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WORKING PAPER SERIES

Antecedents to Students' Importance Rankings of the Course Experience Questionnaire Elements

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Questionnaire Elements

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Abstract

This study empirically examined the interrelationship between the cultural orientation of higher education business students, their learning styles, and their perception of teaching quality. A total of 364 higher education business students (54 international students), from Victoria University were sampled. Though many students saw most elements as 'extremely/very important', there was also variation between students. This variation was explained by Australian citizenship status, gender, language of instruction at the secondary level, whether the student held traditional masculine values and most importantly the degree to which they had a reflective learning style. The Reflector learning dimension was also the only learning style to directly link into the Good Teaching elements.

Keywords

management education; quality; business students; culture; learning styles

Literature Review

Biggs and Watkins (2001) state that there are universal principles of good teaching, which involve getting the students to engage in the learning tasks at an appropriate level. The method chosen depends upon the most appropriate means for that culture. One of the most common instruments to gauge these cultural differences is Hofstede's cultural dimensions, (Robertson 2000). Hofstede (1980) found that cultural differences exist across national boundaries, and thus proposed a four dimensional framework of national culture and more recently added a fifth dimension, and these are: power distance, uncertainty avoidance, individualism/collectivism, masculinity/femininity and most recently Confucian dynamism (Hofstede & Bond 1988; Hofstede 1991). Biggs and Watkins (2001) sum it all up by saying the West needs to create an appropriate climate.

Ramsden (1991) developed the Course Experience Questionnaire, with the intention to develop performance indicators for teachers. During its Australian national trial it was quite successful in its coverage, general applicability, freedom from manipulation and its economy of administration. Ramsden concluded that the Course Experience Questionnaire is a valid and useful instrument for describing important differences, in the teaching performance of academic units. Ramsden's (1991) item factor analysis further supports the validity of the Course Experience Questionnaire. The Cronbach alpha results are: good teaching 0.87, clear goals 0.80, appropriate workload 0.77, appropriate assessment 0.71, and

emphasis on independence 0.72. Richardson's (1994) and Wilson and Lizzio's (1997) findings reinforced the reliability of the Course Experience Questionnaire.

The Course Experience Questionnaire has, nevertheless, received some criticism on both methodological and conceptual grounds. Hillman and Johnson (2000) state that items included in the Course Experience Questionnaire have changed, and that the wording of some items have been modified. Ainley and Johnson (2000) stated that the structure of the Course Experience Questionnaire has remained relatively stable over time, making it possible to link corresponding elements. Martens and Prosser (1998) argue there is a growing consensus that high quality teaching is not just about high quality presentation of content, nor just about implementation of high quality teaching skills.

Nevertheless, the Graduate Careers Council of Australia has been administering the Course Experience Questionnaire since 1993 to assemble data about graduates' perceptions of the quality of the courses that have been completed in the previous year. According to Hillman and Johnson (2000) department or faculty policy in many universities require that student views are surveyed. In some institutions there are now formal processes by which students' assessment of the quality of instruction can be included in review and appraisal processes for individual staff members.

Instruments like the Course Experience Questionnaire that take a normative assumption about teaching quality rather than a customer-oriented approach are not able to do this. According to LeBlanc and Nguyen (1997) there is a concern for excellence in business education, and a lack of empirical research on the cues that signal 'quality' to students. Guolla (1999), for example, states that students study at university not only for the sake of personal development, but also generally expect to be more marketable for potential employers. It could be that the labour market places a premium in pragmatic/activist learning styles that are emphasized in courses like tourism and hospitality (Barron & Arcodia 2002), but the reflective/theorist style is focused on by normative models like Ramsden's (1991) Higher Education model. Students may also take a strategic approach to their learning by adopting a learning style or styles that enhance their assessment and success within an academic program. Therefore students may maintain different learning styles and different preferred teaching styles. These styles may be keeping with what the other customer groups want, but not what may be the reflective learning and

teaching styles that are normatively favoured within universities. One of the most common instruments used to gauge preferred learning styles is Honey and Mumford's (1992) Learning Style Questionnaire, which categorizes learners as either: activists, reflectors, theorists, or pragmatists. Good learning occurs when learners move through all stages (Honey & Mumford 1992). De Ciantis and Kirton (1996), and Van Zwanenberg, Wilkinson and Anderson (2000) examined Honey and Mumford's Learning Style Questionnaire and found it to have acceptable internal reliability. The preceding discussion gives rise to three propositions:

P1: Students' demographics are positively associated with students' preferred teaching styles.

P2: Students' cultural values are positively associated with students' preferred teaching styles.

P3: Students' preferred learning styles are positively associated with students' preferred teaching styles.

Methodology

The sample was taken from Victoria University and consisted of 364 business students with 64 percent being female and 36 percent male. The majority of respondents were Australian citizens (85 percent) with 87 percent of respondents having had their primary education in English and 89 percent their secondary education. The questionnaire gained background information, cultural values, and learning and teaching preferences data from the respondents.

Robertson and Hoffman's (2000) scale was designed to measure an individual's beliefs along each of Hofstede's four initial dimensions, as well as the Confucian dynamism dimension. The cultural subscales had alpha reliabilities of: individualism/collectivism 0.65, masculinity 0.84, power distance 0.73, uncertainty avoidance 0.83, and Confucian dynamism 0.62. This study focused on the future subset (called Confucian), as the past/present subset of Confucian dynamism did not statistically hold in this sample.

Honey and Mumford's (1992) Learning Style Questionnaire, was utilised to collect learning style preferences data from the respondents. In this study students were asked to rate on a scale of 0 to 5, to what extent they agreed with the 80 statements of Honey and Mumford's (1992) Learning Style

Questionnaire. The learning style dimensions had alpha reliabilities of: theorist 0.74, reflector 0.79, activist 0.78, and pragmatist 0.74.

The scale used for the teaching preferences section was designed to measure an individual's importance rating along Ramsden's (1991) Course Experience Questionnaire statements. In this study students were asked to rate on a scale of 1 to 7, how important the 24 statements adapted from Ramsden's Course Experience Questionnaire in Ainley and Johnson (2000), were to them. The appropriate workload scale and the appropriate assessment scale did not statistically hold in this data set. Further analysis allowed a combined subset of these two scales to be developed that was both meaningful and statistically significant. The preferred teaching style dimensions had alpha reliabilities of: appropriate workload and assessment 0.63, good teaching 0.84, goals 0.73, and generic teaching skills 0.79. This study focuses on the importance of the Course Experience Questionnaire elements.

The questionnaires were entered into SPSS 10 and AMOS 4. The background/demographical variables were dichotomous. Male, Australian citizenship and English language were coded 1. The cultural values are coded according to Robertson and Hoffman's scale, of: 1 = strongly disagree through to 5 = strongly agree. The learning preferences are coded according to Honey and Mumford's Learning Style Inventory, of: 0 = strongly disagree through to 5 = strongly agree. The teaching preferences are coded on a seven point scale, of: 1 = extremely unimportant through to 7 = extremely important.

Results

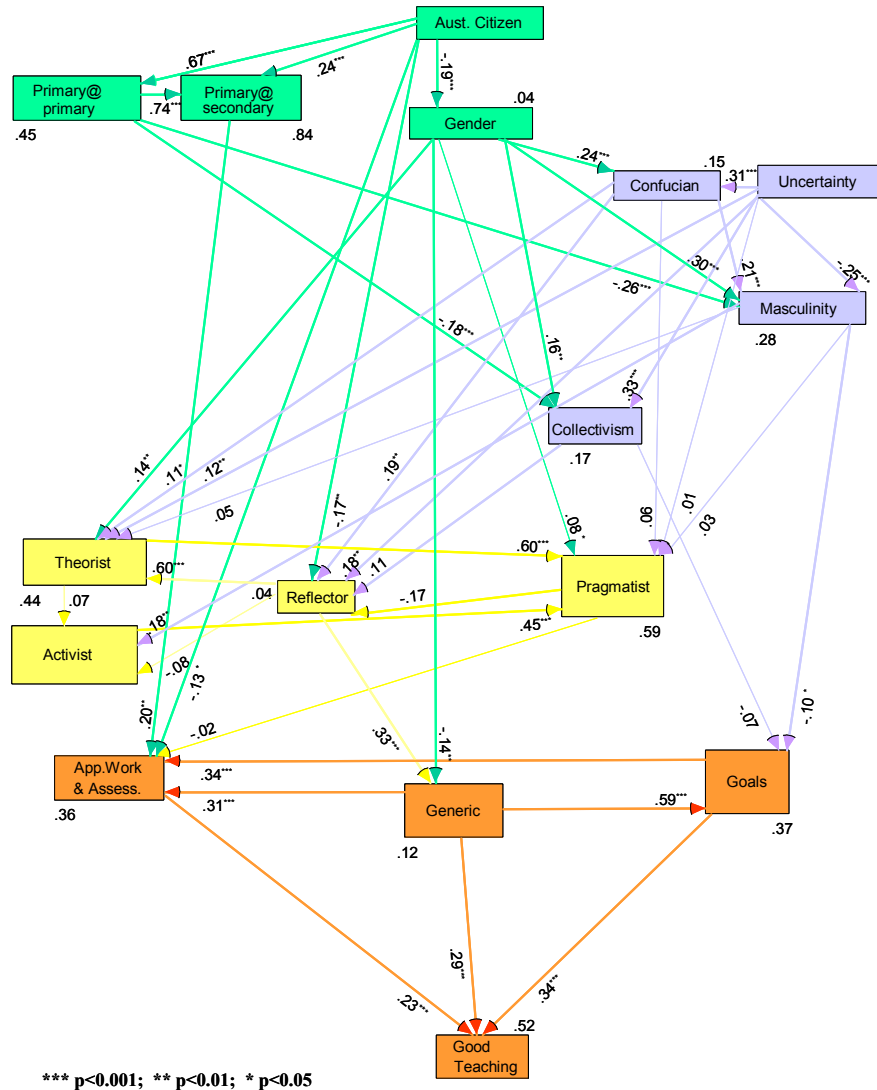
Since the method to be used was a structural equation investigation the sample was split in two as recommended by Byrne (1998). The first sample was used to test the proposed structure and it was anticipated that some modifications would be necessary. Following Byrne (1998) these would only be accepted if they are consistent with substantive theory.

Table 1: Final Model – Calibration Sample, Validation Sample, and Combined Sample [Power Distance construct removed]

Model	Scaled χ^2	df	RMR	GFI	AGFI	PGFI	RMSEA	CFI
Model 1a [Calibration Sample]	78.21	75	0.02	0.95	0.91	0.52	0.02	0.99
Model 1b [Validation Sample]	83.20	75	0.02	0.95	0.91	0.52	0.03	0.99
Model 1c [Combined Sample]	88.97	75	0.02	0.97	0.95	0.54	0.02	0.99

To test if modification indexes are simply capitalizing on chance, Byrne's procedure of using a validation sample was used. As the construct, power distance, did not directly or indirectly explain any variance in any of the teaching variables, it was removed. The calibration model was confirmed with the 'validation sample' data set as shown in Table 1 above, all indexes meet minimum fit criteria (Byrne, 1998). The combined sample is presented in Figure 1.

Figure 1: Path Diagram [Preferred Teaching] after modification with significant pathways [Combined Sample]



Discussion

Propositions one, two and three as previously outlined were generally supported. The pathway Primary@primary (primary language of education (5-11 years))→Primary@secondary (primary language of education (12-18 years))→App.Work&Assess (appropriate workload and assessment)→Good Teaching

can be seen in Figure 1. This suggests that if the student is an Australian citizen, it is highly likely that they studied in the English language at both primary and secondary levels. There is also a strong positive association between the variables Primary@primary and Primary@secondary. Thus, this suggests that if a participant had English as their primary language of instruction during their primary years of education, English would most likely be their primary language of instruction at secondary level. Within this sample, 96.5 percent of Australian citizens had English as their principle language of instruction at primary and secondary levels. A surprising 17 percent of International citizens studied in the English language at primary level education. This increased by approximately a third, to 32.1 percent at secondary level education. Language of instruction seems to be a key variable in shaping students' importance ratings on App.Work&Assess.

The variable Primary@secondary has a positive association with App.Work&Assess. This suggests that if the student is an Australian citizen, it is highly likely that they studied in English at primary and secondary levels of education, and are likely to see the dimension App.Work&Assess. as important. There is also a strong positive association between the variables App.Work&Assess. and Good Teaching. This suggests Australian citizens' perceptions of App.Work&Assess. during their course of study, is positively related to their view of what constitutes Good Teaching.

The pathway Primary@primary→Masculinity (masculinity/femininity)→Goals can also be seen in Figure 1. The variable Primary@primary has a strong negative association with the cultural dimension of Masculinity. This suggests that if English is the primary language of instruction at primary level, that it is highly unlikely that the participant would have Masculine beliefs.

A negative association exists between Masculinity and Goals. Thus, if English was not the primary language of instruction at primary level, it is more likely that the participant would have Masculine beliefs, and would not rate the Goals elements as very important. Contrastingly, it can be speculated that if English was the primary language of instruction at primary level, it is highly unlikely that the participant would have masculine beliefs, and would find Goals to be very important.

There are also strong positive associations between the preferred teaching dimensions of Goals, App.Work&Assess. and Good Teaching. Goals is directly associated with App.Work&Assess. and Good

Teaching. Goals is also indirectly associated to Good Teaching, through App.Work&Assess. Thus, respondents who had English as a primary language of instruction at the primary level were less likely to have a Masculine orientation. Respondents with a Masculine orientation were less likely to rate Goals as important. Respondents who rated Goals as important also rated Good Teaching, and App.Work&Assess. as important.

The pathway Aust. Citizen (Australian citizen)→Gender→Confucian (Confucian dynamism)→Reflector→Generic (generic teaching skills) can be seen in Figure 1. The variable Aust. Citizen seems to have a strong negative association with Gender, and Gender has a strong positive association with the cultural Confucian dimension. The Confucian dimension has a positive association with the Reflector learning style. Therefore Confucian students are more likely to be Reflectors. Reflectors learn best from activities where they are able to stand back from events, listen and observe (Honey & Mumford 1992).

The pathway Aust. Citizen→Gender→Masculinity→Goals can also be seen in Figure 1. The new pathway is between Gender, Masculinity and Goals. The variable Aust. Citizen seems to have a strong negative association with Gender (1 = male), which has a strong positive association with the cultural dimension Masculinity. There are also strong positive associations between the preferred teaching dimensions of Goals, App.Work&Assess. and Good Teaching. The results imply that if the respondent was not an Australian citizen, it is likely that they are male business students. Male business students are more likely to have Masculine cultural beliefs. Respondents, who do not hold traditional Masculine cultural beliefs are more likely to rate clarification of teaching goals as important. A reason for this might be that respondents with a high masculine culture orientation may be less sensitive to social commitments. Therefore they would have less concern about course expectations that impact on social demands. Indirectly males are less likely to rate the Goals elements as important as females. These issues directly and indirectly are associated with their importance rating of Good Teaching.

There is a relatively strong negative association between Gender and Generic Teaching Skills. Thus, if the participants are not Australian citizens, it is highly likely that they are male business students. Male students are less likely to find generic skills to be of great importance to them, as they have the

assertiveness to solve any problems that may arise (see Figure 1). This finding suggests that female students are more likely to see generic teaching elements as more important.

A strong positive association exists between the preferred teaching dimensions of Generic, Goals, App.Work&Assess. and Good Teaching. Generic is directly associated with Goals, App.Work&Assess. and Good Teaching. Indirectly through Goals, Generic is also associated with App.Work&Assess. and Good Teaching. Generic is also indirectly associated with Good Teaching, through App.Work&Assess. Surprisingly there is little research on gender differences in teaching style preferences. The importance of the Generic elements such as: the course developed my problem solving skills; the course sharpened my analytic skills; the course helped me develop my ability to work as a team member; may be indicative of a broader based self-development focus among female students. This is consistent with the lower indirect theoretical/pragmatic orientation held by female students. This directly and indirectly forms their opinions on what constitutes Good Teaching, as previously mentioned.

The pathway Uncertainty (uncertainty avoidance)→Confucian→Reflector→Generic can be seen in Figure 1. Uncertainty has a strong positive association with the cultural dimension Confucian. The new path to be discussed is Uncertainty to Confucian to Reflector to Generic. Uncertainty has an indirect association with the Reflector learning style through the Confucian construct. A high Uncertainty rating is positively associated with Confucian beliefs. Students with high Confucian orientation are more likely to be Reflectors. Students with a Reflector learning style are more likely to rate Generic skills as important. This understanding extends on the previous argument that the areas of importance to Reflectors are the Generic elements in order to help them avoid Uncertainty. Therefore there is no direct link between Uncertainty and Good Teaching, although, there is an indirect path via the Confucian, Reflector and Generic dimensions.

The pathway Uncertainty→Masculinity→Goals can also be seen in Figure 1. The indirect path from Uncertainty to the importance of Goals clarification, being a double negative, is positive. This suggests that goal clarification is in part explained by the need to avoid Uncertainty. This extends and is consistent with the previous observations that students who have a strong Masculine orientation may also be more confident of their abilities to solve disputes and feel comfortable with their ability to manage risk.

This study was designed to focus on University students studying business courses at Australian university campuses located in Australia. As the international students in this study were studying in Australia, in an on-campus mode, the results cannot be generalized to International students not studying in this mode. It also did not examine the students longitudinally. Finally, even though calibration and validation samples were used, and the findings were consistent with related previous Australian studies, the results need to be replicated.

These findings have implications for lecturers in a University environment. There is a positive association between the variables App.Work&Assess. and Good Teaching. A higher importance is placed by international students on App.Work&Assess. and suggests that this is an important determinate of Good Teaching.

The importance of gender at both a biological and cultural level was an unexpected finding and an area surprisingly under-researched. This study suggests a number of possibilities for further research. One major area is an extension of and elaboration on Ramsden's (1991) Course Experience Questionnaire. Ramsden's model assumes that the reflector learning style is the most common learning style of higher education students. This was not found to be the case for business students in this study. This finding is consistent with Barron and Arcodia's (2002) study. Therefore do normative teaching assumptions as proposed by Ramsden and others represent a full model?

The Course Experience Questionnaire needs to be used with caution. As a normative instrument it may adequately measure good teaching but it is overextending its initial design to assume that this equates with student satisfaction. This is because it does not assess the teaching satisfaction of students who do not predominately use a reflective learning style. The importance of some CEQ elements varies according to the strength of the student's reflector learning style. This might not be a concern if all learning styles explain variation in the Course Experience Questionnaires' importance ratings. Indeed use of the CEQ may lead to an incorrect assessment of course satisfaction by non-reflective style learners.

References

Ainley, J. & Johnson, T. 2000, *Course Experience Questionnaire 2000*, Graduate Careers Council of Australia, Canberra.

- Barron, P. & Arcodia, C. 2002, "Linking Learning Style Preferences and Ethnicity: International Students Studying Hospitality and Tourism Management in Australia", *Journal of Hospitality, Leisure, Sport & Tourism Education*, vol. 1, no. 2, pp. 15-27.
- Biggs, J. B. & Watkins, D. A. 2001, 'Insights into teaching the Chinese learner', in *Teaching the Chinese learner: psychological and pedagogical perspectives*, ed. D. A. Watkins & J. B. Biggs, ACER, Melbourne, pp. 277-300.
- Byrne, B. M. 1998, *Structural Equation Modelling with LISREL, PRELIS, and SIMPLIS: Basic concepts, applications and programming*, Lawrence Erlbaum Associate Publisher Inc., New Jersey.
- Guolla, M. 1999, "Assessing the teaching quality to student satisfaction relationship: applied customer satisfaction research in the classroom", *Journal of Marketing*, Summer, pp. 87-97.
- Hillman, K. & Johnson, T. 2000, *The Course Experience Questionnaire 1999*, Graduate Careers Council of Australia.
- Hofstede, G. 1980, *Culture's consequences: international differences in work-related values*, Sage Publications, London.
- Hofstede, G. 1991, *Cultures and Organisations: Software of the mind*, McGraw-Hill, New York.
- Hofstede, G. & Bond, M. H. 1988, "The Confucius Connection: From Cultural Roots to Economic Growth." *Organizational Dynamics*, vol. 16, no. 4, pp. 5-21.
- Honey, P. & Mumford, A. 1992, *The Manual of Learning Styles*, Peter Honey, Berkshire.
- LeBlanc, G. & Nguyen, N. 1997, "Searching for excellence in business education: an exploratory study of customer impressions of service quality", *International Journal of Educational Management*, vol. 11, no. 2, pp. 72-79.
- Macadam, C. 1996, "Addressing the barriers of managing change." *Management Development Review*, vol 9, no. 3, pp. 38-40.
- Martens, E. & Prosser, M. 1998, "What constitutes high quality teaching and learning and how to assure it", *Quality Assurance in Education*, vol. 6, no. 1, p.28-36.
- Ramsden, P. 1991, "A performance indicator of teaching quality in higher education: the course experience questionnaire", *Studies in Higher Education*, vol. 16, no. 2, pp. 129-151.
- Richardson, J. T. E. 1994, "A British evaluation of the Course Experience Questionnaire", *Studies in Higher Education*, vol. 19, no. 1, pp. 59-69.
- Robertson, C. J. 2000, "The Global Dispersion of Chinese Values: A Three-Country Study of Confucian Dynamism", *Management International Review*, vol. 40, pp. 253-268.
- Robertson, C. J. & Hoffman, J. J. 2000, "How different are we? An investigation of Confucian values in the United States", *Journal of Managerial Issues*, vol. 12, no. 1, pp 34-47.
- Van Zwanenberg, N. Wilkinson, L. J. et al. 2000, "Fiedler and Silverman's Index of Learning Styles and Honey and Mumford's Learning Styles Questionnaire: how do they compare and do they predict academic performance?" *Educational Psychology*, vol. 20, no. 3, pp. 365-380.
- Wilson, K. L. & Lizzio, A. 1997, "The development, validation and application of the Course Experience Questionnaire", *Studies in Higher Education*, vol. 22, no. 1, pp. 33-53.