A STUDY OF STRUCTURES AND RELATIONSHIPS ON WORK VALUES AND COUNTER-PRODUCTIVE WORK BEHAVIORS

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Abstract. *This study aims to explore structures and relationships on work values and counter-productive work behaviors. In order to obtain access to reliable and valid scales of work values and counter-productive work behaviors, this study designed their indicator system, on the basis of literature review. A pilot test, involving 50 teaching staff and students in the particular field, was undertaken, and its outcome further modified the initial indicator system and the questionnaire. The present study interviewed 545 employees across China, to verify and formulate the scales of work values and counter-productive work behaviors. The research into the relationship between work values from the seven dimension and counter-productive work behaviors concludes that work values obviously form a negative correlation relationship with counter-productive work behaviors.*
Keywords: Work values, Counter-productive work behaviors, Structure model, Correlation analysis

1. **Introduction.** The organizational citizenship behavior (OCB) and counter-productive work behavior (CWB) are two extremely important employee's behaviors. The OCB can improve the effectiveness of organizational function, so it should be supported. However, the CWB is the problem to be solved, because it can destroy the organizational benefit. In terms of organizational behavior, work values, the important basis of understanding the employee's attitude and motivation, can influence and predict the employee's organizational behavior. The research of work values originates from the "protestant ethics", which is proposed by the classical organization school founder Weber [1]. In this study, the work values are defined as a result of value judgment system which comes from work environment, using Elizur's definition [2]. The earliest research of counter-productive work behaviors originates from a survey about employee's deviance of Kaplan (1975). And the CWB is defined as a series of intentional behavior that employees have done, which is harmful to the organization or organizational stakeholders, according to the research of Rotundo et al. [3-5].

This paper will verify the effectiveness of scales by using structural equation at first, then process preliminary studies on the relationship between the work values and CWB. From the work values, this study draws four creative conclusions through the empirical analysis.

2. **Structures of Work Values and Counter-Productive Work Behaviors.** According to the Taiwan scholar T. Wu, this study divides the work values measurement scale into 7 dimensions and 18 sub-dimensions [6], including self-growth, self-realization, dignity, social interaction, the organization for security and economy, stability and freedom from anxiety, leisure health and transportation, based on literature review. This scale passes the step of open questionnaire investigation, and it has good reliability and validity. In the aspect of the counter-productive work behaviors (CWB), Robinson and

Bennett (2000) divided it into two dimensions to people and organizations, and it is considered as the breakthrough progress in the field of CWB. Then Fox and Spector (2002) divided it into four parts, including slacking, destruction, property occupation and work alienation. In addition, C. Lu (2013) divided it into three dimensions of team damage, work alienation and active avoidance [4,7,8]. On the basis of the achievement of three academics, this study divides the counter-productive work behaviors into 5 dimensions and 23 sub-dimensions, that is, property occupation, work alienation, initiative avoidance, team damage and interpersonal malignity.

3. Structure Analysis of Work Values and Counter-Productive Work Behaviors.

3.1. **Research design.** According to the work values measurement scale of T. Wu (1996), which had good independence and validity, this study adopts his idea and divides work values into 7 parts [6]. However, such way may have problems, for example, some dimensions have one question, and the others have more questions; it may make measurement and calculation unbalanced. Therefore, this study adds 3 questions to dimension of self-growth, 1 question to achievement and stability, 3 questions to leisure health and transportation. It adds 8 questions totally, and then the work values become 38 questions.

In the process of measurement design, combining the survey of enterprise, this study divides the counter-productive work behaviors into five dimensions, that is, property occupation, work alienation, initiative avoidance, team damage and interpersonal malignity. Four factors belong to the organizational deviance, and the fifth factor belongs to interpersonal deviance.

Now that the measurement scale of work values and counter-productive work behaviors were set up, and then it still needs to establish final index system through questionnaire. Firstly, using T test, this study eliminates two sub-dimensions of interpersonal malignity that has no statistically significant difference (P > 0.01). In the aspect of scale design, work values scale is unbalanced in sub-dimensions, which leads to imprecise measurement, so the article adds 8 questions. Thus, the final index system and measurement scale are established, as shown in Table 1.

3.2. **Data analysis and structural testing.**

3.2.1. *Reliability and validity analysis.* The basic situation of measurement scale is shown as in Table 2, through the SPSS. From Table 2, the KMO values of two scales are all up to 0.96, which is close to 1, representing that both of them have good validity and can be used in next research.

3.2.2. *Structural testing.* The former testing proved that two measurement scales reached certain standard of value. To determine corresponding degree between the results of two scales and the measured value, this study will estimate structural model of scales by the method of structural equation, and discuss its contents deeply.

The structural model of work values is shown as in Figure 1. In this model, latent variable has 7 dimensions, and observable variable has 18 sub-dimensions and corresponding residuals, including X_1 to X_{18}, e_1 to e_{18}. Meanwhile, the corresponding path coefficient can be got after calculation.

In Table 3, all goodness-of-fit indexes CMIN/DF are close to 3 in absolute fitting index, RMR is less than 0.05 obviously, and GFI is close to 0.9; NFI is close to 0.9, and IFI and CFI are all up to 0.9 in relative fit index; AIC, BCC and ECVI are all small in information index, indicating that the structural model of work values has better goodness-of-fit.

The structural model of counter-productive work behaviors is as shown in Figure 2. In this model, latent variables include property occupation, work alienation, initiative avoidance, team damage and interpersonal malignity, observable variables are Y_1 to Y_{23},

TABLE 1. Index system of work values and counter-productive work behaviors

	Secondary index	Three-grade index
Work values	X_1 Self-growth trend X_2 Self-realization trend	X_1 Self-enrichment X_2 Creativity X_3 Future development X_4 Life goal X_5 Life quality X_6 Altruism
	X_3 Dignity trend X_4 Social interaction trend	X_7 Achievement X_8 Self-affirmation X_9 Respect and power X_{10} Co-workers X_{11} General interpersonal relationship
	X_5 Organizational safety and economy trend	X_{12} Invisible welfare X_{13} Dominant revenge
	X_6 Stable and free from anxiety trend X_7 Leisure health and transportation trend	X_{14} Job insecurity X_{15} Small working pressure X_{16} Leisure life X_{17} Health X_{18} Convenient transportation
Counter-productive work behaviors	Y_1 Property occupation	Y_1 Waste public property Y_2 Occupy public goods Y_3 Destroy public property
	Y_2 Work alienation	Y_4 Solve private problems during work time Y_5 Unserious work Y_6 Consider resign Y_7 Hide work error Y_8 Exaggerate workload
	Y_3 Initiative avoidance	Y_9 Late and leave early Y_{10} Prolong rest time Y_{11} Insist one's thought Y_{12} Hate dislike tasks Y_{13} Dilatory work
	Y_4 Team damage	Y_{14} Ignore the command Y_{15} Complain company to others Y_{16} Complain work to colleagues Y_{17} Ignore rules
	Y_5 Interpersonal malignity	Y_{18} Help colleagues seldom Y_{19} Talk about gossips of colleagues Y_{20} Cooperate work with colleagues seldom Y_{21} Dislike some colleagues Y_{22} Bad attitude to colleagues Y_{23} Deny achievement of others

TABLE 2. KMO and Bartlett's test

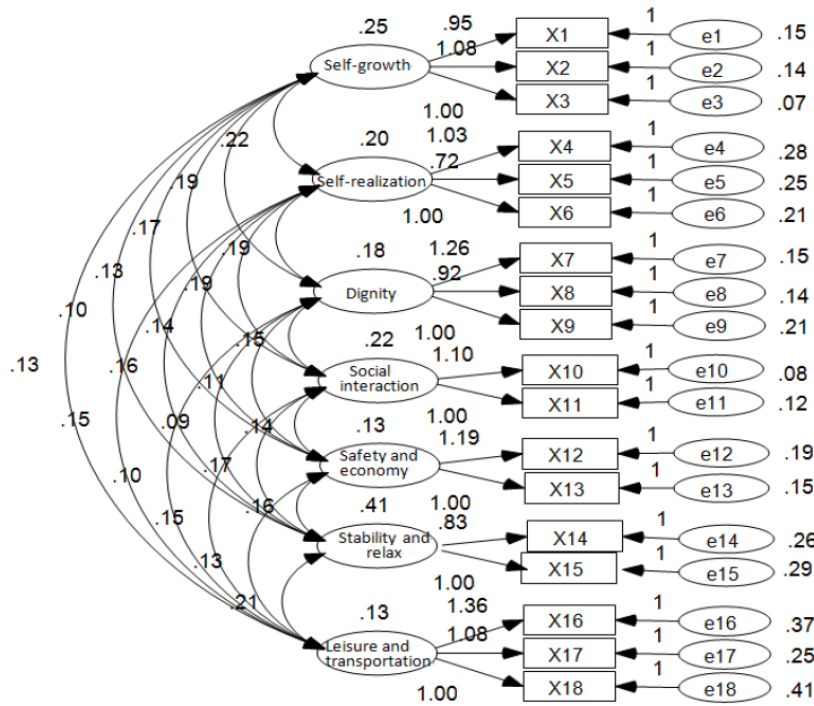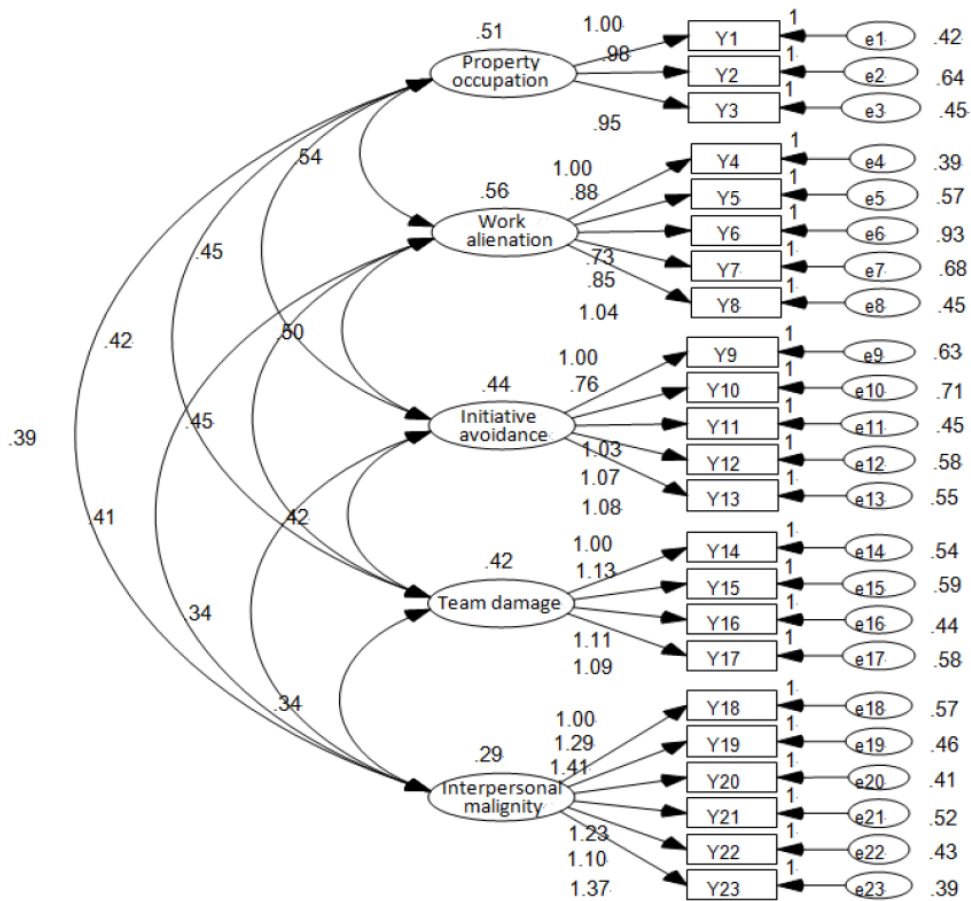|	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	Sig.
Work values scale	.960	6250.249	303	.000
Counter-productive work behavior scale	.961	5664.438	253	.000

FIGURE 1. Structural model of the work values

FIGURE 2. Structural model of counter-productive work behaviors

and residuals are e_1 to e_{23}. The load fitting results are as shown in Table 4, and it can be concluded that the structural model of counter-productive work behaviors has goodness-of-fit similarly with the calculation of work values.

TABLE 3. Model fit summary

Model	CMIN/DF	RMR	GFI	NFI	IFI	CFI	AIC	BCC	ECVI
Default model	3.117	.026	.894	.899	.902	.901	560.506	567.069	1.606

TABLE 4. Model fit summary of the CWB

Model	CMIN/DF	RMR	GFI	NFI	IFI	CFI	AIC	BCC	ECVI
Default model	2.927	.048	.851	.860	.860	.860	922.787	929.187	2.078

In all, the goodness-of-fit of the revised work values scale and counter-productive work behaviors scale passed model testing, indicating that the index system and questions (as shown in Table 2) are reasonable, and it can be used in continuous research. The model still needs to be improved, of course. To achieve better fitting results, the study can amend the structural model by Modification Indices. Although such way can make the model increase several units of fitting effect, it has no influence with the relationship between work values and counter-productive work behaviors, so this study will not amend the structural model anymore.

4. **The Relations Research of Work Values and Counter-Productive Work Behaviors.** Aiming at recycled 545 valid questionnaires, this study proceeds to correlation analysis between 7 dimensions of work values and counter-productive work behaviors, and the results are as shown in Table 5.

TABLE 5. Correlation analysis of work values and counter-productive work behaviors

		X_1	X_2	X_3	X_4	X_5	X_6	X_7	X
Y	Pearson Correlation	$-.051$	$-.300^{**}$	$.265^{**}$	$-.326^{**}$	$-.318$	$-.070$	$.199^*$	$-.195^{**}$
	Sig. (2-tailed)	.031	.000	.000	.000	.000	.141	.001	.000
	N	545	545	545	545	545	545	545	545

**. Correlation is significant at the 0.01 level

*. Correlation is significant at the 0.05 level

When the significance level alpha (α) is 0.01, the P value of dimensions to self-growth (X_1) is larger than alpha obviously, stability and freedom from anxiety (X_6) dimension as well. Therefore, the two dimensions have no relationship with the counter-productive work behaviors (CWB); the other dimensions have significant correlations with CWB, there is significant positive correlation between dignity (X_3), leisure health, transportation (X_7) and CWB; besides, self-realization (X_2), social interaction (X_4), organizational safety and economy (X_5) have negative correlation with CWB. Meanwhile, it can be seen that work values have significant negative correlation with CWB, indicating that the three factors which are negative to CWB influence the counter-productive work behaviors more intensely.

This research will enhance the employers' awareness of work values and counter-productive work behaviors. The employers will attach importance to their employees' routine performance, and provide training programs for their employees, in order to make them understand the notion of counter-productive work behaviors, and afford to prevent counter-productive work behaviors. In addition, the employers are able to predicate the employees' counter-productive work behaviors, from the work values perspective. They can undertake predications through questionnaires and communications with their employees, in order to have a better understanding of their work values, and make correct

judgments. For instance, when the employees think highly of dignity, they will be more apt to get into counter-productive work behaviors, such as interpersonal malignity. This requires the employers to be vigilant against employees' misconducts, and take measures to prevent the counter-productive work behaviors and reduce the chances for loss. Finally, the employers can trace the attributions of the counter-productive work behaviors, from the work values perspective. For instance, when the employees are aware of the employees' tendency for a certain counter-productive work behavior, the employers can resort to communication or other channels, to find out close links between the employees' misconduct and work values. Following the work value tendency, the employers will keep track of the origin of the counter-productive work behavior, and completely resolve the problem.

The structural establishment of two measurement scales is served for the relations research, because it is deserved to concern. To get the relationship between the dimensions of the WV and CWB, a further study is started with multivariate linear regression analysis.

5. **Conclusions.** This study verifies the validity of the measurement scales for the designed work values and counter-productive work behaviors (CWB), by means of the structural equation method. Work values consist of seven dimensions, including self-growth, self-realization, dignity, social interaction, organizational safety and economic stability, freedom from anxiety, leisure, health and transportation. On the other hand, counter-productive work behaviors consist of five dimensions, including property occupation, work alienation, initiative avoidance, team damage and interpersonal malignity. This study, on the basis of correlation analysis, finds that work values form significant negative correlation relationships with the CWB. The finding will help employers to undertake quantitative analysis of the employees' work values and counter-productive work behaviors existing in the enterprise, and predicate, remedy the counter-productive work behaviors, and contribute to the enterprise management.

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