International Conference on Accounting Studies (ICAS) 2015
17-20 August 2015, Johor Bahru, Johor, Malaysia

The operant conditioning concept: The applicability in tax e-filing

Saliza Abdul Aziz[*], Kamil Md Idris

School of Accountancy, Universiti Utara Malaysia, Malaysia

Abstract

This research is on the behavioral intention on technology application. The form of tax e-filing technology introduced in Malaysia particularly on corporate taxation is however, not fully utilized, despite huge amount of budget allocated for this matter. The underpinning theories applied in conducting this research is an extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) that tested the direct relationship as well as moderating effects on behavioral intention as introduced in Technology Acceptance Model 3 (TAM3), *i.e.* incentive alignment. Even though this unified model is accepted and integrated in many studies of various fields, their results revealed some inconsistencies when applied in different areas or situations. For instance in this research, performance expectancy, effort expectancy and social influence are significantly influence the behavioral intention. However, the incentive alignment failed to moderate those relationships, in fact it weaken the relationship toward the acceptance of tax e-filing among tax agents/preparers in Malaysia. In other words, there is no universal UTAUT that can explain all situation of acceptance. As such, the present research is attempted to discover enrichment the model of acceptability in a situation where authority is involved in encouraging professionals (tax agents/preparers) to adopt the proposed system. Thus, the integration of The Operant Conditioning Theory (OCT) is expected to give a new outlook to the existing model. It is expected to reveal the non-compliance behavior towards corporate tax e-filing acceptability among tax agents/preparers in Malaysia.

Keywords: Incentive alignment, Partial Least Square, The Operant Conditioning Theory

1. INTRODUCTION

Technology without any incentive aligned to the acceptance could lead to a negative attitude toward the technology introduced (Ba, Stallaert, & Whinston, 2001). Incentive alignment does not mean organizational rewards for using a system only, but it could also be an individual's perception on job-fit and perceived value of technology adopted. The individual's perception on the perceived benefits of the technology to other work units instead, is lead to perception of lack of incentive alignment and result in low acceptance on the technology (Ba et al., 2001). In a way, incentive alignment which is an important extrinsic reward could influence subjective norm, image, reduce anxiety as well as increase perceived enjoyment. This important extrinsic reward is considered important drivers of intrinsic motivations (Deci, Koestner, & Ryan, 1999; Ryan & Deci, 2000).

The importance of incentive alignment is not limited to the system development, but also considered in other areas such as business (Ericson, 2011; Saxe, 2006), construction (Ling, Rahman, & Ng, 2006; Rahman & Kumaraswamy, 2008), marine (Brandt & Svendsen, 2009) and healthcare (Safavi, 2006; Teutsch & Berger,

———
[*]Corresponding Author. Tel.: +604-9287320; Fax: +604-9287216
E-mail: saliza@uum.edu.my

2005). No matter how difference is the area of study, yet the incentive alignment is not ignored as one of the element to improve performance or increase productivity. In fact, there is significant relationship between incentive alignment and performance, productivity as well as in achieving a mutual agreement between parties. The incentive alignment is indirectly increase or enhance appropriate delivery of services (Teutsch & Berger, 2005); improve performance (Safavi, 2006); increase productivity and assist in achieving goals as required (Rahman & Kumaraswamy, 2008). However, the trend of changes in incentives is not reflected the changes made in performance, *i.e.* the sharp changes in incentive policy have not necessarily force sharp trade-off in the market (Ericson, 2011).

Even though most of the time incentive is reflecting dollar or financial values, but there are also in other forms such as in units of health (Teutsch & Berger, 2005), subsidies (Brandt & Svendsen, 2009) and equitable risk allocation (Rahman & Kumaraswamy, 2008). The importance of incentives alignment is arising as most of the companies and institutions believed of its capacity that could improve efficiency (Brandt & Svendsen, 2009; Safavi, 2006). As a matter of fact, there are models created in achieving this incentive alignment strategies such as traditional shared risk; pay-for-performance contracting; physician gainsharing; private-payer physician gainsharing; service-line gainsharing; and participating bond transactions (Safavi, 2006) for the healthcare department. In the construction side, there are contractual incentives and non-contractual incentives models (Rahman & Kumaraswamy, 2008). Regardless the model and area, the aim is to achieve the objectives and goals. For instance, the healthcare department hopes to achieve health in public health and healthcare; and marine with the aim to agree on perceive profitability between fishermen and biologist in terms of livestock's size. In the construction, the aim is to derive at designing procurement arrangements; selecting and mobilizing different project team's members; and adjusting the conditions of the contract that has equitable risk allocation for all related parties.

In business, long- or short-term incentives is useful in accomplishing a range of business objectives (Ericson, 2011) which indirectly encourage value-creating in business decisions. In fact, it is well accepted in business environment where specific result in a human endeavor is obtained with the allocation of incentives alignment to the goals (Saxe, 2006). The actual receipts compensation, *i.e.* normal salaries without any extra incentives given on a particular supplementary tasks or contracts is unlikely success in generating additional to the aggregate total business income. However, it is achieved if the related parties were given incentives either in terms of financial or nonfinancial values. Based on the arguments, the same situation is predicted in the case of e-filing, where lack of study is conducted to approve the role of incentive alignment in adopting e-filing and the intention behavior to accept the system in completing return forms on behalf of clients. It is likely that, without any incentives alignment to the intention behavior, even though e-filing is seems to help in job performance; reduce effort in completing return forms; the benefits; and opinions by others on the usefulness of the system, tax agents/preparers would reluctant to accept the tax e-filing system. Thus, a balance or equitable incentive alignment between companies, tax agents/preparers and clients need to be achieved in order to increase productivity, profitability as well as in number of potential clients.

Undeniable, the choice, behavioral option, accomplishment, rewards and punishment are also essential factors. Thus, the factors are considered as value that one expect on any choice made either in terms of benefit received or value in returned to be sacrificed. In fact, the Operant Conditioning Theory (OCT) that take into consideration all the above mentioned factors is explained accordingly in the following section.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Expectancy theory is related to choice an individual made on the behavioral option. This means that one is motivated to a behavioral action when believed to achieve the desired outcome. However, it is not applicable all the time where there is a time where conditioning theory applies. This means that, there is a time where one is response to a behavioral where there is a stimulus. The behavioral is repeated when the stimuli give an effect on action taken (Skinner, 1969). In fact, the OCT stress that behavior is performed if it lead to desired consequences, even if it lead to undesired consequences (O'Donohue & Ferguson, 2001; Skinner, 1969). Therefore, company could achieve its goals by linking the performance of specific behaviors to the accomplishment of specific outcomes via motivation. In addition, the considerations is raised by conditioning that is with a balance between rewards, punishment and timing (Jelavic & Salter, 2014; Teo, Ling, & Ong, 2005). It could be that reinforcement is not the determinant of behavior change, but rather that the conditions created in the behavior modification intervention, *i.e.* structure, predictability feedback and the amount of time spent in the learner/teacher relationship is facilitated the formation of attached relationship which in turns facilitates behavior change (Skinner, 1969).

The OCT is further elaborated and tested into four tools, *i.e.* positive reinforcement, negative reinforcement, extinction and punishment (Weiss, 1990). These tools are motivated towards a high performance and prevent workers from engaging in other behavior which could obstruct from organizational effectiveness. Positive reinforcement gives workers' outcomes in terms of monetary rewards, bonuses or job promotions as desired as organizational functional behaviors are performed. Negative reinforcement is takes into action by eliminating or removing undesired outcomes as soon as functional behavior is performed. However, the negative reinforcement is creating an unpleasant workplace, yet it is an alternative if unable to perform via positive reinforcement. Extinction involves limiting the dysfunctional of the performance by eliminating the causes of such behaviors. This is eliminating workers who break the rules and unethical as such behavior could affect others. Punishment is enforced in order to curve any dysfunctional practice or behavior which could be in the form of pay cuts, temporary suspensions, demotions or firing. There are cases where monetary rewards are the most effective kind of positive reinforcement. However, it is not necessarily yield the same positive effects (Haines, Merrheim, & Roy, 2001; Hinze, 2002; Vredenburgh, 2002). The modification via Operant Reinforcement Theory constantly demonstrated that behavior is explained and changed as well as predicted with past and continues reinforcement given. This is basically recognizes attention as a reinforcing event. Thus, behavior is a functioning of the environment in which the behavior occurs.

Incentive alignment is one of the important aspect need to be considered in influencing behavioral intention (Ba et al., 2001). This is because if users find that the system features and capabilities of the system is not aligned to their interest and incentives, the acceptance among them could be failed. Indirectly, the technology itself without any incentive aligned to the acceptance is leaded to a negative attitude toward the technology introduced. In a way, incentive alignment that is an important extrinsic reward could influence subjective norm, image, reduce anxiety as well as increase perceived enjoyment. The extrinsic reward is considered important drivers of intrinsic motivations (Deci et al., 1999; Ryan & Deci, 2000). It is likely that, without any incentives alignment to the intention behavior, even though tax e-filing seems to help in job performance; reduce effort in completing return forms; is benefited; and supported by others on the usefulness of the system, tax agents/preparers is reluctant to accept the tax e-filing system. Thus, performance expectancy, effort expectancy, social influence and perceived value are predicted to influence behavioral intention with the availability of incentive alignment to the tax e-filing system offered to tax agents/preparers.

H_1: *Performance expectancy has a positive influence on behavioral intention to accept tax e-filing in Malaysia.*

H_{1a}: *The influence of performance expectancy on behavioral intention toward tax e-filing among tax agents/preparers will be moderated by incentive alignment.*

H_2: *Effort expectancy has a positive influence on behavioral intention to accept tax e-filing in Malaysia.*

H_{2a}: *The influence of effort expectancy on behavioral intention toward tax e-filing among tax agents/preparers will be moderated by incentive alignment.*

H_3: *Social influence has a positive influence on behavioral intention to accept tax e-filing in Malaysia.*

H_{3a}: *The influence of social influence on behavioral intention toward tax e-filing among tax agents/preparers will be moderated by incentive alignment.*

H_4: *Perceived value has a positive influence on behavioral intention to accept tax e-filing in Malaysia.*

H_{4a}: *The influence of perceived value on behavioral intention toward tax e-filing among tax agents/preparers will be moderated by incentive alignment.*

3. METHODOLOGY

In total, there are 1,871 tax agents/preparers officially registered with Inland Revenue Board of Malaysia (IRBM) scattered in 15 different states in Malaysia. However, the sample size is limited to 714 with an additional 70 per cent from the recommended size, *i.e.* 420 tax agents/preparers as according to the table suggested by Krejcie and Morgan (1970). After few reminders and screenings, there are 231 qualified respondents of registered tax agents/preparers. Tax agents/preparers are considered as the sample instead of the corporate taxpayers/clients. This is because freedom in choosing the medium of transaction on tax filed to IRBM is fully given by the corporate taxpayers/clients to the tax agents/preparers. Indeed, the influence or factors from point of view corporate taxpayers/clients are not considered.

The questionnaire that is design using 7-point Likert scale, anchored by "strongly disagree" (1) to "strongly agree" (7) is sent via mail to respondents who are selected randomly using simple random sampling technique throughout Malaysia. The selection is made based on the list developed using SPSS software, which excluded the tax agents/preparers who have been participated during the Delphi and pilot test. All instruments are adapted from the literatures and modified to suit with the tax e-filing behavioral intention in Malaysia. The questions are

designed to cover the constructs that would determine the behavioral intention of tax agents/preparers to accept tax e-filing. As for this research, the Unified Theory of Acceptance and Use of Technology (UTAUT) model is modified in order to represent the situation of tax e-filing in Malaysia. Most of the original determinants are tested with an additional factor is considered, *i.e.* perceived value. In addition, a new moderator as suggested in TAM3 is introduced, *i.e.* incentive alignment. It is considered an important pushing factor in choosing technology instead of manual system and yet to be empirically approved.

4. ANALYSIS AND FINDINGS

Basically, the 231 qualified respondents consist of 128 male (55.4 per cent) and 103 females (44.6 per cent) as the details in Table 1. The ethnicity distribution of the respondents is Chinese, 135 respondents representing 58.4 per cent, Malay representation is 36.8 per cent and the Indian and other races representation is 4.8 per cent. The average age of the respondents is 42.9 years. In terms of education level, most of the respondents hold a professional qualification, bachelor degree, master degree and diploma holders with 34.2, 44.6, 4.8 and 10.8 per cent respectively. In terms of application part, majority of the respondents have three (3) years of experience with e-filing (25.5 per cent), 34.2 per cent of the respondents with less than three (3) years of experience and 40.3 per cent with four (4) to seven (7) years of experience in the tax e-filing. The majority of respondents who have experience with tax e-filing engaged with more than 100 clients per year (54.1 per cent) or else with less than 20 clients (13.0 per cent). The respondents are from various places, *i.e.* Selangor (15.1 per cent), Kuala Lumpur (14.3 per cent), Kedah (12.6 per cent), Johor (11.7 per cent), Sabah (9.1 per cent) and Pulau Pinang (8.6 per cent). The other locations such as Perlis, Perak, Melaka, Pahang, Terengganu, Kelantan and Sarawak comprise of respondents less than 10 per cent. The lowest representatives are from Negeri Sembilan and Labuan with one (1) respondent only.

Table 1: Descriptive Statistic of Respondents (n=231)

Demography	Frequency	Percent	Cumulative Percent
Age: 20 – 29 years	53	22.9	22.9
30 – 39 years	46	19.9	42.9
40 – 49 years	44	19.0	61.9
50 – 59 years	42	18.2	80.1
60 years and above	46	19.9	100.0
Race: Malay	85	36.8	36.8
Chinese	135	58.4	95.2
Indian	9	3.9	99.1
Others	2	0.9	100.0
Gender: Male	128	55.4	55.4
Female	103	44.6	100.0
Qualification: Upper secondary	4	1.7	1.7
Certificate	7	3.0	4.8
Diploma	25	10.8	15.6
Bachelor	103	44.6	60.2
Master	11	4.8	64.9
Ph.D	2	0.9	65.8
Professional	79	34.2	100.0
Location: Perlis	2	0.9	0.9
Kedah	29	12.6	13.5
Pulau Pinang	20	8.6	22.1
Perak	17	7.4	29.5
Selangor	35	15.1	44.6
Kuala Lumpur	33	14.3	58.9
Negeri Sembilan	1	0.4	59.3
Melaka	12	5.2	64.5
Johor	27	11.7	76.2
Pahang	7	3.0	79.2
Terengganu	9	3.9	83.1
Kelantan	12	5.2	88.3
Sabah	21	9.1	97.4
Labuan	1	0.4	97.8
Sarawak	5	2.2	100.0
Experience: < 3 years	79	34.2	34.2
3 years	59	25.5	59.7
4-7 years	93	40.3	100.0

Table 1: Descriptive Statistic of Respondents (n=231) (continued)

Demography	Frequency	Percent	Cumulative Percent
Tax E-filing clients: 20 clients and below	30	13.0	13.0
21 – 40 clients	25	10.8	23.8
41 – 60 clients	16	6.9	30.7
61 – 80 clients	9	3.9	34.6
81 – 100 clients	26	11.3	45.9
101 clients and above	125	54.1	100.0
Total	**231**	**100.0**	

The construct validity is achieved as the individual standardized factor loading (*i.e.* regression weight) is within the range of 0.5 to 0.7 for all the constructs as in Table 2. Even though behavioral intention construct left with two items to explain, the construct is still supporting the content validity (Byrne, 2010a; Hair et al., 2010). This is because as whole, the model is over identified with minimum of three items on the other six constructs (Byrne, 2010a). It is the suggested number of items with a minimum of three and preferable of four (Hair et al., 2010), however, taking into account the whole model any construct with two measurement items is acceptable (Awang, 2012; Byrne, 2010a).

Moreover, variance extracted measures are satisfied for all seven constructs where the reported average variance extracted (AVE) is 0.5 and above. The constructs are performance expectancy, effort expectancy, social influence, facilitating conditions, perceived value, behavioral intention and incentive alignment with the AVE values of 0.652, 0.705, 0.840, 0.527, 0.728, 0.640 and 0.768 respectively. In fact, all the constructs are also considered achieved the construct reliability. This is because the constructs are above the minimum threshold of 0.6 (Awang, 2012). The construct reliabilities (CR) range from 0.766 for the facilitating conditions construct to 0.993 for the effort expectancy construct. Indeed, the supported evidence on construct reliability suggesting adequate reliability.

Overall, the evidence supports the convergent validity of the measurement model. All loading estimates are above 0.5 (Hair et al., 2010), which indicates and ensures model fit or internal consistency. The AVE estimates also considered all as satisfactory and the same acceptance applied in the reliability estimates. In addition, the model fits relatively well. Therefore, all the items as listed are retained at this point as adequate evidence of convergent validity is supported and the Cronbach Alpha reported are all above 0.7 (i.e. between .712 to .937).

Table 2: The confirmatory factor analysis report summary for all construct (n=231)

Construct	Item	Factor Loading	CA (> 0.7)	CR (> 0.6)	AVE (> 0.5)
PE	PE 1	.753	**.874**	**.830**	**.652**
(17 items)	PE 2	.840			
	PE 3	.935			
	PE 7	.679			
EE	EE 1	.885	**.918**	**.933**	**.705**
(12 items)	EE 3	.910			
	EE 4	.869			
	EE 5	.866			
	EE 6	.901			
	EE 9	-.547			
SI	SI 7	.864	**.937**	**.812**	**.840**
(9 items)	SI 8	.978			
	SI 9	.903			
FC	FC 4	.634	**.729**	**.766**	**.527**
(11 items)	FC 8	.653			
	FC 10	.867			
PV	PV 1	.818	**.818**	**.889**	**.728**
(8 items)	PV 2	.941			
	PV 3	.793			
BI	BI 1	.948	**.712**	**.773**	**.640**
(4 items)	BI 4	-.617			
Incentive	Inc 2	.898	**.923**	**.806**	**.768**
(8 items)	Inc 3	.979			
	Inc 4	.950			
	Inc 7	.637			

Notes: PE=Performance Expectancy, EE=Effort Expectancy, SI=Social Influence, FC=Facilitating Condition,
PV=Perceived Value, BI=Behavioral Intention

The analysis is preceded via Structural Equation Modeling (SEM) and Partial Lease Square (PLS) approach for direct and moderating effect on Behavioral Intention respectively. Besides testing the significance level, the model fitness, *i.e.* average variance explained (AVE) and composite reliability (CR) is checked for its consistency of structural relationships with its theoretical expectations. Validation of the model also focused on the individual parameter estimates in order to determine the statistically significant. Table 3a and Table 3b indicate the standardized parameter estimates for all of the possible structural relationships including the non hypotheses relationships. Relatively the new paths suggested if any, give an idea on model improvement or respecification for further research.

Table 3a: Hypothesis testing result of behavioral intention (direct effect)

Hypothesis	Relationship	Estimate	Critical Ratio	P-value	Result
H_1:	PE + → BI	.491	4.332	***	Supported
H_2:	EE + → BI	.651	5.397	***	Supported
H_3:	SI + → BI	-.178	-4.233	***	Supported
	FC + → BI	-.283	-0.926	.354	Not supported
H_4:	PV + → BI	-.080	-0.610	.542	Not supported
	$R^2 = 0.526$				

*Notes: *** $p<0.000$ BI=Behavioral Intention, PE=Performance Expectancy, EE=Effort Expectancy,
SI=Social Influence, FC=Facilitating Condition, PV=Perceived Value*

Table 3b: Hypothesis testing result of incentive alignment (moderating effect)

Hypothesis	Relationship	Fitness		Estimate	t-value	Result
		AVE	CR			
H_{1a}:	PE* Incentive → BI	0.6031	0.9602	-.000	0.002	NS
H_{2a}:	EE* Incentive → BI	0.6215	0.9513	.018	0.143	NS
H_{3a}:	SI* Incentive → BI	0.6896	0.9635	-.067	0.989	NS
	FC* Incentive → BI	0.5691	0.9401	.058	0.547	NS
H_{4a}:	PV* Incentive → BI	0.7035	0.9659	.093	0.803	NS
	$R^2 = 0.427$					

Notes: ***$p<0.001$, **$p<0.05$, *$p<0.1$, NS=Not Significance, BI=Behavioral Intention, PE=Performance Expectancy, EE=Effort Expectancy, SI=Social Influence, FC=Facilitating Condition, PV=Perceived Value

The above table (refer Table 3b) revealed that none of the constructs, *i.e.* performance expectancy, effort expectancy, social influence, facilitation condition and perceived value are successfully moderated by incentive in influencing the behavioral intention. In terms of power explained, the moderating gives a decrement effect on the behavioral intention as the R^2 is 0.427. Relatively, the formative constructs are able to explain for 52.6 per cent of the variance in the behavioral intention. The direct hypothesized relationship reported is significant on three out of the five relationships (refer Table 3a). This simply means that only performance expectancy, effort expectancy and social influence could influence behavioral intention directly. Indeed, the moderating, *i.e.* incentive alignment does not play any role in supporting the relationship toward a better acceptance in behavioral intention of tax e-filing among tax agents/preparers.

5.   CONCLUSION

Referring to this research finding, incentive alignment is mostly depends on the goal to achieve. In fact, in the aspect of incentive attached to technology acceptance, it could be some form of intrinsic motivation in increasing or improving the intention to adopt the specific technology introduce. Basically, the acceptance level is failed without alignment of interest and incentives, even with great system features and capabilities. Even in this research, it is assumed that incentive alignment is most probably influenced the performance expectancy, effort expectancy, social influence and perceived value towards an improvement in behavioral intention to accept tax e-filing system. However, the element of incentives failed to support any of the constructs, which left the point to question the role of incentive in respect to tax e-filing among tax agents/preparers in Malaysia. Generally, in obtaining specific result, an alignment of incentives is set with the goal. There is also a time where a desired behavior is not rewarded which mostly depends on the plan to achieve. This is the case of tax e-filing, where the task is adequately accomplished even without any form of compensation or incentives. In reality, this is the accepted truth where in most cases, incentives have only modest impact and do not have sustained effects and perhaps could be costly too. As for the reason, the critical issue is the desired result that vital to achieve, *i.e.* more fair payment, improved performance or affordability. Hence, an ultimate solution or governing objective needs to be developed, even if those reasons are aimed to be achieved. Incentive alignment seems not to be the appropriate tool to improve or increase the acceptance level in tax e-filing. On top of the appropriateness of incentive alignment, there is perhaps related to the issue of fair or right to grant incentives. Despite not supposed to receive incentive on important programs, organization need to be loyal to communities and is expected to

portrait as a good corporate citizens. Hence, it is unlikely to demand for incentive in ensuring the government policies successfully implemented for the benefit of the society. The most effective incentives for a project are those that target a key area of competitive advantage for the company or offset a disadvantage for the community. In this particular research, neither the tax agents/preparers on behalf of the company nor corporate taxpayers expected gains or suffer from the existing non-technology system. Thus, incentive alignment plays no important roles and it is supported in this research.

In this study, there are few limitations identified. First, the coverage of tax agents/preparers in Malaysia is limited to the registered tax agents/preparers as the non-registered is not recognized by the IRBM. The detail particulars are obtained from the website of IRBM in year 2010 at the point of data collection period. Second, the open-ended questions failed to be reported due to no responds given on this particular part. As for the results, the second objective is solely based on the response given on the structured questions. Therefore, it is suggested that other form of study, *i.e.* interview, qualitative or case study method of study is conducted in the future. Perhaps would be able to collect more data and achieve the desired level of sample size with more convincing power of statistical tests.

ACKNOWLEDGEMENTS

REFERENCES

Awang, Z. (2012). *A handbook on SEM* (4th ed.). Kota Bharu, Malaysia: UiTM Kelantan.

Ba, S., Stallaert, J., & Whinston, A. (2001). Introducing a third dimension in information systems design: The case for incentive alignment. *Information Systems Research, 12*, 225-239.

Brandt, U. S., & Svendsen, G. T. (2009). Trawling for subsidies: The alignment of incentives between fishermen and marine biologist. *Journal of European Public Policy, 16*(7), 1012-1029.

Byrne, B. M. (2010a). *Structural Equation Modeling with AMOS: Basic Concepts, Applications and Programming* (Second ed.). New York, London: Routledge Taylor & Francis Group.

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychology Bulletin, 125*, 627-668.

Ericson, R. N. (2011). Building a better long-term incentive mix. *Benefits Quarterly* (Second Quarter), 38-42.

Haines, V. Y. I., Merrheim, G., & Roy, M. (2001). Understanding Reactions to Safefy Incentives. *Journal of Safety Research, 32*(1), 17-30.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7/e ed.): Pearson Prentice Hall.

Hinze, J. (2002). Safety Incentives: Do they reduce Injuries? *Practice Periodical on Structural Design and Construction, 7*(2), 81-84.

Jelavic, M., & Salter, D. (2014). Performance measures and rewards: The alignment of management goals and employee motivation. *The Canadian Manager, 39,* 26-27.

Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement, 30*, 607-610.

Ling, F. Y. Y., Rahman, M. M., & Ng, T. L. (2006). Incorporating contractual incentives to facilitate relational contracting. *Journal of Professional Issues in Engineering Education and Practice, January*, 57-66.

O'Donohue, W. T., & Ferguson, K. E. (2001). *The Psychology of B.F. Skinner*. CA: Sage, Berverly Hills.

Rahman, M. M., & Kumaraswamy, M. M. (2008). Relational contracting and teambuilding: Assessing potential contractual and noncontractual incentives. *Journal of Management in Engineering* (January), 48-63.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Education Psychology, 25*(1), 54-67.

Safavi, K. (2006). Aligning financial incentives. *Journal of Healthcare Management, 51*(3), 146-151.

Saxe, S. D. (2006). Why business plans fail. *Of Counsel, 25*(3), 14-15.

Skinner, B. F. (1969). *Contingencies of Reinforcement*. New York: Appleton-Century-Crofts.

Teo, E. A. L., Ling, F. Y. Y., & Ong, D. S. Y. (2005). Fostering safe work behavior in workers at construction sites. *Engineering, Construction and Architectural Management, 12*(4), 410-422.

Teutsch, S. M., & Berger, M. L. (2005). Misaligned incentives in America's Health: Who's minding the store? *Annals of Family Medicine, 3*(6), 485-487.

Vredenburgh, A. G. (2002). Organizational safety: Which management practices are most effective in reducing employee injury rates? *Journal of Safety Research, 33*(2), 259-276.

Weiss, H. W. (1990). Learning Theory and Industrial and Organization Psychology. In Dunnette & L. Hough (Eds.), Handbook of Industrial and Organizational Psychology. Palo Alto, CA: Consulting Psychologists Press.