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Pepperdine University
Graduate School of Education and Psychology

A MANUALIZED PARENT PSYCHOEDUCATION AND NUTRITION PROGRAM AND ITS
IMPACT ON A SENSE OF COMMUNITY: A PILOT STUDY

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology

by

Nahaal Binazir

June, 2019

Judy Ho Gavazza, Ph.D., ABPP, CFMHE - Dissertation Chairperson

This clinical dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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ABSTRACT

Parenthood is an experience that is both joyful and anxiety provoking. Amidst a number of pressures, new parents may encounter depressed feelings, consistent anxious thoughts or various other stressors. These factors can also lead to the development of poor nutritional habits, which further exacerbate psychological symptoms and can create a destructive cycle in their lifestyles. Research indicates that one's sense of community (or conversely social isolation) can further impact parental experiences - which include one's sense of competence, affect directed towards their children and their overall satisfaction. In considering this, a quantitative and partially qualitative pilot study was conducted to evaluate the development of a manualized program providing both nutritional and psychological support to parents in a group format. It was hypothesized that parental sense of community would increase following engagement in one session of the program, that parental stress is negatively correlated with a sense of community, and that feelings of self-reported parental depression are negatively correlated with parental sense of community. The implications for future program development are explored - particularly in considering how these results further inform development of parental manualized treatment and how understanding about providing parental psychoeducation can advance.

Keywords: Parents/caregivers, psychoeducation, manualized treatment, limited access, nutritional knowledge, mental health, sense of community, parental self-efficacy.

Introduction

The Challenges of Parenting

Parenthood is a process that engenders innumerable rewards and challenges – physically, mentally, financially and emotionally. While becoming a parent generally represents a significant period of joy, it also presents novel psychosocial stressors – stressors that undoubtedly influence one’s financial status, sleeping patterns, relationships with significant others, and overall wellbeing (Miller & Solie, 1980). Its impact on wellbeing includes both physical and mental health, as the new parenting role can unearth symptoms of depression and other common stress responses (Petch & Halford, 2008). Extant literature has demonstrated that between 10-15% of mothers experience or are at risk for developing nonpsychotic postpartum depression following delivery, and this is not accounting for other stressful life events that may occur during pregnancy and within the postpartum timeframe (Cutrona & Troutman, 1986; Horowitz, Murphy, Gregory & Wojcik, 2010; Seng et al., 2014). In addition to this, the prevalence of Postpartum Posttraumatic Stress Disorder (PTSD) ranges from 1% to 30% according to existing studies, with averages for pregnant women identified to be at approximately 8% (Grekin & O’Hara, 2014; Seng et al., 2014). Extant research has also indicated that postpartum PTSD demonstrates comorbidity with one third of postpartum depression cases, and that these two postpartum states demonstrate significant associations with impaired bonding with their newborn infants (Seng et al., 2014).

The existing challenges of parenthood, including potential mental health struggles, undoubtedly exercise an impact on a parent’s sense of competence and their perceived self-efficacy as well. Parenting self-efficacy has been defined as a parent’s perception of their own competency, as well as their beliefs about their capacity to positively impact both their child’s development and behaviors (Coleman & Karraker, 2000). While higher parental self-efficacy is associated with higher capacity to cope with challenges - which in turn leads to feelings of mastery and success as well as a reduction of negative emotional responses in response to these stressors - lower self-efficacy is related to higher anxiety in response to

stressors or complete avoidance of challenges, lower self-confidence as a parent, and stronger associations with feelings of parental failure (Weaver, Shaw, Dishion, & Wilson, 2008). Higher parenting efficacy has also been identified as key to responsive parenting, and stronger feelings of parental self-efficacy have been associated with perceived capacity to be responsive and supportive as parents, which is central to building strong parent-child attachments (Gondoli & Silverberg, 1997). Parental self-efficacy has also demonstrated associations with overall feelings of satisfaction as a parent (Coleman & Karraker, 2000). In considering the stressors that impact one's parenting experience - in addition to other life and environmental stressors - it is crucial to consider interventions that address this parental stress and provide necessary psychoeducation and support to parents during this vital and sometimes tumultuous period in their lives.

The Influence of Socioeconomic Status as a Parental Stressor

In addition to existing challenges, being of a lower socioeconomic status (SES) presents added pressures and particular challenges that further impact one's parental self-efficacy. Extant literature indicates that parents of lower SES utilize more resources, energy and time in trying to feed and nurture their children (Lareau, 2011; Leidy, Guerra & Toro, 2010). This pattern is substantiated by the family stress model (FSM; Conger & Donnellan, 2007), which postulates that economic stressors are positively related to parental stress, in turn giving rise to compromised parenting quality. Economic strain is often accompanied by a lack of access to necessary transportation, food, and consequently an overreliance on external organizations for resources such as food stamps, income and other daily needs (Lareau, 2011). This reliance on external resources renders daily parental tasks as more taxing, convoluted, and labor intensive (Russell, Harris & Gockel, 2008) and thus marks a fundamental inequality in parental stress based on inequality of resources. For lower SES parents (in accordance with the FSM), the negative impact of daily tasks (such as providing nutrition, for example) is more substantial, leading to an increase in psychological distress including symptoms of depression and anxiety, family dysfunction, and consequently the

potential of nonoptimal parenting and a lack of support (Crul & Doornik, 2003; Emmen et al., 2013).

With reference to nutritional access in particular, there is a high prevalence of food insufficiency in lower-income households, despite the abundance of food and elevated levels of food wastage in the United States. One in three children in the U. S. live in households without appropriate money or resources to access adequate food and are deprived of necessary nutrients. This in turn has a detrimental effect on their physical health outcomes, with hungry children experiencing minor health problems such as dizziness, colds, unintended weight loss, fatigue, headaches and ear infections more frequently than their nonhungry counterparts (Casey, Szeto, Lensing, Bogle & Weber, 2001). Other lower-income families have access to sufficient food, but lack access to healthy foods and appropriate nutritional knowledge. This disparity in access has also naturally lead to discourse about destructive dietary patterns and risk factors for both chronic diseases and obesity in lower SES families. In exploration of health disparities across communities and access to resources, both local and national research have proposed that lower income and rural neighborhoods are severely impacted by limited access to healthy food and supermarkets, however are overwhelmed with a plethora of options in fast-food chains and unhealthy but convenient options (Larson, Story & Nelson, 2009). Thus, there is understandably a pressing need for interventions formulated to also support equitable access to healthy food and nutrition knowledge for these families (Larson et. al, 2009).

These factors inevitably have implications for the development of interventions implemented with this population. Too often, parenting classes, therapy and programs do not adjust their services in order to consider the different social, contextual and economic circumstances that parents experience (Zilberstein, 2016). The lack of consideration for their needs has demonstrated poor outcomes for psychotherapy services with parents from impoverished households, with lower SES parents experiencing the lowest level of satisfaction and support from existing parenting programs (Leijten, Raaijmakers, Orobio de

Castro, & Matthys, 2013), which thus fuels higher program attrition rates. Parents of lower SES also often exist in a community of family members and other support systems that provide vital aid and assistance for them, which is not always considered by parenting programs (Lareau, 2011). In addition to socioeconomic factors, there are various other factors that need to be considered when developing a parenting program in such a multicultural population. Bacallao, Smokowsky & Rose (2008) explored levels of acculturation between children and parents (with acculturation measured through cultural conflicts, experiences of biculturalism, discrepancy between the level of acculturation between child and caregiver, and levels of involvement both in U.S. culture as well as their culture of origin in these studies) and its impact on the family environment, including conflict, attachment, importance of the family and overall familial cohesion. Studies indicated that when acculturation conflict was experienced by a parent, this negatively impacted relationships within the family and increased conflict between parent and child (Bacallao et al., 2008; Dennis, Basañez & Farahmand, 2010). It is thus necessary to consider levels of acculturation and how this impacts parenting practice and sense of parental competence as well.

Research thus urges evaluators, clinicians and program implementers to consider these contextual elements when developing programs and classes for parents, rather than focusing solely on interventions aimed at an individualistic level. There is a need for programs to increase access to both social and material assistance, which encompasses both a community of support as well as practical knowledge and skills (Pelton, 2015). Existing studies have also identified that many service plans often burden parents with programs and interventions that feel inaccessible, overwhelming, or out of line with the parents' values, circumstances and priorities (Russell et al., 2008). Therefore, there is impetus for interventions focused on capturing the views and needs of lower SES parents, and adapting intervention programs accordingly (Eve, Byrne & Gagliardi, 2014). Based on current literature, this indicates the need for programs that address psychological needs,

provide a community of support, but also reinforce material and practical skills such as nutritional knowledge and access to nutrition.

Sense of community

In considering their lack of access to resources and the importance of existing within a community for parents of lower SES households, developing support systems and a sense of community support is vital, in addition to exploring its impact on their parenting experiences. Families from lower SES households have limited access to psychological support services and also have difficulty consistently obtaining goods for basic needs without external support. Despite research suggesting that lower income parents prefer to organically function in a network or community of family members and other support systems, it is also common to have relatively reduced contact with important communities and support systems (Jensen, 2012). Undoubtedly, a strong sense of community is important to all parents; but perhaps especially so among parents experiencing additional stressors of lower income and higher financial burden.

The term *sense of community* encapsulates themes of collective identity, emotional attachment, and feelings of belonging to something greater than oneself. It is also identified as the extent to which one feels a member of a group and their confidence that they are openly accepted by the collective, which in turn facilitates a stronger sense of belonging (McMillan, 1996). It also describes the strength of attachment that one feels to their community, whether this takes the form of a physical entity such as a neighborhood, or a functional entity such as a psychotherapy group (Davidson & Cotter, 1991). A sense of community includes components of *membership*, which involves feelings of safety, belonging and identification with others; *influence*, which encompasses one's agency in having influence over their community and receiving influence in return; *integration and fulfillment of needs*, such as physical and psychological needs being met; and *shared emotional connection*, which involves positive feelings towards one's community (McMillan & Chavis, 1986). In exploring this concept within educational groups, it has demonstrated direct positive

correlation to higher levels of persistence and lower dropout in programs (Kim & Kaplan, 2004; Tinto, 1993). This is further supported by studies which - in addition to endorsing its impact on increased commitment to group goals, higher motivation, stronger learning and satisfaction - also indicate that those who feel a sense of community are more likely to retain information that is being learned in collective spaces (Rovai, 2002). Hill (1996) and Rheingold (2000) reinforced researchers to systematically study this concept in various settings and environments in order to understand its nature and its contribution to learning spaces as well as spaces of support.

Questions arise concerning sense of community and parenting when acknowledging the vast cultural differences in childrearing, as many families and cultures value aspects of collectivism and extended familial assistance. Escandon (2006) emphasized the existence of an intergenerational caregiving model which demonstrates strong influence and positive impact of extended family on parenting in Mexican American families. Leidy et al. (2010) identified themes that impacted effective parenting and family cohesion amongst immigrant Latino parents in California. Their focus groups indicated that, amongst other factors, acculturation gaps (the power reversal experienced as a result of children acclimating and learning customs of newer cultures at a faster rate than their parents, thus rendering parents to feel less effective and in control), being less involved as a decision maker in their children's education due to language barriers, loss of their extended family unit due to migration and prejudice related to immigration status all reportedly impacted their perceived parental competence and their attachments to their children. These studies recognized the function of extended family as not only integral to child care assistance, but also in providing support, guidance, accompaniment and counsel. Thus, in order to fill this void, they urge interventions to build communities and networks of social support for immigrant families in particular (Leidy et al., 2010). Other studies indicated that children living in extended families are less likely to be living in significant poverty, and as such the aforementioned SES factor

(in addition to the extended family factor) must be taken into account when exploring parental stress and competence (Mutchler & Baker, 2009).

Sense of Community and Wellbeing

In considering this concept of sense of community and its impact on parental health and wellbeing, extant research also suggests strong connections between sense of community and both psychological and physical health - at the individual and group level (Pretty, Bishop, Fisher & Sonn, 2007). A sense of isolation and lack of community connection can render negative physical and psychological outcomes, likely due to the limited emotional attachment, low support from others, and the lack of identity normally associated with feeling part of a larger community (Pretty et al., 2007). Not surprisingly, social engagement and cohesion have been identified as vital for collective health (Berkman & Glass, 2000). Extant literature demonstrates that not only do a sense of community and social support play a vital role, but in many cases can be elements that bolster longevity, as they can mediate and moderate socioeconomic disadvantage, health disparities and difficulties related to being from a lower income community (Berkman & Glass, 2000). In exploring the effects of certain social factors (social support, sociability, collective capacity and efficacy) in a cross-sectional sample of urban adults, collective efficacy has been identified as a critical social factor in relation to health outcomes (Browning & Cagney, 2003). Collective efficacy—which encompasses both social cohesion and connection in addition to efficacy—has demonstrated a negative correlation to poor self-related health, with a two standard deviation increase in the collective efficacy scale demonstrating a 27% reduction in reported poor self-rated health for adults (Browning & Cagney, 2003). Furthermore, literature has indicated that low levels of social support is one of the most powerful predictors of depression and anxiety in mothers (Boyd, 2002).

Extant studies have also demonstrated that a sense of community attachment is negatively related to depressive symptoms, and thus can act as a significant protective factor, particularly in women of historically marginalized populations (Cutrona, Russell,

Hessling, Brown & Murray, 2000). In studies exploring its relation to physical health, 60% of variance in cardiovascular mortality and morbidity was not accounted for by more traditional physiological risk factors, and social determinants such as sense of community were identified as bearing influence on that variance (as social factors are not often considered in relation to physiological health; Syme, 2000). In an immigrant sample of cardiac rehabilitation patients, one such study identified that more typical rehabilitation interventions solely focused on education, nutrition and physical activity were limited and proved not to be the most effective aspect of the program (Scuderi, 2005). Per participants' reports, social engagement and contact with those who shared experiences were most vital, as well as holding significant roles and engaging in meaningful activities inside or outside their families. This research speaks to the need for increasing a sense of community as it optimizes the effects of programs that incorporate psychoeducation and skill building to improve psychological and physical health.

The Impact of a Sense of Community on Effective Parenting

A strong sense of community can also impact a parent's child rearing practices and their ability to foster positive child development. Parents living in isolated settings worldwide have experienced a number of barriers to accessing medical, mental health and other relevant services that provide support (Louc & Quill, 2000). Feeling a sense of community impacts the quality of child rearing practice, as social isolation from one's community has demonstrated a positive relationship with child maltreatment. In addition, mothers who engage in reported maltreatment also report negative and disconnected feelings towards their respective communities, more so than the attitudes and feelings of parents who are engaging in what is described as more effective parenting (Gracia & Musitu, 2003). Research also suggests that mothers are more likely to experience this social isolation and disconnect from communities of support, in addition to compromised self-esteem and confidence, increases in depression, anxiety and physical health complications in response to increased parental stress (Johnston et al., 2003). This stress, without sources of social support or

connection to other parents, is also related to what is referred to as more hostile and rejecting parenting behavior (Colletta, 1979), which may indicate a feeling of overwhelm and struggles in coping. Research indicates that feeling a higher level of social support from others is related to more positive interactions between mother and child, as well as to increased reported marital satisfaction from mothers (Colletta, 1981; Green, Furrer & McAllister, 2007; Wandersman, Wandersman & Kahn, 1980). Studies have reinforced that a decrease in stress demonstrates an increase in positive affect transmitted from parent to child (Green et al., 2007; Telleen, Herzog & Kilbane, 1989). The need for community support and connection with other parents is illustrated by data suggesting that mothers are more prone to communicate frustration and disempowerment by rejecting their children as a result of feeling disconnected from other adults. This is a result of missing the assistance, validation and support of other adults in their experience of parenthood and childcare, causing their isolation to be exacerbated by the experience of constant and intense interaction with solely their children (Parke & Collmer, 1975). This in itself indicates the need for parents to have “breaks” and networks of parents with whom they can develop supportive environments, thereby recognizing that they are not isolated in their struggles. Research also demonstrates a relationship between higher socioeconomic status and higher tendency to engage with social and formal support services (Gracia & Musitu, 2003), thus it is also necessary to consider how SES impacts parents’ reliance on informal communities of support, and how formal programs can be made more accessible and reduce their barriers to access.

Factors Impacting a Sense of Community

Given evidence of the impact of a sense of community on both parental and child functioning, it is important to also examine which variables influence one’s sense of community, and as a result how interventions can improve it. Neighborhood characteristics and socioeconomic disadvantage are undoubtedly such variables. While many would perceive a psychological sense of community as a solely protective factor, emergence of literature also demonstrates varying perspectives. Some research has indicated that mothers

from more economically disadvantaged neighborhoods that they characterized as dangerous found it more adaptive and protective to have a lowered psychological sense of community (Brodsky, 1996). Due to finding their communities to be unsafe and unreliable, they felt they could protect both themselves and family members by isolating, as identifying and depending on their neighborhoods would negatively affect their wellbeing and lifestyle. This is certainly not the reality in every lower income neighborhood for parents, however must be considered in how the economic and material reality of a community affects a parent's sense of community, and how this can be differentiated through psychoeducation from the need for constructive and positive communities of support.

Interventions for Improving Sense of Community

As also indicated by research, a sense of community can act as a strong protective factor; individually and collectively. It is thus indispensable to focus efforts on trying to improve and increase the sense of community that parents feel with interventions. While this may be the case, there is a paucity of research and programs explicitly focused on increasing parental sense of community, and limited documented impact of such programs. There are, however, a myriad of parental support and psychoeducation programs for parents - though exploration of their effectiveness in relation to sense of community and other positive effects of these family support programs has been limited (Weiss & Jacobs, 1984, 1988). Family support programs have ranged from parent-child components of Head Start programs to primary prevention providing parent education to Parent-Child Centers (Telleen et al., 1989). Research that has explored the effectiveness of family support programs in the form of both support groups and psychoeducation groups for parents indicates decreases in both feelings of social isolation and parental stress for parents involved in 3-month family support programs (Telleen et al., 1989). Studies have aimed at increasing social support through not only emotional support and engagement with other mothers, but through providing important information in relation to potential services and referrals, assistance with nutrition and other material needs such as clothing, and guidance on everyday parental tasks such as shopping

and other aspects of childcare (Barrera, 1981). While research indicates that parent support groups have demonstrated a decrease in social isolation and increase in social support in general, more intriguing findings indicate that significant decreases in parental social isolation have occurred more frequently in groups with highly structured curriculum and manualized parental education groups such as STEP. This suggests that the experience of collaboration with other parents towards solutions concerning their parenting struggles (whether in a highly structured psychoeducational format or unstructured format) reduces feelings of social isolation and increases one's perceived social support and sense of community (Telleen et al., 1989). Such findings indicate that exploration of structured parental psychoeducation groups in relation to parental sense of community and social support is a study worth pursuing.

The NAPS Program

The NAPS (nutritional and psychosocial support) program was developed as a pilot study in response to the needs and issues affecting families within the community. This program includes integration of both mental health and nutritional education in order to encompass full psychosocial support for its participants. Implementation of the program was conducted through sponsorship from a Provost award and a partnership between Pepperdine University's Psychology department, the Pepperdine Seaver College Nutrition department and Women, Infants and Children (WIC). WIC are specialized nutritional programs and national centers that focus on providing services to improve nutrition related knowledge and behaviors in mothers and children of low-income populations. The target sample thus comprised parents of lower socioeconomic status and those currently receiving WIC benefits. While WIC provides subsidized programs for nutrition in order to improve health outcomes, they neither possess the staffing nor the funding to support parents with the mental health components of psychosocial support.

Based on the existing need for both mental health and nutritional support, but currently only possessing the resources for nutritional education, the program aimed to

partner with WIC in providing services equally focused on nutrition and psychoeducation. The focus of the program's development consisted of components aimed at stress reduction, increasing self-efficacy and optimizing the participants' mental health. An identified overarching goal was to assist parents in feeling they have the competency and skills necessary to cope with their life demands in relation to both physical and mental health after participating in the program.

The NAPS program structure involves six different modules - each module encompassing a topic that is relevant to the needs and challenges facing newer parents, based on review of extant parenting literature and research. The modules are divided into: (a) *Making healthy habits*, focusing on exploration of how participants' habits affect their lifestyles and promoting contemplation of change; (b) *Stress Management and self-care*, exploring self-care practice and how to create personalized self-care plans to use on a daily basis; (c) *Organize your life*, focusing on creating time management and other techniques to gain a greater sense of organization and control over their daily lives; (d) *All about mindfulness*, focused on practicing mindful eating activities that assist them in gaining a stronger understanding of mindfulness practice; (e) *Changing negative thinking*, focused on identifying thought traps and practicing defusion techniques in order to change negative thinking patterns that may negatively influence their wellbeing and efficacy as parents; and (f) *Getting what you want*, in which participant explore the elements of assertive communication skills and practicing this assertiveness to gain more of what they want and need out of their daily lives.

The theoretical underpinnings that informed the module development and techniques comprising each session included a Cognitive-Behavioral Therapy (CBT) model, Dialectical Behavioral Therapy (DBT) model and also incorporation of mindfulness components. The CBT approach is an evidenced based model which draws from traditional behavior modification as well as cognitive therapy, and concerns itself with the connections between thoughts, emotions, behaviors and consequences that we engage in and experience (Beck &

Fernandez, 1998). CBT's foundation provides participants with psychoeducation to assist them in gaining the necessary tools and skills to recognize and control their thoughts, emotions and consequent behaviors, as well as promoting cognizance of their beliefs about themselves and the world, and how these influence the aforementioned elements (Wyatt & Seid, 2009). Examples of CBT techniques include relaxation techniques such as breathing exercises and progressive muscle relaxation to promote coping with overwhelming emotions, and cognitive restructuring, which involves identifying maladaptive thoughts or *cognitive distortions* by challenging them with alternative evidence in order to lessen their impact on our functioning and our views of the world (Beck & Fernandez, 1998). The DBT model is one which draws from literature in emotions, learning, social influence, emotion-focused and person-centered therapies as well as Zen Buddhist principles to integrate both commitment to change as well as acceptance of what cannot be changed in the present situation (Herbert & Forman, 2011). Examples of techniques include experiential exercises that promote acceptance to change, such as cognitive defusion (methods that assist individuals as recognizing a thought as a thought and nothing more) and mindfulness meditation practice to foster higher levels of acceptance (McKay, Wood & Brantley, 2007). Mindfulness draws from meditation practice and encourages participants to pay attention to their experiences in the moment, increasing their sense of intentionality and conveying the importance of experiencing each moment in a nonjudgmental manner (Kabat-Zinn, 2003). An example of mindfulness is drawing from techniques of Buddhist tradition and engaging participants in a nonjudgmental meditation where they can experience the current moment, and which promotes aspects such as decentering - an individual's ability to observe their emotions and thoughts in the moment, recognize these as temporary experiences in their minds, and not necessarily as absolute truths about themselves or of the world (which is closely linked to cognitive distortions; Herbert & Forman, 2011). Through meditation practice, mindfulness provides a tool to direct an individual's focus inwardly and allows them to engage in inner exploration and self-awareness.

The modules are implemented in a manualized format—to ensure both consistency of techniques being applied as well as to ensure treatment fidelity from its facilitators.

Manualized treatment is an integral component of treatment integrity and fidelity that not only ensures consistent delivery of treatment but provides clinicians with necessary direction and protocol in applying treatment (Waltz, Addis, Koerner & Jacobson, 1993). The use of manuals, as well as supervision thereof, increases the likelihood that treatment will be implemented as intended and contribute to a higher consistency of treatment across contexts—in collaboration with the clinician or facilitator's competence and skills. Failing to deliver treatment with a high level of adherence to protocol compromises evidence-based practice and negatively affects our ability to assess treatment outcome evaluations, and the development of manualized treatment presents as a means to rectifying this issue (Gearing et al., 2011). Both consistency and higher levels of quality and accuracy in treatment delivery (as well as high levels of internal validity as strengths of manualized interventions) characterizes programs that identify the core elements to be delivered across contexts, but continue to adapt accordingly to include cultural, contextual and other characteristics that will influence the intervention (Santacroce, Maccarelli & Grey, 2004). In summarizing extant treatment fidelity research, the manualization of an intervention's core strategies and active ingredients for dissemination are necessary in studies exploring the effectiveness of treatment interventions, due to their preservation of consistency across delivery (Luborsky & DeRubeis, 1984).

In addition to manualized treatments facilitating high consistency in treatment, a highly structured approach is identified as beneficial to parents in retaining vital information and using their skills. This could be in part due to manualized treatment providing delivery of consistent sets of skills in a similar order and utilization of terms and language that are tailored to participants, but consistent across treatment (Santacroce et al., 2004).

The program was developed to be deliverable by either professionals or para-professionals, and in this pilot study was led and delivered primarily by Psychology and Nutrition students. This was optimal in not only creating the space for students to train and develop treatment competence in its delivery, but also increased the accessibility of the program itself, as having flexibility in facilitators allowed for a stronger pool of resources (in considering that students or other facilitators will theoretically be more readily available than professors or licensed professionals).

The Pilot Study Phase

The pilot study phase is an indispensable step that occurs before implementing full scale treatment effectiveness research to identify the study's relevance and practicality. It involves the application of an intervention to determine its feasibility, and to appropriately identify and address modifications where necessary prior to a larger scale study. They are used for a number of purposes, including tests of procedures, exploring validity of instruments being used, and better approximating rates of recruitment, retention and dropout, as well as providing insight into better methods of how to address these factors (Arain, Campbell, Cooper & Lancaster, 2010). The pilot study involved two separate samples and groups that ran concurrently. The first employed a cohort model that ran on a weekly basis for six sessions - expecting participants to attend all six sessions, while the other took a monthly drop-in format for six months. In the second group, participants were not required to attend any specific sessions and could drop into sessions as was convenient to them. To preserve the fidelity and effectiveness of the program in different contexts, the same six-module manual was utilized in both samples.

The purpose of this pilot study was to measure not only the overall effectiveness of the program and manual, but also to create modifications as necessary to optimize its effectiveness in future study and implementation, as well as to study a number of hypotheses related to the participants and the effectiveness of the study on a number of dimensions. Data was collected through measures developed specifically for implementation of this study.

These measures were disseminated prior to and post each session, as well as at various timeframes during the study. While during the monthly sessions, participants were provided with a consent form, demographic and pre-questionnaire as well as post-questionnaire (due to the possibility of participants being different each session), the consent and demographic forms were not provided to participants after the third session in the weekly cohort. This was due to the assumption that the same participants would be returning in the weekly cohort, and in consideration of not overwhelming participants with paperwork each week.

Participants were continuously provided with the pre and post questionnaires during each weekly session, in order to gain a sense of the effectiveness of the program on different domains of functioning. Items in the demographic questionnaire explored general demographic information as well as items encompassing access and barriers to resources, while the pre and post questionnaire items encompassed aspects of parental depression and stress, sense of community as well as parental efficacy.

While the overarching goal of this pilot study was to explore the general effectiveness of the NAPS program and identify potential areas for modification, we also proposed three main hypotheses. First, as identified by the sense of community items on the questionnaires, we hypothesized that parental post sense of community would increase after attending one session. In addition to the above hypothesis, we also proposed to find two important associations between study variables. We predicted that higher parental stress would be correlated with a lower parent sense of community. Finally, we hypothesized that increased feelings of self-reported parental depression would be correlated with lower parent sense of community.

As this was identified as a pilot study for a developing program, all results were utilized to inform the effectiveness of the manualized treatment of itself and inform future implementation and further development of the NAPS program. The results obtained from this study will not only prove invaluable in assessing the effectiveness of the manual and psychotherapy groups themselves but will also provide direction in terms of revisions that can

be made to optimize the program in order to better respond to the needs of the population being worked with, and to inform the research team and others about effective methods to utilize in educating parents on how to respond to the stressors of everyday life and parenthood. In addition, if the results from our preliminary study indicate positive response, the data will help us to expand the dissemination efforts to other WIC locations or even other organizations that provide subsidized or free services to high-need populations.

Methods

Participants

Participants for recruitment were identified as parents (particularly mothers) in the Los Angeles metropolitan area who were receiving nutritional services and support from one of two WIC venues (identified as Hawthorne and 117th for the purpose of this study), were recruited for the NAPS program through outreach initiatives from the WIC staff themselves. This outreach took the form of dissemination of flyers and other paper-based invitations, as well as through personal contact and recruitment via telephone. While WIC's services are generally directed towards mothers, fathers were also encouraged to participate as part of this program. Not all participants completed the demographic questionnaire, and as such the following statistics are reflective of those who did complete specific demographic information for the purpose of this study, with *n* values varying from 10-13. The resulting sample recruited comprised primarily female participants with some male attendance. The sample obtained comprised 13 parents whose age range fell between 20 and 41 ($N = 12$, $M = 31$, $SD = 7.68$) and whose children's ages ranged between 8 months to 16 years of age (with two participants expecting their first child together). With regards to their ethnicities, the majority of the sample identified as Latino or Hispanic, with a smaller percentage identifying as African American ($n = 13$). In exploring how acculturation was relevant to these participants due to their cultures and the implementation of the program, three variables – language preference, language spoken at home and years in the United States were also obtained for the study. A high percentage of the sample identified their preferred language as English, with a smaller percentage identified their preference as English ($n = 11$). In exploring languages spoken at home; participants identified monolingual English, monolingual Spanish and bilingual English and Spanish as preferences at home. In relation to marital status, one participant declined to disclose their marital status, while other participants disclosed being married, single, unmarried but living with their partner, and divorced ($n = 12$). With regards to education and income level, there was also a range of experiences with participants reporting

earning a 4-year college degree, a 2-year college degree, having started college but not having completed it, earning their high school diploma or GED, and finally not having completed high school ($n = 12$). Concerning income in particular, some participants reported earning a yearly income of less than \$14,999, some participants reported \$15,000-\$24,999, \$25,000-\$34,999 and finally \$35,000-\$49,999. There was also a portion of participants in sample declined to answer questions related to income. Please see Table 1 below for full summary of sample's statistics.

Table 1.

*Demographic Information for Participants*Sample Characteristics ($N = 12$)

	<i>n</i> or (<i>M</i>)	% or (<i>SD</i>)
Female parent participants	11	84.6%
Age of participants	(31)	(7.67)
Ethnicity		
Latino/Hispanic	10	77%
African American	3	23%
Marital Status		
Married	6	50%
Single	4	33.33%
Living Together	1	8.33%
Divorced	1	8.33%
Education		
4-Year College Degree	1	8.33%
2-Year College Degree	2	16.66%
Some College	6	50%
High School Diploma/GED	2	16.66%
Did Not Complete High	1	8.33%
School		
Yearly Income		
<\$14,999	4	33%
\$15,000-\$24,999	1	8%
\$25,000-\$34,999	3	25%
\$35,000-\$49,999	2	17%
Decline to Answer	2	17%
Preferred Language		
English	8	73%
Spanish	3	27%
Language Spoken at Home		
English	4	42%
Spanish	2	25%
English & Spanish	4	33%
Years Living in U.S.	(25.08)	(8.3)

Recruitment

Participants were recruited from one of two WIC centers in the Los Angeles area. Advertisement aimed at recruiting participants for the weekly cohort group took place at the Hawthorne location with physical flyers (that were slightly tailored for each session with specific dates and time) and follow up phone calls, while recruitment for the monthly drop in groups were conducted for the 117th WIC location with the same method of flyers and follow up phone calls. Please see Appendix B for a sample copy of a recruitment flyer for one of the sessions. Both weekly cohort and monthly drop in sessions were scheduled for Wednesday mornings, as this was identified as the WIC staff as an accessible timeframe for parents engaging with WIC's services and benefits – in an attempt to increase accessibility and convenience to potential participants and maximize participation. Weekly sessions were scheduled to occur from 9:30am – 11:00am on Wednesdays at the Hawthorne location, while monthly sessions were scheduled to take place from 9:00am – 10:30am on Wednesdays at the 117th location. Per the WIC director's request, WIC staff took charge of contacting and coordinating participants, through phone call reminders 24 hours prior to each session in order to address and concerns and emphasize the importance of timely participation. WIC staff also identified parties who were present at the center during a similar timeframe and provided information to them in case they were interested in attending. While Pepperdine's research time was provided with the necessary contact information of parties who were interested, the WIC center's team was essentially in charge of all recruitment and reminders during the outreach process.

Research Team

The principal investigators leading the research team were Dr. Judy Ho and Dr. Loan Kim - faculty supervisors from Pepperdine's graduate School of Education and Psychology (GSEP) as well as Pepperdine University's Seaver College. The team itself included undergraduate, Masters and Doctoral level students, who are currently enrolled at Pepperdine University's Seaver College nutrition program (undergraduate), as well as in

Psychology at Pepperdine University's Graduate School of Education and Psychology (Masters and Doctoral level). The research team was in charge of not only developing and facilitating the content of the manuals themselves, but also of obtaining the relevant data regarding each sample through demographic questionnaires, pre-questionnaires prior to each group session and post questionnaires following the conclusion of each group session. This existing team was divided into two cohorts – one focusing their efforts on facilitating the weekly cohort sessions, the other focused on facilitating drop in monthly sessions. This intentional division and allocation of facilitators was in order to solidify the engagement and comfort level of participants within the groups, by providing them with consistency of group leaders. In order to also ensure consistency and fidelity of both understanding and implementation of the program across settings and samples - regardless of cohorts - the student facilitators participated in training meetings with both the research team's principal investigators and manual development team in order to develop a shared understanding of the program and its purpose, as well as explore any questions or concerns.

Human Subjects and Ethical Considerations

In order to protect the privacy and best interests of the study's participants, necessary considerations concerning confidentiality and other ethical matters were explored and implemented throughout the research process. In preparation for all ethical considerations, the research team was required to successfully complete a training course concerning human subjects, in order to better understand how to protect the needs of human participants during various forms of research. In addition, the team completed a Health Insurance Portability and Accountability Act of 1996 (HIPAA) to reinforce their commitment to protecting the privacy and limits of confidentiality for all human subject involved and their relevant data that would be collected. The privacy of this data was also bolstered by the fact that solely the research team's participants have access to the relevant data, which has been securely stored and archived. Any hard copy materials containing relevant data have been locked away in secure filing cabinets within the West Los Angeles Campus of Pepperdine

University's Graduate School of Education and Psychology (GSEP). This data was all stored in the current office of Dr. Judy Ho, one of the study's principal investigators. With regards to any electronic data, this was all compiled within password protected files in Microsoft Excel and Statistical Package for the Social Sciences (SPSS), also on Dr. Judy Ho's password protected and physically secure laboratory laptops. Concerning the process of protecting the rights and welfare participants during the groups themselves, all participants were provided with written consent prior to their engagement in sessions, and all new participants were informed by the research team of their limits of confidentiality in relation the research data. Optimal protection of confidential information was accomplished through de-identification of data collected and replacement of all identifying information of participants (for example, names) with a research identification number (RIN) as their identifiers, which were used for the remainder of the research and data collection process.

Data Collection

The data collection process was both quantitative and qualitative in nature. The quantitative data was collected by means of distribution of pre, post and demographic questionnaires that were administered periodically before and after the various groups sessions. Many of the items in the demographic questionnaire took the form of short answer responses, while the vast majority of questions on the pre and post questionnaires took the form of Likert style questions. The demographic questionnaire and pre-session questionnaire were administered prior to the first, second and third session of the weekly cohort. Following the third session, the demographic questionnaire distribution was discontinued, however pre-session questionnaires were continuously provided until the final module. The post-session questionnaires were distributed following the conclusion of every model to assess elements of its effectiveness and participants' perceived experiences. In the monthly drop in sessions, because participants were expected to change from month to month and were not required to commit, the pre-session questionnaire and demographic questionnaire were distributed prior to every module, and the post-session questionnaires were distributed following completion

of every model. In addition to quantitative data, additional qualitative data was gathered in hopes of obtaining relevant information that could inform future directions of the pilot program. Qualitative data was collected via an interview conducted by Dr. Kim with one of the participants, in order to gain a stronger sense of the participants' experiences and further suggestions for the program as it undergoes development.

Nutrition and Psychosocial Support Manual Overview

With consistent direction and accompaniment from the study's principal investigators (Dr. Judy Ho and Dr. Loan Kim), as well as supervision and support from its lab coordinators (Jennifer Duarte and Joseph Farewell), the student members of the research team (In alphabetical order – Nahaal Binazir, Natalia Carr Moss, Stasi Harrell, Venus Mirbod, Rachel Spitz and Jillian Yeargin), developed the content of the manual that was implemented in both the weekly and monthly NAPS cohorts. Please see Appendix C for a copy of the provider version of the manual. In considering the aforementioned limited mental health information but abundant nutritional information provided in WIC's programs, the NAPS manuals and groups were centered around an equal distribution and integration of concepts related to mental health and nutrition. These groups were implemented with the vision of utilizing evidence-based practice in not only creating agency and supporting parents to advance their own understanding and habits related to their mental health and nutrition practice, but to also ensure they feel capable of taking charge in these matters in relation to their families' practices. Manual development consisted of the creation of both participant manuals as well as provider manuals (for the facilitators). The difference between the two manuals included that while the provider manual consisted of more instructions for facilitators, potential questions to ask or examples to give and opportunities for didactic instruction, the participant modules were less information heavy, with summaries of the key concepts, questions to facilitate reflection and engagement, more space to allow participants to note down important information and personal reflections, as well as the psychoeducational handouts that

participants could use at home as frames of reference for skills they learned during the group sessions.

Each of the six modules followed a consistent structure, regardless of differences in content. Each module commenced with systematic review of homework that was assigned the previous week – which not only served as reminders for participants of skills they had acquired, but also created space for participants to comfortably share with others their triumphs and their challenges in implementing necessary skills. The review of homework was then followed by a brief mindfulness practice (for example, deep breathing) in order to orient participants to the group space, a presentation of psychoeducational information in didactic format from the facilitators and a group discussion following which aimed to engage participants in active discussion of the concepts explored. This section was followed by in-session practice assignments that aimed to solidify the participants' understanding of the concepts being presented and discussed, as well as their applications and implications for the participants. Following the in-group application of skills, homework practice was also assigned with accessible weekly goals for participants, to promote everyday application and generalization of the skills and information acquired.

Summaries of the six modules that were facilitated during the program's implementation are presented below. Please see Appendix D for a participant copy of the manual.

Making healthy habits. The first module provides psychoeducation to participants concerning the nature of both physical and mental health, as well as exploring how habits form and empowering participants to feel able to identify and change habits that do not constructively contribute to their own health. Participants explore what contributes to nutritional health (and are provided with live demonstrations concerning the amount of sugar in some preferred snacks, for example), and then discuss why we may feel inclined to develop unhealthy habits, even when possessing this knowledge. Clients identify barriers (for example emotional and thought related barriers) that may impede the formation of healthy

habits, and are provided with tips on how they may address these barriers. The participants also explore the stages of change - accompanied by their facilitator. This information all paves the foundation for their in-session discussion, where participants collectively explore how their habits (particularly destructive habits) affect their lives. Following this discussion, the at-home practice is encouraged, where participants will set the accessible goal of trying to change one negative habit in relation to their thoughts and behaviors concerning nutrition, as well as monitoring their reactions during this practice.

Stress management and self-care. The second module explores different types of stress and how it affects our daily habits – psychologically and nutritionally. The module teaches participants about the different types of stress (for example, acute and chronic), explores participants' understanding and experiences of what causes them stress, identifying triggers that lead to stress and stress related behaviors, as well as various habits that may exacerbate their stress levels (for example, their sleeping and nutritional habits). The module then continues to explore the concept of self-care, and participants - with the assistance of handouts - explore the different types of self-care that exist (such as physical, emotional, psychological, spiritual, personal, and professional self-care). Participants are educated on a variety of concepts, including appropriate sleep hygiene, relaxation and deep breathing techniques, as well as approaching their support systems – all methods equipping them with the tools to cope with stress. The homework assignments in this module involve two elements: engaging in one self-care practice, and to utilize deep breathing and/or support systems in response to two stressors of daily living. To increase the participants' sense of agency as well as insight into their activities, they are encouraged to observe how they feel both before and after practicing these techniques.

Organize your life. This module, in connection with module 2, explores coping strategies for stress from the perspective of planning and organizational techniques. Following psychoeducation about benefits of creating more order and limiting chaos in one's household and everyday life, participants are provided with multiple practical handouts that

can be utilized on a daily basis to organize their children's chores and routines, meal planning, and overall schedule and time management. Their assignment for home builds on this by requiring participants to achieve a goal of either completing one meal preparation activity or utilizing the chore chart once during the week. Parents are also provided with validation and the normalization of initial struggles in implanting a new habit – being reminded that creating new habits successfully require time and patience.

All about mindfulness. This module more deeply focuses on the applications and implications of mindfulness practice than the brief mindfulness activity conducted at the commencement of each module. The module equips participants with a more detailed understanding of what mindfulness comprises of and how it is utilized as a daily practice. This practice is even extended to mindful eating in order to include the nutrition component, where facilitators guide participants through mindful eating and encourage them to be aware of their experience throughout the process. This understanding of mindfulness is then extended to understanding the application of mindfulness practice as a form of coping with overwhelming feelings and intense emotions. The practice assignment for generalization of these skills assigns participants the goal of intentionally engaging themselves in one pleasurable activity and trying to employ the mindfulness techniques that they have practiced during this module in session.

Changing negative thinking. This module focuses on strategies to alter negative thinking contributing to stressful experiences for participants. In opening, the facilitators provide participants psychoeducation on the nature of *thought traps* or cognitive distortions, and guide participants through how to use thought logs as practical methods to challenge these distortions, by assisting them in identifying alternative and more realistic thoughts to challenge and cope with their distortions. Participants are then introduced to defusion techniques, which focus on reducing the impact of these negative thoughts that do not serve a constructive purpose. In session, the facilitators assist participants in putting various cognitive defusion techniques into practice. Such examples including repeating the thought

slowly to oneself, singing the thought, saying the thought using a silly voice—all with the function of reducing the influence a thought could have over a participant. At home, participants will be encouraged to utilize the thought log and to practice utilizing defusion techniques in response to negative thoughts they have.

Getting what you want. In the final module, participants are equipped with skills to assertively communicate in order to meet their needs – in a very practical and accessible manner. Participants are provided with materials and encouraged to create their own assertive communication scripts, in order to begin practicing and generalizing their new assertiveness skills. In addition to the assertiveness training, the module also provides participants with psychoeducation about a CBT five step problem solving method to utilize in their everyday lives. During the session, participants practice creating these scripts and using these problem-solving methods in relation to their everyday lives—either with regards to daily responsibilities and roles or in relation to their food and nutrition practice. As an at home goal for generalization of the skills explored, participants are encouraged to practice utilizing both the assertiveness script and the CBT five step problem solving method once during their week. This module concludes the series of sessions.

Measures

Demographic Questionnaire. The research team created a Demographic Questionnaire with the function of capturing general characteristics of the participants who engaged in programming. Questions included assessed participant age, gender, marital status, ethnicity, education, socioeconomic status, and health status (physical and mental). More specifically, questions exploring participants' perceived barriers to accessing services, both mental and physical health related, were included in order to gain a sense of their current access to resources, its impact on their current state and engagement with the program and to inform future directions of the implementation of this nascent program. The demographic questionnaire also asked a question to gauge the importance of a sense of community to them, and took a 6-point Likert scale. The question was: How important is it to

you to feel a sense of community with other community members? This score was used to derive what was titled as a pre-session community importance score. Please see Appendix E for a copy of the Demographics Questionnaire.

Pre-Session Questionnaire. Prior to each session (in both weekly cohorts and monthly drop in groups), participants were provided with a pre-session questionnaire that gathered information from domains assessing depressive symptoms, stress levels and participants' sense of parental efficacy. These areas were assessed by items incorporated from the Center for Epidemiological Studies Depression Scale Revised (CESD-R-10), the Perceived Stress Scale and the Parental Sense of Competence Scale (PSOCS). The CESD-R-10, which comprises 10 items of a 4-point Likert style, assesses symptoms of clinical depression by the extent to which subjects report depressive symptoms. This measure demonstrates sufficient reliability as well as validity (internal consistency, Cronbach's $\alpha = 0.86$; test-retest reliability ICC = 0.85; convergent validity = 0.91; divergent validity = .89; Miller, Anton, Townson, 2008; Haroz, Ybarra & Eaton, 2014). In addition to the CESD-R-10, the Perceived Stress Scale is also included to measure participants' experiences of subjective stress, as well as their subjective capacity to cope with these stressors. This scale is a 10-item 5-point Likert scale. This scale demonstrates good construct validity as evidenced by its correlations with depression and anxiety, and also demonstrates sufficient internal reliability (Cronbach's $\alpha = 0.84 \sim 0.86$). It also reportedly demonstrates a strong relationship to general measures of stress, and indicates high reliability both internally and over time (Berry & Jones, 1995; Chiu et al., 2016). The third set of questions incorporated were from the Parental Sense of Competence Scale (PSOCS). This item comprises 17 items (of a 6-point Likert scale) which encompass parental self-efficacy (Jones & Prinz, 2005). The entire scale rendered high internal consistency (Cronbach's $\alpha = 0.79$), while the efficacy scale's internal consistency ranged from $\alpha = 0.68$ to $\alpha = 0.88$ across samples (Johnston & Mash, 1989; Ohan, Leung & Johnston, 2000). Estimates of the internal reliability of the efficacy scale ranged from $\alpha = 0.68$ to $\alpha = 0.88$ across several samples

(Cutrona & Troutman, 1986; Gilmore & Cuskelly, 2009; Johnston & Mash, 1989; Lovejoy, Verda, & Hays, 1997). Of the questions selected from the efficacy factor of the PSOCS, the factor loadings ranged from 0.57 to 0.71 (Johnston & Mash, 1989).

Because the researchers in the current study were most interested in parenting efficacy, only items that were determined to assess sense of efficacy were included. Specifically, the questions selected for inclusion are: (a) Being a parent is manageable, and any problems are easily solved; (b) I meet my own personal expectations for expertise in caring for my child, (c) If anyone can find the answer to what is troubling my child, I am the one; (d) I honestly believe I have all the skills necessary to be a good mother/father to my child, and (e) Considering how long I've been a parent, I feel thoroughly familiar with this role. Please see Appendix F for a copy of the Pre-Session Questionnaire.

Post-Session Questionnaire. The Post-Session Questionnaire covered a variety of topics, including the participants' perception of the effectiveness of the program, how much agency they felt in being able to make changes in their lives in the coming week, and how empowered they felt to make changes in relation to their nutritional habits. This scale comprises 24 6-Likert-scale items and is a widely used, researched and revised scale to study the construct of Psychological Sense of Community (PSOC; Chavis, Lee & Acosta, 2008; Long & Perkins, 2003). It has been used to explore this facet in groups in the workplace, religious communities, residential neighborhoods, collegiate communities, with adolescents and for those even as young as sixth graders (Long & Perkins, 2003). Research indicated that the entire scale demonstrates a high level of reliability ($\alpha = 0.94$) and is a strong predictor of factors such as participation.

Five items derived from the Sense of Community Index (SCI-2) were incorporated into the post-session questionnaire. These five items are: (a) I get important needs of mine met because I am part of this community, (b) This community has been successful in getting the needs of its members met, (c) Being a member of this community makes me feel good, (d)

When I have a problem, I can talk about it with members of this community; and (e) People in this community have similar needs, priorities and goals.

To evaluate the hypotheses, these five items are summed into a total score that represents parental sense of community.

The five Parental Sense of Competence Scale items included in the Pre-Session Questionnaire were also included in the post-session questionnaire to explore changes in parents' perceived efficacy as a result of engagement in the modules. As discussed previously, this study aimed to obtain quantitative data, but also some qualitative data in the hopes of informing future directions of the manualized program. In addition to the quantitative items in this questionnaire, two questions were incorporated to gather participants' reports of what nutritional changes they were able to make, as well as any obstacles or barriers identified that stood in the way of them creating such changes. Please see Appendix G for a copy of the Post-Session Questionnaire.

Analytic Plan. Data was cleaned and prepared for analysis in April through June of 2017. Data analysis was conducted utilizing Microsoft Excel and SPSS. The following describes the methods for analyzing the quantitative data collected to assess the proposed hypotheses:

To assess the first hypothesis regarding sense of community increasing following participating in one session, a paired samples T-test was conducted using the of the sum of the 5 questions that corresponded to the SCI-2 (i.e. questions 6-10 on the Post-session questionnaire) from the first session a parent attended compared to the sum of the SCI-2 questions on the post-session questionnaire of the second session the parent attended. There were 2 parents for which we had between session data for analysis. All data from both the weekly cohort and the monthly drop-in cohort was analyzed together in order to evaluate this hypothesis.

Pearson correlation analyses was conducted to analyze the hypotheses related to associations between study variables. We proposed that higher parental stress as indicated

by the (quantitative variable, range 0-40) would be correlated with lower parental sense of community sum score (quantitative variable; range 0-15). We also proposed that high parent-reported depression, as indicated by participant scores from the CESD-R-10 (quantitative variable; range 0-30), would be correlated with lower sense of parental sense of community sum score (quantitative variable; range 0-15). All data from both the weekly cohort and the monthly drop-in cohort were analyzed together in order to evaluate this hypothesis.

Results

Preliminary Analyses

Bivariate statistical analyses were conducted between various study variables and are presented in Table 2. A number of demographic variables, along with target variables, were also included in the analyses as potential correlates of sense of community, parental sense of competence, depression, parental stress and nutrition efficacy. Based on these results, stress was positively correlated with depression ($r = .591, p < .05$) such that higher levels of stress related to higher report of depressive symptomatology. Age demonstrated a positive correlation with parental stress ($r = .647, p < .05$) such that increased ages in participants' ages also demonstrated increases in reported parental stress. In addition, gender was correlated with stress ($r = .691, p < .05$) such that female participants reported higher levels of stress than the male participants in the study. Finally, pre-parenting sense of competence demonstrated a positive correlation with nutrition efficacy ($r = .780, p = .022$) such that parents who reported and felt a stronger parenting sense of competence also demonstrated higher levels of nutritional efficacy. There were no other significant associations found among study variables.

Table 2.

Intercorrelations Between Study Variables

Variable/Scale	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. SCI	1										
2. PSOC (Pre)	-.073	1									
3. PSOC (Post)	-.085	.508	1								
4. Depression	.026	-.578	-.481	1							
5. SES	-.380	-.071	-.304	.329	1						
6. Nutrition Eff	.445	.780*	.407	-.357	-.315	1					
7. Stress	-.080	-.571	-.377	.591*	-.016	-4.81	1				
8. Gender	.122	-.390	-.355	.209	-.025	-.060	.691*	1			
9. Marital Status	-.237	.500	-.611	-.239	-.235	.332	.090	.198	1		
10. Age	-1.72	-.131	-.156	.339	.231	-.336	.647*	.517	.434	1	
11. Education	.468	-.470	-.393	.429	.243	-.178	.132	.302	-.460	.177	1

* $p < .05$

As displayed in Table 3 and to investigate our first hypothesis, a paired-samples t-test was conducted to compare scores of sense of community (SCI) that parents reported following their first session and second session attendance. As indicated by figure 1, there was no significant association demonstrated in the SCI score following the first session ($M = 7.67$, $SD = 2.52$) and their reported SCI score following their second session ($M = 10.33$, $SD = 0.58$), $t = -2.219$, $p = 0.157$. This result indicated that there was no significant increase in the participants' sense of community following their attendance of the first session and attendance of their second session.

Table 3.

Results of Paired-Samples t-test and Descriptive Statistics for Sense of Community Index Following Participant's First and Second Session

Outcome	SCI First		SCI Second		<i>n</i>	95% CI for Mean Difference	<i>r</i>	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>					
	7.67	2.52	10.33	0.58	3	-7.84, 2.50	.157	-2.219	2

Pearson correlation analyses were conducted to analyze our second and third hypotheses related to associations between several study variables and reported sense of community. Based on the results, there was no statistically significant correlation found between parental stress and post-session sense of community ($r = -.080$, $p = .861$). This indicated that the participants did not experience an increase or decrease in stress when experiencing a higher or lower sense of community. In addition, no statistically significant correlation was demonstrated between depression and post-session sense of community ($r = .026$, $p = .939$). Similarly, this result indicated that participants did not experience an increase or decrease in depressed feelings in relation to feeling a higher or lower sense of community and connection to others.

Discussion

This research study explored the effectiveness of implementing a nutritional and psychosocial support program for parents at local WIC locations, and the relationship that feeling a sense of community bears on its effectiveness. More specifically, paired samples T-tests and Pearson's correlations were used to examine relationships between study variables. First, we hypothesized that parental post sense of community would increase after attending one session. Second, we hypothesized that higher parental stress would be correlated with a lower parental sense of community. Finally, we hypothesized that increased feelings of self-reported parental depression would be correlated with a lower parental sense of community.

Contrary to the first predicted hypothesis, results did not indicate a significant increase in sense of community from first to second session attendance. As previously discussed, there is a paucity of literature exploring parenting programs and their impact on the sense of community construct. Nonetheless, this hypothesis was derived from extant research that has explored the effectiveness of parental programs in the form of both support groups and psychoeducation groups, and have reported programs' effectiveness in decreasing both feelings of social isolation and parental stress for participants involved in 3-month family support programs. In addition, it was derived from extant literature demonstrating the importance of structured parenting support groups for socialization, increasing social skills and parental skill building in supporting effective parenting, and studies indicating the strong negative relationship between depressive symptoms and social support/community in mothers (Barber, 1992; Cox et al., 2008; Dempsey, Keen, Pennell, O'Reilly & Neilands, 2009; Depanfilis, 1996; Raikes & Thompson, 2005; Telleen et al., 1989). In considering the results of our NAPS study, extant literature has also indicated that physical and psychological components of sense of community include both a sense of connectedness based in familiarity and a sense of ownership (Kim & Kaplan, 2004). Thus, being mindful that it would take time for participants to establish both familiarity as well as

feeling empowered to take ownership over their wellbeing and the program, in addition to considering the time it generally takes (both in individual therapy and groups) to build rapport, this may indicate that to measure a shift in sense of community from the first to second session was premature and perhaps more sessions (and therefore time) may have been indicated before measuring a change in this construct. Relatedly, aspects such as group cohesion and acceptance of group norms have historically been identified as part of a third phase of group treatments—a phase where members accept one another, feel a stronger desire to preserve their group or community and generate their own norms and sense of identity within the group (Tuckman, 1965). It is therefore possible that as parents continued their participation over a matter of weeks, we may have seen some of these processes emerge as participants became more comfortable with one another and identified the groups as a type of community to which they belonged.

The results of the study did not support the second hypothesis predicting an anticipated negative correlation between parental stress and sense of community. This hypothesis was based on existing literature and research findings which, while limited when referring to parental stress specifically, did indicate that feeling a higher sense of community was strongly related to facets of subjective wellbeing (which encapsulated aspects of personal coping, happiness and worry), as well as social support being negatively related to anxiety in attachments and parenting styles (Davidson and Cotter, 1991; Green et al., 2007; Raikes & Thompson, 2005). The hypothesis was also informed by research suggesting that mothers are more likely to experience this social isolation and disconnect from communities of support and other negative psychological outcomes in response to increased parental stress (Johnston et al., 2003; Pretty et al., 2007). This hypothesis was initially developed as further evidence suggested that one of three highest identified stress factors reported by parents was low levels of social support (Boyd, 2002; Sharpley, Bitsika & Efremidis, 1997). In considering our results, it is possible that due to the limited sample size and aforementioned challenge in capturing participants' sense of community, we were unable to find significant

statistical support for this relationship in our data. However, the lack of correlation may potentially also indicate that there are situations where the two factors may not be related. This has been alluded to in aforementioned research indicating that in some situations, parents chose to become more self-sufficient and demonstrated higher efficacy through not connecting with their community resources, if they felt their community was unsafe or unreliable, and felt more effective and less stressed when working on their own (Brodsky, 1996).

Finally, no significant relationship was found between depression and post-session sense of community. Extant research suggests that social support and reduced social isolation are pertinent protective factors against clinical depression, and findings from such studies informed this hypothesis. Specifically, in extant research with multiple populations, having a higher sense of community belongingness was predictive of a lower severity and shorter duration of clinical depression (Fowler, Wareham-Fowler & Barnes, 2013), as well as sense of belonging to a specific community and larger general community demonstrating significant negative relationships with depression (McLaren, 2009). Additionally, studies have indicated that a sense of community or belonging, as a separate and specific entity from general social support, has a stronger relationship with and is a stronger predictor of the development of major depression (Cutrona et al., 2000; Hagerty & Williams, 1999). Bearing the evidence from existing literature in mind, it is interesting that a relationship between depression and sense of community was not demonstrated in the data. It is possible that for this particular set of participants, depression is not mediated by sense of community but perhaps by other factors that were not explicitly measured in this study.

While the aforementioned hypotheses were not supported by the current study's findings, there were significant bivariate correlations that are supported by existing research. First, parental stress was positively correlated with depression, such that higher levels of stress related to higher report of depressive symptomatology. Given that existing literature endorses stress and depression as positively and very closely related (Hammen, 2005), as

well as research demonstrating increases in parental stress escalating other negative outcomes such as major depression and marital stress or dissatisfaction (Dunn, Burbine, Bowers & Tantleff-Dunn, 2001), it is expected that this result was demonstrated in the data and would corroborate existing literature.

Further, age demonstrated a positive correlation with parental stress such that increased participant ages demonstrated increased reports in parental stress. There is not significant literature indicating why this may have been the case, however the impact of phase of life stressors, including physical health and stressors related to the child's development (as participants with pre-adolescent and adolescent children reported high levels of stress due to their children's developmental stages and behavior during groups) must be considered. Future research would benefit from qualitatively exploring the more nuanced details in order to delineate specific factors contributing to parental stress so that these factors can be closely monitored and effective intervention strategies can be developed.

In addition, gender was correlated with stress, such that female participants reported higher levels of stress than male participants in the study. While it is difficult to generalize the data due to a high discrepancy between the number of male to female participants (2 male, 11 female) as well as the low sample size, there is literature that has yielded some gender-related results. For example, literature has indicated female parents reporting higher anxiety and depression than their male counterparts, in addition to feeling both higher stress on a daily basis and feeling stretched across responsibilities more often than males (Sharpley et al., 1997). It is unclear why this is the case, however literature has attempted to substantiate such patterns by exploring how often the bulk of caregiving responsibilities have historically been placed on mothers (Boyd, 2002; Krauss, 1993; McLinden, 1990). While there are some indications in research about gender differences, it is also important to consider the number of men who participated, as our male participants were involved in relationships and collaborating with the mothers (and as such there could be more indication of marital status

or sense of support as well). In addition, consideration must be given to male and female responding styles, and what aspects female participants may have been more comfortable endorsing in comparison to male participants.

Finally, pre-parenting sense of competence demonstrated a positive correlation with nutrition efficacy, such that parents who reported and felt a stronger parenting sense of competence also demonstrated higher levels of nutritional efficacy. This result indicated that a parent's sense of confidence and self-efficacy predicted their belief in their ability to enforce positive health-related and nutritional changes with their families following the NAPS sessions. While studies have more broadly identified aspects such as collective efficacy (social cohesion and efficacy combined) demonstrating a negative relationship to self-related poor health practice (Browning & Cagney, 2003), there is not a large pool of research exploring the interaction between parental self-efficacy and health/nutritional related behaviors. However, there have been indications that parents who feel more efficacious on a general level may also feel more efficacious with specific parental tasks, and it is possible that interpersonal effectiveness and assertively practicing nutritional efficacy in the family could be included in such specific parental tasks. The possible translatability of self-efficacy from one domain to another is an important implication that can help support further developments of this program, so that building up an individual's sense of self-efficacy in one area might help them to also feel similarly efficacious in other important life domains.

Strengths and Limitations

In considering the strengths and limitations, the issue of sample size was a prominent limitation to the current study. The sample size was much lower than anticipated, and as such it was difficult to make clear generalizations to the population based on this data, due to its limited statistical power. This challenge became apparent during early stages of the study and will be informing future endeavors, particularly concerning recruitment methods.

An additional limitation involved the methods for recruitment. WIC staff demonstrated and expressed strong knowledge in the nutritional aspects of the program, as well as having

indispensable knowledge about the population being recruited. However, due to limited collaboration between the NAPS team and the WIC center regarding specific recruitment (with WIC locations offering to engage in outreach), as well as the potential of a limited knowledge base about the psychosocial aspect when presenting the program, there is a need in future endeavors to collaborate more strongly in recruitment and develop a shared understanding and language in describing the program for outreach.

Another challenge involved ensuring regular attendance, particularly considering that this program was intended to remain accessible and as open as possible to participants. One question became, therefore, how to ensure more regular and consistent attendance, as only 2 participants demonstrated regular attendance throughout the program. Eliciting stronger attendance would not only result in more accurate study of the program's effectiveness, but also allow the impact of the program on various elements (stress, depression, sense of community and self-efficacy) to be more accurately captured and studied. In addition, barriers to attendance also encompassed the geopolitical climate (with some participants and staff conveying that there was significant worry around undocumented status, resulting in a reduction in engagement of services). In addition, it was reported that there is also a stigma - not isolated to mental health - about being regarded as burdens (through requiring reported handouts, services and food stamps, for example) that has impacted services and may have influenced the number of participants recruited. These contextual factors limited recruitment and need to be considered for future recruitment efforts.

Despite the aforementioned limitations, there were also a number of significant strengths. In addition to its nascent contribution to a very limited literature base on parental programs and developments in this arena, the program demonstrated a unique integration of participants' psychological and physiological/nutritional needs. Dunst, Trivette, and Cross (1986) defined effective social support as multifaceted, including sharing of information and resources, instrumental assistance, as well as necessary psychological and emotional

support (Boyd, 2002). The facets of wellbeing addressed by this program encapsulated multiple areas of such effective support.

Another identified strength of the program was its accessibility in various domains. Firstly, the material was designed in such a way as to present well established therapeutic techniques in a form that is simple, understandable and accessible to any population (without underestimating the abilities of said population). There was a strong balance between conceptual/therapeutic concepts and practical examples, with resources provided to assist participants in generalizing their skills to everyday life. This program was also provided as a free service at multiple community-based locations in differing timeframes and time windows in order to actively reduce barriers to treatment. In considering accessibility, literacy rates amongst parents (particularly English literacy amongst immigrant parents) would be beneficial to capture and consider, as these could serve as barriers to engagement in the manuals and thus not necessarily represent the effectiveness of the manual and program itself.

In this vein, thought was also put into designing participant manuals that were not only intended to be student led but—paired with provider manuals—were created so that members of the community could facilitate the program—even those who are not therapists or nutritionists. This aspect allows for wider dissemination of the material, empowerment at a community level and implementation and sustainability of a grassroots program in various communities and populations.

Clinical Implications of the Study

The NAPS program may help to improve parental programs for psychological and physiological health while reducing barriers to access (particularly in communities with low access to mental health and nutritional resources). It will also serve in empowering communities to facilitate spaces, create a sense of community and potentially reduce the stigma towards mental health services by helping participants understand mental health's connection to physiological and overall wellbeing.

The student-based model for the program ensures that there are a good sample of trainee students who can continually put forth the program in future implementations. In addition to this, the program's model uses high levels of collaboration between providers and community agencies, and this will be indispensable in increasing empowerment and engagement from local agencies.

Finally, this initiative represents an evidence-supported manual for building skills in emotional coping which can eventually help effect better parenting. This has strong implications in considering the evidence that parents who do not feel as stressed emotionally or do not suffer from overwhelming clinical symptoms demonstrate less struggle and more consistent parenting (Chronis-Tuscano et al., 2008; Cox et al., 2008; Dix & Meunier, 2009; Haycraft & Blissett, 2010; Silver, Heneghan, Bauman & Stein, 2006), and in the instances of postpartum depression and postpartum PTSD which, combined, impact parent-infant bonding (Seng et al., 2014).

Future Research and Plans for Program Implementation and Evaluation

Based on the strengths, limitations and clinical implications of the program, a number of changes could be addressed for future study. Future research and plans have focused on the importance of a larger sample size in order to gain stronger statistical power and increase generalizability of the information being gathered. Closely linked to this, the team began discussions on how they can become more involved in the recruitment process in collaboration with the WIC teams. This aspect also opens up opportunities to potentially provide some form of informational sessions or psychoeducation to WIC staff about the nature of the NAPS program, in order to strengthen the recruitment process, and in exchange to receive their insights on the population itself and their needs. Being able to train recruiters so that they become more intimately acquainted with and excited about the program could deeply impact the level of buy-in from potential participants whom they are trying to recruit. Future endeavors may also consider multiple meeting times, as some participants conveyed struggling to attend the times allocated to the groups.

In addition, future research will potentially include a Spanish version of the manual as well. In considering the communities where groups were held and the high level of Spanish speakers who engage with WIC's services, there is an impetus for additional Spanish-speaking programs and it may increase accessibility and deeply impact the recruitment process as well as attendance from some local participants. Furthermore, as translating services does not necessarily encompass true cultural adaptation, insights gathered from various populations through qualitative analysis could better inform future cultural adaptations focused on the populations who partake of services. In considering these cultural factors, ideas of individualism and collectivism may need to be further explored. An intervention more deeply focused on individual factors and promoting individual parental efficacy in a population that may value collective parenting and experiences may have impacted the effectiveness of the intervention. In further addressing struggles with attendance, there is also room to optimize options for assisted childcare during the groups and publicize this component to parents, in order to reduce their concerns about tending to their children instead of attending the program.

Beyond friend and extended family networks, literature does not extensively acknowledge the emerging online communities providing support for mothers. In discussion, it became apparent that resources like babycenter.com and momsclub.org, among other online communities, provide sense of community to mothers and should be considered in future exploration.

Conclusion

This program evaluation involved the initial development of a community-based parenting program. Despite initial challenges in attendance and participation, this pilot program marked early potential for implementing more accessible programs that integrate both psychological and physiological education for parents. It has provided insight into not only the concerns that parents possess about their health practice and mental health needs, but has also afforded indispensable insights into potential barriers and areas of program delivery that require concerted development and focus as this research moves forward to larger scales and more communities.

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APPENDIX A

IRB Approval Notice

PEPPERDINE UNIVERSITY

Seaver College Institutional Review Board

November 1, 2017

Protocol #: 17-10-626

Project Title: A MANUALIZED PARENT PSYCHOEDUCATION AND NUTRITION PROGRAM AND IMPACT ON PARENTS' SELF-EFFICACY AND SENSE OF COMMUNITY: A PILOT STUDY

Dear Nahaal:

Thank you for submitting your application, *A MANUALIZED PARENT PSYCHOEDUCATION AND NUTRITION PROGRAM AND IMPACT ON PARENTS' SELF-EFFICACY AND SENSE OF COMMUNITY: A PILOT STUDY*, for expedited review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work completed on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. As the nature of the research met the requirements for expedited review under provision Title 45 CFR 46.110 (Research Category 7) of the federal Protection of Human Subjects Act, the IRB conducted a formal, but expedited, review of your application materials.

In addition, your application to waive documentation of informed consent has been **approved**.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the IRB. Please be aware that changes to your protocol may prevent the research from qualifying for expedited review and require submission of a new IRB application or other materials to the Institutional Review Board. If contact with subjects will extend beyond **11/1/2018**, a **Continuation or Completion of Review Form** must be submitted at least one month prior to the expiration date of study approval to avoid a lapse in approval.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at <http://www.pepperdine.edu/irb/graduate/>).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval.

On behalf of the IRB, we wish you success in this scholarly pursuit.

Sincerely,

Institutional Review Board (IRB)
Pepperdine University

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Regulatory Affairs Specialist
Dr. Judy Ho, Graduate School of Education and Psychology IRB Chair

APPENDIX B

Recruitment Flyer

Parenting Time!

Join us 90 minutes once a month to talk with other parents about stress, time management, health & nutrition!

When: April 26th, 2017

Time: 9:30 - 11:00 am

Where: 117th WIC Center

4455 W. 117th St., 5th Floor, Suite 501, Hawthorne

Interested?

Please contact _____ :

This support group is provided in collaboration between PHFE-WIC and Pepperdine University to support WIC moms

APPENDIX C

NAPS Provider Manual

Welcome & Agenda

Time: 10 Minutes

Instructions:

- Introduce yourself and the Module 1 topic, “Making Healthy Habits”
 - This includes a quick run down of the session’s “agenda”
 - AGENDA
 - Mindfulness/Relaxation Activity
 - What is health?
 - Nutrition
 - How habits develop
 - Changing habits
 - Wrap-Up
- Ensure that everyone has the right materials
 - This includes the following:
 - Handout 1A. Stages of Change
 - Handout 1B. Habitual Behaviors and Thoughts
 - Handout 1C. Healthy Eating Habits
- Emphasize the importance of discussion, questions, and group participation
 - Say “It is really helpful when people ask questions as we go along so we can make sure everything is clear. We will also save a few minutes at the end of the session for questions, comments, and feedback.”
- Lead group in a 2 minute Mindfulness/Relaxation activity
 - Please see Handout entitled “Group Mindfulness Activity” for ideas, all of which take no longer than 2 minutes

Making Healthy Habits

Time: 50 Minutes

BRING TO SESSION:

- Handout 1A. Stages of Change
- Handout 1B. Habitual Behaviors and Thoughts
- Handout 1C. Healthy Eating Habits

I. Educational Activity

A. *What is health and why does it matter?*

1. Ask participants to share what they think of when they hear the word 'health'
 - a) Say "Let's take a look at two different types of health and what they are."
 - (1) Say "Physical health is the one most people are familiar with - it has to do with your body and how well it works. Being physically healthy involves getting enough sleep, eating healthy foods, drinking lots of water, and exercising."
 - (2) Say "Mental health is another aspect of health that is very important, but often overlooked. Mental health involves how we think - for example, how we handle stressful situations, how we relate to others, and how we make choices."
2. *Explain that all aspects of health are connected and highlight the importance of taking care of oneself*
 - a) Say "Physical and mental health are deeply connected. Have you ever felt sad or lonely and reached for a candy bar or bag of chips? You are not alone! This is just one example of how your emotions, or your mental health, can affect your physical health. Also, have you ever eaten a snack or meal you knew was not the healthiest, and then felt tired or unable to focus? Physical health can affect your mental health too, which is why it is important to remember that we have to take care of both our bodies and our minds to really be healthy!"
3. *Explain that individuals have the power to impact all areas of health through creating healthy habits*
 - a) Say "It's easy to feel like, as a mom, you need to be taking care of everyone else around the clock. But it is very important to spend time and energy taking care of yourself! Plus, taking care of yourself can make you an even better caretaker of your family - imagine having more energy to play with your kids or being able to react better to stressful situations at home. You have the power to help improve your mental and physical

health through creating healthy habits - and today we are going to give you some tools to do that!"

B. Discuss general nutrition guidelines briefly - bad fuel and good fuel

1. Say "First, we are going to look at an important aspect of physical health - what we eat. Think of the food you eat as either making your body 'more healthy' or 'less healthy.' Instead of trying to diet or eliminate foods, we can make small decisions to eat more of the foods that will make us healthy and less of the ones that will make us unhealthy. What are some of the foods you think can make you less healthy? Or foods that might be ok occasionally, but we shouldn't eat everyday?"
2. Say "This information may be familiar to you from previous WIC classes, but we are going to do a short overview to make sure we are all on the same page. Here are some of the less healthy options."
 - a) Say "What have you heard about added sugars or high fructose corn syrup?"
 - b) Companies often add sugars or syrups to foods and drinks to make them taste sweet so that you will crave them and buy more. Added sugars are found mostly in sodas and fruit flavored beverages. Additionally, even though juice might seem healthy, it is much, much better to eat a piece of fruit - juice will spike your blood sugar exactly the same way soda does. These juices and sodas are very harmful to your body - they are full of calories and will make you feel tired and hungry. And if that isn't enough, they also make you more likely to develop diabetes."
 - (1) Show beverage containers with sugar
 - c) Say "How do you usually feel after eating a bag of chips, a box of cookies, or any other packaged food item from the grocery store?"
 - d) Processed foods are found in the aisles of the grocery stores - items like packaged cookies, candies, and chips contain additives (to make them taste and look good) and preservatives (to make them last on the shelf longer). Your body doesn't know how to process additives and preservatives because they are not real food. This is why processed foods often make you feel lousy and lead to weight gain."
 - (1) Show examples of processed foods.
 - e) Say "Lastly, fast food is typically very high in calories and saturated fat. Saturated fats can clog your arteries and make you more likely to develop heart disease. They might keep you full for a little while, but they provide nothing good for your body and can be very damaging. Additionally, even though a drive-thru meal can seem cheap, it is actually cheaper to prepare food at home."
3. Say "Now, let's look at foods that will make you more healthy - eating these foods will help give you energy, nourish your body, and make

you feel great! The best part is you already have some resources from WIC that can help you buy these foods. What do you think of when you think of healthy foods? Which healthy foods do you and your family enjoy eating and how do you prepare them?"

- a) Say "Whole grains are excellent for you - they have fiber which your body needs to be at its best. Fiber helps you stay full longer, improves your gut health, and keeps your blood sugar stable so you won't feel that energy 'crash' that you might feel after drinking a soda."
- b) Ask "What are your favorite whole grain foods to buy?"
- c) Say "Fruits and veggies are packed with vitamins, minerals and fiber, which are all great for your body. Including more fruits and vegetables in your family's diet is a simple way to improve health! To get the most out of your food dollar, try buying whole fruits and veggies that are in season - fresh or frozen."
- d) Ask "Where is the best place nearby to get fruits and veggies, and what are your favorite fruits and veggies to feed your family?"
- e) Say "Eating unsaturated fats like avocados, olive oil, and fish can help keep your heart healthy. Also, to avoid those saturated fats we mentioned earlier, choose lean proteins like chicken, turkey, and fish and cut off excess fat before cooking."

C. Explain some common barriers/bad habits that prevent healthy eating

1. Say "Many of us are probably already aware of these general guidelines and what healthy foods we should eat, but we struggle to change our habits and continue eating foods we know aren't the best for us. Let's think about the things that keep us from eating healthy and then we'll talk about how we can change them."
 - a) Ask participants "Everyone eats unhealthy foods sometimes. What are some of the reasons you eat unhealthy foods?"
Pause and give participants time to think and share; offer examples if prompting is needed.
 - (1) Examples: lack of time or energy, not enough cooking knowledge or skills, family or personal taste preferences, etc.
 - b) Say "These challenges and barriers that we face are real, and they can seem impossible to overcome. But, small actions in the right direction can add up to huge changes over time!"

D. Give the following overview on breaking bad habits and establishing good ones

1. Say "Habits come in many shapes and sizes. Whether they are good or bad, habits are patterns of action that are difficult to break. Sometimes we cannot tell whether a habit is good, bad, or neutral. Changing our long-held or automatic thoughts and behaviors can be hard work and it is important to remember you are not alone as you work to establish good habits."

E. Explain and give quick examples of the consequences of bad habits

1. Emotional effects - feeling guilty or angry with yourself
2. Health issues - unhealthy eating habits can negatively affect your health, like lead to weight gain or increase your risk for diabetes, heart disease
3. Difficulties in relationships - habits that may be interfering with your relationships
4. Difficulties at work - habits that are affecting your job performance or interfering with work

F. Tips for developing good habits

1. Spark discussion by asking: *“What do you think we can do to make it easier to create new healthy habits in our lives?”*
2. Take action
 - a) Say “It can be very difficult to make a change and we are often faced with indecision and the fear of making the wrong choice. Don’t worry about making the right decision, instead take action, later on you can reevaluate and adjust your plans accordingly. The important thing is to do something.”
3. Keep it simple
 - a) Say “Make a change that requires as little effort as possible. Setting monumental expectations for yourself will only lead to failure and disappointment. Keeping your goals small and eliminating roadblocks along the way will ensure your goal is achieved.”
4. Make it convenient
 - a) Say “Make the steps toward your goal as accessible as possible as well as the resources you need to achieve your goal”

G. Change is a process

1. Explain the importance of identifying what stage of change you are currently in and how this prepares you to move into the next stage
2. See Handout 1A. Stages of Change
 - a) Stuck
 - (1) Say “Individuals in this stage are not thinking about change, they may be in denial, may have given up or simply do not realize there is a change to be made.”
 - b) Thinking About It
 - (1) Say “In this stage individuals are thinking about changing and weighing the costs and benefits of the change.”
 - c) Getting Ready
 - (1) Say “Here individuals are preparing to make a specific change. They may sample small changes as they move toward a more cemented decision.”
 - d) Action

(1) Say “Individuals in this stage take action toward their desired change. While this is a very important step, it is often not enough to make lasting changes.”

e) Keeping It Up

(1) Say “ This stage consists of individuals facing obstacles which can hinder their progress, often causing discouragement. While it is important to take action toward the desired change, maintenance and the prevention of relapse is the key to success.”

f) Road Blocks

(1) Say “Sometimes you will face obstacles or fail. Whether you fall back to old habits or something obstructs you from your goal, you will be able to think about what went wrong and how you can respond differently next time you face that obstacle.”

II. In Session Practice

A. Guide participants through practice exercises

1. Habitual Behaviors and Thoughts: This exercise will allow participants to better see how their habits affect their life and encourage them to contemplate change

a) Please see Handout 1B. Habitual Behaviors and Thoughts

(1) Do any of your behaviors or thoughts interfere with your family, health, or social life? How so?

(2) Do any of your behaviors or thoughts interfere with your ability to do your job? How so?

(3) Would you be happier and/or healthier without some of your habitual behaviors or thoughts?

(4) Describe how your life would be different without some of the habits you have listed

2. Have participants discuss in small groups a habitual behavior or thought related to nutrition that they would like to change

a) Please see Handout 1C. Healthy Eating Habits

III. At Home Practice Assignment

A. Have participants commit to changing one negative nutrition-related thought or habit. Ask them to pay attention to how they feel during this experience and share with the group next week.

IV. Resources & Wrap-Up

- A. Thank everyone for participating in the module and call attention to resources for further nutrition education.
- B. Ask if anyone has any other questions about nutrition or habits.

-
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APPENDIX D

NAPS Participant Manual

Welcome & Agenda

- Agenda
 - Mindfulness/Relaxation Activity
 - What is Health?
 - Nutrition
 - How Habits Develop
 - Changing Habits
 - Wrap-Up
- Please ensure that you have the right materials:
 - Handout 1A. Stages of Change
 - Handout 1B. Habitual Behaviors and Thoughts
 - Handout 1C. Healthy Eating Habits
- Quick note about participation and discussion
- Mindfulness/Relaxation Activity

Making Healthy Habits

PLEASE HAVE READY:

- Local Resources Sheet
- Handout 1A. Stages of Change
- Handout 1B. Habitual Behaviors and Thoughts
- Handout 1C. Healthy Eating Habits

I. Educational Activity

A. *What is health and why does it matter?*

1. What “health” means to you, and what “health” means to health professionals

a) Physical Health and Mental Health

b) General nutrition guidelines - bad fuel and good fuel

2. Foods that make you “more healthy” or “less healthy.”

a) Sugars and high fructose corn syrup

(1) Processed foods

b) Fast food

c) Healthy options

(1) Whole grains

(2) Fruits and veggies

(3) Unsaturated fats

3. Some common barriers/bad habits that prevent healthy eating

4. Everyone eats unhealthy foods sometimes. But why?

5. Unhealthy/healthy eating habits

6. Emotional effects

B. Tips for Developing Good Habits

1. What do you think we can do to make it easier to create new healthy habits in our lives?

2. Take action
 - a) Keep it simple

 - b) Make it convenient

 - c) Change is a process

3. Stages of Change

a) See Handout 1A. Stages of Change

(1) Feeling stuck

(2) Thinking about it

(3) Getting ready

(4) Road blocks

(5) Action

(6) Keeping it up

II. In Session Practice

A. Please see Handout 1B. Habitual Behaviors and Thoughts

B. Please see Handout 1C. Healthy Eating Habits

III. At Home Practice Assignment

A. Commit to changing one negative nutrition-related thought or habit. Please pay attention to how you feel during this experience and share this information with the group next week

IV. Resources & Wrap-Up

A. Thanks to everyone for participating in the module, and please take a quick look at our listed resources for further nutrition education

B. Time for questions about nutrition or habits

APPENDIX E

Demographic Questionnaire

NAPS DEMOGRAPHICS**DEMOGRAPHICS**

Your answers will be kept confidential. Please circle OR write in your response.

1. Age: _____ 2. Height _____ 3. Weight _____

4. Sex (circle one): M F Other

5. What is your marital status? (circle one)

- | | |
|---------------------------------------|--------------|
| a. Single, never married | e. Separated |
| b. Married | f. Divorced |
| c. Living together | g. Widowed |
| d. In a relationship but living apart | |

6. Who else lives in your household? What is their relationship **to you?**

- | | |
|--------------|--------------------|
| a. AGE _____ | RELATIONSHIP _____ |
| b. AGE _____ | RELATIONSHIP _____ |
| c. AGE _____ | RELATIONSHIP _____ |
| d. AGE _____ | RELATIONSHIP _____ |

7. Do you share your living space with others that you do not share financial resources with?

(circle one): YES NO

8. Which category best describes your total household yearly income?

- | | |
|----------------------|-------------------------|
| a. Under \$14,999 | e. \$50,000-\$59,999 |
| b. \$15,000-\$24,999 | f. \$60,000-\$74,999 |
| c. \$25,000-\$34,999 | g. \$75,000 or more |
| d. \$35,000-\$49,000 | h. Prefer not to answer |

9. Ethnicity (circle or write in)

a. White, non-Hispanic

d. African-American

b. Latino/Hispanic

e. Asian-Pacific Islander

c. Native American

f. Other (please specify) _____

10. Language Preference: _____ Language(s) Spoken at Home: _____

11. Years in the United States: _____

12. Highest level of education completed

a. Less than High School

d. 2- Year College Degree (Associates Degree)

b. High School/GED

e. 4-Year College Degree (BA, BS)

c. Some college

f. Graduate Degree (MA ,MFT, MD, PhD, JD)

13. How important is it to you to feel a sense of community with other community members?

a. Prefer not to be a part of this community

d. Somewhat important

b. Not important at all

e. Important

c. Not very important

f. Very important

14. Any current or past **medical** diagnosis? (Exp: Heart Disease, Diabetes)

(circle one): YES NO

If no, skip to 14.

If yes, proceed to 14a-14c.

14a. Please list your most concerning medical diagnosis.

14b. Have you been treated for the medical diagnosis listed above?

(circle one): YES NO

14c. What makes it hard to find or get treatment for the medical diagnosis listed above (circle all that apply)?

- | | |
|-----------------------------------|--------------------------------------|
| a. Language problems | e. Mistrust of medical professionals |
| b. Financial burden | f. None |
| c. Treatment is not effective | g. Other (describe) _____ |
| d. Negative reactions from family | |

15. Any current or past **mental health** diagnosis? (Exp: Depression, Anxiety)

(circle one): YES NO

If no, you are done with this questionnaire. Thank you!

If yes, proceed to 15a-c.

15a. Please list your most concerning mental health diagnosis.

15b. Have you been treated for the mental health diagnosis listed above?

(circle one): YES NO

15c. What makes it hard to find or get treatment

for the mental health diagnosis listed above (circle all that apply)?

- | | |
|-----------------------------------|--|
| a. Language problems | e. Mistrust of mental health professionals |
| b. Financial burden | f. None |
| c. Treatment is not effective | g. Other (describe) _____ |
| d. Negative reactions from family | |

APPENDIX F

Pre-Session Questionnaire

NAPS PRE QUESTIONNAIRES

Please check the appropriate box for each question.

<u>For questions 1-10, please indicate how often you have felt this way during the past week.</u>	Rarely or none of the time (less than 1 day)	Some or a little of the time (1-2 days)	Occasionally or a moderate amount of time (3-4 days)	All of the time (5-7 days)
1. I was bothered by things that usually don't bother me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I had trouble keeping my mind on what I was doing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I felt depressed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I felt that everything I did was an effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I felt hopeful about the future.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I felt fearful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. My sleep was restless.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I was happy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I felt lonely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I could not "get going."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>Questions 11-20 ask about your feelings and thoughts during the last month.</u>	Never	Almost Never	Sometimes	Fairly Often	Very Often
11. Been upset because of something that happened unexpectedly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Felt you were unable to control important things in your life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Felt nervous and “stressed.”	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Handle your personal problems.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Felt that things were going your way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Not cope with all the things you had to do.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Control irritations in your life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Felt you were on top of things.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Been angered because of things that were outside of your control.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Felt difficulties were piling up so high that you could not overcome them.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX G

Post-Session Questionnaire

13. I meet my own personal expectations for expertise in caring for my child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. If anyone can find the answer to what is troubling my child, I am the one.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I honestly believe I have all the skills necessary to be a good mother/father to my child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Considering how long I've been a parent, I feel thoroughly familiar with this role.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>For questions 17-21, please rate how certain you feel about these statements NOW.</u>	Very Uncertain	Uncertain	Neither Certain nor Uncertain	Certain	Very Certain
17. I can stick to healthful foods even if I need a long time to develop the necessary routines.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. I can stick to healthful foods even if I have to try several times until it works.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. I can stick to healthful foods even if I have to rethink my entire way of nutrition.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I can stick to healthful foods even if I do not receive a great deal of support from others when making my first attempts.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I can stick to healthful foods even if I have to make a detailed plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. If you made any changes to your eating habits based on what we talked about last week, what changes did you make?

23. If you were not able to make any changes, what made it hard for you to make changes?
