

The effects of teacher-directed instruction, student orientation instruction, extrinsic motivation and intrinsic motivation on school engagement of College students in Taiwan

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Introduction

Method

Results

Conclusions

Introduction

➤ School engagement is not only the key factor that influences the success of student learning, but also highly connected to students' academic achievement.

➤ Because school engagement was found to be related to knowledge and cognitive development, and in order to use appropriate teaching strategies and to establish the suitable teaching environment, educators need to have in-depth understanding of the internal and external factors that associate with students' school engagement.



Therefore, it is necessary to investigate the internal and external factors that associate with college students' school engagement.

Introduction

- School engagement has been taken seriously in the recent years, so have the effect of intrinsic motivation and extrinsic motivation toward school engagement. In the current study, we tried to investigate the two types of learning motivations and their relationships with students' school engagement.
- Furthermore, we would like to confirm how the different ways of teaching methods (e.g. teacher-directed instruction, student orientation instruction) can influence school engagement through intrinsic motivation and extrinsic motivation.

- The research questions are listed below:
 1. Whether the theoretical model used in this study fits the observed data of Taiwanese college students.
 2. Whether teacher-directed instruction is related to intrinsic motivation, extrinsic motivation and school engagement.
 3. Whether student orientation instruction is linked to intrinsic motivation, extrinsic motivation and school engagement.
 4. Whether intrinsic motivation is related to school engagement.
 5. Whether extrinsic motivation is associated with school engagement.

Method

Participants

- The research instrument was the questionnaire of Collegiate Learning Outcomes Assessment developed by the National Sun Yat-Sen University.
- The data included 2,546 college students from 21 different departments.

	CFA
Teacher-directed instruction	$\chi^2 (0, N = 2564) = 0.0, p = 1.00$, the model is saturated, the fit is perfect.
Student orientation instruction	$\chi^2 (0, N = 2564) = 0.0, p = 1.00$, the model is saturated, the fit is perfect.
intrinsic motivation	$\chi^2 (2, N = 2564) = 27.61, p < .05$, RMSEA = .071、GFI = .99、AGFI = .97、NFI = .99、NNFI = .98、CFI = .99、IFI = .99.
extrinsic motivation	$\chi^2 (0, N = 2564) = 0.0, p = 1.00$, the model is saturated, the fit is perfect.
School engagement	$\chi^2 (205, N = 2564) = 3945.17, p < .05$, RMSEA = .08、GFI = .88、AGFI = .85、NFI = .97、NNFI = .97、CFI = .97、IFI = .97.

Data analysis

- This study conducted statistical analysis using LISREL8.52 and tested the five hypotheses using structural equation modeling (SEM).

Results

Overall model fit

$\chi^2(44, N = 2546), p < 0.05$	$p > .05$
GFI = 0.96	>.90
AGFI = 0.93	>.90
NFI = 0.98	>.90
NNFI = 0.97	>.90
CFI = 0.98	>.90
RFI = 0.97	>.90
IFI = 0.98	>.90
PNFI = 0.65	> .50
PGFI = 0.54	> .50

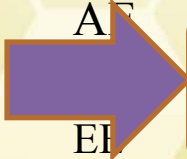


All of these indicators reveal that the theoretical model provided an excellent overall fit of the observed data

results

Fit of the internal structure of the model

Variables	factor loadings	individual item reliabilities	AVE	composite reliabilities
teacher-directed instruction			0.70	0.82
TDI-1	0.88	0.77		
TDI-2	0.79	0.62		
student orientation instruction			0.68	0.81
SOI-1	0.81	0.66		
SOI-2	0.84	0.71		
intrinsic motivation			0.63	0.77
IM1	0.77	0.59		
IM2	0.82	0.67		
extrinsic motivation			0.57	0.73
EM1	0.75	0.56		
EM2	0.76	0.58		
school engagement			0.60	0.85
BE	0.76	0.58		



this theoretical model exhibited a good fit to the internal structure of the model.

results

Full Model

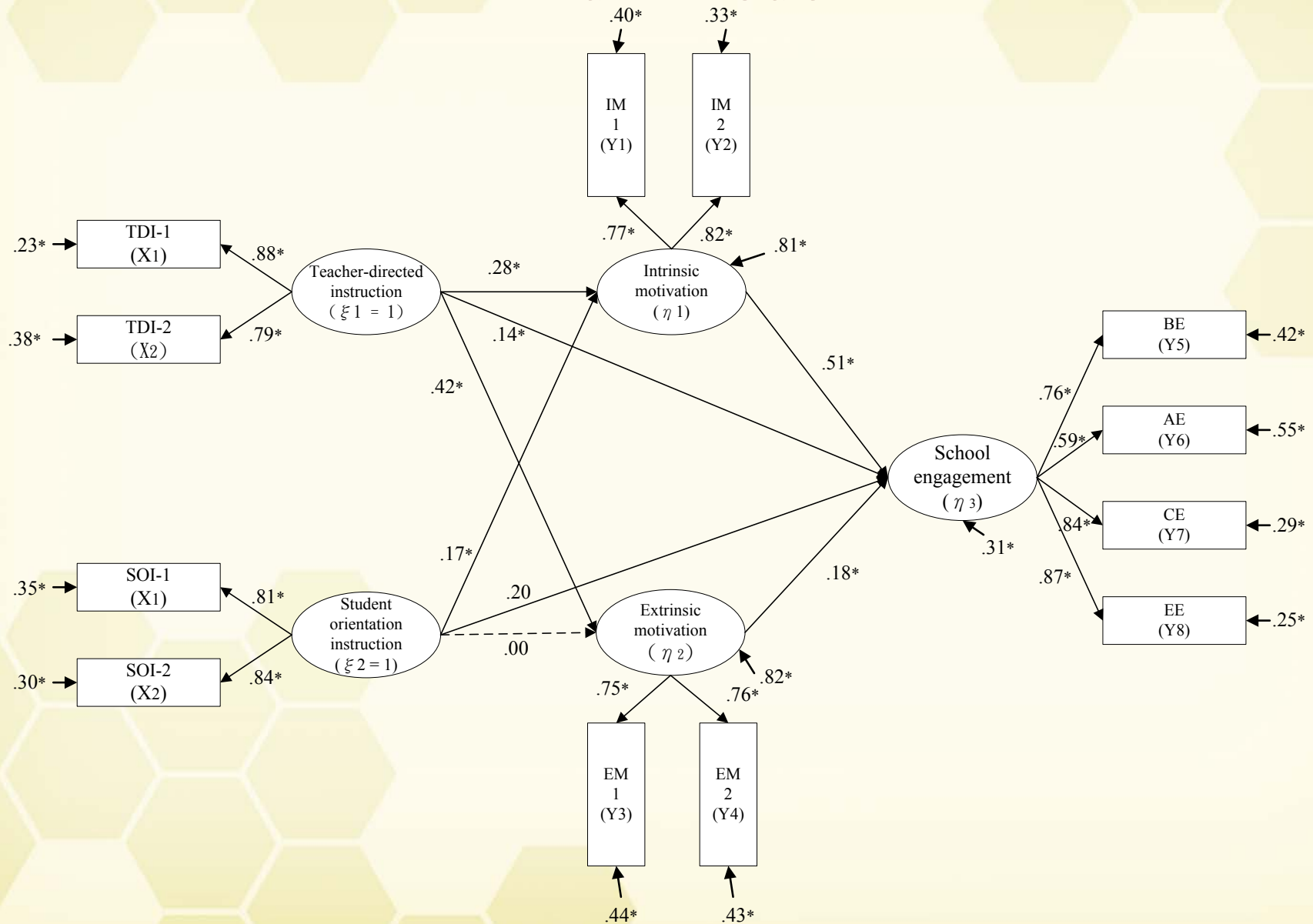


Fig 1. The complete standardized path coefficients and significance tests of the theoretical model.



Conclusions

Conclusions

Conclusions

- The result shows that teacher-directed instruction had direct effects on intrinsic motivation, extrinsic motivation, and school engagement, and it also had an indirect effect to school engagement through both motivations.
- Second, teacher-directed instruction had a stronger effect to extrinsic motivation than to intrinsic motivation.
- Third, student orientation instruction had direct effects to intrinsic motivation and school engagement, which implies student orientation instruction may enhance students' intrinsic motivation and school engagement; whereas it did not have the similar effect on extrinsic motivation.
- However, student orientation instruction can make an indirect effect to school engagement through intrinsic motivation.

Conclusions

- The research also found that both intrinsic and extrinsic motivations had positive effects on school engagement.
- In addition, compared to extrinsic motivation, intrinsic motivation had a stronger effect to school engagement.

Thanks for your attention

