UNIVERSITY OF SWAZILAND

FINAL EXAMINATION PAPER

PROGRAMME : BACHELOR OF SCIENCE IN HOME ECONOMICS, HOME ECONOMICS EDUCATION AND FOOD SCIENCE NUTRITION AND TECHNOLOGY OPTION YEAR III

COURSE CODE : HE 301

TITLE OF PAPER : RESEARCH METHODS

TIME ALLOWED : TWO (2) HOURS

INSTRUCTIONS: ANSWER QUESTION 1 (COMPULSORY) AND ANY ADDITIONAL (2) QUESTIONS.

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QUESTION 1

i) From the attached abstract of a published article, state whether the article is a research article from an empirical investigation or from utilizing secondary sources of information, and justify your answer.

[10 marks]

ii) Using the attached second article, critique the title, introduction and methodology to evaluate if it has been written according to most professional journals. **[30 marks]**

[Total = 40 marks]

QUESTION 2

i) If you were conducting a research project and you opted to select a qualitative research type, how would you define it and what options would you choose from for this project? $2 + (3X6)=$ **[20 marks]**

ii) Differentiate between quantitative and qualitative research based on design, approach, tools, sample and analysis. **[10 marks]**

[Total = 30 marks]

QUESTION 3

i) Briefly describe ways in which a person can identify a legitimate research topic. **[10 marks]**

ii) Differentiate between research and statistical hypotheses, and give examples. **[10 marks]**

iii) What guidelines or rule of thumb can one use in citing or incorporating references in the text of a research proposal or project report? **[10 marks]**

[Total = 30 marks]

QUESTION 4

Define the following:

a) Hypothesis
b) Construct
c) Reliability
d) Content validity
e) Independent variable
f) Action research
g) Scientific approach
h) Exploratory study

i) Theory
j) Ex post facto
k) Concepts
l) Representative sample
m) Numerical variable
n) Ratio scale
o) Sampling frame

[Total = 30 marks]

Apparel Production in the Caribbean:
A Classic Case of the New International Division of Labor

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Abstract

An international division of labor now exists in textile and apparel production. Epitomizing this movement, the Caribbean Basin has become the fastest growing apparel assembly region for U.S. firms. This paper describes tariff and quota provisions that make the Caribbean countries desirable sites for U.S. apparel assembly operations, thus enabling U.S. manufacturers to compete more effectively with low cost imports from non-Caribbean countries. The evolution of special tariff and quota provisions for the Caribbean region is examined. Special trade provisions include 807 production (now 9802 in the Harmonized Tariff Schedule), the Caribbean Basin Initiative (CBI), and Guaranteed Access Levels (GALs) under 807A (now 9802.80 10 2 in the Harmonized Tariff Schedule). The Enterprise for the Americas Initiative is also considered. This paper examines the impact of each of these provisions and explores the implications for the U.S. textile/apparel complex and for the economic development of select Caribbean countries. Costs and benefits to both investor/parent firms and host countries are examined. The effect of paid employment in the apparel industry on the role and status of Caribbean women is considered briefly.

Key Words: Caribbean Basin, apparel production

Reliability and validity of a short credit card attitude scale in British and American subjects

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Abstract

Short scales to measure affective, cognitive and behavioural attitudes toward credit cards developed from a longer scale were administered to respondents in Great Britain and the United States and found to be highly reliable and valid.

Keywords Credit cards, measurement, Britain, America.

Introduction

Xiao, Noring and Anderson[1] devised a 38-item scale to measure affective, cognitive and behavioural attitudes toward credit cards. Affective attitudes involve emotional feelings (e.g. My credit card makes me feel happy); cognitive attitudes involve thoughts (e.g. Heavy use of credit cards results in heavy debt); while behavioural attitudes involve actions (e.g. I use my credit card frequently).

In a sample of American college students, Xiao et al.[1] found that men had more favourable attitudes toward credit cards than did women, as did students living on-campus (as compared to those living off-campus), those with more credit cards, and those who used their credit cards more frequently.

Hayhoe, Leach and Turner[2] reduced this scale to 12 items, with four items in each of the three subscales (see Appendix). Hayhoe et al. did not explore the reliability and validity of this shortened version of the credit card attitude scale, but they did find that all three subscale scores predicted credit card ownership in American college students, with the affective subscale score having the strongest associa-

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tion. Although this short 12-item scale is convenient, research data on its reliability and validity are needed to justify its use.

The present study was designed to explore the reliability and validity of this short credit card attitude scale and to extend the analysis to respondents in another country to explore the cross-national reliability and validity of the scale.

Method

The subjects were 493 undergraduate students enrolled in courses at three colleges/universities in two countries: 32 men and 144 women from a rural American state college (mean age 22.8 years, standard deviation = 5.6), 109 men and 67 women from an urban American university (mean age 21.9 years, standard deviation = 2.9) and 76 men and 65 women from a British university (mean age 20.2 years, standard deviation = 1.9).

The samples were convenience samples from complete classes that the investigators teach. The American college sample was obtained from social science courses, while the American and British university samples were obtained from business courses.

The respondents were administered the 12-item version of the credit card attitude scale devised by Hayhoe et al.[2] which measures feelings, thoughts and usage of credit cards (i.e. affective, cognitive and behavioural components). They were also asked how many credit cards they held.

The students were given a 47-item scale to measure attitudes toward money[3] which measures six attitudes about money: *obsession* with all aspects of money; money as a tactic for gaining *power*; *retention* or being careful with money; *conservative* or having an old-fashioned approach to money; *inadequate* or a feeling that one does not have enough

money; and *effort* or how one gets money. Furnham devised these scales using a factor analysis based on 256 respondents and found that scores were associated with age, education and having a Protestant work ethic. It was hypothesized that attitudes toward money would be associated with the use of and attitudes toward credit cards. For example, those with more conservative attitudes toward money might hold less positive attitudes toward credit cards and possess fewer credit cards.

Results

Factor analysis

The 12-item credit card attitude scale was subjected to a factor analysis, a principal axis factoring and an oblimin (oblique) rotation, using SPSSX. Three eigenvalues were greater than one, and three factors were extracted (see Table 1). It can be seen that the factor analysis confirmed the assignment of items to the three

Table 1 Factor analysis of the 12-item credit card attitude scale

	Factor I	Factor II	Factor III		Factor I	Factor II	Factor III
Total sample				*American university*			
Affective items				Affective items			
Item 1	0.07	0.14	0.74*	Item 1	0.79*	0.10	0.20
Item 2	0.07	−0.07	0.76*	Item 2	0.75*	0.07	−0.17
Item 3	−0.09	−0.36	0.42	Item 3	0.45	−0.03	−0.40
Item 4	0.07	−0.01	0.73*	Item 4	0.72*	0.02	−0.05
Cognitive items				Cognitive items			
Item 5	0.06	0.57*	−0.27	Item 5	−0.29	0.06	0.51*
Item 6	0.07	0.60*	0.08	Item 6	0.12	−0.13	0.69*
Item 7	−0.06	0.71*	−0.08	Item 7	−0.03	−0.05	0.80*
Item 8	0.03	0.64*	0.09	Item 8	−0.02	0.13	0.64*
Behavioural items				Behavioural items			
Item 9	0.85*	−0.09	0.02	Item 9	0.04	0.81*	−0.04
Item 10	0.71*	0.12	0.06	Item 10	0.04	0.77*	0.07
Item 11	0.93*	−0.07	−0.04	Item 11	0.01	0.90*	−0.05
Item 12	0.83*	−0.03	0.03	Item 12	−0.01	0.81*	−0.03
% of variance	30.9%	16.9%	8.6%	% of variance	31.8%	19.5%	8.2%
American college				*British university*			
Affective items				Affective items			
Item 1	0.10	0.16	0.67*	Item 1	−0.04	0.03	0.87*
Item 2	0.06	−0.03	0.74*	Item 2	0.20	0.01	0.72*
Item 3	−0.13	−0.35	0.47	Item 3	−0.09	−0.31	0.23
Item 4	0.12	−0.01	0.69*	Item 4	0.12	0.01	0.75*
Cognitive items				Cognitive items			
Item 5	0.13	0.62*	−0.34	Item 5	−0.11	0.66*	−0.11
Item 6	−0.02	0.54*	0.09	Item 6	−0.05	0.58*	0.02
Item 7	−0.08	0.65*	−0.16	Item 7	−0.07	0.58*	−0.07
Item 8	−0.08	0.65*	0.13	Item 8	0.07	0.51*	0.18
Behavioural items				Behavioural items			
Item 9	0.86*	−0.18	0.01	Item 9	0.88*	−0.03	0.06
Item 10	0.68*	0.15	0.08	Item 10	0.74*	0.06	0.04
Item 11	0.94*	−0.06	−0.05	Item 11	0.94*	−0.10	−0.05
Item 12	0.81*	−0.05	0.09	Item 12	0.92*	−0.01	0.01
% of variance	29.3%	16.4%	9.6%	% of variance	35.1%	12.8%	8.9%

*Factor loading > 0.50.

subscales. Factor I had high (>0.50) loadings from the four behavioural items, Factor II from the four cognitive items and Factor III from the four affective items.

Interestingly, only one of the 12 items is reversed-scored, that is, item 3 in the affective subscale (agreement with the other 11 items indicates a favourable attitude while agreement with this item indicates an unfavourable attitude). This item had the lowest loading of the 12 items on its appropriate factor. The poor performance of a single reversed-scored item in a larger scale is a common phenomenon[4] and the inclusion of a single reversed-scored item is best avoided.

The same factor pattern was obtained for each of the three samples (see Table 1).

Reliability

The reliability of the three subscales was examined using Cronbach's alpha which is a measure of the overall item-total correlations (see Table 2). It can be seen that out of 11 of the 12 the alphas were greater than 0.70 which indicates good reliability, while the 12th alpha was 0.67, just barely short of 0.70.

Correlates of credit card attitudes

Correlates of the three subscale scores with scores from the subscales of the money attitude scale and with the number of credit cards owned are shown in Table 3. It can be seen that the number of credit cards owned was positively associated with affective and behavioural attitudes toward credit cards. This was found for the simple correlations and for the partial correlations after controlling for age and gender. (While the age range for the British students was small [18–24 years] the age range for the students at the American university was larger [17–40 years] and for the students at the American college even larger [18–57 years]). The association with

affective attitudes was found for both women and men, while the association with behavioural attitudes was found only for men.

With regard to associations with money attitudes, only the cognitive attitude toward credit cards showed associations both in the simple correlations and in the partial correlations after controlling for age and gender. The cognitive attitude was positively associated with the scores for obsession, power, retention, and inadequate

Table 3 Correlates of credit card attitudes

	Affective	Cognitive	Behavioural
Total sample			
Correlations			
Age	−0.09*	0.05	−0.13**
Gender	−0.11*	−0.14**	0.05
Credit cards	0.24***	0.06	0.10*
Obsession	0.06	0.21***	0.13**
Power	.0.01	0.18***	0.08
Retention	0.09*	0.17***	0.07
Conservative	−0.07	0.07	−0.08
Inadequate	−0.11*	0.26***	0.07
Effort	−0.02	−0.12**	−0.04
Partial correlations			
(controlling for age & gender)			
Credit cards	0.25***	0.01	0.15**
Obsession	0.05	0.23***	0.10
Power	−0.05	0.20***	0.04
Retention	0.07	0.15**	0.03
Conservative	−0.05	0.03	−0.05
Inadequate	−0.10	0.28***	0.07
Effort	0.01	−0.13*	−0.04
Females			
Credit cards	0.23***	0.04	0.01
Obsession	0.11	0.18**	0.09
Power	0.01	0.16*	0.13*
Retention	0.05	0.17**	−0.01
Conservative	−0.09	0.04	−0.13*
Inadequate	−0.12	0.28***	0.05
Effort	−0.02	−0.19**	0.04
Males			
Credit cards	0.25***	−0.01	0.35***
Obsession	0.02	0.27***	0.16*
Power	0.01	0.18**	0.04
Retention	0.10	0.12	0.18**
Conservative	−0.09	0.07	−0.02
Inadequate	−0.09	0.25***	0.09
Effort	−0.02	−0.05	−0.13

*Two-tailed $P < 0.05$; **two-tailed $P < 0.01$; ***two-tailed $P < 0.001$.

Table 2 Reliability of the subscales: Cronbach's alpha

	Total sample	American college	American university	British university
Affective score	0.78	0.75	0.81	0.77
Cognitive score	0.73	0.72	0.77	0.67
Behavioural score	0.90	0.90	0.90	0.93

and negatively with effort. This pattern was found for the women in the sample and less strongly for the men (for the men, only the associations with obsession, power and inadequate were statistically significant).

Differences between academic institutions

The associations were examined also for each college/university separately (see Tables 4, 5 and 6). The association between the number of credit cards owned and

the affective attitude score was significant for all three institutions; the association with the behavioural attitude score was significant only for the American university and British university, but not for the American college.

The associations between the cognitive attitude toward credit cards and money attitudes was found for both American institutions, but not for the British university. For the British university, the affective attitude

Table 4 Correlates of credit card attitudes: American college

	Affective	Cognitive	Behavioural
Correlations			
Age	−0.20**	0.02	−0.17*
Gender	−0.12	−0.06	0.13
Credit cards	0.28***	0.04	0.05
Obsession	−0.02	0.24**	0.05
Power	−0.05	0.12	0.03
Retention	0.05	0.20**	0.02
Conservative	−0.05	0.07	−0.18*
Inadequate	−0.17*	0.28***	0.09
Effort	0.11	−0.15	0.12
Partial correlations			
(controlling for age & gender)			
Credit cards	0.29***	−0.01	0.08
Obsession	−0.05	0.25**	−0.02
Power	−0.10	0.13	0.01
Retention	−0.01	0.21**	−0.06
Conservative	−0.03	0.07	−0.16
Inadequate	−0.18*	0.30***	0.10
Effort	0.12	−0.15	0.09
Females			
Credit cards	0.24**	−0.03	−0.03
Obsession	0.06	0.26**	0.04
Power	−0.01	0.17*	0.08
Retention	0.04	0.28***	0.05
Conservative	−0.06	0.10	−0.14
Inadequate	−0.12	0.24**	0.10
Effort	0.05	−0.15	0.13
Males			
Credit cards	0.40*	0.29	0.47**
Obsession	−0.21	0.27	0.04
Power	−0.24	−0.05	−0.22
Retention	0.04	−0.06	−0.01
Conservative	−0.08	−0.04	−0.27
Inadequate	−0.35	0.42*	0.06
Effort	0.37*	−0.13	0.13

*Two-tailed *P* < 0.05; **two-tailed *P* < 0.01; ***two-tailed *P* < 0.001.

Table 5 Correlates of credit card attitudes: American university

	Affective	Cognitive	Behavioural
Correlations			
Age	−0.11	0.15*	−0.18*
Gender	−0.12	−0.11	0.12
Credit cards	0.17*	0.07	0.12
Obsession	0.02	0.23**	0.10
Power	−0.07	0.32***	0.10
Retention	0.11	0.12	0.09
Conservative	−0.03	0.06	−0.06
Inadequate	−0.17*	0.29***	0.05
Effort	−0.12	−0.08	−0.10
Partial correlations			
(controlling for age & gender)			
Credit cards	0.16*	0.01	0.18*
Obsession	0.06	0.27***	0.11
Power	−0.10	0.36***	0.04
Retention	0.11	0.14	0.08
Conservative	−0.04	0.05	−0.01
Inadequate	−0.13	0.30***	0.05
Effort	−0.09	−0.10	−0.06
Females			
Credit cards	0.19	0.15	0.09
Obsession	0.08	0.02	0.07
Power	0.07	0.19	0.22
Retention	0.05	−0.01	0.01
Conservative	−0.07	−0.03	−0.10
Inadequate	−0.17	0.29*	−0.13
Effort	−0.14	−0.19	0.01
Males			
Credit cards	0.13	−0.07	0.22*
Obsession	0.01	0.34***	0.10
Power	−0.12	0.39***	0.04
Retention	0.11	0.16	0.15
Conservative	−0.05	0.07	0.01
Inadequate	−0.16	0.31**	0.12
Effort	−0.13	−0.03	−0.16

*Two-tailed *P* < 0.05; **two-tailed *P* < 0.01; ***two-tailed *P* < 0.001.

Table 6 Correlates of credit card attitudes: British university

	Affective	Cognitive	Behavioural
Correlations			
Age	0.13	−0.10	0.02
Gender	−0.13	−0.11	−0.09
Credit cards	0.36***	−0.08	0.41***
Obsession	0.28**	0.13	0.29**
Power	0.27**	−0.07	0.15
Retention	0.15	0.13	0.13
Conservative	−0.19*	0.10	0.01
Inadequate	0.10	0.22*	0.09
Effort	−0.03	−0.13	−0.21*
Partial correlations			
(controlling for age & gender)			
Credit cards	0.32**	−0.02	0.44***
Obsession	0.33**	0.08	0.31**
Power	0.22*	−0.06	0.07
Retention	0.17	0.01	0.10
Conservative	−0.14	−0.05	0.03
Inadequate	0.09	0.22*	0.05
Effort	0.02	−0.11	−0.24*
Females			
Credit cards	0.31*	−0.02	0.29*
Obsession	0.48***	0.14	0.24
Power	0.10	−0.01	0.15
Retention	0.17	0.05	−0.23
Conservative	−0.29*	0.01	−0.10
Inadequate	0.01	0.40**	0.15
Effort	−0.09	−0.29*	−0.22
Males			
Credit cards	0.38**	−0.14	0.49***
Obsession	0.19	0.12	0.32**
Power	0.34**	−0.17	0.12
Retention	0.10	0.14	0.32**
Conservative	−0.17	0.15	0.07
Inadequate	0.13	0.04	0.04
Effort	−0.02	−0.02	−0.22

*Two-tailed *P* < 0.05; **two-tailed *P* < 0.01; ***two-tailed *P* < 0.001.

Table 7 Comparison of the mean scores (and SDs) for the variables for the students from the three institutions

	American college	American university	British university
Number of cards	3.2 (2.8)[a]	2.3 (2.2)[a]	1.0 (1.0)[a]
Credit card attitudes			
Affective	14.8 (4.4)	15.2 (4.8)	13.9 (4.6)
Cognitive	15.2 (4.6)[b]	13.7 (4.9)[b]	14.5 (4.0)
Behavioural	8.0 (4.5)	7.7 (4.1)	7.8 (4.4)
Money attitudes			
Obsession	53.2 (11.5)	53.3 (9.5)	55.0 (10.6)
Power	24.0 (5.1)[c]	22.0 (4.3)	22.5 (4.5)
Retention	22.4 (5.1)[c]	20.7 (4.9)	21.0 (4.9)
Conservative	32.4 (4.7)	32.1 (4.8)	31.3 (5.2)
Inadequate	23.1 (4.1)	23.5 (4.1)	22.6 (3.9)
Effort	14.1 (3.6)	14.5 (3.4)	15.0 (3.3)

[a]All three groups differed significantly from one another at the 5% level or better.
[b]Two groups differed significantly at the 5% level or better.
[c]This group differed significantly from the other two groups at the 5% level or better.

money; it was the students at the American college who were the more deviant group.

Discussion

This study has provided support for the short credit card attitude scale developed by Hayhoe *et al.*[2] from the longer scale developed by Xiao *et al.*[1] The three four-item attitude scales had excellent factorial and item-total reliability. In retrospect, it would have been better to have all 12 items of the short scale keyed in the same direction (rather than having one item reversed-scored), but the scales were reliable even with this defect. In future use of this scale, the content of this item should be reversed.

Regarding validity, the short scale scores were associated with the number of credit cards owned in a meaningful way. The strongest predictors of the number of credit cards owned were the affective and behavioural attitude scores, and this was found in both the United States and Great Britain, and in both women and men.

Associations were also found between the scores on the short scales and money attitudes, although these correlates did vary between American respondents

toward credit cards was associated with the obsession and power scores, while the behavioural attitude toward credit cards was associated with the obsession and effort scores.

Finally, the mean scores on the variables for the students from the three institutions were compared using one-way analyses of variance (Table 7). It can be seen that the American and British university students were quite similar in their attitudes toward credit card and

and British respondents. For the American respondents, cognitive attitudes toward credit cards were more often associated with money attitudes whereas for the British respondents affective and behavioural attitudes were more often associated with money attitudes.

The British respondents possessed fewer credit cards than did the American respondents. In the past, buying on credit was less acceptable in Britain than in America. In Britain, buying on credit used to be called 'buying on the never-never' as one never really owned the product and one never finished paying for it! It appears from the present results that the British respondents still hold such an attitude to some degree.

Interestingly, more positive attitudes toward credit cards in general were associated with greater obsession with money (e.g. 'I put money ahead of pleasure'), seeing money as a tactic for gaining power (e.g. 'I sometimes "buy" friendship by being very generous with those I want to like me'), being careful with money (e.g. 'I often say "I can't afford it" whether I can or not') and a feeling that one does not have enough money (e.g. 'Most of my friends have more money than I do') and less emphasis on effort (e.g. 'I believe that the amount of money that a person earns is closely related to his/her ability and effort'). It appears therefore that attitudes toward credit cards were associated with attitudes toward money.

In summary, the short scales to measure attitudes toward credit cards developed by Hayhoe *et al.* based on the larger scale developed by Xiao *et al.* appear to be both reliable and valid.

References

1. Xiao, J.J., Noring, F.E. & Anderson, J.G. (1995) College students' attitudes toward credit cards. *Journal of Consumer Studies and Home Economics*, **19**, 155–174.
2. Hayhoe, C.R., Leach, L. & Turner, P.R. (1999) Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology*, **20**, 643–656.
3. Furnham, A. (1984) Many sides of the coin. *Personality and Individual Differences*, **5**, 501–509.
4. Lester, D. & Abdel-Khalek, A. (2003) The Collett-Lester fear of death scale. *Death Studies*, **27**, 81–85.

Appendix

The short credit card attitude scale (from Hayhoe *et al.*[2])

1 My credit card makes me feel happy.
2 I like using credit cards.
3 The very thought of using credit cards disgusts me.
4 I love to have a credit card.
5 I think it unwise to use any credit card.
6 Heavy use of credit cards results in heavy debt.
7 The cost of using credit cards is too high.
8 Because I use a credit card, my debt rises every day.
9 I would like to apply for more credit cards.
10 Even though I know it's not easy for college students to acquire credit cards, I always try to apply for one more.
11 I want to possess more credit cards than I have now.
12 I would like to try all kinds of credit cards.

Suggested alternative for item 3:
The very thought of using credit cards excites me.