

Validation of the Measurement Scale and the Vocational Orientation Model Developed in Hong Kong

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Recent research has advanced our understanding of the vocational orientation model applicable to Hong Kong. This study continues this line of research in validating a locally developed measure of vocational orientations in an university ($n = 325$) and an employee ($n = 150$) sample. The consequences of matching employees' vocational orientations and job nature on job satisfaction and turnover intention are also examined. Results provided strong support for the reliability and validity of the locally developed measure and the applicability of the model suggested by recent research. Implications of vocational education, career guidance and future research in Hong Kong are discussed.

Key words: vocational orientation; career interest; WCIAQ

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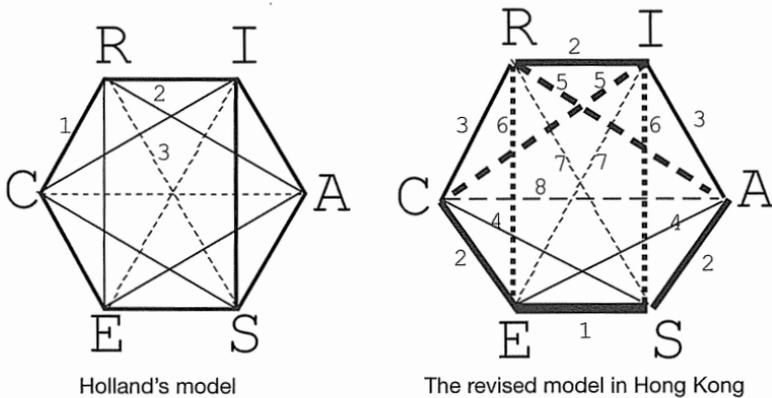
In the past few years, some local researchers have begun to test the appropriateness of western developed models of vocational orientations for university (Law, Wong, & Leong, 2001; Farh, Leong, & Law, 1997) and secondary students (Wong & Wong, 2001). These studies provide evidence that these models may need some modifications in Hong Kong. The Career Advisory Service of the Labor Department of the Hong Kong Special Administrative Region has developed a measurement scale of vocational orientation, the Wong's Career Interest Assessment Questionnaire (WCIAQ) for secondary students in Hong Kong (Wong & Wong, 2000). This study continues this line of research in three aspects. First, we validated the locally developed measurement scale on two samples, i.e., 325 university students and 150 full time employees. Second, we examined the appropriateness of the modified model of vocational orientation suggested by recent studies on these two Hong Kong samples. Third, we tested the consequences of matching the employees' vocational orientations and job nature on employees' job satisfaction and turnover intention. In the following paragraphs, we will first summarize recent research efforts in Hong Kong. Then we will report two studies designed to investigate the above three aspects. Finally, we will conclude this study by discussing the implications for vocational education, career guidance and future research in Hong Kong.

Model of Vocational Orientations for Hong Kong

There has been continuous interest in studying vocational orientations in Western countries. Since the pioneering work of Strong (1943), Holland's model of vocational choice (Holland, 1959, 1985) has been one of the most widely chosen models used to describe individual's vocational interests (Borgen, 1986; Brown & Brooks, 1990). This model prescribes career interests in six different dimensions (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional, or in short form, RIASEC). The basic argument in Holland's theory is that "people search for environments that will let them exercise their skills and abilities, express their attitudes and

values, and take on agreeable problems and roles” (Holland, 1985, p. 4). Consequently, realistic types seek realistic environments, social types seek social environments, and so forth. Another important specification of the model is the concept of calculus (later referred to as the circular order model), which specifies the relationship within and between types or environments. It is argued in the calculus assumption that the six vocational orientation types can be ordered according to a hexagonal model in which the distances between the types are inversely proportional to the theoretical relationships between them. Based on this calculus concept, the six vocational orientation types lie on the vertices of a hexagon as shown in the left-hand-side of Figure 1.

Figure 1 The two-group model as compared with Holland's model



Note. Lines with the same width and shape mean that the correlations between the two sets of personality dimensions are the same; the smaller the number, the greater is the correlation.

Holland's six-dimension model of vocational choice has gained substantial empirical support, both for American and other samples around the world (see e.g., the summary chapter in Holland, 1985; Tay, 1997). Concerning the typology of career orientations, these studies provided encouraging results confirming the six dimensions proposed by Holland's model. However, there is an ongoing debate on the validity of the calculus

assumption of Holland's model, especially on its validity in other cultures (see e.g., the summary in Rounds & Tracey, 1996). Empirically, Rounds and Tracey (1996), after studying 20 U.S. ethnic matrices, 76 international matrices representing 18 countries and a U.S. benchmark sample of 73 matrices, concluded that Holland's circular order model was not supported.

In recent years, Hong Kong researchers have tested Holland's vocational orientation model in Hong Kong. Using a large university student sample, Farh, Leong and Law (1997) found out that Holland's classification of vocational orientations is applicable to Hong Kong, but the circular order relationships among the six dimensions did not receive much support. In a more recent study, Law, Wong and Leong (2001) argued that due to the specific cultural environment in Hong Kong, Holland's model needed some modifications. After considering the specific educational and social environment in Hong Kong, they proposed a revised two-group model. This model is shown in the right-hand side of Figure 1. There are two major differences between this revised model and Holland's original model. First, Realistic and Investigative type of vocational orientations would be less related to the other four types. Second, the relationship between the Social and Enterprising types of vocational orientations would be particularly strong.

Empirically, Law et al. (2001) tested this revised two-group model against Holland's model in two university student samples in Hong Kong. They found out that (1) the six-dimension classification of vocational orientations was appropriate for these samples, and (2) the revised two-group model significantly improved the description concerning the relationships among the six types of vocational orientations. The applicability of this revised two-group model to secondary students in Hong Kong also received empirical support in a large sample investigation (Wong & Wong, 2001).

Vocational Orientation Measure Developed in Hong Kong

Another line of recent research effort in Hong Kong is to develop a local

measure of vocational orientations. The major motive of this effort is to provide a free-of-charge instrument for non-profit making career counselors in Hong Kong. On behalf of the Career Advisory Service of the Labor Department, Wong and Wong (2000) developed the WCIAQ from three secondary student samples. In the first sample, 16 secondary students from four schools with different backgrounds were asked to perform two tasks. In the first task, they listed academic and extracurricular activities that (1) they frequently engaged and (2) they could perform better than their classmates. These activities were then sorted into the six vocational orientations. In the second task, selected jobs from Holland's occupation list were presented to these students and they were asked to indicate those that they knew about. From these two tasks, a total of 84 items were generated.

In the second sample, 348 secondary students from one school responded to the 84 items and some criterion variables. Using factor analysis and the relationships with the criterion variables, 72 items were selected. These selected items were cross-validated on the third sample of 369 secondary students from another school. Thus, the WCIAQ consisted of 72 items with 12 items measuring each vocational orientation. Although the validation sample shows evidence for acceptable reliability, and convergent and discriminant validity for the WCIAQ, whether the evidence is generalizable to samples other than secondary students remains an empirical question to be answered.

Purpose of the Present Study

The purpose of this study is to further advance our understanding of vocational orientation in Hong Kong. Specifically, there are three objectives. First, we attempt to validate the WCIAQ on university students and full time employees in Hong Kong. Second, we will validate the two-group vocational orientation model with this locally developed measure on these university student and full time employee samples. Third, vocational

orientation model will be useful only if it is actually related to important job outcomes. Thus, we will test the consequences of matching employees' vocational orientation and job nature on job satisfaction and turnover intention. By fulfilling these objectives, we believe sufficient empirical evidence should have been collected to warrant the use of the WCIAQ on Hong Kong students and employees.

Study 1: University Student Sample

Method

Sample. Participants were 325 students of a large university in Hong Kong. They came from various faculties including 50.2% Business Administration, 14.6% Social Sciences, 13.0% Engineering, 11.1% Sciences, 7.4% Arts, 2.2% Education, and 1.5% Medicine. They were invited to complete a questionnaire and received a fee of HK\$50 for their time and effort.

Measures. The six types of vocational orientations were measured by the 72-item WCIAQ. To examine its convergence with existing measures, we randomly selected 20 items (i.e., five items for each type of vocational orientation) from two well-researched measures, the Unisex Edition of the ACT Career Interest Inventory (UNIACT) (Swaney, 1995) and the Self-Directed Search (SDS) scale (Holland, 1979). All these items were measured by a 4-point Likert-type scale. To examine its discriminant validity, we asked the students to report their Hong Kong Certificate Education Examination (HKCEE) results on their Chinese, English, Mathematics, and the other three best subjects. Conceptually, students' academic performance of specific subjects may be related to some specific types of interests. For example, students good in language expression may be more likely to be interested in interaction with others and thus have stronger Social type of vocational orientation. However, as an overall measure of students' academic proficiency across various subjects, results of the overall HKCEE should have relatively small relationships with each of their specific voca-

tional orientations. Thus, we used the average score of the six subjects as a measure of participants' overall academic proficiency.

Analyses. Reliability of the WCIAQ was examined by the coefficient alphas of the items for each type of vocational orientation. The appropriateness of the factor structure was examined by Confirmatory Factor Analysis (CFA) with the Linear Structural Relationships (LISREL) program (Jöreskog & Sörbom, 1993). Because the WCIAQ has 12 items to measure each of the six vocational orientations, there will be too many indicators if each item is used as an indicator of a latent construct. As a minimum of three indicators for each construct is recommended by structural equation modelling researchers (e.g., Bollen, 1989), we randomly grouped four items within a vocational orientation type together and used their averages as indicators of the latent constructs. To double check the results of this procedure of reducing the number of indicators, we also used another recommended approach by researchers (e.g., Mathieu, Hofmann, & Farr, 1993) to reduce the number of indicators. Specifically, exploratory factor analyses for the items of each vocational orientation were conducted. We then combined the items with the highest and the lowest loading by averaging until we yield three aggregated items. Hence, the items with the highest and the lowest loadings were averaged to form a first new indicator, and the items with the next highest and the next lowest loadings were averaged to form the second new indicator, etc. As results of this latter approach are similar to the former one, we only reported results of the former approach in the following discussion. Convergent and discriminant validities were examined by their relationships with the UNIACT and SDS items, and HKCEE respectively.

Finally, the revised two-group model was tested against Holland's original model by the method described by Rounds, Tracey, and Hubert (1992). They suggested that one could test the circular order model of Holland's six vocational orientation types using the confirmatory factor analysis. This means constraining some of the reproduced covariances to fit into the hypothesized structure. The resulting goodness of fit indices can be used to assess whether the hypothesized restrictions or structure can be imposed on

the observed covariance structure of the six vocational orientation types. Holland's model specifies that the six vocational orientation types are arranged in a fixed circular order and relate to each other in the shape of a hexagon (i.e., the left-hand-side model in Figure 1). Thus, only three parameters have to be estimated in CFA, i.e., the correlations labeled as 1, 2, and 3 in Figure 1. All the correlations labeled by the same number (i.e., 1, 2, or 3) are constrained to be equal. In contrast, the revised two-group model specified that while the six vocational orientation types still exhibit a hexagonal relationship, this hexagonal relationship will be distorted as shown in the right-hand-side model in Figure 1. Eight parameters have to be estimated in CFA for this model, i.e., the correlations labeled from 1 to 8. Again, all the correlations labeled by the same number are constrained to be equal. This model is nested with Holland's model because it relaxes some of the constraints of Holland's model (e.g., not all the adjacent correlations have to be equal) and thus the formal procedure of nested model testing can be used to compare the two models (Anderson & Gerbing, 1988; Bollen, 1989). In other words, the χ^2 statistics of the two models can be compared to perform a formal statistical test to see which model better explain the data collected. Law, et al. (2001) has a detailed description of this nested model testing procedure. Interested readers may refer to their description.

Results

Reliability of the WCIAQ. Reliability coefficients, descriptive statistics and correlation coefficients among all the measures are shown in Table 1. The WCIAQ has acceptable internal consistency reliability. They are .85, .86, .70, .79, .79, and .67 for the Realistic, Investigative, Artistic, Social, Enterprising, and Conventional types of vocational orientation, respectively.

Convergent and discriminant validities of the WCIAQ. As shown in Table 1, the WCIAQ has good convergence with the selected items from UNIACT and SDS. With one exception (i.e., the correlation between Realistic and Investigative type of vocational orientation measured by WCIAQ

Table 1 Descriptive Statistics and Correlations among the Measures in Study 1

	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12
1. Realistic	2.26 (.54)	(.85)											
2. Investigative	2.62 (.55)	.51	(.86)										
3. Artistic	2.77 (.40)	-.06	.01	(.70)									
4. Social	2.77 (.40)	-.18	-.11	.23	(.79)								
5. Enterprising	2.60 (.42)	.09	.08	.26	.31	(.79)							
6. Conventional	2.41 (.39)	.28	.18	.14	.12	.33	(.67)						
7. R-W	2.06 (.49)	.41	.23	.14	.07	.13	.26	(.66)					
8. I-W	2.20 (.60)	.33	.71	.04	-.03	.08	.09	.27	(.81)				
9. A-W	2.09 (.53)	-.04	-.08	.59	.20	.29	.14	.17	.02	(.71)			
10. S-W	2.31 (.44)	-.16	-.10	.10	.51	.33	.09	.12	-.03	.15	(.69)		
11. E-W	2.23 (.48)	-.05	-.10	.11	.20	.55	.18	.11	-.02	.21	.40	(.73)	
12. C-W	1.84 (.60)	.24	.13	.17	-.00	.18	.36	.14	.08	-.06	.10	.25	(.84)
13. HKCEE	3.92 (.54)	-.11	.06	-.06	-.02	-.06	-.01	-.11	.05	-.11	.07	-.06	.03

Note. $n = 325$; The first six variables are the WCI AQ measures, while the next six variables (i.e., R-W, I-W, A-W, S-W, E-W, and C-W) are the vocational orientation items from the UNI A CT and the SDS

which is .51), the convergent correlations are the largest coefficients reported in Table 1. They are .41, .71, .59, .51, .55, and .36, respectively for Realistic, Investigative, Artistic, Social, Enterprising, and Conventional types of vocational orientation. For discriminant validity, the correlation coefficients between the six types of vocational orientation and HKCEE are quite small as expected. They range from -.11 to .11. Thus, the WCIAQ shows acceptable reliability, and convergent and discriminant validities in this university student sample.

Factor structure of the WCIAQ. Results of the CFA with three indicators for each type of vocational orientation show good fit for the six factor model ($\chi^2 = 294.4$, $df = 120$, GFI = .91, CFI = .92, RMR = .015).

Testing the revised two-group model against Holland's model. Results of the nested model testing are shown in Table 2. The change in χ^2 from Holland's model to the revised two-group model is statistically significant (i.e., 30.01, $df = 4$, $p < .01$). Thus, the two-group model fit the data better than the Holland's model.

Table 2 Results of CFA Analyses Comparing Holland's and the Two-group Model

	χ^2	df	Changes in χ^2	GFI	CFI	RMR
Study 1						
Holland's Model	100.47	12	—	.90	.62	.031
Two-group Model	70.46	8	30.01**	.93	.73	.030
Study 2						
Holland's Model	76.50	12	—	.87	.55	.038
Two-group Model	66.09	8	10.41*	.89	.60	.037

* $p < .05$; ** $p < .01$

Study 2: Employee Sample

Method

Sample and procedure. Participants were 150 full time employees participating in three part-time training programs offered by a large university in

Hong Kong. They came from major sectors of the economy in Hong Kong including 20.0% banking and finance, 18.7% retailing and wholesaling, 17.3% hospitality, 12.7% public utilities, 12.0% telecommunication, 8.0% accounting, 6.0% manufacturing, 3.3% social services and 2.0% education. The average age was 32.98 with standard deviation of 8.49. 54.9% of the sample were male and 51.1% were single. Before completing the WCIAQ and other measurement items, participants were briefed about the characteristics of job duties that can be classified as Realistic, Investigative, Artistic, Social, Enterprising or Conventional. They were asked to evaluate their own jobs and rank the relative frequency (i.e., from 1 to 6) that they need to perform these duties in their jobs.

Measures. The six types of vocational orientations were measured by the 72-item WCIAQ. To examine the discriminant validity, we asked the participants to report their education level in a multiple-choice item (1 = no formal education up to 7 = university degree or above). Conceptually, vocational orientation is an interest measure which should have little relationship with education level. For job satisfaction and turnover intention, we adopted two widely established and validated measures in the management literature. Job satisfaction was measured by the four items of the Job Diagnostic Survey (Hackman & Oldham, 1975). Coefficient alpha is .82 for this sample. Turnover intention was measured by the three items adopted and modified from the Michigan Organizational Assessment Questionnaire (Cammann, Fichman, Jenkins, & Klesh, 1979). Coefficient alpha is .85 for this sample. The response format for job satisfaction and turnover intention items was 7-point Likert-type scale.

Analyses. Reliability of the WCIAQ was examined by the coefficient alphas of the items for each type of vocational orientation. Similar to Study 1, the appropriateness of the factor structure was examined by CFA and we formed three indicators for each vocational orientation by two different methods. Discriminant validity was examined by the relationships between

the six types of vocational orientation and educational level. The revised two-group model was tested against Holland's original model by the nested model testing procedure.

Finally, the consequences of matching one's vocational orientation and the job requirement on job satisfaction and turnover intention were tested according to the two-group model. Two dichotomous variables were created. First, the jobs of the participants were classified by comparing the mean ranking of Realistic and Investigative types of duties and the mean ranking of the other four types of job duties. If the former was smaller, it meant that Realistic and Investigative types of job duties were more frequently performed by participants. For example, if the participant ranked the relative frequencies of Realistic and Investigative types of duties as 2 and 3 (i.e., for the other four types are 1, 4, 5, and 6), it indicates that they need to perform more frequently for these two types of duties because the mean rating is 2.5 (mean of 2 and 3), while the mean rating of the other four types of duties is 4.0 (mean of 1, 4, 5, and 6). Second, participants were classified by comparing their mean score on the Realistic and Investigative types of vocational orientation and the mean of the other four types. If the former mean score was larger, it meant that the participant had stronger interest towards Realistic and Investigative types of jobs. For example, if the participant's vocational orientation ratings are 3.0, 3.5, 2.5, 3.0, 2.0, 2.5, respectively for Realistic, Investigative, Artistic, Social, Enterprising, and Conventional, s/he should have stronger interests towards Realistic and Investigative types of jobs because the mean for these two vocational orientations is 3.25 (mean of 3.0 and 3.5) while the mean for the other four vocational orientations is only 2.5 (mean of 2.5, 3.0, 2.0, and 2.5). From these two variables, a 2 x 2 tables could be constructed and we could judge whether the participants' vocational orientation matched with their job duties. We then conducted *t* tests on the two groups (i.e., matched versus non-matched) to examine their differences in job satisfaction and turnover intention levels.

Results

Reliability of the WCIAQ. Reliability coefficients, descriptive statistics and correlation coefficients among all the measures are shown in Table 3. The WCIAQ has acceptable internal consistency reliability. They are .85, .87, .80, .88, .80, and .64 for the Realistic, Investigative, Artistic, Social, Enterprising, and Conventional types of vocational orientation, respectively.

Table 3 Descriptive Statistics and Correlations among the Measures in Study 2

	M (SD)	1	2	3	4	5	6	7	8
1. Realistic	2.24 (.53)	(.85)							
2. Investigative	2.66 (.51)	.48	(.87)						
3. Artistic	2.61 (.46)	-.02	-.01	(.80)					
4. Social	2.82 (.46)	-.35	-.07	.14	(.88)				
5. Enterprising	2.52 (.41)	-.01	.05	.25	.53	(.80)			
6. Conventional	2.31 (.35)	.40	.29	.08	-.02	.12	(.64)		
7. Job satisfaction	4.69 (1.19)	.16	.07	.05	.12	.31	.14	(.82)	
8. Turnover intention	3.44 (1.68)	-.08	-.02	.06	-.11	-.25	-.12	-.72	(.85)
9. Education level	5.19 (1.02)	.08	.15	-.16	.00	.04	-.04	.23	-.10

$n = 150$

Discriminant validity and factor structure of the WCIAQ. As shown in Table 3, the WCIAQ has good discriminant validity because the correlation coefficients between the six types of vocational orientation and educational level are quite small as expected. They range from -.16 to .15. Results of the CFA with three indicators for each type of vocational orientation show good fit for the six factor model ($\chi^2 = 173.5$, $df = 120$, GFI = .89, CFI = .96, RMR = .017).

Testing the revised two-group model against Holland's model. Results of the nested model testing are shown in Table 2. The change in χ^2 from Holland's model to the revised two-group model is statistically significant (i.e., 10.41, $df = 4$, $p < .05$). Thus, the two-group model fit the data better than the Holland's model.

Consequences of matching on job satisfaction and turnover intention. Results of the matching classification and *t* tests are shown in Table 4. As shown in Table 4a, 134 participants could be classified into four groups. The other 16 participants could not be classified because their mean ranking on the Realistic and Investigative types of job duties was exactly the same as the mean ranking of the other four types. Out of the 134 participants, the vocational orientation of 117 (i.e., 87.3%) matched with their job duties according to the two-group model. As shown in Table 4b, this matched group had higher level of job satisfaction ($t = 2.22, p < .05$) and lower level on turnover intention ($t = -2.04, p < .05$). This provided support for the predictive utility of the two-group model for matching one's vocational orientation with the job duties.

Table 4 Results of the Consequences on Matching

a. Matched versus Non-Matched Group

Vocational Orientation	Frequencies in Performing Job Duties		
	More realistic and investigative duties	Less realistic and investigative duties	Total
Stronger in realistic and investigative types	47	6	53
Weaker in realistic and investigative types	11	70	81
Total	58	76	134

b. *t* tests in Study 2

	Matched Group (<i>n</i> = 117)	Non-Matched Group (<i>n</i> = 17)	Difference in means
Job satisfaction	<i>M</i> = 4.74 (<i>SD</i> = 1.21)	<i>M</i> = 4.13 (<i>SD</i> = 1.02)	0.61* (<i>t</i> value = 2.22)
Turnover intention	<i>M</i> = 3.37 (<i>SD</i> = 1.67)	<i>M</i> = 4.25 (<i>SD</i> = 1.75)	0.88* (<i>t</i> value = -2.04)

* $p < .05$

Discussion

In this study, we have further validated the WCIAQ measure and the two-group vocational orientation model for Hong Kong. Results indicate that Holland's widely accepted classification system is applicable not only to secondary students, but also to university students and full-time employees

in Hong Kong. Furthermore, the revised two-group model appears to be a more appropriate description of the relationships among various types of vocational orientations than the original Holland's model for both students and full time employees. Results also indicate that this model has predictive utility on full time employees' job satisfaction and turnover intention levels.

We believe results of this study have both research and practical implications to Hong Kong. For career counseling research, the revised two-group model can be used as a base for future career counseling research in Hong Kong. Firstly, future research may follow this line of research and develop statistics of comparison groups with different characteristics and backgrounds by the WCIAQ. These may be important information for career counselors to understand the characteristics of Hong Kong people so that better counseling service can be provided.

Secondly, future research may be conducted to examine the process in which people develop their vocational orientations. Results of this study have provided evidence for the potential benefit of matching people's vocational orientation and their job duties. The vast majority of participants in study 2 were found to have a good match between their vocational orientation and job duties. This may due to self-selection and organizational selection mechanisms as Hong Kong adopts a free employment market policy. However, it is also possible that some of the participants in Study 2 developed their interests after they chose their jobs. Thus, it is worthwhile to investigate whether it is possible to develop one's interests to fit some of the job duties. Realistically, some people may not be able to find jobs that match their vocational orientation during the job searching process. If it is possible for them to gradually develop interests in their jobs, the developmental process is as important as matching their vocational orientation in the first place. Future research may be conducted to examine how people could develop more diversified types of career interests.

For practical implications, the six dimensions of vocational orientations and their relationships found in this study can be used as career counseling

materials not only for young but also older people in Hong Kong. As more and more people in the workforce have to change their jobs due to the re-structure of the economy, providing career service to these people is becoming more and more important. As a locally developed measure, the WCIAQ may be used as a good starting point of the counseling process. Since the major motive of the development of WCIAQ is to provide a free-of-charge instrument for non-profit making career counselling education and services in Hong Kong, interested readers may contact the authors for a free copy of WCIAQ.

Secondly, the classification system and the revised two-group model may be included in the formal syllabus for junior or senior secondary education. Education reform appears to be inevitable in Hong Kong and a major direction of the reform is to provide an education system in which our students will be inspired and equipped for lifelong learning and all-round development. Along this direction, it is essential to provide our students with broader and more practical basis of knowledge that will enable them to make better choices concerning their education and training opportunities. Results of this study have further developed our knowledge about the vocational orientations of Hong Kong secondary people. This type of knowledge should be useful for the development of school-based curricula, career counseling and assessment of vocational orientations in Hong Kong.

Thirdly, together with the previous efforts by other local researchers, we believe we have gathered sufficient evidence for the validity of the revised two-group model over Holland's original model in Hong Kong. This revision provides important implication for Hong Kong career counsellors. For example, according to Holland's original model, people with strong Investigative orientation may have relatively little trouble in performing Artistic types of duties. However, according to the revised two-group model, this miss-match is in fact quite large for Hong Kong people. The Hong Kong career counsellor should thus provide different advice according to the revised two-group model.

Finally, for various post-secondary education programs, applicants' vocational orientation may be employed as a useful selection criterion. For example, instead of using academic proficiency, students' interest in Social type of duties may be used as an important selection criterion for health care and social wealth related programs. Similarly, although the classification of the main duties of the jobs are based solely on the participants' self-ranking, results of this study may have provided some preliminary evidence concerning the impact of matching Hong Kong employees' vocational orientations on their job satisfaction and turnover intention. Results indicate that the matching group is about half a standard deviation better in their job satisfaction and turnover intention than the non-matching group. Thus, if further validated by future studies, Hong Kong employers may make use of the knowledge about vocational orientations to make better selection and training decisions.

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