

## **OUTDOOR EXPERIENTIAL-BASED TRAINING: MOTIVATIONAL AND ENVIRONMENTAL INFLUENCES AFFECTING OUTCOMES**

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**Abstract:** The purpose of this study was to go beyond the examination of the single construct of team building by measuring the impact of motivational and environmental factors on the effectiveness of an outdoor-based training (OBT) intervention. The study assessed the self-perceptions of trainee attitudes and attributes that influenced the constructs of motivation to learn, learning which was operationalized as team building, and the motivation to transfer newly acquired knowledge to the work setting. There were six social and situational factors selected as independent variables: age, number of years with the current employer, presence of a supervisor, previous team building experience, fear and work environment favorability. A conceptual framework of trainability in OBT was proposed and tested in this study. In examining the relationships between the constructs motivation to learn, learning, motivation to transfer learning and the independent variables, it was concluded that fear, especially social fear, negatively impacted each of these constructs just as work environment favorability positively influenced all of them. Age and previous team building participation significantly influenced team building outcomes. Additionally, men and women differed significantly on the overall scale of team building. The motivation to transfer learning was also affected by previous experience as well as the number of years a trainee had been with the employer. The presence of one's supervisor was not a factor in any of the equations. This evaluation further described the effectiveness of outdoor-based training given trainee attitudes prior to and following a training experience. Many of the primary findings of this study are congruous with the work of others (Huczynski & Lewis, 1980; Hicks, 1984; Noe & Schmitt, 1986; Galpin, 1989; Dunford, 1992; McGraw, 1992) in both traditional training settings as well as OBT. By understanding the strength of these relationships and going beyond solely measuring training outcomes, the results of this study have contributed to understanding some of the factors that influence outdoor-based training programs.

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### **Introduction**

Outdoor-based training (OBT) programs utilize adventure activities to foster the personal and professional development of corporate managers including but not

limited to team development, leadership skills, decision making, and self-awareness (Beeby & Rathborn, 1983; Mossman, 1983). Outdoor-based training activities generally fall into one of five categories: socialization games, group initiative tasks, ropes courses, outdoor pursuits and "other adventures" (scenarios and distantly related exercises in development training) (Agran, Garvey, Minor & Priest, 1993).

The crux of the research in OBT is that these five categories of activities form the collective treatments that have been studied and reported in the literature in the past. Due to the nature of these activities, there is ambiguity as to which classification some activities fall under, thereby confusing study results and limiting generalizability. As an example, researchers have melded group initiatives and rock climbing courses into one treatment (Priest, 1996).

Adding to this confusion is that OBT can be classified into one of four kinds of formats just like other outdoor adventure programs. As with recreational programs some outdoor-based trainings are offered as entertainment, giving the participants the "lite" version of the team ideals but mostly emphasizing the fun and enjoyment of being with colleagues. Other OBT are offered in an educational format, providing short programs designed to convey new knowledge, awareness and concepts while demonstrating the importance of teamwork. The third type of program is the developmental program, which is aimed at changing the way participants act, think and feel. The objective is to enhance functional behaviors and introduce new ways of conduct. These sorts of programs are offered where there is organizational commitment to real, specific team building. And, finally, therapeutic programming in OBT targets work groups or teams in conflict. Programs are designed specifically to repair relations, manage strife and address dysfunctional behaviors (Priest, 1996).

This booming trend toward the use of adventure programs in management training is not without its issues. Much controversy and debate exists as to whether or not these types of training programs impact or change participants' work attitudes, behaviors and effectiveness in the job place. Critics contend that outdoor training, among other things, is a waste of time and money as well physically unsafe (Miner, 1991; Wagner, Baldwin, & Roland, 1991; Wiesendanger, 1993). Identical outdoor-based team building programs for Master of Business Administration (MBA) students have also been received with skepticism (Wagner, Weis, & Mostad, 1994). There is speculation that, although most organizations and business schools support this notion of teamwork and teams, only lip service is given to the actual process because business schools do not know how to teach team skills (Dyer, 1987). If that is not enough, adventure educators (or facilitators as they are referred to in the marketing literature) moving within formal organizations as agents of change in itself is a controversial issue because they have crossed over into the domain of the organizational development consultant (Flor, 1991). And, lastly, there is also criticism of OBT providers who fail to adequately assess their client's objectives up front so as to design a program in a format that meets the needs of the trainee and the organization.

The increased popularity and spending on outdoor adventure-based training programs has not been paralleled by compelling empirical research and evaluation that would provide evidence demonstrating the effectiveness in either the corporate world or in the business school structure (Beeby & Rathborn, 1983; Tarullo, 1992). If OBT programs are indeed everything they are touted to be, their longevity as a training technique may be short-lived if the impacts and subsequent influences on participants are not documented. Outdoor training has come to a crossroads. It needs to have its credibility as a viable tool in organizational development established or be dismissed as a fad in professional training techniques that provides fun without results (Buller, Cragun & McEvoy, 1991).

**Theoretical Model of Trainability in Outdoor-Based Training Programs**

When determining the likelihood of real training effectiveness, regardless of the venue - indoors or out of doors - or who the trainer might be, the influence and importance of program participant attitudes, values, interests and expectations cannot be overlooked. The degree to which a program participant is motivated to learn and to transfer learning is as important to training outcomes as is the trainee's cognitive ability and psychomotor skills. Although a program participant may have the prerequisite cognitive ability necessary to become proficient in the training material, if motivation is lacking or absent, training performance and outcomes can be expected to be poor (Noe & Schmitt, 1986). Motivation in the setting of a training program therefore becomes the factor that energizes or powers enthusiasm for the program, the stimulus that sways learning and content mastery, and an agent of maintenance that directly influences the application and retention of newly acquired knowledge and skills (Steers & Porter, 1983).

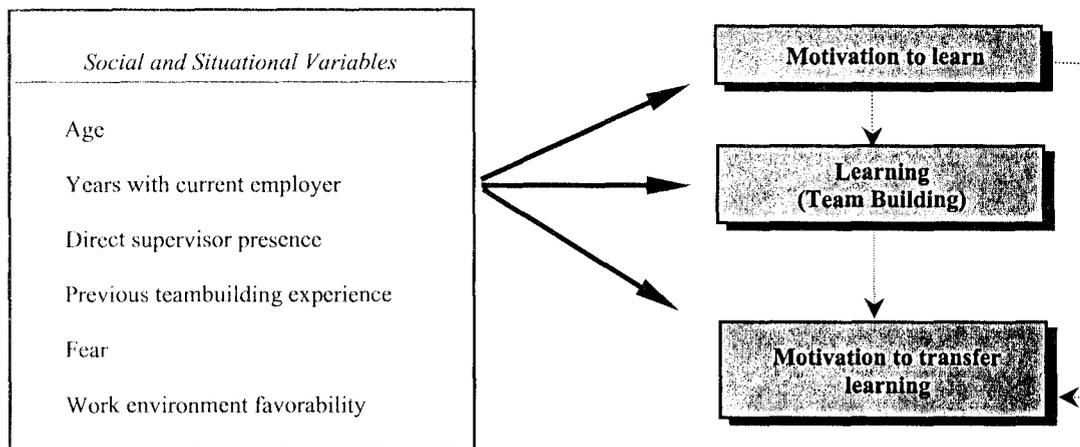
Trainability is a function of trainee ability, motivation and work environment favorability [Trainability =  $f(\text{Ability} +$

Motivation + Environmental Favorability)], according to Noe and Schmitt (1986). The perceptions of social support for the performance of newly learned behavior and the existence of task constraints within the organization to which a program participant returns are crucial factors to consider. The elements facilitating or inhibiting the motivation to transfer learning are influenced as much by organizational structures, processes and values as they are by participant values and beliefs.

Lack of motivation and enthusiasm for outdoor team training, in particular, may emerge in part due to the barriers that exist in the overall work environment or corporate culture. Consideration needs to be given to the type of culture that exists within an organization and the degree to which that organizational environment is compatible with the type of team building an experiential program provides (McGraw, 1992).

McGraw (1992) speculated that trainability in OBT is susceptible to the influence of trainee fears, although no empirical evidence exists to support this claim. Apprehension may certainly be implied if the fear of physical injury, embarrassment, self-disclosure and judgment are thought to be heightened by outdoor training programs. Other conditions affecting trainee physical and social comfort levels in an OBT program could be related to age, gender, race or years with the organization, but again this aspect of trainability remains untested.

The conceptual framework of trainability in OBT presented in this study was based on a number of variables identified in previous research (see Baumgartel, Reynolds, & Pathan, 1984; Ewert, 1987; Hicks, 1984; Huczynski & Lewis, 1980; Lodahl & Kejner, 1965; McGraw, 1992; Noe & Schmitt, 1986; Peters & O'Conner, 1980; Spector, 1988; Wagner & Roland, 1992) as relevant to the prediction of the relationships between the constructs of motivation to learn, learning or training outcomes, and the motivation to transfer learning (Figure 1).



**Figure 1. Hypothesized Influences Affecting Trainability in Outdoor-based Training**

The model depicts the three dependent variables of this study, motivation to learn, learning measured as team building, and the motivation to transfer learning, in the shaded balloons. The social and situational factors (independent variables) were posited to have direct influences on the outdoor experiential team training program participant and were indicated by the solid linkages. The influence of these independent variables is projected to indirectly affect the relationships between the motivation to learn, learning (team building) and the motivation to transfer learning.

Describing the model begins with the understanding of the dependent constructs of the study. For the purpose of this study, motivation to learn was measured by the degree of job involvement (Lodahl & Kejner, 1965), readiness for training (Baumgartel et al., 1984; Hicks, 1984; Huczynski & Lewis, 1980), and the work place locus of control (Spector, 1988). As defined by Noe and Schmitt (1986) motivation is a desire on the part of the training participant to use knowledge and skills learned in a training program on the job. Training outcomes, or learning, was measured as program participant's self-perceptions and evaluation of the level of team development achieved after the conclusion of their team training workshop. The motivation to transfer the training happens when conditions exist where training participants feel confident about using new knowledge or skills, perceive the application of new knowledge resulting in improved job performance or aiding in the resolution of work related problems and addressing frequent job demands (Baumgartel et al., 1984; Huczynski & Lewis, 1980; Noe & Schmitt, 1986).

Factors hypothesized to influence individual lack of motivation toward participation in outdoor experiential training programs include fear of physical injury, strain or embarrassment; fear of the unknown; fear of self-disclosure; and fear of judgment or evaluation, which tends to be a particular problem for senior managers (McGraw, 1992). Demographics, specifically, gender and age, as well as the situational factors which include the presence of a supervisor, number of years with the current employer and any previous experience participating in team training programs were also considered as independent variables. Lastly, work environment favorability was predicted to impact all three of the dependent constructs as well. The opportunity to use newly learned behavior is influenced as much by the existence of task constraints in the work environment as it is by the amount of supervisory and peer support given to the trainee back on the job (Noe & Schmitt, 1986).

Although previous research has been weak in design, more recent investigations have had success in demonstrating sustained team development outcomes (Priest & Lesperance, 1994; Smith & Priest, in press), improvement of problem solving, trust, and commitment to group goals (Wagner, Dutkiewicz, Roland, & Chase, 1994) as well as positive increases in group awareness and group effectiveness (Wagner & Roland, 1992).

## **Purpose of the Study**

The purpose of this investigation was to measure the impact of motivational and environmental variables on the effectiveness of an outdoor experiential based training intervention. An organizing framework outlining factors effecting training and transfer in a one-day outdoor experiential based training course was used as a guide in this study. The self-perceptions of trainee attitudes and attributes that influenced motivation to learn, learning or training outcomes measured as team building, and the motivation to transfer newly acquired knowledge to the work setting were assessed. These three constructs were the dependent variables for this study. The independent variables for this study were age, number of years with the current employer, presence of a supervisor, previous experience, fear and work environment favorability.

It was hypothesized that the three dependent variables of motivation to learn, learning and the motivation to transfer learning would be directly related to the six independent social and situational variables.

Groups were solicited for their participation in the study by the training provider based on the organization's indicated commitment to building teams on the pre-course needs assessment form. It was also important that the program goals developed by the training provider focused on team development and were presented in an educational and/or developmental program format. Those groups wanting a recreational experience with the overall goal of the day emphasizing fun and entertainment were not considered for the study. Intact work groups, or as in this case, many smaller groups, coming to the training from the same large organization were the only type of participants selected to participate in the study.

## **Results and Discussion**

The data for this evaluation project was gathered from 109 full time employees coming to an outdoor-based training program from the same organization over the course of several weeks. Twenty-four unusable surveys were discarded from the sample for reasons of incompleteness or overt disregard for filling out the questionnaire. Of the 109 participants in the study, 90 were male and 19 were female with 87 of the trainees indicating that they were in sales and advertising positions, 11 in upper level management and 11 in support positions of the same manufacturing firm. The frequencies and distributions of the social and situational variables of the study are presented in Table 1.

Sixty-five percent indicated that they had been with their current employer ten years or less. Forty seven percent reported to have previously participated in team building. On the day of the training, 80% of the program participants noted that their supervisors were present at the site.

Several measures used in this investigation were developed by the researcher or adapted from prior research. A quasi-experimental design was used to gather data. The Pre-Program Survey was administered to the study's subjects

**Table 1. Background Profile of Team Building Participants**

Social and Situational Variables	N	%
<i>Gender</i>		
Males	90	82.6
Females	19	17.4
	109	100.0
<i>Age</i>		
20-29 years	8	7.3
30-39 years	39	35.8
40-49 years	39	35.8
50-59 years	21	19.3
60 years and older	2	1.8
	109	100.0
<i>Years with current employer</i>		
10 years or less	71	65.1
11-20 years	22	20.3
21-30 years	12	10.9
more than 30 years	4	3.7
	109	100.0
<i>Presence of a direct supervisor</i>		
Yes	87	79.8
No	18	16.5
Missing	4	3.7
	109	100.0
<i>Previous team building experience</i>		
Yes	51	46.8
No	57	52.3
Missing	1	.9
	109	100.0

when they arrived at the training site and prior to any participation in the training course (Time 1). This questionnaire measured the participant's motivation to learn and pre-course fears. The Post-Training Survey was administered at the conclusion of the team building training (Time 2). This survey was designed to assess the motivation to transfer training, level of team development and trainee perceptions of work environment favorability.

Pearson correlation coefficients were plotted in an effort to determine the size and the direction of the relationships between the constructs of motivation to learn, learning, the motivation to transfer and the independent variables. Regression analysis was used to predict one variable from the others as indicators of motivation to learn, learning and the motivation to transfer learning. Results of the stepwise multiple regression and correlation analysis are shown in Table 2.

In examining the relationships between the constructs motivation to learn, learning, motivation to transfer learning and the independent variables, it was concluded that fear, especially social fear, negatively impacted each of these constructs just as work environment favorability positively influenced all of them. Age and previous team building participation significantly influenced team building outcomes. The motivation to transfer learning was also affected by previous experience as well as the number of years a trainee had been with the employer. The presence of one's supervisor was not a factor in any of the equations.

**Table 2. Summary Multiple Regression Analysis of Social and Situational Variables on the Motivation to Learn, Learning and the Motivation to Transfer Learning**

Independent Social/Situational Variables	Dependent Constructs					
	Motivation to Learn (N=108)		Learning (Team Building) (N=108)		Motivation to Transfer (N=108)	
	r	Beta	r	Beta	r	Beta
Age	-.019	ns	.205*	.186*	.073	ns
Number of years with current employer	.128	ns	.150	ns	.224*	.177*
Presence of a supervisor	-.024	ns	.117	ns	.039	ns
Previous team building experience	-.107	ns	.184	.182*	.236**	.216**
Fear	-.205*	ns	-.186*	ns	-.323***	-.178*
Work Environment Favorability	.270**	.289**	.420***	.417***	.499***	.515***
	R <sup>2</sup> =.084		R <sup>2</sup> =.241		R <sup>2</sup> =.370	

\*\*\*Significant at .001

\*\*Significant at .01

\*Significant at .05

It is also important to interpret the values found in the rows, as well as highlight the influence of the social and situational variables in explaining the dependent constructs. To this end, it is noteworthy to recognize the  $R^2$  values for each of the regression models. The independent variables demonstrate, by a factor of four, their ability to explain the motivation to transfer learning over their predictive ability to explain the motivation to learn. These independent variables are also an important indicators of team building as demonstrated by the regression model ( $R^2=.241$ ).

Although the majority of the sample, 80%, indicated that their direct supervisor was present on the day of the training, this had no effect whatsoever on any of the constructs. While 47% of the sample noted previous team building experience, this variable did not come out as a correlate of team building when in the multiple regression equation previous experience proved to be a significant predictor of team building. A closer review of the correlation analysis output revealed a p-value equal to .058, thereby causing this variable to miss the significance cut-off at .05 by a small margin.

The variable fear proved to be a consistent and significant correlate of all the dependent constructs. Yet, fear only managed to stay in the regression equation long enough to be a significant predictor of the motivation to transfer training.

Work environment favorability was found to be the best predictor overall. This variable proved to have the strongest relationship with all of the dependent constructs. Work environment was also the strongest and most significant predictor out of all of the independent variables.

Figure 2 presents the resulting factors found to impact trainability in outdoor-based training programs.

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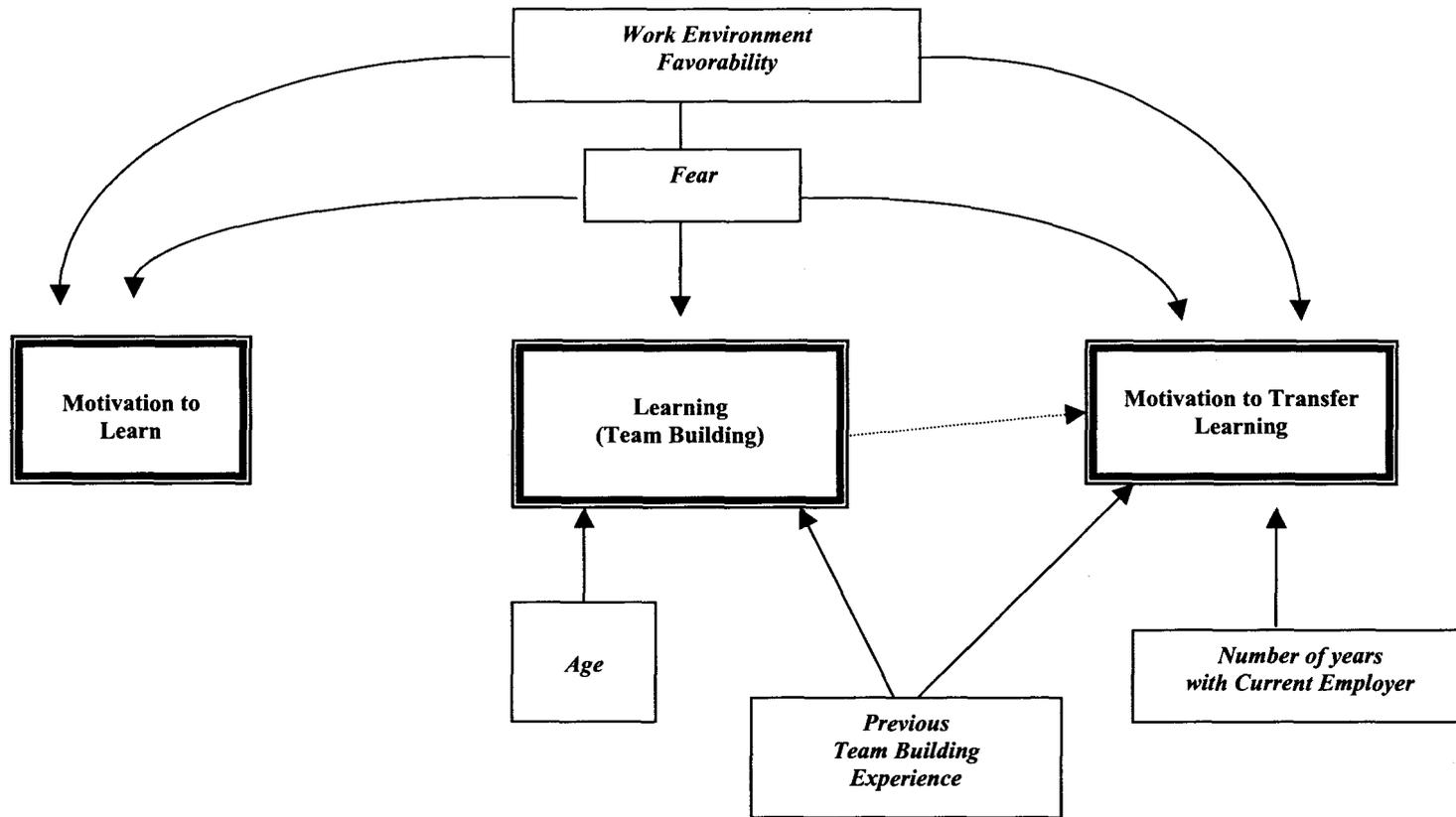


Figure 2. Factors Impacting Trainability in Outdoor-based Training Programs

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