Development and Validation of Teachers' Commitment to Change Scale

Fanny Kho Chee Yuet, PhD
Faculty of Management and Economics, Sultan Idris Education University, Malaysia

Abstract
This study focused on the development of Teachers' Commitment to Change Scale (TCCS) and to validate the adapted instrument based on the belief that individual needs motivation to enhance owns capability to perform a task successfully and efficiently. This instrument was envisioned to measure a variation of overall features of commitment to change. The original version of Commitment to Change Scale (CCS) was validated as having four constructs: personal goals, context beliefs, capacity beliefs, and emotional arousal process. Nonetheless, for the purpose of this study, only three of the constructs were chosen, namely personal goals, capacity beliefs, and context beliefs. It was distributed to 145 school teachers, who were required to respond to a 10-point Likert scale. The respondents were selected through purposive sampling procedure. The collected data were analyzed using SPSS software package. An exploratory factor analysis (EFA) was conducted prior to performing confirmatory factor analysis (CFA). Thus, the TCCS would benefit school principals in assessing the teachers' commitment in assuming new leadership roles in school change initiatives.
Keywords: Teachers' commitment, personal goals, context beliefs, capacity beliefs, leadership roles.

Introduction
Commitment is a commonly utilized word with a multitude of definitions applicable to distinct individuals. It always serves as the most important tool for a leader to instill subordinates or followers a sense of vital commitment and desire to contribute and make a greater contribution to the organization. Thus, a leader needs to have greater production by teaching the followers the best or most efficient ways to do a job, and tried to cajole their followers into a sense of well-being, hoping that their comfort would produce a desire to contribute. Simultaneously, a leader needs to have a measurement tool in order to keep tract of their followers' commitment to the organization, and to a purpose, principle, or person …. Effective leaders know how to channel the energies of strong commitment in ways that will satisfy the follower's personal needs. Effective followers are committed to something – a cause, a product, an organization, an idea – in addition to the care of their own lives and careers.

Yet some leaders misinterpret their commitment. Many effective followers see leaders merely as coventurers on a worthy crusade, and if they suspect their leader of flagging commitment they may just withdraw their support, either by changing jobs or by contriving to change leaders. Most followers like working with leaders whose heart are in their work. Effective leaders, on the other hand, may also channel the energies of strong commitment in ways that will satisfy the follower's personal needs. In other words, leaders' lead an organization by focusing on their followers' commitment (Patterson, 2003). Principals, for instance, need to take a second look at leadership development in leading change in schools, i.e., teacher leader. Leading change in schools is closely linked with the development of teacher leaders (Kho, Hamidah Yusof, & Syed Ismail Syed Mohamad, 2015).

Development of teacher leaders is considered to be the significant outcome of teachers' commitment to change from the classrooms. In this regard, it is a privilege for teacher leaders to walk with principals who portray developmental leadership behavior in order to be competent teacher leaders (Kho et al., 2015). In general, teacher leaders therefore need to understand exactly what they are leading, clearly communicate their intentions for teachers' leadership while actively building connections, coherence and alignment across teachers' leadership throughout the classroom. This alignment is best achieved through identifying a few clear priorities for teachers' leadership in enhancing students' academic achievement and ensuring that these are embraced, embedded and reinforced (Fullan, 2010). Therefore, teachers need to be committed in changing their roles from classroom instructional leader to school based teacher leader.

In fact, teachers' commitment plays a vital role in school organizational reform (Kushman, 1992). Hence, it is essential to be aware of whether principals' developmental leadership behavior is capable of influencing teachers' commitment. Having a clear vision will offer significant advantages into a positively influence teachers' commitment, i.e. promoting advanced students' achievement, fostering a collaborative culture, and enhancing schools' reform.

Development of Teachers' Commitment to Change Scale
The adapted Teachers' Commitment to Change Scale (TCCS) was developed by Ford (1992) and Bandura (1986) based on the belief that individual needs motivation to enhance owns capability to perform a task successfully and efficiently. This instrument was envisioned to measure a variation of overall features of commitment to change. According to Ford (1992) such instrument could be utilized to determine whether the applicants were committed and engaged to any recommended change before the overview of change in daily responsibility or routine.

The original version of CCS was validated as having four constructs: personal goals, capacity beliefs, context beliefs, and emotional arousal process. Nonetheless, for the purpose of this study, only three of the constructs were chosen, namely personal goals, capacity beliefs, and context beliefs. Ford (1992) and Bandura (1986) claimed that the mentioned three constructs of commitment to change are inter-related. The personal goals element focuses on the degree to which a person makes organizational goals as their personal goals. A person who obtained high score on the *personal goals* construct of commitment commonly, i) perceives that change is unnecessary with respect to respective goal; ii) energizes effort if they are

perceived to be challenging but "do-able" (Louis & Miles, 1990); iii) perceives school change to be clear and concrete; and iv) enlivens when reform is proximate, understood and valuable within context of longer term.

Meanwhile, a person who obtained high score on the *capacity beliefs* is a person who determine the strength of motivation in order to achieve *personal goals*. This type of person also portrays high level of self-efficacy, self-confidence, academic self-concepts, and aspects of self-esteem in order to accomplish organizational goals. The increase level of teachers' self-efficacy or capacity will lead to the betterment of classroom instruction and gain significant involvement of teachers in leadership tasks. Whereas, the third construct of commitment to change, the *context beliefs* refer to the belief in which school or central office authorities will prepare allocation for professional development. Those with high scores on *personal beliefs*, *capacity beliefs* and *context beliefs* is the kind of person who are highly motivated (Ford, 1992; Bandura, 1986), to readdress the focus of teachers' commitment and engagement to student learning and school change initiatives.

In general, the pilot version of the original CCS instrument was performed based on a total number of 2,092 primary school teachers in Hong Kong, which consists of 10 per cent of the population (20,428 primary school teachers). Exploratory Factor Analysis (EFA) with ten items was utilized to measure the first construct, i.e. the Personal Goals. Nonetheless, six items were deleted due to low factor loading (below 0.32) (Item 2, 18 and 25), and cross loading (Item 7, 27, and 32). Only four items were retained for the purpose of this study, explaining 30.812% of the total variance. The factor loadings of individual items were ranging from 0.627 to 0.713. The second construct, i.e. Capacity Beliefs, was measured by four items. Only one factor with the variance explained 32.181% was extracted. The factor loadings of individual items were ranging from 0.460 to 0.699. These items were considered fair to very good.

Context Beliefs which was the third construct, was measured by twelve items. Two factors were extracted, explaining 31.960% and 6.690% of the total variance explained. However, only five items were retained for this study, with factor loadings ranging from 0.608 to 0.662, and with the variance explained 31.960%. Most of the items were considered good and very good. To sum up, most of the factor loadings of the items were considered good to very good (Comrey & Lee, 1992) (Table 1).

Table 1.
The summary of Exploratory Factor Analysis results of the original version of CCS

Factor	No. of Item	Factor Loadings	Variance Explained	Remarks (Items)
Personal Goals	10	0.627 – 0.713	30.812%	Good to very good
Capacity Beliefs	4	0.460 – 0.699	32.181%	Fair to very good
Context Beliefs	12	0.608 – 0.662	31.960%	Good to very good

Further, other scholars have also utilized the CCS in their study. For instance, Yusuf Cerit in his study of "The effects of servant leadership on teachers' organizational commitment in primary schools in Turkey" in 2010, (N=563), internal consistency coefficients for the constructs were observed to be in the range of .82 to .95. In 1993, Leithwood, Jantzi, and

Fernandex, in their study of "Secondary School Teachers' Commitment to Change: The Contributions of Transformational Leadership", proclaimed the Cronbach's alpha coefficients for the constructs ranged from .85 to .90, contribute to overall teacher commitment composite reliability (.94). Additionally, Yu, Leithwood, and Jantzi (2002) utilized this inventory in Hong Kong primary schools, particularly in a research on "The effects of transformational leadership on teachers' commitment to change" (N=925) in 107 primary schools and the total Cronbach's alpha coefficients for the instrument was .86. Besides, this inventory had also been utilized by Voon, Lo, Ngui, and Peter (2014) in a study of "Influence of Transformational Leadership Style on Commitment-To-Change: The Impact of Human Resources Practices" (N=470) with reliability value ranged from .84 to .89. Table 2 shows the summary of CCS utilized in previous study. For the purpose of this study, the CCS had been modified to suite local contexts (Table 3).

Table 2.
The Summary of CCS utilized in previous study

Year	Scholars	Study	Sample	Cronbach's alpha
1993	Leithwood, Jantzi, & Fernandex	Secondary School Teachers' Commitment to Change: The Contributions of Transformational Leadership	168	.85 - .90
2002	Yu, Leithwood, & Jantzi	The effects of transformational leadership on teachers' commitment to change	925	.86
2010	Yusuf Cerit	The effects of servant leadership on teachers' organizational commitment in primary schools in Turkey	563	.82 - .95.
2014	Voon, Lo, Ngui, & Peter	Influence of Transformational Leadership Style on Commitment-To-Change: The Impact of Human Resources Practices	470	.84 - .89.

Table 3.

The   Scale   Item   of   Teachers'   Commitment   to   Change   by   Dimension

No.	Variable		Original Scale Items		Modified Items	Reliability
1.	Personal Goals	1.	Implementing the new programs requires making significant changes in how I go about doing my work.	1.	Implementing new programs requires making significant changes in how I go about doing my work.	Coefficient alphas of .85, .84, .86 and .89 respectively were achieved on 4 separate leadership management studies.
		2.	I expect to have opportunities to acquire more concrete knowledge about how to implement new initiatives in my school and classroom.	2.	I expect to have opportunities to acquire more concrete knowledge about how to implement new initiatives in my school and classroom.	
		3.	We regularly review and clarify our school goals as part of an ongoing goal-setting process.	3.	We regularly review and clarify our school goals as part of a continuous goal-setting process.	
		4.	My repertoire of teaching strategies is expanding to help implement new programs.	4.	My repertoire of teaching strategies is expanding to help implement new programs.	
2.	Capacity Beliefs	5.	Strong encouragement from colleagues and administrators whose expertise I respect enhances my confidence for implementing the new policy.	5.	Strong encouragement from colleagues and administrators whose expertise I respect enhances my confidence in implementing new policies.	Coefficient alphas of .89, .88, .87, and .88 respectively were achieved.
		6.	My initial efforts to implement new programs have encouraged me to continue with further implementation efforts.	6.	My initial efforts to implement new programs have encouraged me to continue with further implementation efforts.	
		7.	I sometimes learn new strategies by observing what colleagues do in their work.	7.	I sometimes learn new strategies by observing what colleagues do in their work.	
		8.	Frequent and stimulating interactions with my teaching colleagues provide encouragement to implement new initiatives.	8.	Frequent and stimulating interactions with my teaching colleagues provide encouragement to implement new initiatives.	
3.	Context Beliefs	9.	The policies and regulations of our school facilitate implementation of new initiatives.	9.	Our school policies and regulations facilitate implementation of new initiatives.	Coefficient alphas of .78, .83, .80 and .78 respectively were achieved.
		10.	Our timetables/schedules facilitate accomplishment of new goals.	10.	Our timetables/schedules facilitate accomplishment of new goals.	
		11.	My colleagues and I always support and encourage each other.	11.	My colleagues and I always support and encourage each other.	
		12.	The school administrators respect the expertise of teachers.	12.	The school administrators respect the expertise of teachers.	

Ford (1992) and Bandura (1986) claimed that the mentioned three constructs of commitment to change are inter-related. The personal goals element focuses on the degree to which a person makes organizational goals as their personal goals. A person who obtained high score on the *personal goals* construct of commitment commonly, i) perceives that change is unnecessary with respect to respective goal; ii) energizes effort if they are perceived to be challenging but "do-able" (Louis & Miles, 1990); iii) perceives school change to be clear and concrete; and iv) enlivens when reform is proximate, understood and valuable within context of longer term.

Exploratory Factor Analysis on TCCS
Generally, fitness of data was evaluated before statistically conducting factor analysis for TCCS. The KMO test yielded and acceptable score of .894 which was larger than 0.7 indicating that it was suitable for principal component analysis (PCA) (Table 4). The result of the

Bartlett's Test (.000) showed that the central assumption of inter-item and correlation between the groups were met (Hair et al., 2006). The communalities values (Table 6) indicated only one value (COB1) was loaded just below the threshold value of .5. The exception of this value did not contribute to major problem in factor analysis since the loading of other values were consistent.

Table 4.
KMO and Barlett's Test on TCCS

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.894
	Approx. Chi-Square	4417.229
Bartlett's Test of Sphericity	df	561
	Sig.	.000

Further, PCA affirmed the occurrence of two factors with eigenvalues exceeding 1, explaining 43.96 per cent and 25.28 per cent of the variance respectively or a total of 69.24 per cent of the variance (Table 5). The Varimax orthogonal recommended only two factors were extracted which explained 69.24 per cent of the variance (Table 5). The value exceeded the threshold of 50 per cent as proposed by Streiner (1994). Factor 1 contributing 43.96 per cent, and Factor 2 contributing 25.28 per cent of the variance. Table 6 illustrated that all two factors demonstrated acceptable factor loadings from .692 to .835, which implied high variance among the variables. In fact, the original version of TCCS modified by Huen (2000) consists of 26 items of *Personal Goals* (10 items), *Capacity Beliefs* (4 items), and *Context Beliefs* (12 items) respectively.

Table 5. The Total Variance Explained of TCCS (n=145)

Factor	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% Variance	of Cumulative %
1	7.057	58.808	58.808	5.275	43.958	43.958
2	1.252	10.432	62.240	3.034	25.282	69.240

All the 12 items of the two factors exceeded the threshold value of .5 (Field, 2005) and Cronbach's alpha value of equivalent to or above .7 (Hair et al., 2006). Cronbach's alpha value for *Personal Goals* is .935 and .838 for *Context Beliefs* showing relatively powerful reliability for each domain of TCCS (Table 7). In brief, there were 22, 15 and 12 items for the respective TLCS, PDLBS and TCCS. Simply stated, NMLCI comprised of 49 items for the actual survey. Table 7 summarized the total number of item of each stage from the initial development to the final stage of the instrument established for actual survey.

Table 6. The Rotation Method of 'Varimax' for Teachers' Commitment to Change Scale (TCCS) with Values of Consistence Items (n=145)

Table 7. Selected Items of TCCS for Final Survey, its Initial Construct, Factor Loading and Cronbach's Alpha

Description of items	h^2	1	2
Teachers' Commitment to Change:			
Personal Goals			
PEG1 My repertoire of teaching strategies is expanding to help implement new programs.	.736	.835	
PEG2 My initial efforts to implement new programs have encouraged me to continue with further implementation efforts.	.746	.823	
PEG3 We regularly review and clarify our school goals as part of a continuous goal-setting process.	.711	.799	
PEG4 I expect to have opportunities to acquire more concrete knowledge about how to implement new initiatives in my school and classroom.	.715	.792	
PEG5 Frequent and stimulating interactions with my teaching colleagues provide encouragement to implement new initiatives.	.726	.773	
PEG6 Implementing new programs requires making significant changes in how I go about doing my work.	.689	.750	
PEG7 I sometimes learn new strategies by observing what colleagues do in their work.	.705	.724	
PEG8 Strong encouragement from colleagues and administrators whose expertise I respect enhances my confidence in implementing new policies.	.721	.715	
Context Beliefs			
COB1 Our timetables/schedules facilitate accomplishment of new goals.	.413		.835
COB2 Our school policies and regulations facilitate implementation of new initiatives.	.552		.780
COB3 The school administrators respect the expertise of teachers.	.682		.740
COB4 My colleagues and I always support and encourage each other.	.573		.692
Eigenvalues		7.05	1.25
Total Variance Explained		5.27	3.03
% Cumulative Variance Explained		43.96	69.24

Construct	Item Code (PCA)	Item Code (CFA)	Item	Initial Construct Before EFA	Factor Loading	Cronbach's Alpha
Personal Goals	G11	PEG1	My repertoire of teaching strategies is expanding to help implement new programs.	PEG	.835	.935
	G8	PEG2	My initial efforts to implement new programs have encouraged me to continue with further implementation efforts.	CAB	.823	
	G7	PEG3	We regularly review and clarify our school goals as part of a continuous goal-setting process.	PEG	.799	
	G5	PEG4	I expect to have opportunities to acquire more concrete knowledge about how to implement new initiatives in my school and classroom.	PEG	.792	
	G3	PEG5	Frequent and stimulating interactions with my teaching colleagues provide encouragement to implement new initiatives.	CAB	.773	
	G1	PEG6	Implementing new programs requires making significant changes in how I go about doing my work.	PEG	.750	
	G9	PEG7	I sometimes learn new strategies by observing what colleagues do in their work.	CAB	.724	
	G2	PEG8	Strong encouragement from colleagues and administrators whose expertise I respect enhances my confidence in implementing new policies.	CAB	.715	
Context Beliefs	G10	COB1	Our timetables/schedules facilitate accomplishment of new goals.	COB	.835	.838
	G6	COB2	Our school policies and regulations facilitate implementation of new initiatives.	COB	.780	
	G12	COB3	The school administrators respect the expertise of teachers.	COB	.740	
	G4	COB4	My colleagues and I always support and encourage each other.	COB	.692	

Note. PCA= Principal Components Analysis; CFA=Confirmatory Factor Analysis; EFA=Exploratory Factor Analysis

The Pooled-CFA for the Measurement Model of TCC Constructs
To answer the research question, RQ3: "*Is Teachers' Commitment to Change measurement model construct-valid*?", a hypothesized confirmatory measurement model was developed. This model comprises of three latent variables, *Personal Goals (PEG), Capacity Beliefs (CAB) and Context Beliefs (COB).* The proposed model for TCC was established as it has more degree of freedom (55) than the paths to be estimated (25). Hence, abiding by the rule of thumb proposed a minimum of three indicators per construct but promoting at least four (Hair et al., 2006), with eight and four indicators for *Personal Goals* (PEG) and *Context Beliefs* (COB) respectively, the order condition was satisfied, which means the model was over identified.

The Pooled-CFA for the Measurement Model of TCC Constructs was employed using AMOS version 22 prior to applying SEM. The RMSEA (.089) which exceeded the threshold of .08 and the Normed Chi-Square (8.376) which also surpassed the threshold value of 5.0, specifying a possible fit problem. The GFI (.924), CFI (.942), TLI (.931), and NFI (.935) fit indices were above

the threshold value of .90, indicating a good fit except AGFI (.892). In order to increase the model fit indexes, the researcher decided to proceed for higher level of analysis, which is Second Order CFA. During this stage, the researcher further determines the cause of the misfit by examining the MIs. Nonetheless, before examining the MIs, the researcher decided to delete indicator with the lowest factor loadings, i.e. PEG7 (.39) (Figure 1), which does not meet the requirement of significant factor loading of at least .50 (Hair et al., 2010). Moreover, PEG7 also has very high MIs value (64.959). Hence, it is the most suitable candidate to be deleted. The MIs value will also be utilized to identify other potential indicators to be deleted.
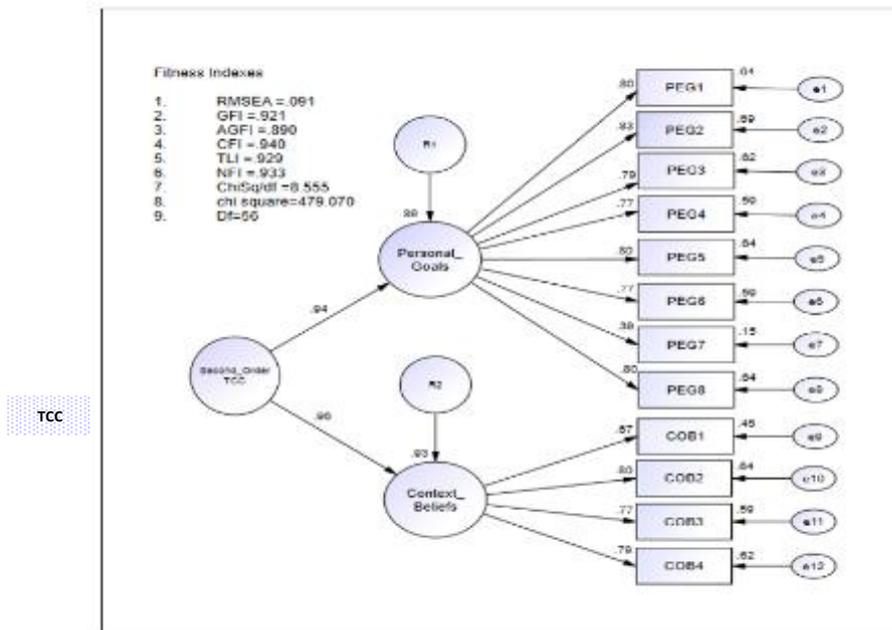

Figure 1. The Initial Second Order CFA for Measurement Model of TCC Constructs

As shown in Figure 2, the RMSEA (.063) has achieved the required threshold of .08. The Normed Chi-Square (4.627) also has achieved the threshold value of 5.0. The AGFI (.946) fit indices also has increased .58, which was above the threshold value of .90, indicating a good fit. The Normed Chi-Square (4.627) which achieve the threshold value of 5.0, indicating a good fit to the model. Overall, the estimation of the model portrayed adequate model fit.
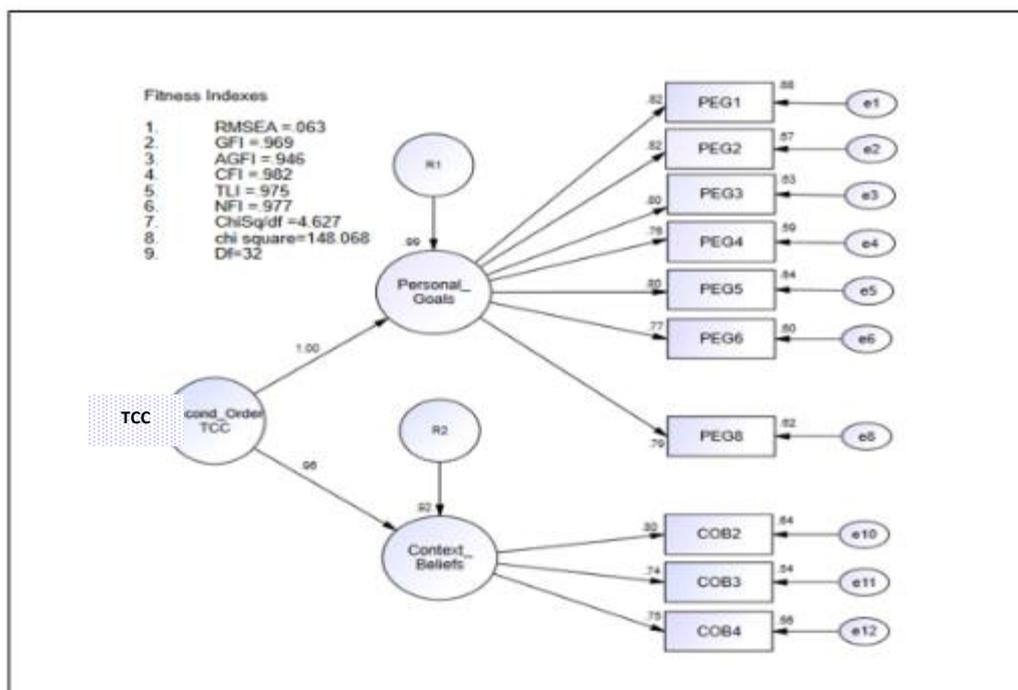
Figure 2. The Final Second Order CFA for Measurement Model of TCC Constructs

The Assessment of Construct Validity of TCC Scale

To assess construct validity of TCC Scale, three categories of fit indices were assessed: i) absolute fit indices; ii) relative fit indices; and iii) parsimonius fit indices. The absolute fit indices (GFI=.969; AGFI=.946); the relative fit indices (CFI=.982; TLI=975); and the parsimonius fit indices (NFI=.977) has surpassed the threshold value of .90. indicating the TCC Scale is construct valid.

Convergent Validity and Composite Reliability

To evaluate the convergent validity, first, the researcher evaluated the critical ratios and p-value. As depicted in Table 8, the results indicated that all the critical ratios of the estimates were outside the $\pm$ 1.96 z-value range and p-value was below .05. This specifies the factor loadings were statistically significant (Holmes-Smith, 2001). Next, all the AVE of the three variables exceeded 50% (Table 8) indicating adequate convergence in which less error remains in the indicators, as a set, than variance explained by the latent factor structure imposed on the measure (Hair et al., 2006). Hence, they would likely to be retained to support content validity of the TCC scale.

Next, moving to composite reliability, Personal Goals (1.00) and Context Beliefs (0.96) both constructs surpassed threshold value of 0.70 (Hair et al., 2006) as depicted in Table 8. This result indicating that the measures consistently represent the same latent construct (Hair et al., 2006).

Table 8.
The CFA Result for TCC Construct

Construct	Item	Factor Loading	CR (above 0.6)	AVE (above 0.5)	
TCC	Personal Goals	1.00	**.980**	**.961**	
	Context Beliefs	.96			
Personal Goals	PEG1	.82	**.923**	**.631**	
	PEG2	.82			
	PEG3	.80			
	PEG4	.76			
	PEG5	.80			
	PEG6	.77			Note.
	PEG8	.79			
Context Beliefs	COB2	.80	**.808**	**.583**	
	COB3	.74			
	COB4	.75			

CR=Composite Reliability; AVE=Average Variance Extracted.

The results in Table 9 indicate that Teachers' Commitment to Change has significant effects on the two components namely "Personal Goals" (PEG), and "Context Beliefs" (COB). In other words, Table 9 shows the effect of Teachers' Commitment to Change on the two sub-constructs are highly significant. Thus, the finding supported H3 of the study, H3: Teachers' Commitment to Change in Malaysia can be explained by these two factors: *Personal Goals* and *Context Beliefs.*

Obviously, overall statistics indices displayed good values and free from offending estimates. These indicated that the TCCS supported evidence of convergence validity. Hence, both constructs with six indicators for Personal Goals (PEG) and four indicators for Context Beliefs (COB) were retained. Table 10 summarized the assessments of the convergent validity for the TCC model.

Table 9.
The Regression Weights for Factors, TCC Items and Their Significance Value

			Estimate	S.E.	C.R.	P	Result
Personal Goals	<---	Second_Order_TCC	1.000	Reference Point			
Context Beliefs	<---	Second_Order_TCC	.855	.036	23.646	***	Significant
PEG1	<---	Personal Goals	1.000	Reference Point			
PEG2	<---	Personal Goals	.991	.034	29.443	***	Significant
PEG3	<---	Personal Goals	1.023	.036	28.217	***	Significant

			Estimate	S.E.	C.R.	P	Result
PEG4	<---	Personal Goals	.918	.035	26.593	***	Significant
PEG5	<---	Personal Goals	.967	.034	28.533	***	Significant
PEG6	<---	Personal Goals	.962	.035	27.093	***	Significant
PEG8	<---	Personal Goals	.937	.034	27.715	***	Significant
COB2	<---	Context Beliefs	1.093	.046	23.836	***	Significant
COB3	<---	Context Beliefs	1.000	Reference Point			
COB4	<---	Context Beliefs	.998	.039	25.803	***	Significant

Table 10.
Summarized Assessments of Convergent Validity of TCC Constructs

Construct	Item	Critical Ratio	Unstandardized Factor Loadings	SMC	AVE	CR	Final Decision
	PEG1	√	√	√			
	PEG2	√	√	√			
	PEG3	√	√	√			
Personal	PEG4	√	√	√	√	√	Retained
Goals	PEG5	√	√	√			
	PEG6	√	√	√			
	PEG8	√	√	√			
	COB2	√	√	√	√	√	Retained
Context	COB3	√	√	√			
Beliefs	COB4	√	√	√			

Note. SMC=Squared Multiple Correlations; AVE=Average Variance Extracted; CR=Composite Reliability.

Results and Discussions
The results revealed that the estimated two-factor TCC measurement model reproduced the sample covariance matrix exceptionally well. This specified that the test empirically supported the hypothesized model. In sum, the overall result provided evidence for convergent validity and composite reliability. This result also reaffirmed that the Teachers' Commitment to Change Model (TCCM) was free from offending estimates. Thus, research question, RQ3: "*Is Teachers' Commitment to Change measurement model construct-valid?*", was thus, answered. The summary of hypotheses testing was illustrated in Table 11.

Limitations and Directions for Future Research

In order to obtain a better understanding of TCCS, it would be advisable to collect data from various type of schools. Nonetheless, due to financial and resource constraints, this was not the case. Any future study would greatly advance our understanding of the phenomena to address the limitation. Next, high performing secondary schools and the concerned chosen sites and respondents was based on the reason that they are 'information rich'. By focusing only on high performing secondary schools, the researcher can easily and more accurately identify which were the most critical components of TCC. Similar research could be pursued on a more diverse sample; for instance, teachers in the mediocre or low-performing secondary schools as well as teachers in primary schools so as to test the validity of the study's model across different samples and the extent to which these can be generalized.

	Hypotheses	Remarks	Results
H3	Teachers' Commitment to Change (TCC) can be described by the subsequent two factors: *Personal Goals (PEG)* and *Context Belief (COB).*	The original measure of Teachers' Commitment to Change consists of three factors: *Personal Goals (PEG), Capacity Beliefs (CAB)* and *Context Beliefs (COB).* However, after identifying the underpinning structure using EFA, only two factors were retained namely, *Personal Goals (PEG)* and *Context Beliefs (COB).* The origin items for *Capacity Beliefs (CAB)* were loaded into *Personal Goals (PEG)* based on local context. As shown in Figure 1 and 2 both the two factors were loaded significantly on the TCC construct. This means that a measurement model for TCC can be explained by "*Personal Goals*" and "*Context Beliefs*".	Partially supported
H3a	Each indicator has a nonzero loading on the hypothesized (targeted) factor.	The two factors as shown in Figure 2 were verified with factor loadings of 1.00 for "*Personal Goals*" and .96 for "*Context Beliefs*".	Empirically supported
H3b	Each indicator has a zero loading in the other (non-targeted) factors.	There were two constructs involved in the TCC measurement model. All indicators with non-zero loadings were targeted only to the respective construct. In other words, each indicator had a zero loading in the other (non-targeted) factors.	Empirically supported
H3c	The error terms are uncorrelated.	All the error terms were uncorrelated.	Empirically supported

Conclusion

In testing the model of Teachers' Commitment to Change (TCC), after identifying the underpinning structure based on local context, instead of three domains: *Personal Goals* (PEG), *Capacity Beliefs* (CAB) and *Context Beliefs* (COB), only two domains were retained

namely, *Personal Goals* (PEG) and *Context Beliefs* (COB). Obviously, the finding revealed that TCC is influenced by the intervention of personal and school context domains, which implies that human factor is relatively an important factor and thus greater attention to be given to the human side of the change process, which in turn, contributes to commitment to change. Indeed, it reinforces the existing literature that stresses the significance human factor in promoting organizational learning commitment and change in public organizations. Hence, it serves as a significant factor for exploring this phenomenon which may help move the commitment literature which contribute to subordinates' commitment to change in a positive way, to a more logical and consistent theoretical perspective.

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Corresponding Author

Dr. Fanny Kho Chee Yuet,
Senior Lecturer, Faculty of Management and Economics,
Sultan Idris Education University, Perak, Malaysia.
fannykcy@fpe.upsi.edu.my

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