A Pilot Study on the Correlation Between Personal Traits in Disability and Performance in Vocational Education and A Preliminary Analysis of Self-efficacy and Enabling Factors
有特殊學習需要(SEN) 的青少年人：生涯規劃相關研究結果分享

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RESEARCH BACKGROUND:

Students with Special Educational Needs (SEN) are generally facing more struggles while developing their own vocational identity thus more confusion in making their vocational choice (Hergenrather et. al., 2008). However, researches on this topic in the Hong Kong context are rare in the literature. This research on the association between personal traits in disability and the performance in vocational education could fill the literature gap and possibly contribute to the planning of support services to students with SEN in the future. Meanwhile, the influence of transitional support (provided by other stakeholders in the school context) on students' self-esteem and self-efficacy will be investigated as well, which is conducive in facilitating the planning, implementation and management of various support services to the students with SEN in VTC.

THIS STUDY AIMS TO INVESTIGATE:

1. The association between personal traits and academic performance in vocational education setting
2. The association between disability and self-evaluation factors (Self-Esteem and Self-Efficacy)

SAMPLING METHOD

Newly admitted higher diploma students with SEN from the academic year of 2016-2017 (AY1617) were selected with a stratified sampling method for this study. Besides, progressing higher-diploma year-2 students with SEN from different disciplines in AY1617, and a small sample of higher-diploma graduate with SEN were sampling in a stratified way. In total, there were 100 participants.

DATA COLLECTION

The selected students were invited to complete a set of self-administered questions for investigating personal traits. Questionnaires were distributed to the selected students with SEN who had just enrolled to the higher diploma programmes in AY1617 during the orientation period. A follow-up data collection completed within the month of September 2016. At the end of AY1617, all students received a phone call to invite them to complete the questionnaires once as a follow up procedure. Data collected above were also used to correlate with their Cumulative Grade Point Average (CGPA) in semester 1 and 2 for data analysis. Furthermore, 15 students of each of the 2 subject groups (newly admitted students and progressing students) were selected for focus group interviews/ individual interviews to collect qualitative data for further analyses. The method of theme analysis was adopted after collection of feedback in the interviews.

DATA ANALYSIS

This study adopted both quantitative and qualitative methods of investigation, thus, data was processed differently. The data analysis process was completed by the SPSS-21 (Statistical Package for the Social Sciences, version 21), a widely used statistical analysis software for researches in the field of education and social sciences.

RESEARCH FINDINGS

Quantitative Results

Descriptive Analysis

There are 99 valid respondents participated in the pre-test of this study, including 63 males and 37 females. Regarding the distribution of SEN types, nine SEN types were identified in the participants' pool and the distribution were as follows:
ASD: 14; ADHD: 8; SpLD: 39; Hearing Impairment: 12; Speech Impairment: 4; Physical Handicap: 8; Visceral Disability: 3; Intellectual Disabilities: 1; Mental Illness: 2
The mean scores of the Rosenberg's Self-Esteem Scale and the Chinese Adaptation of the General Self-Efficacy Scale in the pre-test were respectively 2.20 (N = 99, SD = 0.38) and 2.34 (N = 99, SD = 0.44). In the post-test, there were 51 valid respondents and the distribution of SEN types were:
Autism: 8; ADHD: 7; SpLD: 21; Hearing Impairment: 7; Speech Impairment: 2; Physical Handicap: 2; Visceral Disability: 2; Intellectual Disabilities: 0; Mental Illness: 1
Mean scores of the Rosenberg's Self-Esteem Scale and the Chinese Adaptation of the General Self-Efficacy Scale in the post-test are respectively 2.15 (N = 51, SD = 0.43) and 2.45 (N = 51, SD = 0.48). Regarding the results, means of the CGPA of students was 2.19 (N = 47, SD = 0.83).

Correlational Analysis

Significant associations between the scores of self-esteem and self-efficacywere, respectively, found with a correlation at r = 0.62 (N = 99, p < .01) inthe pre-test whereas r = 0.58 (N = 51, p < .01) in the post-test, which are consisted with results of previous research. Besides, scores of self-esteem over the pre- and post-tests was found to be associated at r = 0.50 (N = 51, p < .01) and scores of self-efficacy over the pre- and post-tests was found to be associated at r = 0.63 (N = 51, p < .01). However, no significant association between self-esteem and self-efficacy and academic result was found at statistically significant level (p < .05). It means that levels of self-esteem and self-efficacy of students is significantly associated over time, but no evidence supporting that they were associated with academic performance.

Compare Means

Regarding the associations between students' SEN types and levels of self-esteem and self-efficacy, statistics suggested the SEN types has no significant difference with self-esteem (N = 99, F = 0.65, p >.05) and self-efficacy in the pre-test (N = 99, F = 0.89, p >.05). However, in the post-test, statistics suggested significant differences between the SEN types and self-esteem (N = 50, F = 2.65, p < .05) and self-efficacy (N = 50, F = 2.31, p < .05). After a year of study, students over the SEN types have different levels of self-esteem and self-efficacy.
Regarding the association of levels of self-esteem and self-efficacy over the school year, paired-sample t-test were conducted to compare for both scores. It was found that no significant differences of self-esteem (N = 51, t = 0.94, p > .05) and self-efficacy (N = 51, t = -1.82, p > .05) between both tests. It means SEN students have no significant change in their scores of self-esteem and self-efficacy over the school year.

Qualitative Analysis

The following models were developed based on qualitative data:
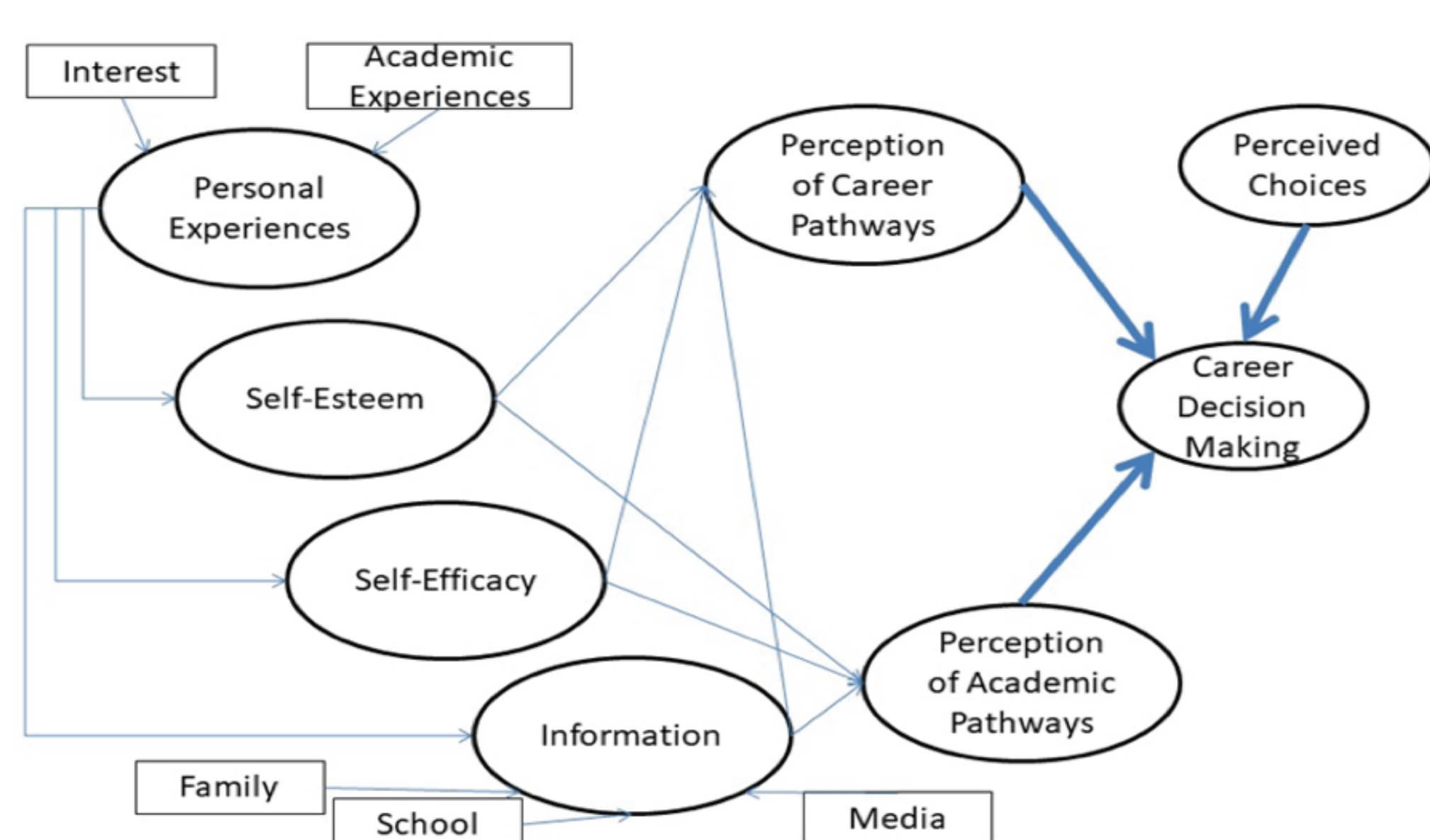
Career Decision-Making Model of SEN Students Based on Themed Contents in Interviews
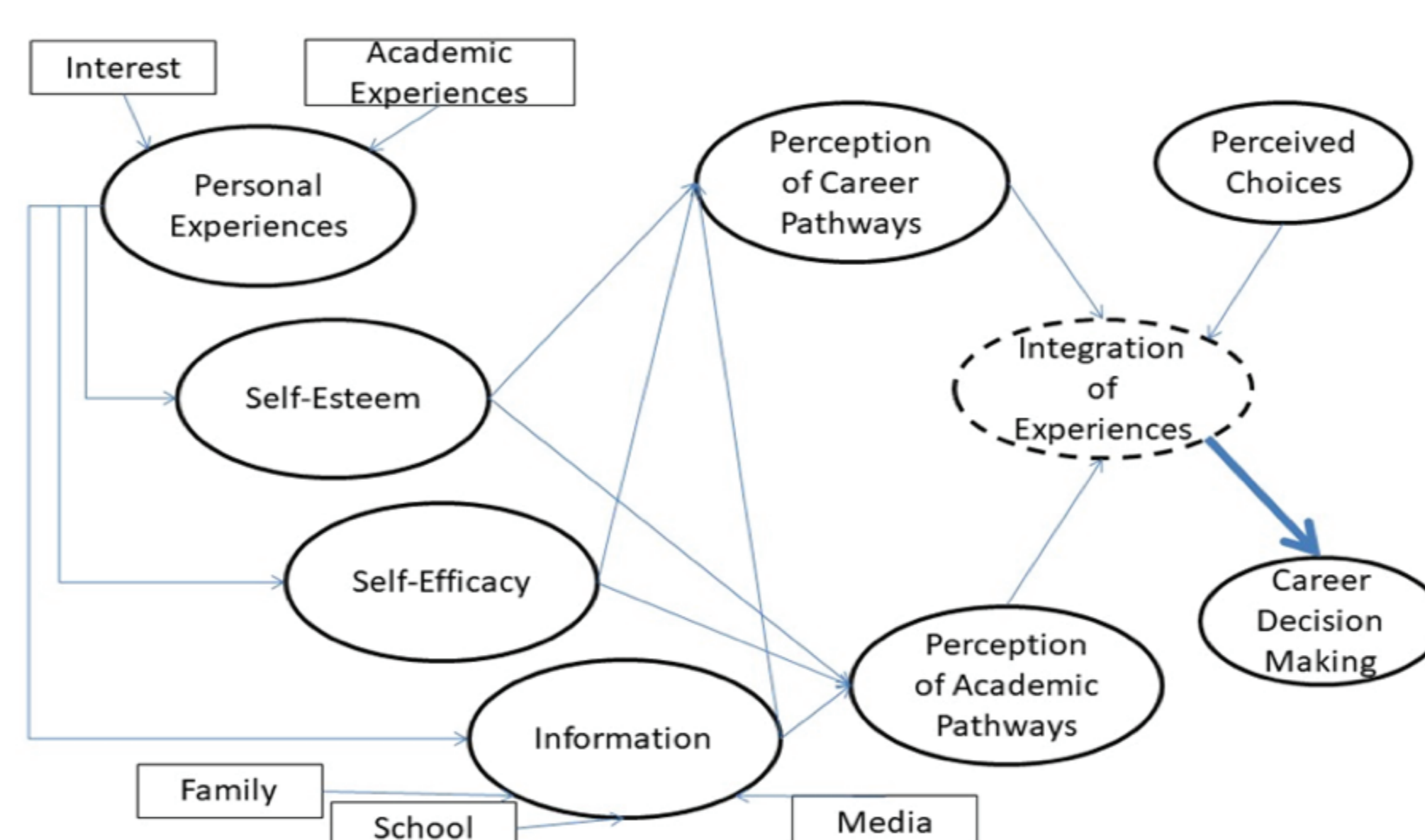
A suggested career decision-making model for SEN students

CONCLUSION

To conclude, this study has primarily investigated on the association between personal traits, academic performance, and other self-evaluation factors. Although results revealed that there were no significant association found between all the variables as previous studies suggested, some implications for special education practice in VTC were suggested, for example, individual support for students with specific SEN types, more attention to be spent on the personal growth of male SEN students, reconsideration of research variables, and the promotion of the improved career decision making model. Since this was a single research conducted on a group of students, limitation inevitably exists. For future research, improvement could be made by extending the research population.

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