

PERSPECTIVES OF CATHOLIC LATINA MOTHERS ON FEMALE ADOLESCENT
DEPRESSION: A QUALITATIVE APPROACH

BY

YULIANA SOTO

THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Science in Kinesiology
in the Graduate College of the
University of Illinois at Urbana-Champaign, 2020

Urbana, Illinois

Adviser:

Assistant Professor Susan Aguiñaga

ABSTRACT

Latina youth report high rates of depression attributed to low socioeconomic status, conflicting cultural and gender roles, and reduced participation in conventional forms of treatment. Yoga has been found to be an effective form of physical activity (PA) to ameliorate depressive symptoms. However, yoga's religious roots in Hinduism may conflict with certain faith-places, like Catholic churches. Faith-placed PA programs have been effective within racial and ethnic populations, such as Latinos. There is limited research on yoga and Latino youth and little is known regarding the acceptability of yoga among Catholic constituents, thus there is a need to assess the acceptability of yoga within the Latino community prior to designing an intervention. This study aims to investigate the thoughts and perceptions of Catholic Latina Mothers on the acceptability and feasibility of a faith-placed yoga intervention for adolescent Latinas through a Social Cognitive Theory (SCT) lens. The present study was a semi-structured interview qualitative study with self-identified Catholic Latina mothers with daughters between the ages of 8-18 years old. A moderator guide was used to ask questions related to yoga and depression using SCT domains, such as environmental, behavioral, and cognitive levels. Measures included the determinants of meditation practice inventory (DMPI), and self-reported height, weight, and PA level. Three bicultural and bilingual researchers opened and axially coded interviews and conducted an inductive and deductive approach to find emerging themes. Eight women (Mean Age= 42.25 ± 10.03, Mean self-reported BMI= 29.5 ± 5.23) participated in the interviews, 50% of sample attended church >1x/ month, 87.5% were born in Mexico and self-reported as physically active. Majority reported minimal barriers to meditation (Mean DMPI= 35.5 ± 15.46). Three themes emerged with corresponding subthemes ;1) Yoga as a potential form of PA for relaxation, 2) Latino family perceptions of health (*Health Behaviors, Depression, and Perceived*

barriers to health and mental health), and 3) Sources of support (*Family, Community, and the Catholic Church*). Catholic Latina mothers perceived a faith-placed yoga program as beneficial and as an appropriate form of PA for adolescent Latinas with depression. Family relationships were perceived to be the root of depression and suggested improved communication between families. Furthermore, mothers viewed daily work routines as barriers to the health of their children. Thus, mothers suggested the need of social group activities within the community to help depressive symptoms. A future yoga intervention aimed to reduce depressive symptoms in Latino adolescents should include meditative and mindfulness components, faith-places with support of priests, and consider including an education component aimed to improve communication within families.

TABLE OF CONTENTS

CHAPTER 1: MANUSCRIPT 1.....	1
1.1 INTRODUCTION.....	1
1.2 METHODS.....	3
1.3 RESULTS.....	5
1.4 DISCUSSION.....	14
1.5 TABLES.....	20
REFERENCES	22

CHAPTER 1

MANUSCRIPT 1

1.1 INTRODUCTION

Latina youth present higher rates of self-reported depressive symptoms (Doi et al., 2001; McLaughlin et al., 2007; Roberts et al., 1997; Roberts & Chen, 1995; Rubens et al., 2018) and suicidal ideation compared to other populations (Zayas et al., 2005; Zayas & Pilat, 2009). Within the last decade, suicide rates amongst all Latina living in the U.S have increased 50% from 2000 to 2015 (Silva & Van Orden, 2018). Adolescent Latinos are at increased risk for depression as they are more likely to have low socioeconomic status (SES) and experience conflicting cultural and gender roles (McLaughlin et al., 2007). Factors that increase risk of depression and may preclude participation in conventional forms of treatment include, stigma associated with psychiatric care, limited knowledge of treatment options (Ford-Paz et al., 2013), and lack of health insurance (Alegría et al., 2006). Therefore, studies have suggested the need to find alternative and culturally-appropriate programs to support Latina youth with depression (Ford-Paz et al., 2013; Silva & Van Orden, 2018).

Regular engagement in physical activity (PA) has shown to improve symptoms of major depression (Physical Activity Guidelines Advisory Committee, 2018) and quality of life (Ward et al., 2013). However, less than 30% of Latina adolescents between the ages of 12-19 report meeting physical activity guidelines of 60 minutes of moderate to vigorous PA per day, compared to 50% of male counterparts (Butte et al., 2007). Engagement in yoga and yoga-like activity (flexibility & resistance training) has shown to be superior in relieving depressive symptoms than aerobic-based PA interventions (Conn, 2010; Cramer et al., 2013). However,

there is limited research on yoga in adolescents with depression especially in racially and ethnically diverse youth (Fishbein et al., 2015). Prior to creating an intervention, it is vital to assess the perceptions and acceptability of yoga within the Latino community to determine the factors playing a role in the acceptance and participation of yoga in Latina adolescents.

1.1.1 THE SOCIAL COGNITIVE THEORY OF EXERCISE CONTROL LENS ON YOGA

Social Cognitive Theory (SCT) is a commonly used framework in PA interventions that focuses on cognitive (i.e., perceptions, beliefs, affect, self-efficacy) and environmental factors to guide adoption and maintenance of a specific behavior (Bandura, 1997), in this case yoga as our behavior. The Latino community places high social values in familism (known as prioritizing family over self-interests) and religiosity (varying from practice, moral beliefs, and attendance to religious institutions) (Hernandez et al., 2019; McLaughlin et al., 2017; Oquendo et al., 2005). As familism is a central value in many religions (Leighton, 2014), religion may be considered an important cognitive and environmental factor for Latinos as 77% of U.S Latinos identify as Christian with 48% of this proportion identifying as Catholic (Pew Research Center, Religious Landscape Study, 2014).

Recent studies have reported the increased efficacy of faith-placed health and PA interventions for ethnic and culturally diverse communities as these spaces are thought to play an important role in supporting and facilitating well-being (Bopp et al., 2011; Duru et al., 2010; Gutierrez et al., 2014; Schwingel & Gálvez, 2016). Therefore a question to ask is, is yoga appropriate in these faith-places for reduction of depression?

Currently, it is estimated that over 36 million people are practicing yoga in the U.S (Fischer-White & Taylor, 2016). Yet, modern yoga looks vastly different from the ancient Hindu practice.

Yoga is an ancient practice with roots in Hinduism (Hayes & Chase, 2010), and thus, this may create tension when attempting to implement it in other faith-places. To increase acceptance of eastern methodologies into Western culture, emphasis was placed on: 1) the physical aspects of yoga (posture and breathing techniques) rather than spiritual dimensions (ethical disciplines, ethical observances, enlightenment, etc.) (Jain, 2016) and; 2) benefits on physical health rather than spiritual health (Douglass, 2007). However, the religious roots of yoga are still subject to scrutiny from Christian leaders as yoga is perceived to violate traditional Christian doctrine by instilling other beliefs and practices (Jain, 2012, 2017; Stoeber, 2017).

Even though yoga may be subject to scrutiny from Christian leaders, the community at large may find yoga as an acceptable form of PA. However, the thoughts and perceptions of Catholic Latina church members on a faith-placed yoga intervention for alleviating depression symptoms in adolescents remains unknown. Therefore, the purpose of the present study is to qualitatively explore the thoughts, perceptions, and acceptability of church attending Latina mothers on a faith-placed yoga intervention for adolescent Latinas.

1.2 METHODS

1.2.1 DESIGN

The current study used a semi-structured interview guide to understand perspectives of Catholic Latina mothers of yoga and depression in adolescent youth. Interview questions were open-ended and designed using SCT domains 1) Environmental level; participants were asked their perspective of female adolescent depression in the Latino community and the role of the community; 2) Behavioral level; participants were asked about their own behavior as relating to health and current activity patterns; 3) Cognitive level; participants were asked their own

thoughts about health, depression, and yoga. Semi-structured interviewing styles are useful in gaining family perspectives as they may help guide further interpretation in daily lives and experiences within family groups (Daly, 1992). Although questions were guided around SCT domains, the semi-structured approach allowed room for flexibility and informality to promote new and unanticipated data without deviating from the script (Fetterman, 1989; Patton, 2015; Taylor & Bogdan, 1984). This study was approved by the Institutional Review Board of University of Illinois at Urbana-Champaign.

1.2.2 DATA COLLECTION

Inclusion criteria for Latina mothers were as follows; 1) self-identify as Hispanic/Latina, 2) have a daughter between the ages of 8-18 years old, and 3) self-identify as Catholic. Mothers were recruited via online social media, flyers, and announcements after Catholic mass were made with the permission of the priests. After participants were screened, determined eligible and provided consent, they were scheduled for an interview either in person or via the phone.

On the day of the interview, basic demographics were collected and height and weight were self-reported to obtain BMI, and self-reported PA assessed by the following question (Have you participated in any PA for at least 30 min, at least 3 days/week, for at least the last 3 months?).

The Determinants of Meditation Practice Inventory is a validated 17-item instrument to identify barriers to engaging in meditation (Williams et al., 2012); total scores ranged from 17 to 85 in which higher scores indicate greater barriers to meditation (Russel et al., 2018). All study materials were available in English and Spanish and delivered by bilingual, bicultural research staff.

All interviews were audio-recorded, for those who did not wish to be recorded, notes were taken. Interviews in English were transcribed for analysis. Interviews in Spanish were coded and analyzed in Spanish to preserve quality and meaning and then translated in English (Hughes et al., 2008; Lopez et al., 2008). Participants were compensated \$20 cash or were emailed a \$20 dollar Amazon e-code.

1.2.3 DATA ANALYSIS AND TRUSTWORTHINESS

Three bicultural and bilingual research members independently analyzed interviews using a deductive and inductive approach (Patton, 2015). Data from three initial transcripts was open and axially coded and discussed by the research team to design a preliminary codebook. Once the preliminary codebook was piloted on the remaining transcripts and research team met to discuss agreement on final codebook. Agreed open codes were then analyzed through an inductive and deductive approach to find emerging themes and sub-themes interviews (Richards et al., 2018; Richards, 2015). The analysis was deductive as data was examined based on how Latina mothers perceive a faith-placed yoga program and adolescent Latina depression through SCT domains, (Richards, 2015). Descriptive statistics were conducted on SPSS software, version 24 (IBM Corp., NY) for the demographic data.

1.3 RESULTS

1.3.1 PARTICIPANT CHARACTERISTICS

Eight women (Mean $_{Age} = 42.25 \pm 10.03$, Mean $_{BMI} = 29.5 \pm 5.23$) participated in interviews. As shown in Table 1.1, data revealed 50% of the sample attended church regularly (>1x/month) and had an annual family income less than \$40,000 a year. Additionally, 87.5% of the sample was born in Mexico and self-reported as physically active with at least 90 minutes per week within

the last three months. Majority reported minimal barriers to meditation (Mean DMPI= 35.5 ± 15.46).

1.3.2 THEMES

Three major themes along with sub-themes (italicized) emerged from the semi-structured interviews, these include: 1) Yoga as a potential form of PA for relaxation, 2) Latino family perceptions of health (*Health Behaviors, Depression, and Perceived barriers to health and mental health*), and 3) Sources of support (*Family, Community, and the Catholic Church*). Furthermore, emerging themes will be presented along with connections to SCT (i.e., beliefs, self-efficacy, behavior, and environmental control) as they relate specifically to perceptions of yoga for Latina youth with depression (Richards et al., 2018).

Yoga as a potential form of PA for relaxation

As shown in Table 2, the majority of mothers perceived yoga as an activity for relaxation and/or meditation, however, there were different perceptions of its relation to the body and mind. Physical aspects were commonly identified such as body postures, stretching, and benefits on body toning and flexibility. Mind-related components of yoga were often associated with meditation and less frequently with concentration and its mind-related benefits.

Mother's perceptions of yoga and its benefits are intrinsically related to self-efficacy, as their thoughts and beliefs are driven by vicarious experiences. As many participants had not practiced yoga, perceptions of yoga were shaped by social testimonies. For example, a participant mentioned as it relates to physical benefits and depression "I've spoke[n] with other people, they do tell me that it does work ... for toning up bodies. It does help for your mind if you have any thoughts or anything like that (P8, 27 yrs)." Additionally, participants expressed yoga as an

activity that they would like to try, participant 9 explains, “I believe that through experimenting and realizing how well it can [benefit] our physique [and] our physical activities (P9, 43 yrs).”

Perception of benefits and interest in yoga also varied depending on previous exposure as related to vicarious experience and performance accomplishment components of self-efficacy. Only two participants had previously practiced yoga. Participant 7 was the only one to assist an in-person class and mention respiration and mindfulness as components to achieve relaxation. She described yoga’s relaxation method as “practicing deep breathing helps give awareness to our own body to relax it (P7, 59 yrs).” On the other hand, participant 12 described yoga as only stretching and shared that her first experience was through a DVD in English. Furthermore, she had no further interest in yoga or meditation as she perceived yoga to be very difficult and did not know how meditation could benefit her.

Meditation was frequently viewed as a component of yoga. Meditation was perceived as either bringing the mind to a free state-of-thought or as focus and attention to something positive. Participant 8 described meditation as “I imagine myself sitting on the ground and just closing my eyes and just not think of anything like just letting my mind flow, like just letting it like not think of anything, just relax like what I was thinking (P8, 27 yrs).” Meditation was viewed as a method to separate from the stress of daily routine. Participant 5 described, “It puts the mind in blank, at a point you start to relax and don’t feel much pressure. You feel that meditation separates you from the routine you have to do daily (P5, 52 yrs).” Furthermore, meditation was also viewed as the focus on positive thinking. Other participants described meditation more as a practice of concentration (i.e focus). Participant 7 described meditation as sitting down and focusing on something positive like the word “peace.” While participant 9 described it as “it is

focusing and being well... how can I say? Well let's see, indeed that I don't know what meditation is exactly, but relaxing, letting go... [and] your respiration (P9, 43 yrs).”

Latino family perceptions of health

The majority of mothers viewed health as consisting of a healthy diet, engagement in PA, and self-care practices. Furthermore, perceptions of depression were shaped by personal experience and how the Latino community at large viewed depression as a real health problem.

Unfortunately, many mothers perceived long working hours of Latino families in the U.S as reduced controllability to influence health and mental health of their children, thus contributing to the declining health and mental health of adolescent Latinas. Additionally, mother's viewed social media as a negative influence that could affect mental health. Individuals with depression are at risk of low levels of self-efficacy as they tend to evaluate themselves in depreciating forms, such as through social comparison, decreasing levels of motivation (Bandura, 1991).

Health-behaviors

Health was frequently referred to as taking care of the body and the mind and as maintenance of a healthy diet and exercise. Many mothers shared a common point of view of health as a vital importance for daily functioning. Participant 5 described it as “important because if you do not have it, you can't do anything, it has to be as much physically as mentally (P5, 52 yrs).” Similar to all mothers, participant 9 described health as “to be healthy, exercise [and] eat healthy (P9, 43 yrs).” In terms of diet, mothers reflected the need of limiting carbohydrate intake and the increase of vegetable consumption. In terms of PA, all mothers mentioned aerobic PA to be their preferred method of exercise. Walking was their preferred form of PA overall, while a few mentioned dance, Zumba, and spinning classes. Similarly, they perceived their daughters

preferred forms of PA to be aerobic-based such as walking and swimming, however, martial arts, yoga, and dancing were also mentioned.

Depression

Depression was perceived as a real mental health problem; however, perceptions varied based on personal experience and social perceptions. Participant 7, believes to have experienced depression because she was never diagnosed and explained her reality differed from social perceptions. “It is real, it is something that many people sometimes think ‘oh it is just your imagination,’ right? Or ‘just begin thinking in other things,’ but it is not that easy. Because I believe that it is more like, a chemical imbalance, in the body, in the mind (P7, 59 yrs).”

Participant 10 shared her thoughts of depression as her husband went through it, “he told me his symptoms and I think it is a disease and I think you have to see what you can do. And with the help of God you can continue forward but many times you need professional help (P10, 35 yrs).”

Mothers viewed a resilient mentality as a method to combating depression. Participant 12 shared her experience with depression after giving birth to her daughter, “They say that there are many people who do many bad things when they have depression, and I kept telling myself no, no, because I have my children, I have to try (P12, 44 yrs).” Participant 11 described resiliency as simply as not having time for depression.

“Since I’ve had my children my day is so busy. I feel that sometimes I don’t even have time for depression. I look around [and] I hear people that say, for example a friend that tells me ‘Once I leave work, I only want to sleep,’ ‘ I don’t feel like going out,’ but [in] my personal case, honestly, I believe that my time is not enough not even for depression. (P11, 42 yrs)

Within the SCT, clinging on to self-hindering thoughts and the experience of stress without positive coping skills may reduce self-efficacy (Bandura, 1991). Mothers frequently described their daily and weekly routines as filled with household, child-care, and work-related activities.

As Participant 6 expressed “in the United States everyone has depression, for the same reason we don’t get out of our routines,” and described her method of coping through depression as, “I don’t let it. I don’t let it follow me, it’s better if [I] put it away (P6, 36 yrs).”

Perceived barriers to health and mental health

Furthermore, many mothers expressed their work obligations and the lack of time with their children as having a reduced ability to influence their children’s health behavior. Participant 11 explained that “well, being here, a Latino family normally we have to work, both parents, and that gives us no time with our children. For which we leave them more time than other races, we leave them more alone (P11, 42 yrs).” Diet and education were also viewed as barriers to health, Participant 6 explains this time spent away in relation to her children’s eating habits, “when we have to go to work, we tell them to eat what there is at home. Or we give them five or six dollars to go buy and eat things from the street, that are sometimes more fattening (P6, 36 yrs).”

Although one mother reflected the concern of accessing a nutrition expert and the disconnect between the ideal behavior versus reality. Participant 12 explains how hard it is to change eating habits as “even if the nutritionist says that they can’t eat things or that they have to eat things, like vegetables and that, they still do not want to (P12, 44 yrs).”

One participant specifically mentioned a health barrier unique for female adolescents. Participant 5 explains parental relationships on visiting a gynecologist as a barrier, “they do not seek help, sometimes they have infections [and] are not well informed. They are afraid and often do not tell their parents and I say that when they remain silent, no, it is not good (P5, 52 yrs).”

Similarly, barriers to mental health were perceived to be attributed to negative familial relationships and social relationships. Majority of mothers referred to “lack of communication” and “lack of love” within the family home as the root of depression. Thus, increasing the

probability of interaction between Latina youth and negative influences such as drugs and violence. Participant 5 described this phenomena a bit further:

Since they don't have love in their house and outside of the home, they seek people that pretend to be their friends or that talk pretty to them. That type of things then, they see that in their house there is no comprehension, there is nothing, they look for it outside. But then, many times those aren't real friends, do you understand me? I believe that by going out it sinks them deeper. (P5, 52 yrs)

Another commonly perceived barrier related to Latina adolescents with depression was social media. Participant 7 described negative influence affecting perceptions of women in relationships as, "there is a lot of influence how one should look. Sometimes they could be seeing violent things, bad influences like how they should treat women, there is sometimes negativity in that (P7, 59 yrs)." Participant 8 mentioned appearance as a stressor, "your appearance as how it may look towards other people. Getting offended if you're overweight, if you're too skinny, too fat, because [of the] internet, social media (P8, 27 yrs)."

Sources of support

Mothers mentioned that support strategies for coping with depression should consider including communication within families, the community, and the Catholic Church. In general mothers expressed the need for community resources and activity programs that support the health and mental health of their children, whether it be through faith-spaces or not. Participants were supportive of faith-placed programs as they viewed priests as supportive leaders, churches have a strong social value of community, and churches are easily accessible. Within SCT, ease of access within the environment may facilitate adoption of a new PA and increase self-efficacy.

Family

In general, the greatest coping and support strategy to address adolescent Latina depression was to address the barriers to health and mental health through increased family communication in

order to foster good relationships. Mothers viewed family as an important factor to coping with depression, as parents are viewed as pillars of guidance and support. Participant 5 reflects, “when they have a problem, tell them that is why parents are here because they are the ones who are going to help resolve the situation (P5, 52 yrs).” Mothers expressed the need to increase the lines of communication between parents and their children to help deal with depression. Participant 10 shared how her 16 year old niece died by suicide and reflected on “if she had only asked for a talk because a lot of times one gets wrapped up in their world without knowing there is family or something that may help with a word of consolation (P10, 35 yrs).” Participant 7 reflects quality communication with less phone use and more attentiveness.

It is very difficult because I think that the most important thing is to try to have communication so that you always know what is happening. But sometimes teenagers don't want to talk to you, so [I] try to insist, to get involved, to find out what is happening in their lives. Right? [I] Try to let them also know that they are important. For example, when I'm at home, I'm almost not on the phone much. I try to be aware of what they are doing or listen to them. Or if they approach me and I see that they want to tell me something, I try to talk to them. (P7, 59 yrs)

Community

Mothers viewed the community as an avenue of potential support for mental health programs for children. Mothers perceive the Latino community to be especially receptive to uniting and joining to address specific causes within their community. Participant 5 explains “well look, the community is very helpful because it is organized. No, it's more Latinos are more organized and there are centers. For example, to help with drug addiction, with domestic violence, so if the community joins it helps (P5, 52 yrs).”

Overall, mothers suggested involvement in group-based activities, whether it pertain to physical activities or creative ones in order to refrain from negative thought-processing. Participant 8 explains, “they can do more socializing, they can do more activity groups to at least to distract

them, their minds, sports might help (P8, 27 yrs).” Similarly, Participant 10 explained activities in relation to the intrinsic interests of the child, “they should do something else so that they are not in the house thinking things that they should not. My eleven-year-old likes to play the guitar. They too should do what they like, so that they don't think of nonsense they shouldn't think about (P10, 35 yrs).” Behavior adoption is tied to intrinsic interest, thus satisfaction of mastery and perceived performance achievement of that specific behavior increases self-efficacy. However, mothers who have sought activities previously in their community expressed concerns of limited available programs. Participant 7 explains, “my daughter has shown a lot of interest in drawing, until now, I can't find many places to send her to (P7, 59 yrs).”

Catholic Church

Faith-placed interventions were viewed as more compatible as these spaces already share the same social support values, have hosted health programs in the past, and are easily accessed spaces. SCT dictates that increased facilitators and reduced barriers in the environment may increase adoption and maintenance of PA. The majority of participants viewed the Catholic Church as part of their community, Participant 11 explains “the church is part of the community, practically, they have a voice inside the community (P11, 42 yrs).” Similarly, participant 5 explains that priests are respected thus are a good avenue of support, “because a lot of people go to church and listen to what the Father says, then it would be a good medium to involve sports and more (P5, 52 yrs).”

Faith-places were viewed to facilitate mental health support as social support is viewed to be aligned with the mission of the church and their social beliefs. For example, as Participant 6 described the need for support specifically from the Catholic community to combat depression in terms of love for ones neighbors, “more so, the Catholic Church than the community, for the

same reason that [the Catholic Church] is about love of thy neighbor, we know that we have to help each other (P6, 36 yrs).” Participant 8 explains how they should help each other a bit further.

[the Catholic Church] should promote more clubs for kids or adults that are having suicidal thoughts or depression, so they don’t feel alone and they know that there is other people around them. Especially coming from a Catholic Church. (P8, 27 yrs)

Additionally, mothers believe faith-places to be supportive of health and mental health as these places have previously hosted health programs with doctors and nutritionists during parent meetings at the church while children are in catechism classes. Participant 10, mentioned compatibility and described how previously doctors had held screenings at the church, “a while ago there were some doctors so that if you want to have a cholesterol test or something like that, many times they invite them when the catechism is over (P10, 35 yrs).”

Mothers mentioned that their current ties with the Catholic Church were based on family traditions and attending church is currently part of their weekend routine. Mothers also talked about increased attendance at church as their children were beginning to prepare for church sacraments. As Participant 10 explained, “I did not frequently assist until my daughter began catechism in preparation for her first communion (P10, 35 yrs).” Similarly, P11 explains “I believe it [church] is one of the activities I most frequently assist in. I go Saturday and Sunday for parents classes and mass (P11, 42 yrs).

1.4 DISCUSSION

Our study aimed to explore the thoughts, perceptions, and acceptability of Latina mothers on a yoga intervention for adolescent Latinas. In our sample of Latina mothers, the majority had not practiced yoga. Yoga was viewed as a method to ease thoughts in the mind, depressive symptoms, and an avenue of physical and mental activities to regulate self-hindering thoughts.

Perceived barriers to mental health included lack of coping skills, negative influences from social media, and lack of involvement in physical or mental activities. Additionally, family relationships were perceived to be the root of depression within Latina youth, stemming from lack of communication in their families. Thus, mothers proposed social activities to reduce self-hindering thoughts and fostering good family relationships with effective communication. Unfortunately, mothers viewed Latino parent's daily work and household routines as a barrier to the controllability of the health of their children. However, they viewed faith-places as avenues to support these activities because faith-places provide social support, promote health activities, and are accessible spaces.

Our study contributes to the limited research on yoga's acceptability within the Latino community for depressive symptoms and highlights opportunity, need, and suggestions for future interventions. Our data suggest Catholic Latina mothers perceive yoga as an acceptable form of PA for adolescent Latinas with depressive symptoms. Mothers perceived that yoga had relaxation abilities of the mind and body that could aid in reducing negative thought patterns and suggested the need of such activities. Yoga can be a PA and mental activity, as studies have found interventions with meditative and mindfulness components had greater reductions on depressive symptoms than yoga without (Cramer et al., 2013; Macy et al., 2018). Although studies on mindfulness and meditation techniques on depression symptoms are limited, one study found that yoga and meditation in adolescents helped improve levels of concentration, attention, and emotional self-regulation abilities (Wisner et al., 2010).

In general, Latina mothers showed interest in participation in yoga in Spanish. However, one participant did not hold interest in yoga or meditation. We speculate that since Participant 12's first yoga experience was through a DVD in English; the language barrier and lack of in-person

delivery method may have influenced the perceived level of difficulty. A meta-analysis by Conn 2010 on PA interventions and depressive symptoms found that an in-person delivery method had a greater effect at lowering depressive symptoms than screen-delivered. Furthermore, Middleton et al. 2017 found novice Latino adults with arthritis had increased levels of self-efficacy when achieving yoga postures when bilingual yoga classes were offered (Middleton et al., 2017). Future interventions may take into consideration language and in-person delivery to reduce potential barriers.

Mothers perceived social media as a barrier and a negative influence to the mental health of Latina youth. Studies have found low self-esteem in youth with depression as social media tends to be used in a maladaptive way, such as through social comparison (Nesi & Prinstein, 2015). Individuals with depression are more likely to de-evaluate themselves through social comparison and reducing self-efficacy (Bandura, 1991). With proper guidance, yoga may have the ability to help increase self-efficacy in individuals with depression to reduce symptomatology and in time, help regulate negative thought patterns through attention and emotional regulation.

Within our sample, mothers placed high values on social support from the family and the community, and viewed the Catholic Church to be a suitable avenue to help Latina youth with depression. In terms of health, mothers reflected on their inability to support the health behaviors of their children due to lack of time. Similarly, Styles et al. 2007 found mothers of Latino adolescents with obesity were concerned about not having enough time to help adopt a healthier eating behavior (Styles et al., 2007). Mother's viewed the U.S Latino family-working lifestyle as a barrier to the health and mental health of Latino children. As Latinos are more likely to work in lower income jobs and more hours than non-Hispanic whites (Leach, 2014), they may have less time to spend with their children. However, mothers suggested Latina youth with depression

would benefit from group activities hosted in faith-places as these spaces provide social support and are already being accessed during their weekend routine, thus increasing acceptability and reducing perceived barriers of lack of time.

Furthermore, in our study, Latina mothers perceived the church as part of their community and similar to other studies, viewed priests as important figures of support (Bopp et al., 2011; Schwingel & Gálvez, 2016). Mothers viewed the importance of community as social support and perceived the church to provide the sense of community and social support. Mothers suggested group activities of either physical or creative forms to help reduce depressive symptoms. As adolescents are beginning to cope with different stressors associated with teenage life, social relationships with peers begin to heavily influence identity and self-esteem (Nesi & Prinstein, 2015). Thus, providing a safe environment in which positive relationships with peers are fostered may be beneficial in providing support. In a study on adolescent youth with depression, perceived support from peers had similar protective effects as family support (Fredrick et al., 2018). Religiosity and familism have been found as protective factors against depression and suicide within the Latino community (Silva & Van Orden, 2018). However, within our study Latina mothers perceived lack of communication within families as increasing risk of depression of Latina youth and suggested strategies to help improve communication. Similarly, other Latina mothers have suggested improving communication within the family for Latino youth with depression (Ford-Paz et al., 2013). Previous studies have found depression to be negatively correlated with familism in the Latino community (Keeler et al., 2014; Rivera et al., 2008). Therefore, when designing an intervention for Latina youth with depression, including social support from peers and improving family communication may be beneficial to help reduce depressive symptom outcomes.

Furthermore, our sample of mothers viewed the need of a resilient ideology to help cope with depression. Resilient ideology is a common viewpoint in Latinos, Cardoso & Thompson 2010 found U.S Latino immigrants to have greater levels of resilience through the preservation of cultural and ethnic identity (Cardoso & Thompson, 2010). However, U.S Latina youth may be at greater risk of depression with increased acculturation, as it has been associated with disintegration of cultural values and increased family conflict (Lorenzo-Blanco & Unger, 2015). Therefore, future interventions should include cultural components to preserve Latino cultural identity within faith-placed PA interventions to further reduce the risk of depression in Latina youth.

The present study had several strengths. First, the study used a semi-structured interviewing method with a SCT lens to gain perspectives on elements to consider when designing a PA intervention for Latina youth with depression. Second, this study included a bilingual and bicultural research team that allowed for the preservation of meaning during analysis. Finally, our study adds to the limited body of research examining the acceptability of yoga among Catholic constituents in a faith-place. A limitation of the study included the small sample size and the limited knowledge of yoga among the participants. The majority of mothers had not practiced yoga and had limited knowledge of yoga, thus they may have not recognized a potential religious conflict. Therefore, it might have affected their perception of acceptability of yoga. Yet, it is important to note the initial perspectives of yoga based on current knowledge of participants to gain valuable perspectives for the design and acceptability of future faith-placed interventions.

In sum, Catholic Latina mothers viewed yoga as an acceptable form of PA to reduce depressive symptoms. Faith-places were also viewed as community infrastructures that provide support and

promote health. Family communication was also strongly recommended as a strategy to include in future interventions for Latina youth. Based on our findings, we suggest future PA interventions for Latina youth use a multi-prong approach that include culturally tailored yoga with meditation, hosting yoga in a faith-place with support of priests, and including an education component aimed to improve communication within the family.

1.5 TABLES

Table 1.1 – Demographic Characteristics of Participants, N (%) or Mean (\pm SD)

Characteristic:	All Participants N=8
Age of Mother, years	42.25 (\pm 10.03)
Age of Eligible Daughter/s, years	11.5(\pm 2.81)
Country of Birth:	
United States	1 (12.5%)
Mexico	7 (87.5%)
Years living in the U.S	23.5 (\pm 4.95)
Church attendance	
Less than 1x/ month	4 (50%)
More than 1x/ month	4 (50%)
Employment Status	
Full time, >35 hrs	4 (50%)
Half-time, < 35 hrs	2 (25%)
Full time homemaker	2 (25%)
Annual Household Income:	
Less than 15,000/year	3 (37.5%)
\$15,000- 40,000/ year	1 (12.5%)
Greater than 40,000/ year	3 (37.5%)
Prefer not to answer	1 (12.5%)
Marital Status:	
Married or Living with Partner	6 (75%)
Single	2 (25%)
<i>Health-related demographics</i>	
Self-reported BMI	29.5 (\pm 5.23)
Perceived Health Status	
Excellent	0 (0%)
Very good	1 (12.5%)
Good	5 (62.5%)
Fair	1 (12.5%)
Poor	1 (12.5%)
Physical Activity Status:	
Active	7 (87.5%)
Not Active	1 (12.5%)
Current Smoking Status:	
Yes	0 (0%)
No	8 (100%)

SD: Standard Deviation.

BMI: Body Mass Index (kg/m²)

Physically Active: Regular engagement in PA for at least 3 days per week for at least 30 minutes for the last 3 months.

Table 1.2 –Emerging themes from Latina mother interviews

Theme	Quotation
<p><i>Perspectives of yoga</i></p>	<p>“It’s more like body postures, relaxation. You know mind, just not think of anything, just yeah you know, like more relaxation (P8, 27 yrs).”</p> <p>“Consists of doing movements or postures, it helps maintain flexibility in the body and also with respiration. Practicing deep breathing helps give awareness to one’s own body to relax it (P7, 59 yrs).”</p> <p>“Well, I think yoga is basically a moment where it requires meditation. Which I don’t do, well that’s what I think it is, a moment of relaxation. Mainly relaxation, meditation, [and] concentration (P11, 42 yrs).”</p>
<p><i>Perceptions of health; Health-behaviors, Depression, and barriers to mental health</i></p>	<p>“Health is involving yourself in things that are positive, like exercise, and trying to eat clean because then one doesn’t feel good. You feel yourself with low energy when you don’t take care of your health, if you don’t stay active. You are more likely to feel more vulnerable more weak (P7, 59 yrs).”</p> <p>“I believed that depression did not exist. That it was a thing, well an erroneous thing. But unfortunately there has been a lot of things with depression and well, I believe that anyone can have it (P9, 43 yrs).”</p> <p>“Well, when they are at that age they believe that every problem is more than it is. And I believe that sometimes it is difficult to deal with them at that age, for example, I scold at my 16 year old daughter sometimes and I feel bad because I remember my niece. But you also have to tell them what is right and what is wrong. And in those moments, don’t just say I love you very much, but demonstrate it. For example, in the things that they get involved and you being present and that.... I don’t think words are necessary but presence is. I think that in this country, you sometimes place work as a priority, and they [children] think that, that is pretext that they don’t love them or don’t matter to them (P10, 35 yrs).”</p>
<p><i>Sources of support; Family, Community, and the Catholic Church</i></p>	<p>“I believe that having more communication, practically getting her out, encouraging her to participate in an activity, or a trip to the Church, the school, with the family (P11, 42 yrs).”</p> <p>“They need group activities with the motives of them going out, getting out of the routine, that isn’t studying but rather something a little more like exercise or going out to explore, clean streets, to become responsible in a different form? Or clean a park...like community service, so everyone can put in their grain of sand (P6, 36 yrs).”</p> <p>“I think that the Church isn’t only about giving a blessing and talking about helping. Because the community is part of the Church, they should open their spaces because a lot of people go to church and listen to what the Father says, then it would be a good medium to involve sports and more (P5, 52 yrs).”</p>

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