug Use
9-10	Critical Usage Level
6-8	Substantial Usage Level
3-5	Moderate Usage Level
1-2	Low Usage Level

0

No Problems Reported

Data Analysis Plan

This quantitative, non-experimental, cross-sectional study examines the relationship among the cultural factors of religion, family structure, gender, and substance use in Mexican American men who have sex with men (MAMSM). According to research, substance use is a way for many cultural and sexual minorities to deal with social pressures (SAMHSA, 2013).

Preanalysis Data Screening

For this investigation, the Statistical Package for the Social Sciences (SPSS) was utilized to evaluate the information collected from Survey Monkey. The data collected from The Drug Abuse Screening Test – 10 (DAST-10) and The Mexican American Cultural Values Scale (MACVS) was downloaded (from Survey Monkey) onto an MS Excel spreadsheet formatted with a single row for each variable (e.g., religion, family structure, gender roles). As part of a screening process, the data was reviewed to ensure correctly entered responses or irregularities that would not be included. Before conducting statistical analysis, all survey data was reviewed to confirm the accuracy of the information provided (Field, 2013). The collected data was examined for missing information to determine whether incomplete data resulted from random chance or a pattern. The criteria for missing variables were adhered to if no pattern relating to the missing data was found (Field, 2013).

In order to maintain the accurateness of the collected data, an evaluation procedure is required for all surveys prior to analysis to demonstrate data cleaning

(Field, 2013). Data cleaning refers to improving data quality by checking that datasets do not include entry oversights and are prepared for evaluation (Pallant, 2013). To find inaccuracies, descriptive statistics that include frequency tables for each variable should be run. Frequency tables provide the opportunity to view and audit inconsistent data entry values, redundancy, transferring data errors, misspellings, and out-of-range values. All the potential values that could be submitted would be available in a frequency table, allowing for correcting inaccuracies (Pallant, 2013). Data is screened for outliers in distributions. Extreme numbers within a data collection are known as outliers and can distort outcomes. A data set's extreme values can change the results of statistical analysis. Eliminating such instances is, therefore, crucial. To inspect a boxplot and eliminate any values that fall more than 1.5 times the box's length from either end, Tabachnick and Fidell (2013) recommend a standard procedure (Quartile 1 and Quartile 3). The statistical data analysis was not performed on participant surveys, with more than 15% of the questions not answered (Vogt & Johnson, 2016).

Research Questions

RQ1: Is there a relationship between religion, family structure, traditional gender roles, and substance use among the MAMSM population?

The null hypothesis for RQ1 is that there is no relationship among cultural values of religion, family structure, and traditional gender roles measured by the MACVS and self-reported substance use measured by DAST-10 within the MAMSM population. Research Question 1 was tested using multiple linear regression analysis. In order to describe relationships between variables, multiple linear regression models calculate the

best-fitting line to minimize the variances of each of the included variables in relation to the dependent variable (Mertler & Vanatta, 2013). For this study, regression analysis was used to estimate how the level of substance use according to DAST-10 Scores change (dependent variable) as the cultural values, religion, family, and gender roles change according to MACVS (independent variables).

RQ2: Does religion have a statistically significant impact on substance use within the MAMSM population?

The null hypothesis for RQ2 is that the cultural factor of religion measured by the MACVS does not have a statistically significant strong impact on substance use measured by DAST-10 within the MAMSM population. A simple linear regression analysis was used to test this hypothesis. By using simple linear regression, the association strength between two quantitative variables is calculated (Mertler & Vanatta, 2013). For this study, a simple regression analysis was used to estimate the strength of the relationship between substance use according to DAST-10 score changes (dependent variable) and the cultural value of religion according to MACVS (independent variable).

RQ3: Does family structure have a statistically significant impact on substance use within the MAMSM population?

The null hypothesis for RQ3 is that the cultural factor of the family structure measured by the MACVS does not have a statistically significant strong impact on substance use measured by DAST-10 within the MAMSM population. A simple linear regression analysis was used to test this hypothesis. Simple linear regression estimates

the relationship strength between two quantitative variables (Mertler & Vanatta, 2013).

For this study, a simple regression analysis was used to estimate the strength of the relationship between substance use according to DAST-10 score change (dependent variable) and the cultural value of family structure according to MACVS (independent variable).

RQ4: Do traditional gender roles have a statistically significant impact on substance use within the MAMSM population?

The null hypothesis for RQ4 is that the cultural factor of the gender roles measured by the MACVS does not have a statistically significant strong impact on substance use measured by DAST-10 within the MAMSM population. A simple linear regression analysis was used to test this hypothesis. Simple linear regression estimates the relationship strength between two quantitative variables (Mertler & Vanatta, 2013). For this study, a simple regression analysis was used to estimate the strength of the relationship between substance use according to DAST-10 score changes (dependent variable) and the cultural value of gender roles according to MACVS (independent variable).

Test of Statistical Assumptions

This descriptive measurement operates on the presumption that the continuous scale predictor variable and the outcome variable are connected in a linear form. Another such assumption is that there is normality across all of the variables being considered. The final assumption is the absence of multicollinearity and homoscedasticity (Bevens, 2022).

Multiple regression analysis assumes the dependent variable (level of substance use) is quantified on a continuous scale (Field, 2013). The results of the DAST-10 are compiled to assess the extent of substance usage. The severity of substance use is calculated on a continuous scale. Higher scores indicate more frequent use, whereas lower scores indicate less frequent use. Multiple linear regression was used to evaluate the difference in DAST-10 scores by the selected cultural values of religion, family structure, and gender roles. Multiple linear regression depends on the bivariate correlation between and among predictor variables (Field, 2013). The result variables must adhere to the conditions for a continuous variable.

Each independent variable was measured as a categorical (ordinal) variable because each variable had two or more categories that could be ordered (Field, 2013). The data points represented in this study were statistically independent of the rest. Each data point value did not influence the value of other observations in the set. This assumption was verified using the Durbin-Watson statistic test run using SPSS (Field, 2013).

The assumption of homoscedasticity in multiple regression analysis signifies that the variances along the line of best fit remain constant (Field, 2013). Homoscedasticity must be assumed for running linear regression models, providing accurate outcomes. This is called homoscedasticity when an independent variable's error term is the same at all possible values (Field, 2013). Multiple regression yields associated data points that presume a direct connection between the dependent variable (substance use) and each of the independent variables (cultural constructs) (Field, 2013). To verify the assumption

that linear relationships exist, scatterplots were created in SPSS to inspect linearity visually (Bevens, 2022).

The lack of multicollinearity in the data set is an assumption made for multiple regression analysis (Field, 2013). Multicollinearity happens when predictor (independent) variables are significantly interconnected (Field, 2013). This position creates uncertainty in identifying which independent variable impacts the variations supported by the dependent variable and technological problems in determining a multiple regression model (Bevens, 2022). Correlation coefficients and Tolerance/VIF values were examined to identify multicollinearity and assess if the data supports or contradicts this assumption (Field, 2013).

In multiple regression analysis, it is assumed that there are no considerable outliers, high leverage points, or exceedingly significant points (Field, 2013). When doing a multiple regression analysis, outliers and influential points indicate remarkable observations in the data (Field, 2013). These several groupings of atypical points indicate various influences on the regression line. These factors may have a detrimental impact on the regression analysis used to forecast the dependent variable's value based on the independent variables. This position has the potential to alter the statistical output, decrease result prediction accuracy, and diminish statistical significance (Field, 2013). Casewise diagnostics and residuals were evaluated in SPSS Statistics to confirm no significant outliers. Two standard methods to check are histogram and P-plot. The residuals (errors) are randomly distributed (Bevens, 2022; Field, 2013).

Multiple Linear Regression

Multiple linear regression analysis was used to test research question 1. Multiple linear regression models evaluated the relationships between quantitative dependent variables and two or more independent variables using a straight line to evaluate the observed data (Mertler & Vanatta, 2013). For this study, multiple regression analysis was used to estimate how the level of substance use according to the DAST-10 score changes (dependent variable) as the cultural values, religion, family, and gender roles change according to MACVS (independent variables). It studies the concurrent reactions of some independent variables over one dependent variable and can be used for predicting and forecasting (Coolican & Coolican, 2014). The advantage of this technique is the potential to provide more accurate and exact knowledge of the relationship between each cultural element and the outcome. The results may produce a more profound knowledge of the correlation of all factors as a whole with the outcome and the associations between the various predictor variables themselves (Coolican & Coolican, 2014; Field, 2018; Gomila, 2021; Keith, 2019).

This correlational analysis provided an understanding of the connection between specified cultural factors and substance use in MAMSM. The outcomes of the investigation give insight into the research that exists on ethnic and sexual minorities and substance use.

Assumptions of Simple Linear Regression

Simple linear regression is a statistical analysis dependent on specific data-related assumptions. The first assumption is the homogeneity of variance (homoscedasticity),

which asserts that the magnitude of the prediction error is not significantly different across the values of the independent variable (Bevens, 2022). Homoscedasticity is fundamental to linear regression models and asserts that the error term is the same for all values of independent variables (Field, 2013). Regression produces data directly between the dependent and independent variables (Field, 2013). To verify the assumption that linear relationships exist, scatterplots were created in SPSS to inspect linearity visually (Bevens, 2022).

The second assumption is the independence of observations. The values in the information were acquired utilizing statistically acceptable data collection techniques, and no hidden relationships exist between the values (Bevens, 2022). Additionally, normality is assumed, meaning the responses collected align with a normal distribution (Bevens, 2022). Linear regression assumes that the connection between the variables is linear, which means that as opposed to a curve or grouping factor, the line of best fit crosses the data points to form a straight line (Bevens, 2022).

If the representing values do not satisfy the requirements of homoscedasticity or normality, in its place, an appropriate nonparametric test (i.e., Spearman rank test) will be conducted (Bevens, 2022; Field, 2013). If the data does not satisfy the independence of observations assumption (observations are repeated across time), I will utilize a linear mixed-effects model that considers the various data formats (Bevens, 2022; Field, 2013).

Simple Linear Regression

A simple linear regression calculates the association intensity between two quantitative variables (Mertler & Vanatta, 2013). For this study, a simple regression

analysis tested the hypothesis of Research Question 2 by estimating the strength of the relationship between substance use according to DAST-10 Score change (dependent variable) and the cultural value of religion according to MACVS (independent variable).

A simple linear regression estimates the relationship strength between two quantitative variables (Mertler & Vanatta, 2013). For this study, a simple regression analysis tested the hypothesis of Research Question 3 by estimating the strength of the relationship between substance use according to DAST-10 Score change (dependent variable) and the cultural value of family structure according to MACVS (independent variable).

A simple linear regression estimates the relationship strength between two quantitative variables (Mertler & Vanatta, 2013). For this study, a simple regression analysis tested the hypothesis of Research Question 4 by estimating the strength of the relationship between substance use according to DAST-10 Score change (dependent variable) and the cultural value of gender roles according to MACVS (independent variable).

Threats to Validity

External Validity

Quantitative research can be confronted with threats to validity in several ways. Internal and external validity are often negatively correlated, meaning that as internal validity increases, external validity decreases. (Salkind, 2010). The extent to which study findings may be applied to a broader population is known as external validity

(Mertens,2015). Threats to external validity are any factors within a research study that reduce the transferability of the findings (Pedhazur & Schmelkin, 2013).

Regarding this study, threats to external validity include reactivity arrangements (i.e., Hawthorne effect), variable interference (i.e., treatment), and sampling bias.

Reactivity arrangements are where subjects change their behavior based on the fact that they are participating in a study (Mertens,2015). The potential of testing reactivity was minimized in this study due to using a survey research design method to obtain self-reported data. In addition, this study design eliminates the threat of treatment interference impacting data. Treatment interference occurs when participants have received multiple treatments, some of which are assigned to an experimental group (Mertens,2015). The researcher is unable to tell whether the effect on the result is attributable to the nominal treatment or some other treatment or condition. This study used a non-experimental cross-sectional design with no treatment techniques, lowering challenges to external validity. Finally, sampling bias occurs when a sample does not represent the entire targeted population (Mertens,2015). Definitions and variables are identified in this study to highlight the subpopulation (MAMSM who have used substances in the last 12 months) within the populations (i.e., MAMSM) to decrease the potential of sampling bias. In this study, information regarding participation, purpose, and criteria was made available on multiple online platforms and discussion groups to minimize inaccessibility.

Internal Validity

Threats to internal validity refer to the extent of confidence that a cause-and-effect relationship established in a study cannot be explained by other factors (Pedhazur &

Schmelkin, 2013). Experimental studies and other research employing pre-and post-test data face several internal validity challenges (Salkind, 2010). For instance, the history effect is observed when a significant occurrence transpires between the initial and subsequent data collection (Mertens, 2015). As a self-report questionnaire is used to obtain data for this research, the danger is mitigated. When only one measurement tool is employed, the mono-method bias arises (Pedhazur & Schmelkin, 2013). The threat is minimized in this study, as two separate self-reporting instruments will be utilized to collect data. The danger of maturation refers to the participants' maturing during the study procedure (Mertens, 2015). Although maturity may pose a risk in longitudinal research, this study's cross-sectional, non-experimental methodology gathers data just once at a single period, thereby avoiding the impacts of maturation. The evaluation instruments (MACVS and DAST-10) have shown strong validity in this domain (Knight et al., 2010; Skinner, 2001).

Ethical Procedures

The ethical principles involving individual participants are essential and were observed in this study. The target population of this study is considered a vulnerable population. A person is considered part of a vulnerable population due to their position of susceptibility to societal, psychological, lawful, financial, and physical injury (Shivayogi, 2013). The subjects are MAMSM who have participated in substance use. By the nature of their qualifying characteristics, participants are vulnerable based on minority status in both culture and sexuality. In addition, the target population has participated in substance use, a sensitive topic that might be considered illegal. For those reasons, the target

population of this study was considered vulnerable and required special attention regarding confidentiality. This study's design and methods have considered the protection of participants by including the fundamental ethical principles, which incorporate informed consent, confidentiality and anonymity, data protection, risk limitation, and no harm to participants. This study plan ensured that participants' risks were minimized, that the acquisition of subjects was fair, that informed consent from each participant was documented, and that there were sufficient precautions to safeguard the welfare and discretion of the participants and the privacy of the data. For example, in this data collection process, no personally identifiable information was collected to protect the anonymity of participants.

Collected data was organized, analyzed, and reported using the collective and not at the individual level. The participants were presented with a consent form that details anonymity and rights during and after the study. In the participants' form that verifies consent, research participants were notified of their right to terminate participation in the investigation despite already providing consent. The participants could not progress to the data collection measures without providing consent.

Regarding data security, information was stored in a passcode-secure file on a passcode-protected USB device. This process prevented data from being saved on the hard drive of a computer. The secured drive and collection of no personal identifying information helped ensure privacy. The information will be retained for at least seven years.

Ethical research involves examining participant recruiting and data collection techniques, review of assessment items, and efforts to keep responses confidential. No soliciting volunteers or collecting data occurred until Walden University's Institutional Review Board (IRB) approved this study.

Summary

For this study, a quantitative research methodology was used to analyze data that were obtained from adult MAMSM who used substances. Using the DAST-10, data regarding participants' severity of substance use were collected and analyzed using SPSS. Using the MACVS, data measuring participants' level of cultural values in terms of religion, family, and gender roles were also obtained and analyzed using SPSS. Multiple linear regression was used to evaluate relationships between variables. I explored whether cultural value alignment among MAMSM correlated with substance use in this population. Chapter 4 includes results of data analysis.

Chapter 4: Results

In the United States, substance use continues to strain both public health systems and communities (Delucio et al., 2020; Lamb et al., 2019; Loza et al., 2021). According to Lamb et al. (2019), ethnic and sexual minorities are more negatively impacted by substance use than their majority peers. In addition, members of these minority communities experience various challenges based on views and beliefs of surrounding communities (Branstrom, 2016; Lamb et al., 2019; Lefevor et al., 2019; Loza et al., 2021). LGBTQ African Americans, Latinos, and Hispanics have been the subject of research in terms of substance use. However, there is insufficient research and data regarding connections between cultural values, drug use among MAMSM.

The purpose of this quantitative research study was to examine relationships between religion, family structure, and traditional gender roles with substance use in this population. This chapter includes descriptions of the research sample, data collection procedures, and statistical analysis to test research questions and hypotheses.

Data Collection

This study received approval by the Walden University IRB (#05-16-23-0971572) on May 16, 2023. The data collection process was started on May 20 and completed September 6, 2023. I used a nonprobability sampling method. I began with a general search for discussion groups on Facebook, Instagram, and Twitter.

Initial invitations to participate were posted to group pages involving sexual minorities. I introduced the study's purpose, targeted population, and criteria. Invitations contained a link for interested participants to continue (see Appendix B). To minimize

hesitation due to fear of being identified, I explained participation was voluntary and strictly anonymous. I had a participation goal of 77 subjects. However, 84 completed surveys were collected. All 84 participants were 18 years or older MAMSM who lived in the United States, and engaged in substance use since May 2024.

The survey questionnaire was comprised of two parts. The MACVS involved religion, family, and gender. I required participants to indicate the degree to which they agreed or disagreed with statements. The DAST-10 contained questions regarding substance use.

Results

Descriptive Statistics

Observed means and standard deviations for each variable are presented in Table 3. Religion had a mean of 2.92 ($SD = 1.35$), family structure was 3.56 ($SD = .93$), gender roles was 2.31 ($SD = 1.05$), and substance use was .45 ($SD = .29$).

Table 3

Descriptive Statistics for Each Variable

Variables	Mean	Std. Deviation	N
Substance use	.45	.29	84
Religion	2.92	1.35	84
Family Structure	3.56	.93	84
Gender Roles	2.31	1.05	84

Evaluation of Statistical Assumptions

I organized data onto a Microsoft Excel spreadsheet in order to import to SPSS I ran necessary data analysis to confirm assumptions of multiple regression. In preparation

for analysis, I conducted tests to satisfy statistical assumptions that underly variable assumptions, independence of observations, linearity, homoscedasticity, multicollinearity, unusual data points, and normality.

Variable Assumption

Independent variables were measured as either continuous (interval or ratio) or categorical (ordinal or nominal). Variables in this study were measured continuously. Therefore, the variable assumption was not violated.

Independence of Observations

In inferential tests, observations in a sample are independent, indicating measurements for each subject in the sample are not impacted by or related to measurements of other subjects (Field, 2013). Observations in a multiple regression must not be related. I used the Durbin-Watson test via SPSS to check assumptions of independent observations. The Durbin-Watson statistic for this analysis was 2.2 (see Table 4). These statistics can range from 0 to 4. Field (2009) suggested test statistic values in a range of 1.5 between 2.5, or approximately 2, which indicates no correlation. Values under 1 or more than 3 are significant and cause for concern.

Table 4

Durbin-Watson

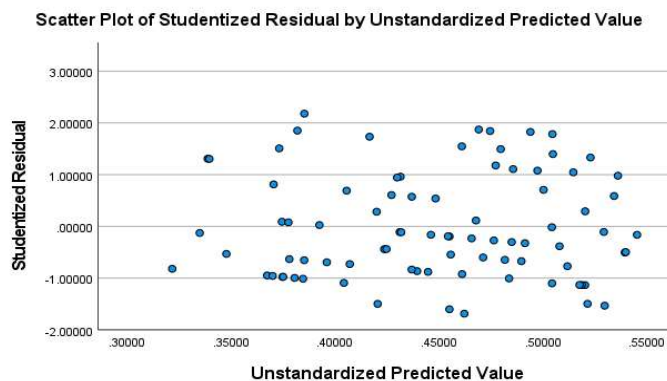
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.20	.04	.00	.29	2.2

Linearity

In multiple linear regression, linearity is assumed between dependent and independent variables, both separately and collectively. I used SPSS to generate a scatterplot of studentized residuals in terms of unstandardized predicted values (see Figure 1). A curvilinear pattern in data points was not present in the scatterplot, indicating assumption of linearity was not violated.

Figure 1

Scatterplot of Studentized Residuals by Unstandardized Predictor Value



Homoscedasticity

Homoscedasticity assumes the variance is constant across all values of the anticipated dependent variable. The scatterplot obtained by SPSS was utilized to confirm homoscedasticity assumptions in multiple linear regression. Figure 1 displays residuals that are randomly spread, with points appearing both above and below the horizontal line, demonstrating that the premise of homoscedasticity was upheld.

Multicollinearity

In multiple linear regression, no multicollinearity is assumed. Multicollinearity occurs when independent variables exhibit a significant degree of correlation (Field, 2013). This correlation causes difficulties in determining the variable that influences the explained variance and technical challenges in computing a multiple regression model. Pearson correlation coefficient and Tolerance /VIF values were processed in SPSS to access the association between variables.

A Pearson correlation matrix of predictor variables was evaluated to identify highly correlated variables (Table 5). Moore, Notz, and Flinger (2013) explain that interpreting the strength of a relationship is based on its r values. Strength of relationship: $r < 0.3$ equates to no or very weak, $0.3 < r < 0.5$ equates to weak, $0.5 < r < 0.7$ equates to moderate, and $r > 0.7$ equates to a strong relationship. The relationship between two variables is generally considered strong when their r value is more prominent than 0.7 (Field, 2013). The results indicate that none of the independent variables show correlations greater than 0.7.

Table 5

Correlations

		Substance use	Religion	Family structure	Gender roles
Pearson Correlation	Substance use	1.000	.187	.031	.045
	Religion	.187	1.000	.513	.389
	Family structure	.031	.513	1.000	.394
	Gender roles	.045	.389	.394	1.000

Sig. (1-tailed)	Substance use	.	.044	.389	.343
	Religion	.044	.	.000	.000
	Family structure	.389	.000	.	.000
	Gender roles	.343	.000	.000	.
N	Substance use	84	84	84	84
	Religion	84	84	84	84
	Family structure	84	84	84	84
	Gender roles	84	84	84	84

In addition to Pearson Correlation, I evaluated the assumption of no multicollinearity using Variance of Inflation Factors (VIFs) values for all predictor variables (Table 6). The VIF indicates whether a predictor has a strong linear relationship with the other predictors. According to Franke (2010) and (Hair et al., 2014), multicollinearity exists if the Tolerance values are less than 0.1 or a VIF value that exceeds 10. Tolerance and VIF values for all predictor variables meet the assumption of no multicollinearity.

Table 6

VIF Statistics for Substance Use

	Tolerance	VIF
Religion	.696	1.438
Family structure	.693	1.444
Gender roles	.798	1.254

Unusual Points

The Casewise Diagnostics table identifies instances with standardized residuals exceeding ± 3 standard deviations. A value exceeding ± 3 is the typical threshold used to determine if a specific residual could be considered an outlier. SPSS Statistics output will not produce a Casewise Diagnostics table if all cases have standardized residuals less than ± 3 . Data meets the requirements of no outliers. All cases have standardized residuals less than ± 3 .

Normality

In order to conduct inferential statistics and establish statistical significance, it is necessary for the prediction errors (residuals) to follow a normal distribution. I employed two techniques to assess the normality assumption: a histogram overlaid with a normal curve using a P-P Plot and a Normal Q-Q Plot using the studentized residuals.

The histogram shows that the standardized residuals exhibit a normal distribution (Figure 2). The P-P Plot indicates that the residuals are close enough to normal for the analysis to proceed (Figure 3). The assumption of normality has not been violated.

Figure 2

Histogram for Substance Use: Frequency and Regression Standardized Residuals

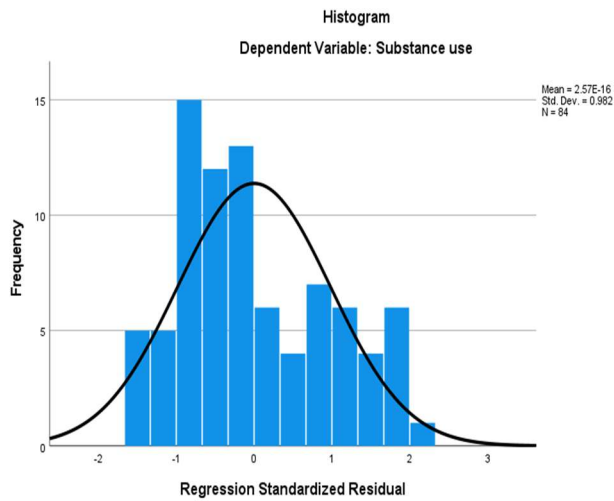
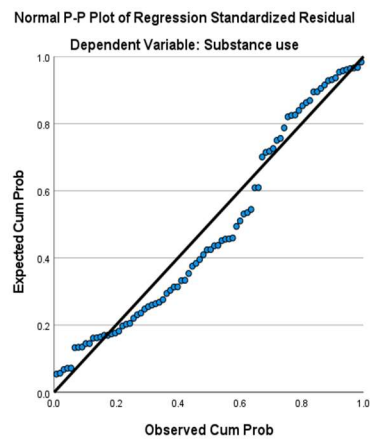


Figure 3

Normal P-Plot of Regression Standardized Residuals



Research Questions

RQ1: Is there a relationship between religion, family structure, traditional gender roles, and substance use among the MAMSM population?

A multiple regression analysis was conducted to determine whether or not religion, family structure, and gender role predict substance use in the MAMSM

population. Results show $R^2 = .041$, indicating that 4.10% of the variance in Substance use is explained by religion, family structure, and gender role. The results of ANOVA were not statistically significant, $F(3, 80) = 1.14, p = .339$. As a result, I fail to reject the null hypothesis that the slope of our regression line could be zero and conclude that religion, family structure, and gender role do not significantly predict Substance use. Religion is a non-significant predictor of substance use ($\beta = .24, p = .076$). Family structure is a non-significant predictor of substance use ($\beta = -.08, p = .523$). Gender role is a non-significant predictor of substance use ($\beta = -.01, p = .912$) (Table 7).

Table 7

Multiple Regression Analysis of Religion, Family Structure, and Gender Roles Predicting Substance Use

Predictor	Unstandardized Coefficients		Standardized Coefficients		R^2	F
	b	SE	B	t		
Constant	.40	.13		3.17**	.04	1.14
Religion	.05	.03	.24	1.79		
Family structure	-.03	.04	-.08	-.64		
Gender roles	-.004	.03	-.01	-.11		

Note. Dependent variable is substance use. b represents unstandardized regression weights. SE indicates standard error of b . β indicates the standardized regression weights. R^2 indicates variances predicted by the independent variables.

*Indicates $p < .05$, **indicates $p < .01$ *** indicates $p < .001$

RQ2: Does religion have a statistically significant impact on substance use within the MAMSM population?

H₀2: Religion does not have a statistically significant impact on substance use within the MAMSM population.

H_{a2}: Religion does have a statistically significant impact on substance use within the MAMSM population.

A regression analysis was conducted to determine whether religion statistically predicts substance use. $R^2 = .035$, indicating that 3.50% of the variance in substance use is explained by religion. The results of ANOVA were not significant, $F(1, 82) = 2.98$, $p = .088$. We fail to reject the null hypothesis that the slope of our regression line is zero and conclude that religion does not significantly predict substance use. Religion is a non-significant predictor of substance use ($\beta = .19$, $p = .088$) (Table 8).

Table 8

Simple Regression Analysis of Religion Predicting Substance Use

Predictor	Unstandardized Coefficients		Standardized Coefficients		R^2	F
	b	SE	B	t		
Constant	.33	.08		4.45***	.035	2.98
Religion	.04	.02	.19	1.73		

Note. Dependent variable is substance use. b represents unstandardized regression weights. SE indicates standard error of b . β indicates the standardized regression weights. R^2 indicates variances predicted by the independent variables.

*Indicates $p < .05$, **indicates $p < .01$ ** indicates $p < .001$

RQ3: Does family structure have a statistically significant impact on substance use within the MAMSM population?

H₀₃: Family structure does not have a statistically significant impact on substance use within the MAMSM population.

H_{a3}: Family structure does have a statistically significant impact on substance use within the MAMSM population.

A regression analysis was conducted to determine whether family structure predicts substance use. $R^2 = .001$, indicating that 0.10% of the variance in substance use is explained by family structure. The results of the ANOVA were not significant, $F(1, 82) = .08, p = .778$. We fail to reject the null hypothesis that the slope of our regression line is zero and conclude that family structure does not significantly predict substance use. Family structure is a non-significant predictor of Substance use ($\beta = .03, p = .778$) (Table 9).

Table 9

Simple Regression Analysis of Family Structure Predicting Substance Use

Predictor	Unstandardized Coefficients		Standardized Coefficients		R^2	F
	b	SE	B	t		
Constant	.41	.13		3.29**	.001	.08
Family Structure	.01	.03	.03	.28		

Note. Dependent variable is substance use. b represents unstandardized regression weights. SE indicates standard error of b . β indicates the standardized regression weights. R^2 indicates variances predicted by the independent variables.

*Indicates $p < .05$, **indicates $p < .01$ *** indicates $p < .001$

RQ4: Do traditional gender roles have a statistically significant impact on substance use within the MAMSM population?

H₀4: Traditional gender roles do not have a statistically significant impact on substance use within the MAMSM population.

H_a4: Traditional gender roles do have a statistically significant impact on substance use within the MAMSM population.

A regression analysis was conducted to determine whether gender role predicts substance use. $R^2 = .002$, indicating that 0.20% of the variance in substance use is

explained by gender roles. The results of the ANOVA were not significant, $F(1, 82) = .17, p = .685$. We fail to reject the null hypothesis that the slope of our regression line is zero and conclude that traditional gender roles do not significantly predict Substance use. Gender role is a non-significant predictor of substance use ($\beta = .05, p = .685$) (Table 10).

Table 10

Simple Regression Analysis of Gender Roles Predicting Substance Use

Predictor	Unstandardized Coefficients		Standardized Coefficients		R^2	F
	b	SE	B	t		
Constant	.42	.08		5.47**	.002	.17
Gender roles	.01	.03	.05	.41		

Summary

This quantitative study was designed to examine religion, family structure, and traditional gender roles as predictors of substance use among MAMSM populations. A total of 84 men completed surveys in their entirety. Participants identified as Mexican-American males who were at least 18, lived in the United States, and engaged in substance use since May 2023. All participants completed a survey that included the MACVS and DAST-10. The MACVS was used to measure participants' alignment with cultural values, and the DAST-10 was used to measure degree of substance use.

I concluded the variable assumption for regression analysis was not violated. The Durbin-Watson analysis value shows independence of residuals and did not violate assumption of independence of observations. Scatterplots with information regarding

studentized residuals and unstandardized predicted values were generated. They showed linearity between dependent and independent variables, both separately and collectively, indicating assumption of linearity was not violated. These scatterplots confirmed assumptions of homoscedasticity had not been violated. Pearson's correlation coefficient was computed to determine relationships between variables. Results indicated none of the independent variables showed multicollinearity. Tolerance and VIF values met the assumption of no multicollinearity. Data cases indicated standardized residuals that were less than ± 3 , confirming no unusual data points. Histogram data and P-P plots indicated the assumption of normality was not violated.

Regression analysis was conducted to determine relationships between religion, family structure, gender roles, and substance use among MAMSM. I used ANOVA to determine religion, family, and gender roles did not significantly predict substance use among MAMSM. Religion, family, and gender roles independently and collectively did not predict substance use in this population.

In Chapter 5, I discuss interpretations of findings, study limitations, recommendations, implications, and conclusions.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative study was to investigate relationships between religion, family structure, traditional gender roles, and substance use among MAMSM populations. The goal of this study was to evaluate the influence of independent variables on substance use in the target population. In the United States, substance use negatively impacts society, healthcare programs, and legal systems. Substance use does not impact all populations equally and continues to affect minority populations disproportionately (Delucio et al., 2020; Gilbert et al., 2016; Jones et al., 2019; Kutner et al., 2017; Lamb et al., 2019; Ma et al., 2017; Valdez et al., 2018). The theoretical framework guiding this study was the MST developed by Llan Meyer to understand minority social and health risk disparities involving substance use.

A regression analysis was conducted to detect whether religion, family structure, and traditional gender roles affected substance use within this population. ANOVA revealed these factors did not statistically predict substance use within this population. Based on statistical analysis of data, I failed to reject null hypotheses. This chapter includes interpretations of findings, study limitations, recommendations for future research, and implications for positive social change.

Interpretation of the Findings

Results of this study contrast with existing research regarding Mexican-American men and cultural values in terms of religion, family structure, and traditional gender roles. These factors were not reflected according to participants in this study. Based on results from the MACVS, there was little to no alignment in terms of religion, family

structure, and gender roles. These results expand on the well-documented need to continue understanding factors that influence substance use among minority populations such as MAMSM. There are likely reasons for elevated substance use practice among MAMSM. However, specific factors have not been clarified in existing research.

Religion

This study indicated no statistical significance between religion and substance use among participants. . One explanation is generational differences in terms of religious attitudes among participants. The qualifying age range for this study was 18 and older, which meant study outcomes included data from across multiple generations. Younger generations are considerably less likely to adhere to religious traditions than their senior counterparts. Additionally, various studies reported variations in terms of adherence to traditional values such as religion among minority men residing in the United States for several generations. Based on literature, additional research with differentiated age groups is needed to understand the target population and substance use.

Minority groups encounter stress as a result of stigmatization and discrimination, which exposes them to various adverse physical and mental health consequences such as substance use (Meyer, 2003). When individuals strongly adhere to conventional religious beliefs and are cognizant of family and cultural disapproval of sexual activities, this may result in heightened levels of stress (Delucio et al., 2020; Gilbert et al., 2016; Mayer, 2003). Increase in stress factors increases the likelihood of substance use (Jones et al., 2019; 2017; Mayer, 2003; Valdez et al., 2018). When individuals are part of an ethnic or sexual minority group, negative attitudes and risky behaviors such as substance use are

experienced at a greater magnitude compared to nonmember counterparts (Herek & Garnets, 2007; Polihronakis et al., 2021). Socially marginalized or stigmatized groups experience unique situations that contribute to adverse social and health disparities such as substance use (Marshall et al., 2008; Meyer, 2003). There appears to be an unmet need to understand influential factors which involve general populations of Mexican American men, as identified in peer-reviewed literature.

Family Structure

The second factor that was explored in this study was family structure and its possible correlations with substance use. Analysis of family structure yielded outcomes with no statistical significance. Family structure did not statistically predict substance use in this population. This could be due to participants having separated themselves from families to avoid shame, disappointing their families, or discrimination. Separation from culture and family may have caused some participants to deemphasize maintaining family structure. Results of this study contrast with existing literature on Mexican American men and families. Many individuals who represent cultural and sexual minority populations often physically separate and emotionally detach from their immediate families in order to explore their sexuality or due to fear of dishonoring families (Jones et al., 2019; Kutner et al., 2017; Lamb et al., 2019). Thus, MAMSM and their attitudes towards traditional family structure may be governed by ideologies that are not accounted for in existing literature focused on Mexican American men.

When a racial minority group member is also a sexual minority, negative attitudes and behaviors are experienced at greater frequencies and magnitudes than nonmember

counterparts (Meyer, 2003; Goldbacher al., 2021; Polihronakis et al. 2021). It is probable that additional stress, coupled with stress due to being a cultural and sexual minority, would create more significant potentials for individuals to engage in substance use.

Gender Roles

The research question that explored the variable of traditional gender roles indicated no statistical significance as a predictor of substance use in the MAMSM population. This result indicates that the responses of the participants were insufficient to infer that the observed disparity between adherence to conventional gender roles and drug use might have been attributed to random variation. The findings of this research did not provide support for my hypothesis that there exists a correlation between adherence to conventional gender norms and substance use. This outcome contrasts with the existing research explaining that Mexican American men strongly adhere to traditional family structure norms (Sanchez et al., 2016; Valdez et al., 2018; Villarreal et al., 2019). The literature highlights that for some individuals, not meeting specific cultural gender expectations has caused maladaptive functioning, such as depression, anxiety, and social withdrawal behaviors in some sexual minorities (Sanchez, 2020; Updegraff et al., 2014). This idea extends the need for continued research on shifting cultural alignments as one experiences enculturation. A possible explanation for these findings is varying degrees of cultural assimilation among the participants. To protect the confidentiality of participants, I did not collect personal information such as age, location, or duration of participants' stay in the United States. Existing research on Mexican American men and gender roles suggests that attitudes are integral elements of culture, and changes in these attitudes are

suggested by cultural assimilation and its pace (Su, Richardson, & Wang, 2010). A study examining the extent to which Mexican Americans have culturally integrated into the United States suggested that integration occurs along dimensions of selected demographic indicators such as age and time spent in the majority culture (Sanchez et al., 2016; Su, Richardson, and Wang, 2010; Valdez et al., 2018). Individuals may adopt the dominant culture's norms, which could impact individual values and behavioral shifts within a population (Sanchez et al., 2016; Valdez et al., 2018). Research explains that individuals undergoing cultural transition are challenged regularly with opposing views and likely exhibit significant shifts in cognitions, identity, and attitudes, i.e., traditional gender roles (Sanchez et al., 2016; Valdez et al., 2018; Villarreal et al., 2019).

My rationale for expecting that a greater traditional gender role affiliation would impact participants' substance use was grounded in the study's framework of minority stress theory (MST). MST suggests that stress caused by the majority population may eventually impact an individual's decision to use substances to cope with daily life (Mayer, 2003). The MAMSM community may experience additional stress and anxiety associated with the shift in outlooks on gender roles from the majority population. This rationale confirms the research that socially marginalized or stigmatized groups undergo unique situations that contribute to adverse social and health disparities (i.e., Substance use) (Marshall et al., 2008; Meyer, 2003).

This research offers valuable insights that are crucial to the field, as they may facilitate a more profound comprehension of the distinct pressures that sexual and cultural minority communities face and how those experiences influence outlooks. The

findings of this research lay the groundwork for more inquiries into the MAMSM community and the factors that influence substance. Moreover, this study presents empirical support for the existence of differentiations between the aspects most profoundly valued by the majority of Mexican-American males and the uninvestigated aspects esteemed by the MAMSM community.

Limitations of the Study

This study aimed to identify the relationship between cultural values and substance use within the MASM population. This study provided needed information about the cultural alignment and substance use in the MAMSM population. There were some limitations to the study that impacted the generalizability of the findings, such as age range, location, and amount of time spent in the US.

This study was open to MAMSM residing in the United States aged 18 or older. To maintain participants' anonymity, I did not collect identifiable demographic information in my survey. I do not know the participants' ages, and thus, age was not part of any statistical analysis. A study including age-related demographic factors could generate different findings based on generational attitudinal shifts in cultural alignment. Analyzing participants' responses by age group may provide a deeper insight into generational variations in cultural factor alignment and the impact on substance use.

Another possible limitation of this study is the lack of knowing the participants' locations. Collecting location could identify a difference in cultural value alignment and substance use among geographical regions within the MAMSM sample population. Location data could uncover patterns in the target population regarding outlooks by

region. Location data could provide insight into whether there is an alignment or contrast between MAMSM and the existing research that presents evidence that indicates sexual minority groups do not exhibit a random distribution across different communities but instead tend to concentrate in urban locations throughout the United States (Badgett et al. 2019).

The findings of this study should be approached with limitations in mind. While the present sample size was sufficient to justify the division of items for analysis, doing a factor test with a larger sample could offer further explanation. Andrade (2020) asserts that a substantial sample will more effectively reflect the characteristics of the entire population, therefore yielding more precise outcomes. However, Andrade (2020) cautions that after a specific threshold is reached, the improvement in accuracy will be minimal, making it not worthwhile to invest in recruiting additional participants.

Another limitation of this study is data informing on participants' level of acculturation. According to existing research on acculturation across various populations, psychosocial components such as cultural knowledge, practices, values, perspectives, and ideals are expected to change with cultural adaptation (Barrera et al., 2019; Jones et al., 2019; Zaglin et al., 2018). Including a measure of acculturation as a variable could provide further insight into the extent of cultural value alignment and substance use within the MAMSM target population. Furthermore, it should be noted that the sample of MAMSM gathered through the online recruitment methods of this study may not represent all sexual minorities with comparable ethnic backgrounds. Only men who

identified with a single ethnic and sexual identification (MAMSM) were included in the present study.

Recommendations

The chapters comprising this study substantiate the necessity for further investigation into the determinants that impact substance use among individuals with MAMSM.

Geographical demographics, generational differences, and acculturation measurements are crucial topics for future research. Further investigation is recommended regarding the factors that influence MAMSM and substance use in acknowledgment of the research gaps that have been identified concerning cultural alignment and ethnic and sexual minorities. Research gaps suggest that the effects of generational differences, geographic location, and acculturation are not comprehensively represented and realized within ethnic and sexual minority communities (Barrera et al., 2019; Holloway et al., 2012; Hunt et al., 2019; Mackellar et al., 2011; Leonard-Myers, 2012; Valdez et al., 2018). This lack of representation in the literature indicates that there is a need for appropriate assessment and detection methods to account for the distorted relationship between religion, family structure, gender roles, and substance use in the MAMSM population (Barrera et al., 2019; Holloway et al., 2012; Hunt et al., 2019; Mackellar et al., 2011; Leonard-Myers, 2012; Valdez et al., 2018). How and to what extent religion, family structure, and gender roles influence the MAMSM population remains ambiguous. Based on these conclusions, it is advisable to replicate the current study using a population sample that includes differentiations by region, generational age groups, and measure of acculturation level.

In addition, it would be beneficial to incorporate a multi-method approach to collecting data, for example, a mixed-methods study. This data acquisition approach would provide a comprehensive insight into the participants' personal experiences through interviews and surveys (Mackellar et al., 2011). This approach would help researchers to learn directly from the participants about cultural influences and substance use.

Implications

The results of this study will contribute to the existing research on the association between cultural values and substance use in ethnic and sexual minority populations. The data presented will assist clinicians and researchers in progressing toward best practices that are more inclusive of the MAMSM population. The findings of this study offer additional evidence that the cultural factors that influence the majority of a population may differ within the subpopulations. The findings of this study continue to build on the foundation of existing support models that do not recognize the differences between a general ethnic minority population (Mexican-American men) and a subpopulation considered ethnic and sexual minorities (MAMSM).

Continued research might result in data that would better assist clinicians and educators in supporting a MAMSM struggling with sexual orientation and substance use. A culturally informed prevention and intervention system will educate and assist in counteracting the disproportionate numbers of substance use in the MAMSM population. Educational programs and intervention systems informed of specific cultural conflicts can target the unique perspectives of MAMSM. This approach can alter social and health

outcomes, lowering drug use, alleviating stress, and enhancing MAMSM population resilience.

Conclusion

Substance use is a prevalent problem in the United States (Loza, Provencio-Vasquez, Mancea, & De Santis, 2021). Substance use impacts individuals, families, and communities. Substance use is a public health concern that disproportionately affects ethnic and sexual minorities (Delucio et al. 2020; Lamb et al. 2019; Loza et al. 2011). In this study, a sample of MAMSM self-selected to participate in an online survey. The purpose was to measure the target populations' cultural values and substance use. The study aimed to identify whether or not a statistically significant relationship existed between the cultural values of religion, family structure, traditional gender roles, and substance use within the target population.

While this study did not find a statistically significant relationship, the information supplied by participants can be valuable insight to expand current research on ethnic and sexual minorities and substance use. This study's findings indicate the need to identify psychosocial factors that may influence substance use in MAMSM. This study may serve as a foundation for additional efforts to understand the underlying mechanism of substance use among MAMSM that could lead to the development of educational, prevention, and treatment programs targeting reducing substance use within the MAMSM.

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Appendix A: Consent Form

You are invited to complete an anonymous survey by a Walden University student working toward a doctoral degree.

Study title: Mexican American Men Who Have Sex With Men (MAMSM): Cultural Factors and Substance Use

Doctoral student name: Michael Garcia

Doctoral student contact information: Walden University

Number of volunteers needed: 77

Number of minutes needed for survey: 15-20 minutes

Volunteers must be:

- 18 years of age or older
- Live in the United States
- Mexican-American Men who have sex with other men
- Participated in substance use in the last 12 month

Your role as a participant:

- Participation can end any time you wish
- Involves no more risk than daily life, and
- Involves no payment or thank-you gifts.

Risks:

Participating in this study could involve minimal risk of emotional discomfort. Some survey questions ask about cultural values and substance use and may be uncomfortable as you think about your experiences.

If at any time participants experience a mental health or substance use crisis, please contact:

Substance Abuse and Mental Health Services Administration (SAMHSA) National Helpline at

1-800-662-HELP (4357). The service is free, confidential, 24/7, 365-day-a-year referral and information service (in English and Spanish) for individuals facing mental and/or substance use disorders.

Privacy:

To protect your privacy, I advise that participants select a private location to complete the survey so others cannot observe their participation and /or view their responses to questions.

To protect your privacy, the doctoral student will not collect, track, or store your identity or contact info.

In place of a consent signature, your completion of the survey would indicate that you consent to your responses being analyzed in the study.

Data will be kept secure by using password-protected devices and platforms. Data will be kept for a period of at least 5 years, as required by the university.

Use of your responses:

Your survey responses will be used for academic research purposes only. Once the doctoral student graduates, a summary of the study's results will be posted on social media sites that were used to recruit participants.

Protecting You

If you want to talk privately about your rights as a participant or any negative parts of the study, you can call Walden University's Research Participant Advocate at 612-312-1210 or email IRB@mail.waldenu.edu. Walden University's approval number for this study is 05-16-23-0971572, and expires on May 15, 2024.

You might wish to retain this consent form for your records. You may ask the doctoral student or Walden University for a copy at any time using the contact info above.

Appendix B: Social Media Recruitment Letter

Hello,

I am a Doctoral student at Walden University researching Mexican American cultural beliefs and substance use among Mexican American men who have sex with men. This study aims to gather information regarding cultural beliefs and substance use in this population.

I would appreciate your help if you are:

At least 18 years old

Mexican American Male

Living in the United States

Have sex with men

Participated in substance use in the last 12 months

None of your personal, identifiable information will be asked of you. The survey will take 15-20 minutes. Responses gathered from this study will aid in advancing knowledge used for education, prevention, and treatment of substance use within cultural and sexual minority groups. Your contributions will be utilized in developing culturally competent mental health practitioners and treatment programs. Participation and all data gathered are anonymous.

Thank you,

Michael G.

Appendix C: Written Statement Regarding Participant Anonymity

I want to assure you that your survey responses are entirely anonymous.

Responses to surveys cannot be traced back to the respondent. No personally identifiable information is obtained. Additionally, your responses are combined with many others and summarized in a report to further protect your anonymity.

To protect your privacy, I advise that participants find a quiet and private space to complete the survey. This will minimize the risk of others observing your participation or viewing your responses.

Appendix D: MACVS Request

George P. Knight
Department of Psychology
Arizona State University

My name is Michael Garcia, and I am a doctoral student at Walden University. I am currently developing my plan for a dissertation in Clinical Psychology. I am writing to ask written permission to use the Mexican American Cultural Values Scale (MACVS) in my research. My study will examine the relationship between cultural factors (religion, family, and gender roles) and substance use in Mexican American men who have sex with men (MAMSM). My goal is to gain insight into a possible relationship between adherence to cultural values and the disproportionate rates of substance use among the MAMSM population. My research is being supervised by my professor, Dr. Michael Johnson, at Walden University.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. The dissertation will be published at Walden University and placed in the ProQuest Dissertations database.

I would like to use and reproduce the Mexican American Cultural Values Scale (MACVS) under the following conditions:

- I will use the MACVS only for my research study and will not sell or use it for other purposes.
- I will include a statement of attribution and copyright on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript.

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail.

Sincerely,
Michael Garcia

Appendix E: MACVS Approval

RE: Permission to use MACVS in dissertation

George Knight [REDACTED]

Wed 4/26/2023 10:22 AM

To: Michael Garcia [REDACTED]

1 attachments (407 KB)

J Early Adolescence 2010-MACVS.pdf

Dear Michael,

You are welcome to use the MACVS. It is fully available in the original publication introducing this measure. Scoring procedures are also included. I've attached a copy of this article.

Best Wishes,

George

George P. Knight, Ph.D
Emeritus Professor
Department of Psychology
[REDACTED]
[REDACTED]
[REDACTED]

From: Michael Garcia

Sent: Tuesday, April 25, 2023 10:54 AM

To: George Knight

Subject: Permission to use MACVS in dissertation

George P. Knight
Department of Psychology
Arizona State University

My name is Michael Garcia, and I am a doctoral student at Walden University. I am currently developing my plan for a dissertation in Clinical Psychology. I am writing to ask for written permission to use the Mexican American Cultural Values Scale (MACVS) in my research. My study will examine the relationship between cultural factors (religion, family, and gender roles) and substance use in Mexican American men who have sex with men (MAMSM). My goal is to gain insight into a possible relationship between adherence to cultural values and the disproportionate rates of substance use among the MAMSM population. My research is being supervised by my professor, Dr. Michael Johnson, at Walden University.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. The dissertation will be published at Walden University and placed in the ProQuest Dissertations database.

I would like to use and reproduce the Mexican American Cultural Values Scale (MACVS) under the following conditions:

Appendix F: DAST-10 Request

Harvey Skinner
Department of Psychology
York University, Toronto, Canada

My name is Michael Garcia, and I am a doctoral student at Walden University. I am currently developing my plan for a dissertation in Clinical Psychology. I am writing to ask for written permission to use the Drug Abuse Screening Test DAST-10 in my research. My study will examine the relationship between cultural factors (religion, family, and gender roles) and substance use in Mexican American men who have sex with men (MAMSM). My goal is to gain insight into a possible relationship between adherence to cultural values and the disproportionate rates of substance use among the MAMSM population. My research is being supervised by my professor, Dr. Michael Johnson, at Walden University.

In addition to using the instrument, I also ask your permission to reproduce it in my dissertation appendix. The dissertation will be published at Walden University and placed in the ProQuest Dissertations database.

I would like to use and reproduce the Drug Abuse Screening Test DAST -10 under the following conditions:

- I will use the DAST-10 only for my research study and will not sell or use it for other purposes.
- I will include a statement of attribution and copyright on all copies of the instrument. If you have a specific statement of attribution that you would like for me to include, please provide it in your response.
- At your request, I will send a copy of my completed research study to you upon completion of the study and/or provide a hyperlink to the final manuscript.

If you do not control the copyright for these materials, I would appreciate any information you can provide concerning the proper person or organization I should contact.

If these are acceptable terms and conditions, please indicate so by replying to me through e-mail.

Sincerely,
Michael Garcia

Appendix G: DAST-10 Approval

Re: Permission to use DASH-10 for dissertation

Harvey A Skinner [REDACTED]

Tue 4/25/2023 3:23 PM

To: Michael Garcia [REDACTED]

Cc: [REDACTED]
[REDACTED]

1 attachment (80 KB)

1. DAST Guide 2023.docx

Dear Michael

Thank you for your interest in the Drug Abuse Screening Test (DAST).

The DAST-10 and DAST-20 versions are published by the Center for Addiction and Mental Health (CAMH), Toronto. I am the test author and copyright holder along with CAMH.

You have my permission to use the DAST for your research study as long as you acknowledge my authorship and respect my copyright along with CAMH. Please use this copyright statement:

© Copyright 1982, 2019 by the test author Dr. Harvey Skinner, York University, Toronto, Canada and by the Centre for Addiction and Mental Health (CAMH), Toronto, Canada.

Attached is a Manual that describes the test development, instructions for using the DAST and supporting research.

All the best for your research study.

Thanks, Miigwech, Namaste

Harvey

Harvey Skinner PhD, CPsych, FCAHS
Professor Emeritus, Psychology & Global Health
Senior Fellow, Dahdaleh Institute for Global Health Research
Founding Dean 2006-2016, Faculty of Health
[REDACTED]
[REDACTED]
[REDACTED]

Email: [REDACTED]

Website: [REDACTED]

Situated on the ancestral and treaty territories of the Anishinabek Nation, the Haudenosaunee Confederacy, the Wendat and the Mississaugas of the Credit First Nation, subject to the Dish with One Spoon Wampum Belt Covenant, an agreement to peaceably share and care for the Great Lake Region.

Pronouns: he/him

Appendix H: MACVS

The following statements are about what people may think or believe. Remember, there are no right or wrong answers.

Response:

1	2	3	4	5
Not at all	A little	Somewhat	Very Much	Completely

Using the scale above, tell me how much you believe that:

1	One's belief in God gives inner strength and meaning to life.	
2	Parents should teach their children that the family always comes first.	
3	Children should be taught that it is their duty to care for their parents when their parents get old.	
4	Children should always do things to make their parents happy.	
5	Men should earn most of the money for the family so women can stay home and take care of the children.	
6	God is first; family is second.	
7	Family provides a sense of security because they will always be there for you.	
8	If a relative is having a hard time financially, one should help them out if possible.	
9	When it comes to important decisions, the family should ask for advice from close relatives.	
10	Families need to watch over and protect teenage girls more than teenage boys.	
11	Parents should teach their children to pray.	
12	It is always important to be united as a family.	
13	A person should share their home with relatives if they need a place to stay.	
14	Children should be taught to always be good because they represent the family.	
15	It is important for the man to have more power in the family than the woman.	
16	If everything is taken away, one still have their faith in God.	
17	It is important to have close relationships with aunts/uncles, grandparents, and cousins.	
18	Older kids should take care of and be role models for their younger brothers and sisters.	
19	A person should always think about their family when making important decisions.	
20	Mothers are the main people responsible for raising children.	
21	It is important to thank God every day for all one has.	
22	Holidays and celebrations are important because the whole family comes together.	
23	Parents should be willing to make great sacrifices to make sure their children have a better life.	
24	It is important to work hard and do one's best because this work reflects on the family.	
25	A wife should always support her husband's decisions, even if she does not agree with him.	
26	It is important to follow the Word of God.	
27	It is important for family members to show their love and affection to one another.	
28	Religion should be an important part of one's life.	

Knight. (2010). Department of Psychology, Arizona State University

Appendix I: MACVS Subscales

Religion	7 items 1, 8, 18, 27, 36, 45, 48
Family	16 items
Family support	6 items 2,9,20,28,37,46
Family obligation	5 items 3,11,21,29,38
Family referent	5 items 4,12,30,39,47
Gender Roles	5 items 13, 19, 32, 42, 50

Interpretation of Scores on the MACVS subscale scores level of endorsement of cultural value**Participant's Level of Alignment with Value (Mean Score)**

0.01 to 1.00	No Alignment with cultural value
1.01 to 2.00	Low Alignment with cultural value
2.01 to 3.00	Neutral Alignment with cultural value
3.01 to 4.00	Moderate Alignment with cultural value
4.01 to 5.00	High Alignment with cultural value

Appendix J: DAST-10

Below is a list of questions concerning information about your potential involvement with drugs, excluding alcohol and tobacco, during the past 12 months. When the words "drug abuse" are used, they mean the use of prescribed or over-the-counter medications/ drugs in excess of the directions and any non-medical use of drugs.

The various classes of drugs that increase may include: cannabis (e.g., marijuana, hash), solvents, tranquilizers (e.g., Valium), barbituates, cocaine, stimulants (e.g., speed), hallucinogens (e.g., LSD), or narcotics (e.g., heroin).

Remember that the questions do not include alcohol or tobacco. If you have difficulty with a statement, choose the response most right.

These questions refer to the last 12 months	No	Yes
1. Have you used drugs other than those required for medical reasons?	0	1
2. Do you abuse more than one drug at a time?	0	1
3. Are you always able to stop using drugs when you want to? (If you never use drugs, answer "Yes.")	0	1
4. Have you had "blackouts" or "flashbacks" as a result of drug use?	0	1
5. Do you ever feel bad or guilty about your drug use? If you never use drugs, choose "No."	0	1
Does your spouse (or parents) ever complain about your involvement with drugs?	0	1
7. Have you neglected your family because of your use of drugs?	0	1
8. Have you engaged in illegal activities in order to obtain drugs?	0	1
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	0	1
10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	0	1

Copyright 1982, 2019 by test author Dr. Harvey Skinner, York University, Toronto, Canada and by the Center for Addiction and Mental Health (CAMH), Toronto, Canada.

Interpreting the DAST 10

In these statements, "drug abuse" refers to using medications at a level that exceeds the instructions and/or any non-medical use of drugs. Patients receive 1 point for every "yes" answer, with the exception of question #3, for which a "no" answer receives 1 point. DAST-10 Score Degree of Problems Related to Drug Abuse Suggested Action.

DAST-10 Score	Degree of Problem-Related to Drug Abuse	Suggested Action
0	No Problem Reported	None at this Time
1-2	Low Level	Monitor and re-assess at a later date
3-5	Moderate level	Further investigation
6-8	Substantial Level	Intensive assessment
9-10	Severe Level	Intensive assessment

Skinner, H. A. (1982). The Drug Abuse Screening Test. *Addictive Behavior*, 7(4),363–371.

Appendix K: Substance Use Free Helplines

There are accessible helplines throughout the United States for anyone with questions regarding alcohol or drug use or seeking crisis support. The organizations and helplines listed below can assist persons with information, education, and referrals to facilities specializing in overcoming substance abuse.

Substance Abuse and Mental Health Services Administration

SAMHSA's National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental or substance use disorders 1-800-662-HELP (4357)

National Text 988 & Crisis Lifeline

If you or someone you know is struggling or in crisis, help is available. Call or text 988 or chat at 988lifeline.org. You can speak with a trained crisis counselor anytime.

National Substance Abuse Hotline

Free & Confidential 24/7 Assistance. If you or a loved one is experiencing trouble with drug addiction, alcoholism, or mental health, do not hesitate to call the National Hotline. Their 24/7 Support Hotline is available to talk you through any issues you may be having and guide you to the right resources 866-210-1303

National Alliance on Mental Illness (NAMI) HelpLine

Free, nationwide support service providing information, resource referrals, and support to people with a mental health condition, NAMI HelpLine 800-950-6264 or text "Helpline" to 62640. In a crisis, call or text 988.