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ORIENTATION TOWARDS CORPORATE SOCIAL RESPONSIBILITIES: A STUDY OF NON-BUSINESS STUDENTS IN HONG KONG

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Abstract

In many ways our daily livings are shaped by business decisions. As students are future decision-makers of their profession, there is a need to educate them with a stronger sense of ethicality and corporate social responsibility (CSR) (Evans and Weiss, 2008; Mohammad, 2011). Before we can identify effective ways in changing students' orientation towards CSR (CSRO), we first need to devise a way in assessing a person's CSRO. Using Carroll's (1979) CSR constructs of Economic, Legal, Ethical and Discretionary (Philanthropy), Aupperle (1982) validated a forced-choice scale (E-CSRO) to assess a person's CSRO. Wong (2017) translated it into Chinese (C-CSRO) and tested with N=793 Chinese business students in Hong Kong. This study further validated C-CSRO with N=827 non-business Chinese students and examined their CSRO. Samples were randomly halved into two N=383 and N=444. Sample 1 showed C-CSRO has high item reliability (.915 to - .783); Exploratory Factor Analysis revealed its factor structure is similar to E-CSRO. Confirmatory Factor Analysis on Sample 2 supported adequate model fit. Overall mean score ranking of the four CSRO in descending order of importance were Legal, Economic, Ethical and Discretionary. Gender and programme streams in particular have significant effects (p < .05) over the Economic and Discretionary dimensions. Avenues for future research can test C-CSRO in other

Chinese communities using cross group CFA on measurement invariance; explore influence from other moderating variables on CSRO so that impactful educational initiatives to specific student group can be found.

Keywords

Business Students, Corporate Social Responsibility, Orientation, Measurement Scale

1. Introduction

Once businesses were only answerable to shareholders (Friedman, 1970; Quazi & O'Brien, 2000) and corporate social responsibility (CSR) was fulfilled as long as they remained economically sound (Wan, 2006). Yet in the course of pursing economic returns, businesses created different social problems affecting our daily living directly and indirectly, hence business have to be more socially responsible (Moir, 2001; Schwartz, 2017). Nowadays CSR is no longer only a buzzword in the business world but has already developed as a strategic tool and key corporate activity (Hasan, 2018; Lindgreen, & Swaen, 2010).

1.1 CSR Framework and CSRO Measurement Scale

CSR is a versatile concept that has gone through decades of development (Carroll, 1999; Cochran, 2007; Frederick, 2006; Joyner & Payne, 2002; Wang & Juslin, 2012) and evolved into multi-faceted definitions (Dahlsrud, 2008). In the midst of all possible meanings, the Pyramid of CSR framework by Carroll (1979, 1991) defined CSR with four succinct dimensions: "Economic" - produce goods and services at a profit; "Legal" - codified business ethicality that are mandatory; "Ethical" - uncodified business ethicality that are desirable and businesses are free to fulfil; "Discretionary" or "Philanthropy" - not legally nor ethically binding but usually in the form of charity that a business can contribute voluntarily to advance the well-being of a society (Figure 1). Carroll's (1979, 1991) framework that cover both the voluntary and obligatory CSR aspects of a corporation is regarded as a leading paradigm and most cited definition on CSR (Baden & Harwod, 2013; Garriga & Melè, 2004, Visser, 2005, Windsor, 2006).



Figure 1: The Pyramid of Corporate Social Responsibility (Carroll, 1991)

Aupperle (1982), Aupperle, Hatfield and Carroll (1983) adopted the CSR Pyramid constructs and designed a measurement scale (the E-CSRO) to assess a person's CSR orientation (CSRO). In reality, Economic and the three non-economic or social CSR dimensions of Legal, Ethical and Discretionary are often competing for the limited resources of a business. By diverting more resources to fulfil the non-economic CSR, implicitly less will be available for economic pursuits, or *vice versa*. In line with such situation, E-CSRO adopted a forced-choice or ipsative design. 13 out of 15 questions of E-CSRO are relevant to the social context of this study and adopted. In each question there are four sub-statements and each statement reflects one of the four CSRO of Economic, Legal, Ethical or Discretionary giving altogether 13x4 = 52 item variables in the questionnaire. Respondents have to give score to the four sub-statements to indicate the relative rather than absolute level of importance of each CSRO. An extract of the instruction and a sample question of E-CSRO are as follows:

Based on the relative importance and application to your firm, allocate up to, but not more than 10 points to each set of four statements. Below are examples.

A = 4	A = 1	A = 0
B = 3	B = 2	$\mathbf{B} = 4$
C = 2 or	C = 0 or	C = 3
<u>$D = 1$</u>	D = 7	$\mathbf{D} = 0$
Total = 10 points	Total = 10 points	Total = 7 points

It is important to:

_____A. provide assistance to private and public educational institutions (*Discretionary)

_____B. ensure a high level of operating efficiency is maintained (*Economic)

____ *C. be a law abiding corporate citizen (Legal*)*

_____ D. advertise goods and services in an ethically fair and responsible manner (Ethical*) *This indicates the CSRO behind each statement but the word will not appear in the questionnaire.

1.2 Research Significance and Purposes

Samples of this study are Hong Kong Chinese non-business students at tertiary level. They will eventually enter into different professions and probably will become decisionmakers of the organizations that they work for. Besides students in Hong Kong have the freedom to work in China who will bring their skills, knowledge and even CSR values to the Mainland. Their CSRO may become part of the overall CSRO of their profession or industry, whether in Hong Kong or in Mainland China. So a study on CSRO among the Chinese student groups in Hong Kong may bear transferrable potential to other Chinese communities including Mainland China.

Though E-CSRO is regarded as robust and psychometrically sound (Ibrahim, Angelidis, & Howard, 2006), to enhance its usability in Chinese communities where English is not the first language, Wong (2017) converted E-CSRO into Chinese (C-CSRO) through a translate-back-translate process and initially validated it with a Chinese business student sample (N=793) in Hong Kong. The purposes of this research are two-folds: first to obtain a measurement scale that can assess CSRO in a Chinese community through examining the psychometric properties of the scale C-CSRO in a non-business Chinese student group in Hong Kong; second is to enrich our understanding on the CSRO of the samples and examine the potential influence from different demographic variables namely: programme streams, gender, age, year of study, religiosity and prior CSR exposure.

2. Method

2.1 Data Collection and Samples

N=893 convenience samples were drawn from students enrolled with non-business associate degree programmes at a community college in Hong Kong. Their subject teachers followed a standard protocol to administer the questionnaires in class. Responses were voluntary and anonymous. 66 (7.3%) of the questionnaires returned have some forms of invalid responses and eventually N= 827 responses were found usable.

All respondents are Chinese ethnically and 785 (94.9 %) are Hong Kong Permanent Residents i.e. they should have resided in Hong Kong continuously for at least seven years. In order to be admitted to this community college, all students should have gone through similar education and attained a recognized standard of qualification, hence academic background should be rather homogeneous. The student samples come from three programme streams: Applied Social Sciences (ASS) N=287 (34.7%), Language and Communications (L&C) N=188 (22.7%); Science and Technology (S&T) N=344 (41.6%), missing 32 (1.0%). Gender split is 392 (47.4%) male 420 (50.8%) female, missing 15 (1.8%). Age-wise 800 (96.8%) aged 18 to 23, 4 (0.5%) > 23, 16 (1.9%) < 18, missing 7 (.8%). 443 students (53.6%) are at Year 1 and 372 (45.1%) at Year 2, 4 are studying for year 3/4 (.5%), missing 11 (1.3%), usually students can finish their study in two years and for a maximum of four. 676 students (81.7%) are without religion, 126 (15.2%) claimed they have a religion with a majority N=100 claimed they are Christians, and 25 missing (3.0%). When asked whether students have any prior CSR exposure such as attending CSR activity, seminar or courses, 714 (86.3%) indicated "No", 103 (12.5%) responded "Yes", missing 10 (1.2%).

2.2 Statistical Procedures

N=827 samples were randomly halved into Sample 1 (N=383) and Sample 2 (N=444). Independent Samples *T*-test showed no significant differences between them. Kaiswer-Mayer-Oklin (KMO) for Sample 1 was .671 and .643 for Sample 2; when KMO of data set exceeds .6 it is recommended for factor analysis (Kaiser, 1974). Bartlett Test of Sphericity on multivariate normality for Sample 1 is (χ^2 (1326, N = 383) = 12474, p < .001); Sample 2 is (χ^2 (1326, N = 444) = 14166, p < .001), suggesting data adequacy for factor analytic kind of study (Barlett, 1954). To fulfil the first research purpose of validating C-CSRO, Sample 1 was subjected to reliability, correlational tests and Exploratory Factor Analysis (EFA). Factor loadings were extracted by principal factor analysis with varimax rotation, and factor loading of .4 was the cut-off value. Confirmatory Factor Analysis (CFA) by Maximum Likelihood as the estimation procedure was applied on Sample 2 to examine model fit of the empirical data and Fit Indices were consulted. For the second research purpose, Independent Samples *t*-test and ANOVA were used to investigate CSRO in relation to five demographic variables i.e. age, gender, year of study, religion and prior CSR experience.

3. Results

Table 1 shows reliabilities (shaded) and correlation statistics on Sample 1. Reliability *Cronbach Alphas* are .78 to .92 that generally is regarded as good (George & Mallery, 2003; Nunnally, 1978). Correlations between the four CSR dimensions are statistically significant p < .01 (2 tailed). Economic and the three non-economic dimensions are inversely correlated with Pearson r from -.4 to -.58. This can be attributable to the conflicting nature between Economic and the three social CSRO variables. Correlational strength between the social CSRO of Legal, Ethical and Discretionary are weaker ranging from -.16 to .22, that can be due to their overlapping nature in some extent. In fact both reliability and correlational tests statistics of C-CSRO are in line with test results on E-CSRO by Aupperle et al. (1983), Burton et al. (2000) and those of C-CSRO obtained by Wong (2017).

Table 1: Reliability and Correlations of C- CSRO Variables on Sample 1 (N=383)

	Economic	Legal	Ethical	Discretionary
Economic	.915			
Legal	400**	.848		
Ethical	584**	.224**	.783	
Discretionary	518**	160**	.180**	.863

*Note. Correlation is statistically significant at ** p<.01 (2 tailed)*

3.1 EFA

EFA results indicated 33 out of 52 item variables loaded on the first four factors. Items 2B, 1C, 3C, 6D, 4C, 9A, 10A, 7D, 13D, 12C and 5A (Discretionary oriented) loaded on factor 1 with factor loadings from .788 to .436. Items 7B, 9C, 4B, 6B, 12B, 11C, 10B, 2C, 5C, 8A and 13B (Legal oriented) loaded on factor 2 with factor loadings from .661 to .418. Items 6A, 7C, 5B, 11A, 12D, 3B, 4A, 9B (Economic oriented) loaded on factor 3 with factor loadings from .747 to .403, and there was one cross loading of -.474 on the same component from Item 6C (Ethical oriented). Items 9D, 11D 4D (Ethical oriented) loaded on factor 4 with loadings .662 to .432. The negative cross loading from Item 6C (Ethical) on a predominantly Economic component is again probably due to the competing nature between the Economic and Ethical CSR dimensions in a forced choice context as explained by Aupperle (1982).

3.2 CFA

The C-CSRO model has four factors namely Economic, Legal, Ethical and Discretionary, and under each factor there are thirteen indicators or item variables, giving it

4x13=52 indicators in total. Initial CFA results on Sample 2 returned with unsatisfactory fit statistics (χ^2 (8759.137, *N* =444, *df* =1270), χ^2 / df =6.897, *p* < .001; GFI (.638), and CFI (.443) RMSEA (.115). There can be poor model fit when there are too many indicators/ items per latent factor (Burton et al., 2000).

Similar to Wong's (2017) practice, a parceling strategy was adopted to reduce the number of indicators under each CSR dimension to a more manageable size (Bovaird & Koziol, 2012; Floyd & Widaman, 1995; Hoyle, 2011) and steps suggested by Hoyle (2012) were used to perform parceling. For example under the Legal dimension, four parcels labelled as P1Legal, P2Legal, P3Legal and P4Legal are created. Among the 13 legal-oriented indicators, the one of the highest and lowest mean scores were grouped under the first parcel P1Legal; items of the next highest and lowest mean scores were grouped under P2Legal and so on, until all the 13 Legal indicators were assigned to one of the four Legal parcels. An average mean score could then be derived from each parcel and became an indicator on its own. Such procedures were repeated to the remaining items and their respective CSRO factors of Economic, Ethical and Discretionary. Through parceling the C-CSRO model was condensed to 4 factors x 4 parcels=16 indicators (Figure 2).

CFA fit statistics after parceling were ($\chi^2 = 464.522$, d/f = 100) p < .001; GFI (.890), CFI (.909), and TLI (.891). Recommended value of good model fit for CFI is .90; for TLI .90 is regarded as acceptable fit (Bentler & Bonett 1980). In this case CFI is .909; both GFI and TLI are close to but below .90. RMSEA is .091; when RMSEA is up to 0.08 it represents adequate fit (Browne & Cudeck, 1993). SRMR which measures the badness of the model fit is .074 and in general SRMR below .08 indicates good fit (Hu & Bentler, 1999). Overall model fit with the empirical data appears adequate.



Figure 2: The C-CSRO Model after Parceling

Two highest pairs of modification indices come from residuals of $e^2 < ... > e^5$ (M.I. 26.106 and E.P.C. -.116) and $e^2 < ... > e^{12}$ (M.I. 25.956 and E.P.C. -.130) were examined. If they were freed to correlate (Figure.3), fit-statistics further improved with χ^2 down to 412.768, $df = 98 \ p < .001$; GFI (.902), CFI (.921), TLI (.904), RMSEA (.085) and SRMR (.072). A closer look at the item variables in relation to these residuals revealed that residual e2 is related to P2 Econ and contained item variables 7C, 3B, 4A; residual e5 is related to P1 Legal and contained item variables 2C, 7B, 1B; residual e12 is related to P4Ethical and contained item variables 3D, 10C, 7A. Apparently Question 7 appeared in all cases involving items 7A, 7B and 7C. Question 7 and its item statements are extracted below for scrutiny.

- 7. It is important to monitor new opportunities which can enhance the organization's: _____A. moral and ethical image in society
 - _____B. compliance with statutes
 - ____ C. financial health
 - _____ D. ability to help solve social problems

The questions in E-CSRO and similarly C-CSRO asked the respondents to indicate the relative importance of each item statement from the point of view of a business. They usually started with the wordings: "It is important (for a business) to"..... then followed by

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four sub-statements, each representing a CSRO that businesses could choose to operate under the confinement of its existing circumstances. Question 7 however is unique in a way it specifies a scenario for future business options rather than a *status quo*, thus elicits respondents' imagination of their ideal CSRO that may open up to more disparate views.



Figure 3: Re-specified C-CSRO Model

In this study academic specialism of the student samples are much more diverse. Students come from three different streams of study i.e. S&T, ASS and L&C. Under each stream there is a broad range of programmes that students can enroll. For example S&T students might enroll in Engineering, Information Technology, Statistics and Data Science or simply Science; ASS students might major in Psychology, Social Policy and Administration, Sociology and Culture, Advertising Design, Visual Communication; and L&C students might belong to Bilingual Communication/ Public Relations/ Translation and Interpretation programmes Such diverse academic interests can explain why CSRO is more varied and this is elaborated in the next section. In fact *t*-test and ANOVA results in the next section show that programme streams do have significant effects on the relative importance of the four CSRO.

In sum, some possible explanations on the CFA results are forwarded above. There are positive evidences to support the claim that latent variables of C-CSRO are adequately measured by its related indicators and there exists a more global factor structure in it that can

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explain the co-variations among the factors. In fact when sample size is large as in this case N=444, it can magnify X^2 and minor specification errors (Kaplan, 1995). So whether modeldata fit is acceptable or not is more important than going after exact model fit (Hancock, 2006) and it is not advisable to re-specify the model to something that might not be replicable.

3.3 Independent Samples T-test and ANOVA

Table 2 shows there are significant differences (p < .05) in students' orientation over the Economic and Discretionary dimensions by programme streams and gender. For age, year of study, religiosity and prior CSR experience, no significant differences are found. This is further analyzed in the Discussion section.

Table 2. Means (standard deviation) of Student's CSRO by Demographic Variables					
	Economic	Legal	Ethical	Discretionary	
Programme Streams					
ASS (N=287)	2.37 (1.11)	2.56 (.62)	2.39 (.70)	1.92 (.70)	
L&C (N=188)	2.38 (1.14)	2.70 (0.68)	2.47 (.60)	1.76 (.66)	
S&T (N=344)	2.66 (1.30)	2.64 (.76)	2.41(.71)	1.68 (.71)	
ANOVA results	F(2,816)=5.788,	F(2,816) = 2.49	F(2,816) = .763,	F (2,816) =9.875	
	<i>p</i> =.003	<i>p</i> =.083	<i>p</i> =.466	p = .000	
Gender					
Male $(N = 392)$	2.74	2.59	2.37	1.69	
Female(N=420)	2.26	2.67	2.47	1.87	
<i>t</i> -test results	t = 5.729	t = -1.720	t = -1.906	t = -3.827	
	df = 699.824	df=722.802	<i>df</i> =735.410	df = 810	
	<i>p</i> =0.000	<i>p</i> =.086	p=.0570	p = .000	
Age					
18-23 N=800	2.49 (1.20) (2)	2.64 (.69) (1)	2.43/ .68/3	1.781/ .7025 /4	
Below 18 N=16					
Above 23 N $=4$					
Year of study	// - // /->				
Year 1 N= 443	2.52 (1.24) (2)	2.63 (.72) (1)	2.40 (.70) (3)	1.76 (.67) (4)	
Year 2 N= 369	2.47 (1.17) (2)	2.64 (.67) (1)	2.44 (.65) (3)	1.81 (.74) (4)	
<i>t</i> -test results	t=643, $df=$	t = .193, df = 814,	t = .829,	t = 1.102,	
	814, <i>p</i> = .521	p = .847	df=814 , $p=.408$	df=814 , $p=.271$	
Religion	2 22 (2.4)		2 (72)	1.0.41 (5.5)	
Yes $N=126$	2.39 (.94)	2.64 (.66)	2.473 (.68)	1.841 (.55)	
No N =676	2.52 (1.25)	2.630 (.70)	2.409 (.68)	1.769 (.72)	
<i>t</i> -test results	t = -1.368	t = .099	<i>t</i> = .981	t = 1.294	
	<i>df</i> =215.469	df = 800	df = 800	<i>df</i> =215.405	
	p = .173	p = .921	p = .327	<i>p</i> =.197	
Prior CSR experience	0.55 (1.01) (0)	0.50(.00)(1)	2 44 ((2) (2)	176(60)(4)	
Yes $(N = 103)$	2.55 (1.31) (2)	2.58 (.69) (1)	2.44 (.62) (3)	1./6(.68)(4)	
No $(N = 714)$	2.50 (1.19) (2)	2.64 (.69) (1)	2.42 (.69) (3)	1.79 (.71) (4)	

Table 2: Means (standard deviation) of Student's CSRO by Demographic Variables

<i>t</i> - test results	t =446, df	<i>t</i> = .811, <i>df</i> =815	<i>t</i> =272, <i>df</i> =815	t =378, df =
	=815	<i>p</i> = .418	<i>p</i> = .786	815
	<i>p</i> = .655			p = .706

4. Discussion

The first purpose of this study is to examine the psychometric properties of the measurement scale C-CSRO in a group of Chinese non-business students. EFA results indicated C-CSRO loaded on four distinct constructs of Economic, Legal, Ethical and Discretionary, showing the existence of a factor structure similar to its host scale E-CSRO (Aupperle, 1982; Aupperle, Hatfield & Carroll, 1983), and when C-CSRO was applied to business students (Wong, 2017). Outcome of CFA showed this specific set of sample data has acceptable model fit with the hypothesized C-CSRO model and possible explanations were elucidated. Overall, similar factor structure and psychometric properties of C-CSRO are supported in the non-business student group. This laid the foundation of its usefulness in fulfilling the second research objective i.e. to measure the CSRO of the non-business students in relation to specific demographic variables.

ANOVA results showed the programme stream variable has significant effects on the Economic (F = 5.788, p = .003) and Discretionary (F = 9.875, p = .000) dimensions. Students from the Science & Technology (S&T) stream exerted greater emphasis on Economic when compared to both the Applied Social Sciences (ASS) (p = .007) and Language & Communications (L&C) (p = .029) students. ASS students gave greater endorsement on Discretionary when compared to the S&T (p = .000) and L&C streams (p = .040). No significant differences were found among the three streams of students in the Legal (F =2.492, p = .083) and Ethical (F = .763, p = .466) dimensions. S&T students were more economically driven and ASS students upheld the importance of corporate philanthropy more clearly than the others. In fact academic discipline tends to attract students of certain attributes (Coate & Frey, 2000) and students of different disciplines would exhibit different level of sensitivity to social responsibility (Elias, 2004; Wang & Juslin, 2012), thus explaining why it can be a moderating variable to one's CSRO (Leveson & Joiner, 2014). Nevertheless in view of the large range of programmes involved in this study, more comprehensive investigation is needed before decisive conclusion about the relationship between programme disciplines and CSRO can be drawn.

Some significant (p < .05) gender effects over CSRO are found. Males attached more importance to the Economic aspect of CSR (p= .000, t = 5.729, mean difference = .478) and less so for Discretionary (p = .000, t = -3.827, mean difference = -.187). This echoed other

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research findings that females tend to put more weight on ethicality and are more CSR sensitive than males (Alonso-Almeida, Fernandez de Navarrete & Rodriguez-Pomeda, 2015; Arli, Bucic, Harris & Lasmono, 2014; Arlow, 1991; Burton & Hegarty, 1999; Fitzpatrick, 2013; Fitzpatrick & Cheng, 2014; Ford & Richardson, 1994; Gonzalez-Rodriguez et al. 2013; Kraft & Singhapakdi, 1995; Lämsä et al., 2008; Leveson & Joiner, 2014).

The vast majority of the participants in this study are 18-23 years old making it less meaningful to conclude any influence from the age factor. With regard to religions, prior studies showed it is positively related to ethicality (Angelidis & Ibrahim, 2004; Hunt & Vitell, 1986; Ibrahim, Howard & Angelidis, 2008; Singhapakdi, Marta, Rallapalli & Rao, 2000), and implicitly we would expect a person with religion emphasize more on the social aspects of CSR, especially the ethical dimensions, than those who do not have any religion. In this study a vast majority of the students do not have a religion and independent samples *t*-test results showed no significant differences between the two groups. Lastly more than 80% of the students did not have prior CSR exposure and about 13% did, again no significant differences were found between them. As far as the particular context of this study goes, seemingly the age, religion and prior CSR experience variables do not appear to exert impact on CSRO.

In terms of ranking by mean score, prior studies showed Economic usually received the highest endorsement while the weakest was on Discretionary (Burton, et al., 2000; Dusuki & Yusof, 2008; Edmondson & Carroll, 1999; Ibrahim & Angeldis, 1995; Pinkston & Carroll, 1996). Besides, CSR is found national culture bound (Gonzalez-Rodriguez, Diaz-Fernandez, Pawlak & Simonetti, 2013; Jamali & Mirshak, 2007; Jones, 1999) and the Chinese group tend to have higher regard for the Economic dimension (Burton et al., 2000; Wong, Long & Elankumaran, 2010). In this study all students are Chinese ethnically, yet new priorities in CSRO emerged. In the overall samples of N=827, ranking of CSRO by mean scores in descending order of importance are: Legal (M= 2.630, s.d. = .694), Economic (M = 2.494, s.d. =1.207), Ethical (M= 2.424, s.d. = .689) and then Discretionary (M= 1.781, s.d. = .703). When CSRO in relation to demographic variables are examined, some interesting trends in the ranking of CSRO are spotted. At programme stream level, in the eyes of S&T students Economic was still the most preferred CSRO, followed by Legal, Ethical and then Discretionary. For ASS and L&C students, they regarded Legal as the most important followed by Ethical, Economic and then Discretionary. Males ranked Economic the first and Legal as second, whereas the female group ranked Legal first followed by Ethical and then Economic. Both the religious and non-religious groups endorsed Legal as the most important

CSRO but the "No" religion group ranked Economic as second whereas the 'Yes' group ranked Ethical as second and Economic as the third important. All in all, in terms of ranking, Legal is gaining in importance and the Economic dimension no longer enjoys an overriding importance in the eyes of this group of Chinese students. More than two decades ago Carroll (1991) opined that "all responsibilities are predicated upon the economic responsibility of the firm, because without it the others would become moot considerations." (p. 41). Seemingly perceptions towards CSR are changing and in the eyes of the younger generation, the Legal dimension is commanding a higher level of importance.

Influences from gender and academic disciplines to CSRO are evident. This carries implications to curriculum design and resource allocation. By knowing such differences, educational endeavours can target for specific needs of different student groups. For example added support and resources to enhance the non-economic aspects of CSR education can be included to the S&T programmes where usually there are a higher percentage of male students.

5. Conclusion

Since non-business students can be future decision-makers of their own professions, their CSRO can affect how certain businesses approach CSR, hence understanding their perception of CSR and finding a way to gauge such perception is crucial. This study adopted a Chinese measurement scale C-CSRO to assess a group of Chinese non-business students' CSRO. The scale was translated from the English version of E-CSRO. And E-CSRO was originated by Aupperle (1982) by using the four CSRO constructs proposed by Carroll (1979, 1991). Overall results have enriched empirical evidence on the usability and credence of C-CSRO within this particular Chinese community.

There are a number of avenues for future research. This study only attempt to examine relationship between CSRO and some basic demographic variables. Possible influence on CSRO by personal attributes such as academic majors and gender was established. Other attitudinal attributes e.g. personal ethicality, however, is also worth investigating. This illuminates the possibility to explore for more contextualized design of CSR education to specific student groups so as to generate higher impact outcome. Within the huge and geographically dispersed Chinese student population, this study only opens up some understanding of a small segment of Chinese students in Hong Kong. Though the usefulness of C-CSRO in a non-business Chinese student group is furthered here, to ensure the

universality of C-CSRO in the Chinese groups, other tests on Chinese students outside Hong Kong such as the Mainland, do have research value. Dhiman (2008) has rightly pointed out that education is a place where we induce change; we no longer can afford to leave the training of socially responsible business professionals to chance. To achieve this end, effective educational means and strategy is much warranted. To enhance the robustness of C-CSRO, measurement invariance of C-CSRO using cross group CFA is suggested. With a reliable and valid measurement scale to evaluate a person's CSRO, this would enable us to identify effective educational interventions ultimately.

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