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BREASTFEEDING KNOWLEDGE IN UNIVERSITY NURSING STUDENTS.

A MULTICENTRE STUDY IN SPAIN

ABSTRACT.

Background: Exclusive breastfeeding is one of the main health and infant survival elements. To start and maintain breastfeeding, health professionals must receive culturally sensitive evidence-based breastfeeding training to offer future mothers the required information and support. While studying the nursing degree, acquiring the necessary knowledge and skills to successfully perform this work is essential. **Objective:** study the level of nursing students' breastfeeding knowledge at three Spanish public universities; explore which variables are related to acquire this knowledge. **Design:** an observational, descriptive, cross-sectional multicentre study. **Methods:** Participants were the students registered for the 4 nursing degree years at the three participating universities (N=1540). They were asked about their breastfeeding knowledge with the self-administered *AprendeLact* Questionnaire; breastfeeding-related socio-demographic variables were included. **Results:** The overall mean score of the 684 returned questionnaires was 4.659 (± 2.377) out of 10. The year-4 students from the Castellón university obtained significantly higher mean scores and had been on practicals in maternity or neonatology units, belonged to breastfeeding associations and were artificially fed as infants. University belonged to, current academic year and placements in maternity or neonatology units were relevant factors for acquiring breastfeeding knowledge. **Conclusions:** Syllabi based on progressive transversal learning, and participating in real maternity-related health settings, could be facilitating strategies to acquire a suitable level of breastfeeding knowledge.

Key words: Breast feeding; exclusive breastfeeding; knowledge; nursing students; Surveys and questionnaires.

INTRODUCTION

Although breastfeeding is an innate human act, different activities and knowledge are required to facilitate it. Support for the women who decide to breastfeed from the prenatal stage is fundamental, and the closest family core (Lok et al., 2017), support capacity, and healthcare staff's counselling and information are central (Ospina et al., 2015; Cadima et al., 2014) (OMS, 2020).

As healthcare professionals' support is a proven determining factor for mothers to decide to start and maintain breastfeeding (Schmied et al., 2011), it is considered important for both nursing students and other healthcare professionals to receive evidence-based and culturally sensitive training to be able to give pregnant women and breastfeeding mothers the information and support they require (Yang et al., 2018).

BACKGROUND

International organisations, such as the World Health Organization (WHO, 2020) and United Nations Children's Fund (UNICEF, 2018), maintain that the ideal choice is exclusive breastfeeding as a central element for infant health and survival. Both these organisations recommend starting breastfeeding in the first hour of the infant's life (Kramer & Kakuma, 2012), provide exclusive breastfeeding for the first 6 months, after which time healthy food is gradually and safely introduced, and continue breastfeeding until the offspring is 2 years old or more (Kim et al., 2018).

Many studies report the enormous benefits of breastfeeding for the health of the newborn (Oribe et al., 2015), childhood (Hui, et al., 2019; Pang, et al., 2019) and women in both the short (Uvnäs-Moberg et al., 2020) and long terms (Chowdhury et al., 2015;

Nguyen et al., 2017). It also helps to make considerable direct and indirect economic savings for the family, the community and health systems (Quesada 2020).

All pregnant women decide at some point of the perinatal stage what kind of food they will feed their newborn baby, and breastfeeding is the most frequent choice (Jasny et al., 2019; Lok et al., 2017). Different barriers can interfere in this starting and continuing breastfeeding; for instance, previous intention to breastfeed, prenatal education received, unsuitable birth and postpartum care, newborn's low birth weight, mother believing she does not produce enough milk or lack of healthcare, and also professionals' follow-up and support. Recent studies (Theurich et al., 2019) report exclusive breastfeeding figures at 6 months to lie between 13% and 39% in Europe. In Spain, the literature indicates breastfeeding and exclusive breastfeeding rates upon hospital discharge of 94.8% and 75.3%, respectively, which drastically drop for both breastfeeding (63.3%) and exclusive breastfeeding (16.8%) at 6 months (Cabedo et al., 2019). Given this situation, it is necessary to adopt strategies that increase breastfeeding duration and allow a 50% exclusive breastfeeding rate to be reached in the first 6 months in accordance with WHO recommendations (2018).

Nurses can play a fundamental role in setting up health educational programmes during perinatal care (Mélo et al., 2016). Educational interventions have been proven to have major repercussions on the health of pregnant women and their offspring, while prenatal breastfeeding education and being accompanied in initial stages can be beneficial for encouraging efficient breastfeeding (McFadden et al., 2017).

For such interventions to be successfully carried out, while nursing students study at university, it is fundamental they acquire the necessary knowledge and skills to successfully perform this work (Spear, 2006). However, nursing students do not always receive adequate breastfeeding training at university (Yang et al., 2018) nevertheless,

there is a wide range of educational methods and evaluation systems for this topic Chuisano and Anderson (2020). In the United States, Spears (2006) found that 85% of nursing students did not know that breastfeeding is recommended in the baby's first year of life and 41.3% opposed breastfeeding in public. In another study performed in the United States, a sample of 115 nursing students obtained a mean score of 17 (± 2.9) out of 24 for their breastfeeding knowledge (Ahmed et al., 2011). In Europe, Melchionda et al. (2019), concluded that according to their study with nursing students, these students did not feel any self-efficacy to offer support to breastfeeding mothers. Nevertheless, other similar studies carried out in Europe report that, students attending midwifery degree courses show a high level of self-efficacy to assist mothers during breastfeeding and good knowledge of the benefits of breastfeeding (Prepelita et al., 2020). In Spain, studies related to the acquisition of breastfeeding knowledge are very scarce and most of them report results focused on a single university (Lopez-Peña et al., 2020).

Hence the objective of this work is to study the level of breastfeeding knowledge of the nursing students registered with three Spanish public universities, and to explore which variables are related to such knowledge acquirement.

METHOD

Design and setting.

This is an observational, descriptive, cross-sectional multicentre study that explores the acquired breastfeeding knowledge of the nursing students registered with three Spanish public universities: Universitat Jaume I of Castellón, Universidad de Sevilla and Universidad de Almería.

In Spain, Order CIN 2134/2008 sets out the competences to be acquired by nursing students, which include aspects related to materno-infant health, but does not specifically set out breastfeeding competences. Each university is authorised to organise these competences and related contents over the 4 years that it takes to complete the nursing degree in Spain.

At the Universitat Jaume I of Castellón, students acquire breastfeeding knowledge transversally in subjects like Human Nutrition (year 1), Health Programmes in Infancy and Adolescence (year 2) and Care with Mothers, and Care in Infancy and Adolescence (year 3). Knowledge acquirement progressively goes from the most basic (recommendations about how long exclusive breastfeeding lasts) to the most complex (detecting the mother/baby's breastfeeding problems) knowledge.

At the Universidad de Sevilla, breastfeeding knowledge is acquired in year 2 by means of a breastfeeding workshop, and is included in the Nursing subject in Reproductive Health and Infancy and Adolescence Nursing, which total 5 hours.

At the Universidad de Almería, breastfeeding knowledge is taught in the first two years as Biochemistry, Food, Nutrition and Diet (year 1) and Nursing in Reproductive Health and Sexual Health, and Infancy and Adolescence Nursing (year 2).

Sampling and Participants

The study population was formed by all the students registered for the nursing degree during academic year 2017/2018 for one of the four nursing degree years at the three participating universities (N=1,540). The three universities had the following nursing students: 360 at the Universitat Jaume I; 480 at the Universidad de Almería; 820 at the Universidad de Sevilla.

All the male/female students who were in class on the day when data were collected could voluntarily and anonymously participate in this study. Those students who did not wish to form part of the study or whose questionnaires were not properly completed were excluded. The participants were recruited by non-probabilistic sampling.

Variables and Data collection

Breastfeeding knowledge was evaluated by the *AprendeLact* Questionnaire (Lopez-Peña et al., 2020), which comprises 21 multichoice questions with four options, of which only one is true. One point is given for each right answer and 0 points for each wrong answer or if questions were not answered. The final score is obtained by weighting the sum of the right answers out of 10. Higher scores indicate possessing more breastfeeding knowledge. This instrument was validated in a Spanish sample and presents suitable internal consistency (KR-20=0.9) and test-retest reliability (CCI=0.925). The KR-20 result in this study was 0.853.

The following variables were also included: socio-demographic and academic (Gender, Level of previous education, University belonged to and Current academic year); breastfeeding-related (Placements in maternity or neonatology units, Formal breastfeeding course, Belonging to a breastfeeding association); personal experience (Having own children, Breastfeeding experience as a parent, Feeding type received in infancy).

This data collection questionnaire was digitised with Google Forms. The data collection period went from January to December 2018.

Data analysis

A descriptive analysis was firstly carried out with the sample and the questionnaire results. Then a bivariate analysis was employed to determine the relation among the variables. As the variables were non-parametric, the Mann-Whitney U test was used to analyse the differences in the overall *AprendeLact* Questionnaire score in the variables Gender, Own children and Previous knowledge (previous experience as a parent, belonging to a breastfeeding association, previous breastfeeding courses, placements in maternity or neonatology units). For the academic variables (Previous studies, University belonged to and Current academic year) and the Feeding type received in infancy variable, the Kruskal-Wallis H test was employed.

Finally, a multiple linear regression analysis was carried out to explore which explanatory variables were associated with the overall *AprendeLact* Questionnaire score (dependent variable). The hierarchical regression method was followed by including all those independent variables showing significant differences with the questionnaire score. The Variance Inflation Factor (VIF) indicated that the non-collinearity assumption had been met (VIF range from 1 to 1.6).

The analyses were performed with SPSS (Statistical Package for Social Sciences), version 21. Statistical significance was set at $p < .05$.

Ethical considerations.

The Nursing Department Board and the Nursing Degree Management of the participating universities approved this study. Consent was obtained from the students so they could participate in this study. The questionnaire did not include any personal data that would identify them, and questionnaires were completed voluntarily. The ethical principles of the Declaration of Helsinki, of October 2013, and the legislation in force in

Spain on Personal Data Protection (Organic Law 15/1999, of 13 December), were respected.

RESULTS

Sample description

This study collected 684 questionnaires and an overall response rate of 44.42%. (Universitat Jaume I=21.1%; n=144; Universidad de Almería=24.4%; n=167 Universidad de Sevilla=54.5%; n=373). Homogeneity was observed among the three universities as no significant differences appeared in them according to the variables Gender (p=0.995), Previous studies (p=0.052), Own children (p=0.140).

The sample was formed by 80% (n=547) women. Of the whole sample, 68.1% (n=463) started the nursing degree after completing Higher Secondary Education; 52.1% (n=356) were in year 1 of the nursing degree. Only 8.8% (n=60) of the participants had been on placements in maternity or neonatology units, 97.8% (n=665) had been on a formal breastfeeding course, and 12.7% (n=87) belonged to a breastfeeding association. Moreover, 2.8% (n=19) had own children, 2.6% (n=18) had personal experience in breastfeeding as a parent and 53.5% (n=366) confirmed having been breastfed in their infancy. The sample's other descriptive variables are provided in Table 1.

-Insert Table 1-

Description of the AprendeLact Questionnaire results per item

From the questionnaire results, a mean overall score of 4.659 (± 2.377) out of 10 was obtained. The item with the best score was item 2 (advice about artificial feeding)

with a mean score of 8.231 (± 3.82). The worst score went to item 3 (mastitis care) with a mean score of 1.096 ($\pm 3,127$). The obtained results are found in Table 2.

-Insert Table 2-

Bivariate Analysis

The results showed significant differences in the overall mean score of the participants from the 4 nursing degree years, and the score was significantly higher ($p < 0.001$) in each academic year. Significantly higher mean scores in the overall questionnaire score were obtained by the students from the Castellón university ($m = 5.585$; ± 2.653) in academic year 4 ($m = 7.682$; ± 1.183), who had been on placements in maternity or neonatology units ($m = 4.586$; ± 3.403), belonged to a breastfeeding association ($m = 3.686$; ± 3.627) and had been artificially fed in their infancy ($m = 3.087$; ± 3.058) (all $p < 0.001$). All the obtained results are found in Table 3.

-Insert Table 3-

Factors associated with breastfeeding learning

For the regression model obtained with the six independent variables (University belonged to, Current academic year, Placements in maternity or neonatology units, Belonging to a breastfeeding association, Formal breastfeeding course, Own children), the multivariate analysis explained 54.6% of the variance of this study's dependent variable. Nevertheless, the results of the regression model's coefficients led to some included independent variables being rejected: Belonging to a breastfeeding association ($t = -1.216$; $p = .224$); Formal breastfeeding course ($t = -1.372$; $p = .171$); Own children ($t =$

1.349; $p=.178$). This was because their contribution to the regression model was insignificant. Finally, the regression model with three independent variables (University belonged to, Current academic year and Placements in maternity or neonatology units) was chosen because it significantly improved the dependent variable's prediction ($F=271.684$; $p<.001$), and parsimoniously explained 54.4% of the variance of the overall mean *AprendeLact* Questionnaire score. Table 4 shows the progression of the obtained models.

-Insert Table 4-

DISCUSSION

This study offered a view of the breastfeeding knowledge level of nursing students from different universities in Spain, and the factors related to breastfeeding knowledge acquirement. Today there is very little evidence for evaluating breastfeeding knowledge of the nursing students registered with Spanish public universities, which may be due to more work being focused on midwives' work to support women's breastfeeding in the pre- and postpartum stages (Swerts et al., 2019). However, it is important for nursing students to receive adequate breastfeeding training so they can pay attention to and offer the necessary support to the women who require it at any healthcare level (Melichona et al., 2019).

Our study sample was formed mostly by female participants. This is a normal finding in this kind of research because the nursing profession is generally feminised (Hung et al., 2019). We observed how more than half those who completed the survey were in academic year 1, which could be related to new students' greater motivation to participate in the events related to their future profession. The very large number of the participants who belonged to a breastfeeding association was striking. This result could

indicate that the surveyed students showed much interest in perinatal care in general, and in breastfeeding in particular, despite the vast majority having no personal breastfeeding experience (Chuisano & Anderson, 2020).

Available evidence for nursing student acquiring breastfeeding knowledge is scarce, which makes comparisons difficult. Nonetheless, some of our results are similar to those encountered in other research works. For instance, Rhodes and Burgess (2018) studied innovative teaching strategies in breastfeeding for nursing students, and their findings coincide with ours as they observed that their study population had no previous breastfeeding experience, and a very low percentage had breastfed their own baby. Nevertheless, it is noteworthy that our study includes a wider range of variables than most research works (Melchionda et al., 2019), and it offers a more detailed description of these variables: socio-demographic, academic, previous knowledge and personal experience in breastfeeding with nursing students.

The overall mean *AprendeLact* Questionnaire score demonstrated a limited breastfeeding knowledge level. The item with the lowest mean score was “mastitis care”. This result could be explained by the fact that this knowledge is of a physiopathological kind with a higher level of specificity that cannot be dealt with in-depth until later academic years (Spear et al., 2006; Ahmed et al., 2011b). Conversely, the item with the best score was for “artificial feeding advice”. This result can be explained by it being related to the high impact of the industry’s breastfeeding substitutes in the media (Piwoz & Huffman, 2015), which could have an influence by facilitating students’ assimilation of such information. These results generally agree with the findings of other studies, which report that nursing students lack sufficient breastfeeding knowledge even after completing the specific materno-infant study units that their university syllabi contemplate (Yang et al., 2018).

One of the objectives herein proposed was to explore the possible differences in the included variables in relation to the *AprendeLact* Questionnaire score in a sample of nursing students from different Spanish public universities. Our findings indicate that the best results were obtained by the year-4 Castellón university students. Thus organising syllabi that contemplate specific transversal and sequential breastfeeding competences might influence learning and improve students acquiring such knowledge. It would also appear that those students who had been on placements in maternity or neonatology units, had been on a formal breastfeeding course and belonged to a breastfeeding association possessed the highest knowledge level. On the one hand, these findings were already observed in another similar study (Lopez-Peña et al., 2020) it is worth noting that come over in relation to most available evidence showing that going on placements in real settings is an excellent learning opportunity for health-related disciplines because it offers a unique chance to observe and interact with professionals who specialise in breastfeeding when they provide new mothers with breastfeeding support (Spear, 2006; Ahmed et al., 2011; Vandewark, 2014). On the other hand, it is worth considering that there could be a personal interest component in learning breastfeeding that could have a relevant positive impact on acquired knowledge. Supplementing academic training with specific courses and participating in groups or associations related to health matters could increase students' breastfeeding knowledge (Moukarzel et al., 2020). Finally, it would appear that the personal variables, such as being artificially fed in infancy or having own children, could arouse more interest in breastfeeding and a higher level of student knowledge, although due to the low representation of the sample it would be interesting to carry out more studies.

Our results offer a parsimonious set of factors, including University belonged to, Current academic year and Placements in maternity or neonatology units that, given their

Comentado [LAP1]: Esta?

Lopez-Peña, N., Cervera-Gasch, A., Valero-Chilleron, M. J., González-Chordá, V. M., Suarez-Alcazar, M. P., & Mena-Tudela, D. (2020). Nursing student's knowledge about breastfeeding: Design and validation of the AprendeLact questionnaire. *Nurse Education Today*, 93, 104539

association and the quantity of variance they explain, should be taken into account when evaluating the results of nursing students' acquired breastfeeding knowledge. These results reinforce the previous notions that by organising syllabi which involve progressive and transversal breastfeeding learning in all the academic years could be a key strategy to acquire breastfeeding knowledge. So, it is fundamental that syllabi contemplate training based on acquiring clinical skills related to breastfeeding (Ahmed et al., 2011b; Dodgson et al., 2013), and to facilitate clinical experience in a real healthcare setting because they could have a stronger effect on improving clinical performance than simulation experiences (Pai, 2016).

Limitations:

This study has some limitations. On the one hand, it includes only three Spanish public universities and the sample was not randomised, which makes it hard to generalise the results. On the other hand, applying a self-applicable format to collect data and to complete the questionnaire did not contemplate having to fill in the participants' age, which prevented using this variable in later analyses. The hierarchical regression technique was employed, as opposed to other techniques, to develop predictive models. Its use is justified by this being an exploratory study that lacks a sufficiently robust theoretical model, which provides an idea *a priori* as to what variables are to be included in the regression model. Nonetheless, future research works are recommended to possibly contribute to other personal and academic variables for nursing students to acquire breastfeeding knowledge and to reinforce our findings or to improve the results. Another point to bear in mind is that as breastfeeding contents in nursing degree syllabi are not regulated, the contents taught at the different participating universities might not allow the acquired skills to be compared because nursing students do not receive the same training.

Despite these limitations, the results obtained in this study are valuable to consider future research work in-depth into the factors that intervene in nursing students acquiring breastfeeding knowledge, and to promote the development of educational interventions to improve their competences.

CONCLUSION:

Our studied sample's level of breastfeeding knowledge may be considered limited. Nonetheless, differences in knowledge levels were found according to some variables, mainly university belonged to, academic year and if nursing students went on placements in maternity or neonatology units. These findings suggest that these variables could be determining factors for acquiring knowledge because university syllabi based on progressive transversal learning and participating in real settings related to maternity experience seem to report better results. Nonetheless, it is necessary to invest more effort into breastfeeding for nursing students by emphasising some modifiable aspects, such as syllabi contents, education methods and evaluation instruments, to improve available learning strategies and to train professionals in a high knowledge level and towards their implication in starting breastfeeding and its duration.

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Table 1. Descriptives of the sample's socio-demographics, academic, previous knowledge and personal breastfeeding experience variables

Variable	N	n (%)
Socio-demographic and academic		
Gender	684	
Feminine		547 (80.0%)
Masculine		137 (20.0%)
Previous studies	680	
Higher Secondary		463 (68.1%)
Vocational training		195 (28.7%)
Other university training		22 (3.2%)
University belonged to	684	
Castellón		144 (21.1%)
Seville		373 (54.5%)
Almería		167 (24.4%)
Current academic year	683	
First		356 (52.1%)
Second		229 (33.5%)
Third		60 (8.8%)
Fourth		38(5.6%)
Previous BF knowledge		
Clinical placements in maternity/neonatology units	684	
Yes		60 (8.8%)
No		624 (91.2%)
Formal BF course	684	
Yes		19(2.8%)
No		665(97.8%)
Belonging to BF Association	684	

Yes		87 (12.7%)
No		597 (87.3%)
Personal experience in BF		
Own children	683	
Yes		19 (2.8%)
No		664 (97.2%)
Experience in BF as a parent	683	
Yes		18 (2.6%)
No		665 (97.4%)
Type of milk fed in infancy	684	
Breast		366 (53.5%)
Mixed		122(17.8%)
Artificial		130(19.0%)
Do not know/answer		66(9.6%)

BF= Breastfeeding

Table 2. Mean score and standard deviation in each *AprendeLact* questionnaire item (N= 684)

<i>AprendeLact</i> Questionnaire item	M	SD
1. BF recommendations according to the WHO	4.415	4.969
2. Artificial feeding advice	8.231	3.819
3. Mastitis care	1.096	3.127
4. True/False	4.781	4.999
5. E-feeding	4.883	5.002
6. Colostrum	7.383	4.399
7. Sequence of procedures in delivery room	2.646	4.414
8. Feed frequency	4.898	5.003
9. Breast hygiene	4.883	5.002
10. Newborn's weight loss	3.363	4.728

11. Tetanalgesia	4.971	5.004
12. Assessing inefficient suction	3.962	4.897
13. Efficient latching	2.924	4.552
14. Breastfed infant's position	2.734	4.460
15. Latching on nipple	5.000	5.003
16. Milk production	4.649	4.991
17. Lactogenesis	6.404	4.802
18. Kangaroo care	4.971	5.004
19. Benefits for breastfed infant	4.108	4.923
20. Benefits for mother	6.067	4.888
21. BF premature babies	5.468	4.982
OVERALL MEAN SCORE	4.659	2.377

Table 3. Differences among the study variables in relation to the overall questionnaire score for BF knowledge.

Variables	M	SD	p
Socio-demographic and academic			
Gender			0.858 ^b
Feminine	2.213	2.506	
Masculine	2.010	2.246	
Previous studies			0.826 ^a
Higher Secondary	2.221	2.533	
Vocational Training	2.013	2.190	
Other university training	2.277	2.897	
University belonged to			
Castellón	5.585	2.653	<0.001 ^a
Seville	1.639	1.477	
Almería	0.421	0.202	
Current academic year			
First	1.846	1.605	<0.001 ^a
Second	1.358	1.991	

Third	3.659	3.575	
Fourth	7.682	1.183	
Previous BF knowledge			
Clinical placements in maternity/neonatology units			<0.001^b
Yes	4.586	3.503	
No	1.941	2.199	
Formal BF course			0.001^b
Yes	4.556	3.766	
No	2.104	2.378	
Belonging to BF Association			<0.001^b
Yes	3.686	3.627	
No	1.952	2.152	
Personal experience in BF			
Own children			0.018^b
Yes	3.571	3.101	
No	2.123	2.415	
Experience in BF as a parent			0.097 ^b
Yes	3.450	3.285	
No	2.140	2.425	
Type of milk fed in infancy			<0.001^a
Breast	1.894	2.151	
Mixed	2.510	2.596	
Artificial	3.087	3.058	
Do not know/answer	1.292	1.788	

^aKruskal-Wallis Chi²

^bMann-Whitney U

BF= Breastfeeding

Table 4. Multivariate Regression Model For the Overall Mean *AprendeLact* Questionnaire Score

DV: Overall mean score	β standard	t	p	95%CI for β	Adjusted R ²	F	df	p
Model 1					.480	630.555	1	<.001
University belonged to	-.694	-25.111	<.001	-2.7.-2.3				
Model 2					.526	378.248	2	<.001
University belonged to	-.619	-22.152	<.001	-2.4.-2.0				
Current academic year	.227	8.113	<.001	0.5.0.8				
Model 3					.544	271.684	3	<.001
University belonged to	-.625	--22.783	<.001	-2.5.2.0				
Current academic year	.154	5.046	<.001	0.3.0.6				

Clinical placements in maternity/neonatology	-0.155	-5.313	<.001	-1.8.-0.8				
Model 4					.545	204.860	4	<.001
University belonged to	-0.624	-22.792	<.001	-2.5.-2.1				
Current academic year	.138	4.272	<.001	0.2.0.6				
Clinical placements in maternity/neonatology	-0.148	-5.050	<.001	-1.8.-0.8				
Belonging to BF Association	-0.046	-1.594	.112	-0.7.0.1				
Model 5					.546	164.719	5	<.001
University belonged to	-0.623	-22.742	<.001	-2.4.-2.1				
Current academic year	.139	4.296	<.001	0.2.0.6				
Clinical placements in maternity/neonatology	-0.142	-4.777	<.001	-1.7.-0.7				

Belonging to BF Association	-.035	-1.168	.243	-0.7.0.2				
Formal BF course	-.043	-1.558	.120	-1.4.0.2				
Model 6					.546	137.736	6	<.001
University belonged to	-.620	-22.620	<.001	-2.4.-2.1				
Current academic year	.139	4.303	<.001	0.2.0.6				
Clinical placements in maternity/neonatology	-.141	-4.759	<.001	-1.7.-0.7				
Belonging to BF Association	-.036	-1.216	.224	-0.7.0.2				
Formal BF course	-.038	-1.372	.171	-1.4.0.2				
Having own child/children	.035	1.349	.178	-0.2.1.2				

DV= Dependent Variable; BF= Breastfeeding

