Research on the Relationship between Junior High School Students' Adaptation and Career Development
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Abstract: -Attitudes toward career development usually can present the level of individual career development, which is also the preparatory status of career choices. The better the attitude of career development is, the higher the level of career development is. Also, wise and adequate career choices will be made by a better preparatory status. This research mainly discusses the relationship between vocational school students’ school adaptation and career development, including two dependent variables--Attitude toward Career Preparation and Career Exploration-- and five independent variables, that is, how well students’ relationship with classmates and teachers, their satisfaction with school curriculum, adaptation to teachers’ teaching methods, and to school environment. The research uses "Career Development Index" (CDI) form as the evaluation tool for the career development attitude, which is in accordance with Super’s theoretic structure. The following results are obtained: (a) How well junior high school students’ getting along with teachers is closely related to students’ career development. (b) How well they accept the curriculum has close relations with students’ attitude toward career development. (c) Students’ identification with the environment has significant relations with Career Planning. Implication related to the connection of career development with hardware and software of mobile learning will be considered.

Key-Words: career development , Career Development Index, attitude, junior high school, career planning

1 Introduction
Career development means the process of all kinds of roles played by a man in his entire life, and since growth is a continuous process, the concept of career covers a man’s whole life, and its development is also a continuous process in his life[13], which means an individual’s position on the continuous line of career development [15]. Different ages groups have different conditions of development of body and mind, and have their unique needs and missions [14]. The better the attitude of career development is, the higher the level of career development is[3],and one of the most important aspects of an individual's personal happiness is affected by one's career choice[11][12]. Also, wise and adequate career choices will be made by a better preparatory status. Junior high school students cannot explore or choose educational occupational goals if they do not have a better understanding of career development [6].

Young people in junior high schools, with the growing of age, face the preparatory period in terms of physiology and psychology. Due to the continuous development of physiology, they gradually are regarded as adults by people around them and themselves. At the elementary school stage, understanding about career is based on fantasy while at the high school stage, on exploration and preparation [5]. Young people between the ages of 12 and 18 under the influence of the cognitive development at concrete operational stage[10] and during the process of seeking for self-identity [4],increasing experience, high-school students have ability to implement the fantasy in the realistic world. In addition, they will learn to find out their interests in the activities, and make plans to achieve their goals. How to meet young people’s needs, lead them to know themselves, and know the outside working environment is one of the most important lessons in education.

Young people become aware of the career opportunities and choices around them as they become exposed to friends and people around them, parents' occupations, role models, television programs, school programs and counselling, church and community activities, etc[9]. Major goals of career guidance for senior high school students are
specific planning of next steps in education and work. Consistent with the setting, resources, and program design the facilitation of some career guidance goals is best achieved by teachers, others by counselors, and still others through cooperative activity between school personnel and specialists in the community. Junior high school students spend a lot more time at school with their teachers than with their parents, which is also their main source of information. Therefore, how well Junior High School students get adapt with their school is supposed to be closely related to student’s career development.

This research mainly discusses the relationship between junior high school students school adaptation and career development, including two dependent variables-- Attitude toward Career Preparation and Career Exploration,--five independent variables, that is, Relations between Teachers and Students, How Well They Get Along with Classmates and Teachers, Satisfaction with School Curriculum, Adaptation to Teachers’ Teaching Methods, and Adaptation to School Environment. The research also refers to related documents discussing career development in order to substantially help with junior high school students’ career education as well as academic research.

2 Research Design

The research aims at discussing the relationship between junior high school students’ adaptation and career development. The basic structure is to use Attitude toward Career Development as dependent variable, and to discuss respectively the relationship between junior high school students’ career development and the five independent variables, including relations between students and teachers, getting along with classmates, getting along with teachers, satisfaction with school curriculum, adaptation to teachers’ teaching methods, and adaptation to school environment.

2.1 Subject

Objects of the research are Feng Shan Junior High School, and Chou Liao Junior High School . One to two classes from each grade were drawn out to become the research objects, and students from these classes are told to fill out the “Career Development Index” form.

2.2 Instrument

The research uses “Career Development Index” (CDI) form as the evaluation tool for career development attitude, which is in accordance with Super’s and CPS’s theoretic structure. In addition, in recent years, a lot of researches used it as the research tool, and its reliability and accuracy are highly valued. Career Development Index, which was revised by Mr. Lin. Ching-wen is used as the research tool, and as the operating definition. Career Development Index consists of two criteria, Career Preparation and Career Exploration. Lin Ching-wen (1985) Reliability coefficient in the CDI forms is stated as follows: Career Preparation .87 and Career Exploration .81. In terms of accuracy, this form uses the “Questionnaire of Attitude toward Career Maturity” and the validity coefficient is as follows: Career Development .44 and Career Exploration .31

2.3 Procedure

Three hundred questionnaires were sent out. After they were sent back, the answers were carefully reviewed, and there were about 252 effective questionnaires, about 84%, excluding the ones with missing pages and obviously with dishonest answers. Data of these questionnaires were analyzed and processed by the SPSS/PC software. The statistical method is as follows: Describe the normal situation of samplings based on basic statistic number (average, and standard error). The multivariate analysis of variance (MANOVA) was used currently for differences group responses to Career Preparation and Career Exploration subscales. All significant MANOVA results were followed by analysis of variance(ANOVA) and post hoc Tukey method to determine the specific locus of the group differences. The MANOVA revealed that school adaptation differed significantly on Career Preparation and Career Exploration subscales. ANOVA to test school adaptation, including the five independent variables, namely, getting along with teachers, getting along with classmates, satisfaction with school curriculum, adaptation to teachers’ teaching methods, and adaptation to school environment. After the analytical result comes out, if the figure of F in each group reaches significantly standard, P<.05, Tukey method will be applied to conduct the aftermath test.

3 Results: Basic data analysis

There are 252 effective samples in the research. Among these samples, the ratio between the male and female is 40.6:59.4. As to the families’ social and economic positions, the ratio among low, middle and high class is about 36.2:47.2:16.6. The ratio of school adaptation among good, fair and bad is about 28.2:44.4:27.4, the ratio of bad, 27.4, is not low, which deserves more attention. The previous two
items are based on the highest percentage, 27%, middle one, 46%, and the lowest one, 27% of the research convention in sociology. In terms of family life, testees answer questions according to the harmony of their families, and the ratio of good, fair and bad is about 46:7:47:2:6:1. Thus, it may be said that most of their family life is between good and fair. As for the grades which are based on the testees’ rank of position in the class, the ratio of high, middle, and low is about 34.1: 40.2: 24.5. Most of them think they are in the middle position in their class while few of them think themselves among top rankings. About one third is among the top ranking, and the result is in accordance with the design of the research. The ratio between the urban and rural is about 46.4:51.2. The reason is that this research drew out one school in the urban area and the other in the rural area.

3.1 Current Status of Students’ Career Development

How well students’ getting along with teachers does influence their performance on career development. As for Career Exploration, the Like Group (M=50.20 SD=7.64) higher than the Dislike Group (M=45.04 SD=8.27) while the Like Group (M=50.20 SD=7.64) is also higher than the Indifference Group (M=49.20 SD=8.52), which reaches the significantly standard. As for Career Planning, the Like Group (M= 53.00 SD=14.33) is higher than the Indifference Group (M=49.76 SD=14.54) and the Dislike Group (M=49.04 SD=11.75), which reaches the significant standard. As far as Career Attitude is concerned, the Like Group (M=103.21 SD=19.02) is higher than the Dislike Group (M=94.12 SD=16.16) and the Indifference Group (M=98.97 SD=19.75), which also reaches a significant standard. (Table 1)

<table>
<thead>
<tr>
<th></th>
<th>Dislike</th>
<th>Indifference</th>
<th>Like</th>
<th>( F )</th>
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<tbody>
<tr>
<td>Career Exploration</td>
<td>0.98**</td>
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<tr>
<td>Average</td>
<td>45.04</td>
<td>49.20</td>
<td>50.20</td>
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<td>Standard Error</td>
<td>8.27</td>
<td>8.52</td>
<td>7.64</td>
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<tr>
<td>Career Planning</td>
<td>2.43***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>49.04</td>
<td>49.76</td>
<td>53.00</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>11.75</td>
<td>14.54</td>
<td>13.33</td>
<td></td>
</tr>
<tr>
<td>Career Attitude</td>
<td>6.35***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>94.12</td>
<td>98.97</td>
<td>103.21</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>16.16</td>
<td>19.75</td>
<td>19.02</td>
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*P<.05 **P<.01 ***P<.001

As to how well they get along with classmates, in terms of the average of Career Exploration, the Like Group (M=49.94 SD=7.90) is higher than the Dislike Group (M=46.19 SD=8.81). In terms of Career Planning, the Like Group (M=51.73 SD=1.44) is higher than the Dislike Group (M=49.50 SD=1.17). As to Career Attitude, the Like Group (M=100.57 SD=1.28) is higher than the Dislike Group (M=95.69 SD=1.03). All three do not reach the significant standard (Table 2) For junior high school students’ adaptation to different curriculum, in terms of Career Exploration, the Like Group (M=50.71 SD=8.54) is higher than the Dislike Group (M=49.45 SD=7.98) and the Indifference Group (M=47.08 SD=7.73), which reaches the significant standard. As to the average of Career Planning, the Like Group (M=53.20 SD=2.69) is higher than the Indifference Group (M=51.78 SD=1.90), also higher than the Dislike Group (M=52.14 SD=1.45), which reaches the significant standard. In terms of the average of Career Attitude, the Like Group (M=103.92 SD=7.78) is higher than the Dislike Group (M=101.60 SD=4.20), also reaches the significant standard. (Table 3)

<table>
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<tr>
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<th>Indifference</th>
<th>Like</th>
<th>( F )</th>
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<tr>
<td>Career Exploration</td>
<td>4.89***</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Average</td>
<td>49.45</td>
<td>47.08</td>
<td>50.71</td>
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<tr>
<td>Standard Error</td>
<td>7.98</td>
<td>7.73</td>
<td>8.54</td>
<td></td>
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<tr>
<td>Career Planning</td>
<td>1.25***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>52.14</td>
<td>51.78</td>
<td>53.20</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>1.45</td>
<td>1.90</td>
<td>2.69</td>
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<tr>
<td>Career Attitude</td>
<td>3.23***</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>101.60</td>
<td>99.20</td>
<td>103.92</td>
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<tr>
<td>Standard Error</td>
<td>4.20</td>
<td>5.50</td>
<td>7.78</td>
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*P<.05 **P<.01 ***P<.001

Table 2 CDI of junior high school students to how well they get along with classmates

Table 3 CDI of junior high school students to different curriculum adaptation

For junior high school students taught by different methods, in terms of Career Exploration, the average of the Like Group (M=49.30 SD=7.96) is higher than the Dislike Group (M=47.74 SD=7.94). The Dislike Group (M=47.74 SD=7.94) is higher than the Indifference Group (M=47.69 SD=9.09). As to Career Planning, the Like Group (M=54.54 SD=2.42) is higher than the Dislike Group (M=50.32 SD=1.53). The Dislike Group (M=50.32 SD=1.53) is higher.
than the Indifference Group (M=48.57 SD=1.84). In terms of Career Attitude, the average of the Like Group (M=104.34 SD=6.98) is higher than the Indifference Group (M=96.62 SD=5.33), and the Dislike Group (M=98.07 SD=4.43). All three level do not reach the significant standard. (Table 4)

Junior high school students in different environments also perform differently in career development. In terms of Career Exploration, the Like Group (M=49.29 SD=4.31) is higher than the Dislike Group (M=46.84 SD=4.13). As to Career Planning, the Like Group (M=58.77 SD=1.85) is higher than the Indifference Group (M=56.15 SD=1.91) and the Dislike Group (M=52.33 SD=1.77), which reaches the significant standard. In terms of Career Attitude, the Like Group (M=102.19 SD=1.77) is higher than the Indifference Group (M=95.85 SD=5.50), and the Dislike Group (M=99.56 SD=5.12), but do not reach the significant standard. (Table 5)

Table 4 CDI of junior high school students taught by different

<table>
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<th>Indifference</th>
<th>Like</th>
<th>F</th>
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<tbody>
<tr>
<td>Career Exploration</td>
<td>47.74</td>
<td>47.69</td>
<td>49.30</td>
<td>1.65</td>
</tr>
<tr>
<td>Average</td>
<td>7.94</td>
<td>9.09</td>
<td>7.96</td>
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<tr>
<td>Standard Error</td>
<td>50.32</td>
<td>48.57</td>
<td>54.54</td>
<td>3.45</td>
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<tr>
<td>Career Planning</td>
<td>1.53</td>
<td>1.84</td>
<td>2.42</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>98.07</td>
<td>96.62</td>
<td>104.34</td>
<td>3.67</td>
</tr>
<tr>
<td>Standard Error</td>
<td>4.43</td>
<td>5.33</td>
<td>6.98</td>
<td></td>
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*P<.05 **P<.01 ***P<.001

Table 5 CDI of junior high school students to different school environment

<table>
<thead>
<tr>
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<th>Dislike</th>
<th>Indifference</th>
<th>Like</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Exploration</td>
<td>46.84</td>
<td>48.38</td>
<td>49.29</td>
<td>1.87</td>
</tr>
<tr>
<td>Average</td>
<td>4.13</td>
<td>4.44</td>
<td>4.31</td>
<td></td>
</tr>
<tr>
<td>Standard Error</td>
<td>52.33</td>
<td>56.15</td>
<td>58.77</td>
<td>4.26*</td>
</tr>
<tr>
<td>Career Planning</td>
<td>1.77</td>
<td>1.91</td>
<td>1.85</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>99.56</td>
<td>95.85</td>
<td>102.19</td>
<td>2.60</td>
</tr>
<tr>
<td>Standard Error</td>
<td>5.12</td>
<td>5.50</td>
<td>5.33</td>
<td></td>
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</tbody>
</table>

*P<.05 **P<.01 ***P<.001

4.1 Conclusion

How well junior high school students get along with teachers is closely related to students’ career development. Junior high school students spend a lot more time at school with their teachers than with their parents, which is also their main source of information. Therefore, how well junior high school students get along with teachers is closely related to students’ career development

A. How well junior high school students get along with classmates has no significant relation with students’ career development. The research shows that the average of career development for the group of students who like to be with classmates are not higher than other groups. This means that what the sub-group influences junior high school students and their peers pay attention to and what information they can offer about career development are limited.

B. How well they accept the curriculum has close relations with students’ attitude toward career development. Generally speaking, the curriculum of Junior High School Students are necessary for vocation to cultivate their general capacity and disposition, gaining access to a college and selecting a major field of study with its myriad implications for later career paths. So it is closely related to students’ attitude toward career development.

C. Students’ identification with teachers’ teaching methods has no significant relations with career development. In terms of students’ identification with teachers’ teaching methods, about career development, the average of the Like Group is higher than the Indifference Group and the Dislike Group, which, however, does not reach the obvious standard. This shows that it has no significant relations with career development.

D. Students’ identification with the environment has significant relations with Career Planning. As to Career Planning, the like group is higher than the indifference group and the dislike group, which reaches the obvious standard, adequately showing that environment has a great influence on school environment.

4.2 Suggestion

A. How teachers’ roles change is connected with students. In the future, teachers’ roles will have a dramatic change. Teachers not only are the instructors of knowledge, but also the coordinators, supervisors, career counselor, and designers of the study environment. Teachers will learn with students, and arouse students’ curiosity and abilities to explore new knowledge and new stuff.

B. Innovation of curriculum design and teaching methods. As to curriculum design and teaching methods, at junior high school stage, students usually only care about their grades, and are encouraged to enter the academic field. Therefore, they pay more attention to the intellectual development, and are not able to develop their own abilities and aptitude, and plan their own career. They, thus, will become deviant easily. So, gradually, on the other hand,
young people should build their self-confidence, and
develop the ability to get along with themselves and
others.
C. Strengthening junior high school students’
counseling about career education. Schools and
society should offer more opportunities for
vocational school students to explore career,
including assistance to resources, offering
information, and counseling.
D. Offering information about the working
environment to students. Schools have limited
information about working environments offered to
students. In addition, due to the keen competition to
enter higher schools, they ignore the information
about working environment. Therefore, schools and
society should actively offer vocational school
students any information related to working
environments in order to help students understand the
working environment better.
E. Improving adaptation to school life and
teaching environment to enhance the harmony of
human relations. The research shows that students
who are better adapted to school life have better
career development. Adaptation to school life is a
type of subjective psychological status. However, it
is also effected by objective environment. Schools
should examine teachers and their teaching all the
time, and make their efforts to improve the
relationships and interactions between teachers and
students.
F. Offering clear counseling directions
Help students understand their interests, abilities,
and value judgment, and contact more different fields
of jobs, and find out jobs, which are more suitable for
them.
Make students understand different essence of
job, knowledge, and differences between skills. Also,
different jobs’ contribution to society and its
importance, and the required ability and aptitude.
Understand whether the type of life style students
like is the same as the life style of the job they want to
do. Then explore the adaption of career development
through a inventory[8] and coping with change[7].
Finally, there is a demand for institutional
support of mobile learning during students’ career
development, especially to provide course content,
timetabling information and guidance [1] [2].
Wireless connectivity of the usability issues relating
to the impact on the students’ usage and satisfaction
with the system of hardware and software will be
considered to develop a platform that can be used to
efficiently design and develop games for m-learning
and m-guidance.

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