



THE EFFECT OF LEADER TRUST AND KNOWLEDGE SHARING ON STAFF SATISFACTION AT WORK: INVESTIGATION OF UNIVERSITIES IN SYRIA

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Abstract. This research paper examines the effect of leader trust, organisational trust and knowledge sharing on staff attitudes and satisfaction at work at universities in Syria. The research methodology employs a quantitative design of questionnaire instrument. The model predicts that if employees develop high levels of trust in their leader and organizations, this will stimulate a good quality relationship and develop satisfaction at work. Leader trust, Knowledge sharing behaviour and job satisfaction subscales are based on prior research measures. Sampling strategy employed non-probability sampling. The size of the sample is 161. The results of the research designate that trust in leader and knowledge sharing behaviours are positively associated with employee job satisfaction.

Keywords: leader trust, knowledge sharing behaviour, job satisfaction, higher education sector, Syria.

Introduction

The new reality of business management is based on acquiring new skills where information explosion and battle to complete talents becomes a critical requirement (Dalati, 2014; Rutkauskas, Raudeliūnienė, & Račinskaja, 2014; Raudeliūnienė & Meidutė-Kavaliauskienė, 2016; Kimpah, Ibrahim, & Raudeliūniene, 2017). The challenge of the new paradigm is strongly related to managing information overload and knowledge, managing people and stressful work environments, and managing technology advancement and connectivity (Jia, Mahdiraji, Kannan, & Meidutė, 2013; Aggarwal, Gupta, Govindan, & Meidute, 2014; Burinskienė, 2015; Merkevičius, Davidavičienė, Raudeliūnienė, & Buleca, 2015; Mačiulis, Tvaronavičienė, Lankauskienė, Raudeliūnienė, & Dzemyda, 2015; Skačkauskienė, Vilkaitė-Vaitonė, Raudeliūnienė, & Davidavičienė, 2016; Raudeliūnienė, Meidutė-Kavaliauskienė,

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& Vileikis, 2016; Davidavičienė, Pabedinskaite, & Davidavicius, 2017; F. Ferreira, J. Ferreira, Fernandes, Meidutė-Kavaliauskienė, & Jalali, 2017; Raudeliūnienė & Davidavičius, 2017; Raudeliūnienė, Davidavičienė, Tvaronavičienė, & Jonuška, 2018).

The examination of knowledge sharing, organizational trust and employee attitudes across institutions of higher education is not completely a new investigation in academic and scientific research. However, the examination of the above-mentioned topics in higher education in Syria is definitely new investigation as there is a literature gap in the examination of the Syrian environment. In fact, the topic of employee attitudes and job satisfaction is a former subject of investigation as there is plenty of research examining employee attitudes and satisfaction in EU, Asia, Middle Eastern examples and in Syria (Oshagbemi, 1997; Morris, Yaacob, & Wood, 2004; Chen, Yang, Shiau, & Wang, 2006; Alves & Raposo, 2009; Bolliger & Wasilik, 2009; Trivellas & Dargenidou, 2009; Tsai, 2011; Bigliardi, Ivo Dormio, Galati, & Schiuma, 2012; Ismail, 2012; Saner & Eyüpoğlu, 2012; Dalati, Raudeliūnienė, & Davidavičienė, 2017).

Before 2011 Higher Education sector in Syria was expanding as the introduction of private universities in Syria through a legislation which was applied in 2001 allowed the operation of Syrian private HEIs. Before the devastating war in Syria and between 2001 and early 2011 private universities in Syria were growing gradually and were competing to win and recruit students primarily undergraduates. After 2011 a long-term crisis has torn Syria over the past seven years, which has created a devastating situation on a social, economic, and business levels including both private and public sectors. Higher education is still operating; however, it has gone through significant declination and worsening through the past seven years of struggle and devastation. Many people in Syria either lost their jobs, their assets and properties or in the worst cases their lives. The devastating situation in Syria drove many individuals including students and academics to leave Syria seeking safer and better living conditions (Dalati, Eddin, & Hamwi, 2016). Currently and after 8 years the subject of employee job attitudes and satisfaction is even more vital than previously, considering the economic background and context which characterizes Syria, particularly with declining economy and inflation, lack of satisfactory salaries and bonus schemes in Higher education institutions in Syria. The challenge to improve employee satisfaction is more critical than before, due to the above mentioned social and economic situations.

Also, the subject of knowledge sharing is a critical phenomenon which is associated with organization effectiveness (Teh, 2012; Sohail & Daud, 2009). Examining organizational environment which characterizes universities in Syria, it is associated with conventional management approaches with a dominating bureaucratic structure (mainly at public universities), lack of dynamic organizational cultures which advocates for flexible and organic systems, establishing organizational trust at different levels. The need for building trust at interpersonal and organizational levels is critical in the higher education sector in Syria.

This research examines the interaction between organizational trust, knowledge sharing behaviour and employee attitudes and satisfaction at universities in Syria. Organizational trust is examined at individual level investigating individual trust in the leader and direct manager.

1. Prior literature

1.1. Organizational trust

Organizational trust is examined as an attitude organization members have for their organization (Nyhan & Marlowe, 1997; Entwistle & Quick, 2006; Ellonen, Blomqvist, & Puumalainen, 2008, Shockley-Zalabak & Morreale, 2011). The importance of organizational trust is related to organizational areas as leadership, communication, negotiation, management by objectives, performance appraisal and implementation of self-managed teams (Mayer, Davis, & Schoorman, 1995). According to Joseph and Winston (2005), the construct of trust has multidimensional approaches including interpersonal, dyadic, inter-organizational, political, social, peer trust in the workplace, trust between superiors and subordinates and organizational trust.

According to Mayer et al. (1995) trust is defined as the willingness of one party to be vulnerable to the actions of another party based on the expectations that the other will comprise a specific action that is significant to the one who is trusting regardless the of their ability to monitor or control this person. Mayer et al. (1995) model of dyadic trust identified two parties, namely the trustor and trustee. The construct of organizational trust comprises of perceived ability, benevolence and integrity of the trustee. It also consists of trustor propensity to trust.

A Previous study examined a definition of organizational trust as the individual inclination to have good intentions and have confidence in the words and actions of others. In this background, trust is considered a crucial factor in the long-term constancy of the organization and the well-being of its members (Cook & Wall, 1980).

Rousseau et al. (1998) state that "Trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another".

Previous studies defined organizational trust as the feeling of confidence and trust in the organization, where an employee believes that the organization is fair and up-front, committed and will not act in an opportunistic approach towards its members (Cummings & Bromiley, 1996; McLeary & Cruise, 2015). Another approach to organizational trust emphasizes developing and designing HRM practices to facilitate building interpersonal trust in the organization (Vanhala & Ritala, 2016).

1.2. Knowledge sharing behavior

Prior research on knowledge sharing provides different definitions on knowledge sharing including the perception of knowledge sharing as a voluntary behaviour by an individual who provides access of his /her knowledge and experience to other members of the organization (Akhavan, Rahimi, & Mehralian, 2013). Knowledge sharing is perceived as a dynamic learning process where organizations constantly interact with clients and suppliers to innovate or creatively innovate (Cummings, 2003). Knowledge sharing is procedure through which an employee could contribute to knowledge application, innovation, and eventually the competitive advantage of the organization (Wang & Noe, 2010).

Raudeliūnienė et al. (2016) examines the determinants of efficiency of knowledge sharing in Lithuanian national defence system, stating that the process of knowledge sharing is crucially associated with knowledge development and knowledge acquisition, as existence of knowledge is critical national defence systems where knowledge should be transmitted to relevant personnel or must be accessible when needed.

1.3. Job satisfaction

There have been considerable studies which have investigated the nature and causes of job satisfaction (Locke, 1969; Locke, 1970; Warr, 1990; Spector, 1997; Tietjen & Myers, 1998; Stringer, Didham, & Theivananthpillai, 2011). One definition of job satisfaction by Spector (1997) states that it is “simply how people feel about their jobs and different aspects of their jobs”. It is associated with the level to which employees like or dislike their job.

The measurement of job satisfaction has been studied in two main approaches which examined the general measurement of satisfaction at work and a specific approach investigating several dimensions of job satisfaction (Martins & Proenca, 2012). The first approach examines respondents overall attitude on their job. The second approach examines several aspects related to job satisfaction including intrinsic and extrinsic aspects.

1.4. Knowledge sharing, organizational trust and job satisfaction

There has been research on the relationship between knowledge sharing, organizational trust and job satisfaction, which reports on a positive association (Bontis, Richards, & Serenko, 2011; Casimir, Lee, & Loon, 2012; Wickramasinghe & Widyaratne, 2012; Pangil & Moi Chan, 2014).

The prior literature has acknowledged relationship and interaction between trust in the organizational background and employees' satisfaction at work (Ellonen et al., 2008; Han, 2010; Tekingündüz, Tengilimoğlu, & Karabulut, 2017). Interpersonal trust has a positive effect on knowledge sharing (Wickramasinghe & Widyaratne, 2012). A study examined the effects of interpersonal trust, team leader support, rewards and knowledge sharing tools on voluntary knowledge sharing. The study is applied to software development project teams in Sri Lanka. The results of the study indicate interpersonal trust, rewards, workgroup communication and personal interactions and have a positive effect on knowledge sharing

Casimir et al. (2012) examined the impact of the perceived cost of knowledge sharing and effective trust in colleagues on the relationship between affective commitment and knowledge sharing. Results of the study signify that employees who value social relationships and social resources perceive knowledge as a collectively owned commodity.

Prior research specifies a significant relationship between knowledge sharing, trust and virtual team effectiveness (Pangil et al., 2014). The study examines relationship between trust and virtual team effectiveness investigating the mediating effect of knowledge sharing in a multinational corporation in Malaysia. Research results specifies that knowledge sharing and trust are significantly associated with virtual team effectiveness, and knowledge sharing partially mediates the relationship between trust and team effectiveness.

2. Conceptual framework and hypotheses development

The assumption in this research is that trust both on an individual leader level and knowledge sharing behaviour stimulates and causes job satisfaction among academics in higher education sector. The model predicts that if employees develop higher levels of trust in their leaders and line managers, this will stimulate a good quality relationship and develop satisfaction at work. Figure 1 illustrates conceptual model of trust, knowledge sharing and satisfaction at work.

2.1. Leader trust

Leader Trust construct reflects organization member's perceived tendency and predisposition to trust their line managers and team leaders. Leader's trust reflects employee's positive perception and confidence of the technical, decision making, supervisory abilities, reliability and discretion of their leaders. Leader's trust subscale comprises of 8 items (a) confidence in line manager technical competence, (b) confidence in line manager decision making, (c) confidence in line manager follow up of assignments, (d) confidence in line manager understating of work, (e) confidence in line manager ability, (f) confidence in line manager reliability, (g) confidence in line manager sense and insight, (h) confidence in line manager discretion.

2.2. Knowledge sharing behavior

Knowledge Sharing Behaviour construct reflects organization member's perceived tendency and predisposition to share their knowledge and expertise with their co-workers. Knowledge sharing behaviour subscale comprises of 7 items (a) plan to share knowledge, (b) sharing work knowledge, (c) sharing results, (d) sharing new ideas, (e) answering questions by colleagues, (f) allocating time for sharing knowledge, (g) displaying difficult methods of work to co-workers.

2.3. Job satisfaction

Job satisfaction construct reflects organization member's perception and attitude of a set of dimensions indicating intrinsic and extrinsic characteristics of employee job satisfaction. Job satisfaction subscale comprises of 16 items (a) physical conditions, (b) job autonomy, (c) coworkers, (d) recognition, (e) immediate supervisor, (f) job responsibility, (g) pay, (h) using abilities, (i) relationship between management and workers, (j) promotion, (k) department management, (l) management's attention to suggestions made, (m) hours of work, (n) job variety, (o) job security, (p) overall job satisfaction.

The research develops a model which comprises of a set of independent variables and an outcome variable. The research model predicts that leader trust and knowledge sharing behaviour are predicted to have a positive effect on job satisfaction. The research hypotheses predict a positive relationship between leader trust, organisational trust and knowledge sharing behaviour and job satisfaction.

H1. There is a positive effect of perceived Leader's trust on employee job satisfaction at universities in Syria.

H2. There is a positive effect of perceived knowledge sharing behaviour on employee job satisfaction at universities in Syria.

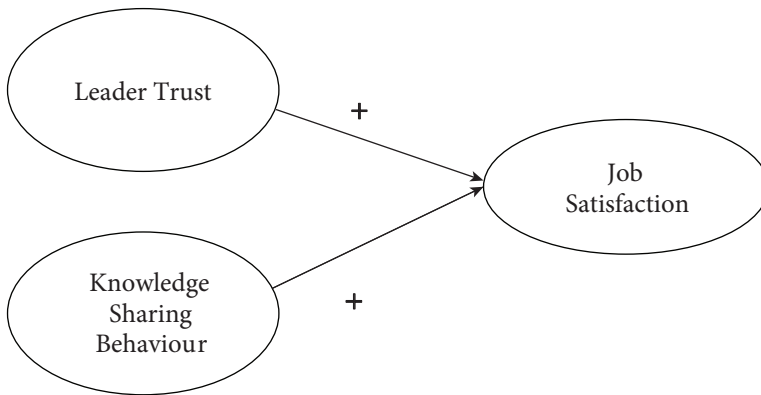


Figure 1. Conceptual model of trust, knowledge sharing and satisfaction at work

3. Research methodology

The research methodology employs a quantitative approach, through the design and application of a questionnaire survey. Quantitative approaches are feasible and efficient approaches when it serves the purpose and design of the study accurately (Cooper & Schindler, 2014; Zikmund, Carr, Griffin, & Babin, 2013) Self-administered questionnaire is an efficient tool which can be applied to a large number of respondents. Data can be collected through questionnaires and can be analyzed quickly and efficiently (Cummings & Worley, 2009).

3.1. Measures and scales

Leader trust subscale is developed and based on the Organizational Trust Inventory developed by Nyhan and Marlowe (1997). Organizational Trust Inventory is employed in this research questionnaire to measure individual employee perceived level of trust in his /her supervisor and perceived levels of trust at an organizational level. The scale consists of 12 items, where items 1 to 8 measure leader trust, and items 9 to 12 measure organizational trust. The original scale employs 7 points Likert scale. In this current research, the scale was modified and adapted to 5 points Likert scale. In the subscale measuring leader trust, the scale was modified to 5 points Likert scale ranging from 1= strongly disagree to 5 = strongly disagree.

Knowledge sharing behaviour scale is developed and based on Zárrega and Bonache (2003), Hsu-Hsin, Tzu-Shian, and Ju-Sung (2011) and Akhavan et al. (2013). In this current study, the knowledge sharing behaviour scale was modified and adapted for the purpose and design of research. The scale comprised of 7 items to measure employee knowledge sharing behaviour and how employees transmit and share job-related knowledge and expertise with their co-workers. The knowledge sharing behaviour scale was adjusted to 5 points Likert scale ranging from 1= strongly disagree to 5 = strongly agree.

Job satisfaction scale is based on job satisfaction scale developed by Warr, Cook, and Wall (1979). The scale comprises of a set of 16 items measuring intrinsic and extrinsic job satisfaction. Items 1, 3, 5, 7, 9, 11, 13, 15 measure extrinsic job satisfaction. Items 2, 4, 6, 8,

10, 12, 14 measure intrinsic satisfaction. The last item (16) measures overall job satisfaction. The original scale employs 7 points Likert scale. In this current research, the scale was modified to 5 points Likert scale ranging from 1= definitely dissatisfied to 5 = definitely satisfied.

3.2. Questionnaire translation

The research instrument is based on self – administered questionnaire. As discussed in the previous section, the research data collection instrument was developed based on prior researchers who developed the scales in English. The research questionnaire was translated from English to Arabic. A well experienced Syrian translator was employed to conduct translation from English to Arabic. Consequently, the Arabic translation was carefully reviewed by research authors who verified translation for accuracy and precision. Consequently, the questionnaire was examined by a group of expert and non-expert academics from Arab International University for final enhancement and to conduct face validity. According to Zikmund et al. (2013) face validity is refers to consensus among experts that a scale logically reflects the research construct or concept being measured.

3.3. Sample design

A non-probability sampling strategy is employed to collect data for this research. A self-administered questionnaire was designed to collect data from private and public universities operating in Damascus and the district of Kalamoun which is located northeast of the Syrian capital Damascus. Data was collected through the paper and online questionnaires employing Google online questionnaire. The size of the sample is 161. The sample unit of analysis comprises academic and administrative staff working in 4 universities in Syria. Data were collected from September 2017 to January 2018. Table 1 illustrates sample size and distribution.

Table 1. Sample size and distribution (n = 161) (source: developed by authors)

University	Sample size	Percent %
AIU	134	83.2
DU	14	8.7
HIBA	3	1.9
UOK	10	6.2
Total	161	100

4. Research analysis

4.1. Descriptive analysis

Descriptive data examines the sample characteristics and respondents demographic profile. The demographic profile includes respondents' age, gender, work experience and education level. Descriptive data indicates that respondent's average age is 39.87; work experience in the current higher education institution is 5.07. Descriptive data illustrates that 55.6% of

the sample study are male, 44.4 female. 41.9% have Bachelor degree, 20.6% master degrees, 30.6% PhDs, and 6.9% have other certificates. Descriptive data illustrates that 60.2% of the sample are academic staff, 39.8 are administrative staff. Tables 2, 3 and 4 illustrate descriptive data analysis.

Table 2. Demographical data (n = 161) (source: developed by authors)

Faculty	F	%
Faculty of Business Administration	19	11.8
Faculty of Civil Engineering	14	8.7
Faculty of Pharmacy	26	16.1
Faculty of Informatics and Communications Engineering	20	12.4
Faculty of Fine Arts	13	8.1
Faculty of Architecture	32	19.9
Administrative Departments and Directories	16	9.9
Faculty of Science	6	3.7
Language Center	9	5.6
Other Faculties	6	3.7

Table 3. Demographical data (n = 161) (source: developed by authors)

Education Level	F	%
Bachelor	67	41.9
Master	33	20.6
PhD	49	30.6
Other	11	6.9
<i>Staff</i>		
Academic staff	97	60.2
Administrative staff	64	39.8
<i>Academic Level (Academic staff only)</i>		
Lecturer	48	49.5
Instructor	28	28.9
Assistant professor	9	9.3
Professor	12	12.4
<i>Administrative Position (Academic staff only)</i>		
Head of Department	11	11.34
Vice Dean	6	6.18
Dean	6	6.18
Academic Staff	74	76.28
<i>Administrative Staff position (Administrative staff only)</i>		
Administrative staff	48	75
Head of Department	15	23.4
Head of Directorate	1	.6

Table 4. Descriptive data analysis of demographic profile (n = 161) (source: developed by authors)

Descriptive Data of the Demographical Profile	M	SD
Age	39.875	12.763
Work Experience in Current Institution	5.071	4.915

4.2. Exploratory factor analysis

To explore research constructs, a principal component analysis is performed to investigate the dimensionality of variables under examination. The analysis examined three factors, which have an Eigen value and factor loading that exceeded 1 and .40. The first factor examines leader trust as a construct which examines perceived trust in line manager. Leader trust comprises of 8 items developed by Nyhan and Marlowe (1997). The second factor examines job satisfaction as a composite construct which examines intrinsic and extrinsic job satisfaction. Job satisfaction comprises of 10 items which are based on and developed by Warr et al. (1979). Originally the scale consists of 16 item and three subscales measuring intrinsic, extrinsic and general job satisfaction. The principal component analysis combined items from intrinsic and extrinsic features of job satisfaction producing a composite construct which was defined as job satisfaction. The third factor examines knowledge sharing behaviour as a construct which examines perceived self-assessment of individual knowledge sharing behaviour. Knowledge sharing behaviour comprises 7 items developed and based on Zárrega and Bonache (2003), Hsu-Hsin et al. (2011) and Akhavan et al. (2013). Table 5 illustrates principal components factor analysis.

4.3. Reliability analysis

To examine the reliability of research subscales a Cronbach Alpha test is performed. Reliability analysis illustrates very well to optimal levels ranging from .86 to .93 indicating excellent levels of internal consistency and reliability of research subscales. Table 6 illustrates reliability analysis.

Table 5. Principle component analysis (n161) (source: developed by authors)

Factors	Principle Component Analysis		
	Eigen Value	% of Variance	Factor Loading
<i>Factor 1 Leader Trust</i>	9.285	37.140	
I have confidence that my line manager will make well thought out decisions about his or her job			.867
I have confidence that my line manager is technically competent at the critical elements of his or her job			.841
I have confidence that my line manager will think through what he or she is doing on the job			.835
I have confidence that my line manager has an acceptable level of understanding of his/her job			.811

End of Table 5

Factors	Principle Component Analysis		
	Eigen Value	% of Variance	Factor Loading
I have confidence that I can rely on what my manager tells me			.776
I have confidence that my line manager will follow through on assignments			.770
I have confidence in my line manager to do the job without causing problems			.736
I have confidence that my line manager will be able to do his or her job in an acceptable manner			.726
<i>Factor 2 Job Satisfaction</i>	2.958	11.832	
Your opportunity to use your own abilities			.715
your job security			.712
The attention paid to suggestions you make			.709
The amount of variety in your job			.706
Your chance for promotion			.701
Industrial relations between management and workers in your faculty/department			.695
The freedom to choose your own method of working			.688
Your hours of work			.682
The recognition you get or good work			.641
The amount of responsibility you are given			.616
<i>Factor 3: Knowledge Sharing Behavior</i>	2.894	11.574	
I share the results of my activities with my colleagues			.850
I share my working knowledge with my colleagues			.793
I share my new ideas pertaining to my job with my colleagues			.768
I show my co-workers how to perform the most difficult part of the work			.737
I allocate some time for sharing knowledge with my colleagues			.671
I always answer my colleagues questions about areas of my expertise			.660
I have a plan for sharing my knowledge with my colleagues			.577
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations.			

Table 6. Cronbach Alpha test (n 161) (source: developed by authors)

Research Variables	No. of Items	<i>Cronbach Alpha (α) without deleting any Item</i>
Leader Trust	8	.935
Job Satisfaction	10	.898
Knowledge Sharing Behavior	7	.868

4.4. Regression analysis

To test research hypotheses a regression analysis is performed to examine the effect of perceived leader trust and knowledge sharing behaviour on employee job satisfaction. The model examines leader to trust and knowledge sharing behaviour as independent variables predicting staff satisfaction at work.

As this research performed a multiple regression analysis with a stepwise approach, a number of assumptions should be considered examining the type of variables, non-zero variance, multicollinearity, homoscedasticity, independent errors, independence, predictors are uncorrelated with external variables, normally distributed errors (which is often confused with the assumption that predictor variables should be normally distributed) and linearity (Field, 2013).

The research performed a linear regression analysis employing a stepwise regression. In the regression analysis performed, two models are investigated.

The first model examined a regression analysis which indicates an association between leader trust and job satisfaction. The multiple regression analysis produces a standardized beta .498, $p = .000$, which accounts for .24.9% of the variability in job satisfaction. The first model confirms that leader trust is a predictor of staff satisfaction at work.

The second model examined a regression analysis which indicates that leader trust is a predictor of job satisfaction. The multiple regression produces a standardized beta of .414, $p = .000$. The second model indicates that knowledge sharing behaviour is a predictor of job satisfaction. The multiple regression produced a standardized beta of .227, $p = .002$. The second model indicates that overall leader trust and knowledge sharing behaviour accounts for 29.3% of the variability in job satisfaction.

The results of regression analysis support the first and second hypotheses confirming leader trust and knowledge sharing behaviour are predictors of job satisfaction for academic and administrative staff. Table 7 illustrate average mean score and standard deviations of predicted and outcome variables.

Table 7 illustrates the correlation between research variables for predictor variables and the outcome variable. The correlation analysis indicates no good multicollinearity between predictor variables, as the relationships between the predictor variables do not exceed .70. The correlation analysis also indicates a significant positive and good relationship between predictor variables and outcome variable, as the relationship is higher than .30.

Table 8 illustrates multiple regression model of leader trust and knowledge sharing and their effect on job satisfaction.

The research findings signify a good model of the effect of trust in leader and knowledge sharing behaviours and practices on employees job satisfaction in management, peers and the organization. The first regression model predicts that for 1 unit increase of leader trust, it causes an increase in staff job satisfaction by .498 standard deviations. The second regression model predicts that for 1 unit increase in leader trust, it causes an increase in staff satisfaction by .414 standard deviation holding, knowledge sharing behaviour constant. The second model predicts that for 1 unit increase in knowledge sharing behaviour, it causes an increase in staff satisfaction by .227 standard deviation, holding leader trust constant.

Table 7. Correlations between research variables (source: developed by authors)

		Job Satisfaction	Leader Trust	Knowledge Sharing Behaviour
Pearson Correlation	Job Satisfaction	1.000	.498	.380
	Leader Trust	.498	1.000	.368
	Knowledge Sharing Behaviour	.380	.368	1.000
Sig. (1-tailed)	Job Satisfaction	.	.000	.000
	Leader Trust	.000	.	.000
	Knowledge Sharing Behaviour	.000	.000	.
N	Job Satisfaction	161	161	161
	Leader Trust	161	161	161
	Knowledge Sharing Behaviour	161	161	161

Table 8. Multiple regression models of leader trust and knowledge sharing on job satisfaction (source: developed by authors)

Model First	Variables	B	BSE	β	t	Sig
	Constant	1.481	.277		5.341	.000
Leader Trust	.484	.067	.498	7.244	.000	
Model Second	Variables	B	BSE	β	t	Sig
	Constant	.641	.379		1.689	.093
	Leader Trust	.402	.070	.414	5.758	.000
	Knowledge Sharing Behaviour	.291	.092	.227	3.157	.002

Note: First Model Multiple R = .498, R² = .248, Adjusted R² = .243
 Second Model Multiple R = .541, R² = .293, Adjusted R² = .284

5. Discussion

In Syria, there is no research on the effect of knowledge sharing behaviour and practices and organizational trust on employee job satisfaction. This research paper provides an empirical investigation of the significant effect of knowledge sharing behaviour and practices and organizational trust on employee satisfaction at work in Syrian Higher Education. This research contributes to the prior research which examines the relationship between the variables under examination. The results of the study support the need for establishing organizational trust and knowledge sharing practices in Higher Education sector and both private and public universities in Syria.

This research advocates that the establishment of effective and positive attitudes among academic and administrative staff requires, higher education institutions need to encourage knowledge sharing practices and policies which would enhance a culture of knowledge sharing. In addition, establishing trust in higher education institutions is critical, specifically trust in the leader. When high levels of trust in leadership and management of organisations exist, these organisations demonstrate higher levels of performance, effectiveness, risk-taking and

robustness. The practical application of this research is in its emphasis on building trust in HEIs in Syria, by developing competent, high performing. Trustworthy and well-informed leaders and managers, who can make effective decisions.

The finding of this research is supported by previous research on the relationship between knowledge sharing behaviour and practices, organizational trust and employee job satisfaction (Bontis et al., 2011; Wickramasinghe & Widyaratne, 2012; Holten, Hancock, Persson, Hanson, & Hogh, 2016; Malik & Kanwal, 2018).

The research limitations are identified as mainly the size and strategy of the sample employed in this research. The research limitation also is related to the specificity of the model in the scope of higher education sector. Further research could investigate additional sectors and industries. Also, further research could investigate mediation analysis examining the effects of organizational trust on job satisfaction with the mediating effect of knowledge sharing. Expanding the sample with the investigation of regional study including Syria and Lebanon could also be a research.

Conclusions

This research paper examines the effect of leader trust and knowledge sharing behaviour on job satisfaction at higher education sector. The research results indicate a positive and significant effect of leader trust on job satisfaction among academic and administrative staff. Knowledge sharing behaviour has an appositive effect on job satisfaction. The research emphasizes the importance of organizational trust in organizations through the development of leaders who can inspire and build trust within their institutions. The research emphasizes the significance of establishing a culture of knowledge sharing in higher education institutions in Syria.

References

- Aggarwal, S., Gupta, A., Govindan, J., & Meidute, I. (2014). Effect of repeat purchase and dynamic market size on diffusion of an innovative technological consumer product in a segmented market. *Technological and Economic Development of Economy*, 20(1), 97-115. <https://doi.org/10.3846/20294913.2014.885914>
- Akhavan, P., Rahimi, A., & Mehralian, G. (2013). Developing a model for knowledge sharing in research centers. *Vine*, 43(3), 357-393. <https://doi.org/10.1108/VINE-06-2012-0020>
- Alves, H., & Raposo, M. (2009). The measurement of the construct satisfaction in higher education. *Service Industries Journal*, 29(2), 203-218. <https://doi.org/10.1080/02642060802294995>
- Bigliardi, B., Ivo Dormio, A., Galati, F., & Schiuma, G. (2012). The impact of organizational culture on the job satisfaction of knowledge workers. *Vine*, 42(1), 36-51. <https://doi.org/10.1108/03055721211207752>
- Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, 30(1), 103-116. <https://doi.org/10.1080/01587910902845949>
- Bontis, N., Richards, D., & Serenko, A. (2011). Improving service delivery: investigating the role of information sharing, job characteristics, and employee satisfaction. *The Learning Organization*, 18(3), 239-250. <https://doi.org/10.1108/09696471111123289>

- Burinskienė, A. (2015). Optimising forklift activities in wide-aisle reference warehouse. *International Journal of Simulation Modelling*, 14(4), 621–632. [https://doi.org/10.2507/IJSIMM14\(4\)5.312](https://doi.org/10.2507/IJSIMM14(4)5.312)
- Casimir, G., Lee, K., & Loon, M. (2012). Knowledge sharing: influences of trust, commitment and cost. *Journal of Knowledge Management*, 16(5), 740–753. <https://doi.org/10.1108/13673271211262781>
- Chen, S. H., Yang, C. C., Shiau, J. Y., & Wang, H. H. (2006). The development of an employee satisfaction model for higher education. *The TQM Magazine*, 18(5), 484–500. <https://doi.org/10.1108/09544780610685467>
- Chen, S.-H., et al. (2006). The development of an employee satisfaction model for higher education. *The TQM Magazine*, 18(5), 484–500. <https://doi.org/10.1108/09544780610685467>
- Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology*, 53(1977), 39–52.
- Cooper, D. R., & Schindler, P. S. (2014). *Business research methods* (12th ed.). New York: McGraw Hill.
- Cummings, J. (2003). *Knowledge sharing: a review of the literature, enhancing development effectiveness through excellence and independence in evaluation*. The world bank operations evaluation department.
- Cummings, L. L., & Bromiley, P. (1996). The organizational trust inventory OTI: Development and validation. In R. Kramer, & T. Tyler, *Trust in organizations: frontiers in theory and research*. Thousand Oaks, CA: Sage.
- Cumming, T. G., & Worley, C. G. (2009). *Organisation development and change* (9th ed.). Mason: Cengage Learning.
- Dalati, S. (2014). Universal leadership across social culture: theoretical framework, design and measurement. In *Wellesley: Academic Conferences and Publishing International Limited Reading* (pp. 59–86).
- Dalati, S., Eddin, S., & Hamwi, A. (2016). Sustainable development in higher education through service quality and price fairness: empirical evidence from private universities in Damascus, Syria. *The International Journal Entrepreneurship and Sustainability Issues*, 4(1).
- Dalati, S., Raudeliūnienė, J., & Davidavičienė, V. (2017). Sustainable leadership, organizational trust on job satisfaction: empirical evidence from higher education institutions in Syria. *Business, Management and Education*, 15(1), 14–27. <https://doi.org/10.3846/bme.2017.360>
- Davidavičienė, V., Pabedinskaite, A., & Davidavicius, S. (2017). Social networks in B2B and B2C communication. *Transformations in Business and Economics*, 16(1), 69–84.
- Locke, E. A. (1970). Job satisfaction and job performance: a theoretical analysis. *Organisational Behavior and Human Performance*, 5, 484–500. [https://doi.org/10.1016/0030-5073\(70\)90036-X](https://doi.org/10.1016/0030-5073(70)90036-X)
- Ellonen, R., Blomqvist, K., & Puumalainen, K. (2008). The role of trust in organisational innovativeness. *European Journal of Innovation Management*, 11(2), 160–181. <https://doi.org/10.1108/14601060810869848>
- Entwistle, V. A., & Quick, O. (2006). Trust in the context of patient safety problems. *Journal of health organization and management*, 20(5), 397–416. <https://doi.org/10.1108/1477260610701786>
- Ferreira, F., Ferreira, J., Fernandes, C., Meidutė-Kavaliauskienė, I., & Jalali, M. S. (2017). Enhancing knowledge and strategic planning of bank customer loyalty using fuzzy cognitive maps. *Technological & Economic Development of Economy*, 23(6), 860–876. <https://doi.org/10.3846/20294913.2016.1213200>
- Field, A. (2013). *Discovering statistics using R* by Andy Field, Jeremy Miles, Zoë Field. *International Statistical Review*.
- Han, G. H. (2010). Trust and career satisfaction: the role of LMX. *Career Development International*, 15(5), 437–458. <https://doi.org/10.1108/13620431011075321>
- Holten, A., Hancock, G., Persson, R., Hanson, A., & Hogh, A. (2016). Knowledge hoarding: antecedent or consequent of negative acts? The mediating role of trust and justice. *Journal of Knowledge Management*, 20(2), 215–229. <https://doi.org/10.1108/JKM-06-2015-0222>
- Hsu-Hsin, C., Tzu-Shian, H., & Ju-Sung, C. (2011). The relationship between high-commitment HRM and knowledge-sharing behavior and its mediators. *International Journal of Manpower*, 32(5/6), 604–622. <https://doi.org/10.1108/01437721111158224>

- Ismail, N. (2012). *Organizational commitment and job satisfaction among staff of higher learning education institutions in Kelantan* (Master thesis) (pp. 1-75).
- Jia, P., Mahdiraji, H., A., Kannan, G., & Meidutė, I. (2013). Leadership selection in an unlimited three-echelon supply chain. *Journal of Business Economics and Management*, 14(3), 616-637. <https://doi.org/10.3846/16111699.2012.761648>
- Joseph, E. E., & Winston, B. E. (2005). A correlation of servant leadership, leader trust, and organizational trust. *Leadership & Organization Development Journal*, 26(1), 6-22. <https://doi.org/10.1108/01437730510575552>
- Raudeliūnienė, J., & Davidavičienė, V., Jakubavičius, A. (2018). Knowledge management process model. *Technical Research Centre of Finland*, 5(3), 455.
- Kimpah, J., Ibrahim, H. I., & Raudeliūniene, J. (2017). The role of psychological empowerment as the moderator between developmental experience and perceived organizational support. *Advanced Science Letters*, 23(1), 333-336. <https://doi.org/10.1166/asl.2017.7175>
- Locke, E. A. (1969). What is job satisfaction?. *Organizational Behavior and Human Performance*, 4(4), 309-336. [https://doi.org/10.1016/0030-5073\(69\)90013-0](https://doi.org/10.1016/0030-5073(69)90013-0)
- Mačiulis, A., Tvaronavičienė, M., Lankauskienė, T., Raudeliūnienė, J., & Dzemyda, I. (2015). Energy security and sustainable competitiveness of industry development. *Economic Research-Ekonomska Istraživanja*, 28(1), 502-515. <https://doi.org/10.1080/1331677X.2015.1082435>
- Malik, M. S., & Kanwal, M. (2018). Impacts of organizational knowledge sharing practices on employees' job satisfaction. *Journal of Workplace Learning*, 30(1), 2-17. <https://doi.org/10.1108/JWL-05-2016-0044>
- Martins, H., Proenca, T. (2012). Minnesota satisfaction questionnaire – psychometric properties and validation in a population of Portuguese hospital workers. *Economics and Management*, 471(October), 1-20.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734. <https://doi.org/10.5465/amr.1995.9508080335>
- McLeary, C. N., & Cruise, P. A. (2015). A context-specific model of organizational trust. *Cross Cultural Management: An International Journal*, 22(2), 297-320. <https://doi.org/10.1108/CCM-11-2013-0180>
- Merkevičius, J., Davidavičienė, V., Raudeliūnienė, J., & Buleca, J. (2015). Virtual organization: specifics of creation of personnel management system. *E a M: Ekonomie a Management*, 18(4), 200-211. <https://doi.org/10.15240/tul/001/2015-4-014>
- Morris, D., Yaacob, A., & Wood, G. (2004). Attitudes towards pay and promotion in the Malaysian higher educational sector. *Employee Relations*, 26(2), 137-150. <https://doi.org/10.1108/01425450410511052>
- Nyhan, R. C., & Marlowe, H. A. (1997). Development and psychometric properties of the organizational trust inventory. *Evaluation Review*, 21(5), 614-635. <https://doi.org/10.1177/0193841X9702100505>
- Oshagbemi, T. (1997). Job satisfaction and dissatisfaction in higher education. *Education + Training*, 39(9), 354-359. <https://doi.org/10.1108/00400919710192395>
- Pangil, F., & Moi Chan, J. (2014). The mediating effect of knowledge sharing on the relationship between trust and virtual team effectiveness. *Journal of Knowledge Management*, 18(1), 92-106. <https://doi.org/10.1108/JKM-09-2013-0341>
- Raudeliūnienė, J., Davidavičienė, V., Tvaronavičienė, M., & Jonuška, L. (2018). Evaluation of advertising campaigns on social media networks. *Sustainability*, 10(4), 973. <https://doi.org/10.3390/su10040973>
- Raudeliūnienė, J., & Meidutė-Kavaliauskienė, I. (2016). Editorial: special issue on knowledge management: theory and practice in SMEs. *International Journal of Learning and Change*, 8(3/4), 193-197. Retrieved from <http://www.inderscience.com/editorials/fl21171346892510.pdf>
- Raudeliūnienė, J., & Davidavičius, S. (2017). A conceptual model of assessment of knowledge transfer to consumer. *Business, Management and Education*, 15(2), 174-195. <https://doi.org/10.3846/bme.2017.387>
- Raudeliūnienė, J., Meidutė-Kavaliauskienė, I., & Vileikis, K. (2016). Evaluation of factors determining

- the efficiency of knowledge sharing process in the Lithuanian National Defence System. *Journal of the Knowledge Economy*, 7(4), 842-857. <https://doi.org/10.1007/s13132-015-0257-4>
- Rousseau, D. M., et al. (1998). Not so different after all: a cross discipline view of trust. *Academy of Management Review*, 23(3), 393-404. <https://doi.org/10.5465/amr.1998.926617>
- Rutkauskas, A. V., Raudeliūnienė, J., & Račinskaja, I. (2014). Integral knowledge, innovation and technology cluster formation nurturing the universal development sustainability in the context of globalization. *Economics and Sociology*, 7(4), 41-58. <https://doi.org/10.14254/2071-789X.2014/7-4/3>
- Saner, T., & Eyüpoğlu, Ş. Z. (2012). The age and job satisfaction relationship in higher education. *Procedia – Social and Behavioral Sciences*, 55, 1020-1026. <https://doi.org/10.1016/j.sbspro.2012.09.593>
- Shockley-Zalabak, P. S., & Morreale, S. P. (2011). Building high-trust organizations. *Leader to Leader*, 2011(60), 39-45. <https://doi.org/10.1002/ltl.467>
- Skačkauskienė, I., Vilkaitė-Vaitonė, N., Raudeliūnienė, J., & Davidavičienė, V. (2016). A model for measuring passenger loyalty. *Transport*, 31(1), 100-107. <https://doi.org/10.3846/16484142.2015.1094748>
- Sohail, M., & Daud, S. (2009). Knowledge sharing in higher education institutions perspectives from Malaysia. *VINE*, 39(2), 125-142. <https://doi.org/10.1108/03055720910988841>
- Spector, P. E. (1997). *Job satisfaction: application, assessment, causes, and consequences*. Thousand Oaks: Sage Publication.
- Stringer, C., Didham, J., & Theivananthpillai, P. (2011). Motivation, pay satisfaction, and job satisfaction of front-line employees. *Qualitative Research in Accounting and Management*, 8(2), 161-179. <https://doi.org/10.1108/11766091111137564>
- Teh, P. (2012). Knowledge sharing, job attitudes and organisational citizenship behaviour. *Industrial Management & Data Systems*, 112(1). <https://doi.org/10.1108/02635571211193644>
- Tekingündüz, S., Tengilimoğlu, M., & Karabulut, D. E. (2017). Effect of organisational trust, job satisfaction, individual variables on the organisational commitment in healthcare services. *Total Quality Management and Business Excellence*, 28(5-6), 522-541. <https://doi.org/10.1080/14783363.2015.1099428>
- Tietjen, M., & Myers, R. M. (1998). Motivation and job satisfaction motivation and job satisfaction. *Management Decision*, 36(4), 226-231. <https://doi.org/10.1108/00251749810211027>
- Trivellas, P., & Dargenidou, D. (2009). Organisational culture, job satisfaction and higher education service quality. *The TQM Journal*, 21(4), 382-399. <https://doi.org/10.1108/17542730910965083>
- Tsai, Y. (2011). Relationship between organizational culture, leadership behavior and job satisfaction. *BMC health services research*. <https://doi.org/10.1186/1472-6963-11-98>
- Vanhala, M., & Ritala, P. (2016). HRM practices, impersonal trust and organizational innovativeness. *Journal of Managerial Psychology*, 31(1), 95-109. <https://doi.org/10.1108/JMP-03-2013-0084>
- Wang, S., & Noe, R. A. (2010). Knowledge sharing: a review and directions for future research. *Human Resource Management Review*, 20(2), 115-131. <https://doi.org/10.1016/j.hrmr.2009.10.001>
- Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63(3), 193-210. <https://doi.org/10.1111/j.2044-8325.1990.tb00521.x>
- Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52(2), 129-148. <https://doi.org/10.1111/j.2044-8325.1979.tb00448.x>
- Wickramasinghe, V., & Widyaratne, R. (2012). Effects of interpersonal trust, team leader support, rewards, and knowledge sharing mechanisms on knowledge sharing in project teams. *Vine*, 42(2), 214-236. <https://doi.org/10.1108/03055721211227255>
- Zárraga, C., & Bonache, J. (2003). Assessing the team environment for knowledge sharing: an empirical analysis. *International Journal of Human Resource Management*, 14(7), 1227-1245. <https://doi.org/10.1080/0958519032000114282>
- Zikmund, G., Carr, J. C., Griffin, M., & Babin, B. J. (2013). *Business research methods* (9th ed.). New York: Cengage Learning.