UNDERSTANDING INFANT FEEDING CHOICES AMONG HMONG-AMERICAN WOMEN IN SAINT PAUL, MN

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by
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Abstract

Understanding Infant Feeding Choices among Hmong-American Women in Saint Paul
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To understand infant-feeding patterns among Hmong women in St. Paul, MN, this qualitative study used a convenience sample of 21 Hmong mothers who had at least 1 child under the age of 2. Drawing on interviews and questionnaires, this researcher explored (a) how participants described their traditional and American cultural traditions, beliefs, and values, (b) their infant-feeding practices, and (c) how their infant-feeding practices are shaped by adaptations to traditional and American cultures. In this sample, those women who had recently immigrated to the United States were more likely to exclusively use formula. Interviews suggest that American norms of breastfeeding in public, hectic lifestyles in a new country, and lack of cultural knowledge about pumping and storing breast milk influenced 1st- and 1.5-generation participants to exclusively use formula. For 2nd-generation participants, the awkwardness of breastfeeding in public was also cited as an important influence on their decision to use formula. However, quite different from 1st- and 1.5-generation women, 2nd-generation women were more educated and more likely to be employed in less segregated and professional occupations, which exposed them to mothers of different backgrounds who were breastfeeding. This exposure to breastfeeding mothers appeared to influence breastfeeding initiation among 2nd-generation Hmong. This study also found that negative social support from participants' mothers and mothers-in-law, and positive social support from sisters and sisters-in-law had a strong impact on their infant-feeding decisions. Unlike previous

research among Hispanic immigrants, this study revealed that 2nd-generation Hmong immigrants were slightly more likely to include some form of breastfeeding in their infant-feeding method. This study also revealed the importance of social support and the role of the ethnic community in infant-feeding choices. More research is needed, however, to further clarify the relationship between acculturation and social support on breastfeeding initiation and duration among various immigrant populations.

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Dedication

This dissertation is dedicated to the memory of my father, Jon Nolan Pfeiffer, who taught me through the course of his life the significance of sacrifice; the importance of hard work, dedication, and perseverance; the value of patience; and the magnitude of a father's love. I owe so much of who I am today to his example and enduring love. I know that he is proud of my educational achievements and this dissertation and that he will continue to be by my side as I make my way through life's incredible journey.

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Chapter 1

Introduction

This study adds to the literature on infant-feeding decisions, seeking to understand the social and cultural context surrounding infant feeding among Hmong women living in St. Paul, Minnesota. Several survey analyses have documented correlations between the social characteristics of mothers and breastfeeding intention and/or duration (Caufield et al., 1998; Hawkins, Nichols, & Tanner, 1987; McKee, Zayas, & Jankowski, 2004; Perez-Escamilla et al., 1998; Rassin et al., 1984; Romero-Gwynn & Carias, 1989; Scott & Binns, 1999; Serdula, Cairns, Williamson, & Brown, 1991). In Scott and Binns's review of the literature, age, education, marital status, social class, employment, social support, and ethnicity were all variables that had some predictive power in breastfeeding intention and/or duration. However, "The effect of ethnicity predominated over that of the other demographic variables when they were examined jointly within ethnic groups" (Rassin et al., 1984, p. 132).

The abovementioned survey research is certainly useful to sociologists but it often lacks deep analysis. Why do some women choose to formula feed and others choose to breastfeed? In order to gain a greater understanding of infant-feeding patterns among immigrants, this research explored the reasons Hmong Americans give for their infant-feeding choices. According to Stuart-Macadam and Dettwyler, "breastfeeding in the United States is embedded in a wider cultural context, one that is … shaped by … fundamental assumptions that underlie beliefs about breasts" (1995, p. 174); and this cultural context and the assumptions linked to beliefs about women's breasts can easily be transferred to immigrants as they assimilate and acculturate to U.S. society. In order

to understand the social and cultural factors that may hinder or facilitate breastfeeding, a growing body of research has focused on acculturation and infant-feeding patterns.

Research conducted on immigrants and infant feeding have consistently found that as groups acculturate and assimilate to life in the United States, their rates of breastfeeding decrease (Callister & Birkead, 2002; Gibson, Diaz, Mainous & Geesey, 2005; Kimbro, Lynch, & McLanahan, 2008; Rassin et al., 1994, 1993). Although most of these studies have looked at Hispanic subgroups, very few have examined infant-feeding patterns among Hmong immigrants. Hmong immigrants are a particularly interesting case for a study on infant feeding because of their unusual settlement experiences in the United States. Resettlement experiences of the Hmong in the United States have been quite different from the resettlement patterns of other immigrant groups both before and after them. Initially, Southeast Asian refugees did not settle in ethnic enclaves as other immigrants had done. Instead Hmong and other Southeast Asian refugees took part in the refugee-resettlement program that "scattered" refugees throughout the nation. This policy, as envisioned, would bring about the quickest assimilation into dominant society and would help spread the resources necessary for refugee resettlement. The resettlement program was not as successful as planned, however, and family reunification and secondary migration created significant Southeast Asian ethnic communities in Fresno and Merced, California and St. Paul, Minnesota (Miyares, 1998).

It was this initial scattering of refugees (a type of *forced assimilation*) throughout the country that may have impinged on Hmongs' strong cultural ties, beliefs, and practices, and the impact of this forced assimilation should be explored further.

According to Tuttle and Dewey (1994), "perhaps the most drastic change [for Hmong immigrants] has been the shift from nearly universal breast-feeding to a predominance of formula-feeding of infants" (p. 282). In fact, 97% of mothers who migrated from Laos to northern California breastfed their last infant in Indochina but only 22.4% of them breastfed their infant(s) who were born in the United States (Romero-Gwynn, 1989). The fact that formula was either too expensive or not available in Indochina (Romero-Gwynn, 1989) could have had a significant impact on changing infant-feeding behavior once in the United States, where formula is much more readily available. However this does not explain why Liamputtong (2002) found that the majority of Hmong who resettled in Melbourne, Australia continued to breastfeed after migrating. This difference in breastfeeding practices among Hmong in Australia and Hmong in the United States leads one to speculate that it is not the supply of formula or cultural influences in the group that explain infant-feeding behavior but instead the larger cultural context that is important. For example, Romero-Gwynn made the following point:

> While in many other countries breastfeeding is commonly practiced in public, in the United States breast-feeding is seen neither in public nor in the mass media. Bottle-feeding, however, is very often seen in public places in the United States, creating an inaccurate representation, and possibly projecting the notion that breast-feeding is not practiced in the United States (1989, p. 807).

Hmong immigrants are also an important population to investigate when it comes to acculturation and infant feeding because of their traditional beliefs in shamanism, animism, and geomancy. These beliefs have often been at odds with the American medical establishment, influenced by science and technology (Miyares, 1998), and the

conflict that has emerged has lead Hmong people to fear and mistrust Western medicine, which could have a strong impact on their infant-feeding beliefs, attitudes, and decisions, especially because infant feeding (specifically formula feeding) has begun to fall more and more under the realm of the medical establishment. Thus, we might expect to find a real conflict in Hmong attitudes and beliefs regarding infant feeding (especially for those who actively practice shamanism), because breastfeeding is more rooted in traditional society and requires less intervention by the American medical establishment.

In addition, Hmong birth rates in the United States have been the highest of any ethnic group, with an average of 11.9 children per mother compared to 1.7 for White mothers and 2.4 for African American mothers (Quincy, 1995; Sue, Arredondo, & McDavis, 1992). The fact that Hmong have such high birth rates also makes them an interesting case for a study on infant feeding. With such high birth rates, economically speaking, breastfeeding would seem to be the preferred choice.

Statement of the Problem

Much of the research documenting the effect of ethnicity on infant feeding has focused on African Americans (Beal, Kuhlthau, & Perrin, 2003; Bentley et al., 1999; Caufield et al., 1998; Felice, Shragg, James, & Hollingsworth, 1987; McKee et al., 2004; Rassin et al., 1984) or Hispanics (Cortes, Rogler, & Malgady, 1994; de la Torre & Rush, 1987; Felice et al., 1987; Hernandez, 2006; Libbus, 2000; Lillig & Lackey, 1982; McKee et al., 2004; Rassin et al., 1984; Romero-Gwynn & Carias, 1989; Scrimshaw, Engle, Arnold, & Haynes, 1987; Seger, Gibbs, & Young, 1979; Smith, Mhango, Warren, Rochat, & Huffman, 1982; Stroup-Benham & Trevino, 1991; Weller & Dungy, 1986), and most of the literature documenting the effect of acculturation and assimilation on

infant feeding among immigrants has focused on Hispanic immigrants (Anderson et al., 2004; Bonuck, Freeman, & Trombley, 2005; Kimbro et al., 2008; McKee et al., 2004; Perez-Escamilla et al., 1998; Rassin et al. 1993; Romero-Gwynn & Carias, 1989; Thiel de Bocanegra, 1998). Few studies have analyzed Asian American immigrants and their infant-feeding decisions. (A few exceptions to this are Fishman, Evans, & Jenks, 1988; Ghaemi-Ahmadi, 1992; Henderson & Brown, 1987; Rossiter, 1992a.) Even fewer have looked specifically at Hmong immigrants in the United States. (Exceptions to this are Romero-Gwynn, 1989; Serdula et al., 1991; Tuttle & Dewey, 1994.) Thus, there has been less exploration of the reasons for infant-feeding choices among Hmong immigrants. This provides the researcher with a unique opportunity to explore infant-feeding patterns in a relatively recent migrated refugee population. The Hmongs' story makes for an interesting case because this population, in contrast to other immigrant groups, traditionally lived in isolated mountain communities prior to the U.S.–Vietnam conflict, where they had relatively little exposure to the West, and thus to formula, prior to migrating.

Current debates on the topic of infant feeding often take a probreastfeeding stance and those who formula feed are often seen as victims of capitalism, and formula manufacturers, and are viewed as ignorant. Research in that vein tends to focus on working class, African American, and younger women with little formal education (Carter, 1995, p. 215). These studies refer to the cultural influences within ethnic groups rather than trying to understand the larger cultural context of the dominant society, and regard the ethnic group as deviant (Beal et al., 2003; Bentley et al., 1999; Caufield et al., 1998; Cortes et al., 1994; de la Torre & Rush, 1987; Felice et al., 1987; Hernandez, 2006;

Libbus, 2000; Lillig & Lackey, 1982; McKee et al., 2004; Rassin et al., 1984; Romero-Gwynn & Carias, 1989; Scrimshaw et al., 1987; Seger et al., 1979; Smith et al., 1982; Stroup-Benham & Trevino, 1991; Weller & Dungy, 1986). The difficulty with these studies is that they do not examine the external experiences of women and thus do not take into account the larger society. Trends in infant feeding need to be better understood in the context of women's social and cultural milieu.

Purpose of Study

The purpose of this research is to understand infant-feeding beliefs and practices among Hmong immigrants in St. Paul, Minnesota. Traditionally, Hmong women exclusively breastfeed their babies in Laos and Thailand; this researcher is particularly interested in any changed patterns of infant feeding that have occurred since their settlement in the United States. Research questions addressed are:

1. How do Hmong women describe their traditional and American cultural traditions, beliefs, and values?
2. How do Hmong women describe their infant-feeding practices?
3. How are their infant-feeding practices shaped by adaptations to traditional and American cultures?

St. Paul, Minnesota has been chosen as the location for this study because of its significant Hmong population (currently Minnesota has the second largest population of Hmong in the United States), and because St. Paul is home to significant Hmong community organizations and resources that may play an important part in preserving Hmong cultural ties, beliefs, and practices. For example, the Hmong Cultural Center, the Association for the Advancement of Hmong Women, the Hmong American Partnership,

and the Hmong American Alliance are just a few of the many local organizations that service Hmong people in St. Paul, Minnesota. In addition, St. Paul, Minnesota is home to significant Hmong research resources such as the Hmong Resource Center, the *Hmong Studies* newsletter, the *Hmong Studies Journal*, the *Hmong Today* newspaper, and the *Hmong Times* newspaper. Further, the University of Minnesota has a strong Asian American studies program that proved invaluable to the researcher while in the field and conducting this research.

Significance and Justification of the Study

Infant feeding has been a hotly debated topic both in and outside the academic community. Fifty years ago most women in the United States formula fed their babies; today less than a third of them initially formula feed (Centers for Disease Control and Prevention, 2010). These changing patterns of infant feeding make the topic an interesting sociological issue. While there are numerous breastfeeding studies in the health-sciences literature, there are relatively few sociological and/or feminist analyses. Stearns (1999) reported that while sociological and feminist research has increased our understanding of the politics of women's bodies and of reproductive experience, there is comparatively little written about infant feeding.

The health-sciences literature on infant feeding has devoted much attention to nutrition. This attention is based on a growing body of research that has shown that breast milk is the most beneficial choice for infant feeding, and suggests social, economic, nutritional, developmental, immunological, and other health benefits to both infants and mothers (Hausman, 2003). According to Beal et al. (2003), "Breastfed infants have lower rates of asthma, gastroenteritis, and otitis media and better vaccine

response than non-breastfed infants … [and], breast milk may protect against [Sudden Infant Death Syndrome]" (p. 368). In addition, according to the American Academy of Pediatrics (2005), breastfed children are less likely to develop ear infections, bronchitis, meningitis, allergies, or problems with diarrhea.

Based on the aforementioned advantages of breastfeeding, the U.S. Public Health Service and Healthy People 2010 set a goal of 75% of all newborns in the United States to be breastfeed by the year 2010, and organizations such as the American Academy of Pediatrics (2005) have repeatedly recommended breast milk as the preferred source of infant feeding. Likewise, the goal of Healthy People 2010 is to increase breastfeeding rates to 75% of all new mothers in the early postpartum period, and to increase duration rates to 50% of mothers who breastfeed through 6 months of age. The U.S. Department of Health and Human Services' "Blueprint for Action of Breastfeeding" and the World Health Organization have also recommended exclusive breastfeeding for the first 6 months of life (Oyeku, 2003).

Despite these goals and demonstrated benefits, overall breastfeeding initiation and duration has fallen short among low-income and ethnic-minority mothers. In a 1994 survey, breastfeeding in the early postpartum period for low-income mothers had a rate of 42%, compared to 60% of women overall in the United States (National Center for Health Statistics, 1996), and according to Oyeku (2003) only 52.9% of African American women breastfed their infants in the early postpartum period, compared to 72% of White mothers. While breastfeeding initiation rates have increased for African American mothers' from 23% in 1990 to 51% in 2001 (Ross Products Division, 2001) these rates still fall short of the Healthy People 2010 goal of 75% and highlight a significant

racial/ethnic disparity in breastfeeding. Breastfeeding duration rates from the year 2000 show an even greater disparity from the 2010 Healthy People goal in that only 10% of African American mothers and 30% of White mothers were breastfeeding at 6 months (Ross Products Division, 2001).

Factors that can influence a mother's decision to breastfeed or formula feed her newborn include the media, public marketing of formula, work environments, social- and personal-support networks, cultural and individual beliefs, and breastfeeding advice by clinicians, hospitals, and nonhealthcare professionals; however, these factors may affect minorities in America disproportionately (Oyeku, 2003). Van Esterik (2002) noted that "attention to cultural factors can enrich our understanding of infant feeding and potentially improve the health and nutritional status of infants." (p. 279) Thus, given the racial, ethnic, and socioeconomic-status discrepancies in initiation and duration, together with the substantial benefits gained from the practice of breastfeeding, studying the determinants of breastfeeding is of the utmost importance not only to public-health researchers but also to sociologists who are concerned with inequality and health across the life course (Kimbro et al., 2008). This dissertation begins with a literature review exploring the social context of infant feeding in the United States among the general population and among immigrant groups. It also provides a review of acculturation theory and models of interethnic relations and ends with a brief history of Hmong immigrants in the United States. Chapter 3 describes the methodology used to collect the data. Chapter 4 provides a summary of Hmong demographics in St. Paul, MN, and Chapter 5 compares and describes more explicitly some of the social characteristics of the sample. Chapters 6 and 7, the analytical chapters, describe some of the themes that

emerged from the data and participants' reasons for their infant-feeding choices. Chapter 7 ends with the limitations of the data, recommendations for future research, and implications for policymakers, public health administrators, medical practitioners and breastfeeding organizations.

Chapter 2

Literature Review

According to the literature examining infant-feeding patterns among Hispanic immigrants in the United States, breastfeeding diminishes as U.S. cultural influences impact them or as they acculturate and assimilate to U.S. society (Callister & Birkead, 2002; Gibson et al., 2005; Kimbro et al., 2008; Rassin et al., 1994, 1993). However, studies on Hmong immigrants have found a different pattern. According to Tuttle and Dewey (1994), there has been a shift from universal breastfeeding in Laos and Thailand to a predominance of formula feeding among Hmong immigrants in the United States. The intent of this research was to explore the reasons why infant-feeding patterns among Hmong immigrants may differ from Hispanic immigrants. This literature review begins with a brief history of infant feeding in the United States. It then explores infant feeding among other immigrant groups in the United States, and ends with an overview of Hmong people in the United States and what is known of their infant-feeding practices.

A Brief History of Infant Feeding Prior to the 20th Century in the United States

In order to understand the social and cultural context of infant feeding in the United States, we need to review its history and how it has changed and evolved over time. Prior to the 20th century, there were few options for infant feeding. Mothers either fed their babies' their own breast milk or employed the service of a wet nurse. However, dramatic changes occurred during the 20th century in the infant-feeding options available to mothers, and this marks a social reconstruction of infant-feeding practices. An examination of the changing roles of women, the rise of women's rights, as well as other

historical and cultural contexts will shed light on the evolution of infant-feeding practices in the United States during this period.

Shifting Breastfeeding Rates During the 20th and 21st Centuries in the United States

The 20th century was a period of dramatic change in patterns of infant feeding in the United States, which resulted in a social reconstruction of infant-feeding norms. Women's roles significantly changed during this time period and this, in part, explains the changes in infant feeding. Early in this century, prior to the war years, approximately 70% of mothers with infants breastfed. However, during the war years, when women entered the labor market in record numbers, breastfeeding rates fell to 50% between 1926–1930 and to 25% by 1946 (Hirschman & Butler, 1981), and by the mid-20th century, American society had experienced the pervasive effects of the Baby Boom in which hundreds of thousands of women returned from their new jobs into a very different American household. However, breastfeeding rates continued to decline.

As one might expect, breastfeeding rates during this period did not increase to prewar levels. In fact, "A national decline in the proportion of women who breastfeed has been documented from 1955 until the early 1970s" (Libbus, 1994, p. 1). Breastfeeding rates continued to decrease to their lowest point in 1972 when only 22% of women with newborns were breastfeeding (Wright & Schanler, 2001). Thus, from the early part of the 20th century until 1979, less than half of the population of mothers with infants in the United States initiated any form of breastfeeding. Even the following two decades (the 1980s and 1990s) had volatile breastfeeding rates varying between 61.9% and 51.5%.

However, since 1990 breastfeeding rates have been on an upward swing. In fact, current statistics reveal that approximately 74% of all infants born between 1999 and 2006 were initially breastfed (Centers for Disease Control and Prevention, 2010). In addition, research done between 1990 and 2000 from the Ross Products Division (2001) revealed that several less-advantaged groups have also had large increases in the initiation of breastfeeding. For example, Black mothers' initiation rate went from 23% to 51% between 1990 and 2000, and teenaged mothers' initiation rate rose from 30% to 56%.

The shift in breastfeeding rates of infants born in the United States today suggests that the United States is adopting a new breastfeeding culture. As breastfeeding rates increase for American society as a whole, one would expect that as immigrants assimilate and acculturate, their rates of breastfeeding would also increase. As a consequence, the effect of acculturation on infant feeding could be different today from that of a decade ago.

Historical and Cultural Context of Infant Feeding During the 20th and 21st Centuries

The rise of *scientific motherhood* in the 20th century. During the early and middle part of the 20th century, infant-feeding decisions were increasingly reliant on the medical establishment, and reproductive advice from the medical establishment supported the move from breast to bottle. In the book, *Mothers and Medicine: A Social History of Infant Feeding 1890–1950*, Apple (1987) pointed out that at the beginning of the 20th century, mothers were still considered the experts when it came to infant care. But things started to change in the middle of the 19th century as the idea of "scientific

motherhood" prevailed. The scientific orientation of medical education resulted in clinicians learning more about "scientific" infant-feeding practices, that is, formula feeding, than they did about breastfeeding. "Lack of knowledge about lactation [also] made doctors indifferent to, and often uncomfortable with, mothers who breast-fed" (Oski, 1989, p. 665). According to Apple, the general cultural agreement during this time was that in order to be a *good* mother, one should adhere to the scientific advice of the "experts" and suppress one's own knowledge and intuition (Apple, 1987).

Women's roles as wives and household managers also changed and began to conflict with more traditional breastfeeding lifestyles, as science began to encroach on the private sphere and dictate the role of modern women as efficient and scientific household managers. Thus "scientific motherhood" became the norm, and according to Hausman (2003), more than any other factor, it was science that impacted infant-feeding practices in the United States at this time. Formula feeding became the most common practice for infant feeding in America. This prevailing attitude discouraged new mothers from breastfeeding to the extent that by the late 1960s, less than 25% of mothers initially breastfed and less than 10% of all mothers continued breastfeeding into the 6th month of their baby's life (Oski, 1989).

The natural-childbirth movement. During the Women's Movement in the 1970s, cultural shifts began to occur and the postmodern response to the often-gendered and biomedicalized expert regimes was for women to embrace a feminist–maternalist ideology that would empower them (Avishai, 2007). Thus, many feminist women's health groups and Christian women's groups began to challenge the medical and scientific model of motherhood and infant feeding. By 1975, breastfeeding rates were on

the rise and by 1980, 54% of new mothers were breastfeeding (Martinez & Krieger, 1985). As of 1995, breastfeeding rates were 60% (Ryan, 1997) and by 2003, 70.9% of mothers breastfed their babies in the early postpartum period, and 39.1% and 19.6% of mothers were still breastfeeding their babies at 6 and 12 months, respectively (U.S. Department of Health and Human Services, 2005).

As Wright and Schanler (2001) pointed out, the *natural childbirth movement,* which coincided with the women's movement during the 1970s, dramatically influenced breastfeeding rates. As scientific motherhood had been an important social change during the midcentury and had promoted formula feeding, the natural childbirth movement completely rejected the medical model of birth and encouraged breastfeeding. Thus, greater family participation in the birth process reduced the reliance on medical personnel after the 1970s, and the rise in natural birthing centers began to compete with hospitals. Parents were now encouraged to take childbirth-education classes that emphasized breastfeeding (Wright & Schanler, 2001).

The natural childbirth movement also affected the way pain was handled during the birthing process. Morphine and scopolamine, which often put women in a "twilight sleep," were replaced with the epidural or other nonsystemic forms of anesthesia (unmedicated delivery was also becoming more common) so that the mother could be alert during the birthing process and breastfeed and bond with her infant immediately after delivery (Pitcock & Clark, 1992). Additionally, the *Baby Friendly Hospital Initiative* encouraged babies to room with their mother rather than staying in the hospital nursery, and organizations such as La Leche League assisted in initiating breastfeeding (Kyenkya-Isabirye, 1992; O'Connor, 1993).

Current cultural contexts: Intensive mothering, attachment parenting, and natural mothering. In addition to scientific motherhood and natural childbirth, a number of more current constructions of motherhood have emerged in the literature. For example, Hays, in *The Cultural Contradictions of Motherhood* (1996), argued that the current dominant paradigm in childrearing is *intensive mothering* where children are viewed as priceless, and mothers, as the primary caregivers, are required to devote themselves entirely to the best interests of their children. According to Hays, this dominant paradigm is often labor intensive, expensive, emotionally absorbing, and self-sacrificing. Similar ideas of current trends in parenting and mothering are provided by Sears in the idea of *attachment parenting* (Sears & Sears, 2001) and Bobel's concept of *natural mothering* (2002). These concepts are similar in that the expectations of mothers are to give of themselves and their resources unconditionally.

Hays (1996) deconstructed the ideology of intensive mothering by describing how current parenting ideology is shaped by expert and professional advice (this is much like scientific motherhood at the turn of the century; however, the difference is that mothers are now encouraged to make educated decisions based on expert advice, rather than to relinquish decisions to the experts), technological advances, and consumerism. The power of the idea of intensive mothering shaped by new technologies can be shown, for example, by the volume of online advice and information for parents. The relationship between intensive mothering and consumerism is also not difficult to comprehend. Large warehouse-type stores, such as BabiesRUs with its enormous number of products for prospective parents, easily links motherhood and parenthood to consumerism.

In addition to intensive mothering based on consumerism and technological advances, other trends have pushed mothering and infant-feeding practices in the United States toward a more natural approach. Many Americans have started questioning large formula companies and their concentrated marketing campaigns; the sterile, impersonal, and complex medical industry; and trends in agribusiness (all driven to increase profit margins). One response is what Bobel (2002) described as the *natural mothering movement* in which mothers choose some or all of the following practices: homebirth, extended breastfeeding, homeschooling, and eating organic and whole foods. While this movement is small in its number of dedicated followers, its influence is significant, and like many social movements, cultural capital plays a large part in who participates. Thus, who chooses natural mothering is often socially determined. It is easier for women from privileged backgrounds to take the risks necessary (to counter dominant ideologies) to participate in natural mothering. Privileged women also have the resources necessary to embrace this type of parenting (organic food is expensive and breastfeeding and homeschooling require flexible working environments or no employment outside the home). Hence, while most women who practice natural mothering, intensive mothering, and attachment parenting are White, college educated, straight, married, and American born, the influence of this movement goes beyond those who are practicing it. Women from less affluent backgrounds may not be able to put these ideals into practice but they are still affected by them; participants in this study may be influenced by these new ideals of motherhood, especially those who are more acculturated and have a higher socioeconomic status.

Thus studies embracing breast milk as the healthiest choice, public-health campaigns, intensive mothering (Hays, 1996), attachment parenting (Sears & Sears, 2001), and the natural-mothering movement (Bobel, 2002), all describe the current cultural context of infant feeding in the United States. And, as a consequence, formula, which at one time was viewed as the most progressive and sophisticated form of infant feeding that only privileged mothers could afford, is now associated with poor, less advantaged, and unsophisticated mothers (Apple, 1987; Avishai, 2007; Carter, 1995).

Feelings of conflict over infant-feeding choices. J. Warner's (2005) work, entitled *Perfect Madness: Motherhood in the Age of Anxiety*, and Avishai's (2007) research in *Managing the Lactating Body: The Breast-Feeding Project and Privileged Motherhood*, both provided insight into the demands and labor of breastfeeding and its often anxiety-producing results. Avishai interviewed mostly White, educated, and privileged lactating women and described the invisible labor that these women (mostly professional working women) endure to comply with dominant mothering standards (specifically breastfeeding). Avishai's respondents found breastfeeding to be a difficult, unpleasant, and disruptive experience. This experience is quite different from what women may be led to believe from public-health campaigns that stress the pleasure and intimacy of breastfeeding. The contradiction is that women both in this study and in the general public are given the message by their gynecologists, pediatricians, and through public-health campaigns that breastfeeding is the best way to feed their baby; yet they are made to feel apprehensive and uneasy for breastfeeding in public.

As the cultural context of infant feeding continues to change, with propaganda stressing the importance of breastfeeding, it is important to remember that those less

privileged often have greater structural barriers to overcome. To be a *good* mother, women feel societal pressure to breastfeed, yet there can be consequences for breastfeeding in public. The result is often conflicting feelings of guilt or anxiety for new mothers (Avishai, 2007).

This history of infant feeding in the United States was meant to provide a glimpse into how infant-feeding patterns have changed over time and the cultural context surrounding these changes. An individual's decision about how to feed an infant, whether to breastfeed, use a wet nurse, or use formula is constrained by socially constructed ideas and beliefs; ideas and beliefs that continue to be reconstructed in specific cultural contexts. Thus, in order to truly understand the choices Hmong immigrants make about infant feeding, the cultural context of both the wider society and the local community must be explored and understood.

Feminist Theories of Infant Feeding

There are clearly a number of individual, cultural, socioeconomic, and psychosocial considerations involved in a mother's decision to breastfeed or formula feed an infant today. Surprisingly, current feminist literature surrounding the social relations of breastfeeding has been fairly sparse. Carter (1995) stated that many feminists are questioning whether women's interests are better served by valuing sexual difference or downplaying the significance of sexual difference. Formula feeding might free women from the constraints of sexual difference thereby reducing sexual differences, or formula feeding might deny women a part of their sexuality by taking on men's definition of sexuality. Formula feeding might also expose them to the exploitation of baby-milk manufacturers.

This debate about sexual difference in the feminist literature is not new and is as problematic as the nature versus nurture debate. In trying to address this quandary, Carter suggested a dualistic approach and argued

> that both breast and formula feeding are shaped within discursive constructions of femininity. In this sense, the manner of infant feeding is not necessarily an answer. Rather, feminist strategy as regards [to] infant feeding can be rooted in resistance to dominant discourses. These resistances are not universal but are frequently historically and geographically specific. (Carter, 1995, p. 31)

Carter's conception of a dualistic approach rooted in the construction of femininity will serve as a guide for this research. Thus, this research sought to understand how Hmong women either accepted or resisted dominant discourses in infant feeding.

Demographics and Infant Feeding

Variables that have been studied and found significant in infant-feeding practices are mother's education level, level of household income, and ethnicity (Wright & Schanler, 2001). Rassin et al. (1984) found that marital status, head of household, and birth order were also significant variables associated with breastfeeding practices. Other variables that seem to have a negative correlation with breastfeeding are younger age and more pregnancies (Hawkins et al., 1987), and data from the National Center for Health Statistics (1996) indicated that socioeconomic status affects breastfeeding rates. In a 1994 survey, breastfeeding in the early postpartum period for low-income mothers had a rate of only 42% compared to 60% of women overall in the United States (National Center for Health Statistics, 1996).

However, probably the most dramatic change in infant-feeding rates has been among ethnically diverse populations. As stated previously, a number of factors can influence a mother's decision to breastfeed or formula feed her infant, including the media, public marketing of formula, hospital policies, work environments, social- and personal-support networks, cultural and individual beliefs, and breastfeeding advice by clinicians and nonhealthcare professionals. Yet, it is unclear as to why these factors affect minorities in the United States disproportionately (Oyeku, 2003).

In the 1980s, White women were more likely to breastfeed their babies than were African American or Hispanic women (Hirschman & Butler, 1981). Other studies conducted in the 1980s on race and breastfeeding incidence and duration showed a significant sociodemographic difference in age, education, marital status, and childbirth-class attendance, and suggested that there is a strong correlation between these demographic variables, ethnicity, and breastfeeding (Kurinij, Shiono, & Rhoads, 1988). More recent research, however, suggested similar breastfeeding rates among Whites and Hispanics but disparities between White and African American women still exist (Ryan, Wenjun, & Acosta, 2002). These researchers found that 72% White, 73% Hispanic, and 52.9% African American mothers breastfed their children in the early postpartum phase during 2001 and 34% White, 33% Hispanic, and 22% African American mothers continued to nurse their babies after 6 months of birth (Ryan et al., 2002).

To identify factors that influence a mother's decision to breastfeed or formula feed her infant, this study will examine these decisions among Hmong immigrants living in St. Paul, Minnesota. Additionally, it will explore how U.S. culture has influenced Hmong immigrants' infant-feeding patterns.

Immigration/Emigration, Acculturation, and Infant-Feeding Studies

Five studies that have examined the association between acculturation and infant feeding will be summarized here and used as a context for the current study. All five of these studies have either looked at Hispanic women exclusively or have compared them to White and African American women. Two of the studies (Kimbro et al., 2008; Rassin, et al., 1993) examined Mexican American women. The other three studies (Anderson et al., 2004; Bonuck et al., 2005; Thiel de Bocanegra, 1998) focused on Puerto Rican and other Hispanic mothers.

The two studies investigating Mexican American women and infant feeding compared breastfeeding rates among White and Mexican-American mothers (both foreign and native born). In the study by Rassin et al. (1993) the researchers conducted structured interviews with 213 Mexican American and Anglo women living on the U.S.–Mexico border. They hypothesized that individuals with a low degree of acculturation will breastfeed at a fairly high rate, as in Mexico, and that breastfeeding rates will diminish as U.S. cultural influences impact them. The researchers' hypotheses were supported and their findings suggested that as acculturation increases, the initiation of breastfeeding decreases.

The study by Kimbro et al. (2008) made use of data from the Fragile Families and Child Wellbeing Study and also investigated the influence of acculturation on breastfeeding initiation and duration for Mexican American women. These researchers hypothesized that "1) similar to other positive pre-and post-natal outcomes, Mexican immigrant mothers are more likely to breastfeed and to breastfeed longer than White or Mexican-American mothers; and 2) acculturation accounts for the ethnic/nativity

differential in breastfeeding initiation and duration" (p. 183). Their hypotheses were also supported. Both studies found that mothers with lower degrees of acculturation [based on country of birth in the study by Rassin et al. (1994) and cultural attachment, preferred language, religious participation, and gender attitudes in the study by Kimbro et al. (2008)] breastfed at higher rates than those with higher degrees of acculturation.

While these studies supported the hypothesis that infant feeding is associated with acculturation among Mexican American women, limitations do exist in both data instruments used. In the Rassin et al. (1994) study the measurement for acculturation was unidimensional. As mentioned elsewhere in this dissertation, acculturation is a complex construct that cannot be fully measured simply through language use or nativity; instead this construct should be measured using multiple dimensions. The study by Kimbro et al. (2008) included limited data on breastfeeding behavior. In their study the data did not measure whether the mother breastfed exclusively. Exclusive breastfeeding has been shown to provide greater health benefits when compared to mixed infant feeding. According to Thiel de Bocanegra (1998) "health education needs to address the qualitative difference between partial and exclusive breast-feeding more aggressively during pregnancy and needs to stress the risks of early supplementation (e.g., nipple confusion, shorter overall breast-feeding duration)" (p. 462). Another limitation of these two studies is that neither study had data that would explain why acculturation affected infant-feeding behavior. Mothers' beliefs, attitudes, and social support regarding infant-feeding practices were not measured. Thus both of these studies lacked women's reasons for infant-feeding choices and their relationship to acculturation and infant-feeding

beliefs and attitudes, a criticism that the current study considers and addresses through the use of in-depth interviews.

Anderson et al. (2004) examined acculturation and social capital in infant feeding among Puerto Rican mothers living in New York City, and Thiel de Bocanegra (1998) examined acculturation, social support, and infant feeding among foreign born women (mostly those from the Dominican Republic, South America, Central America, and the Caribbean) in New York City. According to the study by Anderson et al. on the role of social capital and acculturation in infant-feeding decisions, the most important predictor of breastfeeding was social capital. Unlike earlier studies on Mexican American women, this study did not support the hypothesis that acculturation influenced breastfeeding. The researchers in this study found that exchanging services and support with relatives and friends (one dimension of social capital measured) was a more important predictor of breastfeeding. The researchers suggested that the discrepancy between this study and others could be due to differences in the breastfeeding support systems in the participants' countries of origin. Thus, Puerto Rico has a very low level of breastfeeding initiation (even lower than the United States) in contrast to Mexico, which has a high rate of breastfeeding initiation and duration.

Although Anderson et al. (2004) were able to draw out more data on participants' experiences with breastfeeding (questions asked whether their own mother's had breastfeed them and if they had any close friends who breastfed, in addition to questions about lactation education received either from their hospital or doctor) it lacked data regarding infant-feeding attitudes and beliefs. This study also had limited acculturation measures. Acculturation was measured by language preference, proficiency in English,

social interaction, and lifestyle choices. The acculturation construct would have been stronger had generational status, religiosity, gender attitudes, and cultural engagement also been measured.

Thiel de Bocanegra's (1998) study, which investigated the extent of informational support provided by healthcare professionals and/or family, found that among foreign-born Hispanic mothers (from the Dominican Republic, Central America, South America, and the Caribbean currently living in New York) acculturation had a significant effect on breastfeeding intent and behavior. In this study, more acculturated women were two times less likely to breastfeed than women who were less acculturated, which supports the earlier Mexican American studies. This study also found that demographic variables such as mother's education and age, baby's birth weight, and mother's perceived health status were not significant predictors of breastfeeding once they controlled for acculturation and social support. This is a very important finding and suggests the importance of acculturation and social-support variables in understanding infant-feeding decisions. In this study it was not only acculturation that played an important part in infant-feeding decisions but social support (i.e., receiving support from one's mother or mother-in-law or having a close family member or friend nearby who breastfed her baby) was also essential.

Bonuck et al. (2005) examined country of origin, race, and ethnicity on breastfeeding intentions and found results similar to the studies above. Researchers in this study administered surveys to 352 Hispanic and African American women (both U.S. born and foreign born) living in the Bronx, NY, and examined the impact of birth country, race/ethnicity, and the interaction between the two on breastfeeding intentions.

The researchers found that country of birth (which was one way they measured acculturation) was the only significant predictor of breastfeeding intentions. Like other works on acculturation and infant feeding among Hispanics, foreign-born mothers were significantly more likely to breastfeed than native-born mothers. However, unlike other studies that show dramatic differences between African American, Hispanic, and White women when it comes to infant feeding, race was not a significant predictor of breastfeeding intentions. In this study, once nativity was controlled, the researchers found that race was no longer an important predictor in infant feeding.

A significant limitation of this final study was that it only measured intended feeding choices instead of actual infant-feeding behavior, and the literature on breastfeeding initiation and duration indicates that many prenatal women intend to breastfeed but then turn to formula soon after they deliver. For example, Thiel de Bocanegra's study (1998) found that "Of the foreign-born women, [at their prenatal visit] two thirds (68%) indicated their intent to breast-feed after delivery … and at the time of their postpartum visit, only 4% of the mothers reported that they exclusively breast-fed." (p. 456)

The overall criticism of the studies summarized above is their limited measurement of acculturation and the lack of discussion of how and why acculturation affects infant-feeding behavior. According to this literature, acculturation is measured by country of birth, length of time in the United States, preferred language, religious participation, proficiency in English, and social interaction. However to truly understand the relationship between acculturation and infant-feeding decisions, researchers should also query generational status, gender attitudes, music, food, reading preferences, ethnic

identity, knowledge of ethnic history, and knowledge of traditional values and customs (Abraído-Lanza, Armbrister, Flórez, & Aguirre, 2006). These additional measurements are embedded in the current study and should help in understanding current infant-feeding practices of Hmong immigrants.

The mostly quantitative acculturation and infant-feeding studies described above among Hispanic immigrant groups suggest that as acculturation increases, the likelihood of breastfeeding initiation and duration decreases, thus assimilating to U.S. culture inhibits breastfeeding initiation (Callister & Birkhead, 2002; Gibson et al., 2005). Mexican women who migrate to the United States do not immediately turn to formula but instead continue to breastfeed; however, as they acculturate to U.S. society, they are more likely to turn to formula (Bonuck et al., 2005; Kimbro et al., 2008; Singh, Kogan, & Dee, 2007). Hence, the literature finds a positive correlation between acculturation (most commonly measured by time in the United States and language use) and formula feeding among Hispanics (Anderson et al., 2004; Kimbro et al., 2008; Rassin et al., 1994, 1993).

Studies examining infant-feeding patterns among Hmong immigrants find a somewhat different pattern. According to Romero-Gwynn (1989), 97% of mothers who migrated from Laos to northern California breastfed their last infant in Indochina but only 22.4% of them breastfed their infant(s) born in the United States (Romero-Gwynn, 1989). In Indochina, Hmong women could not rely on formula because it was either too expensive or not available, thus "perhaps the most drastic change [for Hmong immigrants] has been the shift from nearly universal breast-feeding to a predominance of formula-feeding of infants" immediately after migrating (Tuttle & Dewey, 1994, p. 282). It is this literature that motivated the current study. This study was interested in

exploring why Hmong immigrant infant-feeding patterns are different from those of other immigrants, and the reasons more and less acculturated Hmong Americans give for their infant-feeding choices. The object was to illuminate how different aspects of acculturation might affect this group in ways that the literature on other immigrants does not explore.

Acculturation Theory and Models of Interethnic Relations

When diverse groups come into contact in a multiethnic society there are many patterns of intergroup relations. Theoretical models developed by sociologists attempt to explain and describe patterns of intergroup relations in multiethnic societies (Barth & Noel, 1972; Marden & Meyer, 1978). Theories of interethnic relations suggest two possibilities or outcomes: (a) ethnic groups either remain segregated or, (b) they increasingly blend together. Pluralism is the idea that ethnic groups remain culturally distinct and socially segregated, and assimilation suggests that groups become more alike and interact with one another openly (Marger, 2003). These two concepts will be further explained below.

Pluralism. Pluralism has been defined as "conditions that produce sustained ethnic differentiation and continued heterogeneity" (Abramson, 1980, p. 150). Researchers who ascribe to this perspective are skeptical about the complete assimilation of immigrant groups and often disagree with the assimilationist idea of a "nonethnic" unified core. Researchers who agree with this perspective differ on what the eventual outcome for ethnic groups may be in the larger society.

One group of researchers, inegalitarian plurists or structuralists (Marger, 2003), argues that ethnic differentiation stratifies groups and limits their access to economic and

political power. They argue that American society is a stratified society in which individuals and groups have unequal access to wealth, power, and privilege (Barth & Noel, 1972; Blau & Duncan, 1967; Portes & Borocz, 1989). In this line of thinking, immigrants are inhibited by the ethnic hierarchies that limit their opportunities. Overall, the inegalitarian pluralist is skeptical about eventual assimilation and interethnic accommodations suggested by the assimilation perspective, and implied by the multicultural perspective, because of inherent conflicts between the dominant and subordinate groups in the hierarchy (Zhou, 1997).

Bicultural and multicultural perspectives. The second group of researchers, labeled as having bicultural or multicultural perspectives, argues that ethnic groups can live separately while maintaining equal economic and political power. Not all pluralists view pluralism as laden with conflict. Bicultural and multicultural perspectives often entail the separation of groups while groups remain relatively equal in political and economic power. Berry (2003) described biculturalism as strong adherence to both dominant and native value systems. Multiculturialism goes even further to argue that there is no unified core in American society, but instead it is composed of a collection of unique ethnic and racial groups. Immigrants, according to this perspective, are not passive victims of Americanization but instead actively reinvent their own culture (Conzen, 1991; Glazer & Moynihan, 1970; Handlin, 1973).

> From … [the pluralist] standpoint, premigration cultural attributes inherent to ethnicity are not assumed to be inferior traits which should necessarily be absorbed by the core culture of the host society" (as the assimilationists would have us believe); and, the author goes on to say, "rather these primordial

characteristics constantly interact with the host society to reshape and reinvent themselves." (Zhou, 1997, p. 981)

Assimilation. Like pluralism, assimilation is another pattern of ethnic relations. The classical assimilation framework, which was developed in the mid 20th century by Park (1928), has dominated much of the sociological thinking on how immigrant groups adjust to their new culture. This framework defines assimilation as the process of acquiring dominant-group values while losing one's native culture, leading diverse groups to share a common culture. In other words, immigrant groups "melt into mainstream society through residential integration and occupational achievement in the following generations" (Zhou, 1997, p. 976). Thus, social and cultural change, as a result of immigration, is the progenitor of assimilation (Trimble, 2003). According to this framework, upward generational mobility is not only possible for all immigrants, it has been the pattern for many European immigrants in the past (Park, 1928; Zhou, 1997).

Classical assimilation theory proposes a unidirectional or linear framework whereby as one dimension increases (acquisition of dominant values) the other dimension decreases (native values). According to Park (1950), this pull of differing cultures can lead to the *marginal man*: "The marginal man, as here conceived, is one whom fate has condemned to live in two societies and in two, not merely different but antagonistic, cultures" (Park, 1950, p. 373). When describing the marginal man, Park stated, "something of the same sense of moral dichotomy and conflict is probably characteristic of every immigrant during the period of transition, when old habits are being discarded and new ones are not yet formed" (Park, 1950, p. 373).

Park has been criticized for the unidirectional framework, neglecting barriers to residential and occupational mobility. As non-European immigrant groups started appearing in the United States, the classical theory of assimilation was increasingly challenged (Zhou, 1997, p. 978). Older European immigrant groups, such as the Irish and the Italians, were able to assimilate into U.S. culture; however, other immigrant groups such as people of Mexican-origin, who are a part of both the old and new immigrant groups, have not assimilated as well (Wildsmith, 2004). "Despite a long history in the United States with substantial generational depth, Mexican Americans remain disadvantaged" (Wildsmith, 2004, p. 91). In Park's defense (1950), he did mention that racial differences could halt assimilation but stated that assimilation, even for those racially different, is inevitable through the process of interbreeding. Others, such as W. L. Warner and Srole (1945), argued that the assimilation of ethnic minorities is problematic due to structural constraints (i.e., social class, racial/ethnic subsystems) that may not decrease over generations.

Current models of the assimilation process are more multidimensional and have extended and reconceptualized the classical framework (Alba & Nee, 1997; Arias, 2001; Brubaker, 2001; Portes & Rumbaut, 2005; Portes & Zhou, 1993). According to Wildsmith (2004) two perspectives are currently dominant: the general assimilation framework, which has been revisited from the classical model, and the segmented assimilation framework.

Revisited assimilation framework. The new or revisited assimilation framework focuses on the reduction of differences between groups over time rather than the absorption of minority groups into the dominant culture, as the old framework had argued

(Alba, 1995; Alba & Nee, 1997; Brubaker, 2001; Wildsmith, 2004; Zhou, 1997). Gordon's (1964) typology of assimilation is well known in this area and is often cited. The stages of assimilation, according to Gordon, are cultural, structural, marital, identificational, attitude-receptional, behavior-receptional, and civic. Cultural assimilation is the first stage that immigrants encounter. Immigrants must adjust to this stage of assimilation before they can move to the next step. However, moving to the next stage (the structural stage) is the turning point in assimilation, and large-scale entrance into the dominant society depends on how well an ethnic group gains acceptance by the dominant group during this stage. According to Gordon, most ethnic groups ultimately lose their uniqueness as they go through these stages of assimilation.

Both the classical and revised perspectives view ethnic culture and ethnic enclaves as a disadvantage, especially in assimilation (Child, 1943; W. L. Warner & Srole, 1945; Wirth, 1956). According to the classical position, assimilation is the desired outcome, the means to "rise above marginal positions." This idea remains problematic for many theorists who argue that groups should be able to "rise above marginal positions" while maintaining their cultural identity. Assimilation perspectives are also problematic in that longer length of residence in the United States does not necessarily lead to eventual blending into mainstream society (Zhou, 1997), and this is not always an ideal situation. In fact, Zhou's (1997) review of the literature suggests that in many cases length of residence can have negative generational outcomes. For example, Landale and Oropesa (1995) found that by the third generation, a significant increase in single-parent households emerged for Asian and Latin American families. According to these authors, the first generation may work hard to gain acceptance by mainstream society and achieve

higher positions, but assimilation could also influence their children in a negative way (Landale & Oropesa, 1995).

Gans (1992a, 1992b) described this process as a result of "environmental pressures" on immigrant children from school, American peers, and the media. These children often have higher expectations of American life than those of their parents and refuse the norms and conditions that their parents faced in the workplace, resulting in both negative and positive outcomes in the second and third generation. But the classical position, and Gans specifically, considers these just "bumps" on the way to complete assimilation.

> Explicit or implicit in these arguments is the general assumptions that there is a unified core of American society, be it "nonethnic" America or "middle" America, into which immigrants are expected to assimilate, and that, with enough time, assimilation will eventually occur among all immigrants and their offspring regardless of national origins, phenotypical characteristics, and socioeconomic backgrounds. (Zhou, 1997, p. 981)

Segmented assimilation. The other major perspective on assimilation, which has tried to account for deficiencies found in classical theory, is the segmented assimilation framework (Portes 1995; Portes & Rumbaut 2001; Portes & Zhou 1993; Wildsmith. 2004; Zhou 1997). The segmented assimilation framework asks the question, assimilation to what? And, according to segmented assimilation, multiple trajectories of assimilation can occur (Wildsmith, 2004). Its incorporation of assimilationist and pluralist ideas and its focus on the varietly of immigrant experiences has made the

segmented assimilation framework a widely adopted theory and already signifies the conventional wisdom in the field (Waldinger & Perlmann, 1998).

According to the framework, adaptation to U.S. society produces diverse outcomes: some groups may assimilate toward mainstream society or they may assimilate toward other ethnic, perhaps marginalized groups in the United States. Portes and Zhou (1993) created a typology of segmented assimilation to explain how groups may assimilate: (a) Growing assimilation and integration into middle–class White America, (b) growing assimilation to the underclass, and (c) fast economic advancement while preserving one's own cultural value and immigrant-community solidarity. These three processes of assimilation try to account for the divergent pathways among second-generation immigrants. Which road an immigrant group may take can be determined by a number of factors including their mode of adaptation and the development and strength of their ethnic enclave or ethnic community. According to Douglas Massey's (1985) model of spatial assimilation, segregated ethnic communities and enclaves are natural as groups enter the United States. Their "limited market resources and ethnically bound cultural and social capital are mutually reinforcing, they work in tandem to sustain ethnic neighborhoods and they represent a practical and [often] temporary phase in the incorporation of new groups into American society" (Logan, Zhang, & Alba, 2002, p. 300). Thus, deeply rooted in the idea of segmented assimilation is the pluralistic assumption that structural assimilation and upward mobility are possible without cultural assimilation.

Even though segmented assimilation has become a core theoretical construct, it has received its share of criticism. One of the major conceptual and empirical criticisms

has been the unclear reference point for determining the direction of assimilation, either "upward," "straightline," or "downward." For example, considering the fact that many new immigrants arrive with low or no economic or educational resources, how is it possible for them to experience downward mobility (Alba & Nee, 2003; Hirschman, 2001; Portes & Fernandez-Kelly, 2008; Waldinger & Feliciano, 2004; Waldinger & Perlmann, 1998)? Alba and Nee (2003) further criticized the framework by arguing that new immigrants are not adapting that much differently from how older immigrants had. Fluctuations in assimilation patterns among new immigrants, they argued, are only indicators that their assimilation cycles have yet to be completed and can also be explained by the less disjointed and more multicultural society that new immigrants are experiencing in the contemporary United States. According to Swartz, Hartmann, and Lee's (2009) unpublished article titled *Segmented Assimilation in Cultural, Cross-Generational Perspectives: The Incorporation Experience of Hmong Young Adults and their Parents*, these criticisms have been based on quantitative studies that have measured assimilation in "demographic or socio-economic dimensions" (p. 4). Due to its qualitative nature, the current study allows for a more expanded and multidimensional collection of data and interpretation.

Acculturation

Assimilation is not the only concept concerned with the process of adjustment for recent immigrants. In fact, from the assimilation literature emerged the concept of acculturation, a concept commonly researched and measured among sociologists and anthropologists. The concept of acculturation originated during the 19th and early 20th centuries to better understand changes taking place among various cultures and

communities (Trimble, 2003). Acculturation is a concept similar to assimilation and is often used interchangeably in the current literature. Acculturation has also been described as the precursor to full assimilation.

As with the traditional concept of assimilation, the traditional viewpoint of acculturation comes from the Human Ecological School of thought (Park, 1928) and was originally perceived as a linear process: original culture decreases as acculturation increases (Abraído-Lanza et al., 2006; Berry, Trimble, & Olmedo, 1986; Park, 1928; Suarez-Orozco, 2001). However, current research suggests that acculturation is a multifaceted phenomenon, and that one's original culture does not necessarily diminish as acculturation increases (Trimble, 2003). In fact, acculturation may be evident even when assimilation does not occur (Gordon 1964). Thus "researchers promoting and advancing acculturation research are adopting bidimensional and multidimensional perspectives" (Trimble, 2003, p. 7).

Two important aspects of acculturation are change and adaptation. When an individual is exposed to a new culture there are many opportunities for continuity and change in their lives (Berry, 1997). Acculturation has been defined in the literature a number of ways but a definition that is commonly cited is the 1954, Social Science Research Council's version:

> [acculturation] is initiated by the conjunction of two or more autonomous cultural systems. Its dynamics can be seen as the selective adaptation of value systems, the processes of integration and differentiation, the generation of developmental sequences, and the operation of role determinants and personality factors. (p. 974)

The concept of acculturation suggests that certain aspects of a dominant or contributing culture may fit with an immigrant's worldview, and therefore, may lead to behavioral and/or ideological change. However, this does not suggest that an immigrant group or individual abolishes their traditional culture (Trimble, 2003). Acculturation then is a much more flexible and fluid concept than that of traditional assimilation. The flexibility of acculturation is even more evident in Trimble's concept of situational acculturation in which "the person and situation form a coterminous interaction. This interaction is an intricate recursive process that determines cognitive and perceptual appraisals; in turn, these appraisals influence behavioral outcomes" (Trimble, 2003, p. 8).

Thus, an individual may simultaneously reject some practices, assimilate to others, and integrate still other practices into their original culture. Situational acculturation also explains how one's physical locale can affect one's behavior. For example, individuals may behave very differently at home and adhere to their original culture, but when these individuals are at work or school, they may behave in ways consistent with the expectations of the dominant culture (Chun, Organista, & Marin, 2003).

History of the Hmong in the United States

Hmong immigrants started appearing in the United States after the Vietnam conflict (Miyares, 1997). Most came from Laos (or refugee camps in Thailand) and arrived in the United States in the late 1970s. The relationship between the Hmong population and the U.S. government is one of assistance and interference. The United States provided arms and supplies (and the Central Intelligence Agency provided military training) for the Hmong in Laos, while they were fighting the communist-controlled

North Vietnamese over control of their land and their political independence. U.S. support was given in hopes that the Hmong and other Laotians would turn back the communists (Miyares, 1997; Quincy, 1995). Yet, the communists took power in Laos in 1975 and accounts of destroyed agricultural life, genocide, and the oppression of Hmong civilians and soldiers led many Hmong to flee to refugee camps in Thailand. Fleeing Hmong were eventually resettled in a number of locations around the globe (Quincy, 1995) and approximately 900,000 Southeast Asian refugees resettled in the United States between 1975 and 1989 (Miyares, 1998; Quincy, 1995). In addition, between 1990 and 2000, tens of thousands of Thai-based Hmong refugees were ultimately granted the right to emigrate to the United States (Johns, 1995).

Initially, Southeast Asian refugees did not settle in ethnic enclaves as other immigrant groups had before them. Instead the Hmong and other Southeast Asian refugees took part in the refugee-resettlement program, which "scattered" refugees throughout the nation. This policy, as envisioned, would bring about the quickest assimilation into dominant society and would help spread the resources necessary for refugee resettlement. The resettlement program was not as successful as planned, however, and family reunification and secondary migration created significant Southeast Asian ethnic communities in Fresno and Merced, California, and St. Paul, Minnesota (Miyares, 1998). Currently, the largest populations of Hmong are in California (65,345), Minnesota (46,352) and Wisconsin (38,814; Pfeifer, 2005). Thus, the resettlement experience of the Hmong was quite different from the resettlement patterns of other immigrant groups both before and after them, making Hmong immigrants an especially interesting case for a study on infant feeding. It was this initial scattering of refugees

throughout the country that may have impinged on their strong cultural ties, beliefs, and practices.

Brief history of Hmong culture in the United States. Miyares (1998) used Pitman's (unpublished) four-component model to describe Hmong culture in the United States. The first component of this model, *ethnolinguistism,* looks at how one self-identifies ethnically. The Hmong are emotionally tied to their ethnic identity, which does not necessarily refer to their land of origin but to a group of people, and instead of merging imperceptibly into U.S. society they have maintained their ethnic uniqueness (Miyares, 1998).

A second element of culture described by Pitman is the *ideological* component. This element examines one's belief system or worldview. The ideological component of the Hmong belief system, based on shamanism, animism, and geomancy and the traditions that often accompany these beliefs, can and often have conflicted with dominant American beliefs influenced by Christianity, science, and technology (Miyares, 1998). For example, the Hmong often sacrifice animals for key events such as births and deaths, and this has created many misunderstandings between traditional Hmong culture and the dominant culture. Misunderstandings are also common among Hmong traditional beliefs and Western biomedical beliefs. In the book, *The Spirit Catches You and You Fall Down* (1998), Fadiman documented the conflicts and complexities that emerge when Hmong's belief in shamanism comes into contact with Western medicine (also see Culhane-Pera, Vawter, Xiong, Babbitt, & Solberg, 2003; Johnson, 2002; Simon, 2003; Uba, 1992). Thus, the Hmong are often at odds with the American medical establishment and the result has been fear and mistrust of Western medicine among Hmong immigrants.

Pittman's third facet of culture is the *sociopolitical*. According to Miyares (1998) Hmong culture is "patrilineal and patriarchal, organized according to nineteen clans" (Miyares, 1998, p. 56). Historically, men have been in charge of all leadership roles and make most of the decisions for the community, as well as the home. The men have also been primarily responsible for the training of sons. Women, as in many traditional cultures, are not permitted to vote, discuss issues of community governance, or make household decisions, and instead are responsible for "childbirth, tending to the home, assisting in the fields, and teaching traditions such as *pa dnau* [needlecrafts] and cooking to daughters" (Miyares, 1998, p. 56).

The last element of culture, according to Pitman, is the *economic*. How do newly arrived immigrants or refugees participate in the U.S. wage–labor economy? For most of the Hmong, who were subsistence farmers or fishermen in their homeland, the idea of currency and the division of labor are foreign concepts and "working outside the home would require a complete redefinition of their role in society" (Miyares, 1998, p. 57).

While emotional affiliation to traditional Hmong culture has not changed significantly since migrating to the United States, other forms of Hmong culture have gone through significant change and have been redefined by each generation. According to Inui (1998), the 1.5 generation (born in Laos or Thailand refugee camps but socialized in the United States) and second-generation Hmong (born and socialized in the United States) think of themselves as assimilated to U.S. life. However, most young Hmong adults feel removed from traditional culture while simultaneously not feeling completely at ease with American culture (Miyares, 1998).

Hmong family life in the United States. Prior to entering the United States, the Hmong were preliterate and had very little or no formal education. In fact, the Hmong had no written language until the 1950s. Yet, within one generation, a growing number of young Hmong have entered U.S. colleges and universities (Miyares, 1997). Researchers have described three "ideal-typical" family types and corresponding childrearing beliefs that have emerged among Hmong immigrants due to the trauma of war, the refugee experience, and culture change. These three family types differ by educational backgrounds, attitudes toward education, and socialization experiences (Miyares, 1998).

In the first family type, parents are usually preliterate but actively support and encourage their children to pursue an education. At times this can create conflict with traditional culture, but this group is redefining traditional culture in that daughters are permitted to delay marriage and childbirth in order to pursue an education. These parents encourage their children to be successful by American standards (Miyares, 1998).

The second type of family differs from the first based on the sex of the child. Thus, while sons are encouraged to pursue a college education, daughters are expected to take more traditional roles and usually marry young. It is not uncommon for these families to have a daughter who is married with children at 14–16 years of age and has a well-educated professional husband who is much older (Miyares, 1998).

The third family type, according to Miyares (1998), has experienced enormous emotional, physical, and psychological trauma from the war and refugee experience and often yearns to return to Laos. These parents have a hard time adjusting to American life. Securing employment for this group has been difficult due to their illiteracy and lack of

U.S. marketable skills. These parents have also had a hard time connecting to the experiences of their children, which often result in familial conflict. Thus, young adults and teenagers in this third family type usually reject traditional identities and culture.

Hmong immigrants are a particularly interesting case for study on infant feeding because of their unusual settlement experience in the United States, which may have had an impact on their traditional cultural beliefs and practices. In contrast, their real fear and mistrust of the American medical establishment may impact their infant-feeding decisions. With infant feeding falling more and more under the realm of the medical establishment, we might expect to find traditional Hmong (especially those who actively practice shamanism) preferring breastfeeding to formula feeding because it is more rooted in traditional society and requires less intervention by the medical establishment.

Summary

This study examined the reasons that Hmong Americans give for their infant-feeding choices. Through their words, we begin to understand answers to some of the following questions: Why are infant-feeding patterns different among Hispanic immigrants and Hmong immigrants? How might American culture or social structure influence infant feeding among Hmong immigrants? What is the relationship between acculturation, social capital, and infant-feeding choices in the United States? Participant women talked about how structural forces influence their decisions. Does a lack of knowledge about breastfeeding in the United States or a lack of social support and resources for breastfeeding influence their infant-feeding practices? Can the pressures of working in the paid labor force, attending school, and other structural barriers be affecting one's infant-feeding decisions?

The central purpose of this literature review was to (a) provide historical rates of breastfeeding and describe the social and cultural context (a brief social history) of infant feeding in the United States, (b) summarize the current literature concerning infant feeding among immigrant populations, (c) review assimilation and acculturation theories, and, (d) provide a greater understanding of Hmong immigrants in the United States. Personal factors that influence a mother's decision to breastfeed or formula feed are important in understanding infant-feeding behavior, but also important are the ideas, beliefs, and practices regarding infant feeding that are shaped by the wider cultural context and assumptions about the role and purpose of women's breasts. This wider cultural context and the assumptions linked to the beliefs about women's breasts may be transferred to immigrants as they become assimilated and acculturated to U.S. society. Thus this study works to understand the social and cultural context of infant feeding among Hmong women in the United States. In other words, how do Hmong women think that adapting to U.S. culture affects their infant-feeding patterns and what reasons do participants give for their infant-feeding choices?

Chapter 3

Methodology

To achieve the objective of this research—to understand infant-feeding beliefs and practices among the Hmong immigrants in St. Paul, Minnesota—a qualitative methodology was used. Topics to be addressed in this chapter are divided into eight sections: the research design, sampling strategy and participant selection, the researcher's role, data-collection procedures, data analysis and interpretation, evidence of quality, informed consent, and ethical considerations.

Research Design

Much of the existing research on infant feeding has consisted of quantitative research and has not adequately described or interpreted infant-feeding decisions and the effect of the social structure and culture in these decisions. Cronbach (1975) claimed that quantitative research is not able to take full account of the many interaction effects that exist in social settings. Cronbach gave examples of several empirical "laws" that do not hold true in actual settings to illustrate this point and stated that "the time has come to exorcise the null hypothesis," because it ignores effects that may be important, but that are not statistically significant (p. 124). Qualitative inquiry accepts the complex and dynamic quality of the social world and is thus an appropriate method for a cultural analysis of infant-feeding decisions.

Sampling Strategy and Participant Selection

Due to the nature of the research question, a sampling strategy that allows rich cases for in-depth study was most desirable. Purposeful sampling is such a strategy and was appropriate for a cultural analysis of infant feeding because it greatly illuminated the

questions under study. The disadvantage to this kind of sampling is that it does not allow for statistical generalizations. Instead, the small sample allowed a "penetrating interpretation of the interviews" (Kvale, 1996) and with a small number of cases, quality rather than quantity was the focus of this study, allowing the researcher to investigate in detail the relationship between infant feeding and acculturation.

According to Patton (1990), there are 15 different strategies for selecting purposeful cases and in this research three of these strategies were combined and used: snowball, criterion, and opportunistic. Participants were identified through an "information-rich key informant," the executive director of the Association for the Advancement of Hmong Women. This organization agreed to assist the researcher by soliciting participants among its members and coordinating and scheduling all interviews. Approximately half of the interviews were held at the Association for the Advancement of Hmong Women office, one interview was conducted on the University of Minnesota campus, and the other interviews were performed in participants' homes. The Association for the Advancement of Hmong Women also supplied the researcher with an interpreter when it was necessary.

All 21 participants were interviewed in St. Paul during February and March of 2009. According to Guest, Bunce, and Johnson's (2006) research on "How many Interviews Are Enough," data saturation occurs, for the most part, by the 12th interview. They found that after the 12th interview new themes emerged infrequently and the variability of the code stabilized (Guest et al., 2006). The sample for this study included women who breastfed and those who did not. During the course of the interviews redundancy was checked and used to justify the original sample size. If information

emerged that suggested inadequacies in the original sampling size, changes would have been made, as is permitted in opportunistic sampling (Patton, 1990, p. 179). However, no evidence of inadequacies due to the sample size emerged during the data collection. Thus, the sampling design for this study was flexible and emergent in order to provide meaningful inquiry.

The following were the criteria for participation in this study:

1. Participants must have been a Hmong mother with at least one child under the age of 2. A child under the age of 2 is not that far removed from infancy; thus, mothers would have an easier time recalling infant-feeding events, behaviors, and thoughts than if the child were older,
2. Mothers must have had a fairly normal pregnancy with their last child and delivered vaginally. This criterion helped eliminate infant-feeding decisions based on any extreme physical weakness of the recovering mother.

The Researcher's Role

In qualitative research the researcher becomes quite involved with the study participants and "by interviewing, the importance of the researcher as a person is magnified because the interviewer him- or herself is the main instrument for obtaining knowledge" (Kvale, 1996, p. 117). Thus, I was diligent in conducting a study that was as unbiased as possible, however certain assumptions, values, and biases I may hold need to be acknowledged and minimized as much as possible so that the findings are reliable. I do not believe that there is a right or wrong way to feed an infant and no judgment would be placed on a woman who engages in either method; however as a mother, I did feed my

first child exclusively with breast milk. Thus, I may have brought certain biases to the study. Again every effort was made to ensure objectivity while conducting and reporting on the research, but biases can creep in without the researcher's knowledge and shape the way the researcher understands and collects the data, so throughout this study I was reflexive of my own biases, values, and interests.

On the other hand, the researcher's experience with feeding her own children can also be seen as positive rather than detrimental (Locke, Spirduso, & Silverman, 2000). Although my first child was exclusively breastfed, I often supplemented my second child's diet with formula. Therefore, experience with both options enhances my awareness, knowledge, and sensitivity to the decisions mothers must make when it comes to infant feeding.

In conducting qualitative research it is also important to be aware of specific roles that can emerge while interviewing participants. "Roles such as exploiter, reformer, advocate and friend" can materialize quite quickly and easily (Kvale, 1996). Every effort was made to maintain a professional distance and minimize any tendency to overidentify with the participants.

In addition, awareness regarding embedded structures of power (race, class, gender, age, and expertise) was also important to address in order to minimize its affect on informant participation. As a White, 38-year-old, middle-class mother of two children, my status as both an insider and an outsider certainly had an impact on how participants responded to both me and the research questions. While it is impossible to remove these structures of power, I was reflexive on the implications of my European American heritage for the quality of my interviews and the quality of my analysis.

Data-Collection Procedures

As stated previously, the analysis of acculturation and infant-feeding decisions was not suited to quantitative measures. I searched for factual information, opinions, and attitudes regarding infant feeding as a manifestation of acculturation and assimilation. This kind of data collection had both its strengths and weaknesses. The interviews provided very rich and insightful data, but due to the fact that people were not equally articulate and perceptive, this type of data collection and analysis was at times difficult. I tried to reduce this limitation by making sure all questions were understood and explained accurately while in the field.

Data were collected through semistructured face-to-face interviews, a questionnaire, and participant observation. Most of the interview questions were open-ended and questions were minimized to illicit answers that were greater in depth and detail (see Appendix A for the interview guide). Information such as location, time, and date of the field setting was recorded prior to each interview; each interview lasted approximately 2 hours and was audiotaped. Data on demographic characteristics (income, employment, social support, age, education, and marital status) and infant-feeding attitudes and experiences were collected throughout the interview. In addition to the interview guide, participants were asked to complete a questionnaire measuring acculturation (see the Asian American Multidimensional Acculturation Scale [AAMAS] in Appendix B). Each interview initially began by building rapport and credibility, with the participant often talking about the joys of motherhood. Conducting the interviews in a familiar and comfortable facility or in their own home allowed the researcher to be more involved in the actual experiences of the participants and their community.

All interview questions were reviewed by two community members to ensure wording was culturally appropriate. In addition, two pilot interviews were conducted 1 month prior to entering the field to practice procedures and check for any unseen instrument problems and reliability issues. The researcher learned many things while conducting the pilot interviews, transcribing, and reviewing the transcribed documents. First and foremost was the inappropriateness of the second questionnaire (Kim & Hong, 2004). While the purpose of the questionnaire was to measure acculturation in value orientations associated with East Asian societies, the language was much too abstract and participants had a hard time understanding and responding to the questions. While I believed that some of the questions were useful and valuable in a cultural analysis, the questionnaire as originally proposed was removed from the study. However, a few of the important concepts from the questionnaire were retained and reworded and became part of the interview guide.

I also learned that I needed to practice drawing participants out more during the interviews. While the first interview provided an enormous amount of data and the conversation flowed easily, the second interview was more problematic in eliciting rich content. In examination of the transcript it became apparent that I occasionally moved away from open-ended questions, resulting in less conversation and explanation. I also learned that when summarizing participants' responses, it is preferable to use their words so as not to lead them. It is important that the participants' words and ideas are recorded rather than mine. In addition, paying attention to the language participants use for things such as bottle feeding, which they often referred to as formula feeding, was an important part of connecting with participants, and this terminology was used when I reentered the

field. Finally, I learned that the question regarding household income needed to be reconceptualized. Most households in this population include a number of extended family members. It is not uncommon for 8–12 adults to be living in the same household. So when asked about their household income, numbers were often inflated when compared to the average household income in the United States. Thus, participants were asked for their individual income or their income combined with that of their spouse and their household income separately so see if there was any difference between the two.

Acculturation Measurement

Acculturation measures vary in the type of indices used and assumptions made regarding individual acculturation, specifically how people acculturate (Abraído-Lanza et al., 2006; Zane & Mak, 2003). As with the theory of acculturation, measurements are often developed that assume that as acculturation to the dominant culture increases, involvement with one's native culture diminishes. To account for this unidimensional framework, current scales have been developed that measure "two or more cultures independently along various dimensions" (Zane & Mak, 2003, p. 42).

Zane and Mak (2003) used the word "domains" to describe factors used in acculturation measurements. Some measures only look at one domain, such as length of residence in the United States or language use. While this domain is very important in understanding the degree of acculturation, this one-dimensional conceptualization of acculturation lacks breadth and becomes problematic when trying to understand the many nuances of acculturation. Scales that have dominated the literature on acculturation usually measure the following domains: nativity, generational status, length of residence in the United States, and language use. To expand the concept of acculturation, more

recent scales have tried to take a multidimensional approach and tap into other domains such as food, music preferences, ethnic identity, extent of social ties, social affiliation within the group and with White Americans, parents' place of birth, and contact with friends of the same ethnic group (Abraído-Lanza et al., 2006). The current study used a multidimensional approach in order to understand acculturation.

A number of scales are available for measuring acculturation variation among Asian Americans. The first, the Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) is a 21-item instrument and the most common measurement for assessing acculturation among Asian Americans in general. This scale was used by Foss (2001) to measure maternal sensitivity, posttraumatic stress, and acculturation in Vietnamese and Hmong mothers; however this scale lacks the multidimensional approach described above. A second more recent scale is the AAMAS (Chung, Kim, & Abreu, 2004). This 15-item self-report scale measures three cultural dimensions of acculturation (culture of origin, panethnic Asian American, and European American). In addition, this instrument provides four subscale domains of acculturation that assess language, food consumption, cultural knowledge, and cultural identity in each of the three dimensions described above (see Appendix B). This scale was used in measuring acculturation in this study. Participants completed the AAMAS (Chung et al., 2004) prior to each interview and scores were tabulated; once tabulated the sample was split into two subgroups—those more or less acculturated.

Data Analysis and Interpretation

Data analysis "is an ongoing process involving continual reflection about the data, asking analytic questions, and writing memos throughout the study" (Creswell, 2003).

Results from the AAMAS were recorded in an Excel spreadsheet and analyzed. In each of the three cultural-dimension scales (Culture of Origin, Asian Americans, and European Americans) there were four subscales evaluating specific domains of acculturation. Each domain was assessed by a number of questions that were asked of participants: four questions addressed language, two addressed food consumption, three addressed cultural knowledge and six questions addressed cultural identity. As the AAMAS scale indicates, respondents answered each question by rating their responses using a 5-point scale, ranging from *not very well* or *disagree* (1) to *very well* or *agree* (5). Responses to all questions were then summed (one questions was reverse coded before summing) and divided by 15 to obtain a scale score. Scores were compared and low and high acculturation categories were created. Each respondent was then placed into one of the two categories (low and high acculturated). Infant-feeding responses were also recorded and participants were placed into a category of exclusive formula feeding or mixed breastfeeding and formula feeding. The low- and high-acculturated categories were then compared among the two infant-feeding categories and results are presented in Chapter 5.

Tapes from interviews conducted with a translator were reviewed by a second interpreter, a Hmong sociology student at the University of Minnesota, to ensure participant answers were correctly interpreted. Qualitative interviews were transcribed and interview and fieldnote data files were imported to Atlas Ti and coded in initial categories. Next, code categories, with responses from at least 4 different individuals, were refined and organized into a meaningful outline. Major themes of this outline included acculturation, social support, and employment. Codes pertaining to the theme of acculturation included acculturation measurement, Hmong cultural traditions,

experiences, customs, beliefs, identification with Hmong culture, the medical establishment, childbirth, and infant feeding. Relevant codes for social support included family structure, infant-feeding support from friends and family, reasons to breastfeed or not to breastfeed, knowledge about infant-feeding methods, and childbirth. Codes relevant for employment included education, work, and infant feeding. From this outline the narrative was developed. The emerging story was enhanced by pulling specific passages from the text as examples for each category and quantifying the occurrence of common themes.

Evidence of Quality

What makes a study trustworthy, valued, and worth communicating? In quantitative studies scientific rigor is established through internal validity, external validity, reliability, and objectivity (Lincoln & Guba, 1985). However, according to Lincoln and Guba these criteria are not applicable to qualitative research. Instead they argue *credibility*, *transferability*, *dependability*, and *confirmability* are constructs that can deem a qualitative study trustworthy. The current study applied a number of specific techniques to fulfill the qualitative criteria for trustworthiness.

Credibility was managed in two ways: through *triangulation*, and *negative case analysis*. Triangulation, which emphasizes using at least three different data-collection methods, was used in this study. Data were collected through interviews, questionnaires, and participant observation. Trustworthiness was also verified in that major themes were continually revised until more than the majority of cases "fit." Lincoln and Guba (1985) call this negative case analysis and it is "analogous, for qualitative data, to statistical tests for quantitative data" (p. 309).

Transferability was ascertained by providing "thick descriptions" of the context in which the data were collected and illustrative quotations were taken from the transcripts. Transferability in qualitative studies relates to external validity in quantitative studies. The qualitative researcher's task is "not … to provide an index of transferability" but instead "to provide the data base that makes transferability judgments possible on the part of potential appliers" (Lincoln & Guba, 1985, p. 316).

To aid in this study's *dependability* and *confirmability* the researcher kept precise data records and a reflexive journal. The reflexive journal was used to record the researcher's feelings, observations, and interpretations immediately before and after each interview. This sort of "audit trail" had "innumerable payoffs in helping to systematize, relate, cross-reference, and attach priorities to data that might otherwise have remained undifferentiated until the writing task was undertaken" (Lincoln & Guba, 1985, p. 319).

Informed Consent and Ethical Considerations

This researcher was committed to protecting the rights and welfare of those who participated and to do no harm to the people involved. No harm was foreseen for the women who were interviewed and discussing issues of infant feeding seemed to be of interest to those involved. As of this date, Hmong women have been scarcely represented in the literature on infant feeding and thus a goal for this study, and of feminist research in general, is to overcome the oppression of women and minorities by giving them a voice (Creswell, 2003; Kvale, 1996). Hence, this investigation served the interests of the participants by documenting their beliefs, values, and practices. The aim of this research was the acquisition of knowledge and the interviews seemed to be a positive and unique experience for all. In the end, I felt as if I had developed a fulfilling working relationship

with the director and other members of the Association for Advancement of Hmong Women. I hope to maintain the working relationship that was established with this organization and will share my research findings with those that participated.

Prior to each interview, an oral and written statement was given to each participant that clearly outlined the voluntary nature of participation in the study, the protection of privacy for all participants, and the overall purpose, goals, and procedures of the study. Participants were asked if they had any questions with regard to this statement and the researcher answered all questions. The confidentiality of participants is maintained by masking the names of those involved.

For this research, certification from the Institutional Review Board at Temple University was required and obtained (see Appendix C). For certification, online training was completed about human subjects and conflict of interest/scientific misconduct, and is valid for a 2-year period.

Chapter 4

Hmong Demographics in St. Paul, MN

This chapter explains the characteristics of the sample and the larger Hmong population of Minneapolis–St. Paul. I begin by describing demographic data of Hmong living in the metropolitan area and compare this data to the general population. Next, I report the characteristics for the three specific neighborhoods that were represented in this study's sample. This chapter ends by describing sample demographics in terms of socioeconomic status, other social characteristics, and infant-feeding patterns.

Hmong in the Minneapolis–St. Paul Area

After the first wave of Hmong immigration in the late 1970s, during which resettlement agencies tried to disperse immigrants throughout the country, the Hmong began to reunite with family members and secondary migration occurred. Concentrations of Hmong developed primarily in three states: Minnesota, California, and Wisconsin. Although the Hmong represent a small percentage of immigrants to the United States as a whole, they comprise almost 10% of the immigrant population in Wisconsin and Minnesota, and Minneapolis–St. Paul is home to the largest population of Hmong (41,713) of all U.S. metropolitan areas, according to the 2000 Census (U.S. Census Bureau, 2000). The desire to be reunited with clan members and family, better job opportunities, and a lower cost of living all contributed to St. Paul and the Twin Cities becoming the new "Hmong American Capital" (Pfeifer, 2003).

Half of the Hmong population in Minneapolis–St. Paul was born outside of the United States (57%) and most of those were born in either Thailand or Laos (U.S. Census Bureau, 2010). As a population, the Hmong living in Minneapolis–St. Paul tend to be

fairly young. The youthful character of the Hmong population is seen in their median age, which was 16 years in 2006, compared to a 34-year mean in age for the entire Minneapolis-St Paul population (U.S. Census Bureau, 2010).

In recent years, Hmong educational achievements in Minneapolis–St. Paul have risen considerably. However, educational discrepancies between the Hmong and the general population are still prevalent with a higher percentage of Hmong not achieving a high school diploma and a lower percentage of Hmong achieving a bachelor's or advanced degree. Metropolitan-area data for the Minneapolis–St. Paul area indicate that 55% of the Hmong over 25 years of age have less than a high school diploma compared to 9% of the general population. However, it is important to remember that included in the 55% percent with less than a high school education are many older, first-generation Hmong who came to the United States with little or no educational background and consider themselves too old to go to school. However, high school-graduation rates of Hmong seem to be at an almost equal rate to the general population. For example, 19% of Hmong over the age of 25 have completed high school and 17% have some college education compared to 25% and 32% of the general population, respectively. Seven percent of the Hmong population have a bachelor's degree, compared to 23% of the general population and 2% of Hmong have a graduate or professional degree compared to 10% of the general population. Thus, the Hmong have almost matched the general population in terms of high school graduation rates, yet there are still discrepancies in advanced educational degrees (U.S. Census Bureau, 2010).

The inability to speak English leads to linguistic isolation and this has been a longstanding concern for the Hmong. Yet, national figures indicate that Hmong families

are becoming less linguistically isolated. In 1990, more than 60% of Hmong in the United States were linguistically isolated compared to 34.8% in 2000 (U.S. Census Bureau, 1990, 2000). Data for the Minneapolis–St. Paul area specify that 20% of Hmong were linguistically isolated in 2006 (U.S. Census Bureau, 2010). Thus, linguistic isolation seems to be less prevalent among Hmong in Minneapolis–St. Paul and has decreased notably for the Hmong population overall in the United States.

The Hmong often live in large households and it is quite common for grandparents to live with their children and grandchildren. Research on residential crowding often imprecisely defined as "too many persons in too little space" has yielded negative consequences for both the individual and the family (Beeghley & Donnelly, 1989, p. 83). Findings indicate that people living in crowded households often withdraw, display various kinds of psychological stress, and endure physiological symptoms of various sorts at a greater rate than those who do not live in crowded households (Beeghley & Donnelly, 1989). However a word of caution should be offered about the concept of overcrowding. Not only are there measurement problems (how many is too many living in one household?), but just as there are findings that indicate strains from living in crowded households, there are also findings that suggest benefits. In fact, help with childcare (as I describe in Chapter 7) is one such benefit of living with extended family. Studies looking at residential crowding often use the number of persons per room measured by the U.S. Census (Grove & Hughes, 1983). According to the American Community Survey (U.S. Census Bureau, 2010), the population of Hmong over 30 years old that are living with grandchildren is 16% compared to 2% of the total population. In addition, occupied housing units with one or more occupants per room are 31% among

the Hmong compared to 2% for the general population (U.S. Census Bureau, 2010). The effect of Hmong household composition on infant-feeding decisions will be further explored in Chapter 7.

The Hmong in the Minneapolis–St Paul area often work in production, transportation, and material-moving occupations. The largest concentrations of Hmong are employed in manufacturing (32%) and educational services, health care, and social assistance (14%) industries. The majority of participants in this study and/or their husbands were employed in medical assembly and eldercare occupations. According to the Census, 47% of Hmong females' 16-years and over are in the labor force compared to 69% of the total population in Minneapolis–St. Paul. The individual median income for Hmong females was $22,029 compared to $32,255 for all women in Minneapolis–St. Paul, and the median household income for all Hmong in this area was $35,917 compared to $54,304 for the general population. While discrepancies in income are narrowing between Hmong and the general population, poverty rates are still a concern among this subgroup of Americans with 32% of Hmong living below the federal poverty guidelines compared to 4% of the general population (U.S. Census Bureau, 2000). These demographics for the Hmong and general population in the Minneapolis–St. Paul Area are summarized in Table 1 below.

Hmong Neighborhoods in the Minneapolis–St. Paul Area

Sample participants lived primarily in three distinct neighborhoods in the Minneapolis–St. Paul area: both Payne-Phalen and Thomas-Dale (historically known as Frogtown) neighborhoods are in St. Paul and the Near North neighborhood is located in Minneapolis. Census demographic information for the two St. Paul neighborhoods was

obtained through the Wilder Research Center's (2009) Community DataWorks, and Census tract data was used to describe the Near North neighborhood in Minneapolis. Census tracts that corresponded with the Near North neighborhood were obtained through the City of Minneapolis' website. Both sources used U.S. Census Bureau 2000 data. The statistics that follow can be compared to each other and area statistics among the Hmong and general population in Table 1.

Thomas–Dale. According to the 2000 Census, the neighborhood of Thomas–Dale grew by 19% during the 1990s compared to the growth of St. Paul as a whole of 5.5%, and much of this growth was due to the increasing Hmong population. This is a diverse neighborhood in race and ethnicity. In fact, 33% of its residents were born outside of the United States and of those, 81% were born in Asia. The largest racial group represented in this neighborhood is Asian. Racially, this neighborhood consists of 38% Asian, 24% White, 22%, Black, 9% Latino, 1% American Indian, and 5% multiracial. Census figures also noted that 50% of this neighborhood spoke a language other than English and 33% did not speak English "very well." Educational-attainment statistics specify that for those who were 25 years or older, 32% had a high school education, 24% had some college, 6% had a 4-year degree, and 4% had a professional degree. Approximately half of the residents in this neighborhood own their own home and half of them rent their home. The median income for this neighborhood was $27,874 and the median income for women was $24,054. Thirty-one percent of families in this neighborhood were living below the poverty level (Wilder Research Center, 2009).

Table 1

Neighborhood and Minneapolis–St. Paul Metropolitan Statistical Area Demographic Data

Demographics	Payne–Phalen neighborhood **	Thomas–Dale neighborhood **	Near North neighborhood **	Hmong population in Minneapolis–St. Paul area	General population in Minneapolis–St. Paul area
Total population	31,531	17,248	7,516	41,713	2,968,806
Birthplace					
Born outside the United States	21%	33%	19%	57%	7%
Born in Asia	70%	81%	40%	98%	42%
Median age	(X)	(X)	(X)	16	34
Education					
Less than a high school graduate	24%	34%	33%	55%	9%
High school graduate	33%	32%	28%	19%	25%
Some college or associates degree	27%	24%	24%	17%	32%
Bachelor's degree	11%	6%	12%	7%	23%
Graduate or professional degree	5%	4%	4%	2%	10%
Language					
Speak a language other than English	35%	50%	27%	97%	11%
Do not speak English "very well"	20%	33%	16%	20%	2%
Income					
Median family income	$35,475	$27,874	$23,908	$35,917	$54,304
Women's participation in the labor force	(X)	(X)	(X)	47%	69%
Median women's income	$26,194	$24,054	$23,152	$22,029	$32,255

Demographics	Payne–Phalen neighborhood **	Thomas–Dale neighborhood **	Near North neighborhood **	Hmong population in Minneapolis–St. Paul area	General population in Minneapolis–St. Paul area
Families living below poverty	22%	36%	32%	32%	4%
Racial makeup					
White	49%	24%	13%	(X)	84.7%
Hmong	24%	38%	14%	(X)	4.1%
Black	11%	22%	58%	(X)	5.3%
Latino	11%	9%	9%	(X)	3.3%
American Indian & Alaskan Native	1%	1%	1%	(X)	0.7%
Multiracial/other	5%	5%	5%	(X)	2.1%

Note. (X) Not applicable or no available data; Adapted from *Census*, by U.S. Census Bureau, 2000, retrieved from http://www.census.gov/main/www/cen2000.html; *Community Dataworks*, by Wilder Research Center, 2009, retrieved from http://www.communitydataworks.org/StPaul/data.php

Payne–Phalen. The neighborhood of Payne-Phalen in St. Paul has also grown substantially since the 1990s (18%) and much of this growth is attributed to an increase in the Asian population. In addition, Black and Latino Populations have increased since the 1990s. Twenty-one percent of the residents in this neighborhood were born outside of the United States, and of those, 70% were born in Asia. The largest racial group in this neighborhood is White (49%, down from 82% in 1990). The next largest racial group is Asian (24%); Black and Latino people make up 11%, and multiracial individuals make up 5% of the neighborhood. Thirty-five percent of the residents in this neighborhood spoke a language other than English and 20% reported that they did not speak English "very well." Educational-achievement data indicate that 33% of individuals had a high school diploma, 27% had some college, 11% had a 4-year degree, and 5% had a graduate or professional degree. The median income for this neighborhood was $35,475. Women's median income was $26,194. Twenty-two percent of individuals

living in this neighborhood had incomes below the poverty level (Wilder Research Center, 2009)

Near North. The last neighborhood to be described is the neighborhood of Near North in Minneapolis. This neighborhood has increased its population by 27.4% over the last 2 decades and is racially diverse with 58% Black, 14% Asian, 12% White, and 9% Hispanic people. Nineteen percent of the residents in this neighborhood were born outside of the United States, and of those, 40% were born in Asia. In fact, the Asian population has grown steadily since 1990 from 5% to 14% in 2000. Educational data show that 28% of its residents had completed high school, 24% had some college education, 12% had a bachelor's degree, and 4% had a graduate or professional degree. Compared to the two neighborhoods described in St. Paul, there are fewer individuals who speak a language other than English (27%) in the Near North neighborhood, and only 16% of the community does not speak English "very well." Examining the economic status of this neighborhood, statistics reveal that 66% of housing units were renter-occupied in 2000 and thus 34% were owner-occupied. The median family income was $23,908, and the median income for women was $23,152. Thirty-two percent of families living in the Near North neighborhood had incomes below the poverty rate compared to 17% of the city of Minneapolis as a whole (U.S. Census Bureau, 2000). These neighborhood statistics are meant to provide a brief overview of the areas where participants lived. Following is a description of the sample.

Sample Demographics

Based on participants' zip code, the researcher was able to approximate the neighborhoods where participants resided using zip codes and neighborhood maps

obtained from the city of St. Paul and the city of Minneapolis. Five participants lived in the neighborhood of Payne–Phalen, 8 participants lived in Thomas–Dale, and 5 participants lived in the Near North neighborhood of Minneapolis. Three individuals lived in the suburbs of St. Paul. The median age of this sample was 30, much higher than that of the general Hmong population; however, the nature of the study was geared toward women of childbearing age, so the higher median age is not surprising. Eighty-six percent of the participants stated that Hmong was their primary language and 14% reported that English was their primary language. Other language measures will be described later in this dissertation in the context of discussing acculturation and infant feeding. For educational attainment, 32% of the participants had less than a high school diploma, 36% had finished high school, 28% had some college or an associate's degree, and 4% had a college degree. None of the participants had an advanced degree (see Table 2). These educational statistics reveal that the sample was not remarkably different from the overall population of Hmong people in Minneapolis–St. Paul in educational achievement.

Seventy-six percent of the women interviewed were married, and the other 24% were divorced. Many participants married during their teenage years; all but 2 of the participants were married before they reached the age of 20. Fifteen of the women interviewed worked in the paid labor force and 6 worked in the home. Thus, women's participation in the labor force was slightly higher among this sample than the overall Hmong population in Minneapolis–St. Paul (see Table 2). The median household income for this sample was $38,000 a year. This figure indicates a slightly higher median income among participants compared to the general population of Hmong in

Minneapolis–St. Paul (see Table 2). Four individuals in the current study were making less than $18,000 a year and thus 19% of the sample was living below the poverty line.

Table 2

Sample Demographics

	Sample		Hmong in Minneapolis–St. Paul area
	Number	Percent	
Total population	21	100%	41,713
Median age	30		16
Education			
Less than a high school graduate	7	33%	55%
High school graduate	7	33%	19%
Some college or associates degree	6	29%	17%
Bachelor's degree	1	5%	7%
Graduate or professional degree	0	0%	2%
Primary language			
Hmong	18	86%	(X)
English	3	14%	(X)
Language Use			
Interview conducted in English	12	57%	(X)
Interview conducted in Hmong	9	43%	(X)
Income			
Median family income	$38,000		$35,917
Families living below poverty	4	19%	32%
Working status			
Works in paid labor force	15	71%	47%
Works inside the home	6	29%	53%
Marital status			
Married	16	76%	46%
Divorced or separated	5	24%	9%
Gave birth to at least one child outside of U.S.	5	24%	(X)
Generation Status			
1st generation	9	43%	48%
1.5 generation	4	19%	30%*
2nd generation	8	38%	52%

Note. (X) Not applicable or no available data; *Foreign born; naturalized U.S. citizen

The poverty rate for this sample was much lower than the poverty rate calculated by the 2000 Census for the overall population of Hmong in the Minneapolis–St. Paul area and this discrepancy was probably influenced by the state of the economy at the time of the interviews. Many of the participants or their husbands worked in the manufacturing industry and mentioned that either they or their husband had recently been laid off.

Sample Characteristics: Infant Feeding

Five of the women in this sample had given birth both outside of the United States and in the United States and could compare their experiences of having an infant in Laos or Thailand to their childbirth experiences in the United States. These experiences will be discussed in more detail in Chapter 6. Interestingly, all of the women who had given birth outside of the United States breastfed their infants born outside the United States, but had turned to formula for those children born in the United States. Infant-feeding patterns reveal that 12 participants exclusively formula fed their babies during the first year of the baby's life, and only 1 participant exclusively breastfed her baby during the first year of life. Table 3 illustrates that of the women who had breastfed, 9 combined it with formula feeding and 7 of them breastfed for less than 3 months. Thus, long-term breastfeeding was not prevalent in this sample of women.

Table 3

Sample Characteristics: Infant Feeding

	Number	Percent
Participants' infant feeding practices		
Exclusively formula fed 1st year	12	57%
Breastfed 1 month or less	4	19%
Breastfed 2–3 months	3	14%
Breastfed 4–5 months	1	5%
Exclusively breastfed 1st year	1	5%

Summary

This chapter began with a description of demographic data among Hmong people and the general population of Minneapolis–St. Paul. Neighborhood data provided a depiction of the area where participants resided. Sample data were compared to the overall population of Hmong in Minneapolis–St. Paul to see how well the sample represented those Hmong living in the area. Chapter 4 ended with a discussion of the sample's infant-feeding patterns. The statistics reveal some interesting patterns; however, they don't go far enough in explaining Hmong infant-feeding behaviors. Thus, deeper analysis is necessary to gain greater understanding. Based on respondent interviews, Chapter 5 will provide more descriptions of the sample and will explicitly relate these characteristics to patterns in infant feeding.

Chapter 5

Description of the Sample

This chapter presents a description of the relevant demographic characteristics of participants and relates them to patterns in method of infant feeding. It begins with a description and definition of the generational-status typology that will be used throughout the analysis in the chapters that follow. It then looks at breastfeeding by generational status, age, language use, education, cultural identification, cross-ethnic affiliation and workforce participation. The chapter ends with a summary table that lists each participant and her pertinent characteristics.

Generational-Status Typology

Generational status, according to the literature on assimilation and acculturation, is often used by researchers to examine cultural shifts and incorporation among immigrants (see Chapter 2 for a review). Generational status is defined here in the following way: Those participants who were born in Laos or Thailand and spent most of their childhoods in Laos or Thailand will be considered members of Generation 1 (G1). All participants in this category were over the age of 16 when they arrived in the United States. Those participants who were born in Laos or Thailand but spent at least half of their childhood in the United States are here considered members of Generation 1.5 (G1.5). All participants classified as 1.5 generation were under the age of 11 when they arrived in the United States. Those participants born and raised in the United States will be considered members of Generation 2 (G2). Generations then, defined here, are groups with distinct characteristics (birthplace and age of entry) and not true biological generations. Since participants were required to have a child under the age of 2, which

limited participants to those of childbearing age, generations had to be defined in this way. According to these classifications, 10 participants in the sample were part of Generation 1, 3 participants were part of Generation 1.5, and 8 participants were classified as Generation 2.

Participant narratives, found in the following chapters, are referenced by a coding system developed to highlight the generational status and infant-feeding method of each narrative. Thus, a code appears after each quote. The first letter and number in the code represents the generational status of the participant (G1, G1.5, or G2). The following letter and number in the code represents the participant number. Because there were 10 first-generation subjects, P ranges from P1 to P10. There were three 1.5-generation participants, so in this group P ranges from P1 to P3; and there were eight Generation 2 participants, thus P ranges from P1 to P8. The last letter in the code represents the infant-feeding method participants used for their youngest child. Because there was only one participant who exclusively breastfed, it made sense to combine those who exclusively breast fed with those who initiated some form of breastfeeding into one category. This led to two classifications for infant feeding. The letter F indicates that the mother exclusively formula feed her infant and the letter B indicates that the participant included some form of breastfeeding in her infant-feeding method.

Generation Status and Infant Feeding

While one needs to be careful in drawing conclusions about the qualitative data (especially the 1.5-generation data) in this study due to its small sample size, examining the differences in infant-feeding methods among generational groups resulted in 6 first-generation, 2 1.5-generation, and 4 second-generation participants who exclusively used

formula (see Table 4). While a more descriptive analysis of respondents reasoning for their chosen infant-feeding method and generational status is provided in the following chapter, the fact that 1.5-generation participants were less likely to initiate breastfeeding in comparison to first-generation participants may be partially explained by the fact that many first-generation mothers had already exclusively breastfed previous children in Laos or Thailand and were more familiar with the practice. In comparison, 1.5-generation mothers came to the United States at a younger age (prior to having any children) and did not have the breastfeeding experience in Laos or Thailand that first-generation mothers had.

Patterns among second-generation participants indicated that they were just as likely, or slightly more likely, to introduce breast-feeding than first- and 1.5 generation participants. This is unlike what has been found in research on Hispanic immigrant populations. The patterns here suggest that the majority of first-generation and 1.5-generation participants exclusively used formula after migrating to the United States, and second-generation participants were equally likely to exclusively use formula or adopt some form of breastfeeding in their infant-feeding method (see Table 4). Because this finding is counter to research on other immigrant populations and breastfeeding, it is important to look at the reasons women who are more or less acculturated gave for their infant-feeding decisions. Chapter 6 will explore the reasons respondents provided for their infant-feeding choices.

Interestingly, the infant-feeding method participants chose for their last infant and the infant-feeding method that their own mothers had used to feed them as infants was almost reversed. Fourteen of the participants' mothers had included some form of

breastfeeding in their infant-feeding practices compared to only 9 of the participants; and 12 of the participants exclusively formula fed their infants compared to only 7 of the participants' mothers (see Table 5). Thus, participant infant-feeding practices reversed the pattern depicted in their mothers' infant-feeding practices. Much of the breastfeeding among participants' mothers can be explained by the fact that many were living in Laos or Thailand at the time of their daughter's birth.

Table 4

Infant Feeding and Generational Status

	Infant feeding	
	Exclusive formula	Some form of breastfeeding
1st generation	6	4
1.5 generation	2	1
2nd generation	4	4

Table 5

Sample Characteristics: Infant Feeding

	Number
Participant mothers' infant feeding practices	
Exclusively formula fed	7
Included some form of breastfeeding	14
Participants' infant feeding practices	
Exclusively formula fed 1st year	12
Included some form of breastfeeding	9

Age and Infant Feeding

Age was also examined in relation to infant feeding. Unlike the general population described in Chapter 2, in which older women were more likely to breastfeed

(Hawkins et al. 1987), study participants were less likely to breastfeed as they aged. Six participants' who ranged in age from 19 to 30 had breastfed compared to 3 participants between the ages of 31 and 42, and. when it came to exclusive formula use, the pattern was the reverse: 5 participants between the ages of 19 and 30 exclusively used formula and 7 participants between the ages of 31 and 42 exclusively used formula. Upon further examination, however, if the participant was under the age of 37, the pattern was consistent with the general population. For example, all 3 participants between the ages of 19 and 21 exclusively used formula and those participants between the ages of 22 and 36 were twice as likely to breastfeed (8) as use formula (4). For the six women who were over the age of 37, five of them exclusively formula fed and only one of them breastfed their infants. This pattern may be due to the relationship between acculturation, education, and age. The younger generation in this sample seemed to be more acculturated in that they were more likely to have attended school in the United States and interacted with a more diverse group of people at school. Therefore, being a young mother (younger than 22 years) was inversely associated with breastfeeding just as it is in the general population, where young mothers often find breastfeeding incompatible with their lifestyle. Those in the middle-age category tended to be more educated and thus perhaps more acculturated to dominant norms of infant feeding among more highly educated women. The literature suggests that education is positively associated with breastfeeding (see Chapter 2). For those women over the age of 37, the story becomes more interesting. These women tended to be less educated and less acculturated. All 6 participants over the age of 37 were part of the first generation and none of them had an

education above high school. Thus, age, education and acculturation seems to influence patterns of infant feeding in this sample.

Language and Infant Feeding

Of the 21 subjects, 15 reported that they spoke English and 6 reported that they only spoke Hmong. However, 9 of the 21 interviews were conducted in Hmong. Thus, 3 of the 15 who reported they spoke English were not fluent enough in English for the interview to be conducted in English, or they preferred to speak Hmong during the interview. Therefore, a better indicator of language use was whether the interview was conducted in English. This divided the sample into 9 participants who spoke Hmong during the interview and 12 participants who spoke English during the interview.

Of the women who spoke Hmong during the interview, 7 exclusively formula fed and 2 of them combined breastfeeding with formula. For those women who spoke English during the interview, 5 participants exclusively formula fed and 7 of them combined breast milk with formula. The pattern indicates that those participants who spoke English during the interview and were thus more acculturated, according to language use, were more likely to breast feed. Those participants who spoke Hmong during the interview and thus less acculturated, according to language use, were more likely to exclusively use formula.

The concept of language use and its importance to culture was raised in many of the interviews, and it seemed to be a good measure of acculturation according to the participants. Many of the women interviewed felt that their cultural traditions were slowly disappearing, especially among the youth and younger generations. In fact, as one

respondent stated, the youth speak “Hmong-lish” rather than Hmong and another respondent talked about language linking cultural traditions in the following way.

> I feel like once all the old people die, then you know, the second generation and so forth on, they won’t even know anything about it. I try to learn about it but at the same time, I can’t even learn it all. And I tried to teach my kids it, but then at the same time it seems like, you know, as they’re going to school they just change so much. Like their little Hmongkins not Americans (laughs). They come home and they talk in English and they practice their English and sometimes, you know, since there’s an old, and elderly in the house, they still practice Hmong, but I’m pretty sure if we lived on our own, they would not even know a single word of Hmong. So it’s very sad. (G2P8F)

Language then is an important part of culture among these participants and seemed to be associated with their infant-feeding method. Yet again, the pattern was the opposite of what research conducted on Hispanic immigrants and infant feeding suggests. For the more acculturated participants (according to language use) the initiation of breast–feeding was slightly more common.

Education, Income and Infant Feeding

As described in Chapter 2, a number of variables other than race have been found to influence infant-feeding practices in the general population. Wright and Schanler (2001) found that mother’s education level, household income, and ethnicity were significant predictors of breastfeeding. Although the current study did not employ quantitative methods and cannot make generalizations, relationships found in the general population were somewhat consistent with the patterns found in this study. This study

found that participants who were less educated were more likely to exclusively formula feed their infants, and those who were more educated were more likely to introduce some form of breastfeeding in their infant-feeding method. For those participants who had 12 years or less of formal education, 9 of them exclusively formula fed their infant and 5 of them breastfed. For those participants who had more than 12 years of education, 3 of them exclusively used formula and 4 of them breastfed. Thus, participants with more education were slightly more likely to breastfeed and those with less education were more likely to use formula. Perhaps those who were more educated were also more acculturated and thus more informed and influenced by health education and public-awareness campaigns concerning breastfeeding.

Identification with Hmong Culture and Infant Feeding

Ethnic identification, how individuals define themselves, can be examined as another dimension of acculturation. As one acculturates to dominant society, group identity may begin to be construed differently. "The process of acculturation can be perceived as influencing the components of an individual's ethnic identity so that changes may be introduced and expected as members of a group acculturate" (Marin, 1993, p. 182). Participants in this study were asked how they defined themselves ethnically to get an indication of acculturation in terms of ethnic identity. More than half of the participants (13) defined themselves as Hmong and 8 participants identified themselves as Hmong American. It is important to note that not one of the participants described themselves as exclusively American. Thus, participants had a strong identification with Hmong culture. In fact, all 10 first-generation participants and all 1.5-generation participants defined themselves as Hmong and all second-generation participants defined

themselves as Hmong American. Hence, those who identified exclusively as Hmong had some memory of life either in Laos or Thailand, and those who identified as Hmong American tended to be younger and born in America. The following is how 1 participant described the conflict she experienced in being part of the second generation and relating to her first generation parents:

> I think sometimes it gets frustrating because it's like our parents have so much knowledge of the old world, you know. … They're kind of like, not engrave it into our brains, but like, you know, they're trying to let us know. … It was really hard for us to grow up, so we don't want it to be hard for you guys to grow up. … And like [we think] … we're just like regular Americans but Hmong. We're just like whatever Mom, you know, like you're just saying stuff, you know? And at the same time, like I can understand where it really does get really frustrating for my parents because it's true. It's true, they did have a really hard time over there, you know, and it's hard for the kids to understand too because we didn't go through that, you know? (G2P8F)

Whether participants defined themselves as Hmong or Hmong American and whether they could relate to life in Laos or Thailand, all participants agreed that being Hmong played a large role in their lives. For example, the same participant went on to state,

> Like I'm always going to be Hmong. I can't run away from it. You know, like I cannot bust a Michael Jackson and become a different color, you know. … I'm always going to be Hmong. And I want that for my children. (G2P8F)

This participant is clearly straddling two worlds, American and Hmong. While she sees herself as an American and has difficulty relating to what her parents experienced in Laos and Thailand, she nevertheless sees herself as Hmong and believes that Hmong identity is important for future generations in America. Generally, participants had a positive view of the United States and those who were of the second-generation tended to understand both American and Hmong cultures. Yet, there was little difference among ethnic identity and infant-feeding practices among this group of participants. For those participants who identified solely as Hmong, 7 of them exclusively used formula and 6 of them breastfed. For those participants who identified as Hmong-American, 5 of them exclusively used formula and 3 of them breastfed their infant.

While many participants identified with American culture and considered themselves American, they also recognized their ancestral heritage and believed that it was important in self-identification. Thus the transformation in ethnic identity from Hmong to Hmong American (hybrid identity) illustrates one aspect of the process of acculturation among study participants. Yet, this aspect of acculturation was not associated with any specific infant-feeding pattern. Instead these narratives and the terms they used to define themselves explained the importance of Hmong identity and their bicultural status. While this strong identification with being Hmong may not be directly related to any pattern of infant feeding, it is associated with the development of a strong ethnic community; a concept that will be further discussed and related to infant feeding in Chapter 7.

Another aspect of acculturation that was discussed by participants was their degree of cross-ethnic affiliation. When participants were asked if they had any good close friends who were not Hmong, most respondents replied *No* (18 out of 21). So the majority of participants did not associate in a significant way with others outside of their ethnic circle. One should be cautious however in using cross-ethnic affiliation as a measure of acculturation. Many Whites do not have significant cross-ethnic affiliations. Additionally, interaction with those outside of the community requires one to speak the language. The language barrier between almost half of the respondents and non-Hmong people made it difficult for them to interact. Many respondents reported that they would like to interact with non-Hmong people but could not because of the language barrier. In contrast, for those more acculturated and English-speaking participants, it was not the language barrier that discouraged them from interacting with others outside their community, but cultural differences. For example one respondent stated,

> It's just hard, hard to have a friend that really understands you, understands where you're from, understands like all the morals and beliefs you have to carry with you, all the obligation you have, even growing up in school. Like your friends, they wouldn't understand why you have to go home and cook for your family when you're only 12 or 13, you know? They'll be like, why do you have to go do that? You know they stay after school for soccer and whatever else they have to do, and they can go to the mall, but then you can't, so you just feel like you don't want to, like I feel like I didn't want to associate with them because it's just too hard to explain myself to them or explain my culture to them and some of the stuff we do is kind of weird. (G2P8F)

In this example, it is clear that not only language affected external relationships but cultural differences also played an important role in limiting relationships outside of the Hmong community. In contrast, while very few women stated that they had close friends who were not Hmong, many of the women who worked in the paid labor force interacted with non-Hmong people on a consistent basis. Of the 21 participants, 15 worked outside the home. However, not all of them worked in a diverse workforce that provided opportunity for cross-ethnic affiliation. Thus, the type of employment and the diversity of the workforce is an important dimension to consider when examining the influence of coworkers on infant-feeding practices.

Participants who worked in the paid labor force were asked to describe the diversity of their immediate coworkers, and based on these responses the researcher came up with two categories of workforce diversity. If participants stated that at least half of their interactions at work were with people of Hmong decent, they were categorized as working in a culturally secluded workplace. If participants stated that most of their interactions at work were among those who were non-Hmong, they were considered to be working in a culturally diverse workplace. It was often the case that more professional positions requiring a higher educational level had a more diverse workforce than those service-oriented positions requiring less skill and education. Of the 15 participants who worked in the paid labor force, 9 of them worked in diverse workplaces and 6 of them worked in more culturally secluded workplaces. The concept of cross-ethnic social capital and its influence on infant feeding will be further addressed in the following chapter. Table 6 presents a summary of selected demographic and other characteristics for each member of the sample.

Table 6

Summary of Participant Demographic Histories

Generation status	Participant number	Exclusive formula/ breastfeeding	Age	Number of children	Interview language	Age when came to U.S.	Education	Employed	Workforce diversity	Nuclear or extended family
G1	P1	F	40	5	English	17	HS diploma	Yes	Secluded	Extended
G1	P2	F	42	4	Hmong	19	HS diploma	Yes	Secluded	Nuclear
G1	P3	F	37	6	English	16	HS diploma	yes	Diverse	Extended
G1	P4	B	24	4	Hmong	22	No formal Education	Yes	Secluded	Nuclear
G1	P5	F	36	2	Hmong	19	No formal Education	No		Extended
G1	P6	B	33	5	Hmong	28	No formal Education	No		Extended
G1	P7	B	41	6	English	17	HS diploma	No (recently laid off)	Secluded	Extended
G1	P8	F	40+	10	Hmong	?	No formal Education	No		Nuclear
G1	P9	B	36	6	Hmong	34	Middle school in Thailand	Yes	Secluded	Nuclear
G1	P10	F	38	3	Hmong	35	No formal Education	Yes	Secluded	
G1.5	P1	B	23	4	English	8	Some College	Yes	Diverse	Nuclear
G1.5	P2	F	22	4	English	2	College Senior	No		Extended
G1.5	P3	F	32	3	English	11	HS diploma	Yes	Secluded	Nuclear
G2	P1	F	26	2	English	N/A	A.A. Pursing BA	Yes	Diverse	Extended
G2	P2	B	24	1	English	N/A	5 years of College	Yes	Secluded	Extended
G2	P3	B	30	4	English	N/A	HS diploma	Yes	Diverse	Extended
G2	P4	B	22	1	English	N/A	A.A. Degree	Yes	Diverse	Nuclear
G2	P5	F	19	2	English	N/A	Junior in High School	No		Extended
G2	P6	F	21	1	English	N/A	HS diploma	Yes	Diverse	Extended
G2	P7	B	24	1	English	N/A	B.A.	Yes	Diverse	Nuclear
G2	P8	F	20	1	English	N/A	HS diploma	No		Extended

Summary

The purpose of this chapter was to examine infant-feeding patterns among participants, along with some important demographic characteristics and factors that may be related to acculturation. Patterns from the previous chapter and this chapter show that first-generation participants were more likely to speak Hmong during the interview, have less education, and be in the paid workforce earning less than $20K a year. They, along with the 1.5-generation participants, were also more likely to identify as Hmong rather than Hmong American. In contrast, 1.5-generation and second-generation participants were more likely to speak English during the interview and have a higher level of education. All second-generation participants described themselves as Hmong American, thus, ethnic identity appeared to be important to all participants, regardless of generation. While participants' strong cultural identification was not directly related to any specific pattern of infant feeding, it did indicate the strength and character of their ethnic community. Also noted in this chapter was the minimal amount of cross-ethnic affiliation among all generation participants. Yet, those who worked in professional settings were more likely to have culturally diverse coworkers. The influence of this diverse workforce on infant-feeding behavior will be further explored in Chapter 6.

While generational status and other indicators of acculturation seemed to be related to infant-feeding patterns among participants, the direction was different for this group of immigrants from what has been found in research on Hispanic immigrant populations. To understand this divergent pattern, the following chapters will examine participants' reasons for their chosen method of infant feeding.

Chapter 6

Convenience and Lifestyle

Reasons for Infant-Feeding Choices

As reviewed in Chapter 2, Hmong immigrants are quite distinct because of their refugee status and mode of incorporation into the United States. The purpose of this chapter is to examine the reasons participants gave for their method of infant feeding. It begins with a discussion of their political refugee status and how their mode of incorporation affected their formula use. The chapter ends with an examination of work and education outside of the home and its influence on infant-feeding patterns among study participants.

The literature on Hispanic immigration and infant feeding suggests that immigrants maintain breastfeeding practices upon arrival in the United States, but as they become more assimilated and acculturated they are more likely to turn to formula (Anderson et al., 2004; Bonuck et al., 2005; Kimbro et al., 2008; Thiel de Bocanegra, 1998). Yet, research among Hmong women reveals a different pattern. Now, as in the past, women in Lao and Thai refugee camps exclusively breastfed their infants, and research shows that once Hmong immigrants arrive in the United States, they shift from "universal breast-feeding to a predominance of formula-feeding of infants" (Tuttle & Dewey, 1994). Thus, once Hmong women migrate to the United States, their traditional practice of breastfeeding dramatically decreases.

One participant who had spent many years at the Ban Vinai and Phanat camps in Thailand stated, "No formula was available [in the camps], there was no milk of any kind to [give] kids, and you have to feed with your breast milk. … Only when we got here, we

would go to WIC and they will give you vouchers" (G1P6B). Thus, the accessibility of formula in the United States is an important reason for its use, but it doesn't explain the dynamics encompassing one's decision to use formula or to breastfeed a child. Breastfeeding was a way of life, and thus a tradition, in Laos and Thailand, and traditions do not easily change. So what persuaded so many Hmong women to use formula in the United States? How did they learn about formula and why would they trust a substance so foreign to them to feed their babies? To try to answer these questions it is necessary to examine their resettlement process and the context surrounding their arrival in the United States. What were the reasons for them leaving their homeland? How did they migrate to the United States? Did they receive any assistance from the United States or its agencies for their travel to the United States? Upon and after their arrival did they receive a hostile, neutral, or supported reception by the U.S. government and society?

As reviewed in Chapter 2, the Hmong, with the support of the Central Intelligence Agency, fought against the communist-nationalist Pathet Lao during the Secret War in Laos during the 1970s, and as such were singled out for retribution once the United States withdrew from Vietnam in 1975 and the Laotian government was overtaken by the Pathet Lao (Hamilton-Merritt, 1993). To protect the Hmong from deadly reprisal, numerous Hmong were resettled in the United States and throughout the world. Due to the Hmong's support of U.S. interests during the war in Laos, they occupy a unique status as political refugees and, for the most part, their arrival in the United States has been supported by both the government and society (at least according to many of the Hmong interviewed in this study). However, the influx of Southeast Asian refugees did create some public strain, and political pressure grew to counteract any hostility. To tame any

public discontent, the federal government adopted a relocation policy dispersing refugees throughout the country. This was partly done to discourage the formation of ethnic enclaves (Liu, 1979).

As political refugees then, the Hmong are a distinct group of immigrants and have been eligible for government programs that have assisted them both financially and educationally. These resources, along with their strong identification with Hmong culture, language, and values, have enabled Hmong immigrants, after being sparsely relocated throughout the country, to initiate secondary migration whereby they have been able to reunite with both family and other clan members and form ethnic enclaves. According to Miyares (1994) "A history of multiple migrations has instilled in Hmong culture a predisposition to learn to do whatever it takes to survive and remain 'free' in the new place" (p. 222). In doing so, they have created ethnic communities that have a strong sense of community cohesiveness, and have been able to counteract many negative outside influences (see Chapter 4; Helzer 1994; Miyares 1997; Swartz et al., 2009).

While the majority of Hmong came to the United States with little or no social, educational, or economic capital and primarily live in concentrated lower-income neighborhoods, they have not experienced downward mobility nor have they assimilated or acculturated as traditional assimilation may suggest. According to segmented-assimilation theory, their mode of incorporation and the strength and character of their ethnic enclave has protected them from any downward assimilation or downward mobility. Not only have Hmong immigrants avoided downward mobility, they have experienced some upward socioeconomic advancement, especially in their educational achievements. And the Hmong have done this all while preserving their cultural values

and tightly knit ethnic community. For example, 29% of participants had some college education or an associate's degree compared to 19% of the general population in St. Paul–Minneapolis (see Table 2). Additionally, 80% of the Hmong in the St. Paul–Minneapolis area speak "English well" (see Table 1) and in this sample all 1.5 and 2-generation interviews were conducted in English.

Participants in this study also seemed to strongly identify with being Hmong, enabling them to culturally connect to their parents and protecting them from downward assimilation. Thus, the development of a strong ethnic community has been a positive form of adaptation among Hmong immigrants that has not necessarily limited their ability to advance, as traditional assimilation theory suggests. In studying the incorporation experiences of two generations of Hmong immigrants, the work by Swartz et al. (2009), found that this group of immigrants came to the United States with "relatively high expectations for education, opportunity, and mobility … [and] are surprisingly successful at fitting into mainstream institutions of education and work" (p. 47). Although it makes little sense to consider breastfeeding as evidence of upward or downward mobility, as the judgment of whether one breastfeeds changes historically and does not typically signal "success" in U.S. society, mobility patterns among the Hmong do not suggest a linear pathway, as traditional assimilation theory may suggest. Instead their upward mobility and lack of downward mobility shows the importance, and perhaps the protection, of ethnic enclaves. The importance of ethnic enclaves, however, is not only important in mobility patterns but was also found to be significant to breastfeeding trends among this sample: a concept to be further addressed in the following chapter.

Women, Infants and Children (WIC)

Upon arrival in the United States, Hmong refugees were matched with an American Resettlement Organization and one of the first steps in resettlement is a medical evaluation during which refugees become familiarized with the local American healthcare system. Because these refugees had little to no economic resources upon arrival, WIC (the special supplemental nutrition program for women, infants and children) was introduced to female refugees as a resource for both food and formula at no cost. Thus, WIC was, and continues to be, an important resource for participants. Although WIC endorses breastfeeding, it also provides formula for free. Because most of the women interviewed had experience with WIC, it seems that this organization could be an important breastfeeding resource for these women. Yet, participants in this study found that WIC was often too assertive in encouraging women to breastfeed, which often turned them away. For example,

> WIC they're on your ass about it. You know, they tell you, breastfeeding's good. We'll teach you. We have pumps we will provide for you, da, da, da, we'll walk you through, we have room for you and so WIC is very, I think Americans in general, they're very open, supportive of it, because they really want you breastfeeding. Maybe it's because we're too used to not breastfeeding (laughs). (G1.5P2F)

Although WIC has been successful in increasing overall breastfeeding-initiation rates among affiliates, in this sample of Hmong mothers, all first-generation WIC participants used formula and used the free vouchers to feed their infants.

Resettlement and Hectic American Lifestyles

The process of arrival and adjustment for refugees in the United States can be quite overwhelming. Once refugees arrive in the United States they are met by members of a resettlement organization who assist them in becoming settled. Services include assistance in finding housing; learning American systems of transportation; obtaining a social security number (so that they can seek employment or enroll in school); if they have school aged children, enrolling them in school; and locating places to purchase food and other goods. Refugees are also given medical evaluations and are culturally oriented to life in the United States. Self-sufficiency is highly promoted throughout this process, and refugees are immediately given authorization to work. Not only are they expected to find employment within 6 months of arriving, they are also expected to repay the U.S. government for their travel to the United States as soon as possible. English is often an essential step to becoming self-sufficient, so most refugees begin taking English as a Second Language courses almost immediately (U.S. Committee for Refugees and Immigrants, 2010).

When participants who exclusively formula fed were asked why they chose that method of infant feeding rather than the more traditional method of breastfeeding followed in Laos or Thailand, nearly all responded that having to adapt to busy lifestyles in the United States required them to reconsider traditional infant-feeding practices. Thus for these refugees, life in the United States is quite different from what they were used to, and most of the first- and 1.5-generation participants felt that breastfeeding was not practical in the United States. “Well, these countries [United States], really tough to keep

the breastfeeding, because we have to do a lot of things to survive, so I am breastfeeding for 2 months, and then after that I bottle feed" (G1P4B).

Discomfort of Breastfeeding in Public

Not only did the availability of formula and adapting to American lifestyles influence infant-feeding methods, lack of comfort for breastfeeding in public also seemed to influence participants' decisions. Unlike in the United States, breastfeeding in Thailand or Laos was much more comfortable, according to these women.

> Well back in the camp or back home in Thailand, because everybody do it so you do it and in front of anybody, you don't mind. But here in this country, if you and family and parent, then you can do it in front of everybody but if there's a guest, then you have to go somewhere. (G1P6B)

Participants' movement in and out of public spaces was also much different in the United States than it was in Laos or Thailand where the "public" was much more like an extended family. In the United States, the public realm and private realm are very distinct, but in Laos or Thailand those boundaries were not so clear. Breastfeeding, a very intimate act according to Western standards, can be more difficult in a less personal society. Although most of these women stated that they believed breastfeeding to be better for the baby, the U.S. norm of public breastfeeding to be discrete and unnoticeable made formula use more desirable and reduced one's level of comfort for breastfeeding, just as it is often does for native women.[1]

[1] Two recent incidents demonstrate the uneasiness many Americans (and breastfeeding mothers) may feel about breastfeeding in public. The first incident took place in Minneapolis (June 2006) when a nursing mother was told by a Target employee that she could not nurse her child in a fitting room. The second and more recent incident (November 2009) took place in Detroit where Target employees tried to force a couple to

Interviews indicated that first-generation and even 1.5-generation participants had to acculturate to various differences in this new culture, which often made the most convenient option of infant feeding the most desirable. The sheer difficulty of adjusting to U.S. culture, preparing or establishing a new life with an infant, along with the availability and affordability of formula and the awkwardness of breastfeeding in public, often discouraged participants from initiating or continuing to breastfeed; many indicated that they did not have the time and resources necessary to devote to breastfeeding. Upon arrival in the United States, they needed to quickly learn English, find a job or enroll in school, and develop the skills necessary for employment in the United States. This is a difficult task for any new immigrant, but perhaps especially difficult for a group who, in general, prior to immigrating worked as subsistence farmers, had no formal education, and had no written language until about 60 years ago. Thus, the fast-paced structure of American society, along with the difficult task of acquiring a new written and spoken language and other skills necessary to support one's family, along with the availability of formula for no cost through WIC, made breastfeeding impractical.

Employment: Working in the Paid Labor Force and Breastfeeding

"If I don't have to go to work, I'd probably be breastfeeding longer" (G1P6B). The difficulty of breastfeeding in the United States in comparison to their homeland was a recurring theme especially among first-generation women, and many women mentioned the difficulty of breastfeeding when working in the paid labor force because they could not bring their infant to work. For example,

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leave the store because the woman was breastfeeding. When the woman refused, they called police for help (Roop, 2009).

> Back in Laos if women have infants, they take their infants with them to the farm and have someone watch them while they plant their crops; and so it's not like in America where they have to drive and can't take their kids with them to work. But in our country they can take their kids to go with them cause they only work at the farm. (G1P1F)

Many first-generation women stated that they turned to formula out of necessity because they had to go to work, could not bring their infants with them, and because formula was available at low or no cost.

> Well, if I live in Laos, then I think that it's important for me to breastfeed my children, because a lot of people are sharing a story that if you breastfeed your child, they would stay healthier and the child would stay close to you and have a better behaved, between moms and childs, but here I have no choice because I have to go to work and, there's a formula that is available so I have to go buy that because I'm too busy. (G1P2F)

Thus, this first-generation participant described how American lifestyles necessitated formula feeding. She also noted the availability of formula. For women to breastfeed and work in the paid labor force in the United States requires a considerable amount of planning, effort, and knowledge when it comes to their options for pumping. Because most places of employment do not allow mothers to bring their infants to work, if one wanted to breastfeed she needed to know how to use a pump, have access to a pump, and know how to freeze and store breast milk. She also needed to understand her rights when it came to pumping breast milk at work. For first-generation participants (and to some extent even 1.5-generation participants), this cultural knowledge was not

always apparent. Many first-generation participants reported that they did not know about or understand their options to pump at work and freeze their breast milk, and 1.5- and second-generation participants often reported that the rules regarding pumping milk at work were so extensive that it often drew unwanted attention to mothers who were breastfeeding.

> Yeah, and I think, well I've been told here that if you breastfeed, your employer, they have to allow you to pump, so if you're like, "Oh I have to pump," then they can't say, "No you can't pump." They have to like allow you to pump your milk, and I learned a lot of things so, like wow, there's all these rules and like, rules made for women and breastfeeding. It's like, "Gosh, breastfeeding's such a big issue." (G1.5P2F)

While participants often cited working status as a barrier to breastfeeding, the initial data does not seem to support this. In fact, working status seemed to facilitate breastfeeding initiation. For example, almost 75% of this sample consisted of mothers who worked in the paid labor force (15) at some time during their baby's first year of life. Out of the women who were in the paid labor force, 47% of them exclusively formula fed, and of the women who were not in the paid labor force, 83% of them exclusively formula fed. Thus, overall women who did not work in the paid labor force were more likely to use formula, not less likely, as the previous quotations would suggest.

Expanding the analysis to generational groups, findings suggest that first-generation participants were less likely than 1.5-generation participants to be in the paid labor force (67% of first-generation women worked outside the home compared to 75% of 1.5-generation), which could be due to the fact that 1.5-generation participants were

less likely to have a language barrier and more likely to be employed. Initially, this might explain part of the increase in formula use between first- and 1.5-generation Hmong, because more of the 1.5-generation participants were employed. However, upon further examination of the differences in formula use between generations, there are some revealing patterns. Among first-generation participants, 50% of them who were employed in the paid labor force exclusively used formula and 67% of them who were not in the paid labor force exclusively used formula. Among 1.5 generation participants', 67% of those in the paid labor force exclusively used formula and all of them who were not in the paid labor force exclusively used formula. Thus for both generational groups those who were in the paid labor force were more likely to breastfeed.

Among second-generation participants, the effect was even greater than those in the first and 1.5 generation. Second-generation participants who were in the paid labor force were even less likely to exclusively use formula (33%) and all second-generation participants who were not in the paid labor force exclusively used formula. Thus, the argument that workforce participation decreases breastfeeding did not hold true for this group of women. So what is it about employment status that would especially increase breastfeeding initiation among second-generation participants? And why was the effect not as strong among 1.5-generation participants?

One potential reason for the difference is the type of employment among 1.5-generation and second-generation participants. Participants in the 1.5 generation were more likely to be employed in lower paid service occupations (see Chapter 5) with less ethnic diversity among coworkers; whereas second-generation women were more likely to be employed in professional occupations with more ethnic diversity among coworkers.

This difference in employment diversity often exposed second-generation participants to Americans who breastfed and this seemed to have a positive effect on breastfeeding initiation among second-generation women. Second-generation women employed in the paid labor force interacted and networked on a daily basis with a much more diverse population than those in the 1.5 generation. As reported in Chapter 2, the incidence of breastfeeding in the larger population has increased between 1999 and 2006 to almost 75%; one may even consider the United States a "breastfeeding country" (Centers for Disease Control and Prevention, 2010). Second-generation participants often mentioned noticing this trend among their coworkers.

> Hum … You know I'm starting to see a lot of people to do the breastfeeding. I'm seeing more of that now … and it amazes me. You know a lot of my coworkers breastfeed … um … rather than formula feed. Um … which is a good thing. And I think that the more people learn about the benefits of breastfeeding they do it more. (G2P1F)

Another second-generation participant had this to say, "All my coworkers breastfed, which I thought was really pretty awesome. Yeah and they're young, you know, and they tried, so like I see more of that among Americans than with the Hmong young mothers" (G2P4B). It appeared that second-generation participants were more exposed to working breastfeeding mothers and more educated when it came to their pumping options. Thus, second-generation Hmong participants were more willing to initiate breastfeeding than were first- or 1.5-generation mothers, even though duration rates were low (see Chapter 4). Participants acknowledged that although they were

allowed two 15-minute breaks to pump at work, it was often problematic for two reasons: it disrupted coworkers, and there were time constraints.

> I do want to do it, or breast pump real quick or, you know, pump for 10 minutes and then you come back and then during my lunch time pump again and have another second break and pump again. I just feel like it was disturbing my coworkers because, yeah, I know, but it was hard to stop. (G2P3B)

Another participant stated,

> They just said that I had my 15 minutes and that's it and I did that for a few weeks and it didn't work, you know, cause as soon as I'm not [done] pumping then, I didn't even have time to clean, you know, and put things away. (G2P4B)

In general, for second-generation participants, working outside the home exposed them to others who breastfed and knowledge of pumping options was greater for this group of women; but also, according to the participants, working outside the home presented its challenges to breastfeeding.

As the first- and 1.5-generation had done, second-generation participants also gave privacy and convenience as reasons for exclusively using formula. For example, 1 participant described that she felt as if people were watching her when she tried to breastfeed.

> At first I kind of like the whole world was watching (laughs). Like every time someone would pass by they would be looking like what are you doing. I remember this one kid pointed out to her mommy. She's like "mommy I can see her boobie" and I was like "oh my god. Cover up." (G2P1F)

Privacy norms in public spaces made breastfeeding in the United States uncomfortable for all participants, and many of the second-generation participants also turned to formula for these reasons.

> Oh formula, I guess it was just more convenient for me. … You know I'm going to travel less [if I were to breastfeed]. I'm going to go to Target or something and she gets hungry, you know, what do I do? I thought it would be easier to give her a bottle or you know, mix the formula really quick rather than go back to the car or, cause you don't find many places. I mean I know there are some places that have like private breastfeeding areas for new moms; that's not very common. (G2P7B)

Patterns of infant feeding among second-generation participants seemed to indicate a possible return to breastfeeding, although many also cited privacy norms and convenience as their reason for exclusively using formula, which is consistent with the reasons White Americans give for exclusively using formula (Gengler, Mulvey, & Oglethorpe, 1999).

In this sample, the initiation of breastfeeding was more common among second-generation and English-speaking participants. Second-generation participants in this study were more likely to initiate breastfeeding in comparison to first-generation and 1.5-generation participants, not less likely. Hence, the way in which assimilation and acculturation affects infant-feeding behavior is different between participants in this study from what has been found among other immigrant groups. The trajectory is not as linear as traditional assimilation would suggest. The pattern for Hmong immigrants does not suggest that as they assimilate they are more likely to formula feed. Instead the trend

moves in the opposite direction (second-generation participants are more likely to introduce breastfeeding practices). Second-generation Hmong participants were more likely to say they were familiar with (and had more of a desire to abide by) current breastfeeding norms in the United States, and it was easier for them to do so in comparison with their less acculturated counterparts. Second-generation participants did not have the language barrier that first-generation women had, were more educated and more likely to be employed in less segregated, professional occupations. They were also more likely to be familiar with breastfeeding campaigns in the United States, more likely to understand the benefits of breastfeeding according to the medical community, and did not carry the burden of needing to quickly learn the language to provide for their family. They were also more likely to have knowledge of breast pumps and how to use them, and were more familiar with their options for freezing and storing breast milk. Thus, the obstacles to breastfeeding mentioned by first-generation women did not exist or were easier to overcome by second-generation participants and breastfeeding could be a higher priority in their lives.

Summary

In summary, the Hmong migration process necessitated immediate and frequent contact with resettlement agencies. In terms of their changing infant-feeding practices, Hmong refugees were introduced to formula only after their arrival in the United States through agencies such as WIC. Adapting to new fast-paced lifestyles in the United States, along with pressures to learn a new language and gain employment, and the ease and availability of formula through WIC, influenced many first-generation Hmong women to formula feed their infants. Throughout the interviews, first- and 1.5-generation

participants pragmatically described their infant-feeding decisions and did not necessarily view breastfeeding as a part of their ethnic culture, necessitating preservation. Therefore, it was easier for them to make the switch to formula upon arrival. Findings also suggest that American norms of breastfeeding in public and a lack of cultural knowledge about pumping and storing breast milk also influenced first- and 1.5-generation participants to exclusively use formula. For second-generation participants, norms of privacy and the awkwardness of breastfeeding in public along with the convenience of formula were also cited as important influences on their decision to exclusively use formula. However, quite different from first- and 1.5-generation women, second-generation women were more educated and more likely to be employed in less segregated and professional occupations. This exposed them to secondary ties in the paid workforce where mothers did breastfeed. This exposure appeared to influence breastfeeding initiation among second-generation Hmong. Thus, unlike Hispanic studies on acculturation and infant feeding, where patterns indicate that more acculturated Hispanic immigrants are more likely to use formula than less acculturated Hispanic immigrants, infant feeding among Hmong immigrants take a different trajectory. Hmong women exclusively breastfed their infants in Laos and Thailand and then immediately switched to formula upon emigrating to the United States. These findings suggest that the pattern then seems to reverse itself as second-generation Hmong begin to introduce breastfeeding back into their infant-feeding decisions.

Chapter 7

Infant Feeding Influences: Social Support

This chapter begins by discussing the importance of community among this sample of Hmong and how adaptation can be influenced by the strength and character of ethnic communities. It then moves to a discussion of social support and its effect on infant-feeding decisions. The final sections describe the limitations of the data, implications for professionals who are engaged in this topic, recommendations for future research, and the conclusion.

Like many traditional societies, Hmong culture places much importance on the idea of community and kinship (Miyares, 1998). Perhaps as Hmong acculturate to American society, American individualism grounded in Protestantism, capitalism, and modernity will be at odds with traditional belief and value systems. Weber (1904) argued that the modern world sees an increasing rationalization of all aspects of life and a perpetual displacement of religion, magic, and other "nonrational" perspectives with that of modern science. Although traditional assimilationists argue that immigrants will eventually adopt these American values and beliefs (Gordon, 1964; Park, 1928, 1950), pluralists and multiculturalists see the process of integration as much more multidimensional (Abramson, 1980; Berry, 2003). Immigrants can interact with the host society, reshape and reinvent themselves taking on some of the dominant values while discarding others, and they often do this collectively by way of ethnic communities. Ethnic communities serve as one pathway through which immigrants have preserved traditional beliefs and values. Ethnic communities can offer immigrants a sense of familiarity and emotional comfort, making it easier to adapt to U.S. life. While the

classical assimilation framework may see ethnic communities as a barrier to assimilation and acculturation and hence upward mobility, segmented assimilationists argue that ethnic communities promote ethnic solidarity, which can create viable economic opportunities, positive educational outcomes, and human capital.

Most of the participants, when asked, said they believed that the community and/or family superseded its individual members (17 of 21 participants stated that family needs should take priority over the needs of individuals). Thus, the idea of community was still very important to this sample of women. However, unlike what traditional assimilationsists might expect, these feelings did not decline over generations and even appeared to increase. The generation that felt most strongly about the ideals of communalism wasn't the first generation, as expected, but the second generation. While 80% of first-generation Hmong in this sample feel that family needs should take priority over individual needs (and 67% of the 1.5 generation), 88% of the second generation feel more strongly about the family versus the individual. For example, one second-generation respondent said, "I believe the family needs would be more [important] because it's a whole group instead of an individual. And I guess its more people, so you actually help more of the, more people than the individual" (G2P6F). This is similar to the response of a first-generation participant, who stated that "Well, the whole family [is more important than the individual]. You have to encourage everybody to do the same thing" (G1P5F). Thus, value for family over the individual does not appear to have declined from the first to the second generation. This could be because as second-generation participants understand and witness discrimination in the larger society, ethnic

solidarity and strong ethnic networks may serve as a resource in confronting obstacles to adaptation.

In a few cases, 1.5- and second-generation participants who were beginning to value American individualism, mentioned that they were criticized for doing so because it conflicted with Hmong traditional ideas of community. For example, 1 respondent of the 1.5 generation said,

> Yeah, so it's not like they say it to you directly, but you know [family members are] talking about you, talking about how you're not doing what you're supposed to do, because you decide to pursue your dreams, your individual dreams. (G1.5P2F)

The participant quoted below indicated that she questioned some traditional beliefs but did not question the value of participating in them and believed that many of these traditional customs are a defining factor of group identity.

> Our culture's in us and it makes us who we are, and there are certain things that I agree with and there are certain things that I don't, but I think it is important because it makes us who we are, our community, you know, our culture is what makes us who we are as one. (G2P2B)

Care of Elders

Elders in the Hmong community honor traditional family values and expect their children, especially the daughter-in-law who is living with them, to be their primary caregivers (Metropolitan Area Agency on Aging, 2006). When asked, most of the participants (16 of the 21) said that they would want their parents to live with them or other family members as they aged and that sending them to a retirement community was

unacceptable according to Hmong customs. For example, 1 participant who was asked if she would ever consider putting her parents in a retirement home stated, "No, I never think that. I think that my parents raised me, so I have to take care of them when they get older, so that's why they have me here for them" (G1P2F). Those participants who were most likely to disagree with putting their parents in a retirement home were more likely to be part of the second generation, though the majority of respondents, regardless of generation felt that way. One participant described the cultural rules of taking care of elders in the following way:

> Well, culturally … it's usually the eldest or the youngest son that will take the responsibility upon with the parents. Usually, for example right now, my husband is, we're taking care of his parents, and they'll live with us until they want to live with the younger, or with the other [male] siblings, because my husband, he has 7 other brothers, so it's a big family, so it's really up to where my in-laws stand. And another example, my parents, they live with my older brother, so he will be the caretaker until they pass. (G2P2B)

Here too we see the influence of the ethnic community on the obligations of participants. Participants also expressed a sense of guilt and conflict when they are caught "in-between" cultural ideals. For example, following, a participant described her difficulty with the expectations as the wife of an only son and what she and her husband must do to take care of her parents-in-law.

> I have really mixed values on that. … Like in our culture you know how you're supposed to take care of the elders. My husband is the only son. So he has the burden, I think it's a burden at times. He has to take care of his mom, and it's

> really hard because a lot of pressure falls on him to be a man, to grow up, and it's like, we can't really live our life because she's always in our life, telling us what to do, what not to do and you know, this is how old people do it, and gosh if I wasn't around, how would you guys survive? Da, da, da, I'm like, you know, the root of the house, the thing that holds you guys together, and it's true. She does hold his family together, but then at the same time, I just want to like be free of her and live a life to myself, you know? (G1.5P2F)

Although the majority of women in this sample would not put their parents or parents-in-law in a retirement community, one second-generation participant mentioned that she would embrace living in a retirement community once she reached retirement age.

> No I wouldn't [put my parents or parents-in-law in a retirement community] cause, you know, when we were little, you know, they used to take care of us and that's what we should be doing back to them, taking care of them. … But to me, I prefer going to a nursing home when I get older though. Because you know, different generations can change and you know, they can actually think differently now … cause this is the United States, and you know, people can actually change more now so to me, prefer I would actually like to send me to a nursing home. [Interviewer asks why.] I don't know. Just because, you know, my future daughter-in-law, you know, they're actually different from who I am, you know, so yeah. (G2P6F)

In summary, most of the women in this sample conformed to traditional obligations and expectations when it came to taking care of elders, even though they may

have felt burdened in doing so. Second-generation participants were just as likely if not more likely than first-generation participants to disagree with the idea of putting their parents or parents-in-law in a retirement home. Although a few of the 1.5- and second-generation participants may be questioning this tradition, the majority of participants felt it was an important part of their culture. Across generations, Hmong women felt strongly that the community was more important than the individual and made that clear in their attitudes about taking care of their elders. Obligations to and belonging in a community seem very important to this group of women.

Ethnic Communities: Social Support and Infant Feeding

Where generational status was not so clearly related to the introduction of breastfeeding among some participants in this study, informal social support among participants and their roles in the ethic community do seem to be. Chapter 2 reviewed the social-scientific literature on infant feeding and many reports cited the positive effect of social support on breastfeeding. Social support from informal social networks such as male partners, mothers, family and friends, and professional networks (healthcare professionals, health and educational organizations, and lactation consultants) can increase one's knowledge about breastfeeding and raise the level of emotional and tangible rewards for breastfeeding. Negative social support may have the opposite effect and decrease breastfeeding initiation (Raj & Plichta, 1998). This part of Chapter 7 will explore the role of social support, from both informal and formal networks among participants, and their infant-feeding decisions. The section begins with a brief description of Hmong family structure in order to understand the nature of structural social support in this ethnic community, and the potential it has to provide support for

Hmong mothers and their infant-feeding decisions. The next section includes a review of the informal social networks that seemed to influence infant-feeding decisions among this group of women. Findings suggest that negative informal social support from mothers-in-law was a strong influence on formula use among participants and positive informal social support from sisters-in-law was a strong influence on breastfeeding initiation.

Hmong family structure. It is Hmong tradition to have large households, and this is often accomplished through high birthrates and extended-family members living together under one roof. The average birthrate for this sample was 4.2 compared to the average U.S. birthrate in 2005 of 2.9 for Hispanic mothers, 2.0 for African American mothers, 1.9 for Asian mothers, and 1.8 for non-Hispanic White mothers (U.S. Population Reference Bureau, 2009). Additionally, 14 of the 21 women interviewed lived with or had extended family living with them. The smallest household in this sample was made up of 4 people (4 of the women interviewed lived in these households). More than half of this sample, 13 of the women interviewed, had households of 6–10 people. Three of the women interviewed lived in households with 10 other people and one woman lived in a household with 12 people.

These larger households can often provide tangible support in the management of a home. Although some of the participants lived with their siblings, siblings-in-law, or aunts and uncles, the most common arrangement was to be living with a mother-in-law (and if still alive, father-in-law). Of the women interviewed, 10 lived with their mothers-in-law and/or fathers-in-law and 4 of the women lived with other extended-family members. This family structure and large family size offered participants a unique opportunity for extended social support and cooperation in the running of a household,

childcare, and infant feeding. Interestingly, there were indications that participants were more likely to include some form of breastfeeding in their infant feeding if they did not live in an extended family household. To understand this apparent contradiction we need to further explore Hmong informal social networks.

Informal social networks: Hmong family structure and social support. As mentioned earlier in this dissertation, it is Hmong tradition for sons (especially the oldest or youngest) to continue living at home once they reach adulthood and care for their parents as they age. And once sons marry, it is common for their wives to move into the household as well. In discussing Hmong matrimonial traditions 1 participant stated, "we have to move out of family to marry to other families" (G1P2F). In Hmong society, a married woman is still a physical member of her birth clan but she no longer belongs to her parents' lineage in a spiritual sense. Instead, she belongs to her husband's family, spiritually and ritually, and will remain there even in the afterlife. In essence, she has been adopted into her husband's spiritual domain through marriage (Lee, 2009). According to Lee,

> Daughters are … often referred to as "other people's women." They are expected to marry and to belong rightfully to strangers from outside their group of birth. … They are cut off from their parents' ritual system as soon as they are married. (2009, p. 3)

Thus, for Hmong women, marriage is not just between a man and a woman; marriage for these women is more often than not a marriage into another family physically, spiritually, and emotionally.

This unique family structure may impact the nature of relationships between parents, and sons and daughters because their "daughter will not perform social functions of importance for her [birth] family and the ancestral group" (Lee, 2009, p. 3). This idea was echoed in the current study. For example, one participant stated,

> Because the boys, they're going to be the ones who cares for the parents, and everything the parent goes to the boy first. Then because we are the woman and marry to other clans, so we will be the last one to inform or to ask anything that we have to do for the family. (G1P2F)

Thus, because mothers will often live with their daughters-in-law for a longer period of time than they lived with their own daughters, they measure potential wives both as matches for their sons but also as matches for themselves and other family members living at home. For example, one participant described her mother's discussions with her brother in terms of a potential wife: "My mom does give him signs like, you know, you need to find this kind of a girl. You need to make sure that, you know, she's the right person for the family" (G2P2B). Hmong mothers who live in traditional families (with their sons) have a vested interest in who their sons marry because people living in the same household (rather than in a nuclear family) are regarded as "the strongest category of relationships" in Hmong society (Cooper, 1978, p. 309).

Participants somewhat apologetically admitted that there were differences in how they and their brothers were treated. However, they were quick to defend or justify the differences in that the boys were responsible for staying home and taking care of their parents.

> Because we are the girl and when we grow up, we have to move out of the family to marry to other families, but the boy, they're going to be the one who stay and take care of our family. That's why they get treated differently. (G1P2F)

In another case, the participant indicated that she understood why "her parents support more the boy instead of the girl" and that she doesn't "feel bad" because "that's how Hmong parents are" (G1P5F).

These gender differences and the makeup of Hmong households may impact parents' vested interests in their sons; and, therefore, may impact the emotional or psychological relationship between mother and daughter and grandchildren. While most of the women interviewed stated that they had close relationships with their mothers, they also described a lack of openness when it came to discussing and sharing more intimate details of their lives, specifically the birth process and breastfeeding.

The influence of mothers-in-law in infant-feeding decisions. Participants often mentioned that they had few people to talk to when it came to preparing for labor and what to expect for the delivery. Culturally, labor was perceived as a very personal and private matter especially among their parents' generation, and talking about the labor process with their mothers was like "talking about sex, it's very taboo" (G1.5P2F). Thus, the majority (14) of the women interviewed said that they felt uncomfortable going to their mothers or their mothers-in-law for advice and/or guidance on the birth process and breastfeeding. For example, 1 participant stated, "No, because in our culture, that is something that you cannot talk. It's too—I don't know something like—it's too embarrassed to talk about that. Something you experience yourself" (G1P10F). Even some of the friends of these women chose not to talk to them about the labor process for

fear that the soon-to-be mother might get "too scared," essentially "complicating the labor" (G1.5P2F).

Although participants did not feel comfortable talking to their mothers or their mothers-in-law about the birth process, the majority of women interviewed said that "it is most common for the mothers-in-law (and mothers if around) to be in the [delivery] room" and that husbands were usually discouraged from participating. "My mom actually kicked my husband out of the room. 'She was like Um, son-in-law go out there,' and so she held on to one hand and my mother-in-law held onto the other hand" (G1.5P2F). This illustrates the tangible support participants had from both their mothers and their mothers-in-law when it came to labor, but emotional and educational support for breastfeeding seemed to be absent in the participants' descriptions of support from their mothers and/or mothers-in-law.

For most participants, mothers and mothers-in-law primarily provided negative rather than positive support for breastfeeding. All but 3 of the women interviewed said that either their mother or their mother-in-law (or both) encouraged them to formula feed. A few participants were more likely to go against their mother or mother-in-law's wishes when it came to breastfeeding, especially if they were not living together. For example, 1 woman who went against her mother's wishes for her to formula feed stated,

> I talked to my mom and she say, "cause in this world where we work," she's like, "don't breastfeed" but I say, "uh I kind of tried to breastfeed, to feel like attached to my kids and how does it feel like breastfeeding," so I just breastfeed my kids. (G1.5P1B)

Notably, this participant did not live with her mother or mother-in-law and the primary caregivers of her four young children were her husband and herself, thus it was easier for her to decide to breastfeed even as her mother discouraged it.

Mothers and mothers-in-law in this sample provided much more negative support than positive support for breastfeeding. "Yeah, I talked to my mom a little bit. She say, 'not good to breastfeed if you want to go to work' (laughs)" (G1.5P1B). Yet, the fact that so many of these women had large households and extended family members helping with infant care while they worked outside the home or ran errands may also explain why they were discouraged from breastfeeding. Babies had many caregivers (the most common was the mother-in-law) and formula feeding made it "so everybody can help. You know, when you're not there, they can feed your baby easy" (G1P7B). Another participant stated,

> My mom also [here "mom" is referring to her mother-in-law whom she lives with and who discouraged her from breastfeeding] told me not to [breastfeed]. She was like, "Don't breastfeed because you have to go to work. You have to go to school and work and you know, if you breastfeed and your babies, they only want your milk, and it will be hard on whoever is taking care of your kid, cause they have to deal with a fussy baby." (G1.5P2F)

Another participant described the trouble she had with her "mothers" when she tried breastfeeding.

> I think with my second kid I tried breastfeeding. With my first kid, there was, I was very young and the mothers, they were at my ass about it. They were like, don't breastfeed, you know, and I had a lot of questions after I gave birth, like

why do I feel this, why is my breast, you know, like full of stuff. And they would say like, "Oh, don't let your breast milk leak onto other stuff. It's a bad sign. Don't give your breast milk to other babies to drink. You hear that?" (G1.5P2F)

The previous quotation illustrates the confusion and lack of positive social support for breastfeeding among the mothers in this study. Another participant described it this way:

I wish I breastfed her longer. It's just that I was having trouble having her latch on. And then my husband's mom kind of mentioned that it would be too hard if I breastfeed and maybe I shouldn't, cause she knows how it feels when she breastfed all of her kids. And she said, living in the U.S. is different from living in Laos so in the U.S. we can get formula so we might as well just feed her a bottle. So that kind of made me not breastfeed. If my mom was there, she would have encouraged me. (G2P3B)

Another participant explained the difficulty of trying to persuade her ex-mother-in-law to "let" her breastfeed.

Well, like I said … the child-development classes really helped me out a lot. And me myself, I wanted to breastfeed her, so bad, I was, like that's what I'm going to do. … I'm going stick the baby on the nipple and it's going to be on. … I'm going to breastfeed her because I know that there are like nutrients in your breast milk that you just cannot get from anything else. You know, you can't get from Enfamil, you cannot get from Similac. It's natural breast milk, you know? And that's what I want to do. But then again, you know, that evil woman is in the picture, my evil mother-in-law, you know, and she's just like, no, because when

you go to school, you know, your daughter is going to be so used to, you know, your nipple that she's not going to want a bottle. And I'm just like, well haven't you heard of like a switch off? You know, like I would switch her off every now and then. … I can still pump and switch her off. Like I can, she doesn't have to … be on my nipple all the time. … I can just, you know, let her have my nipple at night and then … during the daytime, you can … feed her … my breast milk. Like I can pump, you know? I don't know. She had issues. (G2P8F)

Not only did many of the mothers and mothers-in-law of these women discourage them from breastfeeding, few of them had peer breastfeeding role models. For example, this participant was asked if any of her female relatives' breastfed:

They don't breastfeed actually. Yeah, they don't. I think the only one was my sister-in-law, sister-in-law that breastfed. I know that all her children breastfed. But I know that they both, yeah, two of my sister-in-law that had a kid, they tried to for the first week or so and then they stopped, and then one sister-in-law never did. And then all my friends, they don't. I mean I have cousins who don't because their parents say no. I don't know why, but they said their mom had a situation with breastfeeding and so they're strongly disagree with breastfeeding. So I mean, I had a lot of discouragement from aunts and uncles. (G2P4B)

This traditional family structure was consistent with family structure in Laos and Thailand where women also lived with their in-laws, in large families, and where children were cared for by many; however, the difference between living in the United States and living in Laos was that *infants* born in Laos were primarily cared for by the working mother and formula was unavailable. In contrast, infant care in the United

States tended to be shared among the extended family and especially the mother-in-law. In most cases, mothers in the United States are not permitted to bring their infants to work with them, and even for those mothers who do not work in the paid labor force, running errands with an infant can be difficult in a modern commuter society. In Laos, though, mothers could work the fields and tend to their daily chores and activities while physically caring for their infants. Table 7 shows the structural/cultural patterns of potential social support for breastfeeding, classified by whether the participant lived in a household with extended family members or a household made up of only parent(s) and children (nuclear family). The women who lived with extended family members were more likely to exclusively formula feed, and those women who lived in nuclear families were more likely to include some form of breastfeeding in their infant-feeding method.

Table 7

Potential Structural/Cultural Social Support and Infant Feeding

	Exclusively formula	Breastfed exclusively or did both
Lives with extended family	64%	36%
Lives with nuclear family	43%	57%

These patterns differ from what was expected. On the one hand, one may argue that extended-family households provide greater potential for positive breastfeeding support in terms of the size and homogeneity of the household. In other words, participants living in extended-family households had more people around them (including a mother-in-law who more than likely breastfed her own infants) to help with childcare and manage the household, and thus new mothers would have positive social support for breastfeeding. However, negative social support for breastfeeding was more

prevalent among extended-family households. Again, this can be explained by the fact that extended-family households had many infant caregivers and formula feeding by caregivers (mothers and mothers-in-law) other than the mother herself was more practical and convenient. Among nuclear-family households with mothers who worked in the paid labor force, there was a tendency for those women who relied on their mother or mother-in-law for daycare to use formula. Of the 5 women in this study who lived in a nuclear family and worked in the paid labor force, 2 used their mother and mother-in-law for daycare services and both of them exclusively used formula. Two other women paid for daycare services outside of the family: 1 of them exclusively breastfeed and the other combined breastfeeding with formula. The last participant worked a different shift from that of her husband and they were able to split child-care responsibilities between them. They combined breast milk with formula.

The influence of sisters and sisters-in-law in infant-feeding decisions. Although most of the women interviewed felt that they could not go to their mothers or mothers-in-law for breastfeeding support, some were able to elicit support from their sisters or sisters-in-law. When 1 participant was asked if any of her friends or sisters breastfed she stated,

> My sister-in-law did. Yeah. She is the one who mostly came to help me a lot with it, she showed me how to have the baby latch on and if I had sores what I would do, and, so she was the biggest source that I had was my sister-in-law. (G2P2B)

Another participant stated,

> I kind of questioned what would be best, if it was better to do formula or breastfeeding. My sister-in-law, she's breastfed all three of her kids, my brother's three kids, until they were 5, so she said that was the best to go, you know. It's more healthier and they get less ear infections and they get more nutrients that way. So I tried that and I decided to go with breastfeeding to see how it would go. I did it for about a month, but then my baby wouldn't latch on correctly, so I would get sores on me, so I just decided to go with formula. Which I decided if we were going to go, what kind of formula, and my sister-in-law preferred that for me to go with the powdered Enfamil because it gives the baby iron and all that, so I went with the Enfamil. (G2P2B)

Breastfeeding support from a sister or sister-in-law cannot be understated in importance for this sample of mothers. In fact, all but one of the women interviewed who breastfed had the support of a sister or sister-in-law.

> Yeah. I had my sister-in-law … cause she breastfed all her kids. So on the day that I had my son, she actually came and she helped me and so I just always, I continued to ask her for help. And so she would come over once or twice, she came over once or twice when I was breastfeeding and just kind of, you know, taught me how to, you know, latch, help my son latch on. (G2P4B)

Participants who exclusively formula fed did not mention a friend or a sister/sister-in-law that breastfed. When these women were asked if they were able to talk to anyone, specifically sisters or sisters-in-law, about breastfeeding, they were more likely to reply, "Not really. Because they don't breastfeed. None of them do"

(G1.5P1B). Even women who might have considered breastfeeding turned to formula if they did not have support from someone in the nuclear or extended family.

> I formula fed. At that time I was still really young, and so I didn't really know so, you know, my sister went with formula. My sister-in-law went with formula, so I just thought that it might be easier for me. So I went with formula. But now, when I think about it, I, you know, I wish I could turn back and you know, breastfed. (G2P6F)

Thus, among this group of women, sisters or sisters-in-law were the primary source for positive social support when it came to breastfeeding, and mothers and mothers-in-law often did not support breastfeeding. The difference in support between mothers-in-law and sisters-in-law may have been affected by the family structure in that mothers-in-law were often living with the participants and caring for their infant children. Therefore, they were more pragmatic in their support for formula feeding, arguing that it would minimize their worry about running out of milk when the mother was not home. Alternatively, as peers, sisters-in-law were easy to talk to and if they had breastfed or were breastfeeding they were capable of providing knowledge about breastfeeding, as well as emotional and tangible support for breastfeeding.

Social Capital and Infant Feeding

One of the unexpected findings of this study was the role of social capital in infant-feeding decisions. The construct of social capital has been defined as "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (Putnam, 1995, p. 67). Social capital has been previously associated with many health outcomes (Diderichsen, Evans, & Whitehead,

2001; Hyppa & Maki, 2001; Rose, 2000) including breastfeeding initiation (Anderson et al., 2004; Riordan & Auerbach, 1999; Thiel de Bocanegra, 1998). Breastfeeding initiation studies have found that social capital has a positive effect on breastfeeding among immigrant women from Latin and Central America and the Caribbean who now live in the United States (Thiel de Bocanegra, 1998) and Puerto Rican women living in Hartford, Connecticut (Anderson et al., 2004).

Informal social support was an important factor in the initiation and duration of breastfeeding among Hmong participants. Other research examining the influence of social support on breastfeeding initiation suggested that the largest source of social support for immigrants comes from participants' mothers or mothers-in-law (Riordan & Auerbach, 1999). This is similar to what was found in this study; however, the effect of this support for breastfeeding was negative. In fact, negative social support for breastfeeding was most prevalent among mothers and mothers-in-law in this study, while peers (specifically sisters and sisters-in-law) provided the most positive social support for breastfeeding.

The literature on social support, culture, and breastfeeding has found that sources of breastfeeding support for new mothers vary by culture. Riordan and Auerbach (1999) discussed persons who influence breastfeeding according to their cultural background. In their study, Southeast Asians' decision to breastfeed tended to be influenced by their mothers and mothers-in-law (see Table 8) and this study supports that research. However, the positive influence of sisters and sisters-in-law for breastfeeding, which was noteworthy in this study, seemed to be absent in Riordan's typology. While the literature fails to acknowledge the importance of sisters and sisters-in-law on breastfeeding

initiation, their role in influencing Hmong mothers to breastfeed is an important finding. In instances where the participant had a sister, sister-in-law, friend, or other family member who was breastfeeding, she was more likely to initiate breastfeeding. In a few cases, women who formula fed their infants mentioned regrets that a lack of social support made it very difficult to initiate breastfeeding.

Table 8

Source of Support for Breastfeeding According to Culture

Cultural background	Person who influences breastfeeding (positive and negative)
Black	Health care providers, peers
White	Male partner, baby's father, mother's best friend
Hispanic	Parent's mother, male partner, baby's father
Southeast Asian	Mother-in-law, mother

Note. From *Breastfeeding and Human Lactation,* by J. Riordan & K. G. Auerbach, 1999, Boston, MA: Jones & Bartlett. Permission granted.

Hmong women in this study were tied to their ethnic communities through their values of communalism and obligations to their elderly, and through their residence in Hmong extended families. The importance of this ethnic community as a source of social capital for Hmong immigrants cannot be understated. In this study I did not find, as previous studies among Hispanics have found, an increase in formula use among those who were less tied to this community through their living arrangements or family structure. Instead, those who were embedded in Hmong extended families and reliant on mothers and mothers-in-law for support explained that they were less likely to initiate breastfeeding. While traditional theories of assimilation and acculturation, which would suggest declining breastfeeding over time among the Hmong, did not necessarily explain changing infant-feeding patterns among Hmong immigrants, the social support (or lack

thereof) from those in ethnic communities does seem to clarify the relationship between infant-feeding decisions and ties to this community.

Professional Social Support and Infant Feeding

According to the literature, doctors, nurses, breastfeeding-advocacy organizations, or educational courses all can be important sources of information and can impact breastfeeding initiation (Raj & Plichta, 1998). Thus, this part of Chapter 7 assesses study participants' formal networks for breastfeeding support. It begins with participants' descriptions of their interaction with prenatal doctors and nurses and then reviews the support role of breastfeeding associations and other organizations such as WIC.

When discussing obstetricians, all women interviewed stated that they were asked by their obstetrician whether they planned to breastfeed. Most of the women stated that their obstetrician encouraged them to breastfeed and a few stated that their doctor seemed indifferent when it came to infant feeding. For example, "My doctor, they're always like, do you want to breastfeed? They always encourage me to breastfeed, cause they said it's good for the brain, the eyes" (G1.5P1B). Another participant stated that her doctor was more aggressive in encouraging her to breastfeed. "They suggested, they constantly actually suggested that I should breastfeed, and they constantly reminded me that it was better for their immune system to build up and whatnot" (G2P7B). For others, though, their doctors just asked them which method they were planning to use and if they said formula the doctor did not bring it up again.

> When I went to my OB check up, they asked me if I was going to breastfeed or if I was going to do formula and I just said formula. And I guess that carried on to

the hospital that I only wanted formula, so they never really asked me again (G2P6F).

Although many participants' doctors had encouraged them to breastfeed, it did not seem to have the same impact that support from family or friends had on breastfeeding initiation. For example, when participants were asked if encouragement from their doctor to breastfed influenced their infant-feeding decisions, one participant replied, "I know doctors encourage breastfeeding cause you know, it's supposed to be better for the child's immune system. But I find that more people formula feed anyway so that's what I did" (G2P7B). Another participant described the advice her doctor gave her on breastfeeding.

> I valued their opinions … um … I realize how important it is … um … the important of breastfeeding … the nutrients you give … the bonding that you get with your child … all that's very important … but um … no they didn't say … they brought up these important things about breastfeeding but you also have the other option too. (G2P1F)

If a woman was initially interested in breastfeeding and had informed her doctors of her desire to do so, doctors eagerly provided them with support. Doctors even "showed me a few tips, to uh, a few tips I can use to breastfeed my daughter" (G1P1F). Another source of support mentioned by participants was the hospital staff, specifically nurses. "When you're at the hospital and after labor, delivery, they encourage it" (G1P6B). Another participant recalled her experience with breastfeeding support in the hospital after delivery.

> You know, they gave me information. They would give me like a lactation nurse's number if I needed to call her anything and if there were any questions, and if I wanted a home visit, they'll come help me, yeah. (G2P7B)

For another participant, the hospital nurses were "just too pushy about it and they made me uncomfortable" (G2P7B). For this woman, who was initially interested in breastfeeding, hospital nurses perhaps were a little overly ambitious in encouraging breastfeeding.

> Yeah, like, "oh, you want to try breastfeeding? Okay, here, let's do it." You know, and I was kind of like, "well I need to go a little slower than that," but I guess that's kind of made me feel uncomfortable and not want to head towards breastfeeding. So I definitely want to talk to my doctor about that. (G2P7B)

Another participant described her conversation with one of the hospital nurses who encouraged her to breastfeed.

> One of my nurses was just like, you should definitely, even if you're not going to breastfeed her, you should breastfeed her … as much as you can before you don't …? Just so … you can get … at least some [breast milk] in there. … She knew about my situation and …[when] she heard my ex-husband talking to his mom … [about us] just going to use bottles and stuff … she like snuck into the room and she was like, "you should breastfeed as much … as you can until, you know, until you can't … just so you can get at least some in there." So I think, yeah, they try to influence breastfeeding as much as possible. (G2P8F)

Study participants reported receiving support from their doctors and hospital nurses if they were interested in breastfeeding. However, in contrast to the literature,

which suggests the importance of this formal source of support, support from doctors and hospital staff had very little positive breastfeeding impact on the women interviewed. In fact, the majority of participants stated that their doctor did not influence their infant-feeding decisions at all.

Another source of formal support for breastfeeding reported in the literature is from breastfeeding organizations such La Leche League or Nursing Mothers Counsel, to name two. When participants were asked if they were familiar with any breastfeeding-support organizations, all but 2 of the participants answered negatively. The 2 who answered in the affirmative only indicated that they had heard about breastfeeding-support organizations, but did not have any information on organization names, where they were located, or how they could get in touch with them. Thus, organizational resources for breastfeeding support to which mothers in the general population often turn did not appear to impact the Hmong mothers interviewed.

Formal breastfeeding support can also come from childbirth and/or lactation courses. These courses are often provided at no cost for expectant mothers through the hospital where they deliver, and hospitals often provide course-scheduling information (usually in English only) to mothers who are scheduled to deliver within 5–6 months. Six of the participants attended some form of childbirth or lactation class during their pregnancy. Although participants mentioned that the classes were informative, they did not seem to have an effect on long-term breastfeeding. For example,

> We went to a breastfeeding class and they gave us a little bit of information and then when we got to the hospital after the baby was born, they kind of asked us and gave us some suggestions on what we could do, depending if the baby was

able to latch on or not. So we tried it for the first few months, first month, to see if breastfeeding would work and it didn't really work. (G2P2B)

An organization that appeared to be important to study participants when it came to infant feeding was WIC. WIC often supplied nutritional food and formula to families at no cost. Because many of the women interviewed had experience with WIC, this organization could be an important resource for these women. Although WIC endorses breastfeeding, it also provides formula for free. To have a convenient, free food for infants decreases the appeal of breastfeeding because formula was less costly and more convenient than breastfeeding. Participants in this study also mentioned that WIC was often too assertive in encouraging women to breastfeed. For example,

> WIC they're on your ass about it. You know, they tell you, breastfeeding's good. We'll teach you. We have pumps we will provide for you, da, da, da, we'll walk you through, we have room for you and so WIC is very, I think Americans in general, they're very open, supportive of it, because they really want you breastfeeding. Maybe it's because we're too used to not breastfeeding (laughs). (G1.5P2F)

Although WIC has been successful in increasing overall breastfeeding-initiation rates among affiliates, in this sample of mothers, all WIC participants used the free formula vouchers to feed their infants.

Summary

This chapter explored the reasons participants gave for choosing their preferred method of infant feeding, and examined the role of ethnic communities and social support for infant-feeding decisions. The ethnic community and informal social support seemed

to have a greater effect on infant-feeding patterns than generational status. In this study, participants who were able to find social support for breastfeeding among their primary ties were more likely to introduce breastfeeding. Almost all of the women who initiated breastfeeding in this study had the support of a sister or sister-in-law who had breastfed or was breastfeeding.

Formal support for breastfeeding from the medical establishment and breastfeeding organizations seemed to have little impact on this group of mothers. Although these mothers were advised to breastfeed by professionals, they were less likely to initiate breastfeeding if they did not have the support from a family member who had breastfed.

Participants who were strongly tied to their ethnic communities through residence in more traditional extended families had little social support for breastfeeding from those who were most important to their decision-making: mothers and mothers-in-law. For those who were less tied to these families, the advice and support of sisters or sisters-in-law was important. Unlike in many other studies of immigrant acculturation and breast-feeding, greater ties to the ethnic community did not encourage, but rather seemed to discourage the initiation of breastfeeding.

Limitations of Data

Some of the limitations of this study were its small sample size and lack of interpreter training. With only 21 interviews, one needs to be cautious in drawing conclusions and making generalizations about the findings. In addition, interviews that were conducted in English seemed to be uniformly more descriptive and longer in length. Participants also seemed more comfortable in interviews that took place without an

interpreter. English-speaking participants were more likely to expand their responses and offered narratives in making their point in comparison to their Hmong-speaking counterparts, who were often brief in their responses. Initially, the researcher thought that the interpreter was not translating the entire dialogue and instead summarizing participants' responses. However, upon further review of the taped interviews by another native speaker it was clear that the original interpreter was translating the responses, for the most part, accurately. This lead the investigator to look at how the interpreter was asking the questions and perhaps her demeanor while doing so. Therefore the native speaker was again asked to review the tapes and examine the translation of the questions that were being asked by both the researcher and the interpreter. According to the second review, questions seemed to be asked matter of factly and quite often the interpreter seemed rushed when asking the questions. Participants were not encouraged to expand their responses and in some cases the investigator's questions were not translated verbatim and instead questions were shortened. In addition, the format was occasionally switched from open-ended to closed-ended questions when translated. Thus the lack of detail in the Hmong speakers' interviews was often the result of a lack of training in interviewing techniques for the translator. For future studies, where an interpreter is necessary, it is important that they are prepared and trained in interviewing techniques prior to the interviews.

Implications for Policymakers, Public-Health Administrators, Medical Practitioners, and Breastfeeding Organizations

The findings in this study have implications for policymakers, public-health administrators, medical practitioners, and breastfeeding organizations. For policymakers

and public-health administrators, breastfeeding-promotion policies and campaigns need to take note of the unique experiences of immigrant groups and their adaption processes. As revealed in this study, infant-feeding decisions are contextualized, and universal breastfeeding campaigns cannot expect to be successful among diverse immigrant populations in the United States.

In addition, breastfeeding is a time-consuming, labor-intensive, and often-difficult act for all mothers, but perhaps even more difficult for less privileged mothers (Avishai, 2007). To make breastfeeding more desirable in the United States and allow breastfeeding mothers more flexibility, products such as electric pumps, slings, cover-ups, nursing bras, nursing pillows, nursing chairs, and storage and freezer containers, to name a few, should also be available to refugees, just as formula is available to them. Newly arrived Hmong immigrants also need instruction in how to pump, store, and freeze their breast milk. Hence, education in this area is a necessity especially among first- and 1.5-generation Hmong immigrants.

For medical practitioners, especially those nurses working on the maternity floors of hospitals in high-density Hmong populations, diversity training may be beneficial. Instead of pressuring mothers to breastfeed, nurses could arrange for a Hmong mother-to-mother counselor or a Hmong lactating professional to talk to Hmong mothers who have just given birth. The findings of this study suggest that peer social support is an important factor in breastfeeding initiation.

Lastly, the Hmong mothers interviewed did not know much about breastfeeding-support organizations. Perhaps public-awareness campaigns and breastfeeding-support organizations designed by and for Hmong women could provide bilingual and low-

literacy breastfeeding educational materials. In addition, a more informed and culturally educated WIC staff and an increased availability of nursing paraphernalia for low-income mothers, may increase breastfeeding initiation and duration for this population.

Recommendations for Future Research

The results of this study indicate that hectic American lifestyles, a desire to structurally acculturate as quickly as possible among first- and 1.5-generation participants, norms about privacy, knowledge of how to use breast pumps and store breast milk, workplace environments, along with negative social support from mothers and mothers-in-law and positive social support from sisters and sisters-in-law, influenced participants' infant-feeding decisions. Therefore, unlike what has been reported for other immigrant groups, this study suggests that infant-feeding patterns among Hmong women follow a different pathway. Hmong reception in the United States was, for the most part, positive, and due to their refugee status, U.S. agencies have played a substantial role in their relocation and adaptation. As a group of political refugees, Hmong immigrants received economic assistance from government and private agencies upon arrival and were more familiar working with these organizations than perhaps Mexican immigrants who did not come to the United Sates as refugees. That these different "modes of incorporation" influence formula use is one of the main findings of this study. Thus, in comparison to Mexican immigrants, the way in which the Hmong settled and were received by the United States, and the influence of agencies such as WIC (with its availability of formula through vouchers) may explain some of the differences in formula use between first-generation Hmong and first-generation Mexican immigrants. It is also

noteworthy that ties to the Hmong ethnic community through residence in extended families worked as a deterrent to breastfeeding initiation.

Immigrant/ethnic subpopulations seem to be quite heterogeneous with respect to breastfeeding behaviors and the factors associated with them. Thiel de Bocanegra (1998) examined the influence of both acculturation and social support on breastfeeding among Puerto Rican women living in the United States and found that the influence of acculturation decreased when controlling for social support. Thiel de Bocanegra also found that more acculturated women reported more social support.

Conclusion

Drawing on interviews with 21 Hmong mothers, this dissertation explored infant-feeding beliefs and practices among Hmong women in St. Paul, Minnesota. In this sample, those women who had recently immigrated were more likely to change the infant-feeding method they relied on in Laos (breastfeeding) to an exclusively formula-fed diet. Results suggest that hectic American lifestyles, a desire to structurally acculturate as quickly as possible among first- and 1.5-generation participants, norms about privacy, knowledge of how to use breast pumps and store breast milk, workplace environments, negative social support from mothers and mothers-in-law, and positive social support from sisters and sisters-in-law influenced participants' initial infant-feeding decisions. Results also indicate that, unlike previous research on the influence of acculturation and infant-feeding decisions among Mexican immigrants, differing modes of incorporation among Hmong mothers influenced first and 1.5-generation mothers to use formula. Breastfeeding initiation was found to be positively influenced by coworkers, for those participants in professional occupations, and the social support from

a breastfeeding sister or sister-in-law among all participants. The present analysis represents a preliminary step toward enriching our understanding of infant feeding patterns among Hmong immigrants; however, further research is needed to further clarify relationships between acculturation and social support on breastfeeding initiation and duration among various immigrant populations.

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Appendix A

Interview Guide

Demographic Questionnaire

Before we begin our conversation about motherhood and infant feeding, I have a few background questions for you to answer.
Bottom of Form

1. How old are you?

2. If I needed to contact you again for some follow up questions how could I reach you?

3. What's your zip code?

4. What is your primary language? Do you speak any other languages?

5. Do you practice Shamanism, Christianity or both?

6. If you do not practice Shamanism or Christianity, do you practice another religion?

7. What is your current marital status?
   a. Divorced
   b. Living with another
   c. Married
   d. Separated
   e. Single
   f. Widowed

8. If married, how old were you when you were married? How old was your husband?

9. How many children do you have?
   a. What are their ages?

Probing questions (Are any of your children adopted or do any of them have a different biological mother? If yes, does/do this/these child(ren) live with you full-time? Have they lived with you full-time since birth? If no, how old were they when they started living with you full-time?)

10. Were any of your children born outside of the U.S.?
    a. Yes Where?
    b. No

11. How old were you when you had your first child?

12. How many people live in your household and what is their relationship to you?

13. What is the highest level of education that you have completed?
    a. Grammar school
    b. High school or equivalent
    c. Vocational/technical school (2 year)
    d. Some college
    e. Bachelor's degree
    f. Master's degree
    g. Doctoral degree
    h. Professional degree (MD, JD, etc.)

14. Are you in school now?
    a. Yes (Probing question: What kind of degree are you working toward)
    b. No

15. Do you work outside the home?
    a. Yes (probing questions: what do you do? Can you describe your workplace and co-workers? How many of your co-workers are Hmong?)
    b. No (probing question: do you plan to go back to work at anytime in the near future? If yes, doing what? Did you work outside of the home before you had children? If yes, what did you do?)

16. What is a good approximation of you and your husbands current income?
    a. Under $10,000
    b. 10,000–9,999
    c. 20,000–29,999
    d. 30,000–39,999
    e. 40,000–49,999
    f. 50,000–74,999
    g. 75,000–99,999
    h. 100,000–150,000
    i. Over 150,000

17. What is a good approximation of your current household income?
    a. Under $10,000
    b. 10,000–19,999
    c. 20,000–29,999
    d. 30,000–39,999
    e. 40,000–49,999
    f. 50,000–74,999

g. 75,000–99,999
h. 100,000–150,000
i. Over 150,000

18. Where were you born and raised?
    a. In Asia only
    b. Mostly Asia, some in U.S.
    c. Equally in Asia and U.S.
    d. Mostly in U.S., some in Asia
    e. In U.S. only

19. What contact have you had with Asia?
    a. Raised one year or more in Asia
    b. Lived for less than one year in Asia
    c. Occasional visits to Asia
    d. Occasional communications (letters, phone calls, etc.) with people in Asia
    e. No exposure or communications with people in Asia

20. (If participant was born outside of the US) Since being in the US have you taken any classes or attended school? Do you think your standard of living has improved since being in the US? Why or why not?

21. (If participant was born in the US) Has your income or standard of living increased over the years? If so, how? Have you or your husband received work promotions, changed careers, received extra training or additional education?

22. Do your parents live in the U.S.? Where they born in the US?

(Probing question: If yes, does your mother work outside of the home? If so, what does she do? Does your father work outside of the home? If so, what does he do?)

23. Are your grandparents alive? Do they live in the U.S.? Where were they born?
    (Probing question: If yes, does your grandmother work outside of the home? If so, what does she do? Does your grandfather work outside of the home? If so, what does he do?)

24. What generation in America do you consider yourself?
    a. 1st Generation = I was born in Asia or country other than U.S.
    b. 2nd Generation = I was born in U.S., either parent was born in Asia or country other than U.S.
    c. 3rd Generation = I was born in U.S., both parents were born in U.S., and all grandparents born in Asia or country other than U.S.

d. 4th Generation = I was born in U.S., both parents were born in U.S., and at least one grandparent born in Asia or country other than U.S. and one grandparent born in U.S.
e. 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.

Now I'm going to ask you some questions about the father of your youngest child and/or your husband:

25. Do any of your children have a different father?
    a. Yes
    b. No

26. Does the father of your youngest child live with you?
    a. Yes
    b. No
    (Probing questions: In no, tell me about the relationship between your youngest child and his or her father. Does he participate in his child's life? Is he a part of your life?)

27. Where was your husband (or the father of your youngest child) born and raised? Does he live in the US now? Is he Hmong?

28. Where were your husband's parents (or the father of your youngest child) born and raised? Do they live in the US?

    (Probing question: If yes, does his mother work outside of the home? If so, what does she do? Does his father work outside of the home? If so, what does he do?)

29. Where were your husband's grandparents (or the father of your youngest child) born? Are they still alive? Do they live in the US?

    (Probing question: If yes, does his grandmother work outside of the home? If so, what does she do? Does his grandfather work outside of the home? If so, what does he do?

30. Does the father of your youngest child work outside of the home?
    a. Yes (Probing question: what does he do?)
    b. No

31. Is he in school now?
    a. Yes (Probing question: what kind of degree is he working toward?)
    b. No

32. What is the highest level of education that he has completed?
    a. Grammar school
    b. High school or equivalent
    c. Vocational/technical school (2 year)
    d. Some college
    e. Bachelor's degree
    f. Master's degree
    g. Doctoral degree
    h. Professional degree (MD, JD, etc.)

That's all of the background questions I have for you. Now I would like to ask you some questions about your values and beliefs.

33. How do you think parents should be taken care of in their old age? Would you ever consider putting your parents in a retirement home? Why or why not?

34. How do you think younger persons should talk to parents or grandparents (elders)? Is it ok to confront elders? What do you think about eye contact with elders? (prompt: Is it ok to look elders in the eye or do you think it seen as a form of disrespect?)

35. What is your view about education in general and the educational system in the United States?

36. What is your view about the medical establishment in the United States? Do you see a doctor regularly? Do you think he/she has your best interest in mind? How knowledgeable or wise do you think your doctor is?

37. Do you think one should focus all of their energies on school and their studies?

38. Would you discourage your child from talking a lot or boasting about their achievements? (or Do you think it is ok for a child to boast about their achievements?)

39. What do you believe would make your parents proudest and why?

40. What do you think is more important the individual or the family and why?

41. Do you believe it is important to keep traditional roles alive? Why or why not?

42. If you're having a problem or even just a bad day would you go to family members for support? Why or why not?

43. Did you or has your family encouraged you to wait for marriage and childbirth and instead pursue an education?

44. Were your brothers treated differently than you by your parents? In what way? Were they encouraged to pursue an education and delay marriage more so that you?

45. (If participant grew up in the US) Do you feel like your parents or grandparents understand what it is like growing up in the US? Have they been sympathetic to the trails and tribulations you have had while growing up in the US?

46. Do you have any good/close friends who are not Hmong? If yes, Do you interact differently with them than you do with your Hmong friends?

47. How are meals served in your home? Who cooks the meals? Does everyone eat at the same time in the same place or is it common for certain family members to eat first and in different places?

Topic Questions

Now I am going to ask you questions about your pregnancy(ies), motherhood and childrearing.

1. Tell me about the pregnancy and delivery of your youngest child?

   Probing questions:
   - i. Was the pregnancy particularly hard?
   - ii. How about the delivery, was it extremely difficult?
   - iii. How did it compare with your other pregnancies?

2. How did you prepare for childbirth and motherhood?
   Probing questions:
   - i. Did you ever attend childbirth classes?
   - ii. Did you read any books?
   - iii. Did you seek or receive any information from your doctor?
   - iv. Did you talk to anyone (mother, mother-in-law, aunts, sisters, other relatives or friends) about childbirth and motherhood?

3. Have you ever heard of the "natural childbirth movement"? What have you heard about it and what do you think about it?

4. Did you give birth to your last child in a hospital? If not, where did you give birth? Was this location any different from where you had your other children?

   (If participant gave birth in a hospital) Did your baby room-in with you or did he/she stay primarily in the hospital nursery? Were you asked for your preference? Would you have wanted it any differently?

5. Have you ever heard of a natural birthing center? If so, what do you think about them? If you had the option, would you ever have a baby at a birthing center?

6. During labor did you have (or want) an epidural? If you had the option, would have rather been asleep during childbirth or awake?

7. Did you have questions about infant feeding prior to motherhood?

   Probing questions:
   - i. If yes, who helped answer your questions and how did you learn about your infant feeding options?

8. How did you feed your infant? Did you breastfeed, bottle-feed or do a little of both?

Probing questions:

i. During the first year of your youngest child's life, who did you go to when you had questions, concerns or issues regarding infant feeding?
ii. How about your other children? Did you feed them the same way?
iii. If not, why did you feed them differently?
iv. If child was breastfed, did you breastfeed your child in front of other family members? If yes, what family members (nuclear, extended, men)? What was your experience with breastfeeding in public? How comfortable were you? Were you ever apprehensive? If you were uncomfortable with breastfeeding in public what made you feel that way? In what kinds of situations did you feel comfortable breastfeeding and in what kinds of situations did you feel uncomfortable? Why do you think you were uncomfortable in those situations?
v. If child was formula fed, what kind of formula did you use and why?

9. During your pregnancy or while you were nursing did you have a special diet?

10. Did you have any beliefs about a mother's health during pregnancy or lactation and how it affects the baby?

11. (If participant breastfed) How long did you breastfeed? Did you breastfeed exclusively?

12. How did you come to the decision to breastfeed /formula feed or do both?

Probing questions:

i. Did you talk to anyone about formula or breastfeeding?
ii. Were you guided or influenced by anyone in particular (family/friends?)
iii. Did working outside the home (if applicable) or attending school (if applicable) have any affect on your decision? Were there any constraints of working or daycare that influenced your decision?
iv. Were there any other practical reasons for your decision?
v. Did you change any aspect of your life or plans for childcare based on your infant feeding desires or practices? (Example, leave a job because it didn't accommodate breastfeeding or change/choose a daycare that accommodated breastfeeding)

vi. Did separation from baby for long periods of time affect your feeding choice?
vii. Did this specific child influence your infant feeding decision? For example, did this child have any specific needs, desires or behaviors that encouraged you to feed a particular way?

13. The reality of life doesn't always allow us to follow our ideals especially when it comes to infant feeding. Are your ideals and practices of infant feeding one in the same? If you had to do it all over again would you have chosen a different infant feeding method? Why or why not?

14. When it comes to infant feeding what does most of your family and friends think and/or do?

Probing questions:
i. Did your mother breastfeed or formula feed you or your brothers and sisters? How did that influence your decision?
ii. Did other family members and friends' breastfeed or formula feed their children? How did that influence your decision?
iii. How did family member communicate their views to you (directives, casual conversations, modeling)?
iv. Did you experience any conflict or tension with other family members (mothers, grandmother, aunts, sisters, child's father) regarding your infant feeding decision and your timing of introducing solid foods or weaning?
v. Did the preferences of the father of your child influence your infant feeding decisions? (For example, did the father want equal parental involvement in feeding so formula feeding was more accommodating. Or did the father of your child worry about changes in your body that could follow from breastfeeding.)

15. Have you ever heard of La Leche League? If so, what do you know about the organization? Did you ever attend a meeting? Are you familiar with any other breastfeeding support organizations?

16. Tell me about when you started introducing solid foods and when you stopped breastfeeding or formula feeding your youngest child.

Probing questions:
i. Why did you introduce solid foods at this time?
ii. Did you wish you could have weaned your baby earlier or later? (formula or breast) Why? Were family members or

friends influential in your decision to introduce solid foods or weaning?

iii. How did you do this differently with your other children?

17. What did your infant's diet consist of during their first year of life?

18. Do you have any help with childrearing from your family or friends? Who helps? Do you ever exchange babysitting services with friends or family? If so, is it informal or formal? In other words, do you keep track of time? Do you pay them? How many people can you rely on for help with babysitting? (Prompt- How often does this person/or persons help you with your children?)

19. What do you think is the general view/attitude among your friends and family regarding infant feeding?

20. What do you think is the general view/attitude regarding infant feeding among Hmong living in America today?

21. Do you think your views on infant feeding are different from older generations of Hmong in America or different from Hmong with more "traditional" or more "Americanized" views?

22. What do you think are the general attitudes about infant feeding (formula feeding and breastfeeding) among Americans? Why?

23. What do you think are the general attitudes about infant feeding (formula feeding and breastfeeding) in Asia (Laos or other name of country of ancestry)? Why?

24. What do you think is the opinion of doctors, nurses and other health care professionals in the U.S. when it comes to infant feeding (formula feeding and breastfeeding)? Did their opinion influence your decision at all?

25. What have you seen on television when it comes to infant feeding (formula feeding and breastfeeding) and did it influence your decision? What about magazines and books?

Probing questions:

i. If you read books or magazines on childrearing and/or parenting what was their viewpoint of infant feeding? Were any of these influential in your infant feeding decisions?

Appendix B

Asian American Multidimensional Acculturation Scale (AAMAS)

Ruth H. Gim Chung, Bryan S. K. Kim, and Jose M. Abreu

Chung, R. H. G., Kim, B. S. K., & Abreu, J. M. (2004). Asian American Multidimensional Acculturation Scale: Development, factor analysis, reliability and validity. *Cultural Diversity and Ethnic Minority Psychology, 10,* 66-80.

Instructions: Use the scale below to answer the following questions. Please circle the number that best represents your view on each item. Please note that reference to "Asian" hereafter refers to Asians in America and not Asia.

			Not very well			**Somewhat**		**Very well**
			1	2	3	4	5	6
1.	**How well do <u>speak</u> the language of --**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	English?	1	2	3	4	5	6
2.	**How well do you understand the language of --**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	English?	1	2	3	4	5	6
3.	**How well do you read and write in the language of --**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	English?	1	2	3	4	5	6

			Not very well			Somewhat		Very well
			1	2	3	4	5	6
4.	**How often do you listen to music or look at movies and magazines from**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
5.	**How much do you like the food of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
6.	**How often do you eat the food of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
7.	**How knowledgeable are you about the history of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
8.	**How knowledgeable are you about the culture and traditions of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6

			Not very well			Somewhat		Very well
			1	2	3	4	5	6
9.	**How much do you practice the traditions and keep the holidays of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian American cultures?	1	2	3	4	5	6
	c.	the White mainstream culture?	1	2	3	4	5	6
10.	**How much do you identify with -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
11.	**How much do you feel you have in common with people from -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
12.	**How much do you interact and associate with people from -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the White mainstream groups?	1	2	3	4	5	6
13.	**How much would you like to interact and associate with people from -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	White mainstream groups?	1	2	3	4	5	6

			Not very well			Somewhat		Very well
			1	2	3	4	5	6
14.	**How proud are you to be part of -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	the American mainstream?	1	2	3	4	5	6
***15.**	**How negative do you feel about people from -**							
	a.	your own Asian culture of origin?	1	2	3	4	5	6
	b.	other Asian groups in America?	1	2	3	4	5	6
	c.	White mainstream groups?		1	2	3	4	5 6

*This item must be reverse-coded before scoring.

AAMAS Description and Scoring Instructions

AAMAS is an orthogonal measure that assesses acculturation to three different cultural dimensions: Culture of Origin (AAMAS-CO), Asian American culture (AAMAS-AA), and European American culture (AAMAS-EA). The pan-ethnic Asian American (AAMAS-AA) acculturation dimension is unique to the AAMAS. If this dimension is not of interest to the researcher and there is a compelling need for a shorter measure, it can be left out by eliminating option "b" under each item. However, in order to maintain orthogonality, at least two cultural dimensions must be assessed at the same time.

Three Cultural Dimension Scales:

Name of Scale	What it measures
Culture of Origin (AAMAS-CO)	Acculturation to one's own Asian culture of origin
Asian Americans (AAMAS-AA)	Pan-ethnic Asian American culture
European Americans (AAMAS-EA)	Host society's European American culture

Four Acculturation Domain Subscales

Within each of the cultural dimension scales above are 4 subscales assessing specific domains of acculturation:

Name of Scale	No. of Items	
Language	4	Items 1–4
Food Consumption	2	Items 5–6
Cultural Knowledge	3	Items 7–9
Cultural Identity	6	Items 10–15

Reliability Data for Cultural Dimension Scales

Internal Consistency	Range	Test-Retest: 2 week interval
AAMAS-CO .87 to .91	.89	
AAMAS-AA .78 to .83	.75	
AAMAS-EA .76 to .81	.78	

Reliability Data for Acculturation Domain Subscales

Internal Consistency in 2 Studies

AAMAS-CO	*AAMAS-AA*		*AAMAS-EA*			
Language	84	.76	.85	.84	.82	.87
Food Consumption	.71	.65	.79	.68	.71	.68
Cultural Knowledge	.77	.89	.77	.66	.71	.67
Cultural Identity	.79	.79	.70	.72	.78	.74

Instructions for Scoring the AAMAS

1. Item #15 needs to be reverse scored:

To reverse the score:

1	should be changed to	6
2	"	5

3	"	4
4	"	3
5	"	2
6	"	1

2. Calculate the total score for each scale:

a) AAMAS-CO add together all of the responses to "a" (your own Asian ethnic group) for all 15 items

b) AAMAS-AA add together all of the responses to "b" (other Asian groups) for all 15 items

c) AAMAS-EA add together all of the responses to "c" (the White mainstream groups) for all 15 items

3. Divide the total score for each cultural dimension by 15 to obtain the scale score.

Appendix C

Institutional Review Board Certification

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Jericho, NY 11753-1098

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Exit Course

Congratulations Shannon Pfeiffer! You have completed all of the required material for your track "Principal Investigator (Not Involved In Clinical Trials)" in the course "Research Compliance: Human Subjects".

Today's session date is April 8, 2007.
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For verification, your log in ID is 6026477 and your internal HCCS control code is PFEI2412525838712.

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Principal Investigator (Not Involved In Clinical Trials)

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This certifies that

Shannon Pfeiffer

has successfully completed the requirements of
Research Compliance: Human Subjects

for the year 2007

Mitchell Diamond
CEO, HCCS

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Student / Post-Doc

Certificate of Completion

This certifies that

Shannon Pfeiffer

has successfully completed the requirements of

Research Compliance: Conflicts of Interest and Scientific Misconduct

for the year 2007

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