Transformational Leadership and Affective Commitment to Change: The Roles of Readiness for Change and Type of University

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The purpose of this paper is to investigate the relationship between transformational leadership and affective commitment to change through readiness for change. This paper also examines whether the type of university moderates the relationship between transformational leadership and affective commitment to change in the Kurdistan Region. **Design/methodology/approach -** This paper mainly uses quantitative methods to explore the relationship between transformational leadership, readiness for change, and affective commitment to change. The data was gathered from 611 lecturers in 14 public and 11 private universities in the Kurdistan Region. SmartPLS3 was used to assess the measurement model and structural model. **Findings -** The results show a significant relationship between transformational leadership and affective commitment to change. The results show also that readiness for change mediates the relationship between transformational leadership and affective commitment to change. SmartPLS results show that the type of university had a moderate effect on the relationship between transformational leadership and affective commitment to change. **Research Implications:** Self-reported questionnaire and cross-sectional design are considered the main limitations of this study, also the generalisation of the present results is limited to the used sample. **Originality/value -** This study is one of the first to explore the impact of transformational leadership on lecturers' commitment to change in HEIs in Kurdistan. Furthermore, the paper contributes to existing literature by presenting a more detailed understanding for practitioners and researchers into the effectiveness of transformational leadership during periods of organisational change by investigating its effect on affective commitment to change through readiness for change and a moderating role of the type of university.

Type – Research Paper

Introduction

Today, all organisations are struggling with the need for almost continuous change in order to responsd to environmental factors. In this regard, organisational change has become more common in all organisations regardless of size and industry. Although organisations are dealing with constant change, the implementation of change is not easy; the failure rate for change initiatives exceeds 70 percent (Beer & Nohria, 2000; Kotter, 2008). In this regard, it is claimed that the reason for this high failure rate of change programs is ignoring employees' feelings, motivation, and commitment (Bolman & Deal, 2005). In light of this, employees' behaviors and attitudes regarding organisational change can significantly affect change efforts. Therefore, understanding employees' reactions to change are becoming more critical factors during organisational change (Chen & Wang 2007). One of the concepts used to explain these types of reactions and attitudes is commitment to change. Furthermore, one of the many reasons why change efforts have failed has been lack of commitment to change (Elias, 2009). Hence, commitment to change is considered to be one of most important factors for the successful implementation of change initiatives (Herscovitch & Meyer, 2002).

In addition, as with other sectors, the higher education sector faces many and new challenges in the new millennium. In today's changing environment, higher education institutions are required to adapt to change. In light of this, the ministry of higher education and scientific research in Kurdistan has decided to reform the higher education system in Kurdistan. It is proposed that the reform could achieve desired results. Reforming the higher education system in Kurdistan faces many barriers to progress, and to successfully achieve desired outcomes from the reforming process , and resistance to change is a major barrier and a big challenge that requires administrators using different ways to overcome the resistance to change. In this regard, Ali (2012) stated that the process of reform in higher education institutions in Kurdistan has faced many challenges, such as lecturers' resistance, which leads to slowing down the accomplishment and progress of the reform process. Hence, acceptance and support from the employees is crucial for succeeding with an organisational change (Godager & Toft, 2011).

On the other hand, organisational change requires leaders to change, and leadership is at the heart of any change process in an organisation (Block, 2003). Hoghes (2016) states that leaders need to have the ability to gain employees' commitment during periods of organisational change. Achieving success in organisational changes requires a proper

leadership style in order to gain employees' commitment during changes. Transformational leaders are seen as playing an extraordinarily important role in the successful implementation of change (Abrell, 2012). Furthermore, employees' readiness for change plays an important role in effective organisational change efforts (Bloir, 2014). Bernerth (2004) stated that researchers and practitioners have found that employees' readiness for change is a fundamental factor in implementing organisational change efforts successfully. Numerous studies (Holt, Armenakis, Field, & Harris, 2007; Armenakis, Bernerth, Pitts, & Walker, 2007; Armenakis & Harris, 2002) found that employees' commitment is a critical factor for success regarding organisational changes, which in turn is determined by employees' readiness for change. However, there are many organisational factors which should be considered in order to successfully implement the reform, such as commitment to change, readiness for change, and transformational leadership.

Literature Review
Commitment to Change

Organisational commitment has received great attention in the last several decades. Numerous studies suggest that organisational commitment is a significant issue, since it may be used to explore employee's performance, absenteeism, work turnover, and other behaviors (Meyer & Allen, 1997; Meyer & Herscovitch, 2001; Staples, 2009). In addition, organisational commitment is a complex subject, which is showed by the plethora of definitions that have been used throughout the literature for several decades (Culverson, 2002). Meyer and Allen (1991) suggested a model of organisational commitment that contains three components: affective, normative, and continuance commitment, known a Three-Component Model (TCM) of Meyer and Allen.

On the other hand, initiatives of change have become more significant in today's business, organisational commitment researchers have started to study commitment to change, because the idea that the employee who is more committed to an organisational change initiative will work more toward implementing it (Jaros, 2010). In addition, commitment to change has been shown to be empirically and conceptually different from organisational commitment (Fedor, Caldwell, & Herold, 2006; Meyer, Srinivas, Lal & Topolnytsky, 2007). According to Herscovitch and Meyer (2002), commitment to change compared to organisational commitment is considered a better indicator of encouragement for organisational change efforts. Kotter (1996) stated that if organisational managers cannot attain employees' commitment to new ideas, there will be a high rate failure of change implementation. In other words, Harris and Ogbonna (1999) suggested that planned change efforts in an organisation are more likely to be successful if organisational employees are committed to implementing it. Consequently, employees' commitment to change determines the successful implementation of the planned change in organisations (Armenakis & Bedeian, 1999).

On the other hand, commitment to change was considered as a one-dimensional concept for a long time (Armenakis & Bedeian, 1999). Until recently, Herscovitch and Meyer (2002) suggested the commitment to change concept based on the Meyer and Herscovitch (2001) general model of organisational commitment. Meyer and Herscovitch (2001) thought that the three-component model of Meyer and Allen (1991, 1997) of organisational commitment could be appropriate to distinctive organisational commitment matters such as a union, a supervisor or a change. In light of this, Herscovitch and Meyer (2002) modified the Three-Component Model (TCM) of Meyer and Allen (1991, 1997) to cover commitment to change (affective, normative, and continuous commitment to change). Affective commitment to change has been defined as "an aspiration to support the organisational change initiative based on its essential benefits" (Herscovitch & Meyer, 2002, p. 475). Furthermore, this type of commitment is dependent on an employee's readiness and wishes to support organisational change efforts. This aspiration regarding the change initiative is established because the employees understand its value to produce. In addition, employees with higher levels of affective commitment to change are more likely to show supportive attitude about change initiatives (Ford & Ford, 2012). Among three components of commitment to change, this study focuses on affective commitment to change because it has been shown to have the strongest and most consistent positive relations with behavioral support for specific change initiatives (Herscovitch & Meyer, 2002; Meyer et al., 2007). In this regard, understanding factors that affect affective commitment to change is important. Among many factors, transformational leadership (i.e. Herold, Fedor, Caldwell, &Liu, 2008; Abrell, 2012) and readiness for change (i.e. Mangundjaya, 2013; Adil, 2016) have been shown as the main factors that affect affective commitment to change. The next two sections will discuss these two factors.

Transformational Leadership

The idea of leadership has been an subject of interest to philosophers and historians since ancient times, however scientific studies on leadership started in the 20th century, especial, around 1930 (Daft, 2001, Littrell, 2002, Yukl, 2013). Leadership has been identified as an important subject and one of the most frequently discussed and studied topics in the organisational behavior field, due to its importance to all organisations (McShane & Von Glinow, 2015). In the mid-to-late 1970s, a new leadership pattern began to capture the attention of many. By combining trait, behavior, and contingency leadership approaches, one of the new leadership theories was developed, called transformational leadership (Lussier & Achua, 2015; Silong, 2009).

In 1978, McGregor Burns introduced the notion of transformational leadership. Since Burns introduced the concept of transformational leadership, it has received an unexpected amount

of attention, and become the most effective form of leadership, and the most noticeable subject in the research and theories of leadership. The plethora of studies on transformational leadership style extends from Burns' (1978) original study in the political field to numerous private, public, and non-profit organisations (DeBerry, 2010). Bass and Riggio (2006) state that although the primary studies demonstrated that transformational leadership style was a specifically powerful source in military fields (e.g., Longshore, 1988; Bass, 1985; Yammarino & Bass, 1990), more recent studies on transformational leadership style surveyed leadership in different settings such as: business, government institutions, education, health care settings, and in the nonprofit sector.

Several theorists have suggested many theories and versions of transformational leadership since Burns developed the concept of transformational leadership in (1978), for example, Bass (1985, 1996), Bennis and Nanus (1985), Tichy and Devanna (1986), and Sashkin (1988). Notably, these theories of transformational leadership were strongly influenced by the thoughts of James M. Burns, but the version of transformational leadership theory developed by Bass (1985, 1996) has influenced leadership research more than any of others (Yukl, 2013). In addition, according to Bass and Avolio (1994), the transformational leader achieves excellent outcomes by using the following behaviours: idealised influence behaviour/charismatic, inspirational motivation behaviour, individualised consideration behaviour, and intellectual stimulation behaviour. Moreover, transformational leadership style is a process of enhancing employees' commitment to organisational goals and objectives and then motivating followers to achieve those goals and objectives (Yukl, 2013).

Transformational Leadership and Affective Commitment to Change

In today's environment, change has become very common in organisations, and all organisations regardless of size and industry are required to change quickly if they want to survive (Jacobsen, 2013). Commitment to change has been determined as a main indicator of implementing organisational change efforts successfully (Herscovitch & Meyer, 2002). On the other hand, leaders in organisations are seen as playing an unusually significant role in implementing change efforts effectively (Abrell, 2012). Transformational leadership is especially important when organisations needs to make radical changes in order to survive.

Transformational leaders enhance employees' affective commitment to change by building trust in them, and affecting their perception of benefits and expectations fulfilment of change (Caldwell et al., 2008). Many studies (e.g. Herold et al., 2008; Abrell, 2012) have been conducted researching the link between transformational leadership and commitment to change, and they found apositive relationship between these two variables. Based on the above discussion and past studies, this paper hypothesisese that:

H1: Transformational Leadership has a positive relationship with affective commitment to change.

Readiness for Change

Lewin (1947) generated the first acknowledged model that conceptualised the process of change. His model contained three steps (Unfreezing, Moving, and Refreezing). The first step, unfreezing, is the process of helping employees to be psychologically ready for the change by convincing employees of the need of change and potential benefits for it, as well as explaining the future vision of the organisation. In addition, unfreezing (the first stage) is similar to the concept of readiness for change. When employees in the organisation feel that they are qualified to (ready) make a change, they are more likely to take the risk involved in moving towards adopting new attitudes and behaviours, and ultimately new attitudes and behaviours are refrozen into the organisation (Lewin, 1951). When a problem occurs in this stage (unfreezing or readiness for change), problems will also occur in the next steps and ultimately successful change can not occur in long term (Madsen, Miller, & John, 2005).

Based on Lewin's (1947) Model, Armenakis, Harris, & Mossholder (1993) have developed a new model to explain the organisational change process and to better understand how to implement change effectively, namely readiness for change. Readiness for change has been extensively studied in the organisational change literature and is the most frequent concepts promoting a positive attitude toward change. In other words, readiness for change is one of the most significant factors and plays an important role in implementing change initiatives successfully (Cunningham, Woodward, Shannon, Maclntosh, Lendrum, Rosenbloom, & Brown, 2002; Holt et al, 2007; Madsen et al., 2006; Armenakis et al., 2007). Bouckenooghe (2010) concluded that (after a review of the literature) more than 90% of conceptual work on organisational change attitudes has been conducted on either readiness for change or resistance to change. Using the term readiness instead of resistance is more consistent with the change agent role when undertaking change (Armenakis & Harris, 2009).

Readiness for Change and Affective Commitment to Change

Organisations need to prepare employees for the change to implement change successfully (Armenakis et al., 1993). On the other hand, employees' readiness for change increases positive attitudes, since the level of understanding becomes higher, and thus, makes employees more committed towards the change initiatives (Person, 2014). In this regard, many studies found that readiness for change positively affects commitment to change (e.g. Soumyaja, Kamlanabhan, & Bhattacharyya, 2015; Madsen, 2005; Mangundjaya, 2013; Adil, 2016). From the above discussion and literature review, the following hypothesis is proposed:

H2: There is a positive relationship between readiness for change and affective commitment to change.

Transformational Leadership and Readiness for Change

During organisational change, leaders, especially transformational leaders play an important role in their organisations (Bass & Reggio, 2006). Transformational leaders influence their followers' behaviours, hence, employees are more likely to accept and be ready for change than to be resistant to change (Gilley, Dixon & Gilley, 2008). In addition, leaders' attributes are significant in the process of creating readiness for change (Armenakis et al., 1993). In this regard, many studies found that the transformational leadership behaviour plays a significant role in increasing the level of employees readiness for change (e.g. Santhidran, Chandran, &Borromeo, 2013; Nordin, 2011). From the previous studies and above discussion, the following hypothesis is proposed:

H3: Transformational leadership has a positive relationship with readiness for change.

Transformational Leadership, Readiness for Change, and Affective Commitment To Change

This study assumed that transformational leadership may impact employees' affective commitment to change via their readiness for change. As discussed in earlier sections, there is a direct effect of transformational leadership on employees' readiness for change and affective commitment to change. It can be argued that transformational leadership has an indirect effect on employees' affective commitment to change through readiness for change. According to Lewin's Change Model, successful change happens by unfreezing the existing situation, moving to a preferred situation, and then refreezing the system, consequently, it remains in this preferred situation. In the unfreezing stage, organisational management prepares employees for the change by creating a need for change. Based on Lewin's Model, Holt et al. (2007), which stated that the process of implementing organisational change successfully includes three stages: a) readiness for change, b) adoption, and c) institutionalisation. Based on both above change models, readiness for change is a significant stage in the process of change and it exceeds the commitment to change (commitment is typically a component of refreezing stage). Hence, it is proposed that employees' readiness for change mediates the relationship between transformational leadership and affective commitment to change. In this regard, some studies found that readiness for change mediates the relationship between transformational leadership and commitment to change (e.g. Santhidran et al., 2013). Based on the above discussion and past research, the following hypothesis is supported:

H4: Readiness for change mediates the positive relationship between transformational leadership and affective commitment to change.

Higher Education in Kurdistan

Since the founding of Iraq in 1921 and until the late 1960s, there were no universities in the Kurdistan Region, including Kirkuk. In 1968, the University of Sulaimaniah was founded. Later (in 1981), the University of Sulaimaniah transferred to Erbil and was named Salahaddin University. After the Gulf War I (1991), the United Nations (UN) announced a no-fly zone, three Iraqi northern Kurdish provinces (Erbil, Sulaymaniah, and Duhok) gained an autonomous status, and the Iraqi regime completely withdrew its troops from the three provinces. Consequently, the university of Salahaddin acquired the independence from the Ministry of Higher Education and Scientific Research in Baghdad it had sought since its establishment in 1968. After liberation, the Kurdistan Regional Government (KRG) reopened the University of Sulaimaniah and inaugurated the University of Duhok in 1992. Since 1992, many other new universities and technical institutes have been established in major cities and towns. Today, there are 11 public universities, 3 polytechnic universities, and 11 licensed private universities in the Kurdistan Region.

The higher education and scientific research ministry in Kurdistan has decided to reform the higher education system in Kurdistan. The reform process began with new a vision, followed by a well-defined strategy and a well-designed roadmap for the higher education system reformation in Kurdistan. According to former minister of higher education and scientific research in Kurdistan, Dlawer A. Ala'addin (2009), the strategy of reformation is the foundation of a long development process that would not be comprehensive without the support of all the higher education institutions' individuals (academic staff, students, and other employees) . We can conclude from his view that the individual's support and acceptance of the new strategy is significant to implement the reform process successfully in higher education institutions in Kurdistan. On the other hand, as mentioned earlier, leadership style, readiness for change, and commitment to change are important during organisational change. Moreover, based on the previous studies, public institutions are bureaucratic institutions and contain complex political systems. Therefore, the level of leadership style and affective commitment to change might be different within public and private institutions. Hence, the following hypothesis is proposed:

H5: Type of university (public/private) moderates the relationship between transformational leadership, readiness for change, and affective commitment to change

Research Method

We conducted a quantitative survey throughout Higher Education Institutions in the Kurdistan Region. A questionnaire was developed to measure transformational leadership, readiness for change and affective commitment to change. The 20 items used in this study to measure transformational leadership were adapted from MLQ Bass and Avolio 2004. Nine items used to measure readiness for change were adapted from Bouckenooghe, Devos, and Van den Broeck (2009). To measure affective commitment to change, six items were adapted from Herscovitch and Meyer (2002). The questionnaire was organised into four sections; the first section represented respondents' profiles (this section contained six questions regarding the gender, age group, academic qualification, academic position, type of university, length of the service in the university). Sections two, three, and four covered the questions about the three main variables in the study answered on a five-point Likert scale ranging from strongly disagree =1 to strongly agree=5. 1860 questionnaires were distributed to gather data. Among the completed and returned questionnaires, 611 questionnaires were suitable for analysing. The survey was carried out from April 2017 to June 2017. SPSS version 22 was used for descriptive analysis and to assess the measurement model (reliability and validity of constructs) and structural model (hypotheses testing), partial least square-structural equation modelling (PLS-SEM) was used. PLS-SEM was used because the data was not normally distributed and the model included a combination of both reflective and reflective-formative constructs. It has been suggested to use PLS-SEM when a model contains both reflective and formative constructs (Hair, Ringle, & Sarstedt, 2011; Chin, 2010). This study used SmartPLS 3 to perform the PLS-SEM analysis.

Analysis and Findings
Descriptive analysis

A total of 611 respondents from public and private universities in the Kurdistan Region have participated in this study. 349 of them represent 57.1% from Public Universities and 262 of them represent 42.9% from Private Universities. Most of the respondents in this study were male (72%), and around 60% of the respondents were less than 40 years old. In addition, 220 respondents out of 611 respondents hold a PhD, and around 50 % of all respondents were assistant lecturers. 62 % of respondents have less 10 years of service in the university, and the rest (38%) have at least 10 years of service in the university. The following table summarises the respondents' profiles of this study.

Table 1: Respondents' Profiles

Variables		Frequency	Percentage %
Gender	Male	445	72.8
	Female	166	27.2
Age Group	Less than 30 Years Old	55	9
	30-39 years Old	310	50.74
	40-49 Years Old	142	23.24
	50 Years Old and above	104	17.02
Academic Qualification	Bachelor	4	0.65
	Higher Diploma	1	0.16
	Master	386	63.19
	PhD	220	36
Academic Position	Assistant Lecturer	303	49.6
	Lecturer	193	31.6
	Assistant Professor	90	14.7
	Professor	25	4.1
Type of University	Public	349	57.1
	Private	262	42.9
Length of service in the University	Less than 5 Years	171	28
	5-9 Years	208	34
	10-14 Years	129	21.1
	15 Years and above	103	16.9

Model Assessment

Model assessment via PLS commonly comprises of two steps: measurement model assessment and structural model assessment (Hair, Hult, Ringle, & Sarstedt, 2017). Measurement model assessment involves an examination of the reliability and validity of main constructs (the relationship between construct and its indicators), whereas structural model assessment focuses on the relationships between the main constructs.

Measurement Model Assessment

The final model for this study involved seven reflective first-order constructs (Idealized Influence-Attribution-IIA, Idealised Influence-Behaviour-IIB, Inspirational Motivation-IM, Intellectual Stimulation-IS, Individualised Consideration-IC, Readiness for Change-R4C, and Affective Commitment to Change-AC2C) and a reflective-formative second-order construct (Transformational Leadership-TL). Since all first-order constructs are reflective, the criteria for the assessment of the reflective measurement model had to be considered to assess measurement model (first step). This involves determining the internal consistency (Cronbach's Alpha, and Composite Reliability), convergent reliability (Factor Loadings, and AVE), and discriminant validity (Cross-Loadings, Fornell-Larcker Criterion, and Heterotrait-Monotrait Ratio). In the second step, the measurement model was analysed by generating second-order construct.

The first criterion to be evaluated is typically internal consistency or reliability. The traditional criterion for internal consistency is Cronbach's alpha, which provides an estimate of the reliability based on the intercorrelations of the observed indicator variables. The Cronbach's Alpha coefficient ranges between 0 to 1. It is supposed that a higher coefficient of Cronbach's Alpha produces a better measurement (Sekaran & Bougie, 2013). For this study, a value of 0.70 or more is used as a rule of thumb (Hair et al., 2010; Sekaran & Bougie, 2013). Table 2 shows each construct's score and the overall score of Cronbach's Alpha fulfilled the requirement of 0.70 and more. In addition, composite reliability is another measure to evaluate internal consistency reliability. The composite reliability varies between 0 and 1, with higher values indicating higher levels of reliability. It is generally interpreted in the same way as Cronbach's alpha. The overall score of composite reliability also fulfilled the requirement of 0.70 and more (as shown in Table 2).

Convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct. To evaluate convergent validity of reflective constructs, researchers consider the outer loading of the indicators and the average variance extracted (AVE). High outer loadings on a construct indicate the associated indicators have much in common, which is captured by the construct. Table 2 shows PLS analysis results, all outer loadings of the reflective constructs are well above the threshold value of 0.60, which suggests sufficient levels of indicator reliability. Moreover, Average Variance Extracted (AVE) is a common measure to establish convergent validity on the construct level. This criterion is defined as the grand mean value of the squared loadings of the indicators associated with the construct. AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators. Table 2 shows that AVE values are above 0.50 (threshold value), all seven reflective constructs have high levels of convergent validity.

Discriminant Validity is the extent to which a construct is truly distinct from other constructs by empirical standards. Thus, establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model. There are three approaches to measure discriminant validity: cross loadings, Fornell-Larcker criterion, and Heterotrait-Monotrait ratio (HTMT). The cross-loadings are typically the first approach to assess the discriminant validity of the indicators, specifically, an indicator's outer loading on the associated construct should be greater than any of its cross-loadings on the constructs. SmartPLS results show the loadings exceed the cross-loadings. In addition, the Fornell-Larcker criterion is the second approach to assessing the discriminant validity.

In the second step of the measurement model, the measurement model for second-order construct was analysed. Transformational Leadership (TL) as a second-order construct in this study can be represented by numerous first-order components (Idealised Influence-Attribution-IIA, Idealised Influence-Behaviour-IIB, Inspirational Motivation-IM, Intellectual Stimulation-IS, and Individualised Consideration-IC). These first-order constructs represent lower-order components (LOCs) of the more general higher-order component (HOC) Transformational Leadership-TL. In this study, Transformational Leadership-TL as a second-order construct considers the reflective-formative HCM type, indicates (formative) relationships between the LOCs and the HOC, and all first-order constructs are measured by reflective indicators.

To assess the HOC's measurement model, we assign all the indicators (20 items) from the LOCs to the HOC in the form of a repeated indicators approach. In the first stage, the repeated indicator approach is used to obtain the latent variable scores for the LOCs. In the second stage, the LOC scores serve as manifest variables in the HOC measurement model. The LOC scores are readily available from the SmartPLS output. In reflective-formative HCM type, we need to assess collinearity as well as significance and relevance of the relations between the LOCs and the HOC. In the first stage, the repeated indicators approach is used to obtain the LOC's scores. These scores are saved in the data set as additional variables for further analysis in the second stage. Then, in the second stage, the LOCs' scores serve as manifest variables in the HOC's measurement model. to check collinearity issues, from SmartPLS report-Quality Criteria- Collinearity Statistics (VIF). We found that the VIF values of Idealised Influence-Attribution- IIA (2.796), Idealised Influence-Behaviour- IIB (3.368), Inspirational Motivation-IM (2.516), Intellectual Stimulation-IS (3.587), Individualised Consideration-IC (3.040) were below the threshold of 5, providing support that collinearity is not a critical issue.

The results presented in Table 2 show that the reliability, convergent validity, and discriminant validity for seven reflective constructs met acceptability criteria. The VIF values for the indicators of second-order construct were below 5 (threshold) and acceptable, and p-

value of the outer weights was lower than 0.05 and significant. Therefore, the measurement model assessment criteria have been met and provide support for the measures' reliability and validity.

**Table 2:** Measurement Model Assessment

Latent Variable		Convergent validity		Internal consistency reliability		Discriminant Validity
First-order	Items	Loadings/ Weights	AVE/ VIF	Cronbach's Alpha	Composite reliability	HTMT Confidence interval does not include 1
Idealised Influence-Attribution- IIA	IIA1	0.775	0.654	0.823	0.883	Yes
	IIA2	0.846				
	IIA3	0.853				
	IIA4	0.756				
Idealised Influence-Behaviour- IIB	IIB1	0.698	0.628	0.803	0.871	Yes
	IIB2	0.824				
	IIB3	0.818				
	IIB4	0.824				
Inspirational Motivation-IM	IM1	0.831	0.700	0.858	0.903	Yes
	IM2	0.840				
	IM3	0.833				
	IM4	0.844				
Intellectual Stimulation-IS	IS1	0.784	0.710	0.863	0.907	Yes
	IS2	0.848				
	IS3	0.856				
	IS4	0.879				
Individualised Consideration-IC	IC1	0.831	0.670	0.834	0.890	Yes
	IC2	0.724				
	IC3	0.869				
	IC4	0.842				
Readiness for Change-R4C	R4C1	0.703	0.560	0.902	0.919	Yes
	R4C2	0.717				
	R4C3	0.770				
	R4C4	0.726				
	R4C5	0.688				
	R4C6	0.725				
	R4C7	0.783				
	R4C8	0.810				

	R4C9	**0.800**				
Affective Commitment to Change-AC2C	AC2C1	**0.817**	**0.624**	**0.877**	**0.908**	Yes
	AC2C2	**0.859**				
	AC2C3	**0.620**				
	AC2C4	**0.808**				
	AC2C5	**0.844**				
	AC2C6	**0.769**				
Second-order	Items	**Weights**	**VIF**			
Transformation al Leadership-TL	IIA	0.607	**2.796**			
	IIB	0.274	3.368			
	IM	0.375	**2.516**			
	IS	0.501	3.587			
	IC	0.148	3.040			

Structural Model

The purpose of exhibiting the structural model is to identify the relationships among all the constructs in the study. We first need to check the structural model for collinearity issues by examining the VIF values of all sets of predictor constructs in the structural model. We can get inner VIF values from Quality Criteria-Collinearity Statistic (VIF) in SmartPLS. The SmartPLS results report shows that all VIF values are clearly below the threshold of 5. Therefore, collinearity among the predictor constructs is not a critical issue in the structural model, and we can continue examining the results report. In addition, the most commonly used measure to evaluate the structural model is the coefficient of determination (R^2 value). It represents the exogenous latent variables' combined effects on the endogenous latent variable. The R^2 value ranges from 0 to 1, with higher levels indicating higher levels of predictive accuracy. The R^2 values of Affective Commitment to Change-AC2C (0.577) and Readiness for change-R4C (0.186) can be considered moderate and weak respectively. This means that 57.7% of the variance found in the affective commitment to change-AC2C is explained by Transformational Leadership-TL and Readiness for Change-R4C. Moreover, 18.6% of the variance found in the readiness for change is explained by Transformational Leadership-TL.

Figure 1. Study Model
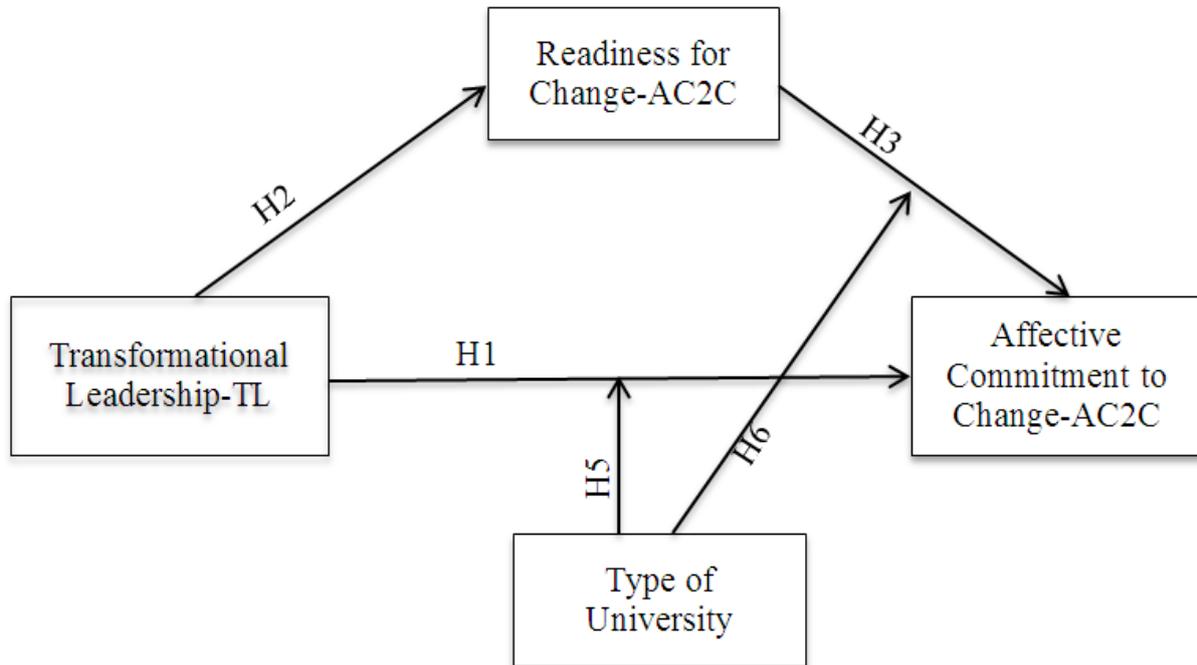
H4: TL→ R4C→AC2C

Figure 1 shows the relationships between Transformational Leadership-TL, Readiness for Change-R4C, and Affective Commitment to Change-AC2C. Looking at the relative importance of the exogenous driver constructs for the affective commitment to change-AC2C, the results show that readiness for change-R4C is more important (0.663) than transformational leadership-TL (0.182). To assess whether these relationships are significant, we run the bootstrapping procedure. As mentioned earlier, hypothesis is a testable statement of the relationship between two or more variables. The hypotheses for this study are concerned with relationships between independent variable (Transformational Leadership-TL), mediator variable (Readiness for Change-R4C), moderator variable (Type of University), and dependent variable (Affective Commitment to Change-AC2C).

This study aimed to test the direct effect between study variables, indirect effect (mediation), and moderation effect. Direct effects are the relationships linking two constructs with a single arrow (→). The results of direct effect between main constructs in the structural model are shown in Figure 1, H1 covers the relationship between independent variable (Transformational Leadership-TL) and dependent variable (Affective Commitment to Change-AC2C). The standardised coefficient for the path is 0.182 (p-value = 0.000). These results indicate a significant positive impact of Transformational Leadership-TL on Affective Commitment to Change-AC2C. In view of that, we can decide that H1 is supported. The second hypothesis addresses the effect of Transformational Leadership-TL on Readiness for

Change-R4C. The results show that the relationship between Transformational Leadership-TL and Readiness for Change-R4C is statistically significant (Beta = 0.431; p-value = 0.000). Consequently, H2 is supported. The third direct hypothesis addresses the positive relationship between Readiness for Change-R4C and Affective Commitment to Change-AC2C. The results show a significant positive relationship between readiness for change and affective commitment to change (Beta = 0.663, P-value = 0.000). Thus, H3 is supported.

The Mediation Effect

Having examined the direct effects between main constructs , this study is also interested in the indirect effect or the mediation effect. This section shows the indirect effect of independent variable (Transformational Leadership-TL) on dependent variable (Affective Commitment to Change-AC2C) through Readiness for Change-R4C (mediator). Figure 1 shows both a direct effect between Transformational Leadership-TL, and Affective Commitment to Change-AC2C and an indirect effect of Transformational Leadership-TL on Affective Commitment to Change-AC2C via Readiness for Change-R4C in the form of a TL→R4C→AC2C sequences.

To begin the mediation analysis, we test the significance of the indirect effect. The indirect effect from TL via R4C to AC2C is the product of the path coefficient from TL to R4C and from R4C to AC2C. To test the significance of this path coefficient's product, we run the bootstrap routine. After running the procedure, from the SmartPLS bootstrapping report, the table under Final Results→ Indirect Effects provides us with an overview of results, including standard error, bootstrap mean value, t value, and p value. From the bootstrapping results, we found that the indirect relationship between Transformational Leadership-TL and Affective Commitment to Change-AC2C is significant (Beta = 0.286, t-value = 10.135, p-value =0.000). Hence, we can conclude that R4C mediates the relationship between TL and AC2C. Thus, H4 is supported.

Our findings provide empirical support for the mediating role of readiness for change in our study. More specifically, Readiness for Change-R4C represents a mechanism that underlies the relationship between Transformational Leadership-TL and affective commitment to change-AC2C. Transformational Leadership-TL leads to Readiness for Change-R4C, and Readiness for Change-R4C in turn leads to Affective Commitment to Change-AC2C. For the relationship between Transformational Leadership-TL and Affective Commitment to Change-AC2C, Readiness for Change-R4C serves as a complementary mediator. Higher levels of Transformational Leadership-TL increase Affective Commitment to Change-AC2C directly but also increase readiness for change, which in turn leads to Affective Commitment to Change-AC2C. Hence, some effects of Transformational Leadership-TL on Affective Commitment to Change-AC2C are explained by Readiness for Change-R4C.

The Moderation Effect

Moderation describes a situation in which the relationship between two constructs is not constant but depends on the values of a third variable, referred to as a moderator variable. We could hypothesise that the effect of Transformational Leadership-TL on Readiness for Change-R4C and Affective Commitment to Change-AC2C is different for public universities compared with private universities. The type of university would then serve as a grouping variable that divides the data into two subsamples. In this regard, multi-group analysis enables the researcher to test for different groups of respondents (e.g., Public Universities vs. Private Universities).

Figure 1 shows the direct relationships between Transformational Leadership-TL, Readiness for Change-R4C, and Affective Commitment to Change-AC2C. In general, path coefficients in Public Universities and Private Universities are numerically different as shown in Table 3. For example, the results show that that the effect of Transformational Leadership-TL on Affective Commitment to Change-AC2C is much stronger in Private Universities (0.327) than in Public universities (0.073). The researcher wants to check whether this difference is statistically significant by using multi-group analysis.

Table 3: Moderation Effect

Hypothesis	Public Universities (N=349)		Private Universities (N=262)		Public Universities Vs. Private Universities		
	Path Coefficient	P. Value	Path Coefficient	P. Value	Path coefficients (PubUni-PriUni)	p-Value (PubUni vs PriUni)	Significance Level
TL→ AC2C	0.073	0.09	0.327	0.000	0.253	0.000	***
R4C→ AC2C	0.723	0.000	0.570	0.000	0.153	0.012	**

*** P-value<0.01, ** p-value<0.05

The researcher used PLS-MGA approach to compare Public Universities with Private Universities. PLS-GMA approach builds on bootstrapping results. It has been proposed by Henseler et al. (2009). The Moderating effect of type of university (Public vs. Private) is presented in Table 3, which shows that hypotheses H5, and H6 were supported. For hypotheses 5 and 6, when the path coefficients, standard errors, and T-values of public universities-PubUni and private universities-PriUni groups were compered, the differences between the two groups were found to be significant (P < 0.05), and as such, it was

concluded that type of university (Public vs. Private) positively moderates the relationship between Transformational Leadership-TL and Affective Commitment to Change-AC2C, and between Readiness for Change-R4C and Affective Commitment to Change-AC2C).

Discussions and Implications

Lack of commitment is considered one of the main reasons of failure for organisational change. Hence, creating a committed employee during periods of organisational change becomes one of the highest priorities in the field of human resources management. Furthermore, understanding the factors that affect employees' commitment to change is therefore a significant task for organisational researchers. In this regard, this study examined the relationship between transformational leadership, readiness for change, and affective commitment to change in HEIs in Kurdistan. Most prior research on leadership, and organisational change focused on cases in developed and western countries and in private organisations, very little research on leadership and organisational change has focused on developing countries such as Iraq-Kurdistan, and particularly none has been studied in public universities, hence it was interesting to discover the much different research results on leadership style due to the enormous differences in the management practices and the market environment between Kurdistan and Western countries.

The results of this study revealed a strong positive relationship between transformational leadership and affective commitment to change. This finding is consistent with previous research (e.g. Herold et al., 2008; Abrell, 2012). In addition, this study examined the mediating role of readiness for change in the relationship between transformational leadership and affective commitment to change. The results indicated that readiness for change mediates the relationship between transformational leadership and affective commitment to change. This result confirmed the findings of previous studies, having investigated the role of readiness for change in the relationship between transformational leadership and affective commitment to change (e.g. Santhidran et al., 2013). The findings of this study also showed a strong positive relationship between transformational leadership and readiness for change, and between readiness for change and affective commitment to change. These results confirmed the findings of the previous studies mentioned in the literature review. Based on the above-discussed findings, H1, H2, H3, and H4 were supported.

In addition, this was the first time that the effect of the type of university, as a moderator, has been examined on the relationship between transformational leadership, readiness for change, and affective commitment to change. The findings of this study showed that the relationship between transformational leadership, readiness for change, and affective commitment to change were different in public universities compared to private universities. This may be because public universities are bureaucratic institutions and contain complex political

systems. This means that the type of university moderates the relationship between transformational leadership, readiness for change and affective commitment to change. Thus, H5 and H6 were supported.

On the other hand, the most significant implication of the present study is that understanding the linkage between transformational leadership, readiness for change, and affective commitment to change helps to provide healthy managerial practices to enhance the employees' affective commitment to change, which in turn enhances the likelihood of the success reform process in Higher Education Institutions (HEIs) in Kurdistan. The findings of the current study will be useful for Higher Education Institution (HEIs) leaders facing challenges when managing the change process and designing tactics to change management in Higher Education Institutions (HEIs).

Conclusion and Recommendations

This study aimed to examine the relationship between transformational leadership and affective commitment to change by mediating the role of readiness for change and the type of university as moderator among lecturers in higher education institutions in the Kurdistan Region. 611 lectures in 14 public universities and 11 private universities participated in this study. SPSS and SmartPLS have been used to assess descriptive analysis and study model (measurement model assessment and structural model assessment). The findings of this study showed that transformational leadership positively affects affective commitment to change, and readiness for change mediates the relationship between these two variables. The results showed also that the type of university (Public or Private) moderates the relationship between transformational leadership and affective commitment to change.

There are some theoretical and practical contributions for this study as mentioned before. Notwithstanding, this study is not without its limitations. A cross-sectional design and use of self-reported questionnaire data are limitations of this study. Since affective commitment to change is the best predictor of success of the change initiatives in all organisations, researchers should continue to examine further factors that affect it and under different contexts.

REFERENCES

Abrell-Vogel, C., 2012. Transformational leadership's effectiveness in organisational change: Three empirical studies deepening the understanding of the relationship between transformational leadership and employees' commitment to change.

Adil, M.S., 2016. Impact of change readiness on commitment to technological change, focal, and discretionary behaviors: Evidence from the manufacturing sector of Karachi. *Journal of Organisational Change Management*, *29*(2), pp.222-241.

Ali, S.O., 2012, June. Quality assurance and effectiveness in Kurdistan higher education: The reform process. In *Proceedings of World Academy of Science, Engineering and Technology* (No. 66). World Academy of Science, Engineering and Technology.

Armenakis, A.A. and Bedeian, A.G., 1999. Organisational change: A review of theory and research in the 1990s. *Journal of management*, *25*(3), pp.293-315.

Armenakis, A.A. and Harris, S.G., 2002. Crafting a change message to create transformational readiness. *Journal of organisational change management*, *15*(2), pp.169-183.

Armenakis, A.A. and Harris, S.G., 2009. Reflections: Our journey in organisational change research and practice. *Journal of Change Management*, *9*(2), pp.127-142.

Armenakis, A.A., Bernerth, J.B., Pitts, J.P. and Walker, H.J., 2007. Organisational change recipients' beliefs scale: Development of an assessment instrument. *The Journal of applied behavioral science*, *43*(4), pp.481-505.

Bass, B.M. and Riggio, R.E., 2006. Transformational leadership.

Bass, B.M., 1985. Leadership: Good, better, best. *Organisational dynamics*, *13*(3), pp.26-40.

Bass, B.M., 1996. *A New Paradigm for Leadership: An Inquiry into Transformational Leadership*. STATE UNIV OF NEW YORK AT BINGHAMTON.

Beer, M. and Nohria, N., 2000. Cracking the code of change. *HBR's 10 Must Reads on Change*, p.88.

Bennett, H. and Durkin, M., 2000. The effects of organisational change on employee psychological attachment An exploratory study. *Journal of Managerial Psychology*, *15*(2), pp.126-146.

Bennis, W. and Nanus, B., 1985. The strategies for taking charge. *Leaders, New York: Harper. Row*.

Bernerth, J., 2004. Expanding our understanding of the change message. *Human Resource Development Review*, *3*(1), pp.36-52.

Block, L., 2003. The leadership-culture connection: an exploratory investigation. *Leadership & Organisation Development Journal*, *24*(6), pp.318-334.

Bloir, K. L. 2014, A Study of Ohio State University Extension Employees' Readiness for Change in Relation to Employee-Supervisor Relationship Quality, Basic Psychological Needs Satisfaction, and Dispositional Resistance to Change, The Ohio State University.

Bolman, L. G and Deal, T. E., 2005. Nya perspektiv på organisation och ledarskap. 3rd ed. Lund: Studentlitteratur. p.42, 103, 454.

Bouckenooghe, D., 2010. Positioning change recipients' attitudes toward change in the organisational change literature. *The Journal of Applied Behavioral Science*, *46*(4), pp.500-531.

Bouckenooghe, D., Devos, G. and Van den Broeck, H., 2009. Organisational change questionnaire–climate of change, processes, and readiness: Development of a new instrument. *The Journal of psychology*, *143*(6), pp.559-599.

Burns, M.L., 1977. The effects of feedback and commitment to change on the behavior of elementary school principals. *The Journal of Applied Behavioral Science*, *13*(2), pp.159-166.

Caldwell, C., Hayes, L.A., Bernal, P. and Karri, R., 2008. Ethical stewardship–implications for leadership and trust. *Journal of business ethics*, *78*(1), pp.153-164.

Chen, J. and Wang, L., 2007. Locus of control and the three components of commitment to change. *Personality and individual differences*, *42*(3), pp.503-512.

Chin, W.W., 2010. How to write up and report PLS analyses. *Handbook of partial least squares*, pp.655-690.

Culverson, D., 2002. *Exploring organisational commitment following radical change A case study within the Parks Canada Agency* (Master's thesis, University of Waterloo).

Cunningham, C.E., Woodward, C.A., Shannon, H.S., MacIntosh, J., Lendrum, B., Rosenbloom, D. and Brown, J., 2002. Readiness for organisational change: A

longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organisational psychology*, *75*(4), pp.377-392.

Daft, R.L., 2001. Essentials of organisation theory and design.

DeBerry, S.L., 2010. Using transformational leadership to change organisational culture in a government agency.

Dlawer, A. A., 2009. A Roadmap to Quality Reforming the system of Higher Education and Scientific Research in the Kurdistan Region of Iraq, Ministry of Higher Education & Scientific Research Kurdistan regional government

Elias, S.M., 2009. Employee commitment in times of change: Assessing the importance of attitudes toward organisational change. *Journal of Management*, *35*(1), pp.37-55.

Fedor, D.B., Caldwell, S. and Herold, D.M., 2006. The effects of organisational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, *59*(1), pp.1-29.

Ford, J.D. and Ford, L.W., 2012. The leadership of organisation change: A view from recent empirical evidence. In *Research in organisational change and development* (pp. 1-36). Emerald Group Publishing Limited.

Gilley, A., Dixon, P. and Gilley, J.W., 2008. Characteristics of leadership effectiveness: Implementing change and driving innovation in organisations. *Human Resource Development Quarterly*, *19*(2), pp.153-169.

Godager, L. and Toft, N.T., 2011. *Building support for change: a multilevel investigation of factors influencing commitment to change* (Master's thesis).

Griffith, J., 2004. Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration*, *42*(3), pp.333-356.

Hair Jr, J.F., Hult, G.T.M., Ringle, C. and Sarstedt, M., 2016. A primer on partial least squares structural equation modeling (PLS-SEM).

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R., L.(2010). Multivariate data analysis. *Pearson*.

Hair, J.F., Ringle, C.M. and Sarstedt, M., 2011. PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, *19*(2), pp.139-152.

Harris, L.C. and Ogbonna, E., 1999. Developing a market oriented culture: a critical evaluation. *Journal of Management Studies*, *36*(2), pp.177-196.

Henseler, J., Ringle, C.M. and Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, *43*(1), pp.115-135.

Herold, D.M., Fedor, D.B., Caldwell, S. and Liu, Y., 2008. The effects of transformational and change leadership on employees' commitment to a change: a multilevel study. *Journal of applied psychology*, *93*(2), p.346.

Herscovitch, L. and Meyer, J.P., 2002. Commitment to organisational change: extension of a three-component model. *Journal of applied psychology*, *87*(3), p.474.

Hughes, M., 2016. Leading changes: Why transformation explanations fail. *Leadership*, *12*(4), pp.449-469.

Jacobsen, D. I. (2013). *Organisationsförändringar och förändringsledarskap*. Studentlitteratur.

Jaros, S., 2010. Commitment to organisational change: A critical review. *Journal of Change Management*, *10*(1), pp.79-108.

Kotter, J.P., 1996. Leading change.

Kotter, J.P., 2008. *Corporate culture and performance*. Simon and Schuster.

Lewin, K., 1947. Group decision and social change. *Readings in social psychology*, *3*, pp.197-211.

Lewin, K., 1951. Field theory in social science: selected theoretical papers (Edited by Dorwin Cartwright.).

Littrell, R.F., 2002. Desirable leadership behaviours of multi-cultural managers in China. *Journal of Management Development*, *21*(1), pp.5-74.

Longshore, J. M.,1988. The associative relationship between transformational and transactional leadership styles and group productivity. *Unpublished doctoral dissertation, Nova University, Boca Raton, FL*.

Lussier, R.N. and Achua, C.F., 2015. *Leadership: Theory, application, & skill development*. Nelson Education.

Madsen, S.R., Miller, D. and John, C.R., 2005. Readiness for organisational change: Do organisational commitment and social relationships in the workplace make a difference?. *Human Resource Development Quarterly*, *16*(2), pp.213-234.

Mangundjaya, W.L., 2013, August. Leadership, Readiness to Change and Commitment to Change. In *Proceedings International Management Conference, Bucharest, Romania*.

Meyer, J.P. and Allen, N.J., 1991. A three-component conceptualization of organisational commitment. *Human resource management review*, *1*(1), pp.61-89.

Meyer, J.P. and Herscovitch, L., 2001. Commitment in the workplace: Toward a general model. *Human resource management review*, *11*(3), pp.299-326.

Meyer, J.P., Allen, N.J. and Allen, N.J., 1997. Commitment in the workplace.

Meyer, J.P., Srinivas, E.S., Lal, J.B. and Topolnytsky, L., 2007. Employee commitment and support for an organisational change: Test of the three-component model in two cultures. *Journal of Occupational and Organisational Psychology*, *80*(2), pp.185-211.

Nordin, N., 2011. The influence of emotional intelligence, leadership behaviour and organisational commitment on organisational readiness for change in higher learning institution. *Procedia-Social and Behavioral Sciences*, *29*, pp.129-138.

Persson, S., 2014. How readiness for strategic change affects employee commitment and flexibility: considering type of organisational culture.

Santhidran, S., Chandran, V.G.R. and Borromeo, J., 2013. Enabling organisational change–leadership, commitment to change and the mediating role of change readiness. *Journal of business economics and management*, *14*(2), pp.348-363.

Sashkin, M., 1988. The visionary principal: School leadership for the next century. *Education and Urban Society*, *20*(3), pp.239-249.

Sekaran, U. and Bougie, R., 2013. Research Methods for Business. A Skill-Building Approach. Sixth Edition. John Willey & Sons Ltd.

Silong, A.D., 2009. *Leadership Theories Research & Practices: Framing Future Leadership Thinking*. Penerbit Universiti Putra Malaysia.

Soumyaja, D., Kamlanabhan, T.J. and Bhattacharyya, S., 2015. Antecedents of Employee Readiness for Change: Mediating Effect of Commitment to Change. *Management Studies and Economic Systems*, *2*(1), pp.11-25.