Connotation, Dimensions and Scale Development of work volition in the Chinese Context

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Abstract. The Psychology of Working Theory (PWT) was developed to complement existing vocational theories[1], in which work volition is a central construct. There is a lack of local measurement tools for Chinese university students' work volition, which restricts the breadth and depth of research. Based on survey data from 960 college students nationwide, this study explored the cross-cultural validity of the WVS-SV. Through exploratory factor analysis and confirmatory factor analysis, a measurement scale of work volition was developed involving two dimensions of volition and constraints, with a total of fourteen items. This study opens up new perspectives for work volition research, enriches the literature on careers guidance research, and provides an effective measurement tool for subsequent research on college students' work volition.

1. INTRODUCTION

The Psychology of Working Theory (PWT) explains the work experiences of all individuals. Even so, there are people who are near or are living in actual poverty who face discrimination and marginalization in their lives. These particular individuals face challenging work-based transitions for which contextual factors are often the primary drivers of the ability to secure decent work. Work volition is gaining more attention from researchers as it is a key construct within the PWT framework that reflects an individual's perception of choice in career decision-making despite constraints[2]. However, the empirical researches on the PWT and work volition are mainly from North American countries[2-5], where individualism and freedom are specifically emphasized.

In contrast with the West, China is defined by a collectivist culture and highly centralized government control; thus, the standard career path has quietly changed. In the past, under the planned economy system, the government allocated and arranged jobs for individuals. Under this system, individual willingness and autonomy were completely missing. Now, under the market economy system, the state's protection of individuals has begun to weaken, and people have then shifted from traditional dependence and obedience to the state's employment arrangements to more independent roles that are more adapted to market changes. This is despite the fact that individual career choices in China are completely different from the West in terms of a developmental path. However, both China and the West fit well with today's career choice practices and backgrounds. Accordingly, both of these cultures need to explore the individual's work volition based on constraints and restrictions.

Chinese undergraduates' career decisions are shaped by both traditional collectivist cultural values and their challenging economic circumstances. Firstly, the influence of a collectivist culture means that Chinese college students take into account not just their personal circumstances, but also broader considerations such as national requirements and family situations when choosing their careers. Secondly, the current economic climate in China, characterized by sluggish growth and even a downward trend, poses additional challenges. The ongoing expansion of university admissions has resulted in a significant increase in the number of college graduates, leading to a higher incidence of unemployment post-graduation. Consequently, it's challenging for students to find jobs that truly align with their aspirations, expectations, and interests. Given this cultural context and tough economic environment, it's crucial to examine the work volition of Chinese undergraduates.

It is necessary to verify the adaptability and effectiveness of the work volition scale for Chinese college students. Duffy, Diemer, and Jadidian (2012)[3] developed the 16-item WVS-SV among 379 undergraduate students at a large southeastern university in the United States. The scale was later validated with a sample of Turkish undergraduate students[6]. But the above-mentioned researches are mainly based on Western cultural samples which emphasize the values of independence, autonomy, and freedom. The work volition

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scale is relatively insufficient when tested with other cultural backgrounds[7].

2. Theory

2.1.The Psychology of Working Theory

The Psychology of Working Theory (PWT) was formulated as an extension to existing vocational theories, drawing from the fields of vocational psychology, multicultural psychology, intersectionality, and the sociology of work[1]. It emphasizes the primary role of sociocultural factors in shaping the career choices and work experiences of individuals, especially those from disadvantaged and marginalized communities. A key concept within the PWT is work volition, which is believed to be influenced by tangible structural, environmental, and personal barriers that are more prevalent among individuals facing economic hardship or marginalization[4, 5]. However, it is also viewed as an adjustable attitudinal variable. Individuals with high work volition are likely to feel less restricted and are more inclined to select a career that aligns with their needs, interests, and values. On the other hand, those with low work volition tend to perceive more constraints and their career choices are often influenced by factors such as social class, ethnicity, physical disability, psychological barriers, sexual orientation, status, gender, poverty, and resource scarcity[7].

3. Method

3.1. Context

In collaboration with faculty members, data was gathered from various Chinese universities. The sampling was based on a combination of cluster random sampling and convenience sampling, taking into account factors such as the type of institution (universities directly under the Ministry of Education versus local universities), geographical location (central, western, or eastern regions), and the potential for high-quality scale acquisition. This study posits that junior and senior college students are most concerned about their future career development. Therefore, these groups were the primary focus of the survey sample.

3.2. Collection Procedure and Sample

Participants in sample were 960 undergraduates who accepted the work volition survey by WeChat, website and class teacher in universities. The samples were from 12 provinces and cities in China, 40.4% (n=388) males and 59.6% (n=572) females, enrolled in university. Of the survey sample, 38.0% (n=365) comes from universities directly under the Ministry of education, and 62.0% (n=595) comes from local colleges and universities; 29.7% (n=285) identified themselves as from China'scentralsection,48.7% (n=467) as from China's western, and central, and 21.7 % (n=208) as from China's eastern section. Juniors students comprised 45.0% of the sample (n=432), and 55.0% (n=528) were seniors. The mean age of participants was 20.8 years. All survey samples were split in half by random grouping; half of the samples were used for exploratory factor analysis, and the other half were used for confirmatory factor analysis.

4. Results and Discussion

4.1. The validation of WVS-SV among Chinese undergraduate students

Since The Work Volition Scale-Students Version[3] did not have a Chinese version. It will be validated in this study. The 960 valid questionnaires were split in half, with half of the questionnaires conducting exploratory factor analysis and the other half performing confirmatory factor analysis.

The exploratory factor analysis was performed by running SPSS20.0 statistical software. The principal component analysis method was used to extract the common factor with Eigen value greater than 1, and the maximum equilibrium value method was used for orthogonal rotation. With the factor load greater than 0.4 and the cross load greater than 0.3 as the basis for whether the item is retained, two factors are co-aggregated after rotation. The commonality of each item in the scale is greater than 0.4, and the items W2 and W15 have higher loads in both dimensions (minimum load exceeds 0.3). Therefore, the item W2 (Discrimination will not affect my ability to choose a job) and W15 (The only thing that matters in choosing a job is to make ends meet) were deleted, the results are shown in Table 1.

Table1. Analysis of the EFA of College Students' Work Volition (N=480)

Items	commonality	Factor load	
		factor1	factor2
W1. I will be able to change jobs if I want to.	0.465		0.520
W3.Once I enter the work world, I will easily find a new job if I want to.	0.518		0.689
W4. I will be able to choose jobs that I want.	0.599		0.676
W5. I will learn how to find my own way in the world of work.	0.441		0.456
W6. I feel total control over my future job choices.	0.523		0.626
W7. I will be able to do the kind of work I want to, despite external barriers.	0.433		0.577
W8. What I want has little impact on my future job choice. *	0.450	0.546	
W9. In order to provide for my family, I will have to take jobs I do not enjoy.*	0.478	0.673	

W10. Due to discrimination, I do not feel I have complete control over my ability to get a job.*	0.390	0.580	
W11.Due to my financial situation, once I get a job I couldn't change jobs even if I wanted to.*	0.551	0.683	
W12. I feel that my family situation limits the types of jobs I might pursue.*	0.573	0.719	
W13. I worry that my life circumstances will prevent me from achieving my long term career goals.*	0.448	0.644	
W14. Due to my financial situation, I will need to take any job I can find.*	0.420	0.560	
WA16.I know I won't like my future job, but it will be impossible for me to find a new one.*	0.444	0.649	
eigenvalue		4.363	3.488
Total variation explained 60.108%		33.589	26.519

(Note:* Represents the reverse scoring problem. The reverse scoring problem was reversed before the exploratory factor analysis and the subsequent statistical analysis.)

The factors are named according to the content described in the item. Factor 1: This dimension mainly reflects the degree of volition that the university feels in the career search process, and whether it is able to engage in work that suits their interests. Therefore, it is named as "volition". Specifically, it includes six items of W1, W3, W4, W5, W6, and W7 in the scale. Factor 2: This dimension mainly reflect the various restrictions or constraints (including social discrimination, family conditions, etc.) that college students perceive in career seeking, so it is named as "constraints". Specifically, it includes eight items of W8, W9, W10, W11, W12, W13, W14, and W16 in the scale.

A Confirmatory factor analysis (CFA) with maximum likelihood estimation (ML) was conducted using AMOS 20 software. The Comparative Fit Index (CFI) compares the proposed model to a model that considers all the variables to be uncorrelated. According to Hu and Bentler (1999)[8], values greater than .95 represent good fitting models. The Root Mean Square Error of Approximation (RMSEA) evaluates the degree to which the proposed model would fit population covariance matrices if the optimal parameter estimates were available. Tabachnick and Fidell note that RMSEA values less than .06 indicate good fit, while values greater than .10 signify poor fit. The results of the CFA revealed that all items loaded on their expected factor and were consistent with the original structure of the scale (Fig. 1), model fit indices RMSEA=.071,CFI=.939, indicating a good fit to the data.

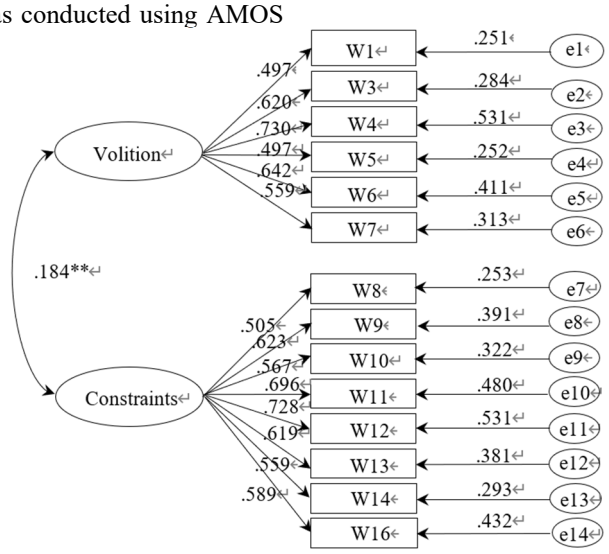


Fig. 1. CFA of college students' work volition scale
($\chi 2$/df=3.409; RMSEA=.071; AGFI=.931; GFI=.945; IFI=.930; CFI=.939; NFI=.932; NNFI=.935)

The correlation between the item and the dimension is between 0.607 and 0.753, indicating that the homogeneity within the two factors is better and the scale has better validity. The reliability of work volition scale indicates that the internal consistency reliability coefficient of the dimension is between 0.760 and 0.825, and the internal consistency reliability coefficient of the total scale is 0.789, both higher than the judgment criterion of 0.70, with high reliability[9]. In addition, 184 college students were surveyed by work volition questionnaire, which enrolled in marketing management and human resource manager classes at Yunnan University of Finance and Economics. The results of the test-retest reliability test at 4 months before and after the interval was Kappa=0.786(N=184), indicating that the college students' work volition scale has good reliability.

4.2. Discussion

This study, which is based on survey responses from 960 college students across the country, delves into the cross-cultural applicability of the WVS-SV. A work volition measurement scale was created through exploratory and confirmatory factor analysis. This scale comprises two

dimensions: volition and constraints, and includes a total of fourteen items. The study not only offers fresh insights into work volition research but also contributes to the body of literature on career guidance. Furthermore, it provides a valuable tool for future research into the work volition of college students.

5. Limitations and future research

It is important to acknowledge that the present study has certain limitations, which can guide future research directions. Firstly, despite gathering data at two intervals, the study was unable to mitigate the impact of common method variance as all data were sourced from college students. Consequently, future studies might benefit from diversifying their data sources. Secondly, the study's participants were exclusively college students. To enhance the applicability of our results, it would be beneficial for future research to validate our findings in settings beyond academia and to include a more varied adult demographic.

6. Practical implications

The cultivation of the willpower and frustration of college students and the improvement of their ability to cope with problems is another priority. The students must be assisted in summarizing their failure experiences, discussing improvement methods, understanding personal goals, and increasing enthusiasm for achieving their goals. While focusing on their career objectives, college students should develop their cultural knowledge, professional skills, and comprehensive qualities that are needed to achieve their career goals, and lay a solid foundation for achieving them in the future.

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