

Cultural Influences on Irish Attitudes Towards Infant Feeding

Lucinda Tracey
1553296
PSY3815L

Submitted in partial fulfillment of the requirements of the Bachelor of Arts degree
(Psychology Specialization) at DBS School of Arts, Dublin.

Supervisor: Dr. P. Frazer

Head of Department: Dr. S. Eccles

March 2012

Department of Psychology

DBS School of Arts

Contents

1. Acknowledgements	3
2. Abstract	4
3. Introduction	5
4. Method	16
5. Results	23
6. Discussion	28
7. References	34
8. Appendices	38

Index of Tables

Table 1. Descriptive statistics of participants who breast fed	24
Table 2. Descriptive statistics of participants who never breast fed	24
Table 3. Duration of breast feeding	24
Table 4. Correlations of predictor variables	27
Table 5. Group Statistics of Participants who either breast fed or bottle fed	27
Table 6. Descriptive Statistics of Psychological Measures	27

Index of Figures

Figure 1. Irish and International breast feeding initiation rates	7
---	---

Acknowledgments

A big thank-you to everybody who helped, supported, provided information, and gave me access to participants while conducting this research. In particular I'd like to thank my supervisor, Dr. Patricia Frazer who offered great advice and encouragement during the whole process, to Michael Nolan who helped me to source the questionnaires, to Anne Byrne who allowed me to attend one of her mother & toddler groups to gain access to participants, to Colm Hayes for permitting me entry to the Department of Agriculture, to Dundrum Town Centre and to Peter Marks hairdressers for giving me permission to ask their customers to par-take in my study. A huge big thank-you must also go to my big sis, Nicola Tracey-Hayes, not only for gaining me permission to distribute my questionnaire in the Department of Transport but for keeping me sane (enough) through out this whole research project. Lastly, not forgetting Mary-Claire Tracey who sat by my side for hours on end helping me to enter data, not just on one occasion, but all over again after I somehow lost it!! Thank you for your patience, and for your endless supply of tea and chocolate!

This research project is dedicated to Mary-Claire Tracey, without whom we would be lost.

Cultural Influences on Irish Attitudes Towards Infant Feeding

Abstract

Ireland has one of the lowest rates of breastfeeding initiation and duration in Europe and the developing world. This study aimed to explore some of the possible reasons why Ireland's initiation rates are so low. Cultural influences, including the relationship between Social Support, Self-Monitoring, Individualism and Collectivism on Irish attitudes towards infant feeding in particular was looked at. Participants (n = 100) were mothers recruited using a sample of opportunity in Dublin. Each completed a self-administered questionnaire containing the Iowa Infant Feeding Attitude scale, the Revised Self-Monitoring Scale, the Auckland Individualism and Collectivism Scale, the Social Support Questionnaire 6 and a demographic questionnaire. Participants who had breastfed their infants were found to have higher total attitude scores, higher collectivism scores, higher social support numbers, and higher social support satisfaction than participants who had bottle fed their infants.

Introduction

Good nutrition in infancy is a vital part of achieving optimal growth, development and health and can also be involved in laying the foundation for good health in later life (Department of Health and Children, 2005). In 2003 the world health organization (WHO) revised the best practice recommendation for infant feeding and promoted the extension of exclusive breast feeding duration from 4 to 6 months, to 6 months for all infants (WHO, 2003). Irelands initiation (defined as the infant suckling from the breast at least on one occasion) of breast feeding rate is currently only 56% (Economic Research and Social Institute, 2012). This is far below the initiation rate of breast feeding in other developed countries (see Figure: 1) when compared with 81% in the UK and 98% in Nordic states such as Denmark, Norway and Sweden (ERSI, 2012). The purpose of this study is to explore some of the possible reasons why Irelands initiation rates are so low. Cultural influences on Irish attitudes towards infant feeding including the relationship between Social Support, Self-Monitoring, Individualism and Collectivism on Irish attitudes towards infant feeding in particular will be looked at.

The Benefits of Breast feeding

The benefits of breast feeding are well documented (Kramer & Kakuma, 2002). It is the biologically natural method of infant feeding. Breast feeding exclusively provides complete nutrition for around the first 6 months of life for the vast majority of infants. Fats in human milk are of critical importance during infancy, and are a major energy source present in breast milk, helping to support the rapid growth and development that is occurring at this time (Rautava & Walker, 2009). The

nutritional profile of breast milk changes with the stage of lactation, presumably to meet the changing nutritional requirements of the individual infant during this time period (Rautava & Walker, 2009), and so can provide complete nutrition for the first 6 months of life for most infants (WHO/UNICEF, 2003). After six months of age complementary foods are needed along with breast milk to meet the growing infants nutritional needs. Breast feeding continues to provide significant nutritional and health benefits up to 2 years of age or older and it is recommended by many health organizations including the WHO and the Health Service Executive (HSE) to continue breast feeding up to two years of age and beyond. Anthropologist Katherine Dettwyler estimates that if culture did not tell us to do otherwise, weaning would occur between 2.5 and 7 years of age (Dettwyler, 1995).

Breast feeding has many health protective and health enhancing advantages for both the mother and the baby. These advantages include; reduced hospitalization from infections during the first year of life (Talayero, Lizán-García, Otero Puime, Benlloch Muncharaz, Beseler Soto, Sánchez-Palomares et al, 2006), it is associated with reduction in Sudden Infant Death Syndrome (SIDS) (Stuebe, 2009), it has a positive effect on post-partum weight (Kac, Benício, Velázquez-Meléendez, Valente, Struchiner, 2004; Hatsu, McDougald, Anderson, 2008) and may reduce the risk of obesity and being overweight later in life (Horta, Victora, Lima, Gonçalves, Guimarães, Barros, 2006; Owen, Whincup, Kaye, Martin, Smith, Cook, et al, 2008) to name but a few. The nutritional, immunological and psychological benefits of breast feeding continue throughout the duration of breast feeding. Breast feeding is an inexpensive form of nutrition, is available on demand, is always at the right temperature and no preparation is required. The positive influence of a varied maternal diet has also been highlighted by research, which suggests that the variation

in the taste and odor of breast milk exposes the infant to a greater variety of gustatory stimuli, which encourages the selection of a wider variety of foods later in life (Arenz, Ruckerl, Koletzko, Von Kries, 2004). Formula fed infants not only lose many of these health protective properties of breast milk but also carry the additional risk of bacterial contamination due to the manner in which the formula is reconstituted (Food Safety Authority of Ireland, 2011).

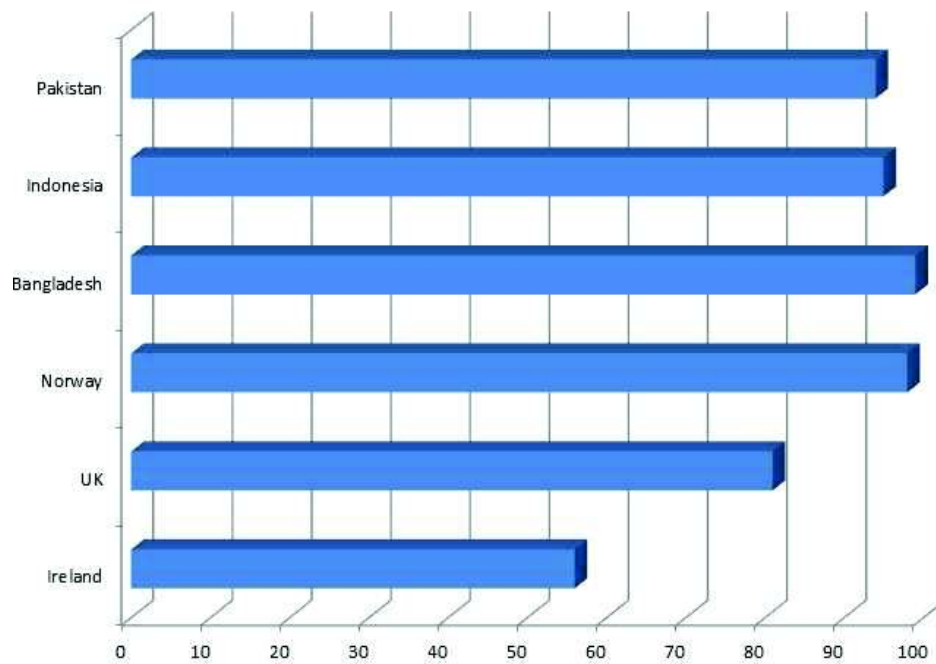


Figure:1 Irish and international breastfeeding initiation rates as a percentage of total breastfeeding.

Breast feeding in Ireland

Despite recommendations from different world and Irish health organizations, who support exclusive breast feeding of infants for the first six months of their lives, currently only 56% of mothers in Ireland are breast feeding at discharge from maternity care (ERSI, 2012). This is an increase by 8% on the figure published from the ‘Growing up in Ireland – National Longitudinal Study of Children’, which reported that 48% of Irish women had breast fed their infant (Williams, Greene, Doyle, Harris, Layte, McCoy et al, 2010). In the study by the ERSI in 2012 it was revealed that women not born in Ireland but who were resident here for less than 5 years, are 10 times more likely to breast feed than Irish women. This may suggest that the figure of 56% of mother’s breast feeding at discharge from maternity care may be inflated due to the inclusion of non-national women within the sample. A report commissioned by the HSE highlighted that although 55% of women put their baby to the breast initially after birth, breast feeding rates significantly dropped upon discharge and continued to do so over the course of the next 6 months, with results showing that just over 2% of the original group of mothers continuing exclusively to breast feed, and a further 9% partially breast feeding at 6 months (Begley, Gallagher, Clarke, Carroll, Millar, 2008). Recent research within Ireland (Begley et al, 2008, Tarrant, Younger, Sheridan-Pereira, White, Kearney, 2010) has highlighted that a formula feeding culture prevails, and in terms of infant feeding formula usage, Ireland remains ahead of international counterparts.

The WHO recognises that ‘the rates of exclusive breast feeding decline substantially after 4 months. It is important to identify biological and social constraints to exclusive breast feeding to 6 months in different geographical and cultural settings, and develop appropriate and effective interventions to deal with these barriers and their consequences’ (WHO/UNICEF, 2003). ‘Growing up in Ireland – National Longitudinal Study of Infants’ reported that the average age of breast feeding cessation in Ireland was 12 weeks of age (Williams, Greene, Doyle, Harris, McDaid, McNally, et al, 2010). Recent studies suggest that between 45% (Begley et al, 2008) and 53% (Tarrant et al, 2010a) of mothers do not initiate breast feeding at all and offer formula milks to their infants straight from birth. Research within Ireland has highlighted that Ireland has developed a formula feeding culture, with 45% of mothers using formula milks 48hrs after birth (Begley et al, 2008) compared to just 10% of Canadian mothers (Chalmers, Heaman, O’Brien, Sauve, Kaczorowski, 2009), and only 6% of Austrian mothers (Cattaneo, Koletzko, Guzman, 2005). Interestingly an Irish study revealed that of the Irish women who had ceased to breast feed by 3 to 4 months; 81% would have liked to have breast fed for longer (Begley et al, 2008).

Previous Research

A significant amount of studies into breast feeding in Ireland and other developed countries have focused on socioeconomic groups, age, education and employment and whether or not mothers were breast fed themselves. Results of these studies revealed that women who do breast feed are likely to be from a higher socio-economic background (Dyson, Renfrew, McFadden, McCormick, Herbert, Thomas,

2005, Gudnadottir, Gunnarsson, & Thorsdottir, 2006), be older and well educated and have been breast fed themselves (Fitzpatrick, Fitzpatrick, & Darling, 1994, Ward, Sheridan, Howell, Hegarty, & O'Farrell, 2004). Factors such as culture, knowledge and attitudes towards infant feeding methods have had very little research. The Iowa Infant Feeding Attitude Scale (De la Mora, Russell, Dungy, Losch, & Dusdieker, 1999) was developed to measure attitudes towards infant feeding. It has been used in previous research including the USA (De la Mora, 1998, De la Mora et al, 1999) and in Scotland (Scott, Shaker, & Reid, 2004). An Internet search of the ebsco database looking for studies done on cultural influences on attitudes towards infant feeding in Ireland revealed a study called, Culture and Caregivers: Factors Influencing Breast feeding among mothers in West Belfast, Northern Ireland (Bishop, Cousins, Casson & Moore, 2008). This study only used the IIFAS, a demographic questionnaire and some open ended questions seeking information about the reasons and the people that influenced choices of infant feeding methods. A further search of the ebsco database on cultural influences on attitudes towards infant feeding in Ireland and specifically looking at Social Support, Self-Monitoring, Individualism and Collectivism revealed no relevant hits.

Culture

Culture refers to the enduring values, beliefs, behaviors, and traditions that are shared by a large group of people and passed from one generation to the next. All cultural groups develop their own social norms, which are rules (often unwritten) that specify what behavior is acceptable and expected for members of that group (Passer, Smith, Holt, Bremner, Sutherland, & Vliek, 2009). Traditionally women have relied upon the knowledge and experience of other women to learn about breast feeding,

however this once standard interaction between women, most commonly, mothers or sisters, has become less common in Irish society. Since infant feeding formulas were introduced and advertised in the 1950's and 1960's, Ireland's breast feeding rates have declined and Ireland has developed a formula feeding culture (Begley et al, 2008).

Attitudes to Infant Feeding

Given the low rates of breast feeding initiation in Ireland, the lack of published research investigating the low initiation rate of breast feeding in this culture, and that breast feeding attitudes and techniques vary between cultures, it is important to consider Irish women's attitudes towards infant feeding and to determine the degree to which such attitudes impact on their choice of infant feeding methods. The Iowa Infant Feeding Attitude scale (De la Mora et al, 1999) was developed as a measure of attitudes towards infant feeding (e.g., breast feeding, formula feeding). Previous research has indicated that maternal attitudes are important predictors of both choice of feeding method (i.e., breast feeding v's formula feeding) and, among breast feeding women, the duration of breast feeding (Dungy, Losch, & Russell, 1994).

Social Support

While breast feeding is the biologically natural method of infant feeding, it is a skill that needs to be learned. Skills like how to attach the infant to the breast, how to know that the infant is receiving the right amount of milk and how to make milk available to the infant when the mother and baby are apart all need to be learned. Breast feeding is a social behavior, as breast feeding is learned (or failed to be learned) from those around us. Good, 1999 wrote, ‘When women become mothers in societies in which breast feeding is the norm, they have societal support and approval, as well as ample models and reliable advisors in their own families. However, the mothers and aunts of women bearing children today may have no experience with breast feeding’. The breast feeding rates in Ireland dropped from 64% in the 1950’s to just 16% by 1975 (Kevany, Humphries, & Corboy, 1975). This may suggest that breast feeding knowledge, and therefore the ability to give or offer breast feeding support has been lost in individual families and entire societies in Ireland leading to an anxiety around breast feeding, particularly among first time mothers and a culture of increased formula feeding. Social support is a crucial factor for breast feeding success (Gill, 2001) and the presence of a supportive and knowledgeable breast feeding role model can actively affect the initiation and duration of breast feeding (Stolzer, 2010). Recent research has shown that a perceived lack of milk and a perceived lack of ability to breast feed was a barrier to breast feeding (Tarrant et al 2010a; Begley et al, 2008), this lack of confidence and knowledge of breast feeding may have improved with an increased amount of social support.

Self-Monitoring

Self-monitoring and the ability to individually self-monitor, influences perception of individual performance expectations and confidence (Kim, 1999). Some people are sensitive to how they think other people view them while others are not. According to self-monitoring theory, individuals differ in the extent to which they are willing and able to monitor and control their self-expressions in social situations. Research on self-monitoring has provided important insights into individual differences in how individuals present themselves in social contexts (Gangestad & Snyder, 2000). In a social situation high self-monitors ask, “who does this situation want me to be and how can I be that person?” (Snyder, 1979), while a low self-monitor may ask “Who am I and how can I be me in this situation?” (Snyder, 1979). Low self-monitors are consistent in demonstrating behavior that expresses inner feelings attitudes and beliefs while high self-monitors are consistent in adjusting their behaviours to the demands of different situations. High self monitors are conformist in social situations in which conformity is the most appropriate interpersonal orientation and since high self monitors rely on social cues from others to guide their behaviors rather than on their own inner attitudes and emotions, high self monitors may be more likely than low self monitors to follow the current trend of formula feeding their infants.

Individualism and Collectivism

Ireland with a score of 70 on the Hofstede scale (A scale which measures the degree to which individuals are integrated into groups) has an individualistic culture. In individualistic societies people generally give preference to emphasizing the individual self, personal achievements and unique identities. In collectivist societies individuals are viewed as being part of a larger group, there is less of an individual identity and the group provides the sense of identity and values for the individual. Bangladesh has a score of 20 on the Hofstede scale indicating it has a collectivist culture, where people act in the interest of the group. Indonesia and Pakistan also have a low score of just 14. Of interest, is that the countries that have a high collectivist culture also have high breast feeding rates. For example the breast feeding rate in Bangladesh is 99%, Indonesia 95% and Pakistan 94% (WHO, Global Data Bank on infant and Young Child Feeding, 2009). Culture affects coping styles - the way in which people deal with the challenges in their lives. For example, people with individualistic worldviews are less likely to reach out to others for help than are people with collectivistic worldviews (Good, 1996). A consequence of being part of a culture, which emphasizes individualism, is that without good social support, seclusion, lack of stable relationships, and stress is more common (Popenoe, 1993) which may be a factor leading to Irish women giving up on breast feeding earlier than recommended.

Considering the low rates of breast feeding in Ireland and the lack of published research on cultural influence towards attitudes of infant feeding, the purpose of this study is to look at the influence of culture on attitudes towards infant feeding in Ireland and to enhance the knowledge of cultural influences on attitudes

towards infant feeding which may assist health organizations to develop programs to increase the rates of breast feeding in Ireland. This study will specifically look at the influence of social support, self-monitoring, individualism and collectivism on attitudes towards infant feeding.

Study Hypothesis

Hypothesis 1: It is hypothesized that levels of self-monitoring, social support, individualism and collectivism will significantly predict attitudes towards infant feeding.

Hypothesis 2: It is predicted that participants who have breast fed their infants will have significantly higher positive attitudes toward breast feeding.

Hypothesis 3: It is predicted that participants who have breast fed their infants will score higher on the collectivist scale.

Hypothesis 4: It is predicted that participants who have breast fed their infants will have significantly higher levels of social support.

Method

Participants

147 mothers were approached in Dublin using a sample of opportunity and asked to fill out a self-administered questionnaire. The participants were approached at a mother-toddler group, in a restaurant at a large shopping center, in a Dublin based Peter Marks hair dressers, at the offices of the Department of Agriculture and at the offices of the Department of Transport. Participants were informed about the purpose of the study and the identity of the researcher. Questionnaires were anonymous and participants were informed that participation was entirely voluntary. No rewards or incentives were offered for the completion of the questionnaires. A total of 100 mothers completed and returned questionnaires. The participants ranged in age from 25 to 62 years. The mean age was 38.5 years and the standard of deviation was 13.20.

Design

The study was a correlational design. There were five predictor variables in this study. The predictor variables were, Self Monitoring, Concern for appropriateness, Collectivism, Individualism and Social Support. The criterion variable for this study was attitudes towards infant feeding.

Materials

A 12 page self administered, paper and pencil questionnaire, containing 94 questions was distributed to the participants (see appendix A). The questionnaire contained a cover sheet informing participants about the purpose of the study, and the identity of the researcher. It informed the participant that their expected time commitment to the study was 12-15 minutes. All questionnaires were anonymous and participants were informed that participation was entirely voluntary.

The Questionnaire

The 94 questions on the questionnaire were broken down into six different sections. The questionnaires used for each section were: The Iowa Infant Feeding Attitude Scale (De la Mora & Russell, 1999). the Revised Self-Monitoring Scale (Lennox & Wolfe, 1984), the Auckland Individualism and Collectivism Scale (Shulruf, Alesi, Ciochina, Faria, Hattie, Hong et al, 2011), the Social Support Questionnaire 6 (SSQ6)(Sarason, Sarason, Shearin & Pierce, 1987) and a demographic questionnaire compiled by the researcher.

The Iowa Infant Feeding Attitudes Scale

The first section, which consisted of 17 questions, was to measure the mothers' attitudes to infant feeding (See Appendix B). This was measured using the Iowa Infant Feeding Attitude Scale (IIFAS)(De la Mora et al, 1999). The scale was designed to cover various dimensions of infant feeding. For example, questions were written concerning the costs of infant feeding (e.g., "Formula feeding is more

expensive than breast feeding"), nutrition (e.g., "Breast milk is the ideal food for babies"), convenience (e.g., "Breast feeding interferes with a couple's sexual relationship"), and infant bonding (e.g., "Breast feeding increases mother-infant bonding"). The 17 questions have items worded so that approximately half of the questions are favorable toward breast feeding and the remaining questions favorable toward formula-feeding. The IIFAS appears to be very reliable (Chronbach's $\alpha = .86$). It has also previously been shown to be a valid and reliable measure of infant feeding attitudes and behavior among women in the USA (De la Mora, Russell, Dungy, Losch & Dusdieker, 1999) and Scotland (Scott, Shaker, & Reid, 2004). Responses were on a five point Likert scale ranging from; strongly disagree (1) to strongly agree (5). Instructions from the author of the IIFAS were followed to reverse score certain questions and a total attitude score was then computed. The total scores could range from 17, reflecting positive formula feeding attitudes, to a high of 85, indicating attitudes that favour breast feeding.

The Revised Self-Monitoring Scale

The revised self-monitoring scale (Lennox & Wolfe, 1984) was used to assess self-monitoring, (See Appendix E), which is defined as the extent to which people regulate their self-presentation by tailoring their actions in accordance with immediate situational cues. It is a revision of Snyders (1974) original self-monitoring scale. Thirteen questions were asked using a five point rating (1 = strongly disagree to 5 = strongly agree). For example, Q.13. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly. The respondent answered using the five point scale. Questions nine and twelve were reversed scored before totaling. High

scores (65 being the highest) indicated high self-monitoring. The revised self-monitoring scale has a high reliability (Cronbach's $\alpha = 0.75$).

Concern for Appropriateness Scale

The concern for appropriateness scale (Lennox & Wolfe, 1984), a measure of the tendency to adopt protective self-presentation styles was also used (See Appendix F). It consisted of twenty questions. For example: Q. 20. When in a social situation, I tend not to follow the crowd, but instead behave in a manner that suits my particular mood at the time. Responses were on a five point Likert scale ranging from strongly disagree (1) to strongly agree (5). Question twenty was reverse coded before totaling. High scores (100 being the highest) indicated high concern for appropriateness. The concern for appropriateness scale yields high internal reliability and validity (Cronbach's $\alpha 0.86$)

Auckland Individualism and Collectivism Scale

The Auckland Individualism and Collectivism Scale (AICS) questionnaire, which consisted of 26 questions (See Appendix C), was used to find out how the participants think and behave in regard to themselves and to groups to which they belong. For example: Q.16. I prefer using indirect language rather than upsetting my friends by telling them directly what they may not like to hear. Responses were on a six point Likert scale ranging from 'Never or almost never' (1) to 'Always' (6). Collectivism and Individualism scores were computed by calculating the mean scores for the specified collectivism and Individualism questions. The final version of the

AICS (Shulruf et al, 2011) repeatedly yields high reliability (Chronbach's α between .70 to .82).

Social Support Questionnaire 6 (SSQ6)

The SSQ6 is a six-item questionnaire designed to measure the perceptions of social support and satisfaction with that social support. Each item is a question that solicits a two part answer: Part 1 asks participants to list all the people that fit the description of the question, they are asked to give the persons initials and their relationship to the participant, for example: Q.5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps. Part 2 asks participants to indicate how satisfied they are, in general, with these people. Responses to part 2 were on a six point Likert scale ranging from 'very satisfied (6) to 'very dissatisfied' (1). If the answer to Part 1 was 'no one' they were still asked to rate their satisfaction in Part 2. They were also asked not to list more than nine persons per question. Both the test retest reliability and the internal reliability (Chronbach's α 0.90 to 0.93) of the SSQ6 were highly satisfactory.

Scores were computed by adding the total number of people for all 6 items (max. of 54) and dividing by 6 for per item score. This gave an SSQ Number Score, or SSQN. Total SSQ satisfaction score or SSQS was obtained by totaling satisfaction scores for all 6 items (max. of 36) and dividing by 6 for per score item.

Demographic Questionnaire

The final section of the questionnaire consisted of 11 questions relating to demographic factors including age, nationality, length of time living in Ireland, marital status, household income, education level, employment status, occupation and how many children the participant had. There was a question also asking if the participant had ever breast fed, and if so for how long?. The last two questions in this section of the questionnaire were open ended and asked the participant what their reasons were for stopping breast feeding and what had influenced their choice to breast feed or bottle feed.

Procedure

Participants were approached in Dublin using a sample of opportunity from a mother and toddler group, a restaurant at a large shopping center, a local Peter Marks hairdressers, at the offices of the Department of Agriculture and at the offices of the Department of Transport. Participants were informed that they were being invited to take part in a research study to investigate cultural influence on Irish mothers attitudes towards infant feeding. They were told the identity of the researcher and were offered a 12-page self-administered paper and pencil questionnaire containing 94 questions to fill out. They were informed that all questionnaires would remain anonymous and that participation was entirely voluntary. They were told that their expected time commitment for the study was 12-15 minutes. All participants completed the questionnaire within this time frame. Participants gave their consent by ticking a box stating that they voluntarily agreed to take part in this study. Information on relevant support groups was given in case of the possibility of any upset caused while filling

out the questionnaire. No rewards or incentives were offered for the completion of the questionnaires. Participants were also informed that completed questionnaires would be kept in a locked file cabinet in the possession of the researcher and shredded when no longer necessary for the purpose of the research. The completed questionnaires were returned to the researcher either then and there, or through email. Data was analyzed using the statistical package for social sciences (SPSS) version 18.

Results

Descriptive Statistics

The age range of respondents was between 25 and 62 years with a mean age of 38.54 years and a Standard of Deviation of 13.20. Nearly all of the women were married (81%). The total participants who had breast fed their babies was n=68. The total number of participants who had never breast fed their babies was n=27. Five respondents failed to specify if they had either breast fed or bottle fed their infants. The sample was generally well educated with 74% of respondents having completed a diploma, a degree or a masters course. Participants who had breast fed had slightly higher education levels (Mean=3.97, SD= .690) than non breast feeders (Mean= 3.84, SD= .674), see Table: 1 and Table: 2. Participants who had breast fed also reported having more children (Mean= 2.16, SD= .824) than non breast feeders (Mean= 1.88, SD=. 800).

Participants who had breast fed their infants were also asked the question, how long did you breast fed for? Of the 67% of respondents who had breast fed only 17% had carried on breast feeding after the baby had reached 6months. 17% had breastfed between 3-6months, 16% had breast fed between 4-12 weeks, 12% had breast fed for 1-4weeks and 5% had breast fed for less than 1 week (See Table: 3).

Table: 1 *Descriptive statistics of participants who breast fed*

	N	Range	Min.	Max	Mean	SD	Variance
Age	68	36.00	26.00	62.00	39.08	8.57	72.53
Highest level of education	68	3.00	3.00	6.00	3.97	.690	.477
Household income	63	5.00	1.00	6.00	5.22	1.26	1.59
How many children	68	5.00	1.00	6.00	2.16	.907	.824
Valid (listwise)	N 63						

Level of Education: Secondary School (3), Diploma/Degree (4), Masters (5), Doctorate (6)
Household Income: Less than €18k (1), €18k-€24,999 (2), €25k-€34,999 (3), €35k-€44,999 (4), €45k-€59,999 (5), €60k + (6)

Table: 2 *Descriptive statistics of participants who never breast fed*

	N	Range	Min.	Max	Mean	SD	Variance
Age	27	25	27.00	52.00	38.55	7.01	49.10
Highest level of education	26	3.00	2.00	5.00	3.84	.674	.455
Household income	26	5.00	1.00	6.00	5.15	1.46	2.15
How many children	27	3.00	1.00	4.00	1.88	.800	.641
Valid (listwise)	N 25						

Level of Education: Secondary School (3), Diploma/Degree (4), Masters (5), Doctorate (6)
Household Income: Less than €18k (1), €18k-€24,999 (2), €25k-€34,999 (3), €35k-€44,999 (4), €45k-€59,999 (5), €60k + (6)

Table: 3 *Duration of breast feeding*

		Frequency	Percentage
Valid	Less than 1 week	5	5
	1 – 4 weeks	12	12
	4 – 12 weeks	16	16
	3 – 6 months	17	17
	6 months +	17	17
	TOTAL	67	67
Missing	Missing	9	9
	System	24	24
	Total	33	33
Total		100	100

Inferential Statistics

A standard multiple regression was carried out in order to investigate if there was a relationship between the variables for predicting attitudes towards infant feeding. The predictor variables used were, Social Support, Self-Monitoring, Concern for Appropriateness, Collectivism, Individualism, and Social Support. Assumptions were checked, the criterion variable was normally distributed and the variables were linear in relation to the criterion variable. There was no singularity present and there were no high correlations between predictors suggesting that multicollinearity was not present.

This model did not significantly predict attitudes to breastfeeding ($R^2 = .008$, $F(6,81) = .881$, $p > .001$). The correlation between total attitudes towards breastfeeding and the social support questionnaire number was the closest to significance $Sig = .081$ (see table 4). The internal consistency of attitudes towards infant feeding was reviewed and it appeared to be low (Cronbachs $\alpha = .228$).

Participants who had breast fed their infants (Mean=50.88, SD=4.92) were found to have higher total attitude scores than participants who had bottle-fed their infants (Mean=47.59, SD=6.18). The 95% confidence limits shows that the population mean difference of the variables lies somewhere between .893 and 5.68. An Independent samples t-test found that there was a statistically significant difference between attitudes of infant feeding in participants who had breast fed or bottle fed ($t(93) = 2.72$, $p = .008$). Therefore the null can be rejected. (See Table: 5)

Breast feeders (Mean =4.51, SD =1.41) were found to have a higher Social Support Questionnaire Number (SSQN) than bottle feeders (Mean =3.86, SD= 1.35).

The 95% confidence limits shows that the population mean difference of the variables lies somewhere between .002 and 1.29. An independent samples t-test found that there was a statistically significant difference between the SSQN of breast feeders and bottle feeders ($t(88) = 1.996, p = .049$) Therefore the null can be rejected. (See Table: 5)

Breast feeders (Mean= 5.51, SD= .64) were found to have higher Social Support Questionnaire Support (SSQS) than bottle feeders (Mean= 5.17, SD= .83) The 95% confidence limits shows that the population mean difference of the variables lies somewhere between .008 and .653. An independent samples t-test found that there was a statistically significant difference between SSQS levels of breast feeders and bottle feeders ($t(88) = 2.037, p = .045$) Therefore the null can be rejected. (See Table: 5)

An Independent t-test found that there was no statistically significant difference between the self-monitoring of participants who breastfed and those who bottle fed their infants ($t(91) = 0.205, p = 0.83$) Therefore the null has been accepted. (See Table: 5)

Although participants who bottle fed their infants (Mean= 60.60, SD= 13.3) were found to have higher scores on the concern for appropriateness scale than participants who had breast fed (Mean= 57.55, SD= 9.12), there was no statistically significant difference ($t(36) = -1.08, p = .284$) Therefore the null has been accepted. (See Table: 5)

Breast feeders (Mean = 3.61, SD= .589) were found to score higher on the collectivism scale than bottle feeders (Mean = 3.49, SD = .67). However, an Independent samples t-test found that there was no significant difference between collectivism scores and participants who either breast fed or bottle fed their infants ($t(93) = .889, p = .376$). Therefore, the null can be accepted. (See Table: 5).

Table 4: *Correlations of predictor variables*

	Variable	Total Attitudes	Self-Monitoring	Concern for Appropriateness	Collectivism	Individualism	SSQN	SSQS
Sig. (1-tailed)	Total Attitudes							
	Self-Monitoring	.396						
	Concern for Appropriateness	.125	.000					
	Collectivism	.171	.263	.072				
	Individualism	.320	.144	.159	.057			
	SSQN	.081	.058	.082	.175	.101		
	SSQS	.119	.198	.096	.197	.004	.005	

Table 5: *Group Statistics of Participants who either breast fed or bottle fed*

	Participants who breast fed		Participants who bottle fed	
Total Attitudes	Mean: 50.88	SD: 4.92	Mean: 47.59	SD: 6.18
	($t(93) = 2.72, p = .008$)			
Total Self-Monitoring	Mean: 47.74	SD: 5.86	Mean: 47.44	SD: 7.43
	($t(91) = 0.205, p = 0.83$)			
Concern for Appropriateness	Mean: 57.54	SD: 9.12	Mean: 60.60	SD: 13.3
	($t(36) = -1.08, p = .284$)			
Collectivism	Mean: 3.61	SD: .589	Mean: 3.49	SD: .67
	($t(93) = .889, p = .376$)			
Individualism	Mean: 3.75	SD: .58	Mean: 3.6	SD: .67
	($t(89) = 1, p = .320$)			
SSQN	Mean: 4.51	SD: 4.51	Mean: 3.86	SD: 1.35
	($t(88) = 1.99, p = .049$)			
SSQS	Mean: 5.51	SD: 6.39	Mean: 5.17	SD: .828
	($t(88) = 2.037, p = .045$)			

Note: p significant at .05 level.

Table 6: *Descriptive Statistics of Psychological Measures*

Variable	Mean	Standard Deviation
Total Attitudes		50.37
Total Self Monitoring		47.85
Concern for Appropriateness		58.42
Collectivism		3.55
Individualism		3.72
SSQN		4.35
SSQS		5.40
		5.59
		6.34
		10.78
		.614
		.637
		1.32
		.722

Discussion

Considering Ireland's initiation of breast feeding rate, which is currently very low, at only 56% (ERSI, 2012) and the lack of published research on how culture influences attitudes towards infant feeding, the aim of this study was to look at the influence of culture on attitudes towards infant feeding in Ireland, to enhance the knowledge of cultural influences on attitudes towards infant feeding, and to produce results which may assist health organizations to develop programs to increase the rates of breast feeding in Ireland. This study specifically looked at the influence of social support, self-monitoring, Individualism and collectivism on attitudes towards infant feeding.

It was hypothesized that levels of self-monitoring, social support, individualism and collectivism would significantly predict attitudes towards infant feeding.

It was predicted that participants who have breast fed their infants would have significantly higher positive attitudes toward breast feeding.

It was predicted that participants who have breast fed their infants would score higher on the collectivist scale.

It was predicted that participants who have breast fed their infants would have significantly higher levels of social support.

The IIFAS indicated higher scores for mothers who had breast fed than those who had bottle fed. The mean IIFAS score for breast feeding mothers was 50.88, and 47.59 for bottle feeders, indicating that breast feeding mothers had a more positive attitude towards breast feeding than bottle feeding mothers. An Independent samples t-test found that there was a statistically significant difference between attitudes of infant feeding in participants who had breast fed than those who had bottle fed ($t(93)=2.72, p=.008$). Therefore the null hypotheses can be rejected. This finding corresponds with results of other studies (De la Mora, Russell et al, 1999).

Mothers also reported factors that influenced them most in their choice of infant feeding method, what they considered to be best for the baby and the most natural were reported as the factors that influenced breast feeders most, while bottle feeders reported convenience, and having experienced bottle feeding with a previous child as having the most influence on them. Mothers who had stated that they had breast fed their infants were also asked what their reasons were for stopping breast feeding. Mothers reported that lack of milk; babies' hunger and the introduction of solid foods were their main reasons. However, the predictor variables, Self-Monitoring, Collectivism, Individualism and Social Support did not significantly predict attitudes towards infant feeding. On review, the internal consistency of the attitudes towards infant feeding scale of the multiple regression model was found to be low (Chronbachs $\alpha = .228$). If question number 2 on the IIFAS "Formula feeding is more convenient than breastfeeding" had of been removed from the questionnaire, the internal consistency would have improved (Chronbachs $\alpha .440$). This suggests that perhaps the IIFAS is not a good measure for Irish conceptions of breast feeding.

Considering that participants who breast fed had a higher positive attitude to breast feeding than bottle feeders it was interesting to note that only 17% of the 68 breast feeders had continued to breastfeed their infants after six months of age. 'Growing up in Ireland – National Longitudinal Study of Infants', reported that the average age of breast feeding cessation was at 12 weeks of age (Williams et al 2010), highlighting that the vast amount of mothers in Ireland are currently not breast feeding for the recommended length of time. This corresponds with this study, which found that 33% of participants had given up breast feeding at 12 weeks.

Breast feeders (Mean =4.51, SD =1.41) were found to have a higher Social Support Questionnaire Number (SSQN) than bottle feeders (Mean =3.86, SD= 1.35). This finding suggests that social support is a crucial factor for breast feeding success (Gill, 2001). The presence of a supportive breast feeding role model can actively affect the initiation and duration of breast feeding (Stolzer, 2010). Similarly breast feeders with a mean of 5.51, had higher social support satisfaction than bottle feeders with a mean of 5.17. As previous research has suggested this presence of a supportive breast feeding role model can actively affect the initiation and duration of breast feeding (Stolzer, 2010). The hypothesis that participants who breast-fed their infants would have significantly higher levels of social support was accepted. One participant who had completed the questionnaire reported that she had been breast fed her self for nearly three and a half years and was very upset when she had to cease breast feeding her own child at three months. She reported that she had no support group or any friends who were breast feeding at the time. This corresponds to Irish research, which revealed that of the Irish women who had ceased to breast feed by 3 to 4 months, 81% would have liked to have breast fed for longer (Begley et al, 2008).

Breast feeders (Mean = 3.61, SD= .589) were found to score higher on the collectivism scale than bottle feeders (Mean = 3.49, SD = .67) This is interesting as countries that are indicated as having a collectivist culture, for example Indonesia and Pakistan, also have higher breast feeding rates (95% and 94% respectively). However an Independent samples t-test found that there was no significant difference between collectivism scores and participants who either breast fed or bottle fed their infants ($t(93) = .889, p = .376$). Therefore the null hypothesis was accepted. This result may be due to the small sample size of respondents in the study.

Participants who breast fed their infants were found to have higher education levels (Mean=3.97, SD= .690) than non breast feeders (Mean= 3.84, SD= .674). They were also found to have a higher household income (Mean= 5.22, SD= 1.26) than participants who had not breast fed (Mean= 5.15, SD= 1.46). These results correspond with other studies which have revealed that women who choose to breast feed are more likely to be from a higher socio-economic background (Dyson et al 2005, Gudnadottir et al, 2006), and be well educated (Fitzpatrick et al, 1994).

No relationship between the predictor variables, Self-Monitoring, Collectivism, Individualism and Social Support and attitudes towards infant feeding was found. On review, the internal consistency of the attitudes towards infant feeding scale in the results section of the multiple regression model was found to be low (Chronbachs $\alpha = .228$). This suggests that perhaps the IIFAS is not a good measure for Irish conceptions of breast feeding.

Possible limitations of the study were the sample size. The recommended number of participants for a multi regression model is between 15 – 40 people per variable. A total of six different variables were used for this model which meant a minimum number of 90 participants were needed. Considering this study is relatively small (n= 100), this suggests that the sample size was not adequate. The study also included some mothers who had their children many years ago, therefore many of their answers may not have been relevant to the time when they were actually breast feeding or bottle feeding their infants. Participants may not remember exactly how they felt or what they did and may have been motivated to present a socially desirable account to the researcher (Miller, Cardinal, & Glick, 1997). The questionnaire was also considered to be quite long, with 94 questions some participants may have simply found it tedious or tiresome, perhaps ticking boxes without giving too much thought to their answers. The questionnaire was also only handed out to women. It did not take into account how the attitudes towards infant feeding of members of the women's social network (e.g., baby's father) may have impacted maternal attitudes and the choice of which feeding method to use.

A lot more research needs to be done in assessing the cultural dimensions of breast feeding. Future research on cultural influences towards attitudes to infant feeding could look at the validity and reliability of the IIFAS on predicting infant feeding attitudes of an Irish population. Knowledge of culture and how this influences the decision to breast feed also needs to be studied more. This would help the health organizations in different countries to provide information and support to mothers that correspond to their cultural backgrounds. Understanding factors that influence maternal attitudes may provide valuable information to help increase the rate and duration of breast feeding in Ireland. Good, (1999), stated “when women become

mothers in societies in which breast feeding is the norm, they have societal support and approval, as well as ample models and reliable advisors in their own families. However, the mothers and aunts of women bearing children today may have no experience with breast feeding”. This study showed that women who had breast fed their infants had higher social support numbers and higher social support satisfaction than bottle-feeders. If Ireland could increase knowledge, support and improve attitudes towards breast feeding this may result in changing the formula feeding culture that prevails in Ireland today to a culture where breast feeding is considered the cultural norm.

References

- Arenz, S., R ckerl, R., Koletzko, B., von Kries, R. (2004). Breast-feeding and childhood obesity-a systematic review. *International Journal of Obesity Related Metabolic Disorders*, 28(10), 1247-56.
- Begley C, Gallagher L, Clarke M, Carroll M, Millar S. (2009). *The national infant-feeding survey*. Health Service Executive: Dublin.
- Bishop, H., Cousins, W., Casson, K., & Morre, A. (2008). Culture and Caregivers: Factors influencing breastfeeding among Mothers in West Belfast, Northern Ireland. *Journal of Child Care in Practice*, 14(2), 165-179.
- Cattaneo, A., Yngve, A., Koletzko, B., Guzman, L.R. (2005). Promotion of Breastfeeding in Europe project: Protection, promotion and support of breast-feeding in Europe. *Public Health Nutrition*, 8(1), 39-46.
- Chalmers, B., Levitt, C., Heaman, M., O'Brien, B., Sauve, R., Kaczorowski, J. (2009). Maternity Experiences Study Group of the Canadian Perinatal Surveillance System, Public Health Agency of Canada, Breastfeeding rates and hospital breastfeeding practices in Canada: a national survey of women. *Birth*, 36(2), 122-32.
- De la Mora, A. (1998). *Maternal attitudes, intentions, and duration of breast-feeding* (Unpublished master's thesis). Iowa State University, Ames, Iowa.
- De La Mora, A., Russell, D. W., Dungy, C. I., Losch, M., & Dusdieker, L. (1999). The Iowa Infant Feeding Attitude Scale: Analysis of Reliability and Validity. *Journal Of Applied Social Psychology*, 29(11), 2362-2380.
- Department of Health and Children (2005) *Breastfeeding in Ireland: A five-year strategic action plan*. The Stationary Office: Dublin: Department of Health and Children.
- Dettwyler, K. A. (1995). *The hominid blueprint for the natural age of weaning in modern human populations*. Breastfeeding: Biographical perspectives. New York: Aldine de Gruyter.
- Dungy, C.I., Losch, M.E., & Russell, D.W. (1994). Maternal attitudes as predictors of infant feeding decisions. *Journal of the Association for Academic Minority Physicians*. 159-164.
- Dyson.L., Renfrew. M., McFadden.A., McCormack.F., Herbert. G., & Thomas. J., (2005). *Promotion of Breastfeeding Initiation and Duration: Evidence into Practice Briefing*. London: NICE/NHS. Retrieved from: http://www.breastfeedingmanifesto.org.uk/doc/publication/EAB_Breastfeeding_final_version_1162237588.pdf

- ESRI. (2012), *Growing up in Ireland, National longitudinal study of children*, Retrieved from: http://www.esri.ie/Childrens_Longitudinal_Study/news_publications/publications_-_infant_coh/Infant_Cohort_Key_Finding_No._1_Pregnancy_and_Birth.pdf
- Fitzpatrick, C.C., Fitzpatrick, P.E., & Darling M.R.N. (1994) Factors associated with the decision to breastfeed among Irish Women. *Irish Medical Journal*, 87(5), 145-146.
- Food Safety Authority of Ireland. (2011). *Scientific Recommendations for a National Infant Feeding Policy*. Dublin: Ireland
- Gangestad, S., & Snyder, M. (2000). Self-monitoring: Appraisal and reappraisal. *Psychological Bulletin*, 126, 530-555.
- Good Mojab, C. A. (2000). The cultural art of breastfeeding. *Leaven*, 36(5), 87-91.
- Gill, S.L. (2001) The little things: Perceptions of breastfeeding support. *Journal of obstetric, gynecologic, and neonatal nursing*, 30(4), 401-409.
- Gudnadottir, M., Gunnarsson, B.S., & Thorsdottir, I. (2006). Effects of Sociodemographic factors on adherence to breastfeeding and other important infant dietary recommendation. *Journal of Paediatrics*, 95, 419-424.
- Hatsu, I.E., McDougald, D.M., Anderson, A.K. (2008). Effect of infant feeding on maternal body composition. *International Breastfeeding Journal*, 6(3), 18.
- Horta, B.L., Victora, C.G., Lima, R.C., Gonçalves, H., Guimarães, B.E., Barros, F.C. (2006). Breastfeeding duration and blood pressure among Brazilian adolescents. *Journal of Paediatrics*, 95(3), 325-31.
- Kac, G., Benício, M.H., Velásquez-Meléndez, G., Valente, J.G., Struchiner, C.J. (2004). Breastfeeding and postpartum weight retention in a cohort of Brazilian women. *Journal of Clinical Nutrition*, 79(3), 487-93.
- Kevany, J.P., Humphries, S.N., Corboy, A.F. (1975). Infant Feeding Patterns and Weight Status in Five Year Old Children. *Irish Journal of Medical Science*, 144, 379-387.
- Kim, M. S. (1999). Self-monitoring, and individual expectation of performance-norms in sport teams. *Perceptual and Motor Skills*, 89, 1129-1132.
- Kramer MS, Kakuma R. (2002). Optimal duration of exclusive breastfeeding. *Cochrane Database of Systematic Reviews*, Issue 1. Art. No.: CD003517. DOI: 10.1002/14651858. CD003517.
- Lennox, R.D., & Wolfe, R.N. (1984). Revision of the Self-Monitoring Scale. *Journal of Personality and Social Psychology*, 46(6), 1349-1464.

- Owen, C.G., Whincup, P.H., Kaye, S.J., Martin, R.M., Davey, L., Smith, G., Cook, D.G., Bergstrom, E., Black, S., Wadsworth, M.E., Fall, C.H., Freudenheim, J.L., Nie, J., Huxley, R.R., Kolacek, S., Leeson, C.P., Pearce, M.S., Raitakari, O.T., Lisinen, I., Viikari, J.S., Ravelli, A.C., Rudnicka, A.R., Strachan, D.P. (2008). Does initial breastfeeding lead to lower blood cholesterol in adult life? A quantitative review of the evidence. *Am Journal Clinical Nutrition*, 88(2), 305-14.
- Passer, M., Smith, R., Holt, N., Bremner, A., Sutherland, E., & Vlieg, M., (2009). *Psychology: The Science of Mind and Behaviour*. United Kingdom: McGraw-Hill Education.
- Popenoe, D. (1993). American Family Decline, 1960 – 1990: A Review and Appraisal. *Journal of Marriage and Family*, 49, 527-555.
- Rautava, S., & Walker, W.A. (2009). Academy of Breastfeeding Medicine founder's lecture 2008: breastfeeding-an extrauterine link between mother and child. *Breastfeed Med*, 4(1), 3-10.
- Sarason, I.G., Sarason, B.R., Shearin, E.N., & Pierce, G.R. (1987). A brief measure of social support: Practical and Theoretical implications. *Journal of Social and Personal Relationships*, 4, 497-510.
- Scott, J.A., Landers, M.C.G., Hughes, R.M., Binns, C.W. (2001) Factors associated with breastfeeding at discharge and duration of breastfeeding. *Journal of Paediatrics and Child Health*, 37, 254-261.
- Scott, J., Shaker, I., & Reid, M. (2004). Parental attitudes toward breastfeeding: Their association with feeding outcome at hospital discharge. *Birth*, 31(2), 125.
- Shulruf, B., Alesi, M., Ciochin, L., Faria, L., Hattie, J., Hong, F. (2011). Measuring Collectivism and Individualism in the Third Millennium. *Social Behavior and Personality: An international Collectivism and Individualism in the Third Millennium. Social Behavior and Personality. An International Journal*, 39(2), 173-188.
- Shulruf, B., Alesi, M., Ciochina, L., Faria, L., Hattie, J., Hong, F., et al. (2011). Measuring Collectivism and Individualism in the Third Millenium. *Social Behaviour and Personality: An international journal*, 39(2), 173-188.
- Sloan, S., Sneddon, H., Stewart, M., & Iwaniec, D. (2006). Breast is Best? Reasons why mothers decide to breastfeed or bottlefeed their babies and factors influencing the duration of breastfeeding. *Childcare in Practice*, 12(3), 283-297.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology*, 30, 526–37.
- Snyder, M. (1979). Self-monitoring processes. *Advances in Experimental Social Psychology*, vol. 12. 85-128. New York Academic Press.

- Stolzer, J.M. (2010) Breastfeeding and WIC participants: A qualitative analysis. *Journal of Poverty*, 14, 423-442.
- Stuebe, A. (2009) The risks of not breastfeeding for mothers and infants. *Rev Obstetrics and Gynecology*, 2(4), 222-31.
- Talayero, P.J.M., Lizán-García, M., Otero Puime, A., Benloch Muncharaz, M.J., Beseler Soto, B., Sánchez-Palomares, M., Santos Serrano, L., Rivera, L.L. (2006). Full breastfeeding and hospitalization as a result of infections in the first year of life. *Pediatrics*, 118(1), 92-98.
- Tarrant, R.C., Younger, K.M., Sheridan-Pereira, M., White, M.J, Kearney, J.M. (2010a) The prevalence and determinants of breast-feeding initiation and duration in a sample of women in Ireland. *Public Health Nutrition*, 13(6), 760-780.
- Ward, M., Sheridan, A., Howell, F., Hegarty, I., & O'Farrell, A. (2004). Infant feeding: factors affecting the initiation, exclusivity and duration. *Irish Medical Journal*, 97(7), 197-199.
- Williams, J., Greene, S., Doyle, E., Harris E., McDaid, R., Mc Nally, S., Merriman, B., Nixon, E., & Swords, L. (2010). Growing Up in Ireland – National Longitudinal Study of Children [collection]. Maynooth, Co. Kildare: Irish Qualitative Data Archive: ID10027. Irish Qualitative Data Archive.
- World Health Organization (WHO)/ UNICEF (2003) Global Strategy for Infant and Young Child Feeding. Geneva: <https://whqlibdoc.who.int/publications/2003/9241562218.pdf>
- World Health Organisation. Global Data Bank on Breastfeeding. Available at https://apps.who.int/nut/db_bfd.htm assessed on 08/11/12.

Appendices

Appendix A

12- Page self-administered questionnaire

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

You are being invited to take part in a research study. My name is Lucinda Tracey and I am a final year Psychology student at Dublin Business School. I am carrying out this research to complete my thesis on attitudes towards infant feeding in Ireland.

Your participation in this study is voluntary. If you decide to take part in this study you are still free to withdraw at any time and without giving a reason.

Before you decide to take part in this study it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Please ask the researcher if anything is not clear or if you need any further information.

Purpose of Study:

The purpose of this study is to look at the relationships between Social Support, Self-Monitoring and Individualism/Collectivism on attitudes towards infant feeding in Ireland.

It is hoped that this will enhance knowledge of the influence of culture in the decision mothers make between breastfeeding and bottle-feeding their children.

Study Procedure:

Your expected time commitment for this study is 12-15minutes. This will involve filling out five short paper and pencil questionnaires.

Potential Risks:

The risks of this study are minimal. However, if you experience any upset while filling out this questionnaire you may contact the Samaritans on Tel: 1850 60 90 90 Email: jo@samaritans.org or Text: 087 260 90 90. You may also decline to answer any or all questions and you may terminate your involvement at any time if you choose.

Confidentiality:

Every effort will be made by the researcher to preserve your confidentiality including the following:

Assigning code names/numbers for participants that will be used on all researcher notes and documents

Questionnaires and any other identifying participant information will be kept in a locked file cabinet in the possession of the researcher. When no longer necessary for research all materials will be shredded.

Person to Contact:

If you should have any question about the research or any related matters please contact me by email at [REDACTED] or [REDACTED]

Consent:

By ticking the box below, I agree that I have read and understood the information and have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.

I voluntarily agree to take part in this study:

For each of the following statements, please indicate how much you agree or disagree by circling the number that most closely corresponds to your opinion.

(1 = Strong Disagreement [**SD**], 2 = Disagreement [**D**], 3 = Neutral [**N**], 4 = Agreement [**A**], 5 = Strong Agreement [**SA**]). You may choose any number between 1 and 5.

		SD	D	N	A	SA
1.	The nutritional benefits of breast milk last only until the baby is weaned from breast milk.	1	2	3	4	5
2.	Formula Feeding is more convenient than breast-feeding.	1	2	3	4	5
3.	Breast-feeding increases mother-infant bond.	1	2	3	4	5
4.	Breast milk is lacking in iron.	1	2	3	4	5
5.	Formula-fed babies are more likely to be overfed than are breast-fed babies.	1	2	3	4	5
6.	Formula-feeding is the better choice if a mother plans to work outside the home.	1	2	3	4	5
7.	Mothers who formula-feed miss one of the great joys of motherhood.	1	2	3	4	5
8.	Women should not breast-feed in public places such as restaurants.	1	2	3	4	5
9.	Babies fed breast milk are healthier than babies who are formula fed.	1	2	3	4	5
10.	Breast-fed babies are more likely to be overfed than formula-fed babies.	1	2	3	4	5
11.	Fathers feel left out if a mother breastfeeds.	1	2	3	4	5
12.	Breast milk is the ideal food for babies.	1	2	3	4	5
13.	Breast milk is more easily digested than formula.	1	2	3	4	5
14.	Formula is as healthy for an infant as breast milk.	1	2	3	4	5
15.	Breast-feeding is more convenient than formula feeding.	1	2	3	4	5
16.	Breast milk is less expensive than formula	1	2	3	4	5
17.	A mother who occasionally drinks alcohol should not breast-feed her baby	1	2	3	4	5

For each of the following statements, please indicate how much you agree or disagree by circling the number that most closely corresponds to your opinion. (1 = Strong Disagreement [SD], 2 = Disagreement [D], 3 = Neutral [N], 4 = Agreement [A], 5 = Strong Agreement [SA]). You may choose any number between 1 and 5.

		SD	D	N	A	SA
1.	In social situations, I have the ability to alter my behavior if I feel that something else is called for.	1	2	3	4	5
2.	I am often able to read people's true emotions correctly through their eyes.	1	2	3	4	5
3.	I have the ability to control the way I come across to people, depending on the impression I wish to give them.	1	2	3	4	5
4.	In conversations, I am sensitive to even the slightest change in the facial expression of the person I'm conversing with.	1	2	3	4	5
5.	My powers of intuition are quite good when it comes to understanding others' emotions and motives.	1	2	3	4	5
6.	I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.	1	2	3	4	5
7.	When I feel that the image I am portraying isn't working, I can readily change it to something that does.	1	2	3	4	5
8.	I can usually tell when I've said something inappropriate by reading it in the listener's eyes.	1	2	3	4	5
9.	I have trouble changing my behavior to suit different people and different situations.	1	2	3	4	5
10.	I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.	1	2	3	4	5
11.	If someone is lying to me, I usually know it at once from that person's manner of expression.	1	2	3	4	5
12.	Even when it might be to my advantage, I have difficulty putting up a good front.	1	2	3	4	5
13.	Once I know what the situation calls for, it's easy	1	2	3	4	5

for me to regulate my actions accordingly.

For each of the following statements, please indicate how much you agree or disagree by circling the number that most closely corresponds to your opinion.

(1 = Strong Disagreement [**SD**], 2 = Disagreement [**D**], 3 = Neutral [**N**], 4 = Agreement [**A**], 5 = Strong Agreement [**SA**]). You may choose any number between 1 and 5.

		SD	D	N	A	SA
1.	I tend to show different sides of myself to different people.	1	2	3	4	5
2.	It is my feeling that if everyone else in a group is behaving in a certain manner, this must be the proper way to behave.	1	2	3	4	5
3.	I actively avoid wearing clothes that are not in style	1	2	3	4	5
4.	In different situations and with different people, I often act like very different persons.	1	2	3	4	5
5.	At parties I usually try to behave in a manner that makes me fit in.	1	2	3	4	5
6.	When I am uncertain how to act in a social situation, I look to the behavior of others for cues.	1	2	3	4	5
7.	Although I know myself, I find that others do not know me.	1	2	3	4	5
8.	I try to pay attention to the reactions of others to my behavior in order to avoid being out of place.	1	2	3	4	5
9.	I find that I tend to pick up slang expressions from others and use them as part of my own vocabulary.	1	2	3	4	5
10.	Different situations can make me behave like very different people.	1	2	3	4	5
11.	I tend to pay attention to what others are wearing.	1	2	3	4	5

		SD	D	N	A	SA
12.	The slightest look of disapproval in the eyes of a person with whom I am interacting is enough to make me change my approach.	1	2	3	4	5
13.	Different people tend to have different impressions about the type of person I am.	1	2	3	4	5
14.	It's important to me to fit in to the group I'm with.	1	2	3	4	5
15.	My behavior often depends on how I feel others wish me to behave.	1	2	3	4	5
16.	I am not always the person I appear to be.	1	2	3	4	5
17.	If I am the least bit uncertain as to how to act in a social situation, I look to the behavior of others for cues. □	1	2	3	4	5
18.	I usually keep up with clothing style changes by watching what others wear.	1	2	3	4	5
19.	I sometimes have the feeling that people don't know who I really am.	1	2	3	4	5
20.	When in a social situation, I tend not to follow the crowd, but instead behave in a manner that suits my particular mood at the time.	1	2	3	4	5

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

Please read the following questions and answer each question by ticking a box indicating *how often* you would think or behave as described in each of the following items.

		Never or Almost Never	Rarely	Occasionally	Often	Very Often	Always
1.	I define myself as a competitive person.						
2.	I enjoy being unique and different from others.						
3.	Before I make a major decision I seek advice from people close to me.						
4.	Even when I strongly disagree with my group members, I avoid an argument.						
5.	I consult with superiors on work-related matters.						
6.	I believe that competition is a law of nature.						
7.	I prefer competitive rather than non-competitive recreational activities						
8.	Before taking a major trip, I consult with my friends.						
9.	I sacrifice my self-interest for the benefit of my group.						
10.	I consider my friends' opinions before taking important actions						
11.	I like to be accurate when I communicate.						
12.	I consider my self as a unique person separate from others.						

		Never or Almost Never	Rarely	Occasionally	Often	Very Often	Always
13.	It is important to consult close friends and get their ideas before making a decision						
14.	Without competition, I believe, it is not possible to have a good society.						
15.	I ask the advice of my friends before making career related decisions						
16.	I prefer using indirect language rather than upsetting my friends by telling them directly what they may not like to hear						
17.	It is important for me to act as an independent person.						
18.	I discuss job or study-related problems with my parents/partner						
19.	I take responsibility for my own actions.						
20.	I do not reveal my thoughts when it might initiate a dispute.						
21.	I try to achieve better grades than my peers.						
22.	My personal identity independent of others is very important to me.						
23.	I enjoy working in situations involving competition with others.						
24.	I consult my family before making an important decision.						
25.	Winning is very important to me						
26.	I see my self as “my own person”.						

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

The following questions ask about people in your life who provide you with help or support. Each question has two parts.

For the first part, list all the people you know, excluding yourself, whom you can count on for help or support in the manner described. Give the persons initials and their relationship to you (see example). Do not list more than one person next to each of the numbers beneath the question.

For the second part, circle how satisfied you are with the overall support you have.

If you have no support for a question, check the words "No One" but still rate your level of satisfaction. Do not list more than 9 persons per question.

Please answer all questions as best you can. Remember all your answers will be kept confidential.

Example:

Who do you know whom you can trust with information that could get you in trouble?

No One	1) T.N. (brother)	4) T.N. (father)	7)
	2) L.M. (friend)	5) L.M. (employer)	8)
	3) R.S. (friend)	6)	9)

How Satisfied?

6 – Very Satisfied	5 – Fairly Satisfied	4 – A little Satisfied	3 – A little Satisfied	2 – Fairly Satisfied	1 – Very Dissatisfied
--------------------	----------------------	------------------------	------------------------	----------------------	-----------------------

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

1. Whom can you really count on to be dependable when you need help?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

2. Whom can you really count on to help you feel more relaxed when you are under pressure or tense?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

3. Who accepts you totally, including both your worst and best points?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

4. Whom can you really count on to care about you, regardless of what is happening to you?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

5. Whom can you really count on to help you feel better when you are feeling generally down-in-the-dumps?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

6. Whom can you count on to console you when you are very upset?

No One	1)	4)	7)
	2)	5)	8)
	3)	6)	9)

How Satisfied?

6- Very satisfied	5- Fairly satisfied	4- A little satisfied	3- A little dissatisfied	2- Fairly dissatisfied	1- Very dissatisfied
-------------------	---------------------	-----------------------	--------------------------	------------------------	----------------------

Please answer the following questions to let us know a bit about yourself.

1. What is your age, in years? _____

2. What is your Nationality?

3. How long have you lived in Ireland?

4. What is the highest level of education you have completed?

No formal education	<input type="checkbox"/>	Primary School	<input type="checkbox"/>	Secondary School	<input type="checkbox"/>
Diploma Degree	<input type="checkbox"/>	Masters	<input type="checkbox"/>	Doctorate	<input type="checkbox"/>

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

5 (a). Are you Employed Self Employed Unemployed
Student Retired Looking after the home/family

5 (b). If you are employed, what is your occupation?

6. What is your household income?

Less than €18,000 €18,000 - €24,999 €25,000 - €34,999
€35,000 - €44,999 €45,000 -€59,999 €60,000 +

7. What is your current marital status?

Single, never married Married Separated Divorced Widowed

8. How many children do you have?

9. Did you ever breast-feed any of your children?


Yes No

If Yes, for how long?

10. What were your reasons for stopping breast-feeding?

A STUDY TO INVESTIGATE ATTITUDES TOWARDS INFANT FEEDING

11. What influenced your choice to breast-feed or bottle-feed?

Thank you very much for your time and co-operation. If you would like to read about the results of this study please email me at 



Appendix B

The Iowa Infant Feeding Attitude Scale

Appendix C

The Auckland Individualism and Collectivism Scale

Appendix D

Social Support Questionnaire 6 (SSQ6)

Appendix E

Revised Self-Monitoring Scale

Appendix F*Concern for Appropriateness Scale*