Predictors of personal reflection among managers who climb mountain

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Abstract: The area of this study is incidental learning among managers through mountaineering activities. The objective of this study was to determine the influence of perception of risk towards mountaineering and thrill and adventure seeking personality trait on their personal reflection. Respondents of this study consisted of 58 managers who participated in Mount Tahan Expedition, the highest peak in Peninsular Malaysia. This study used three well-established instruments to measure the variables. After going through the steps to ensure the validity of the instruments, it had also been tested for reliability. Then, linear regression test was used to determine the influence of independent variables on the dependent variable. This study revealed that both independent variables explained 11.9 percent variation in personal reflection. This finding is significance as shown by F-value of 3.712 (0=0.031). A further look at the t-values revealed that both perception of risk and thrill and adventure seeking personality trait contributed significantly to the change in personal reflection. As a conclusion, this study had achieved its objective by showing that personal reflection among managers can be enhanced by increasing their level of risk perception and by selecting managers with thrill and adventure seeking personality trait as participants of the expedition.

Key words: Personal reflection; Perception of risk; Thrill and adventure seekers; Adventure training

1. Introduction

At work place, there is always a group of individuals who spend their leisure time climbing mountains. Although the activity is neither related to work, training, development nor learning, the unique activity of mountain climbing may potentially be a subconscious approach to train and develop professionals indirectly. Experiencing self and life struggles to face the challenges of the climb along the mountain climbing expeditions, the participating managers will be able to polish various self competents which are needed for them to excell in their careers and professions.

The researcher's inference is supported by many studies on the benefits of such activities. The benefits are said to be consciously and subconsciously obtained by individuals involved (Driver, 1996; Walker et al., 1998). Horwood (1999) purported that involving in outdoor adventure activities helps smoothen the change and development of individuals and groups. It is said to potentially boost affective, cognitive and physical components of one's individual development (Klint, 1999). Brown (1999) claimed that among the benefits of outdoor adventure activities are the boost in self esteem, self confidence, good feeling after being able to undergo challenges, opportunities to cooperate and develop group, awareness of new priorities, volition control, and health and environmental awareness. Ewert (1985, 1989) stated that people climb mountains to test themselves, gain joy, taste success, relax mind, develop creativity and potentials, experience the power of control over the surrounding, build relationship with friends, look at flora and fauna and the magnificent views, and to feel close to nature.

Stein and Lee (1995) gathered 54 benefits of participating in outdoor adventure activities from the literature. The benefits can be categorised into 9 aspects which are feeling relieved from stress, sharing of common values, achieving success, learning new things, being independent, improving mental health, having space for self-evaluation, teaching/leading, and meeting new friends. In short, a brief literature review above shows that one of the benefits of involving in outdoor adventure is the occurence of the process of training and developing self competent, either consciously or subconsciously.

Based on Kolb's Learning Model (Kolb, 1984), the researchers infer that the integrated process of getting rid of, reducing or getting used to risk threat underwent by each climber will result in one of the aspects of the benefits of climbing as discussed in the above literature and it is a part of cognitive development. Regarding the subject, Kolb (1984) states that the result of the transformation of experience will lead to creation of knowledge. The experience gainedafter participating in this risky expedition by managers whose adventure and thrill seeking traits are high, when accompanied by the process of personal reflection before any further action is planned and carried out will allow learning to take place.

In other words, in line with Kolb's view, the experience of going through thick and thin gained during the days of participating in the expedition, followed by reflecting and thinking process and

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correcting mistakes in follow up actions should be able to inrease knowledge and thinking skills of the participants.

This study was conducted to look at the perception of risk and adventure and thrill seeking personality on the personal reflection of the professionals who climb mountains.

2. Literature review

The variables of this study are personal reflection, perception of risk and adventure and thrill seeking. Personal reflection is defined as one's exploration and evaluation on his or her personal or other people's experience which clarify and create meanings to the experience. It comprises three main aspects which are personal reflection, emphatic reflection, and communicative reflection (Aukes Geertsma, Cohen-Schotanus, Zwwierstra & Slaets, 2007, 2008). Risk percetion is defined as a subjective evaluation on real or perceived threats on psychological, physical and social well beings (Ward, 2008, Lupton & Tullock, 2002; Sokolowska & Pohorille, 2000; Priest, 1999; Renn, 1998); while thrill and adventure seeking is a type of personality which refers to the desire to be physically involved in risky and adventurours behaviours which provide extraordinary/unusual sensation *(*Zuckerman et al., 1978). The researchers hypothesize that the catalyst for the occurence of personal reflection is risk perception which really prevails in outdoor adventure activities. It is the perception of risk which stimulates the process of personal reflection to ensure safety and well being of the person involved. Naturally, this is a human reaction when facing any safety threats (Goetsch, 2008). The study conducted by Cates-Draper (1998), as mentioned in Pedro (2001), states that it was found that most of the teachers under study engaged in personal reflection and the reflection was triggered by dilema and incidents faced by them. In other words, when an activity is taking place, certain circumstances which require reflection process will arise. The same thing will happen when one participates in adventure climb which involves various risks. Incidents which happen, particularly involving the risks of personal safety, will trigger personal reflection process. This phenomenon is clearly explained in Kolb's learning cycle (1984).

Kolb (1984), Honey and Mumford (1982) and Cheetham and Chivers (2001) stated that different individuals need different learning approaches. Renn (1998) claimed that to optimize the achievement of learning objectives of an activity, the risks which arise must be in the form of desired ones by those involved. Any adventure climb avtivities participated by those who are not willing to face the risks which exist will instead bring negative consequences. To obtain positive result from involving in adventure activities, the participants must do it voluntarily and be aware of the risks that exist. Zuckerman (1988) explained that one with high thrill seeking sensation is expected to have less worries but show more

positive effect while taking part in such activity compared to those with low sensation seeking. His view was supported by the findings of the studies by Horvath and Zuckerman (1993) and Franken, Gibson and Rowland (1992). This is in tandem with adult and experiential learning theories stemming the formation of the theoretical framework of this study.

Based on the above scenario, it was proposed that:-

H_o: Perception of risks and adventure and thrill seeking personality do not influence the personal reflections of managers who climb mountains

H_a: Perception of risks and adventure and thrill seeking personality influence the personal reflections of managers who climb mountains

3. Methodology

3.1. Respondents of the sudy

The population of this study were managers who participated in Gunung Tahan Adventure Climb Expeditions within the period of data collection which was from May to Juky 2011.

In the period of data collection, the researcher found that there were 5 organised expeditions which fulfilled the study population criteria with the number of participation of 87 people.

The number of expedition and participation was obtained from Sungai Relau's Tahan National Park office in Pahang. The office was contacted from time to time within the data collection period to get access to the number of permits issued and the list of names of the participants which was attached to the application forms.

To ensure the validity of the given data, the researcher himself distributed the questionaires to all the participants in each expedition before and after the climb. In other words, the researcher himself participated in all the climbs with other participants except for the 2 events when he entrusted the expedition guides to distribute the questionaires to the participants involved. It was because there was a clash in the schedule of the expeditions. For those two expeditions, the researcher had sent the set of questionaires to the expedition guides and provided a complete set of instructions on the questionaire management procedure to the participants.

As a result, 87 climbers had filled in the forms distributed. Nonetheless, only 71 sets were able to be collected. From the 71 retrieved sets, 13 climbers did not answer all the questions asked. Therefore, only 58 questionaires were useable to be analysed after undergoing a screening process. This number represents 66.67 percents of the study sample.

3.2. Research instruments

The questionnairesused in this study combined threewell-established instruments which were developed and utilised by the previous researchers.

The instrumentswere used as they were able to help attain the objectives of the study by taking into consideration the validity dan reliability of the construct and its campatibility to the respondents of the study (Table 1).

Table 1: Variables and instruments

Variables	Reference	Name of Instrument	Item
Perception of Risk	Ward, 2008		20
Personal Reflection	Aukes et al., 2007	Groningen Reflection Ability Scale	23
Thrill and adventure seeking	Zuckerman, 1978	Form V of Sensation Seeking Scale	10

After going through instrument validating process to ensure their validity, the instruments were later tested for their reliability. The result of the reliability test through the measure of "Coefficient Cronbach's Alpha" is as shown in Table 2 below:

Table 2: Reliability test

Variable	Cronbach's Alpha
Thrill and Adventure Seeking	0.837
Perception of Risk	0.711
Personal Reflection	0.795

Cooper and Schindler (2006), Sekaran (2005), Hair et al. (1998) and Nunally (1978) stated that any Cronbach's Alpha coefficient score of around 0.60 is assumed to have an acceptable reliability standard. As the score obtained was found to be higher, therefore, the instrument was useable to measure the variable of the study.

3.3. Data analysis

Particularly, linear regression test wascarried out to look at the influence of the independent variables which are perception of risk and thrill and adventure seeking on personal reflection which is the dependent variable. Before the test was performed, the data obtained were thoroughly looked at to ensure that the required assumptions were met. The assumptions of this study are population normality and population score difference normality. Skewness and curtosis test result shows that the variables are within the normal range as suggested by Meyers, Gamst and Guarino (2006).

4. Findings of the study

4.1. Descriptive statistics

The respondents of this study were managers who took part in one of the three adventure climb expeditions known as GunungTahan Expeditions. Fig. 1 below shows that of the 58 respondents, 47 were males and the rest were females.
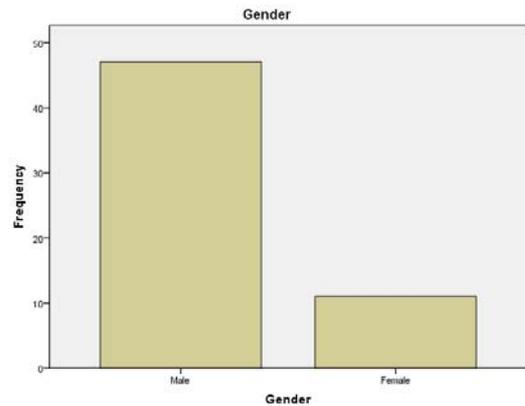

Fig. 1: The number of respondents according to genders

Table 2 below shows the respondents' age distribution. 50 out of 58 respondents were in the middle years of their careers while the rest were either in the early or final years of their professions.
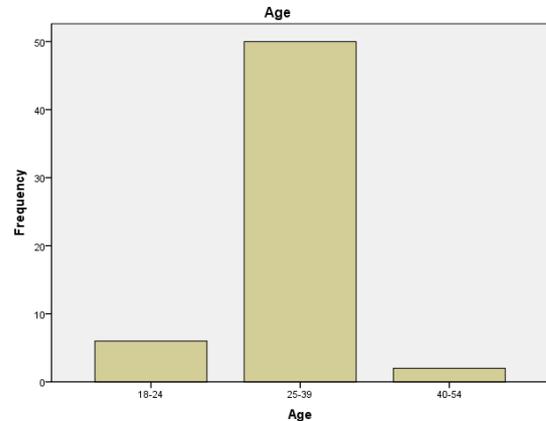

Fig. 2: The number of respondents according to their age

4.2. Inferential statistics

Table 3 below displays the result of linear regression test. The study found that both independent variables explain 11.9 percent of personal reflection variation. The influence is significant as shown by F value of 3.712 (p=0.031) in Table 4.

Table 3: Regression test model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.345[a]	.119	.087	.39603

a. Predictors: (Constant), mean TAS, mean PR
b. Dependent Variable: mean RP

Table 4: ANOVA test

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.164	2	0.582	3.712	.031[a]
Residual	8.626	55	0.157		
Total	9.79	57			

a. Predictors: (Constant), mean TAS, mean PR
b. Dependent Variable: mean RP

The examination of t values in Table 5 shows that both independent variables which are perception of risk on adventure climb and thrill and adventure seeking personality trait contribute significantly to the change in personal reflection.

Table 5: Coefficients of independent variables

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.219	.365		8.807	.000
	Mean PR	.040	.119	.049	.337	.738
	Mean CSt	.201	.091	.319	2.212	.031

a. Dependent Variable: mean RP

5. Discussion

The study proves that both independent variables which are perception of risk and adventure and thrill seeking have significant influence on personal reflection.

The finding is in line with that of Cates-Draper's study (1998, as stated in Pedro, 2001) which states that most of the teachers studied performed personal reflection and the reflection was triggered by dilemma and incidents faced by them.

In other words, when an activity is carried out, along the way, certain circumstances which require reflection process to take place will occur. The same circumstances will occur to those who take part in adventure climb activities which are full of various risks. Incidents which take place, which are particularly related to safety risks are expected to trigger personal reflection process. The finding is also in tandem with Kolb's (1984) and Mumford's (1995) explanation of their experiential learning cycle.

The finding of the study is also in line with Renn (1988) who purported that to achieve positive result from participating in outdoor adventure, those involved must do it voluntarily and be aware of the risks that exist. Zuckerman (1988) explains that one with high sensation seeking is expected to have less worries but show more positive-affectwhile doing the activity compared to one who has low sensation seeking. The situation is parallel to suggestions found in adult learning theory and experiential learning theory which stem the formation of the study's theoretical framework.

6. Conclusion

As a conclusion, in using adventure climb as an indirect approach to training and developing managers, the level of perception of risk among the participants need to be raised to increase their personal reflection. Besides, the target group should be among those with high thrill and adventure seeking sensation as people with this type of personality are inclined to take part in such activities and they will more likely make personal reflection.

Last but not least, personal reflection is a crucial aspect of management's Meta competent. Schön (1983, 1987), Kolb (1984), Gore and Zeichner (1984), Mezirow (1991), Gore and Zeichner (1991), Smith and Lovat (1991), Cheetham and Chivers (1996; 1998) and Aukes et al. (2007), in their writings, stressed that personal reflection, either consciously or subconsciously performed, will act as a lesson for future actions. It is also believed to be the gateway of other management competence such as creativity, problem solving skills and critical thinking skills. Hence, this study has opened a new chapter for the implementation of adventure climb method to encourage the process of personal reflection to take place as it is crucial to the formation of other management's Meta competent.

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