AN INVESTIGATION OF BEHAVIORS INFLUENCING LIFE SATISFACTION IN YOUNG ADULT FAMILIES

by

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Abstract

Parenthood is a major life event that requires considerable lifestyle changes. As young adults become married they start a change in lifestyle that influences their health and their future children. Some couples understand that they need to change their behavior, but do not know how to do so healthfully. The poor lifestyle behaviors that produce excessive weight gain place an increased risk for premature death, heart disease, diabetes, other health problems as well as threatens their quality of life. These transitional experiences present a unique challenge that warrants exploration in the context of the young adult life stage and perceptions about health and quality of life.

Currently, there is limited research of the concerns or perceptions young adults have regarding quality of life and diet related health behaviors. The purpose of this study is to identify behaviors that impact life satisfaction and health of young adult families.

Two-90 minute focus groups were conducted, with pre-recruited community members 18-24 years of age. All participants were recruited from community service organizations, day care facilities and university educational classes. Participants were parents and/or married. Nutrition and Exercise majors were excluded. Both focus groups were asked seven key questions along with probing questions. All focus groups were audio taped and then transcribed verbatim. The transcriptions were coded manually by assigning a label in the margins of the transcripts for each quality of life issue that appeared. Coding allowed the data to be assembled into categories that can be used to develop quality of life and health interventions for young adults.

Several issues impacting satisfaction with life and barriers to a healthy lifestyle were identified. However, money, time, family, stress, and children were primary concerns. This study identified the need to completed additional assessments to quantify the needs of young adult parents and families, so community-based partnerships can effectively develop programming and interventions.

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Dedication

I dedicate this to my two little girls, Allyson and Lillyan. All of this is for you.

CHAPTER 1 - Literature Review

Young adults are in transition as they move from adolescence into adulthood. They are, in fact, "emerging adults," characterized by self-focus, identity exploration, and instability in living situations (Arnett, 1998; Arnett, 1999; Arnett, 2001). Most of this time of transition is marked by moving from childhood homes, ending full-time education, starting full-time work, having non-family live-in relationships, getting married, and/or becoming parents. These transitions are stressful and could negatively impact health-related behaviors, resulting in use of tobacco and excessive alcohol intake, difficulty in getting sufficient sleep, insufficient physical activity, and unhealthful eating (Bell & Lee, 2006; Brown & Trost, 2003). These transitional experiences present a unique challenge that warrants exploration in the context of the young adult life stage and perceptions about health and quality of life. Appropriate programs and interventions are required to prevent chronic diseases as a direct result of poor lifestyle choices. For successful programs to be developed we must first understand the perceived barriers to a healthy lifestyle, and current health behaviors of young adults. In addition, it is imperative to better understand how these behaviors impact life satisfaction.

Young Adults

Arnett has characterized the transition from an adolescent to an adult as an ambiguous time of "emerging" that occurs gradually and individually (Arnett, 1998; Arnett, 1999; Arnett, 2001). These transitions of moving from childhood homes and full time education to starting full time work, having non-family live-in relationships, getting married, and/or becoming parents are stressful and could negatively impact health-related

behaviors, resulting in use of tobacco and excessive alcohol intake, difficulty in getting sufficient sleep, insufficient physical activity, and unhealthful eating (Bell, 2006; Brown 2003). Demographics (education, employment, marital status), social factors (level of social support, stress), and degree of maturity have been identified as important determinants of health behaviors in young adults and are important factors to consider when planning interventions for this targeted group (Dowda, Ainsworth, Addy, Saunders, & Riner, 2003). For example, in adults, including young adults, lack of supportive family and social relationships can negatively affect perspectives about the future, which include one's expectancy about length of life and, ultimately, the value and effort placed on engaging in health protective behaviors (Ross & Mirowsky, 2002). Traditionally, little attention has focused on helping young adults cope with these transitions in a manner that allows them to develop and maintain healthful behaviors. Currently, there is limited available research on how health behaviors impact life satisfaction of young adults. Yet, there is some research on the current behaviors of young adults and how they impact their health.

The dietary patterns of young adults from the Bogalusa Heart Study reflected higher intakes of fruit and dairy foods and reduced energy intakes from fat when young adults were more physically active. However, the diet-physical activity relationships are somewhat affected by gender and ethnicity (Jago et al, 2005). The Bogalusa Study also revealed that serum lipid levels can track into young adulthood and are part of a clustering of multiple risk factors for cardiovascular disease that suggest a need for preventive measures at younger ages (Nicklas, von Duvillard, & Berenson, 2002).

Health Behaviors of Families

As couples begin their lives together, there is an adjustment period where the lifestyle changes they are making will impact their health and their future children (Burke et al., 1999). Researchers find that in many instances young adults have the knowledge needed to make healthful decisions. In many instances, young adults do not know how to apply this information or lack the support that will assist them in following through with the correct behavior. According to Lawrence & Schank (1993), participants stated that health protective behaviors are nutrition, exercise, sleep/rest, health professional visits, substance avoidance, personal hygiene, and the general safety of the environment. Yet, 70% of participants reported driving after drinking alcohol, time as a major barrier to meeting physical activity requirements, and 70% skipped breakfast. This exhibits our behaviors do not always coincide with our knowledge.

In addition to the decisions a young adult must make during this transition into adulthood, a young parent deals with parental stresses. Many times these decisions and stressors compound and impact a parent's perceived ability to live a healthy life.

Research completed by Currie (2001) found that most mothers' physical activity had reduced since the birth of their first child. The type of physical activity changes through the transition into motherhood, there is a decrease in moderate and vigorous physical activity, but an increase in household activities (Bellows-Riecken & Rhodes, 2008).

Parenthood causes a greater decrease in physical activity for mothers than fathers (Bellows-Riecken, 2008). Plus, parents perceive barriers at a greater level than non-parents (Verhoef & Love, 1994).

Barriers to Health Behavior of Families

Parents feel as though the increased cost of healthy food makes it difficult for them to purchase these items when on a budget (Dwyer, Needham, Simpson, & Heeney, 2008). The media impacts their children's "wants" for unhealthy options (Dwyer, 2008). Parents frequently reported lack of time (Birkett, Johnson, Thompson, & Oberg, 2004) as a barrier preventing them from being physically active and active with their children. A sense of fatigue (Verhoef & Love, 1994), bad weather, and an unsafe outdoor environment impacts a parent's ability to be active with their child (Dwyer, 2008.) Many parents find exercising with a stroller or jogger a possibility. There are still barriers to this form of exercise such as, poor quality sidewalks, road crossings and steep hills (Currie & Develin, 2002).

Barriers that prevent general healthy behavior change are the social environment (Verhoef, 1994), physical environment, lack of knowledge, and lack of social support (Birkett, D., et. al., 2004). A study by Nuss, (2006) assessed the barriers to healthful eating during the first year postpartum in low-income women. The barriers to healthful eating increased significantly as postpartum progressed. Families that have young children in the household complete less physical activity (Bellows-Reicken, 2007). Younger children require more attention and care. Mothers with two or more children were more likely to report lack of time from family and household obligations as a barrier to physical activity (Bellow-Reicken, 2007, Verhoef, 1994). According to Verhoef (1994), the lack of childcare and money impacted the parent's ability to complete physical activity. Parent's personal factors that affect healthful lifestyle behaviors were putting the child's needs before their own personal health, consuming more high-fat

foods, and less fruits and vegetables (Chang et al., 2008). Self-control is an issue as parents joined their children in eating unhealthy treats (Chang, 2008). Mothers felt overwhelmed or burned-out and lost social interaction with other people (Chang, 2008). Physical environment barriers for parents were the convenience of unhealthy food such as fast food and candy bars, and lack of personal time (Chang, 2008). Mothers felt that there was little support from their husband/spouses as they refused to eat healthful foods (Chang, 2008). Stressful daily lives consistently affected their healthful behaviors (Chang, 2008).

A study by Burke (1999) and colleagues in Australia worked with recently married couples and found lack of knowledge, willpower, and planning time as barriers to eating a healthy diet. Tiredness, lack of willpower, trouble sticking to a routine and planning time were barriers to physical activity (Burke, 1999). Women specifically stated that the lack of a companion to exercise with was a barrier. Barriers to reducing consumption of alcohol were social activities and restaurant dining. Some couples knew that they should improve their lifestyle, but were uncertain how to achieve behavior change (Burke, 1999).

Low-income rural mothers stated that produce prices, children being picky eaters and lack of time to prepare and cook a meal were barriers to consuming healthful foods (Atkinson, Billing, Desmond, Gold, & Tournas-Hardt, 2007). Participants did not plan meals prior to shopping. To help with the cost of food, participants gardened, canned their own produce, and butchered animals they raised (Atkinson, 2007). For this rural population, exercise facilities were difficult to reach without transportation. In addition, participants were unable to afford the cost of the facility membership (Atkinson, 2007).

Motivators for Health Behaviors

According to Young, (2001), current regular exercisers found health, weight gain, clothes not fitting, doctors' advice, and their child as motivators to start exercising. Also, motivations to continue exercising were good health, weight maintenance, people's comments, energy level, stress management, look and feel good, and a workout buddy. Individuals who were currently sedentary found the following motivators to begin exercising; a workout buddy, joining a group, and self enjoyment. Reasons why the sedentary group were not currently physically active were; no time, health, had second child, and never got motivated (Young, Gittelsohn, Charleston, Felix-Aaron, & Appel,, 2001). From a study by Birkett (2004) focus groups were completed with WIC participants to understand their lives. Participants reported health benefits to children, promoting child development, sense of responsibility, and social support systems as factors motivating positive behavior change (Birkett, 2004). Chang (2008) assessed personal and environmental motivators to healthy lifestyle behaviors in low-income WIC participants. Personal motivators were a strong desire to improve personal appearance and lose weight. Physical discomfort and concerns of developing disease were motivators to improve health (Chang, 2008). Environmental motivators were social support from mothers, friends, coworkers, and other people with similar experience, dietitians, and physicians (Chang, 2008). Despite these motivators to lead a healthful lifestyle, current research has found multiple barriers to living a healthy lifestyle. This reinforces the need to work with young adults to develop effective interventions.

The research completed in this thesis will use the PRECEDE-PROCEED logic model. PRECEDE-PROCEED provides the tool needed to anticipate intervention

development and implementation challenges and to resolve them successfully. A key component of PRECEDE-PROCEED is to develop a community partnership that plays a critical role in researching the target population.

PRECEDE-PROCEED Logic Model

PRECEDE-PROCEED (Minkler, 2005) is a Community Based Participatory Research (CBPR) model that can be used with local or very broad communities to untangle and understand the complex behavioral and environmental factors that influence health and quality of life. To achieve broad and sustained change in environmental forces and behavioral patterns, it is necessary to use a participatory model to both plan and implement multiple strategies (Minkler, 2001). According to this model, successful health education is dependent on voluntary cooperation and participation of the client in a process which allows personal determination of behavioral practices. The amount of change is determined by the amount of participation of the individual (Green & Kreuter, 2005). Health behaviors have multiple influences which need to be evaluated to develop an appropriate intervention. There are eight phases of PRECEDE-PROCEED that will identify the influences of health behaviors, develop appropriate interventions, and complete continued evaluations.

In PRECEDE-PROCEED the basic phases are interdependent parts of an ecological planning system. The study of ecology simply means everything influences everything else. There are two sets of phases. The first four phases make up the PRECEDE portion of the model. PRECEDE is made up of both qualitative and quantitative evaluation methods. Phase five is the transition phase from PRECEDE into PROCEED. PROCEED consists of phases six through eight. Phase 1 provides for the

assessment of social and cultural circumstances of a targeted population. The community is involved in a self-study to identify its own needs and aspirations. This is the starting point for obtaining indicators of quality of life. During phase 1, the community partnership is developed and quality of life issues are assessed. The definition of quality of life is determined by targeted population. Quality of life can mean different things for different individuals. Epidemiological assessment (Phase 2) allows for identification of the specific health goals or problems that may interact with the social goals or problems that were identified in the first phase. It includes assessment for genetic, behavioral and environmental determinants of health. Genetic factors refers to the family history or any genetic predispositions an individual might have. Behavior factors refer to the patterns of behavior that protect or put the individual at risk. Environmental factors are determinants outside of the person that can be modified to support behavior, health or quality of life. There are hundreds of factors that could influence our genetic make-up, behavior and environment. In the third phase, educational and ecologic assessment, causal factors impacting phase 2 are grouped into predisposing (knowledge, attitudes, beliefs values, perceptions), reinforcing (rewards and feedback from others), and enabling (skills, resources, barriers) factors. Phases 4 is when the intervention is developed, along with assessing policy, organizational and administrative capabilities. As mentioned above, phase 5 is the transition period from PRECEDE to PROCEED. During phase 5 the intervention is implemented. During phase 6 the intervention is evaluated. The initial set-up and delivery, target audience satisfaction, establishment of policies and quality assurance are evaluated. These evaluations begin during phase 5 and continue through phase 7 and 8. Finally, in Phases

7 and 8 impact and outcome evaluations are completed. The evaluations are tied to measurable objectives that are determined in the first steps of the process and are routinely stated and reiterated throughout the planning process. The phases are outline in Figure 1 (Green, 2005). Throughout the entire model the community partnership developed in phase 1 is strengthened and collaboration continues to take place.

The focus of this research utilizes phase 1 of the PRECEDE PROCEED logic model. Researchers will work with the target population to determine their quality of life issues and community partners will be identified and begin collaboration. Quality of life will be assessed by completing focus groups with the target population, young adult families. This is the initial work that the community partnership and phases 2-8 of the PRECEDE PROCEED will build upon in later research.

Community Based Participatory Research (CBPR)

Randomized clinical trials have become the gold standard in determining our knowledge of health and disease (Israel, Schulz, Parker & Becker, 1998). Despite the accomplishments of randomized clinical trials, there is a void between knowledge and application in our society. Because of CBPR "multi-component, mulit-sector" approach to changing the environments that establish and maintain behavior it is an excellent model for reduction in the population-level prevalence of obesity (Roussos & Fawcett, 2000). For example, affordable access to nutrient dense foods and increased walk ability of neighborhoods assist in the broad change in eating and activity habits. Israel (1998) states the primary feature of community based participatory research (CBPR) is the emphasis on the participation and influence of community researchers in the process of creating knowledge. The consistent involvement of the community partners in all aspects

of the research, from beginning to end, is pivotal to the success and challenges of CBPR (Israel, 1998). All phases of the research are equally controlled by community partners (Israel, 1998). Israel (1998) lists eight key principles for guiding researchers through CBPR. The first is CBPR tries to work with communities with an existing identity. This could be in the physical form of a neighborhood or in the form of social interaction. The second is, CBPR attempts to build on the "strengths, resources, and relationships," already found in the community (Israel, Eng, Schulz & Parker, 2005). Third, the control of all phases of the research process is shared amongst all community partners. When there is increased community participation in the initial research decisions, then there is fewer conflict and better implementation of the intervention (Roussos, 2000). The partnership focuses the research on the needs and concerns of the identified community. The fourth key principle is all knowledge is shared to benefit the community at large. The exchange of knowledge begins with gathering of community concerns and ends with providing the outcomes of the final project. This knowledge can be used within the community to create social or environmental policy change. The next key principle is empowering the community through sharing information, decision making power, and support among the partnership (Israel, 2005). A critical variable that assists in achieving health outcomes is the ability to empower the community (Minkler, Thompson, Bell & Rose, 2001). Sixth, CBPR is a cyclical process. "It includes partnership development and maintenance, community assessment, problem definition, development of research methodology, data collection and analysis, interpretation of data, determination of action and policy implications, dissemination of results, action taking, specification of learning, and establishment of mechanisms of sustainability," (Israel et al., 1998). The seventh key

point is it focuses on the ecological model of health that includes biomedical, social, economic, cultural, historical, and political factors. The goal is to improve populationlevel health outcomes by creating sustainable environmental changes in the community (Roussos, 2000). So much of the time researchers, without strong community input, design interventions that are ill suited and not applicable to the target population (Minkler, 2005). The final key principle is the dissemination of findings and knowledge in an understandable way. Community based participatory research (CBPR) is a process that allows researchers to work along side the target population to understand, grow and create interventions desired by the population or community. The process is designed to uncover the necessary background information and knowledge to understand the issues that are important to the target population, followed by collaborative development of intervention strategy suitable to the target population. CBPR provides a method to conduct culturally sensitive and appropriate research with diverse communities (Minkler, 2005). The result is increased community trust of researchers, because researchers are seen as responding to the perceived needs of the community.

In CBPR community members are equal partners with academic researchers in defining the problem, collecting information, interpreting the data, and developing solutions in pursuit of socially relevant outcomes (Minkler, 2000). Community members must be recognized as experts in their own right and that knowledge must be equally valued as academic expertise (Corburn, 2002). CBPR fosters co-learning relationships that involve sharing of power, capacity, skills, and knowledge (Suk, 2004). Communities are empowered by their active participation and engagement in the decision making process (Fetterman, 1996). The best source of information about the community is the

community and CBPR commits to "blurring the lines between the researcher and the researched," (Minkler, 2000). CBPR works from the ground up setting the foundation of the research or intervention from the community's needs and/or priorities (Minkler, 2000). As part of the community partnership team, community members' influence and control processes that affect their community (Flegal, 2002; Coburn, 2002; Suk et al., 2004). In addition, they are trained in research skills, participate in intervention activities, and assist in analysis and interpretation of results (Fetterman, Dreyfus, Stubbs, 1996). In its purest form, CBPR emphasizes both process and outcome, with community members being equal partners in all phases of the research process (Flegal, 2002).

The American Public Health Association has a detailed policy statement supporting CBPR in public health (Maalim, 2006) and a recent Institute of Medicine report has recommended public health professionals be taught how to conduct CBPR to reflect the social and ecological view of health and disease in their work (Minkler, 2001). Rather than passive involvement of research participants, CBPR calls for active collaboration with the community to more effectively solve their problems. Communities need to set priorities for how to handle their problems including obesity (Roussos, 2000). CBPR is typically used with a definable local community, but can also be used across a broad community, such as a collection of college campuses. CBPR has been used successfully for the development and implementation of the large scale California Health Interview Survey so that the information collected would best meet the needs of agencies/populations using the resulting data. Advisory boards involving 145 people representing the 60 agencies who used the results were involved in each step of the process (Leslie, 1999).

Because community members are an integral part in designing the program, high levels of enthusiasm for implementing the program are experienced (Israel, Schultz, Parker, Becker, 1998). CBPR methodology increases the community's capacity and likelihood that findings can effect change (Israel, 1998). Methodological benefits of CBPR include improvement in reliability and validity of assessment tools, improved cultural sensitivity of interventions, and accuracy of data interpretation (Green, 2002). Sustainability of the health promotion effort beyond the initial intervention is enhanced (Kumanyika, 2005). Many programs have been tested for their efficacy (the impact of intervention under highly controlled circumstances) but not necessarily for their effectiveness (the impact of intervention under normal circumstances) (Brown, Holtby, Zahnd, Abbott, 2005). The community-based approach is a community-sensitive strategy that allows for testing effectiveness.

Community based participatory research has challenges. Visible changes in population-level health outcomes take longer than the typical lifetime of the many partnerships (Roussos & Fawcett., 2000).

Quality of Life

For the purpose of this research quality of life is defined by the target population, young adult families, during the focus group process. Green (2005) defined quality of life as "needs are satisfied and that they are not being denied opportunities to pursue happiness and fulfillment." An individual's desired satisfaction with life is influenced by their culture. People perceive life to be more enjoyable if it ends on a high note versus living several years in pain at the end of life (Diener, E., Wirtz, D., & Oishi, S., 2001). According to Diener et al. (2003), subjective well-being deals with what an individual

would describe as happiness or satisfaction. Demographic factors such as health, income, educational background, and marital status accounts for a small degree of how satisfied an individual is about their life. A study addressing physical activity's impact on quality of life found that after 5 years physical activity had a positive effect on quality of life of older adults (Elavsky, S., McAuley, E., Motl, R.W., et al. (2005). The factors influencing a young adult's quality of life have not been identified. This research will utilize focus group methodology to assist in the determination of these factors.

Focus Groups

Focus Group vs Quantitative Methods

Non-directive qualitative methods allow participants to share their experiences, attitudes, and perceptions about a belief or behavior in greater depth than is available using quantitative methods (Young, D.R., & et. al., 2001). Analysis of this information can suggest strategies that may be particularly effective with the target audience (Gittelsohn J. & et. al., 1998). Qualitative data from Cody and Lee (1999) found mothers in focus groups identified benefits of physical activity that are specific to motherhood. The participants felt that they were able to be more effective as a mother after exercising. This methodology may be useful in future research to gain insight into the topic areas where quantitative research may be misleading.

Developing the Questions

Questions should be conservational, clear and short, and usually open-ended (Krueger, 2000). The questions should move from general to more specific with the later questions being of greater importance to the study. Refrain from any questioning that will make the participant feel that a certain answer is expected. Dichotomous questions

do not foster an environment in which people feel they are expected to elaborate. For example, "did you like this newsletter?" These kinds of questions make it easy for the participants to answer just yes or no. Asking "why" questions should also be avoided as these questions imply rational answer is expected and an answer may be fabricated to comply. Krueger (2000) presents five categories of questions to help guide moderators through the focus group, see Table 1. The focus group interview will generally include no more than twelve questions for a 90 minute session (Krueger, 2000).

The process of developing the questions begins with clarifying the problem (Krueger, 1998). This is done best by collaborating with team members to understand several points of view and to determine that focus group is the best method for obtaining answers to the problem. The next step is to gather ideas about questions that will shed light on the problem identified (Krueger, 1998). Through this process the type of participants and further clarification of the problem will be discussed. A variety of ideas will be used to develop the final questions (Krueger, 1998). The third step is preparing the first draft of questions. Attention must be given to the phrasing and sequencing of the questions (Krueger, 1998). The questions can be thought of as 5, 10, and 15 minute questions. The five minute questions would consist of the get to know you questions or transition questions. While the 15 minute questions take up a great deal of your 90 minutes and must be very important. Finally, it is important to pilot the questions and make any revisions necessary. Piloting of questions maybe done with a sample of the target population, or members of the research team (Krueger, 1998).

Moderator

The effectiveness of focus groups depends in large part upon the skills of the moderator. The moderator should be a person who is capable of skillfully handling the group process. According to Krueger (2000), the moderator's respect for the participants may be one of the most influential factors affecting the quality of focus group results. A good moderator listens attentively with sensitivity, is genuinely interested in the group, wants to hear what each participant has to say, makes the group feel comfortable and relaxed, and builds an environment that is thoughtful and permissive.

A good moderator is able to keep the discussion on track and draw out the perceptions and opinions of all group members without undue influence from dominant individuals. Part of the skill of moderating focus group discussions is being able to make these transitions and yet preserve group enthusiasm and interest in the subject matter. Skillful moderators know when to probe for greater depth of responses and are able to do so without reacting to, and thereby influencing, opinions of participants (Krueger, 2000). Leadership does not mean dominating the conversation but rather knowing when to step in and redirect the group (Morrison-Beedy, Cote-Arsenault, Feinstein, 2001).

The moderator must have an adequate background of the subject matter under discussion, but does not need to be an expert. Having an adequate background is essential for placing comments in perspective and following up on critical areas of concern. A moderator who is clearly an expert on the subject matter, however, may cause participants to withhold from expressing their opinions (Krueger, 2000).

Assistant Moderator

Use of an assistant moderator can enhance focus group research. The moderator is primarily concerned with directing the discussion, keeping the conversation flowing, and taking minimal notes which are mostly comprised of future questions to be asked (Krueger, 2000). Toward the end of the focus group session, the moderator asked the assistant if he or she would like to ask any further questions of follow-up on any key points (Krueger, 2000). The assistant moderator is extremely helpful in conducting the post-meeting analysis of the focus group sessions (Krueger, 2000).

The assistant moderator keeps track of time, responds to unexpected interruptions and takes comprehensive notes of the order in which people speak and themes that are striking. Other responsibilities include keeping records of the seating arrangement and nonverbal behavior between group members, operates the recording equipment, and handles the environmental conditions and logistics (lighting, seating, refreshments, etc.) (Krueger, 2000; Cote-Arsenault & Morrison-Beedy, 1999). The assistant moderator should be someone (i.e. graduate student, research associate, peer student, extension educator) who is familiar with the research objectives and qualitative research methods.

Good note taking is essential in case the tape recorder doesn't work. Following are some points for the assistant moderator to consider when taking notes (Krueger, 1998b).

- Consistency and clarity are important for capturing key phrases or words, major themes, and for identifying quotes.
- 2.) You may want to draw a sketch, of the seating arrangement to help recall who sat where and said what.

- 3.) Listen for statements that illustrate important points of view. Place the name, initial or code number of the speaker after the statement or quote. Use an ellipsis (...) to indicate when part of the quote is missing.
- 4.) Write down follow-up questions on key points that you might ask toward the end of the discussion.
- 5.) Watch for head nods, eye contact, or other clues that would indicate the level of interest or agreement.

Facilities and Equipment

Focus groups are to be conducted in a neutral setting that is easy to find and conveniently located to the target audience (Edmunds, 1999). If a table is available, focus group participants should be seated around it. Avoid long, narrow tables that place too much distance between those who are near the moderator and those at the far end of the table (Morgan & Scannell, 1998).

Prior to the Session

Before conducting a focus group, the moderator should memorize the questioning route. Memorizing the questioning route is helpful because the sequence of questions maybe altered during the discussion. However, it is important not to read the questions word for word. This destroys the spontaneous flow of the conversation (Krueger, 2000).

Both the moderator and assistant moderator should arrive early to set up the room and tape recorder, as well as greet the participants. The opening conversation, as participants arrive, should center on neutral topics (weather, sports, etc.). Avoid controversial topics (religion, politics, etc.) or key issues to be discussed later in the

session. The emphasis is on creating a warm, friendly, and comfortable atmosphere without distractions (cell phones, pagers, room noise, people arriving late, etc).

During this time, the moderator and assistant moderator can observe group interaction and note people who tend to dominate and those that seem shy or quiet. It is best to position the shy and quiet individuals across from the moderator to facilitate eye contact and encourage participation. If participant names are known beforehand, "name tents" can be made from 5-by-8 inch index cards folded in the middle with first names printed and positioned around the table. Last names are not necessary (Krueger, 2000).

Controlling Focus Group Dynamics

Ideally, participants will stimulate each other to participate in the discussion. The moderator's job is to keep the conversation directed towards the topic, and to elicit as much information as possible. When focus group participants talk among themselves, more insights may be gained than when they simply respond to the moderator's questions.

In addition, the moderator should be familiar with two fundamental techniques: the five second pause and the probe (Krueger, 2000). Both techniques are helpful in gathering more information from group participants. The five-second pause is used to prompt additional comments as people speak up to fill conversation "gaps." Probing is a process where the moderator encourages focus group participants to elaborate on their responses (Edmunds, 1999.)

During the discussion, the moderator or interviewer should allow the conversation to flow with as little interruption as possible. Do not interrupt participants or interviewees when they are sharing. The possibility of group influence and dominant

respondents are frequently raised as a limitation of focus group research. Such situations can and do occur if the moderator is not skilled at knowing how to handle them.

After the Focus Group

Immediately following the focus group, the moderator and assistant moderator should have a debriefing session. They check to make sure the tape player successfully recorded the discussion. The moderator and assistant moderator compare notes (both visual and written) and determine the most important themes or ideas discussed. As researchers debrief, consider any unexpected findings and determine if there are any thoughts or ideas that should be probed more heavily in the next group (Edmunds, 1999). It is especially important to discuss what went well and what can be improved (e.g. seating arrangements, wording of questions, moderator responses, or strategies to deal with individuals or circumstances) (Morrison-Beedy, 2001).

It is essential to have a detailed transcription of the focus group dialogue. The audiotapes from the focus groups should be transcribed verbatim and then typed. The moderator and assistant moderator should review the tapes three times to check that the dialogue was accurately recorded. Analysis starts by going back to the purpose of the study (Krueger, 2000). According to Krueger, focus group analysis is systematic, uses verifiable procedures, is done in a sequential manner, and is a continuing process. Each subsequent group is analyzed and compared to earlier groups (Krueger, 2000). Doing analysis as you go improved data collection. Several sources of information are useful for focus group analysis including: (Edmunds, 1999)

- 1. The moderator's own notes
- 2. Notes taken by the assistant moderator

- 3. Debriefing sessions conducted immediately following each group
- 4. Audio tapes of the face-to-face focus groups
- 5. Transcripts

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Figures

Figure 1.1 Phases of Precede-Proceed

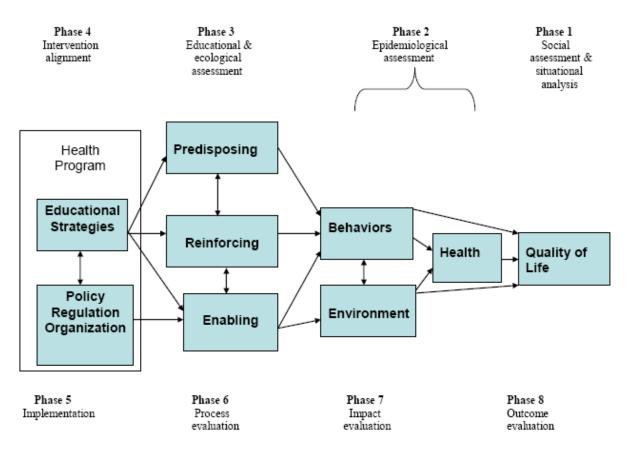


Figure 1. Phases of the Precede-Proceed Model as outlined by Green LW, & Kreuter MW, Health Program Planning, 4th ed., N.Y.: McGraw-Hill, 2005, Ch.1

Tables

Table 1.1 Focus Group Question Categories

Opening question	Helps participants and/or interviewee get acquainted
Introductory question	Begins topic of discussion
Transition questions	Move the conversation into key questions that drive the study
Key questions	Obtain insight into the main objective of the study
Ending question	Brings closure to the discussion and allows each participate to summarize their views or to say something they didn't have the chance to mention during the group session

CHAPTER 2 - Methodology

Introduction

Focus groups allow researchers to gain an understanding of participants' knowledge and values (Morgan, 1998). Focus groups create an opportunity for participants to discuss ideas and opinions, and declare differences and similarities (Kieffer, 2005.) Focus group interviews have been described as un-structured questionnaires, but the responses are open-ended (Churchill, 1979). The moderator creates a permissive, non-threatening environment that encourages participants to share perceptions and points of view (Krueger, 2000.) Focus groups create lines of communication and are a fundamental way to learn from the selected population (Krueger, 2000).

Focus Group Sample

Approval from the Institutional Review Board (IRB) was obtained to complete this study. Participants for the focus groups were recruited from Riley County (RC) and Fort Riley's Women, Infants and Children (WIC) office, RC Head Start, RC Early Head Start, RC Parents as Teachers, RC Family Connections, and Flint Hills Bread Basket. Post-card flyers were provided to an area woman's program and day care facilities. In addition, participants were recruited from two Kansas State University departments. The participants were asked, by phone, a series of questions to determine whether they qualified for the study. If the individual was between the ages of 18-24 years, and married or a parent they qualified to partake in the study. If the individual was a student

and a Nutrition or Exercise major they did not qualify as these individuals could bias the data. Both reminder phone calls and emails were completed four days and one day prior to the focus group discussion. Participants were asked to arrive 10 minutes early. Ideally, the number of participants for a focus group is six to eight; four is considered the minimum number acceptable (Krueger, 2000). Each focus group consisted of 6 individuals. Over recruitment was completed in the case of cancellation, fourteen and ten individuals were recruited for the first and second focus groups, respectively. The potential recruitment was n=901, representing a total per managers and directors overseeing facilities where recruitment took place, (see Figure 2.1). According to the 2000 U.S. Census for the city where recruitment took place, people 18-24 years of age make up over 39% (n=17, 562) of the population (U.S. Census Bureau, 2000). The 2008-2009 student enrollments at the university were 23, 520 (http://www.k-state.edu/registrar/statistics/).

Focus Group Procedure

Focus group questions were developed by the twelve university NC-1028 regional committee and piloted by the University of Rhode Island. For this study, seven piloted questions were designed as the questions for each focus group (see Appendix A). The community based partners supported the piloted questions. All focus groups were completed in the Kansas State University Sensory Analysis Panelist Room. This room provides the adequate quiet and room design promoting good participation. The moderator, trained by the Riva Training Institute, led each focus group discussion. The moderator's guide (see Appendix A) was designed to obtain information to identify quality of life issues of the target population. The researcher was the assistant moderator

and assisted with the consent and demographic forms, and taking notes during each focus group. To increase participation, childcare was provided. Participants were compensated \$20 cash for their time. At the beginning of each focus group, signed consent forms (see Appendix B) were collected. Each participant completed a demographic (see Appendix C) form at the end of the focus group discussion.

A debriefing took place between the moderator and assistant moderator immediately following each focus group. All focus group discussions were audio taped and transcribed verbatim. Coding the data allows the researcher to assemble the data in categories (Krueger, 2000). The researcher, moderator, and an individual with a qualitative research background coded each transcript independently. The transcripts were coded manually by assigning a label in the margins of the transcripts for each quality of life or health behavior issue that appeared. If the issue appeared again, the same label was assigned to that issue. To avoid research bias, the final coded transcripts were compared to identify the commonalities and differences. The moderator's transcript served as a master copy, while categories or labels from the other two coders were transferred to this copy. If labels on any three transcripts did not match up with another coder they were highlighted. Differences in categories were reviewed and discussed by the three coders to determine if the category was important enough to stand alone, could it be collapsed into another category, or should it be discarded because of its irrelevancy.

Statistical Analysis

All quantitative data were analyzed using SPSS for Windows (version 13.0, SPSS, Inc.). Descriptive statistics will be used to describe the demographics survey completed by focus group participants.

Outcomes

The outcomes of these focus groups provide health professionals with information to guide behavior interventions and programs for young adult parents and families.

University and community policy makers will have a better understanding of the needs for this sub population of young adults. More specifically, researchers will obtain quality of life measures for Phase 1 of the research model, PRECEDE-PROCEED. The community-based partnership will use this information to move forward through the remaining phases of the PRECEDE-PROCEED Model. Upon completion of the PRECEDE-PROCEED Model phases, an intervention would have been developed and evaluated for its influence on quality of life issues pertaining to adult married couples and/or parents.

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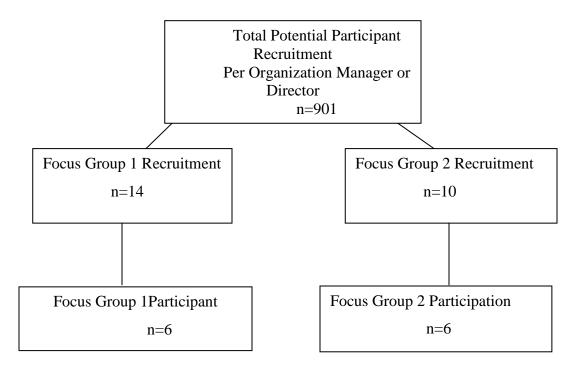
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Figure 2.1 Potential Recruitment



CHAPTER 3

An Investigation of Behaviors Influencing Life Satisfaction in Young Adult Families

Abstract

Objective: To identify behaviors that impact life satisfaction and health of young adult families.

Design: Two-90 minute focus groups were conducted with parents and/or married people.

Setting: Focus groups were lead by a trained moderator using a moderator's guide designed specifically for this target audience.

Participants: Twelve pre-recruited community members participated in this study. Participants were between the ages of 18-24 years. In the case they were students, Nutrition and Exercise Science majors were excluded to prevent bias.

Analysis: Focus groups were audio taped and tapes were transcribed verbatim. The transcriptions were coded manually by assigning a label in the margins of the transcripts for each quality of life issue that appeared.

Results: Several issues impacting satisfaction with life and barriers to a healthy lifestyle were identified. However, money, time, family, and children were primary concerns.

Conclusions: This study identified the need to complete additional assessments to quantify the needs of young adult parents and families, so community-based partnerships can effectively develop programming and interventions.

Introduction

Young adulthood is a critical time when adverse changes in body weight are likely to occur, and 18-25 year olds are at particularly high risk for excess weight gain (Lewis et al, 2000; Williamson et al, 1995; Klem, Viteri, Wing, 2000). Moderate physical activity is a key component in maintaining one's health and quality of life, while inactivity is associated with increased levels of mortality and chronic disease (Center for Disease Control and Prevention, 2005). The leading health goal of *Healthy People 2010* is to increase physical activity (U.S. Department of Health and Human Service, 2000).

A demographic at high risk of inactivity is parents with dependent children. Parenthood is a major life event that requires considerable lifestyle changes (Bellows-Riecken & Rhodes, 2008). There are findings suggesting a decrease in total number of physical activities people are involved in during childbearing years and increase obesity (Nielsen et al., 2006). As young adults become married they start a change in lifestyle that influences their health and their future children (Burke et al., 1999). Some couples understand that they need to change their behavior, but do not know how to (Burke et al., 1999). The poor lifestyle behaviors that produce excessive weight gain place an increased risk for premature death, heart disease, diabetes, other health problems as well as threatens their quality of life, (Ogden, Yanovski., Carroll, & Flegal, 2007). These transitional experiences that influence young adult behaviors present a unique challenge that warrants exploration in the context of the young adult life stage and perceptions about health and quality of life.

Qualitative methods allow participants to share their experiences, attitudes, and perceptions about belief or behavior in greater depth than is available using quantitative

methods (Young, et al., 2001). Focus groups are an effective way to elicit perceived barriers to a healthy lifestyle (Hoebeke, 2008). Qualitative methods provide insight into topics, while quantitative findings provide more detailed information, and informing future theory and health promotion development (Bellows-Riecken & Rhodes, 2008).

Community-based research is a collaborative approach with community members, organizational representatives, and researchers throughout the research process (Israel, Schulz, Parker & Becker, 1998). A successful community-based partnership shares the research responsibility through equal participation and shared control over all phases (Israel et al, 1998). Because of CBPR "multi-component, mulit-sector" approach to changing the environments that establish and maintain behavior it is an excellent model for reduction in the population-level prevalence of obesity (Roussos & Fawcett, 2000). This study's community based partnership met during the planning period of the focus groups and after focus groups was completed to discuss results and develop conclusions.

PRECEDE-PROCEED (Minkler, 2005) is a CBPR model that can be used with local or very broad communities to untangle and understand the complex behavioral and environmental factors that influence health and quality of life. Using the PRECEDE-PROCEED model of participatory research will help researchers work with their target populations to identify and prioritize the problems of significance to them which can then be connected to most appropriate health issues. By using a participatory research model, we are also more likely to develop an intervention desired by the target population and thus on that is sustainable. The purpose of this study was to identify quality of life and health behaviors of young adult parents and/or married people.

Methodology

Focus Group Sample

Approval from the Institutional Review Board (IRB) was obtained to complete this study. Participants for the focus groups were recruited from Riley County (RC) and Fort Riley's Women, Infants and Children (WIC) office, RC Head Start, RC Early Head Start, RC Parents as Teachers, RC Family Connections, and Flint Hills Bread Basket. Post-card flyers were provided to an area woman's program and day care facilities. In addition, participants were recruited from two Kansas State University departments. The participants were asked by phone a series of questions to determine whether they qualified for the study. If the individual was between the ages of 18-24 years, and married or a parent they qualified to partake in the study. If the individual was a student and a Nutrition or Exercise major they did not qualify as these individuals could bias the data. Both reminder phone calls and emails were completed four days and one day prior to the focus group discussion. Participants were asked to arrive 10 minutes early. Ideally, the number of participants for a focus group is six to eight; four is considered the minimum number acceptable (Krueger, 2000). Each focus group consisted of 6 individuals. Over recruitment was completed in the case of cancellation, fourteen and ten individuals were recruited for the first and second focus group respectively. The potential recruitment was n=901, reflecting a total per managers and directors overseeing facilities where recruitment took place, (see Figure 2.1). According to the 2000 U.S. Census for the city where recruitment took place, people 18-24 years of age make up over 39% (n=17, 562) of the population (U.S. Census Bureau, 2000). The 2008-2009 student enrollments at the university were 23, 520 (http://www.k-state.edu/registrar/statistics/).

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were compared to identify the commonalities and differences. The moderator's transcript served as a master copy, while categories or labels from the other two coders were transferred to this copy. If labels on any three transcripts did not match up with another coder they were highlighted. Differences in categories were reviewed and discussed by the three coders to determine if the category was important enough to stand alone, could it be collapsed into another category, or should it be discarded because of its irrelevancy.

Statistical Analysis

All quantitative data were analyzed using the Statistical Package for the Social Sciences (SPSS for Windows, version 13.0, SPSS, Inc.). Descriptive statistics will be used to describe the demographics survey completed by focus group participants.

Results

Demographics

Of the 24 respondents recruited for this study, 12 participated in one of two focus groups. The majority of the participants (n=11) were females and 25% (n=3) represented racial minorities. Approximately 92% (n=11) were students at the university, technical school or community college level. Over 83% (n=10) were parents and nearly 25% (n=3) were married. Fifty percent (n=5) received WIC benefits and 17% received food assistance (food stamps) benefits. Twenty-five percent (n=3) had children utilizing the Head Start program, while over 33% (n=4) took part in the county's Parents As Teachers program. In addition, 25% (n=3) self reported other forms of assistance such as, State Children Health Insurance Program and Low-Income Housing.

Participants also provided information regarding fruit and vegetable consumption, and minutes of physical activity. Forty-two percent (n=5) of participants reported

completing at least 30 minutes of physical activity most days of the week. Fifty percent (n=6) consumed five or more servings of fruits and vegetables each day. Yet, greater than 91% (n=11) recorded they should consume 5 or more fruits and vegetables per day. Ninety-one percent (n=11) reported their current weight to be greater than their perceived preferred weight.

In addition to a majority of the participants being students, 75% (n=9) worked outside of the home. Fifty percent worked 10 or more hours per week. All participants made less than \$25,000 in annual income: over 58% made less than \$10,000 in annual income.

Focus Group Results

Focus Group Labels

Three Things That Determine How Happy One is About Life

The responses from this question were rather simple and direct. Popular responses are issues regarding the following: 1) family 2) time 3) goals 4) social 5) environment.

Family

Participants reported that the relationships with their children, spouses, and parents made a significant impact on their happiness with life. The health and happiness of their child affects their own happiness. Being separated from family caused them to be nervous.

I think that when ever my son is happy, I am happier. (Respondent from Group 1).

My 2 ½ year old makes me happy when she is healthy and happy. (Respondent from Group 1).

Relationships are something very important to me, friends and family. (Respondent from Group 1).

I am from a small town called Great Bend, Kansas. I like that life. I feel safer in that town. I feel like I know everyone and everyone is going to be there for you. It is that small town feel and I like that. I am calm when I am in that environment. When I came up here I became unnerved. (Respondent from Group 2).

Time

Time was an issue that impacted multiple areas of the participant's life. It affected their ability to partake in hobbies, physical activity, personal time and the ability to relax. In many instances, it appears as though the time requirements of parenthood affected the participants, (who were parents) free time.

I would have to say the amount of time you have for yourself. If you do not do the things you enjoy you will get run down. (Respondent from Group 2).

My daughter is 4 months old. There is not a lot of time for relaxing. I used to not enjoy sitting and relaxing, but I love it now. I used to always be doing something with someone, but now I enjoy the free time. (Respondent from Group 2).

Having time for you...whether it is just reading a book. (Respondent from Group 2).

Goals

The participants had personal and professional goals that they are striving for.

According to the participants, achieving and accomplishing those goals would provide great happiness in their lives. In some cases, the participants who were parents were able to easily transition into their parental responsibilities, while not giving up their social goals.

For me having personal goals outside of my kid is important. And things that make me happy and make me a better person and a better parent, so, going to school. I want to do things that I would do if I didn't have her, doing things for me, so I don't lose myself in being a parent. Going for a walk and taking her with me. Going to things here at school, but taking her with me. I went to this Stomp thing with the fraternities that she had fun at. Doing things I want to do and include her with me. (Respondent from Group 1).

Accomplishments would be on my list too. Good grades and things like that. (Respondent from Group 1).

I just look for the future and how well things will be. I think ahead instead of thinking of just now and today. (Respondent from Group 2).

I feel that about 50% of people our age do not plan for the future. (Respondent from Group 2).

Social

It appears that the social atmosphere these young adults surround themselves with have an impact on their happiness. The participants believe it is important to have a connection outside of being a parent; however, some admitted that the attitudes of the individuals they spend their days with affect them.

Just the people you are around and your surroundings on an everyday basis. How their attitudes come off, regarding friends and family. It makes my day regarding what is going to happen and how my day is going to go. (Respondent from Group 2).

I think my daughter makes me happy too, but I think it is important to have someone grown up to talk to also. Keep you company and get away from some of the small child talk for awhile. (Respondent from Group1).

Environment

Many participants believed the physical environment influenced their happiness. Some participants verbalized missing their home town and believed that Manhattan was too small or too large, depending on where they were from. Also, a pleasant work environment and a job a person enjoys was a factor for individuals working.

I think the job if you have one adds happiness if you enjoy your job. (Respondent from Group 2).

I enjoy Kansas City more; Manhattan is too small for me. It has improve since I had my daughter, but I like to interact with people. (Respondent from Group 2). Factors that Affect Life

Participants listed several factors that influenced their life. Labels identified for this question are: 1) money 2) stress 3) time 4) parenting 5) family 6) relationships 7) social.

Money

Money appeared to be a major issue for these young adult parents and families. The parents found themselves limiting luxuries or fun items to make sure bills were paid and childcare was paid. The young married adults were learning how to budget their finances and communicate with their spouse regarding what they will spend their money on. The participants expressed a belief that their need to work many hours to make ends meet affected the time spent with family, friends, and on themselves.. Some participants believed they were more dependent on financial aid and working because they were parents.

You will be working more hours and have less time for your friends, family, or even for yourself. Or the things that make you happy. I think that is a big factor. (Respondent from Group 2).

Money is always an issue for me. It is not a huge issue between my wife and I, but it is just deciding what we are going to spend money on. (Respondent from Group 2).

When you have your own place and have a kid you have to worry about bills and keeping gas in the car to make sure you can get back and forth to your job. You cannot always have fun after you have paid bills. Get your bills paid first, make sure daycare is paid, and make sure he has clothes to wear to school. (Respondent from Group 2).

I missed the initial deadline for FAFSA [Federal Student Aid] by 2 days. I didn't get work study. Now I have to think about that time between August and November where I will not have the extra income. So, any little bit impacts me greatly. (Respondent from Group 1).

Stress

Stress was a concern indicated through out the first question. Bills, childcare, saving money, finding academic funding were all problems discussed. The need to take care of their child(ren) at all costs provided increased stress. Their child was one of their first priorities.

I think money is a big issue. Because of all of the stress you have to figure out. Trying to figure out what you need to payoff next. How much money you are going to have for the semester? Having childcare, where are you going to find childcare? Having extra money? Besides being a regular student who has difficulty finding grants and loans, you also have that extra burden of how to pay for childcare. (Respondent from Group 1).

If you have a kid you have to take care of them at all costs. You get in your head that I have to have this money and I will figure out how I am going to get this money. It can cause a lot of stress if you do not have enough of it. (Respondent from Group 2).

I am working two jobs right now and it can stress me out at times. (Respondent from Group 2).

Time

Time was a factor for all of these young adults. When these young adults were lacking time, sleep was typically sacrificed. Not having enough time separate from their child to complete their homework during the day was a problem. Participants discussed the time management of school, work, family commitments and trying to stay involved with family and friends was an issue.

I stay up all night 2-3 times a week to just get the things done. Because when she is home I want to be with her. I can't take out pins and needles and scissors when she is there. So, I do that at night. (Respondent from Group 1).

I also think time is a big thing for me. If I do not get my homework done when she is at daycare, then I have to do it when she is asleep, because she will not handle it. She has to do her homework too and it is on the same paper. She is not old enough to not be like that. (Respondent from Group 1).

Sleep is a huge restriction. Even when I show up for work and school, I am not showing up if I don't have that. So before I can have money or schooling I need sleep. Sleep is usually what has to be cut. (Respondent from Group 1).

School is harder for me than I want it to be. Time is an issue. (Respondent from Group 1).

Parenting

All parents of the two groups expressed their child being higher priority than their own needs. They search for reassurance that they are raising their child right. As some were single parents they described the strong bond that they had with their child and their dependence on one another. Single parents expressed their perceived difference from married couples with children and non-parent young adults, such as their dependence on financial aid coming on time and providing health insurance to their child.

Yes, I think [money] impacts me more as a parent. Because, if I wasn't a parent then I would have the option to take more on at work or if I was more responsible I would have more savings. Since I am a parent I have a lot more factors that tap into me, daycare, diapers, and extra food, on top of my personal expenditures. There are no personal expenditures, it goes to the child. (Respondent from Group 1).

Being a parent I have always wondered if I am doing the right thing for my son. I need reassurance. (Respondent from Group 1).

If I have had a bad day at work and go to pick him up at pre-school and I ask how his day was, if I had a bad day 9 times out of 10 he had a bad day at school. It is some kind of mother son connection. I don't know how to explain it.

(Respondent from Group 2).

My daughter receives (health) insurance from the state, but I do not. Because my daughter's father does not pay child supports. So, it is in my best interest to pay for my own health insurance than get into that whole legal mess. So, there are things that non-parents and parents that have the mother and father dynamic, there are certain factors above and beyond that is more stressful for single parents. So, if I do not receive my financial aid then it impacts my life more than just school. (Respondent from Group 1).

Family

Family support was a factor influencing their lives on many occasions. Many young adults received financial support from their parents, while others didn't. Some felt guilty for taking the assistance and were determined to make it on their own or pay their parent back the money. Participants looked forward to and stressed about their independence from their parents. One participant felt that there will always be a strong bond with family. In many cases, despite the fact that they are parents themselves, they still feel the repercussions of conflict between their own parents. As one participant moved to Manhattan to finish her degree, her parent received a divorce. Influences from the family's religion stressed participants into marriage upon becoming pregnant. One followed her parent's wishes and got married, but now wonders if they were married for

the right reasons. Another did not follow her parent's wishes and has decided to wait until she is finished with college and be sure marriage is right for herself. A final issue discussed was the in-law dynamic that occurs within some young couples. A young lady was concerned about her in-laws assisting them financially. She was afraid that it may become a problem.

I have not really had to worry about money my entire life, because my parents have been very supportive and they pay for my college. They pay for just about everything until I graduate in May. So, I am starting to stress about how I am going to take care of things, because I am not use to it. I have been trying to budget for it. And I have been stressing because I know that I am going to be pretty shocked once it does happen. My dad wants to pay for me for ever, but my mom says no. (Respondent from Group 2).

With family they will always be there to back you up and look out for you. (Respondent from Group 2).

I think there is an emotional thing that holds me back, b/c I feel guilty. I feel a little less than, because I get help from my parents because they pay my rent. Then the rest I have to come up with. I feel that there is a certain determination to do well in school as a certain measure for paying them back. Then when I get out of school I will pay them back even though I do not have to. For the help they gave me. Respondent from Group 1).

My family are clear across the state, because I moved here all by myself. At the same time they went through a divorce. So, I felt like I just kind of left. That is really hard. (Respondent from Group 1).

I got pregnant before I was married. My background and family background is very Christian, so I received a lot of looks. Like you shouldn't have done that look. So, what I am dealing with now is whether I did the right thing by getting married. Was it for the right reasons? So, for me by the time the kids are all gone, what is going to happen. (Respondent from Group 2).

My husband grew up a lot better off than I did. His parents helped him out a lot. They took loans from their corporation and now we owe them money. I feel that could become an issue in the future. Just in-laws and money are not a good combination. (Respondent from Group 2).

[The in-laws] wanted me to get married the second I was pregnant. Marriage is not something that I am ready to jump into. I am going to wait till I am done with college, because I want to enjoy it. I also want to make sure that I am ready. (Respondent from Group 2).

Relationships

Participants discussed their relationships with their spouse, previous relationship and the father of their child. A male participant described his marriage as an arranged marriage and they must learn how to compromise and work together. A female

participant who is a single parent acknowledged she has no support from the father of her child. One participant describes her difficulty in becoming involved in a relationship.

The way I have approached marriage is like an arranged marriage, but it is one that I have really grow form because we are really different people. We have to learn how to compromise and work together. (Respondent from Group 2).

The baby's father, well I call him the sperm donor because he is not worth a darn. When I say I am a single mother I mean I am a single mother. He does not call or come around. He is a worthless parent. (Respondent from Group 2).

My barriers is just guys. When I feel like I have found the right one, I feel like I have found the right one too fast. And I end up being alone a few months down the line. (Respondent from Group 2).

Social

During the beginning of parenthood these parents felt as thought have had to sacrifice their social life. They put their child ahead of their own needs. But, the love for their child has helped them overcome these feelings of resentment. A parent notes the difference between him or herself as parent and her or his single friend. Their priorities about how they spend their time were different.

Well since I have had a child there are a lot of things I cannot do any more. It did make me mad at first, but you grow to love your child and want the best for them. (Respondent from Group 2).

My best friend from back home, he is from Venezuela. His biggest concern is how many girls' numbers he is going to get by the end of the evening as if he is going to get Friday night off to go party. We have different priorities.

(Respondent from Group 2).

Satisfaction with Life

Participants found money, time, future plans, family stress and support as issues that would improve their satisfaction with life.

Money

Money was brought up again as it was stated that money will bring increased satisfaction with life. The participants believed that if they had more money then it would solve some of the financial stresses associated with college and parenthood. They would feel as though they would be able to provide for their child. More money would allow them to pay off debt, which they believe would decrease their stress.

If I had more money I wouldn't have to take out as many loans. I would not have to worry about college. You know that your child will always be taken care of.

You can provide the best for them. (Respondent from Group 2).

Paying off debt. Paying off bills and credit cards. It is a cloud hanging over my head that I want to get rid of. (Respondent from Group 1).

Time

The young adults in this study believe that more hours in the day would assist in their satisfaction with life. One individual noted that they have realized how poor their time management was, which may be a solution to their need for more hours in the day. A parent stated that they feel guilty sending their child to daycare, so that they can attend school. The participants expressed a need to spend more time with their children.

I would definitely like to have more hours in the day. I never realized how bad I am at time management. (Respondent from Group 2).

Not leaving my kid at daycare everyday, so I can go to school. I want to be with my daughter a lot more. (Respondent from Group 1).

Future Plans

All of these young adults had some sort of professional goal and looked towards planning the future, versus just living in the moment. Instead of just living day to day, they were making plans for their future that would then benefit their family. The sense of job security was something they desired and looked forward to achieving upon graduation. There was a longing for independence from other resources or parents. They want to be able to make it on their own and make decisions on their own.

Job security. Go ahead and graduate and have a job that you know that you are going to be there for awhile. Not just a temporary job or summer job. (Respondent from Group 1).

I think not needing people's resources. Not needing to call home for help. The feeling of not being able to be on my own, because I feel like that I need mom's help with this. My home is almost to Colorado. If my car breaks down what do I do? It would be nice to not have to do that. (Respondent from Group 1).

Family

A few of these young adults had strong bonds with their own parents. They felt a need and had a desire to help take care of their parents financially. One individual would like to have a successful job, so that her parents are taken care of financially. She feels that her satisfaction with life would improve if her father took more time for himself instead of working a great deal.

I would like to have my own successful job. My dad is 60 and he is not going to retire, he loves to work and cannot sit still. His mind is always on work and always stressed out. I would like to be able to help him enough to give him free time too. I want to support my entire family. Even though they haven't told me I have to, I just want to because of everything they have done for me. (Respondent from Group 2).

Stress

Through the focus group these young adults were able to connect with others that are dealing with many of the same issues as they were. They stated that they had felt isolated and that there was no one to relate with. Upon meeting other college students who are married or have a family they understand that others have the same needs. The participants in this study acknowledged the impact stress on their life satisfaction. One parent noted that how one approaches life can cause stress and dissatisfaction. He recommended just the act relaxing more and looking at things positively will improve life satisfaction.

Just the stress of thinking that you are the only one going through it, or the only one feeling the way I am. Other people don't seem to have it affect them as bad. (Respondent from Group 1).

I feel that it is the whole approach to life is what it takes to be happy. You have to be able to relax and see things in a more positive light. (Respondent from Group 2).

Support

Young adults felt as though knowing others in the same situation provides emotional support for difficult situations. There was a need for an easier way to identify all of the resources available to them through the university such as financial aid and adult services. Identifying community services, such as WIC, was important to them. Young adult parents and young adult families would like a method to connect with individuals just like themselves and the options available to help them deal with their problems. An individual stated that the people she surrounds herself with on a daily basis impacts her satisfaction with life. Her mood can be dependent on those around her.

Just briefly talking to people here, I need to speak with people in similar situations. Because the challenges that I face everyone faces, because everyone is just trying to do the best they can. I sit in class and think that other students are not like me. So, knowing what other resources are out there, FAFSA, grants, state, and WIC. Knowing other people are dealing and that there are options that help deal with it. (Respondent from Group 1).

Happiness is determined by the people you are around on a daily basis. It's like if you are not happy I am not happy. (Respondent from Group 2).

Personal Health and Satisfaction with Life

Participants focused on the problems that impact their health, but were unable to determine how these problems affected their satisfaction with life. Problems that were identified were exercise, illness, social, dietary,

Exercise

In many instances participants referred to how active they were before parent hood or marriage. There was a definite sense of a significant change in behaviors after this transition period occurred in their life. Two participants referred to how exercise impacts their happiness, health, and stress in life. There were also statements regarding their desire to improve their current level of physical activity.

I don't have time to work out as much as I used to. I am trying to build it into my day. My grandmother lives here and watches my daughter till 5:00 every day. Every time I plan to exercise something else comes up like wanting to sleep. I never end up doing it. (Respondent from Group 2).

I used to do Yoga every day. I used to run, ride my bike, and walk everywhere. (Respondent from Group 1).

I think [exercise] has a lot of effect on how happy you are. If you are not able to do the things you did before. You are not able to workout the way you want to.

You are sick you do not feel the same way. You feel like you need more sleep. (Respondent from Group 1).

I was in every sport in every semester. I would run 3 miles a day. I ran today, but I have not run since Christmas break I think. (Respondent from Group 1).

Before I had her, I was active but not on a regular basis. Once I had her I was hauling groceries, carriers, laundry, and lifting her up. I have to be healthy because God forbid if I broke a foot. We are going to be up a creek. It is important for me to maintain my health. I like to have her outside at the park and run around to keep her active, which helps keep me active. (Respondent from Group 1).

I have actually started running more. I have noticed my energy and attitude improves. I am less stressed out. I used to be very high strung before starting to do it. I have a friend to do it with me. We are both enthusiastic about it and we look forward to it. (Respondent from Group 1).

Illness

A few participants noticed the development of some illnesses since having their children, such irritable bowel syndrome and a bladder disorder. Both disorders caused stress in the households. The chance of catching and spreading communicable illnesses was a concern as it would impact the parent's ability to attend classes and get to work. The parent feels as though they can work through their own

illnesses, but if their child becomes sick then they must stay home and miss school or work.

I stress really bad about things and since having my son I have developed IBS.

Some of the gastrointestinal issues because I drank so much coffee to stay awake then I stopped recognizing hunger cues. (Respondent from Group 1).

Well since I had my daughter I have been diagnosed with a chronic illness, which is a bladder disorder. The disorder is typically controlled and tolerated. But when it is not, it really affects my entire household, which is me, her (child), and my fiancé, which is really bad. It makes me incapacitated for a day or two, where I can not get out of bed or the bathroom. It is really hard on her because she follows me from room to room. (Respondent form Group 1).

My personal health is if I get sick then it is only a matter of time when she (child) gets sick. So, I can not perform up to par, but when she gets sick it is a mess. So, like last week I had to miss 2 days of school, because when I am sick I can deal with it, but when she gets sick and we are both sick and we are staying up all night then it gets ugly. (Respondent from Group 1).

Social

A participant felt that moving here has contributed to her loneliness. Again, there is significant impact on their behavior upon a transition in their life.

Before moving here I was very active and very social. I think that is part of it too, because now I am so lonely. I had so many friends and things to do all of the time. (Respondent from Group 1).

Dietary

Participants discussed their family's influences over the food they eat. The lack of time to prepare foods was mentioned. On participant mentioned her concern for consuming the right amount of nutrients because she is breastfeeding her child. A mother expressed the concern of her husband's family history of obesity and poor health. She felt as though this could impact her family's quality of life. In addition, there was a lack of knowledge of what is considered healthy and how to eat it.

Both my parents had restaurants and I would just eat anything. But once they closed them and my mom started cooking at home I didn't eat anything greasy or much sugar. When I came here I could eat what ever I wanted to and if I did I would just feel sick. My body didn't like the sugars and the grease. So, I ended up eating the way my mom does anyways. (Respondent from Group 2).

I eat when ever I can get it in. I am on the go all of the time. If I have time to fix food in the situation I will. (Respondent from Group 2).

I am breast feeding right now, so I am worried about getting the right balance of nutrients. (Respondent form Group 2).

In my husband's family obesity runs in their family and their lungs wear out because they cannot keep it off. I guess I learned that I am not good at eating healthy, because my metabolism was so fast I didn't have to worry about it until I got pregnant. I am still carrying baby weight. I never know how to eat healthy and I am still working on it. I guess to me it scares me that he could get that way so fast that I wouldn't see it coming and then all of a sudden he wouldn't be able to walk around with us. I have told him many times that we need to start eating healthier because I do not want him sitting in the bleachers and not being able to play with his kids. (Respondent from Group 2).

Current Lifestyle Affect Future Health

Again, this question was not directly answered. Participants discussed the problems that influenced their current lifestyle, but they did not connect how their current lifestyles would affect their future health. Factors influencing their current lifestyle were stress, physical activity, time, diet, money, and support.

Stress

Participants discussed how the stress of school and lack of sleep affects them. Instead of mentioning how they are going to deal with the stress, they hoped that when school is over their stress will go away. There was also the hope that consuming a healthy diet will make up for the increased stress in their life. A majority of the participants expressed the concern that stress will impact their future health and prevent them from achieving their academic goals, yet they were not able to articulate exactly how the stress would impact their future health. Exercise was brought up again as a way to treat stress and frustrations.

We always have fruits, vegetables, protein and bread. I think that it hopefully makes up for some of the time that I do not get enough sleep and stress. I think the stress is from school, so I hope I will get to a point that I am not as stressful. (Respondent from Group 1).

I am just really burnt out right now. I want to go on and get my master degree, but I can't keep going the way I am now. I just can't. I think depression has an impact on me. Since I had my son I have had depression, not severe depression but a small degree. (Respondent from Group 1).

My lifestyle right now will affect me badly in the long run. Because I am doing so much and am so stressful. Stress is bad for your health. (Respondent from Group 1).

[Exercise] helps get that frustration out. It is rarely [my child] that makes me mad; it is other adults, other environmental situations. Exercise helps me get out some of the things that I cannot control. (Respondent from Group 1).

Physical Activity

Different experiences were expressed regarding physical activity. One noted that lack of physical activity does affect your quality of life in your 30's and 40's and that one could die by 50 if they were sedentary. Something not specified was how physical activity affected a person's quality of life in their 30's and 40's. Some participants noted how they attempted to commute by foot, many walking all over campus for classes. A

few participants expressed their concern that there was no child care at the student recreational center. They would like to use the recreational center, but were unable to attend because of lack of child care. One parent included their child in their workout time. One participant mentioned the difficulty in exercising on a regular basis and acknowledged that the lack of exercise could impact their health, but they did not know how it could impact their health.

I feel like osteoporosis is in my future. Carcinogens and sedentary lifestyles make you feel worse in your 30s and then 40s and you are definitely dead by 50. You have to exercise to live. (Respondent from Group 1).

I walk everywhere for class. (Respondent from Group 2).

You can't take your daughter to the workout center. (Respondent from Group 2).

I spend time with my child working out. (Respondent from Group 1).

Since I am not exercising, I don't feel like I have time. I feel that it will have an impact on health. I am trying to exercise, but it is hard. You start going to the gym, you are going, then you stop and it is hard to go back. (Respondent from Group 1).

I think if they did have a service at the rec like a day care center for students that are parents I think it would make it a lot easier. Because if I made time I would

have time after school to go, but since I have him with me then I can't go to the rec. We go to the park and walk, but I don't think it is the same as working out at the gym. (Respondent from Group 1).

Time

One respondent discussed how all of her time commitments influence the amount of sleep that she obtained. She was concerned that her daughter will learn bad behaviors from her own poor sleep habits. While some mentioned that they have no time to exercise on their own, they try to go on long walks with their child. A married individual commented on how since becoming married she doesn't make time to exercise, but she could if it were a priority. Some acknowledged the guilty feelings if they left their child with a friend to work out after their child had been in daycare all day. The parent would like to spend that time with her child instead of working out.

I think that staying up all night will catch up with me, in ways it already has.

There are a lot of things. Emotionally, it can wear on you. And it can set up a lifestyle that at least for me I don't function well. In the future, I need to be alright with it not getting everything done today, it can wait until tomorrow. And my daughter, I don't want her to think that this is the only way to get things done. I want her to know that it is okay if we do not get everything done today. If I am physically drained, I don't want her to think that it is normal. (Respondent from Group 1).

The biggest problem that I have is no time to exercise. I don't have time to exercise on my own, so when we do go for a walk we walk for a long time. I

don't have time to go to the rec, I think in my whole college career I have gone to the rec maybe once. (Respondent from Group 1).

I know when I need a break, but I feel guilty picking him up and then leaving him with a friend, so that I can go to the rec. I want to spend that time with him and can't afford to lose that time with him. (Respondent from Group 1).

I just got married. Something that I have a problem with is making time to work out. I always used to and I know that is my fault I could make time. If I had a kid I could make time, but I don't know if I would. You can if it is a priority. You can get up an hour earlier. (Respondent from Group 2).

Diet

Participants discussed their different eating habits. A few of the participants admitted that they wanted their child to eat healthy, which would encourage them to eat healthy. Another parent felt that since becoming a parent she had no time to plan and prepare a meal, so she eats a lot of fast food. Lastly, a male participant stated he would like to live a long healthy life and as an older adult still function independently. Eating healthy is a prevention tool for him.

I think definitely that some things that we do well with our health is that we eat well. That is one thing that is important to me. Since my daughter eats well, that makes me eat better. (Respondent from Group 1).

I try to eat really healthy and my son eats really healthy too. (Respondent from Group 1).

Well I eat a lot of fast food, because once you have a child you can't really sit down and plan a meal. (Respondent from Group 2).

When I eat out I always try to think about when I am an old man. I want to be healthier when I am older and have my brain still functioning. I look at it as preventive medicine.

Money

A parent discussed that she currently takes here daughter for walk, but would like to increase her intensity to jogging. She feels as though she cannot afford to buy a jogger.

I take her for walks, but I do not have a jogging stroller and I do not have the money to buy a stroller. (Respondent from Group 1).

Support

One participant discusses how her family and significant other live in different cities far away from her as she finishes her degree. The lack of support here makes it hard on her.

Part of it is being separate from his father, we are still together and he is still in college in Colby and that is where my family lives. For about a year and a half it was really hard. (Respondent from Group 1).

Surroundings/Environment Affect Health

Once again participants addressed problems in the environment that affect their health, but they did not discuss how it would impact their health. Problems discussed were in the home, environmental, work/school, social, physical environment, and safety.

Home

The home environment was an issue brought up by many participants. In many cases they felt as though their family had outgrown their small home. Some did not have the tools or the time to keep their house clean, so they felt as though it was unsafe for their child learning to crawl. Another participant lived with her mother, which caused a stressful living condition.

My home is a mess. I can't do dishes that quickly and do not have a dishwasher.

Our vacuum is not working. Since she is starting to crawl around I am freaking out, because I don't want her to eat something that she shouldn't have.

(Respondent from Group 2).

We have so much stuff, more stuff than our apartment allows. I have to make a path into her room, because there are clothes, toys, diapers, and her bed. That affects me a lot. It is stressful. And it is frustrating. (Respondent from Group 1).

I live with my mother and she is horrible for my health. (Respondent from Group 1).

Environmental

A participant discussed their concern with the increasing concern of environmental costs.

One reason I started to walk was to save gas. (Respondent from Group 2).

Work/School

According to one participant, the stress of the work environment can affect one's health.

I think stress no matter your environment, such as your work environment. If you are stressed out all of the time it will impact your health. (Respondent from Group 1).

Social

The participants felt a strong sense of peer pressure to drink and eat. They expressed as a student there is not a lot to do other than drink or eat. Other factors that influenced them were their families eating habits. A young married female admitted that she now eats more like her husband, meat and white bread versus the fruits and vegetables she ate prior to marriage. Another participant discussed her family's cattle ranch and how eating beef is large part of her family's tradition.

Parents in our groups felt left out of their social circle after becoming a parent.

Many of them have friends that are single and non-parents. They have felt a shift in priorities from going out to taking care of their child. But, that sense of feeling included was still a desire. One parent expressed that her single friends actually enjoyed spending time with herself and her son. They plan fun events that they can all take part in.

Everyone wants to go out drinking. When I turned 21 I started drinking. (Respondent from Group 2).

There is nothing to do. When I first came here I was bored. You ate or you drank. I guess I could have gone and worked out, but all my friends were eating and drinking. (Respondent from Group 2).

My ex-best friend all she wanted to do was eat. When she would come to Manhattan she would say lets go eat. With her I was eating a lot. (Respondent from Group 2).

My husband will not touch anything that is green, orange, or yellow. He eats white bread and a lot of meat. So, I will cook what he will eat. I have the same bag of vegetables in my freezer for a month. I used to eat a lot of fruits and vegetables, but now I eat more of what he eats. (Respondent from Group 2).

My grandfather raises and butchers cattle, so if you don't eat beef then you are not part of the family. (Respondent from Group 2).

My old friend from high school tries to include me, but they know that I am more mature, more responsible, different priorities and goals. My new friends here at K-State are accepting of my son, but they do not get it. And you want your old friends to still ask you to do stuff even if you can't. (Respondent from Group 1).

I have felt left out, especially since my daughter's father continued to go out. I am okay, because I enjoyed being with her more than the stupid people going out and drinking. (Respondent from Group 1).

Now that my son is older, now that I have moved here all of my friends are supportive of me with him. All of my friends are college students, and only a few of them have children. The ones I talk to the most do not have children, but they like helping me out with him. We do things together that allow me to bring him with me. But, when there are times when I can't bring him with me, my mom is very supportive. She knows that I need time off since she was a single mother. I felt left out in high school, but not in college. (Respondent from Group 1).

Physical Environment

Participants felt that their physical environment influenced their health behaviors. One commented on the poor upkeep of the sidewalks surrounding the campus. Another pointed out that fast food companies are offering healthier options, which she felt was a result of the nation moving towards demanding healthier options. Another participant believes that the city is health conscious. People are frequently outside being active. She makes the point that people do not have to go to a gym to be active. In her opinion, parents can be active with their children through walking, biking, or going to the park.

Where I use to live was by campus. The sidewalks are not good for running or walking. (Respondent from Group 2).

A lot of fast food places are providing healthier options. There is a trend toward convenience and healthy. Better brands. Now I actually eat some fast foods, but I am still picky. The trend is that people are trying to eat healthier, so the industry is moving in that direction. (Respondent from Group 2).

I think Manhattan is a very health conscious town. There are people outside at all times of the day exercising or just being outside whether it is throwing the Frisbee or whatever. Even if you have kids you can go outside and play, ride bikes, or walk. You don't have to go to a gym to be physically active. (Respondent from Group 2).

Safety

Many participants discussed their concerns with the safety of their neighborhoods. One participant mentioned hearing guns shots and having intoxicated individuals throw beer bottles in their yard. Another has neighbors that sit outside and shoot beer cans. She is concerned about someone in her family becoming injured. A parent discussed how, prior to parenthood, she took her health for granted. Now that a neighbor above her apartment smokes, the smell comes into her apartment and she is now concerned with her daughter's health. Another participant noticed that her move to suburban area made her feel safer and now she walks outside all of time.

Well I have heard gun shots. I have heard screaming and not know where it is coming from. We have drunk people walk past our house and throw beer bottles in our yard. (Respondent from Group 2).

My environment affects us because it is small and someone above me started smoking and I didn't realize how bad it smells and it does stink. I start thinking like you do, oh my god, before it was your own health, but then you have this fresh little baby you are trying to protect and be mother wolf. Our environment is what keeps us healthy and keeps up happy. (Respondent form Group 1).

We live outside of town in a little suburb and I love walking at night and I feel safe. I am outside a lot more. (Respondent from Group 2).

The neighbors sit out every night and shoot beer cans. That bothers me as a safety issue if it were to come into our house. I have the baby's room on the opposite side, because I would never be able to sleep at night. (Respondent from Group 2).

Additional Concerns of Young Adults

Each focus group discussion had rich dialogue. At the end of each discussion participants addressed additional concerns regarding healthy lifestyles. Across both focus groups one theme appeared regarding weight issues; the desire to be thin. There are internal and external pressures to be thin. Unhealthy weight loss methods worried these young adults as they have seen friends and family use starvation and behaviors that have lead to anorexia. Other weight issues were concerns with family history of obesity and the chronic diseases related to them. Mothers expressed a desire to lose excess postnatal weight. Additional health issues discussed were mental health and peer pressure of alcohol consumption.

Participants provided their opinion on the type of young adult health messages professionals should use. Examples were: anything in moderation, love yourself, make time for yourself, and variety. Delivery methods mentioned were video games, personal experiences and through celebrities.

Discussion

The purpose of this study was to identify quality of life and health behaviors of young adult parents or families. In addition to these outcomes, many barriers and motivators to health behaviors were identified.

Despite a majority of the recruitment taking place in the community, 92% (n=11) of participants were students. According to the 2000 U.S. Census for the city where recruitment took place, people 18-24 years of age make up over 39% (n=17, 562) of the population (U.S. Census Bureau, 2000). The 2008-2009 student enrollments at the university were 23, 520 (http://www.k-state.edu/registrar/statistics/). These statistics make it reasonable to assume that while our recruitment qualifications were to be between the ages of 18-24 and married/and or a parent most were also students.

A majority of the participants reported they should be consuming 5 or more fruits and vegetables per day, while 50% actually consumed 5 or more fruits and vegetables per day. Nanney et al., (2007) found parents understood the importance of consuming 5 or more fruits and vegetables per day, but none of the parents met the recommendation.

In October, 2008 the U.S. Department of Health and Human Services released 2008 Physical Activity Guidelines for Americans, which provided Americans with updated scientific recommendations for physical activity (http://www.health.gov/PAGuidelines/guidelines/default.aspx#toc). This report stated

nearly half of young people aged 12-21 are not active on a regular basis, while forty-two percent of our participants reported completing 30 minutes of moderate intensity most days of the week. Understanding the individual's current behaviors, their perceived barriers, needs and desires are important factors in determining how they can change their undesired behavior. These factors can assist community-based partnerships in developing effective programming for young adults.

Nomanguchi and Bianchi (2004) found that married people, parents and full-time employees spend less time exercising. In relation to marital status, single parenthood was significantly associated with higher levels of inactivity (Brown and Trost, 2003). Barriers to healthful eating increased as children grew older (Nuss, Clarke, Klohe-Lehman, & Freeland-Graves, 2006). Many participants discussed how their lack of sleep impacted their overall happiness and health. The elements that affected the amount of sleep they received were homework, household responsibilities, and their child. Individuals had a strong desire to increase or become more physically active. Issues influencing their physical activity level were time, child, energy level, lack of child care, and lack of social support. Research completed by Chang et al. (2008) found mothers felt they had a no personal time. Young et al. (2001) found social support as a motivating factor for both initiating and maintaining physical activity and weight loss behaviors. Their social support and social life were large contributors to their life satisfaction. Social support was addressed in several forms: family supporting them financially, and family and friends' emotional support. The lack of support was also discussed as they either have no family physically present or their family chooses not to emotionally support them. King et al. (2000) research found lack of support in terms of child care and

encouragement were major barriers to engaging in physical activity. The stress of family, school, work, and money caused negative health results in some and lack of sleep in others. Knowing how to budget and save money, and the lack of money was a great concern for participants. A final point that was a significant part of parent's satisfaction was their child. The child's health and happiness was the parent's top priority. Yet, the child was also a barrier to the parent taking care of his or her own health and practicing healthy behaviors. Parent's reported lack of time made it difficult for them to be active with their child (Dwyer, Needham, Randall-Simpson, & Shaver-Heeney, 2008). Some reported their activities of daily living have increased since becoming a parent.

In addition, the child was a motivator for the parent to lead a healthier lifestyle. The health benefits gained from healthier behaviors were also motivators. Young et al. (2001) found health and children to be motivating factors for starting physical activity. WIC participants reported the health benefits to the child, a sense of responsibility and social support systems as motivators to healthy eating (Birkett, Johnson, Thompson, & Oberg, 2004).

Conclusion

The findings from this study revealed there are several barriers that are impacting quality of life and health of young adult parents and married couples. Even though participants understood changing their current behaviors would improve their health, they have difficulty overcoming barriers to a healthy lifestyle. Research completed by Burke et al. (1999) found young adult couples want programs that assist them in putting knowledge to practice. Participants reported factors influencing their quality of life were money, time, stress, family, and lack of a healthy lifestyle. All of the issues discussed in

the focus groups can be brought to the community-based partnership for further discussion and evaluation. Using the PRECEDE-PROCEED model additional assessments can be completed to quantify the needs of young adults. Not only can community programs and research interventions be developed from this invaluable information, but policy change supporting non-traditional students at the university can occur. In addition, the information can guide policy changes at the city level. When new planning take place, such as updating recreational services, the outcomes of our study could help guide decision makers in adding childcare.

Education materials or classes pertaining to time management may address poor time management and the perceived lack time. A similar format could be used pertaining to living on a budget and how to set financial goals. Support groups with other non-traditional students would help individuals isolated from family members to create new relationships and develop a sense of belonging. The parents of this group made it clear their child is top priority. Education on how to complete healthy lifestyle behaviors together as a family could be beneficial. The general public has a general knowledge of what is a healthy behavior from the internet, television, radio, magazines, and newspapers (Broihier, 2000). Yet, the public needs assistance in achieving and maintaining these behaviors.

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CHAPTER 4

Project Summary

As stated previously, this research is a smaller part of a larger North Central (NC-1028) Regional research project. The results from this research will be part of a total assessment of the young adult population. Since the completion of our focus groups, we have been able to obtain additional partners to take part in our steering committee. Our steering committee during the focus group consisted of professionals from community service organizations such as Parents as Teachers, Riley County Health Department, Child Care Facility, Head Start and Riley County Research and Extension. Currently, representatives from Kansas State University Student Governing Board, Lafene Health Center and the University Recreational Center will be joining us in 2009. In addition, we were able to identify individuals from our target population to take part in our steering committee upon completion of the focus groups. The following is an outline of the eight phases of PRECEDE-PROCEED and how each is used in the NC-1028 Regional Project.

Phase 1: Social Assessment and Situational Analysis. This step was the starting point for obtaining indicators of quality of life as defined by individuals' perceptions of their life in the context of the culture and value systems where they live, and in relation to their goals, expectations, standards and concerns. In each state (n=12), participatory research-community teams that included young adult participants were established and steering committees were formed. Qualitative focus groups and key informant interviews, and quantitative surveys were used to identify perceived quality of life issues of young adults. Quality of life is characterized as how one defines day-to-day and long-term goals, aspirations, frustrations, and stressors. Problems and priorities concerning

general quality of life issues that were specific to prevention of weight gain for these individuals and their communities were determined.

Phase 2: Epidemiological Assessment. In this phase each state's PI, in collaboration with it steering committee, is currently recognizing and prioritizing the specific health goals or problems related to obesity prevention that influence quality of life and goal attainment of its young adults. The specific health goals or problems will become the outcomes measured in PROCEED Phase 8. In addition, community teams in each state are conducting an environmental analysis to assess the nutrition and physical activity environment; activities include mapping food outlets, assessing the availability of healthful options in restaurants, outdoor walkability and indoor access to stairs, analyzing vending options and policies that support healthful nutrition and physical activity options. Based on Phase 1 focus group data, we anticipate that some of the behavioral and environmental indicators that prevent excessive weight gain will include compliance and consumption patterns of fruit and vegetables, frequency and duration of exercise, and sufficient sleep duration and quality.

Phase 3: Ecological and Educational Assessment. From the first 2 phases, the quality of life factors and epidemiological issues will be prioritized so that an appropriate ecological and educational assessment can be conducted. The results from Phase 2 will guide the development of a survey to assess predisposing (knowledge, attitudes, beliefs, values, perceptions), enabling (resources, rules or laws, skills) and reinforcing (support, influence from others) factors that have potential to prevent obesity (excessive weight gain). The target population and partners will be involved in identifying and administering appropriate instruments and sorting the results into the predisposing,

reinforcing, and enabling categories. The survey, which will be pilot tested with young adults in each state, will also identify preferred modalities for potential interventions. There are numerous existing valid and reliable surveys that identify predisposing, enabling and reinforcing factors that states may use; for example, Stage of Change for readiness to consume the recommended number of cups of fruit and vegetables and eating competence. Eating competence has been measured using ecSatter Inventory (ecSI). The ecSI measures eating attitudes, food acceptance, internal regulation, and contextual skills such as meal planning. Those who have higher eating competent scores are more likely to be satisfied with weight, have lower BMI and consume more fruits and vegetables than those with lower eating competence scores.

The product from this phase will be the identification and prioritization of the most important and changeable elements that have a direct impact on, and the greatest potential to change the behavioral and environmental factors related to obesity prevention that impact young adults' quality of life. Thus, community steering committees will collaborate throughout the process and will review results from the quality of life/health and predisposing/enabling and reinforcing factor survey and ecological/environmental analysis and use these results to identify the most important needs described by their peers. The data from all states will be aggregated and analyzed to determine trends in similarities and differences. From these, specific learning and resource (predisposing, enabling, reinforcing) objectives that guide the intervention and the evaluation in each state will be developed. With the completion of Phases 1-3, each state's research team will be poised to begin Phase 4.

Phase 4. Program Administrative and Policy Design. During this final assessment phase, state partnership teams/steering committees will develop the intervention best suited to encourage desired changes in behaviors and environments and in the factors that support those behaviors and environments. Policy, organizational and administrative capabilities and resources that support obesity interventions will be assessed and teams will determine components that are needed and available to effect the desired changes. To ensure target population and partner input, the PIs will work through their state partnership teams/community steering committees to tailor-design the intervention. This process will be an iterative procedure among PIs and communities and will continue until the intervention under development meets the collective objectives of the communities. Additionally, Dr. Jeffrey Arnett, a developmental psychologist specializing in young adult (emerging adult) growth, will be consulted for additional assurance that the intervention meets identified young adult issues.

We will develop an intervention for weight management through healthful eating and physical activity based on those qualities that contribute to young adult's life balance. Based on the results from the previous phases, the intervention may need to include additional foci (i.e., control of stress and time management principles) to overcome the barriers to achieving the selected healthful behaviors. The intervention is yet to be developed.

Phase 5: Implementation. This phase is will be the transition from the PRECEDE into the PROCEED. The PI from each state will work with his/her steering committee to implement and test the intervention in their target community. This process is yet to be determined.

Phase 6. Process Evaluation. In this phase, occurring in Years 2, 3 and 4 of the study, we will evaluate on an on-going basis the fidelity with which the intervention is being implemented and whether the intervention is operating effectively (instrument to be developed).

Phase 7 (Impact evaluation) and Phase 8 (Outcome evaluation) are the phases that include the evaluation tenets of the randomized control trial to assess the interventions planned during the PRECEDE phases. Phase 7, Impact Evaluation Phase, determines the impact of the interventions on outcomes (set forth in the study hypotheses). The predisposing factors (knowledge, attitudes, beliefs, values, perceptions), reinforcing factors (attitudes and behaviors of health and other personnel, peers, parents and employers) and enabling factors (availability of resources, accessibility, referrals, rules or law, skills and the built environment) that were determined in phase 3 are now the factors measured to determine short-term impact on the intervention. The behavioral indicators (compliance, consumption, preventive actions) and their dimensions (frequency, persistence, quality, range), environmental indicators (economic, physical services, social services) and their dimensions (access and affordability) and vital indicators (fitness and physiological risk factors) determined in phase 2 also will be measured as outcomes of the developed intervention. Anticipated behavioral indicators that will be measured include eating competence, self-reported physical activity and fruit and vegetable intake.

Phase 8, Outcome Evaluation Phase, provides the opportunity to measure changes in weight and the subjectively defined problems and priorities of the communities of young adults that were defined as quality of life indicators in Phase 1.

Appendix A - Moderator's Guide

Moderator's Guide

Focus Group Moderator's Guide

Begin the focus group by welcoming all participants, introducing the moderator and comoderator, if appropriate, and having the participants introduce themselves. The moderator should present an overview of the topic and provide the ground rules before the questioning begins.

Moderator Opening Statement:

I'd like to welcome you to our focus group and thank you for taking the time to join our discussion. My name is Tanda. Assisting me is Carrie Snyder. Today I will be asking you some questions about life satisfaction and things that are important to you. The goal is to have a discussion based on the questions that I propose. Please take a few minutes to respond to each question as well as reply to the response of the other participants. There are no wrong answers, but rather many different points of view. Please feel free to share your opinion even if it differs from what others have to say. We are interested in learning what's important to each of you.

The information obtained during this study may help us to better understand the quality of life of young adults. Before we begin, let me remind you of some ground rules. This is strictly a research project. I will be guiding the discussion but not participating so that you may talk with each other. Please speak clearly and it is best if only one person talks at a time. I am going to be asking for you to comment on different issues and you can refuse to participate at any time. No names will be included in any report and your comments are confidential.

Our session will last 90 minutes, and we will not be taking a formal break. Are there any questions?

Okay, let's get started and find out more about each other. Please share your favorite hobby.

Focus Group Questions

Quality of Life

- 1.) What are the 3 things, which are most important in determining how happy or satisfied, you're feeling about your life?
- 2.) What are the most prominent factors (safety, security, environment, relationships, successes, barriers, goals, etc.) that affect your life?
- 3.) What will improve your satisfaction with your life?

Epidemiology/Health

- 1.) How does your personal health affect how satisfied you are with your life?
- 2.) How do you think your current lifestyle will affect your long-term health?
- 3.) How do your surroundings or environment affect your health?
- 4.) Among young adults, what issues do you see related to weight?

Appendix B - Consent Form

Informed Consent

Thank you for your interest in the Life Satisfaction Project. You are invited to participate in a discussion group to explore what young adults feel is important for them and their health. Information from you and others will be used to understand how to develop programs that will benefit young adults and their health.

You must be 18-24 years old and be able to participate in a focus group on XXX at XXX.

If you choose to participate, you will be asked to:

- Participate in a 90-minute discussion group.
- Complete a brief survey (approximately 5 minutes).

All discussion groups will be held at Kansas State University in Justin Hall room 145. After participating in the discussion group, you will be asked to complete a survey with questions about your age, gender, ethnicity, food intake, and physical activity.

Risks

The risk to participate is not greater than in every day living.

Voluntary

Your participation is voluntary. You may refuse to answer any questions that are part of the survey or discussion group. You may stop participating at any point.

Confidentiality

All information that you provide will be kept confidential and your privacy will be protected to the maximum extent allowable by law. The data will be stored on a disk and in hardcopy format in the Department of Human Nutrition at Kansas State University.

In the discussion group you will only be identified by your first name. Transcripts of the data will be stored in locked offices at Kansas State University and for up to 5 years (as required by law) and then destroyed.

Data will be reported in summary format, and no names will be used. Selected quotes, from the discussion groups, may be reported. Data with all identifying information removed will be available upon request.

Questions

If you have any questions or concerns, please contact Carolyn Snyder (carriet@ksu.edu) or Dr. Tandalayo Kidd (martan@ksu.edu). If you have concerns regarding your rights as a research participant, please contact the human subjects representatives:

Rick Scheidt, Chair,
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1 Fairchild Hall

Kansas State University

Manhattan, KS 66506

(785) 532-3224

Consent to Participate

If you agree to participate in this study, please sign below:		
Signature	Date	

Appendix C – Demographic Form

Please check the appropriate box or fill in the blank.

1. How old are you?	
☐ Less than 18 years old (Not	□ 22
eligible)	□ 23
□ 18	□ 24
□ 19	☐ More than 24 years old (Not eligible)
□ 20	,
□ 21	
2. What is your gender?	
□ Male	
□ Female	
3. Are you currently a student?	
□ Yes	
□ No	
4. What is your race or ethnic	
group?	☐ American Indian/Alaska Native
☐ White (not of Hispanic	☐ Asian/ Pacific Islander
origin)	☐ Other
☐ Black (not of Hispanic	
origin)	
☐ Hispanic/ Latino	
5. How many children 12 and under are	

living in your home?	
6. What services have you used	
in the past 12 months?	
☐ Bread Basket/Food	☐ Parents as Teachers
Pantry	□WIC
☐ Food Stamps/Vision Card	☐ Other (specify)
☐ Heartland Share _	
☐ Head Start	☐ None
7. Including snacks, how many cups FRUIT and 100% FRUIT JUICE do	
cups	
8. How many cups of fruit and 100% fruit jugood health each day?	iice do you think you should eat for
cups	
U.S. Dietary Guidelines define a cup as	s the equivalent of 1 cup cooked of raw

vegetables or 2 cups of lettuce salad.

9. Including snacks, how many cups of VEGETABLES do you usually eat
each day?
cups
10. How many cups of vegetables do you think you should eat for good
health each day?
nealth each day:
cups
11. What is the amount of moderate or vigorous activity (such as brisk
walking, jogging, biking, aerobics, or yard work) you do on most days in addition
to your normal daily routine?
☐ Less than 30 minutes
☐ 30-60 minutes
☐ More than 60 minutes
12. How tall are you?
12. How tall are you!
feet inches
13. How much do you weigh?
pounds
14. How much would you like to weigh?
pounds
poulius

15. How many hours do you work for pay per week? □ 0-3 hours □ 4-10 hours □ 10-19 hours 16. Which of the following categories represents your household's total income for the past year? □ Under \$10,000 □ \$10,000 - \$15,000 □ \$15,001 - \$20,000 □ \$35,001 - \$40,000

☐ Over \$40,000

□ \$20,001 - \$25,000