



International Journal of Applied Business and Economic Research

ISSN : 0972-7302

available at <http://www.serialsjournal.com>

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Volume 15 • Number 7 • 2017

Proposing Values for Enabling Knowledge Sharing and Active Learning

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Abstract: The present study is designed to propose values for encouraging people to share knowledge in the workplace. The implementation of active learning in the higher education institutions (HEI) was selected as the case study. Its aim is to develop lecturers' commitment to encourage students to share knowledge in the classroom, which can improve the development of students' soft and technical skills. This in turn enables active learning to be established in the classroom. The proposed independent variables are grouped under three constructs, namely, affective commitment (faith and sincerity), continuance commitment (contemplation and goal obsession) and normative commitment (means and attitude towards university). The researchers have applied cross-sectional survey research to validate the conceptual framework. It is found that all values influenced lecturers' commitment to undertake active learning in the classroom. Additionally, faith, means, contemplation and sincerity influenced the development of lecturers' commitment to encourage students to share knowledge in the classroom significantly. However, the proposed mediating role of commitment to encourage students to share knowledge in the classroom in the relationship between independent variables and active learning commitment could not be obtained in the practical setting. The practical implications are the discovery of theoretical, personal, and workplace practical best practices for the establishment of active learning in the HEI.

Keywords: Individual Commitment, Knowledge Sharing, Active Learning, Universities

1. INTRODUCTION

The conventional methods of instruction, which is based on retention of facts rather than student engagement, have not maximized student learning (Stage, Muller, Kinzie, & Simmons, 1998). Barr and Tagg (1995) proposed a paradigm shift in college instruction that allows students to reap complete benefits of the undergraduate experience and name this new perspective of college instruction as active learning (Barr & Tagg, 1995; Hallinger & Lu, 2013). This new method focuses on student learning (outputs) through active engaging learning rather than delivery of knowledge (input) that emphasizes passive learning only.

Other different labels of active learning are constructivist, experiential learning, and problem based learning (von Glasersfeld, 1987; Vygotsky, 1987; Fogarty, 1999). In short, active learning involves the engagement and empowerment of the students in the learning process.

However, the most important condition that needs to be fulfilled before active learning could take place is that the lecturers must have two commitments: (1) a commitment to motivate students to express ideas and participate in the group discussion; and (2) a commitment to use innovative classroom activities and teaching materials in the teaching (Selamat, Selladurai & Abdul Halim, 2015). These two commitments are complementary to each other. Thus there is a need to understand values that could develop lecturers' commitment to encourage students to share knowledge in the classroom and in turn commitment to establish active learning through innovative classroom activities and teaching materials in the classroom.

To assist in the process of developing the above two commitments amongst lecturers, this research proposes three constructs of individual commitment, namely, affective commitment, continuance commitment and normative commitment (Meyer & Allen, 1991). Affective commitment consist the elements of faith and sincerity. Continuance commitment consist the elements of contemplation and goal obsession. Normative commitment consist the elements of means and attitude towards university. All these are included in the conceptual framework.

The paper is organized as follows. Next section presents a theoretical justification for every element in the conceptual framework. Section 3 discusses research approach to validate the proposed conceptual framework. Finally, a conclusion is presented in the concluding section.

2. THEORETICAL OVERVIEW

For the theoretical understanding of the establishment of the commitment of the lecturers to encourage students to share knowledge in the classroom and in turn commitment to establish active learning through innovative classroom activities and teaching materials in the classroom we posit that it is based on the concepts of individual commitment (Selamat *et al.*, 2015). In the following sections a discussion of individual commitment is offered.

2.1. Lecturer-Centred and Student Centred Teaching Approach

There are two types of teaching approach that are being practiced by the higher education institutions which are lecturer-centred teaching approach and student-centred teaching approach (Barr & Tagg, 1995; Gardiner, 1994). Lecturer-centred teaching approach is commonly known as passive teaching whereas student-centred teaching approach is commonly known as active learning.

Within lecturer-centred teaching approach, the lecturers hold centre stage for the purposes of the transfer of course content to the students, who are passive recipients for this information. Lecturer-centred teaching approach uses demonstration, discussion, and lectures with learning content, structured mainly around the textbook. The students in these classrooms are rarely allowed to engage in reflection about their learning (Gardiner, 1994), and hold attitudes that are competitive and individualistic. Their learning progress becomes dependent on the actions of the lecturers, who control the manner and type of information dispensed, the development of learning objectives, the design of learning activities, and the choice of learning evaluation tools (Weimar & Associates, 1996).

On the other hand student-centred teaching approach is more inclined towards active learning, where the focus moves from the lecturers to the students, and the goal of teaching is to improve the quality of learning for the students (Gardiner, 1994; Stage *et al.*, 1998; Hallinger & Lu, 2013). Instead of being concerned with transferring information, the lecturer is concerned with how students learn and whether they are making sense of the information they have received. The role of the lecturer in this aspect is therefore to facilitate understanding and promote the development of higher order thinking skills, rather than the memorization of facts, and with more importance given to student-generated solutions and problems (Gardiner, 1994; Prawat, 1992; Stage *et al.*, 1998; Weimer & Associates, 1996; Hallinger & Lu, 2013). The focus on the lecture is minimized to give more emphasis to varied teaching methods like problem solving and problem-based learning, experiential, field-based learning, role- playing, case studies, service learning, simulations, cooperative learning and collaborative learning (Bonwell & Eison, 1991; Gardiner, 1994; Guskey, 1994; Meyers & Jones, 1993; Stage *et al.*, 1998; Travis, 1995). The selection choices among these methods depends on students' needs, abilities, and skills (Stage *et al.*, 1998; Travis, 1995; Weimer, 1996; Hallinger & Lu, 2013).

The focus of this research is active learning or student-centred learning. This is because it is argued that the dependency on the lecturer undermines the development of higher order thinking, and instead only encourages superficial learning of low-level, factual material (Hallinger & Lu, 2013). As contemporary society becomes increasingly diverse and complex, developing students' critical thinking through active learning becomes a necessity for every higher education institutions.

2.2. Active Learning and the Role of Lecturers

From the above definition it can be seen that active learning moves beyond isolated set of activities, discussions or seminars that encourage social interaction and support among students and their lecturers. It also involves repetition and integration of meaningful experiences that allow students to generalize their knowledge to different situations and problems (Korthagen & Kessels, 1999; Loucks-Horsely, Hewson, Love, & Style, 1998; Mintz, 1999). The learning activities used are concrete, involving input from several sensory systems, to stimulate multiple regions of the brain to perform. The interactions with other individuals and materials that occur in this type of classroom increase effectiveness and efficiency in the learning process (Davis, 1993; 1995).

The transition to active learning requires the lecturers to change their views of teaching from “covering the content” to “helping students to learn” (Svinicki, 1990), and to alter their teaching methods to incorporate activities that challenge students to become actively engaged in learning. Within this approach, lecturers take on the role of coaches, facilitators, negotiators, and guides who mediate between the students' current knowledge base and the demands of the learning objectives expected from them. This requires the need for lecturers to be sensitive to students' goals and motivation in order to identify and utilize activities that facilitate the development of solutions and insights.

In short, it could be said that within active learning the success of a course is determined by the level to which students are involved in the learning process and the quality of the learning that takes place in the classroom (Fox, 1997; Fox-Cardamone & Rue, 2003). The move toward more student-centred learning has been growing since the 1990s (Bonwell & Eison, 1991; Davis, 1993; Gardiner, 1994; Grasha, 1996; Grubb, Worthen, Byrd, Webb, Badway, Case, Groto, & Villeneuve, 1999; Weimer, 1990; Weimer & Associates,

1996). In view of the limitations of traditional lecturer-centred methods which cannot meet the needs of the students in as these methods do not provide the necessary critical thinking, problem-solving, and interpersonal and intercultural skills needed in the knowledge age and the rapidly changing business environment (Drucker 1992; Grubb *et al.*, 1999). This transition from a focus on teaching to student learning requires a shift in the role of the lecturer in order to accommodate this change successfully.

However, it was seen that many lecturers resist involving students in the learning process (Guskey, 1994). This is due to barriers are such as discomfort and anxiety associated with change, a possible increase in preparation time, and a lack of needed materials, equipment, and resources. Implicit in these barriers is that the use of active learning requires a different skill set that goes beyond teaching by lecturer, and is accompanied by a different mental model (Bonwell & Eison, 1991; Chickering & Gamson, 1987). Senge (1990) defined a mental model as “deeply ingrained assumptions, generalizations, or even pictures or images that influence how we change the world and how we take action” (p. 8). Thus there is a need to understand values that could develop lecturers’ positive mental model so that they are ready to involve students in the classroom discussion and to establish active learning in the classroom.

2.3. Tacit Knowledge and Active Learning

The above highlights that the success of active learning relies on the commitment of the lecturers to encourage students to share tacit knowledge in the classroom and to conduct active learning in the classroom. Tacit knowledge can be defined as something that is being understood but is not being openly expressed (Random House Dictionary of the English Language, 1971). It is knowledge that people do not have words. It is representing people’s intuition, beliefs, assumptions and values that are developed through a series of experiences (Saint-Onge, 1996). Thus it could be said that tacit knowledge is highly personal, subjective form of knowledge is usually informal and can be inferred from the statements of others (Sternberg, 1997). Tacit knowledge is critical in the process of decision making and influencing others in the workplace (Liebowitz & Beckman, 1998).

In short tacit knowledge is so embedded in an individual’s mind. Thus it is highly personal, hard to externalize and hard to share (Nonaka & Takeuchi, 1995; Tsoukas, 2002; Selamat & Choudrie, 2007; Amayah, 2013). In turn, there is a need for the lecturers to encourage students to externalize and share their tacit knowledge in the classroom through innovative classroom activities and teaching materials. By practising this, every student in the classroom can be trained to analyze others’ ideas critically and examine the feasibility of their ideas in the practical setting. Ignoring could lead to the creation of passive students and the inefficiencies in developing holistic human capital (Saint-Onge, 1996; Selamat *et al.*, 2015).

2.4. Developing Lecturers’ Commitment to Encourage Students to Share Knowledge and to Establish Active Learning

From the above discussion it is clear that a commitment to encourage students to share knowledge is the mediating variable and a commitment to establish active learning (through innovative classroom activities and teaching materials) is the dependent variable of this research. On the other hand, the proposed independent variables are grouped under three constructs which are as follows: (1) affective commitment (faith and sincerity); (2) continuance commitment (contemplation and goal obsession); and (3) normative commitment (means and attitude towards university). These constructs are developed based on Meyer and

Allen's (1991) organizational commitment model. The focus of this research is on what values that can develop lecturers' self-commitment (individual commitment) and not what the faculty should do to increase lecturers' commitment in active learning (organizational commitment). In other words, this research extends the use of Meyer and Allen's (1991) model.

2.4.1. Affective Commitment

Affective commitment refers to the emotional or psychological connection of an individual to identify and participate in the organization (Meyer & Allen, 1991). This research proposes two affective commitment values that could develop lecturers' commitment to encourage students to share knowledge through activities that facilitate the development of solutions and insights (active learning commitment), namely, faith and sincerity.

2.4.1.1 Faith: Faith is a great trust or confidence in something or someone (Cambridge International Dictionary of English, 1995). Its position is much higher than trust or confidence. Having faith in active learning enables lecturers to appreciate students' communication skill and critical thinking development (Gardiner, 1994; Prawat, 1992; Stage *et al.*, 1998; Weimer & Associates, 1996; Hallinger & Lu, 2013; Selamat *et al.*, 2015). In turn, forces them to encourage students to share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment). This enables the students to experience soft skills development more effectively and efficiently.

Pedler, Burgoyne and Boydell (1994), Butcher, Harvey and Atkinson (1997) and Harvey and Butcher (1998) found that there is a significant relationship between faith in organization and organizational performance. On the other hand, Selamat and Choudrie (2007) and Abdul Wahab, Selamat and Saad (2013) found a significant relationship between faith in organization and the willingness to externalize and share knowledge and skills within the organization. Haldin-Herrgard (2000) further supported this axiom by saying that lack of faith prevents staff members from externalizing and sharing their tacit knowledge. In short, there is a potential relationship between the value of faith and commitment to encourage students to share knowledge in the classroom and in turn commitment to establish active learning in the classroom. Thus the following hypotheses are developed:

H1a: There is a relationship between faith and active learning commitment

H1b: There is a relationship between faith and commitment to encourage students to share knowledge in the classroom

H1c: The relationship between faith and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

2.4.1.2 Sincerity: Sincerity is the most important value that should be instilled in the workplace including lecturers. Every lecturer must have a feeling that he or she works for the sake of the university and for fulfilling his or her responsibility to the university. The important role of sincerity in developing effective individuals has been stressed by Schroder (1989). This is further supported by Selamat and Choudrie (2007), Abdullah and Selamat (2007) and Abdul Wahab, Selamat and Saad (2012) whereby they obtained an effective role of sincerity in motivating staff members to participate in learning environment. The main reason why an organization recruits people is to assist management in the maximizing of its profits. Thus every recruited staff has to bear in his or her mind in the workplace that "we must perform organizational

tasks sincerely.” The value of sincerity also gives staff members a strength to ignore any negative sentiment to the management, that is created through gossip and slander (Schroder, 1989; Selamat & Choudrie, 2007).

Based on the above discussion it could be argued that sincere lecturers are more willing to encourage students to share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment). This is to assist the university to produce quality graduates for the industry. Thus the following hypotheses are proposed:

H2a: There is a relationship between sincerity and active learning commitment

H2b: There is a relationship between sincerity and commitment to encourage students to share knowledge in the classroom

H2c: The relationship between sincerity and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

2.4.2. Continuanance Commitment

Continuance commitment means that when employees enter into an organization they are bound to maintain a bond with the organization or remain with the organization due to the awareness of costs associated with leaving the organization (Meyer & Allen, 1991). This research proposes two continuance commitment values that could develop lecturers’ commitment to encourage students to share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment), namely, contemplation and goal obsession.

2.4.2.1. Contemplation: People are always contemplating the reward or profit that they will obtain before doing something. In the workplace, rewards can be categorized into monetary rewards (salary, bonus, allowance, promotion) and non-monetary rewards (complimentary words such as thank you and congratulation) (Lohman, 2000; Ashton, 2004; Bryson, Pajo, Ward & Mallon, 2006). The employees in the manufacturing companies (Sambrook & Stewart, 2000; Bryson *et al.*, 2006) and multinational corporations consider reward system as a basis before participating actively in the organizational activities. Similarly, Lohman (2000) found that teachers contemplate rewards first before get involve in additional school activities such as sponsoring student clubs, reviewing curriculum, mentoring colleagues, leading teams and departments and supervising student teachers. However, professionals such as accountants (Hicks, Bagg, Doyle & Young, 2007) and system analyst (Lohman, 2009) did not consider rewards as a main evaluation basis before participating in any organizational activities.

One of the reasons why the lecturers are reluctant to change their teaching style is due to the absence of incentives (Bonwell & Eison, 1991; Haas & Keley, 1998; Halpern & Associates, 1994; Seldin & Associates, 1995; Travis, 1995; Weimer, 1990, 1996, 2002; Weimer & Associates, 1996). Based on the social exchange theory and norm of reciprocity, when employers acknowledge their employees’ efforts by offering opportunities and benefits, employees may feel obligated to reciprocate and become more committed to the organization (Shore, Thornton, & Newton, 1990; Tansky & Cohen, 2001). Thus it is logical to relate reward contemplation to lecturers’ commitment to encourage students to share knowledge in the classroom through innovative classroom activities and teaching materials (active learning commitment). This leads to the following hypotheses:

- H3a: There is a relationship between contemplation and active learning commitment
- H3b: There is a relationship between contemplation and commitment to encourage students to share knowledge in the classroom
- H3c: The relationship between contemplation and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

2.4.2.2 Goal Obsession: The second element of continuance commitment construct is goal obsession. In this research goal obsession is defined as a continuous visualization of university's goals and commitment to achieve them (adapted from Selamat & Choudrie, 2007). Every lecturer must be obsessed with the university's goal, especially the aim to produce high quality graduates. Being obsessed with this aim enables them to become more receptive to knowledge sharing amongst students because it is considered as the best approach to develop students' analytical and communication skills (Gardiner, 1994; Prawat, 1992; Stage *et al.*, 1998; Weimer & Associates, 1996; Hallinger & Lu, 2013).

Previous studies have found a significant relationship between aims or targets understanding with organizational performance (Butcher *et al.*, 1997; Manogran & Liang, 1998; Selamat & Choudrie, 2007; Abdul Wahab *et al.*, 2013). Being equipped with right understanding on organizational aims and targets enables staff members to undertake tasks diligently and monitor performance prudently. In addition, it assists staff members to effectively navigate the difficult and dynamic organizational reality. As this understanding enables adept use of knowledge and skills, it is beneficial when considering knowledge sharing and active learning activities and is therefore adopted in this research. In short, the inspiration to build up university's image through quality graduates makes goal obsession applicable for developing lecturers' commitment to encourage students to share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment). Thus the following hypotheses are developed:

- H4a: There is a relationship between goal obsession and active learning commitment
- H4b: There is a relationship between goal obsession and commitment to encourage students to share knowledge in the classroom
- H4c: The relationship between goal obsession and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

2.4.3. Normative Commitment

Normative commitment is related to employees' sense of responsibility or obligation to remain at the current organization due to employees' various pre-entry and socialization experiences (Meyer & Allen, 1991). Employees with normative commitment feel that they have a moral obligation in paying back the organization through remain with the employing organization. This research proposes two normative commitment values that could develop lecturers' commitment to encourage students to share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment), namely, means and attitude towards university.

2.4.3.1 Means: In the organizations, means is normally coined as standard operating procedure or organizational best practice (Barham & Rassam, 1989; Burgoyne, 1988; Schroder, 1989; Morgan, 1989; Drucker, 1992; Selamat & Choudrie, 2007). By adopting standard operating procedure, staff members can

undertake tasks based upon “the right approach for the right situation.” This in turn enables cost, time and energy savings (Barham & Rassam, 1989; Burgoyne, 1988; Schroder, 1989; Morgan, 1989; Drucker, 1992; Selamat & Choudrie, 2007; Abdul Wahab *et al.*, 2013).

The use of active learning requires a different skill set that goes beyond teaching by lecturer, and is accompanied by a different mental model (Bonwell & Eison, 1991; Chickering & Gamson, 1987). Armstrong-Stassen (2008), McEvoy and Blahna (2001), Kooij, de Lange, Jansen and Dijkers (2008) and Maurer and Rafuse (2001) stated that the opportunity to develop skills and competencies may facilitate workers’ commitment because the availability of training is a strong signal that the organization is willing to ‘invest’ in its workforce. Thus it could be said that extensive training on active learning methods can improve lecturers’ skill and mentality on active learning and in turn their commitment to encourage students to share knowledge in the classroom. In short, being equipped with adequate active learning knowledge and skill enables lecturers to encourage students to externalize and share knowledge in the classroom through innovative classroom activities and teaching materials (active learning commitment). Thus the following hypotheses are developed:

H5a: There is a relationship between means and active learning commitment

H5b: There is a relationship between means and commitment to encourage students to share knowledge in the classroom

H5c: The relationship between means and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

2.4.3.2 Attitude towards University: Under theory of reasoned action, Fishbein and Ajben (1975) stated that attitudes are learned disposition to respond to an object or behavior. It is representing a hierarchy of effect from feeling or judgments toward person, object or issue and linked to user behavior (McMillan, Hwang, & Lee, 2003). Attitude is one of the essential factors in influencing user behavior and become as one of the most investigated concepts (Fishbein & Ajben, 1975; Jahng, Jain, & Ramamurthy, 2007; McMillan *et al.*, 2003; Simon & Peppas, 2004). It has been the focus of marketing researches, especially to investigate the impact of advertisement on sales (McMillan *et al.*, 2003; Simon & Peppas, 2004). It continues from research in the offline world into a concept of attitude towards the website that measures online user predisposition to respond favorably or unfavorably to a website, especially with the enormous growth of e-commerce (Chen, Clifford, & Wells, 2002). Derived from this scenario this research argues that positive attitude towards university make lecturers more receptive to active learning activity and vice versa. This axiom leads to the pre-supposition that positive attitude towards university motivates lecturers to encourage students to externalize and share knowledge in the classroom through activities that facilitate the development of solutions and insights (active learning commitment). Thus the following hypotheses are developed:

H6a: There is a relationship between attitude towards university and active learning commitment

H6b: There is a relationship between attitude towards university and commitment to encourage students to share knowledge in the classroom

H6c: The relationship between attitude towards university and active learning commitment is mediated by the commitment to encourage students to share knowledge in the classroom

To complement the above hypotheses and in tandem with this research conceptual framework, the following hypothesis is proposed as the final hypothesis:

H7: There is a relationship between commitment to encourage students to share knowledge and active teaching commitment

3. RESEARCH METHODOLOGY

Data of this study were gathered through a survey approach. Survey is one of the most common data collection methods for examining the participation in active learning and learning activities (Barr & Tagg, 1995; O'Banion, 1999; Baxter, Terenzini, & Hutchings, 2002). Survey research suits the unit of analysis of this study, which are lecturers in the Malaysian higher education institutions (Dwivedi, 2005). This study utilized stratified random sampling as a sampling technique. Stratified random sampling, as its name implies, involves a process of stratification or segregation, followed by random selection of subjects from each stratum (universities) (Sekaran, 2003; Fowler, 2009; Babin & Griffin, 2010). A total of 370 lecturers in public and private universities across Malaysia were randomly selected. The questionnaires (as per attached below) were distributed by liaison lecturers (most of them are deans of the faculty or school) of the universities. Multiple regression analysis was used to test the relationship between independent variables and dependent variable.

4. RESEARCH FINDINGS

Out of 370 distributed questionnaires, 253 were returned. This resulted in a response rate of 68.38%. As suggested by Sekaran (2003), a response rate of 30% is considered adequate for mail survey research. Based on this suggestion, the response rate of this study (68.38%) was above the recommended rate. In turn, the findings of this research can be generalized to the population.

4.1. Profile of Respondents

The frequency and percentage of each demographic profile are illustrated in Table 1. The reported demographic profiles include gender, age and number of years working in the current university.

Table 1
Background of the Respondents (N=253)

	<i>Frequency</i>	<i>Percentage</i>
Gender		
Male	108	42.7
Female	145	57.3
Age (years)		
21-30	12	4.7
31-40	119	47.0
41-50	81	32.0
51-60	37	14.6
>60	4	1.6
Length of Service		
<5	26	10.3
<10	100	39.5
<15	65	25.7
<20	62	24.5
>21	0	0.0

In this research, gender distribution was slightly higher for female. Out of 253 respondents, 108 (42.7%) respondents are male and 145 (57.3%) respondents are female. The largest group of respondents (N=119, 47.0%) reported that they were in the “31-40” age group. The second largest group consisted of respondents with age “41-50” (N=81, 32.0%), third largest group consisted of respondents with age “51-60” (N=37, 14.6%) and fourth largest group consisted of respondents with age “21-30” (N=12, 4.7%). The smallest group of respondents (N=4, 1.6%) reported that they were in “Over 60” age group.

The largest group of respondents (N=126, 49.8%) indicated that they have worked at the current university “10 years or less”. The second largest group of respondents (N=62, 24.5%) reported that they have worked at the current university “20 years or less). This is followed by “15 years or less” category (N=65, 25.7%).

4.2. Reliability Analysis

To test the reliability of the research instrument, as suggested by Sekaran (2003), this study utilized internal consistency method which is measured by Cronbach’s alpha. The coefficient for the Cronbach’s alpha is expressed between 0 and 1.00. The results of the Cronbach’s alpha values of the variables are as illustrated in Table 2.

Table 2
Reliability Coefficients for Variables (N=253)

<i>Variable</i>	<i>N of Item</i>	<i>Cronbach Alpha</i>
Faith	8	0.890
Means	5	0.931
Contemplation	6	0.924
Sincerity	3	0.790
Goal obsession	6	0.932
Attitude towards university	5	0.901
Commitment to encourage students to share knowledge	6	0.767

As shown in Table 2, the Cronbach’s alpha values for variables varied between 0.767 (commitment to encourage students to share knowledge) and 0.932 (goal obsession). Four variables possessed Cronbach’s alpha values above 0.90 (means, contemplation, goal obsession and attitude towards university), one between 0.80 and 0.90 (faith) and only two below than 0.80 (sincerity and commitment to encourage students to share knowledge). In other words, none of the study variables demonstrated below the minimum reliability level of 0.60 (Hair, Black, Babin, Anderson, & Tatham, 2006). Thus the internal consistency of the measures used in this study was considered acceptable (Churchill, 1979; Sekaran, 2003).

Subsections 4.3, 4.4 and 4.5 discuss the result of multiple regression analysis. Data refinement was undertaken prior to multiple regression analysis. It was divided into data screening and data testing, which aim to fulfill the multivariate assumptions (Hair *et al.*, 2006). Data screening consists of three tests which are missing data, response bias and outliers identification. On the other hand, data testing consists of linearity, normality, homoscedasticity and multicollinearity tests. The criteria for all these tests were met in this study.

4.3. The Effect of Independent Variables on Active Teaching Commitment

This section discusses the results for hypotheses H1a, H2a, H3a, H4a, H5a and H6a, which are related to the effect of faith, sincerity, contemplation, goal obsession, means and attitude towards university on active teaching commitment. Result is summarized in Table 3. It is indicated in Table 3 that all six independents variables explained 83.1 percent of active learning commitment ($R^2=0.831$, $F=201.950$, $p<0.01$). Out of six variables, goal obsession was found to have the biggest significant effect on active learning commitment ($B=0.321$, $t=9.856$, $p<0.01$), followed by element of sincerity ($B=0.266$, $t=11.101$, $p<0.01$) and attitude towards university ($B=0.233$, $t=5.858$, $p<0.01$). Other variables were also showed the significant relationship to active learning commitment as follows: element of faith ($B=0.137$, $t=4.558$, $p<0.01$), element of means ($B=0.151$, $t=5.275$, $p<0.01$) and element of contemplation ($B=0.116$, $t=3.916$, $p<0.01$).

Table 3
The Effect of Independent Variables on Active Learning Commitment

	<i>B</i>	<i>t</i>	<i>Sig.</i>
Faith	.137	4.558	.000
Means	.151	5.275	.000
Contemplation	.116	3.916	.000
Sincerity	.266	11.101	.000
Goal Obsession	.321	9.856	.000
Attitude towards university	.233	-5.858	.000
R^2	0.831		
F	201.950		
Sig.	0.000		

In summary, the above findings show that there are significant effects of faith, sincerity, contemplation, goal obsession, means and attitude towards university on active learning commitment. Thus hypotheses H1a, H2a, H3a, H4a, H5a and H6a were accepted.

4.4. The Effect of Independent Variables on the Commitment to Encourage Students to Share Knowledge

This section discusses the results for hypotheses H1b, H2b, H3b, H4b, H5b and H6b, which are related to the effect of faith, sincerity, contemplation, goal obsession, means and attitude towards university on the commitment to encourage students to share knowledge. Table 4 summarizes the results in relation to the effect of faith, sincerity, contemplation, goal obsession, means and attitude towards university on the commitment to encourage students to share knowledge. The results indicate that the model explained 59.7 percent of the commitment to encourage students to share knowledge ($R^2=0.597$, $F=60.781$, $p<0.05$). Only four variables were found to have significant effect on the commitment to encourage students to share knowledge. They were element of faith ($B=0.345$, $t=7.028$, $p<0.01$), element of means ($B=0.153$, $t=3.266$, $p<0.01$), element of contemplation ($B=0.241$, $t=4.978$, $p<0.01$) and element of sincerity ($B=-0.126$, $t=-3.215$, $p<0.05$).

Table 4
Effect of Independent Variables on the Commitment to Encourage Students to Share Knowledge

	<i>B</i>	<i>t</i>	<i>Sig.</i>
Faith	.345	7.028	.000
Means	.153	3.266	.001
Contemplation	.241	4.978	.000
Sincerity	.126	3.215	.001
Goal Obsession	.059	1.110	.268
Attitude towards university	-.045	-.696	.487
R ²	0.597		
F	60.781		
Sig.	0.000		

In summary, the above findings show that there are significant effects of faith, sincerity, contemplation and means on commitment to encourage students to share knowledge. Thus hypotheses H1b, H2b, H3b and H5b were accepted.

4.5. Mediating Effect of Commitment to Encourage Students to Share Knowledge on the Relationship between Independent Variables and Active Teaching Commitment

Two steps hierarchical regression was carried out to examine the effect of knowledge sharing on the relationship between task accomplishment, attitude towards university and active teaching. This analysis tested hypotheses H1c, H2c, H3c, H4c, H5c, H6c and H7. Model 1 was to examine the relationship between the independent variables (faith, sincerity, contemplation, goal obsession, means and attitude towards university) and active teaching commitment. Model 2 was to examine the effect of independent variables (faith, sincerity, contemplation, goal obsession, means and attitude towards university) and active teaching commitment but with the presence of commitment to encourage students to share knowledge as the mediating variable.

Table 5 summarizes the results in relation to the mediating effect of commitment to encourage students to share knowledge on the relationship between independent variables (faith, sincerity, contemplation, goal obsession, means and attitude towards university) and active teaching commitment. The results indicate that the presence of commitment to encourage students to share knowledge only increase the R² to 83.4 percent (R²=0.834, F=176.469, p<0.01). All of the independent variables were significant. The findings also revealed that there were also significant relationship between commitment to encourage students to share knowledge and active teaching commitment (B=-0.085, t=-0.2.193, p<0.05). However, the presence of commitment to encourage students to share knowledge only decrease the coefficient for sincerity (B=0.256, t=10.518, p<0.01) and attitude towards university (B=-0.237, t=-5.994, p<0.01). It can be concluded that commitment to encourage students to share knowledge only partially mediated the relationship between sincerity and attitude towards university and active teaching commitment. Hence, this study had partially supported H2c and H6c and rejected H7.

Table 5
Mediating Effect of Commitment to Encourage Students to Share Knowledge on the Relationship between Independent Variables and Active Teaching Commitment

	<i>B</i>	<i>t</i>	<i>Sig.</i>
Model 1: IV to DV			
Faith	.137	4.558	.000
Means	.151	5.275	.000
Contemplation	.116	3.916	.000
Sincerity	.266	11.101	.000
Goal Obsession	.321	9.856	.000
Attitude towards university	-.233	-5.858	.000
R ²	0.831		
F	201.950		
Sig.	0.000		
Model 2: IV + MV to DV			
Faith	.166	5.089	.000
Means	.164	5.652	.000
Contemplation	.136	4.425	.000
Sincerity	.256	10.518	.000
Goal Obsession	.326	10.062	.000
Attitude towards university	-.237	-5.994	.000
Knowledge Sharing	-.085	-2.193	.029
R ²	0.834		
F	176.469		
Sig.	0.000		

4.6. Discussion

This study found that faith was positively and significantly influenced lecturers' commitment to encourage students to share knowledge in the classroom and commitment to undertake active learning activities in the classroom. This finding is consistent with the previous studies such as Gardiner (1994), Prawat (1992), Stage *et al.* (1998), Weimer and Associates (1996), Hallinger and Lu (2013) and Selamat *et al.* (2015). The result implies that the lecturers that have low faith or do not believe in active learning will not encourage students to participate in the classroom discussion through innovative classroom activities and teaching materials in the teaching. This is because active learning requires more time and resources for preparation and two-way communication between lecturer and students and also amongst students themselves. Thus the lecturers must believe that only through active learning the students are able to improve their soft skills effectively and in turn able to face challenges in the business real life situation confidently. This belief in turn will motivate them to encourage students to share knowledge and implement active learning in the classroom.

From the analysis it was also found that sincerity was positively and significantly influenced lecturers' commitment to encourage students to share knowledge in the classroom and commitment to undertake

active learning activities in the classroom. This finding is consistent with the previous studies such as Selamat and Choudrie (2007), Abdullah and Selamat (2007) and Abdul Wahab *et al.* (2012). Implicit in this finding is that sincerity was perceived by the lecturers as the motivational factor in the implementation of active learning activities in the classroom. The probable explanation could be the norm that sincerity is the most important value in every human endeavor and active learning is not exceptional. This is because, based on the norm of reciprocity, when the universities offer job and salary to sincere lecturers, they may feel obligated to reciprocate and become more committed to the success of teaching and learning activities in the universities.

Additionally, contemplation was found to be positively and significantly influenced lecturers' commitment to encourage students to share knowledge in the classroom and commitment to undertake active learning activities in the classroom. This finding is consistent with the previous studies where lecturers are reluctant to change their teaching style is due to the absence of incentives (Bonwell & Eison, 1991; Haas & Keley, 1998; Halpern & Associates, 1994; Seldin & Associates, 1995; Travis, 1995; Weimer, 1990, 1996, 2002; Weimer & Associates, 1996). In other words, lecturers contemplate rewards first before include students in the teaching and learning activities. The probable explanation could be extra workload that they have to bear due to tedious preparation of active learning. Thus the universities must consider financial and non-financial incentives to encourage the use of active learning amongst lecturers.

Another value that influenced lecturers' commitment to encourage students to share knowledge in the classroom and commitment to undertake active learning activities in the classroom concurrently was means. This finding is consistent with the previous studies whereby the understanding on best practices develops staff members' internal strength to bring success to their organizations (Barham & Rassam, 1989; Burgoyne, 1988; Schroder, 1989; Morgan, 1989; Drucker, 1992; Selamat & Choudrie, 2007; Abdul Wahab *et al.*, 2013). In other words, lecturers that do not know how to establish active learning will not implement it in the classroom. The probable reason behind this scenario is that active learning requires a different skill set that goes beyond teaching by lecturer, and is accompanied by a different mental model. Thus adequate training on active learning must be provided to the lecturers so that it could be practiced extensively in the university.

Contrastingly, this study found that goal obsession was positively and significantly influenced commitment to undertake active learning activities in the classroom but not commitment to encourage students to share knowledge in the classroom. The result indicates that the inspiration to build up university's image through quality graduates makes this value applicable for establishing active teaching in the classroom. Lecturers will think that it is pointless to be selfish because university needs good ranking and image for future growth. This kind of thinking will motivate them to undertake active teaching activities relentlessly. This finding is consistent with the previous studies such as Selamat *et al.* (2015), Abdul Wahab *et al.* (2013) and Selamat and Choudrie (2007). However, goal obsession did not influence lecturers' commitment to encourage students to share knowledge in the classroom. Possible explanation for this scenario is that innovative classroom activities and teaching materials in the teaching was considered adequate to motivate students to participate in the discussion (knowledge sharing). Thus adequate information on university's aims and targets must be provided to the lecturers so that they become more self-motivated to monitor daily activities and determine future direction for the sake of the university.

Attitude towards university was also found to be positively and significantly influenced commitment to undertake active learning activities in the classroom but not commitment to encourage students to share

knowledge in the classroom. The result indicates that this factor was perceived by the lecturers as the motivational factor in the process of establishing active learning activity in the classroom. This is because attitude is one of the critical factors in explaining user behavior and become as one of the most studied concepts. Thus positive attitude towards university make lecturers more receptive to active learning and vice versa. This finding is consistent with the previous studies such as Selamat *et al.* (2015), Abdul Wahab *et al.* (2013) and Selamat and Choudrie (2007). However this does not apply to commitment to encourage students to share knowledge in the classroom. Possible explanation for this scenario is that innovative classroom activities and teaching materials in the teaching was considered adequate to motivate students to participate in the discussion. Thus inculcating positive attitude towards university amongst lecturers through soft skill training is a prerequisite for the establishment of active learning in the university.

Last but not least, mediating role of commitment to encourage students to share knowledge in the classroom cannot be obtained in the practical setting. Possible explanation for this scenario is that innovative classroom activities and teaching materials in the teaching was considered adequate to motivate students to participate in the discussion. This study only uncovered that commitment to encourage students to share knowledge partially mediated the relationship between sincerity and attitude towards university and active teaching commitment. In other words, this study had partially supported H2c and H6c and rejected H7. Thus it could be said that these two values should be given utmost priority in the process of developing lecturers' commitment to encourage students to share knowledge in the classroom and commitment to undertake active learning activities in the classroom concurrently.

5. CONCLUSION

The objective of this study was to determine whether individual affective commitment (faith and sincerity), continuance commitment (contemplation and goal obsession) and normative commitment (means and attitude toward university) develop lecturers' commitment to encourage students to share knowledge and in turn commitment to undertake active learning activities in the classroom. From the findings, the proposed conceptual framework was substantially validated. The findings showed that there are significant effects of faith, sincerity, contemplation, goal obsession, means and attitude towards university on active learning commitment. The findings also highlight that there are significant effects of faith, sincerity, contemplation and means on commitment to encourage students to share knowledge. It can also be concluded from the findings that commitment to encourage students to share knowledge only partially mediated the relationship between sincerity and attitude towards university and active teaching commitment.

Although this study have contributed to active learning area, but several limitations have to be considered. First, the context of this study is limited to the lecturers. For future research it is suggested that a comparison is made between lecturers and students. Second, this research conceptual framework was tested and examined from the Malaysian perspective. Thus obtaining feedback from the HEI in other countries is necessary. Third, this research adopted cross-sectional survey for data collection. To gain broad view on the issues related to active learning and knowledge sharing, a longitudinal study is advised. Last but not least, unit of analysis of this study was an individual whereby the lecturers were selected as the respondents. To gain more variance in the analysis, obtaining feedback from all individuals working in the HEI is strongly recommended.

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