An Exploratory Study on the Relationship between Parents' Career Interests and

the Career Interests of Young Adults

Chi-Sum Wong Department of Management The Chinese University of Hong Kong Shatin, N.T., HONG KONG Telephone: (852)2609-7794 FAX: (852) 2603-6840 Email: cswong@baf.msmail.cuhk.edu.hk

Ping-Man Wong Department of Educational Policy and Administration Hong Kong Institute of Education Tai Po, N.T., HONG KONG Telephone: (852) 2948-7637 FAX: (852) 2948-7619 Email: pmwong@ied.edu.hk

> Kelly Z. Peng Department of Business Administration Hong Kong Shue Yan University North Point, Hong Kong

Accepted by International for Journal of Educational and Vocational Guidance, January 18, 2011.

An Exploratory Study on the Relationship between Parents' Career Interests and the Career Interests of Young Adults

Abstract

This study attempts to investigate the potential effects of parents' career interests on young adults' career interests. Using a sample of 113 freshmen in Hong Kong, results indicate that after controlling for personality, gender, general mental abilities and emotional intelligence, some of the parents' career interests are still related to the freshmen's respective career interests. For some types of interests, the extent of influences is found to be contingent on the gender of the respondents. Implications are discussed.

Key Words: Career Interests, Parental Guidance, Personality, Emotional Intelligence

An Exploratory Study on the Relationship between Parents' Career Interests and the Career Interests of Young Adults

The role of familial influences on career development has been well recognized in the literature (e.g., Bradley & Mims, 1992; Hagen, 1960; Herr & Lear, 1984; Peluchette, 1993). However, parental involvement during the career counseling process is basically neglected in past studies (Zingaro, 1983), and the focus of the literature is usually on the ultimate career decisions instead of the development of career interests. This study attempts to investigate the potential effects of parents' career interests on young adults' career interests. In the following paragraphs, we briefly review the literature reporting the effects of personal characteristics and familial influences on career development. Then we will propose our research question concerning the potential relationship between parents' and young adults' career interests. After reporting an empirical study designed to explore this relationship, implications are discussed.

Personal Characteristics and Career-Related Variables

The extant literature suggests that personal characteristics such as personality traits and gender will affect young adults' career development (Guerra & Braungart, 1999). To study potential parental influences on young adults' career-related variables, these personal characteristics must be controlled so that the results will not be confounded.

While there are different perspectives concerning the definition of personality, personality may be defined briefly as certain relatively stable traits that influence how people think, feel, and behave across different situations. Personality is based on genetics and environmental factors. However, it is usually believed that one's basic personality would be developed during early years of life and once developed, it is relatively stable. We adopt the Five-Factor Model of personality classification developed by Costa and McCrae (1992) because it is theoretically driven and widely researched (Rossier, 2005). The five traits are Neuroticism (tendency to experience negative emotions and moods, and be critical of oneself and others), Agreeableness (tendency to get along well with others), Openness to new experiences (the tendency to be original, be open to a wide range of stimuli, and willing to take risks), Extraversion (tendency to be sociable, affectionate, outgoing and friendly), and Conscientiousness (the tendency to be careful, scrupulous and preserving).

The Five-Factor stable traits may affect people's development of interests. For example, more agreeable people may engage in more social activities and thus having a greater chance to develop interests towards this type of activities. To systematically examine the relationship between the Five-Factor traits and career-relevant activities, we use the Holland's classification of occupational activities (Holland, 1959). According to Holland's (1997) classification, there are six major types of career activities. They are Realistic (working on concrete objects such as operating machines), Investigative (using abstract thinking and logical deductions to find out solutions such as writing computer programs), Artistic (expressing the inner emotions and feelings through various ways such as writing, singing, dancing and acting), Social (interacting with other people such as presenting, negotiating and counseling), Enterprising (managerial activities which involve planning, organizing, leading and controlling), and Conventional (following instructions and guidelines to prepare outputs such as filing and drafting financial statements). The relationships among the Five-Factor personality traits and six types of career interests have been examined in numerous studies. These findings have been consolidated in two meta-analyses

(Barrick, Mount & Gupta, 2003; Larson, Rottinghuas & Borgen, 2002). In these meta-analyses, the strongest associations were found for Openness with Artistic, Investigative and Social, and for Extraversion with Enterprising and Social. Associations are also found between Agreeableness and Social, between Conscientiousness and Enterprising and Conventional, and between Neuroticism and Enterprising.

Gender is one of the major influences on the development of career interests and choices (Lent, Brown & Hackett, 1994). In a recent meta-analysis, Su, Rounds and Armstrong (2009) concluded that men showed stronger preferences for Realistic and Investigative Jobs, while women had stronger preferences for Conventional, Social, and Artistic occupations.

Apart from personality traits and gender, abilities may be another type of important personal variables that may affect the development of young adults' career interests. Self-efficacy for a particular type of activities is certainly an important determinant of interest (Lent et al., 1994). However, for children and adolescences, it may be more important to understand why they will develop self-efficacy towards different types of activities. Some generic types of abilities may have important impact on whether children and adolescences can master different types of activities. The two generic abilities that have received much research attention are general mental abilities (GMA; e.g., Herrnstein & Murray, 1994; Jacoby & Glanberman, 1995) and emotional intelligence (e.g., Wong & Law, 2002; Wong, Foo, Wang & Wong, 2007). GMA is mostly about abilities related to abstract thinking and reasoning. Thus, it is expected to have a positive impact on the interests of investigative activities. In short, to study the potential parental influences on young adults' career-related variables, it is necessary to control the effects of their personality, gender, GMA and emotional intelligence.

Familial Influences on Career-Related Variables

While familial influences on young adults' career development have been well recognized by scholars, the conceptualization of these influences differs among studies. Some studies have concentrated on objective variables such as birth order and family system on various career-related variables (e.g., Bradley & Mins, 1992; Leong, Goh & Gaylor, 2001). Other scholars extended the objective variables into more abstract psychological concepts such as family cohesion (Johnson, Buboltz & Nichols, 1999), psychological separation and parental attachment (Blustein, Walbridge, Friedlander & Palladino, 1991), and parental acceptance and encouragement of independence (Guerra & Braungart-Rieker, 1999). Based on these earlier investigations, later studies have concentrated on more abstract concepts of family environment and found supports for the impact of family environment on young adults' career-related variables (e.g., Hargorove, Creagh & Burgess, 2002; Hargrove, Inman & Crane, 2005; Lee, Choe, Kim & Ngo, 2000; Ma & Yeh, 2005; Moos & Moos, 1986; Whiston, 1996). Thus, clear evidence has been reported concerning familial influences on the career-related variables of young adults.

There are at least two limitations in the extant literature concerning the impact of familial influences on career development. Firstly, although the focus of these studies is on familial influences, little efforts have been devoted to parent education concerning how parents can help young adults in their career-related issues. Secondly, most studies investigate the effects of familial influences on variables related to career decisions such as career certainty, career decision-making self-efficacy, commitment to career choices and vocational identity. While these variables may be the ultimate outcomes of concern in career counseling, they contain little information about the process through which young adults gradually develop these outcomes. To study this developmental process, some intermediate career-related variables that will affect career decision have to be investigated.

As the first step to address the above two limitations, career interests may be an important intermediate variable that helps provide more concrete recommendations to parents because of several reasons. First, career interests should be an important determinant of variables related to career decisions. By its definition, career interests are "patterns of likes, dislikes, and indifferences regarding career-relevant activities and occupations" (Hansen, 1984). While not explicitly stated, interests should be free from extrinsic rewards. That is, regardless of the associated rewards, interests refer to the extent to which one can gain enjoyment simply by engaging in the relevant activities. As such, past studies have demonstrated that when people occupy job positions with activities that match their interests, the resulting job outcomes such as job satisfaction will be more favorable (e.g., Holland, 1997, Wong & Wong, 2002). Furthermore, Lent et al. (1994) argue that self-efficacy and outcome expectations for a particular career activity are the major determinants of respective career interest. Therefore, if a young adult has strong career interest concerning a particular career activity, s/he may be more certain and confident in making career decisions.

Second, using young adults' own career interests to counsel them may be more effective than other reward-based variables such as salary, benefits and career prospects. Finally, career interests are related to concrete activities. To develop the interests towards a particular type of activities, career counselors and parents may provide chances for young people to actually engage in similar activities and help them master these activities to enhance their self-efficacy. Lent et al. (1994, p. 88-89) vividly describe the potential developmental process in the following way:

"Over the course of childhood and adolescence, people's environments expose them to a wide array of activities of potential career relevance. They also observe or hear about others performing various occupational tasks. Not only are they exposed (directly and vicariously) to diverse activities but also they are differentially reinforced for pursuing certain activities from among those that are possible and for achieving satisfactory performance in chosen activities. Through repeated activity engagement, modeling and feedback from important others, children and adolescents refine their skills, develop personal performance standards, form a sense of their efficacy in particular tasks, and acquire certain expectations about the outcomes of their performance."

There are a lot of evidences showing the relationships between adults' career interests and their occupational activities (e.g., Betz, Borgen & Harmon, 2004; Donnay & Borgen, 1996; Hansen & Dik, 2005). Thus, when parents are interested in certain types of activities, they themselves may be more likely to engage in these activities. Their children will therefore have greater chance to be involved. To the very least, their children will have more chances to observe these activities through their parents. Thus, to test whether it is possible for parents to shape the career interests of their children, we attempt to investigate the relationship between parents' and young adults' career interests. If there is a significant relationship after controlling for personal characteristics, it means that it is worthwhile to continue this line of investigation so that more concrete suggestions can be provided to parents. Furthermore, fathers may interact more frequently with sons and thus the relationship between fathers' and sons' career interests may be stronger. Similarly, the relationship between mothers' and daughters' career interests is expected to be stronger. If this is supported empirically, then it will provide more evidences for our assumption that parents' activities could have impact on their children's interest development.

Method

Sample

Research participants are one hundred and thirteen undergraduate freshmen and their parents. Student participants were enrolled in an introductory management course of a large university in Hong Kong. Fifty eight (51.3%) of them are female and 55 (48.7%) are male.

Procedure

During the first lesson of the introductory management course, the instructor invited all the 150 undergraduate freshmen enrolled in the course to participate in this study. One hundred and thirteen accepted the invitation to provide data by themselves and their parents. They were given three questionnaires to be completed by themselves and their parents. HK\$150 (about US\$20) was given to each student who turned in all three questionnaires within a month. All 113 students who agreed to participate returned their questionnaires on time. The student questionnaire includes measures on career interests, personality, emotional intelligence and proxy of general mental abilities and their gender, while the parent questionnaire contains the measure of career interests.

Measures

Career interests. The six types of career interests are measured by Wong's Career Interests Assessment Questionnaire (WCIAQ; Wong & Wong, 2006). Each type of interests is assessed by 12 items on 4-point Likert-type response scale.

Personality. The Five-Factor personality traits are measured by the 80-item adjective scale developed and reported by McCrae and Costa (1987). Each item is assessed by a 7-point Likert-type response scale.

Emotional intelligence. Emotional intelligence is measured by the 40-item

Wong's Emotional Intelligence Scale (WEIS; Wong, Foo, Wang & Wong, 2007; Wong, Wong & Law, 2007). This is a forced choice scale of which each item contains two options and respondents are requested to choose the more appropriate one only. A correct answer for each item will be awarded one mark and thus the score of this scale can range from zero to 40.

Proxy of general mental abilities. All students have to take two public examinations before entering the university in Hong Kong. The first is a comprehensive one of which students are required to take at least six subjects including Chinese and English languages, and mathematics. This is the Hong Kong Certificate Education Examination (HKCEE). For each subject, the grading system is from zero to 5 with 5 representing excellent performance. Thus, the total score of six subjects can range from zero to 30. This score has been used as a proxy of GMA in other studies involving Hong Kong samples (e.g., Wong & Law, 2002; Wong & Wong, 2002).

Control variable. As all participants are freshmen, they have little variances in age. Thus, we only measure their gender by a two-choice item as a controlling variable. Female is coded as zero while male is coded as one.

Insert Table 1 about here.

Results

Coefficient alphas are shown in Table 1 for all the multiple-item measures. Only 5 measures are at the .60 level while the other 19 measures are above the .70 level. Thus, it appears that reliabilities of the measures are acceptable. The potential relationships between gender and career interests are examined by t-tests. Results are shown in Table 2. As expected, male student participants have significant higher scores on Realistic interests and female student participants have higher scores on Artistic interests. However, no significant differences are observed for the other four types of interests in this sample.

Insert Tables 1 and 2 about here.

Descriptive statistics and the correlation coefficients among all measures are shown in Table 1. Since our sample size is only 113, we also report the marginally significance results (i.e., p<.10). Consistent with the meta-analyses on personality and career interests, Openness to new experiences is related to Artistic interests (r = .27, p<.01), Extraversion is related to Social (r = .38, p<.01) and Enterprising interests (r = .22, p<.01), and Neuroticism is related to Enterprising interests (r = .22, p<.05). However, in this sample, Openness is also found to be related to Enterprising interests (r = .28, p<.01), Extraversion is related to Realistic (r = .35, p<.01), Investigative (r = .22, p<.05), Conventional (r = .28, p<.01) and Artistic (r = .24, p<.05) interests, Neuroticism is related to Realistic (r = .24, p<.05) interests, Neuroticism is related to Realistic (r = .22, p<.05) and Investigative (r = .22, p<.05) interests.

For the two ability measures, the proxy of general mental abilities (i.e., HKCEE) is not related to the six types of career interests. Emotional intelligence is positively related to Social interests (r = .16, p<.10), and negatively related to Realistic (r = -.40, p<.01), Investigative (r = -.29, p<.01), Artistic (r = -.17, p<.10) and Conventional (r = -.18, p<.10) interests. It appears that emotional intelligence may have stronger relationship with career interests than GMA.

To test our expectation concerning the relationship between parents' and

students' career interests, we conducted hierarchical regression using each of the six types of career interests as dependent variables. In the first step, we entered the five personality traits, gender and the two ability measures (i.e., emotional intelligence and HKCEE). In the second step, we entered the parents' respective career interests. Results are shown in Table 3. Parents' interests have 6% incremental explanatory power over personality, gender and the two types of abilities for Realistic, Investigative and Artistic interests, and the explanatory power is 12% for Conventional interests. However, parents' Social and Enterprising types of career interests do not have significant incremental explanatory power on students' Social and Enterprising interests, respectively. Changes in \mathbb{R}^2 are only 1% and 2%, respectively for the two regression analyses of Social and Enterprising interests. As some of the independent variables such as the Five-Factor personality traits in the regression analyses are correlated, we checked for the threat of multicollinearity by calculating the tolerance level and the variance inflation factor (VIF) for the predictors used in all the regression equations. None of the tolerance is smaller than .10 and the largest VIF is only 1.62. These indicate that the effect of multicollinearity is quite minimal.

Insert Table 3 about here.

To explore the possibility that fathers and mothers have differential relationships with their sons' and daughters' career interests, we input the two interaction terms between student participants' gender and their fathers' and mothers' respective interests into the regression equations reported in Table 3 as the last step. In three regression equations, the changes in \mathbb{R}^2 due to the two interaction terms are statistically significant. They are 7.3% (p<.01), 8.8% (p<.01), and 4.1% (p<.05), respectively for predicting Realistic, Investigative, and Artistic interests of the student participants. However, only five interaction terms are statistically significant. The interaction term between fathers' Artistic interests and gender is not significant in predicting the student participants' Artistic interests. To show the differential relationship, we calculated the subgroup correlations corresponding to these five interaction terms and report them in Table 4. It appears that fathers' Realistic and Investigative interests have stronger relationships with their sons' respective interests, while mothers' Realistic and Investigative interests. Interestingly, mothers' Artistic interests are related only to their sons' but not daughters' Artistic interests.

Insert Table 4 about here.

Discussion

Familial influences on career development are well recognized in the literature. To provide more concrete suggestions to parents, we argue that it may be possible for parents to influence their children's career interest development through providing chances and reinforcement for the children to engage in career-relevant activities. As a first step to test this argument, we examined the relationship between parents' career interests on a sample of 113 freshmen's career interests. Results indicate that after controlling for personality, gender, GMA and emotional intelligence, parents' realistic, investigative, artistic and conventional interests are related to the respective interests of the freshmen. Fathers and mothers also show differential associations with their sons' and daughters' Realistic and Investigative interests. However, mothers' artistic interests are found to be related only to their sons' but not daughters' artistic interests is not as expected.

Results of this study concerning personal characteristics are largely consistent with what the literature has suggested. Personality traits, gender and emotional intelligence are associated with different types of interests. However, female participants have similar level of interests in Investigative, Social, Enterprising and Conventional activities when compared to male participants in our sample. It is possibly due to the fact that all our student participants are business majors. Through self-selection, they are not as heterogeneous as the general population in Investigative, Social, Enterprising and Conventional interests. Also, GMA does not show any significant relationship with the six types of career interests in our sample. One possibility is that we have a relatively homogenous sample because all the student participants have good public examination results because the selection ratio of the university in Hong Kong is very small, especially for business majors. It may be worthwhile for future research to study samples with greater diversity on this variable to uncover its potential relationships with young adults' career interests.

As for our focus on the relationship between parents' and students' career interests. Four out of the six interests provide support to our expectations. The four significant interaction terms between parents' Realistic and Investigative interests and gender of the students are also consistent with our expectation. It appears that fathers high on Realistic and Investigative interests may have more interactions with their sons concerning these two types of activities. To speculate, examples of these activities may be about repairing home appliance and furniture, and analyzing the design and structures of the appliance and furniture, and so forth. Mothers high on Realistic and Investigative interests also have more interactions with their daughters concerning these two types of activities. To speculate, examples of these activities may be about sewing, cooking, and analyzing recipes, and so forth. Future research may attempt to uncover the exact activities that parents and their children will interact and share among each other.

Before continuing to discuss the possible implications of our findings, three important limitations of this study must be noted. Firstly, we use a cross-sectional design and there is no direct evidence about the causal direction between parents' and student participants' career interests. It is possible that when children become interested in some activities, their parents will arrange and participate more in these activities. Thus, children's interests are the causes of their parents' interests. It is also possible that parents' and children's interests are reciprocally related as they will reinforce each other. Future study may use longitudinal design to examine the causal ordering of the two sets of variables.

Secondly, as an exploratory study, we do not measure parents' activities to examine their potential effects on children's career interests. Thus, we cannot be sure whether the parental involvement in some activities can actually induce the career interest development of the children. However, given the exploratory evidence concerning the associations between parents' and children's career interests, we believe that it should be worthwhile for future studies to further investigate the impact of parents' activities on children's career interests.

Thirdly, our results do not support the relationships between parents' and student participants' Social and Enterprising interests. Contrary to our expectation, mothers' Artistic interests are only related to sons' but not daughters' Artistic interests. These non-significant and unexpected results may indicate that the role of parents and mechanisms of interest development may be more complicated than we originally expected. For example, mothers may worry more about the artistic abilities of their sons than their daughters and so they may interact more with their sons on related activities. It is also possible that parents interested in Social and Enterprising activities will be busier with their friends and their own career, and thus leaving relatively less time to spend with their children. Of course, these are purely speculations which need more studies to verify. Given our preliminary evidence, it appears that it is worthwhile for researchers to spend more efforts in this line of research.

Despite the above limitations, there are at least two important implications for this study. Firstly, results of this study should have provided preliminary evidence concerning the role of parents in shaping the career interests of their children. Future research towards this direction to further uncover the exact interventions that parents can engage is worthwhile. At the time being, it appears that parents may try to identify various activities that may be career relevant and provide chances and reinforcement to the children to engage in those activities.

Secondly, Five-Factor personality, gender, GMA and emotional intelligence and parents' interests as a whole account for significant portion of variances of freshmen's career interests. However, the percentage of variances accounted for show quite a great difference among the six types of career interests. The highest one is Realistic (40%), while the lowest is Social (19%). As developed economies like Hong Kong have a vast numbers of jobs in the service sector, career interests in social activities may be necessary for most of the young people. Future research may devote more efforts in finding ways to help young people to develop social interests so that they can be better prepared for the service-oriented society.

References

- Betz, N.E., Borgen, F.H., & Harmon, L.W. (2006). Vocational confidence and personality in the prediction of occupational group membership. *Journal of Career Assessment*, 14, 36-55.
- Blustein, D.L., Walbridge, M.M., Friedlander, M.L., & Palladino, D.E. (1991).
 Contributions of psychological separation and parental attachment to the career development process. *Journal of Counseling Psychology*, *38*(1), 39-50.
- Bradley, R.W., & Mims, G.A. (1992). Using family systems and birth order dynamics as the basis for a college career decision-making course. *Journal of Counseling and Development*, *70*(3), 445-448.
- Costa, P.T., Jr., & McCrae, R.R. (1992). *Revised NEO Personality Inventory* (*NEO-PI-R*) and NEO Five-Factor Inventory (*NEO-FFI*) professional manual. FL: Psychological Assessment Resources.
- Donnay, D.A.C., & Borgen, F.H. (1996). Validity, structure, and content of the 1994 Strong Interest Inventory. *Journal of Counseling Psychology*, 43, 275-291.
- Guerra, A.L., & Braungart-Rieker, J.M. (1999). Predicting career indecision in college students: The roles of identity formation and parental relationship factors. *The Career Development Quarterly*, 47(3), 255-266.
- Hagen, D. (1960). Career and family atmosphere: An empirical test of Roe's theory. Journal of Counseling Psychology, 47, 255-266.
- Hansen, J.C. (1984). The measurement of vocational interests: Issues and future directions. In S.D. Brown & R.W. Lent (Eds.), *Handbook of counseling psychology*, pp. 99-136. New York: Wiley.
- Hansen, J.C., & Dik, B.J. (2005). Evidence of 12-year predictive and concurrent validity for SII Occupational Scale scores. *Journal of Vocational Behavior*, 67,

365-378.

- Hargrove, B.K., Creagh, M.G., & Burgess, B.L. (2002). Family interaction patterns as predictors of vocational identity and career decision-making self-efficacy. *Journal of Vocational Behavior*, *61*, 185-201.
- Hargrove, B.K., Inman, A.G., & Crane, R.L. (2005). Family interaction patterns, career planning attitudes, and vocational identity of high school adolescents. *Journal of Career Development*, 31(4), 263-278.
- Herr, E.L., & Lear, P.B. (1984). The family as an influence on career development. *Family Therapy Collections*, *10*, 1-15.
- Herrnstein, R.J., & Murray, C. (1994). *The bell curve: Intelligence and class structure in American life*. New York: Free Press.
- Holland, J.L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35-45.
- Holland, J.L. (1997) Making Vocational Choices: A theory of vocational personalities and work environments. 3rd ed., Odessa, FL: Psychological Assessment Resources.
- Jacoby, R., & Glanberman, N. (1995). *The bell curve debate: History, documents, opinions*. New York: Times Books.
- Johnson, P., Buboltz, W. C., Nichols, C. N. (1999). Parental Divorce, Family Functioning, and Vocational Identity of College Student. *Journal of Career Development*, 26(2), 137-146.
- Larson, L.M., Rottinghuas, P.J., & Borgen, F.H. (2002). Meta-analyses of Big Six interests and Big Five personality factors. *Journal of Vocational Behavior*, 61, 217-239.

Law, K.S, Wong, C.S., & leong, F. (2001). The cultural validity of Holland's model

and its implication on human resource management: The case of Hong Kong. *The International Journal of Human Resource Management*, 12(3), 1-13.

- Lee, R.M., Choe, L., Kim, G., & Ngo, V. (2000). Construction of the Asian American Family Conflicts Scale. *Journal of Counseling Psychology*, 47, 211-222.
- Lent, R.W., Brown, S.D., & Hackett, G. (1994). Towards a unifying social cognitive theory of career and academic interest, choice and performance. *Journal of Vocational Behavior*, 45, 79-122.
- Leong, F.T.L., Hartung, P.J., Goh, D., & Gaylor, M. (2001). Appraising birth order in career assessment: Linkages to Holland's and Super's models. *Journal of Career Assessment*, *9*(1), 25-39.
- Ma, P.W.W., & Yeh, C.J. (2005). Factors influencing the career decision status of Chinese American youths. *The Career Development Quarterly*, *53*, 337-347.
- McCrae, R.R., and Costa, P.T. Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81–90.
- Moos, R.H., & Moos, B.S. (1986). *Family Environment Scale manual*. Palo Alto, CA: Consulting Psychologists Press.
- Peluchette, J. (1993). Subjective career success: The influence of individual difference, family and organizational variables. *Journal of Vocational Behavior*, *43*, 198-208.
- Rossier, J. (2005). A review of the cross-cultural equivalence of frequently used personality inventories. *International Journal for Educational and Vocational Guidance*, 5, 175-188.
- Su, R., Rounds, J., & Armstrong, P.I. (2009). Men and things, women and people: A meta-analysis of sex differences in interests. *Psychological Bulletin*, 135, 859-884.

Whiston, S.C. (1996). The relationship among family interaction patterns and career indecision and career decision-making self-efficacy. *Journal of Career Development*, 23(2), 137-149.

- Wong, C.S., Foo, M.D., Wang, C.W., & Wong, P.M. (2007). The feasibility of training and development of EI: An exploratory study in Singapore, Hong Kong and Taiwan. *Intelligence*, 35, 141-150.
- Wong, C.S., & Law, K.S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. <u>The Leadership</u> <u>Quarterly</u>, <u>13</u>, 243-274.
- Wong, C.S., Wong, P.M., & Law, K.S. (2007). Evidence on the practical utility of Wong's emotional intelligence scale in Hong Kong and Mainland China. Asia Pacific Journal of Management, 24(1), 43-60.
- Wong, C.S., & Wong, P.M. (2002). Validation of the measurement scale and the vocational orientation model developed in Hong Kong. *Educational Research Journal*, 17(2): 235-252.
- Wong, C.S., & Wong, P.M. (2006). Validation of the Wong's career interest assessment questionnaire and the revised Holland's hexagonal model of occupational interests in four Chinese societies. *Journal of Career Development*, *32*(4), 378-393.
- Zingaro, J. C. (1983). A family systems approach for the career counselor. *The Personnel and Guidance Journal*, September, 24-27.

	Mean (S.D.)	Alpha	1	2	3	4	5	6	7	8	9
1. Neuroticism	3.90 (1.01)	.83	1.00								
2. Agreeableness	4.89 (.86)	.84	25**	1.00							
3.Openness	4.06 (.84)	.65	11	.17+	1.00						
4. Extraversion	4.36 (1.07)	.79	05	.44**	.41**	1.00					
5. Conscientiousness	4.42 (.87)	.71	31**	.41**	.23**	.34**	1.00				
6. Gender	0.49 (.50)		32**	12	19*	19*	05	1.00			
7. Emotional Intelligence	24.72 (4.46)	.60	14	.26**	06	.26**	.15	03	1.00		
8. HKCEE	24.98 (3.65)		.02	09	.06	.00	.08	.03	11	1.00	
9. Realistic	2.26 (.55)	.87	22*	12	11	35**	10	.29**	04	05	1.00
10. Investigative	2.55 (.58)	.88	22*	05	.02	22*	02	.14	29**	.07	.64**
11. Artistic	2.60 (.51)	.82	06	.03	.27**	.24*	14	30**	17+	07	10
12. Social	2.77 (.43)	.83	12	.15	.12	.38**	.13	.02	.16+	12	13
13. Enterprising	2.59 (.45)	.81	22*	.01	.28**	.32**	.06	02	.08	03	03
14. Conventional	2.38 (.37)	.68	12	07	04	28**	06	07	18+	.05	.39**
15. Father Realistic	2.61 (.42)	.78	06	.18+	16+	.11	.18+	05	.17+	07	.13
16. Father Investigative	2.60 (.43)	.82	19*	.24*	.00	.17+	.13	.06	.12	11	.21*
17. Father Artistic	2.33 (.39)	.76	.02	02	.09	.04	00	.13	.04	06	.15
18. Father Social	2.52 (.39)	.83	17+	.14	.14	.12	.00	.20*	.17+	.01	.10
19. Father Enterprising	2.53 (.42)	.82	10	.02	.16+	.07	06	09	.14	.02	.16+
20. Father Conventional	2.46 (.31)	.62	.14	.05	.04	.11	08	12	.03	.01	.18+
21. Mother Realistic	1.98 (.44)	.84	04	08	.07	07	.06	.17+	08	07	.32**
22. Mother Investigative	2.21 (.46)	.85	16+	.04	.16+	.01	.19*	.13	12	.03	.31**
23. Mother Artistic	2.46 (.37)	.77	33**	.10	.07	.08	.15	.19*	11	.17+	.23*
24. Mother Social	2.79 (.38)	.81	11	.03	07	.05	.05	.02	.07	.13	.02
25. Mother Enterprising	2.47 (.34)	.72	10	20*	.10	02	11	.14	23*	.09	.29**
26. Mother Conventional	2.46 (.31)	.60	08	08	.04	05	.00	.05	21*	.08	.23

Table 1. Descriptive Statistics and Correlations among Variables

Table 1.	Continued
raule r.	Commucu

	10	11	12	13	14	15	16	17	18	19	20	21
10. Investigative	1.00											
11. Artistic	02	1.00										
12. Social	10	.29**	1.00									
13. Enterprising	07	.45**	.49**	1.00								
14. Conventional	.36**	.22*	.04	.28**	1.00							
15. Father Realistic	.04	19*	.05	03	.06	1.00						
16. Father Investigative	.18+	.02	04	00	.03	.47**	1.00					
17. Father Artistic	05	.19*	03	.08	.08	.07	.35**	1.00				
18. Father Social	.05	.10	.06	.11	.11	01	.38**	.60**	1.00			
19. Father Enterprising	.08	.26**	.03	.21*	.14	.08	.35**	.51**	.61**	1.00		
20. Father Conventional	.05	.17+	04	.14	.23*	.16+	.33**	.56**	.37**	.56**	1.00	
21. Mother Realistic	.16+	.01	03	.04	.17+	.14	.08	.27**	.15	.11	.21*	1.00
22. Mother Investigative	.26**	.09	.01	.06	.12	.11	.23*	.18+	.23*	.27**	.09	.67**
23. Mother Artistic	.17+	.18+	.12	.23*	.17+	.10	.19*	.21	.27**	.16	.08	.35**
24. Mother Social	03	08	.10	.04	.01	.23*	.19*	.06	.11	.20*	.07	07
25. Mother Enterprising	.23*	.13	01	.15	.22*	.04	.10	.26**	.15	.39**	.23*	.43**
26. Mother Conventional	.22*	.06	.09	.24*	.34**	.15	.04	01	04	.09	.17+	.47**

	22	23	24	25	26
22. Mother Investigative	1.00				
23. Mother Artistic	.36**	1.00			
24. Mother Social	.14	.39**	1.00		
25. Mother Enterprising	.46**	.49**	.29**	1.00	
26. Mother Conventional	.40**	.44**	.19*	.55**	1.00

Notes:

	Female Respon	ndents $(n = 58)$	Male Respon	dents $(n = 55)$		
	Mean	S.D.	Mean	S.D.	t-value	Mean Differences
Realistic Interests	2.10	0.52	2.42	0.55	-318	-0.32**
Investigative Interests	2.47	0.54	2.63	0.60	-1.51	-0.16
Artistic Interests	2.74	0.49	2.44	0.48	3.32	0.30**
Social Interests	2.76	0.47	2.78	0.40	-0.23	-0.02
Enterprising Interests	2.60	0.43	2.58	0.47	0.25	0.02
Conventional Interests	2.40	0.31	2.35	0.43	0.75	0.05

Table 2. Differences in Career Interests between Male and Female Respondents

Note:

	Table 3.	Results	of Re	gression
--	----------	---------	-------	----------

	Real	listic	Investi	gative	Arti	istic	Soc	cial	Enterp	orising	Conve	ntional
	Beta	$\Delta \mathbf{R}^2$	Beta	$\Delta \mathbf{R}^2$	Beta	$\Delta \mathbf{R}^2$	Beta	$\Delta \mathbf{R}^2$	Beta	$\Delta \mathbf{R}^2$	Beta	$\Delta \mathbf{R}^2$
Step 1		.34**		.18*		.31**		.18**		.22**		.15*
1. Neuroticism	23*		23*		26*		09		23*		22*	
2. Agreeableness	.08		03		08		06		15		.05	
3.Openness	05		.02		.08		05		.10		.00	
4. Extraversion	22*		20+		.29**		.42**		.39**		34**	
5. Conscientiousness	09		05		32**		01		09		01	
6. Gender	.13		01		40**		.06		03		19+	
7. Emotional Intelligence	40**		27**		24**		.05		.02		07	
8. HKCEE	05		.06		07		12		04		.03	
Step 2		.06**		.06*		.06*		.01		.02		.12**
9. Father-Realistic Interests	.16+											
10. Mother-Realistic Interests	.19*											
11. Father-Investigative Interests			.17+									
12. Mother-Investigative Interests			.15									
13. Father-Artistic Interests					.20*							
14. Mother-Artistic Interests					.12							
15. Father-Social Interests							04					
16. Mother-Social Interests							.08					
17. Father-Enterprising Interests									.11			
18. Mother-Enterprising Interests									.02			
19. Father-Conventional Interests											.23*	
13. Mother-Conventional Interests											.23*	

Note:

	Daughter-Realistic Interests	Son-Realistic Interests
Father-Realistic Interests	r = .06	r = .28*
Mother-Realistic Interests	r = .42**	r = .16
	Daughter-Investigative Interests	Son-Investigative Interests
Father-Investigative Interests	r = .06	$r = .26^+$
Mother-Investigative Interests	r = .45**	r = .05
	Daughter-Artistic Interests	Son-Artistic Interests
Father-Artistic Interests	r = .31*	r = .16
Mother-Artistic Interests	r = .08	r = .47**

Table 4. Differential Impacts of Parents' Interests on the Interests of Sons versus Daughters

Note:

This is the pre-published version. Career Interest 26