A validation of career adaptability model in Taiwan

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The purpose of the study was to: (1) validate the applicability of Career Adapt-Ability Scale in Taiwan; (2) examine personal background factors related to adults’ career adaptability; and (3) explore factors related to adults’ personal growth and satisfaction with life.

Reliability and validity of the applied measures, include CAAS, were tested in the first stage of the study. In the second stage, a hypothesized model was proposed and tested by the LISREL.
Abstract-2

- Participants were 136 adults, age ranged from 19 to 59 (M=35.73, SD=9.35) in the first stage.

- In the second stage, participants were 493 working adults, 180 males and 313 females, age ranged from 19 to 63 years (M=35.56, SD=8.55).
Abstract-3

- Reliability of the five scales of the CAAS based on the sample of 136 adults ranged from .87 to .93.
- Results of confirmative factor analysis with the sample of 493 adults indicated that the validity of the Taiwan form of the CAAS was supported.
Abstract-4

- The results of LISREL indicated that the hypothesized model was supported. Personality, cognition, and career adaptability predicted the individual’s personal growth and life satisfaction significantly.
Introduction

- Savickas (1997) proposed the term “career adaptability” to replace the concept of career maturity.

- He defined career adaptability as a psychosocial construct that denotes an individual's resources for coping with current and anticipated developmental tasks, occupational transitions, and work trauma, etc.
Introduction

- Positive psychology was recently applied in varieties of work settings in Taiwan.
- For adult workers, the sources of work stress include work loadings, family/personal life, vertical and peer communications, and possibility of being fired nowadays. Are they happy with their life, both professional and personal?
- We are concerned of their personal growth and life satisfaction, which we believe are related to career adaptability.
The purpose of the study was to test the applicability of Career Adapt-Ability Scale in Taiwan; We also want to examine the possible factors related to adults’ career adaptability; Finally, we tested the hypothesized model of variables related with career adaptability in Taiwan.
Method - Participants

In the first stage-

- Participants were 136 adults (58 males and 78 females), age ranged from 19 to 59 (M=35.73, SD=9.35).

- Four of them owned PhD degree, 34 masters, 62 bachelors, 15 of them graduate from community college, 14 with high school diploma, 4 middle school and 3 of them did not indicate educational degree.
Method - Participants

In the first stage-

- 70 of them were married; 63 of them were not married and 3 of them did not indicate marriage status.
- With respect to the work experiences, the average year was 9.81 years ranged from 1 to 35 years.
- As far as the type of work, 9 in Realistic, 18 in Investigative, 8 in Artistic, 40 in Social, 15 in Enterprising, and 46 in Conventional types.
Method - Participants

In the second stage-

- Participants were 493 (180 males and 313 females) working adults.
- The age ranged from 19 to 63 (M=35.56, SD=8.55).
- 8 of them owned PhD degree, 131 masters, 223 bachelors, 74 of them graduated from community college, 50 owned high school diploma, 5 middle school and 2 of them did not indicate educational degree.
Method - Participants

- 282 of them were married; 211 of them were not married.
- For those married couples, 77 couples have 1 child, 111 have 2 children, 28 have 3 children, and only 1 couple have more than 4 children. The rest of the married couples did not have kids at the time when the study was conducted.
Method - Participants

- With respect to the work experiences, the average year was 8.75 years ranged from 1 to 35 years. The average year was 8.75 years, SD=7.24.
- As far as the type of work, 54 in Realistic, 55 in Investigative, 35 in Artistic, 201 in Social, 54 in Enterprising, and 93 in Conventional types, and 1 did not indicate type of work.
Method - Instrument

Career Adapt-Ability Scale (CAAS – Taiwan Form).

- It consists of 55 items in the original inventory developed by Savickas.
- The five scales are Concern, Control, Confidence, Curiosity, and Cooperation.
- Reliability coefficient are .91, .93, .91, .90, and .87 respectively with 136 adults.
Method - Instrument

- Reliability coefficients for the five scales are .92, .94, .94, .93, and .93 respectively with the sample of 439 adults in the second stage of the study.
- Confirmatory factor analysis also support the CAAS validity, $\chi^2= 4665.22$, df=1420, $p=.000$. RMSEA=.068.
Method - Instrument

- Big Five Scale - Chinese edition
  - The five dimensions of the Big Five Scale are Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experiences
  - Internal consistency for the five scales in Chinese version are .78, .56, .83, .70, and .59.
  - Validity of the Big Five Scale – Chinese form has been tested in different studies in Taiwan.
Method - Instrument

- Adult Career Cognitive Scale -
  - Cognitive Complexity (.71)
  - Career Self-efficacy
    - Confidence of completing tasks successfully (.78)
    - Perceived degree of difficulty about the task (.71)
    - Generation of the confidence to similar tasks (.82)
  - Internal consistency indicated in the parentheses were based on the data of 943 adults in the current study.
Method - Instrument

- Adult Career Cognitive Scale (cont.) –
  - Content validity of the scale had been examined by 5 experts in Tien and Gao’s (2005) study.
  - Validity of the Career Self-efficacy Scale
    - Validity of the Career Self-efficacy Scale has been tested by CFA with a sample of 607 adults in a previous study (Tien and Gao, 2005), and the results supported its construct validity.
Method - Instrument

Personal Growth Initiative Scale (PGIS)

- The PGIS (Robitschek, 1998, 1999) consists of nine items rated on a 6-point Likert-type format ranging from 1 (definitely disagree) to 6 (definitely agree).
- Total scores can range from 6 to 54. Higher scores indicate higher levels of PGI. The scale was applied to measure subjective well-being perceived by the individuals.
- The internal consistency was .87 based on the sample of 217 school teachers and .90 based on the sample of 725 school teachers, another study (Tien, 2008).
Method - Instrument

- **Satisfaction with Life Scale (SWLS)**
  - The SWLS was developed by Diener (1980). The translated Chinese version consists of the same five items. They basically measure an individual’s perceived degree of life satisfaction.
  - Reliability coefficients was .89 based on the sample of 493 adults in our study.

- **Career adjustment** variable in our study combined of PGIS and SWLS indicated a good fit of index, $\chi^2(df) = 334.25(76)$ through CFA. The construct validity was supported.
Method - Procedure

- In the first stage, the test of CAAS, we recruit participants from different organizations by snowballing.
- A packet of questionnaires with basic information, consent form, and measures were mailed to individuals who were willing to participate in the study.
- Some of them were invited by their colleagues, who were also volunteer participants in our study.
- All the participants were paid 200 gift card (about 6 US dollars values).
- In the second stage, the similar procedure was applied.
Method - Data analysis

- ANOVA was applied to test gender differences on career cognitive complexity, personal growth, and life satisfaction.

- MANOVA was applied to understand gender differences on all the variables, career adaptability, personality traits, career cognitive complexity, career self-efficacy, personal growth, and life satisfaction.
Method - Data analysis

- Confirmatory factor analysis (CFA) was applied to test construct validity of the scales applied in the study.
- Structural Equation Modeling (SEM) was applied to test the path relationship among personality trait, career cognitive, career adaptability, and career adjustment (personal growth and satisfaction with life).
Results

- Means, standard deviations, and intercorrelations among all variables are shown in Table 1.
- Openness to experiences are not significant correlated with personal growth (subjective well-being). Degree of confidence is not correlated with perception of task difficulty.
- Perception of career difficulty is not significantly correlated with cooperation either.
Results -2

- The results of ANOVA indicated no gender differences on personal growth ($F= 3.23$, $p=.073$) and life satisfaction ($F= .19$, $p=.663$). (Table 2)

- However, females degree of cognitive complexity was higher than males ($F=20.11$, $p=.000$). This finding indicated that females can think from more angles, taking more aspects into consideration in observing and making decisions in workplace.
For other variables in the model, results of MANOVA test indicated gender differences in personality traits ($\Lambda = .931^{***}$, $p = .000$) and career self-efficacy ($\Lambda = .962^{***}$, $p = .000$). (Table 3)

Females scored higher on openness to experiences, more agreeable, and lower in perceived task difficulties.

For career adaptability, there is no gender differences ($\Lambda = .987^{***}$, $p = .297$).
The results of ANOVA indicated differences among current job category (RIASEC six categories) on personal growth (F= 2.86, p=.015), life satisfaction (F= 2.85, p=.015), and cognitive complexity (F=9.02, p=.000). (Table 4)

The follow up test with Tukey HSD method indicated that Social type adults have higher degree of cognitive complexity than other five type workers. In addition, Enterprising type workers are more complicated in cognitive thinking than Realistic type.

For both personal growth and life satisfaction, Social type workers are more satisfied with life and even happier in wellbeing perception than conventional type.
Results - 5

- For other variables, six type workers are different in personality traits ($\Lambda = .813^{***}$), career self-efficacy ($\Lambda = .916^{***}$), and career adaptability ($\Lambda = .892^{***}$). (Table 5)

- Follow up test indicated significant differences between several types.
Results -6

- Stepwise regression analysis (Table 6)
- Results came out 7 models.
- The variables entered into the final model included service years in the current job, personal traits (extraversion, neuroticism, agreeableness), generation, cognitive complexity, career adaptation (concern, control, confidence, curiosity, and cooperation).
- The total amount of explanation were 35.8%.
As far as the hypothesized path model, the results of LISREL indicated that personality traits and career cognitive complexity career adaptation and then influence individual’s career adjustment, which are combined with personal growth and life satisfaction scores.

Personality traits and cognitive complexity also influence career adjustment directly.

Basically, the hypothesized model was supported ($\chi^2(71)=387.97.60; \text{NFI}=.96; \text{RFI}=.94; \text{CFI}=.96$).
Figure 1. Path diagram model of personality, career cognition, career ability and career Adjustment
Note. ⊣indicates Latent variables ⊢indicates observed variables. Latent variable included PT (Personality traits), CC (career cognitive), CA (career ability), CAD (Career Adjustment).

PT (Personality traits): P1, P2, P3, P4, P5

CC (Career cognitive): C11, C12

CA (Career ability): A1 = Concern, A2 = Control, A3 = Curiosity, A4 = Cooperation, A5 = Confidence

CH1, CH2

Chi-Square = 387.97, df = 71, P-value = 0.00000, RMSEA = 0.095
The Career Adapt-Ability Scale - Taiwan Form has good reliability and validity.

Generally speaking, the hypothesized model for predicting adults personal growth and life satisfaction was supported. Personality traits, cognitive complexity, self-efficacy, career adaptability are important factors predicting personal growth and life satisfaction. We can pay attention to those variables when discussing an individual’s career adjustment and life satisfaction.
Thank You For Your Listening!

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