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Predicting Trainees' Intentions to Transfer Training - An
Application of the Theory of Planned Behaviour

par

Amir Shoham

DÉPARTEMENT DE PSYCHOLOGIE
FACULTÉ DES ARTS ET DES SCIENCES

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Application of the Theory of Planned Behaviour

Présenté Par

Amir Shoham

a été évalué par un jury composé de personnes suivantes :

Geneviève A. Mageau, Ph.D.

Robert R. Haccoun, Ph.D.

Roxane de la Sablonnière, Ph.D.

Président du jury

Directeur de recherche

Membre du jury

ABSTRACT

The primary purpose of the training program is performance improvement on an individual level. Performance improvement results from knowledge, skill or ability enhancement. A customer service training program is an important intervention which leads to effective customer service and sales techniques, and overall customer satisfaction. The Theory of Planned Behavior (Ajzen and Fishbein 1975, 1980) was used as a research model to investigate post-training reaction, perceptions of organizational climate, and intentions to transfer training. An integral part of the training process is transfer of training. It is believed, among researchers that, transfer of training levels are not high and are in fact considerably low. It is suggested that transfer of training is a function of trainees' characteristics, training design and the work environment that influences the application of training to the job. The present study is an investigation of transfer of training. The goal was to determine transfer of training criteria and explore individual as well as organizational components, their contribution and effect on the transfer of training process. This study applied the Theory of Planned Behaviour to understand trainees' intentions to transfer training.

Survey responses from 96 sales associates who had received their customer service training were used. Trainees' reaction, attitudes and perceptions towards the training and transfer of training were assessed. Based on the results, we were able to determine that trainees' attitude and their perceptions towards social pressure were associated with intentions to transfer training. Additionally, the study showed that trainees' attitudes are a more important predictor than subjective norms and perceived behavioural control respectively. Finally, a positive association was found between organizational transfer climate cues and intention to transfer training. Perceived behavioural control did not display any association with intention to transfer training. These results support theoretical context regarding the importance of attitudes and subjective norms in which newly acquired skills are applied. From a practical perspective, understanding some of the variables that influence transfer of training can direct organizations to use appropriate techniques for facilitating the applications of transfer. Further research should determine whether or not intentions to transfer training actually result in applications of learned skills in the work place. Additionally, investigation of training climate cues sources is suggested

in order to determine the extent to which trainees transfer their skills as a result of managerial or peers influence.

Key Words: Transfer of training, Attitudes, Intentions

RÉSUMÉ

Le but principal d'un programme de formation est l'amélioration de la performance des individus. L'amélioration de leur performance résulte des connaissances et des compétences acquises et de la mise en valeur de leurs habiletés. Un programme de formation de service à la clientèle est une intervention importante qui mène à des techniques de ventes efficaces et à la satisfaction globale des clients. Le modèle de recherche a servi à étudier la réaction des stagiaires après leur formation, les perceptions du climat organisationnel de leur milieu de travail et leurs intentions dans le transfert des apprentissages. Une partie intégrale du processus de formation est l'application des nouveaux comportements appris. En général, le transfert des apprentissages n'est pas très élevée, voire même très base. Il est suggéré que le transfert des apprentissages est caractéristique des stagiaires, de la conception qu'ils se font de la formation reçue et du milieu de travail dans lequel ils se trouvent, tous influençant l'application de la formation au travail.

Cette étude porte exclusivement sur le transfert des apprentissages. Le but était de déterminer les critères de transfert des apprentissages et d'explorer leurs

composantes individuelles et organisationnelles, et leurs contributions respectives au processus de l'application de la formation. La théorie du comportement planifié (*Theory of Planned Behavior*, Ajzen and Fishbein 1975, 1980) a été appliqué à l'élucidation des intentions des stagiaires ayant reçu leur formation. Les réponses de 96 responsables des ventes qui avaient reçu une formation de service à la clientèle ont été analysées. Les réactions, les attitudes et les perceptions des stagiaires envers leur formation et les modes d'application de leur formation ont été évaluées. Les résultats permettent de déterminer que l'attitude et les perceptions des stagiaires de la pression sociale du milieu de travail ont une portée directe sur les intentions d'application de la formation. En plus, l'étude a prouvé que les attitudes des stagiaires sont un meilleur indice du succès de leur formation que les normes subjectives et les contrôle de comportements. En conclusion, une corrélation positive a été établie entre le choix du climat d'application et l'intention d'appliquer la formation reçue. Par contre, la perception des contrôles comportementaux n'a montré aucune corrélation avec l'intention d'appliquer la formation. Ces résultats confirment le contexte théorique sur l'importance des attitudes et des normes subjectives dans lesquelles les

habiletés nouvellement acquises sont appliquées. D'un point de vue pratique, comprendre certaines des variables qui influencent l'application de la formation reçue peut aider les organismes à employer des techniques appropriées pour en faciliter l'application. Une future recherche devrait déterminer si les intentions d'appliquer la formation résultent en réalité des habiletés acquises dans le milieu de travail. En plus, une recherche sur les choix du climat de formation est suggérée qui pourrait déterminer si les stagiaires appliquent leurs habiletés sous l'influence de leur gestionnaire ou de leurs collègues.

Mots clés : transfert des apprentissages, intention, climat de la formation

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INTRODUCTION

A great part of organizational success relies on the talent of the people that comprise an organization. It has been asserted that an organization's competitive success is achieved through people (i.e. changes in behavior Saks & Haccoun, 2007). In his book, *Competitive Advantage Through People*, Pfeffer (1994) claimed that sources of organizational competitive success have shifted from product, process technology, regulated markets and economies to employees in the organization. The shift, according to Pfeffer, stemmed from changes in product life cycles, the need for continuous innovation, deregulation and increased efficiency of financial markets.

Skills, performance, continuous learning and education of employees are critical to organizational success and competitiveness (Saks & Haccoun, 2007). As a result, organizations need to rely on workplace learning and continuous improvement. More than ever, organizations invest in training activities. As reported by Broad (1982), and more recently by Saks and Haccoun (2007), organizations in the United States invest approximately \$100 billion annually, European organizations (with some exceptions) spend less, while Canadian organizations spend on average \$30 billion for the same purpose. Other estimates suggest

that investments in training activities range from \$55.3 to \$200 billion annually (Salas & Cannon-Bowers, 2001).

Given the importance and potential impact of training on organizations, and the costs associated with development and implementation of training, it is important to assess training effectiveness. Kirkpatrick (1976) identified four levels of training evaluations: level 1 includes trainees' reactions, level 2 refers to learning, level 3 is application of learned material and level 4 refers to results and organizational outcome. The third level, which concerned the degree to which knowledge, skills, abilities and attitudes are generalized onto the job, is recognized as transfer of training (Wexley & Latham, 1981).

Transfer of training is vital, since it serves as an integral part of the training process. It is concerned with the use and maintenance of learned material on the job, and it is affected by trainees' characteristics, training design and several parameters related to the work environment.

The main objective of the present research is to apply the Theory of Planned Behaviour as a model that uses trainees' attitudes as predictors of intentions to transfer training. Established by Ajzen and Fishbein, the Theory of Planned Behaviour (TPB) is a general behavioural model that

is used to explain a variety of human behaviours. Therefore, the present study uses TPB to explore individual variables, as well as organizational ones (as perceived by respondents) in order to understand and predict transfer of training.

In order to accomplish our objective, we present conceptual and empirical issues derived from the literature on transfer of training. A rationale for considering trainees' attributes and organizational factors that may be important for transfer of training will be presented as well. Next, we introduce the Theory of Planned Behaviour and show the hypothesized relationships between the model constructs and intentions to transfer training. Then, we present the relationship between transfer of training climate and intentions to transfer training. Finally, we present the rationale to consider trainees' subjective norms as a particularly dominant predictor of transfer of training.

Transfer of Training

Transfer of training is concerned with generalization of knowledge and skills learned in training on the job and the maintenance of acquired knowledge and skills over time (Baldwin & Ford, 1988).

As part of the training process, it is essential to know how much of what is learned in the training translates into changes on the job (Saks & Haccoun, 2007). As will be demonstrated shortly, trainees often do not apply their newly acquired knowledge and skills to the job. Thus, it is important to explore what influences transfer and how it can be enhanced once training has ended.

Even though transfer is important, it has been often overlooked. Transfers of training studies are relatively rare in practice (Arthur, Winston, Edens, & Bell, 2003; Dunberry & Péchard, 2007; Haccoun & Saks, 1998). Meta analytic work conducted by Arthur et al. (2003) showed that measures of transfer of training evaluation which were assessed by self-report did not reflect changes in the trainees' job-related behaviour. In their meta-analysis, the authors also claimed it unlikely that affective and attitudinal response to a training program reflect generalization and application of new behaviours on the job.

It is also believed that transfers of training levels are not high. It is reported that only 10 percent of total training expenditures could lead to transfer (Georgenson, 1982). Saks and Belcourt (1997) reported that levels of transfer reduced from 63 percent immediately after training to 34 percent one year after attending a training program. However, their data is based on self-report of transfer which is problematic because it does not always provide information about how much was learned from training, it does not indicate changes in trainees' job-related behaviours or the utility of the program (Arthur et al., 2003). Haccoun and Saks (2002) analyzed a Canada-wide sample of more than 3000 organizations to show that the relationships between training investment and company profit was close to zero.

However, a recent Quebec-based study showed that training leads to improved performance and positive company impacts only to the degree that its content (i.e. learning) is transferred to the job (i.e. changes in behaviour: Bouteiller & Cossette, 2007). Thus, transfer is the key mediating variable between training and job performance changes. It is important, therefore, to explore the factors that affect the extent to which trainees generalize and apply their trained behaviour to the job.

Models of Transfer of training

Models of transfer of training and training effectiveness provide a framework for studying the process of transfer. In the context of our study, these models are used as reference points to understand the roles of trainee, training and work environments in shaping transfer levels. These models describe the multiple sources that affect transfer before, during and after training.

Baldwin and Ford's (1988) model of transfer of training presents factors that affect transfer of training. As shown in Figure 1, conditions to transfer are affected by training inputs: trainee characteristics (ability, personality, and motivation), training design (principles of learning and training content) and work environment (support and opportunity to use the learned skills). Learning and retention partially mediate the link between the training input and transfer. According to the model, training inputs have direct effect on learning and retention that in turn, directly affect generalization and maintenance. Finally, according to Baldwin and Ford, trainee characteristics and work environment have a direct link to transfer.

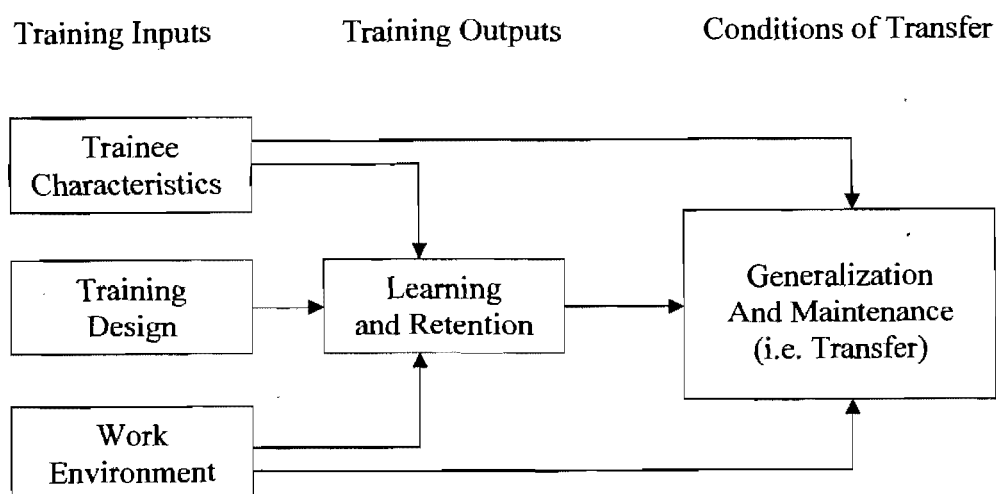


Figure 1. Model of transfer of training (Baldwin & Ford, 1988)

As mentioned earlier, models of training effectiveness may provide valuable information regarding transfer of training. The Cognitive, Organizational, Motivational and Attitudinal (COMA) model of training effectiveness (Haccoun, Jeanrie, & Saks, 1997) asserts that cognitive variables, motivation, attitudes, affects, as well as organizational environment factors are essential to the transfer of training. The COMA model suggests that measurement of these variables enhances the usefulness of training evaluation including transfer, and can be administered before and immediately after training sessions (Saks & Haccoun, 2007).

Both Baldwin and Ford's model of transfer of training as well as the COMA model, were strongly influenced by the

industrial/organizational psychology tradition which provides outlines of the factors that affect transfer of training in organizations. They focus on multiple sources ranging from trainees' abilities, personality, motivation, learning principles and organizational support. An alternative perspective guiding the search for explanation of trainees' decisions regarding transfer may be found in the Theory of Planned Behavior (TPB - Ajzen & Fishbein, 1980). This theoretical framework is derived from the social psychology tradition.

Unlike the COMA model or Baldwin and Ford's model of transfer of training, the TPB provides a framework for examining the influence of attitudes, social norms, and perceived control on intentions to perform a behavior. This implies that the TPB is designed to predict behavioral intentions as well as a behavior, namely transfer of training. Presumably, intentions are precursors to behavior. As will be shown, it may offer an effective and pragmatic strategy for gathering information and assessing trainees' intentions immediately after training.

The TPB is also a potentially important contribution to the transfer of training literature for pragmatic reasons. Many authors (for example, Saks & Haccoun, 2007) have noted the scarcity of studies that measure transfer.

The reason for this paucity of information stems from a practical problem. Collecting data on the job is a very difficult process because the data collection itself is disruptive to the normal productivity imperative. However, collecting data immediately following training (and while the trainees are still in the training locale) is relatively easy. Therefore, it is convenient to assess transfer intentions at that time. Research has shown that intentions are antecedents of behaviour and may predict behaviour (Armitage & Conner, 2001). If intentions to transfer can be predicted using the parameters identified through TPB, future training evaluations that employ this paradigm may provide useful estimation of transfer. In this study, we investigate the prediction of transfer intentions using the parameters of the TPB. We assume that the intentions to transfer predict actual transfer. However, this assumption is not tested in our study.

The Theory of Planned Behavior (TPB)

The theory of planned behavior (Ajzen, 1991; Ajzen & Fishbein, 1980) is used to predict behavior as diverse as job searching, playing video games, alcohol consumption, voting habits and weight loss. It offers a practical tool to explore and understand the initiation and continued performance of behaviors.

The theory of planned behavior provides us with a unique viewpoint that places an individual's beliefs, attitudes and perceptions as proximal determinants of behavior in specific situations. This study will explore predictors of transfer of training that originate from the TPB. Figure 2 illustrates this model.

Based on Ajzen and Fishbein (Ajzen, 1991; Ajzen & Fishbein, 1980), actions are guided by three factors: (a) beliefs about the likely outcomes of the behaviour and the evaluations of these outcomes (behavioural beliefs), (b) beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), and (c) beliefs about the presence of factors that may facilitate or inhibit performance of the behaviour (control beliefs). Behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour, normative

beliefs result in subjective norms, and control beliefs give rise to perceived behavioural control (Ajzen, 2006).

In combination, attitude toward behaviour, subjective norms, and perception of behavioural control predicts the formation of behavioural intentions. The more favourable the attitudes, the subjective norms and the greater the perceived control, the stronger the intention to perform the behaviour in question. Finally, given a sufficient degree of actual control over the behaviour, intentions serve as an immediate antecedent and a predictor of behaviour.

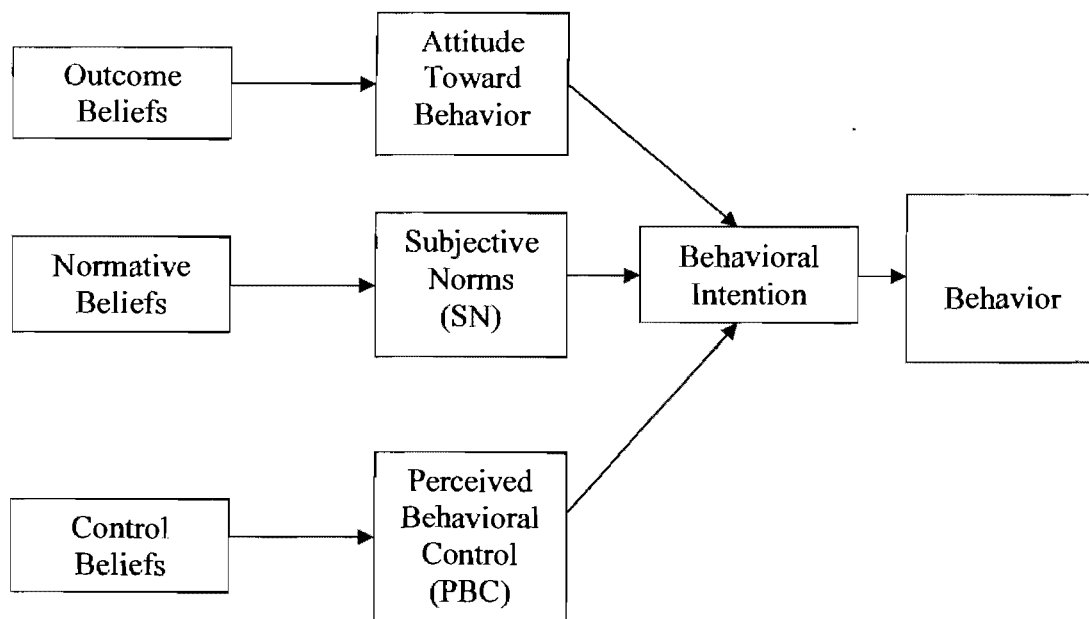


Figure 2. The Theory of Planned Behavior: Influence of beliefs on attitudes that lead to the formation of behavioral intention and behavior (Ajzen, 1991).

Attitude Toward Behavior

According to the TPB, one determinant of behavioral intention is the attitudes toward that behavior (Ajzen, 1991). Attitudes are a function of an individual's underlying beliefs regarding the outcomes that may be achieved by engaging in the behavior, as well as the value that one places on these outcomes. This refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior, based on his or her instrumental perceptions of the behavior in question.

In a training context, the behavior refers to the trainees' application of skills learned in training and their generalizations. In the context of transfer behavior, an important attitude is the perceived usefulness as well as the perceived importance and value of the target behavior that is to be transferred.

Research has shown that the perceived utility of trained behavior may have important implications for transfer. Clark, Dobbins and Ladd (1993) showed that trainees who perceived training as having high job and career utility were more likely to be motivated to learn. More specifically, trainees who perceived training to be relevant had a higher level of immediate skill transfer (Axtell, Maitlis, & Yearta, 1997). Using a very large

sample of Canadian companies (N = 6000), Saks, Tagger and Haccoun (2002) showed that company investment in training is positively correlated with company profits, only for those companies whose remunerative policies included rewards for improved performance. Employees who believe that training enhances job performance, and that such performance translates into tangible consequences to the employee, are more likely to transfer.

Trainees' attitudes may also be affected by the way they feel regarding the behavior in question. It is expected that trainees will not transfer their skills if they believe that the training itself, as well as the application of new skills may create unpleasant instrumentalities. In the context of this study, attitudes will be measured as perceived usefulness that affects intentions to transfer training. Thus, hypothesis 1 states,

H1: Trainees' attitudes towards transfer of training are positively correlated to intentions to transfer training.

Subjective Norms

Subjective norms refer to perceived social pressure to perform or not to perform a behavior (Ajzen, 1991). These norms, transmitted by important others such as friends,

family and co-workers define what one should do, provided one is motivated to conform to their views. The TPB refers to subjective norms as important predictors of intentions, which in turn lead to behavior.

In the training context, research has shown that trainees who hold realistic beliefs that supervisors and peers support their skill use are more likely to transfer training (Haccoun & Savard, 2003). We define subjective norms as trainees' perceptions of organizational support for transfer of training. Consistent with Baldwin and Ford (1988) the work environment, including support expectations influence the process of transfer before, as well as after training (Haccoun & Saks, 1998).

Similarly, the TPB suggests that perceived social pressure determines, at least partially, intentions, which in turn, lead to behavior. In our study, subjective norms will be measured as perceptions of organizational cues to transfer the learned skills. Therefore, Hypothesis 2 states,

H2: Trainees' subjective norms towards transfer of training are positively correlated to intentions to transfer training.

Perceived Behavioral Control (PBC)

According to TPB, Perceived Behavioral Control (PBC) refers to the degree to which an individual feels that performance or non-performance of the behavior in question is under his or her volitional control. In the transfer context, the intentions to transfer may well be influenced by the extent to which the behavior is perceived to be under the control of the trainee. PBC influences both behavioral intention and (presumably) actual behavior (Ajzen, 1991).

Armitage and Conner's (2001) data indicated that variance in behavior may be accounted for perceptions of control as well as self-efficacy. In the context of training, perceptions of control contribute to the behavioral intentions of trainees choosing whether or not to transfer their skills to their jobs. Self-efficacy (Bandura, 1997) is defined as "people's judgments of their capabilities to organize and execute courses of actions required to attain designated types of performance (p. 391)."

The effect of self-efficacy on transfer has been widely studied. Research shows that self-efficacy is positively related to pre-training motivation (Quinones, 1995). It also has been shown that self-efficacy is

positively related to transfer performance (Ford, Smith, Weissbein, Gully, & Salas, 1998; Haccoun & Savard, 2003), as well as to transfer skill maintenance (Stevens & Gist, 1997). There are strong, theoretically based recommendations (Haccoun, 1997; Haccoun & Saks, 1998) that self-efficacy be assessed in all transfer studies.

In the context of our study, PBC will be measured as perceptions of self-efficacy as well as beliefs about the controllability over transfer behavior. It is expected that trainees who perceive control over the application of new skills to the work place will have positive intentions to do so. Thus, Hypothesis 3 states,

H3: Trainees' PBC is positively correlated to intentions to transfer training.

Considering the three antecedents of behavioral intentions as specified in the TPB (Ajzen, 1991), namely attitudes, subjective norms and perceived behavioral control, predict intention to engage in behavior. Thus we hypothesize that:

H4: Attitudes, subjective norms and perceived behavioral control significantly predict intentions to transfer training.

Subjective Norms as a Dominant Predictor to Intentions to Transfer Training

The perceived social pressure to perform or not to perform a behavior may have the greatest effect on trainees' intentions to transfer training. In the context of our study, perceived social pressure is the degree to which important groups of individuals such as managers, supervisors and peers believe that trainees should transfer their skills and apply them to their job.

Maurer and Palmer (1999) argued that a distinction be made between compulsory and non-compulsory training. In cases where participation in training is pursued on a voluntary basis, the role of peer and supervisor to support the use of skills on the job may be less important. In those cases where training is obligatory, social pressure provided by co-workers as well as management to transfer training may become very salient. Hence, the impact of social norms (as defined by the TPB constructs), especially those projected by supervisors, may have a dominant effect on training transfer intentions and actual transfer.

Kozlowski and Farr (1988) showed that supervisors play a key role in employee development. Moreover, Gumuseli and Ergin (2002) showed that trainees supported by their managers displayed a significant difference in the way they

transferred their training as compared to trainees that did not have such support. Thus, it would be expected that subjective norms as projected by managers and perceived by trainees are most important, at least in context where training is obligatory. Hence, hypothesis 5 states,

H5: Subjective norms are the dominant predictor of intentions to transfer training.

Subjective Norms and Transfer Climate

As demonstrated earlier, subjective norms in the TPB model are concerned with one's perception of social pressure to perform, or not to perform, a behavior. Training literature demonstrates the influence of organizational culture and environmental characteristics on training outcomes. Among others, it puts forward transfer climate characteristics that may enhance or inhibit transfer. It is apparent, therefore, that these characteristics are symmetric to subjective norms in TPB.

As much as trainees' perceptions of important individuals (such as supervisors, peers) approve or disapprove transfer of training, similarly, transfer climate serves as a normative condition that promotes or hinders transfer. Moreover, in the contexts of training,

assessing transfer climate may provide more details and information about training and may increase the applicability of TPB regarding transfer of training.

According to Tracey, Tannenbaum and Kavanagh (1995), organizational culture is directly related to the transfer of trained behaviors. In their study, conducted among supermarket managers, they showed that the social support system - a critical and integral part of the organizational culture, appeared to play a significant role in the transfer of training. Fecteau, Dobbins, Russell, Ladd and Kudisch (1995) tested whether organizational constituents such as management, supervisors, peers and subordinates influenced pre-training motivation and transfer of training. Their results confirmed that such support was predictive of motivation and transfer.

Tannenbaum, Mathieu, Salas and Canon-Bowers (1991) noted the importance of environmental characteristics for the transfer of training: "post-training environment can encourage, discourage or actually prohibit the application of new skills (p.420)." Noe (1986) as well as Santos and Stuart (2003) indicated that organizational support is manifested by supervisors who allow employees to practice (i.e. rehearse) the skills or knowledge acquired in the training. Organizational support is perceived to be high

when employees believe that supervisors and peers provide them with opportunities (i.e. practice to use the skills) to transfer (Ford, Quinones, Segó, & Sorra, 1992). Hence, the reinforcement and feedback received from supervisors and peers enhance (or reduce, when it is negative or absent) organizational support.

Rouiller and Goldstein's (1991) '*transfer climate*' construct focuses more tightly on the issue of perception of the environment and on feedback. Rouiller and Goldstein (1991) defined transfer climate as "situations and consequences that either inhibit or help to facilitate the transfer of what has been learned in training to the job situation (p. 379)." Using their measure of transfer climate they showed that trainees assigned to units that had more positive organizational transfer climate, were rated as better performers of behaviors previously learned. Hence, they concluded that positive transfer climate is one requirement for learning to transfer from the classroom to the job. Transfer climate - as operationalized by Rouiller and Goldstein (1991) consists of eight situational scales divided into two major categories, '*situational cues*' and '*consequences*'. All items are presented in Appendix B.

Situational Cues

Situational cues serve to remind trainees of their training or provide them with an opportunity to use the skills they learned in training. Rouiller and Goldstein categorized them into four basic types:

- a. Goal Cues: goal cues refer to goals that may be imposed or jointly established with the trainee and that remind trainees to use their training when they return to their jobs. For example, 'supervisors set goals for new employees that encourage them to apply their training on the job.'
- b. Social Cues: social cues are exhibited by supervisors, peers and subordinates. They serve to remind and provide an opportunity for trainees to use their training when they return to their jobs. For example, 'new employees discuss problems that may arise when using training material with their team members.'
- c. Task Cues: task cues concern the design and nature of the job itself and remind the trainees to use their training on the job. For example, 'equipment is available that allows new employees to use skills they learned in training.'

- d. Self-Control Cues: self-control cues concern various self-control processes that permit trainees to use what they have learned. For example, 'I was allowed to practice and solve job-relevant problems.'

*Consequences of generalization and maintenance of skills
and knowledge to the job*

Consequences refer to the instrumentalities and feedbacks associated with the use, on the job, of what has been learned. Four types are measured, positive and negative feedback, punishment and no-feedback. For the consequence dimension 'Punishment' and 'No Feedback' are expected to negatively affect the transfer climate and consequently inhibit the transfer of training.

- a. Positive Feedback: positive feedback refers to positive information given to trainees about the use of trained behaviour. For example, 'new employees who successfully use their training will receive a salary increase.'
- b. Negative Feedback: negative feedback refers to negative information given to trainees about the use of trained behaviour. For example, 'supervisors

are made aware of new employees who are not using their trained skills.'

c. Punishment: trainees are punished for using trained behaviour. For example, 'more experienced workers ridicule the use of skills learned in training.'

d. No Feedback: no information is given to trainees about the use or importance of the learned behaviour. For example, 'supervisors are too busy to note whether employees use learned behaviours.'

Rouiller and Goldstein's (1991) data confirms that transfer climate is significantly and positively related to transfer behavior: the more positive the transfer climate, the more trainees will demonstrate transfer behavior. Conversely, the more negative the consequences, the less transfer will occur.

Subjective norms in the TPB model are concerned with the perception of the environment, as is the transfer climate structure. In the training context, there is a close symmetry between the two constructs. Hence, in this study, subjective norms will be substituted by transfer climate factors. Therefore, hypothesis 6 states,

H6: Transfer climate factor(s) is positively correlated to intentions to transfer training.

Implementation of Transfer Climate Factors in the TPB

Subjective norms in the TPB model are concerned with the perception of the environment. They refer to perceived social pressure to perform or not to perform a behavior (Ajzen & Fishbein, 1980). Transfer climate factors, namely situational cues and consequences, as well as subjective norms, are in close theoretical symmetry. However, climate measures, as they are specifically focused on transfer, may be more useful in our applied context than subjective norms. Therefore, in this study we substitute transfer climate components into the model of TPB. Figure 3 illustrates the implementation of transfer climate factors to the original model of TPB. Incorporation of climate components into the TPB may improve the prediction of intention to transfer training.

Thus, hypothesis 7 states,

H7: Substitution of climate factors for subjective norms leads to higher levels of prediction of intentions to transfer in the TPB model.

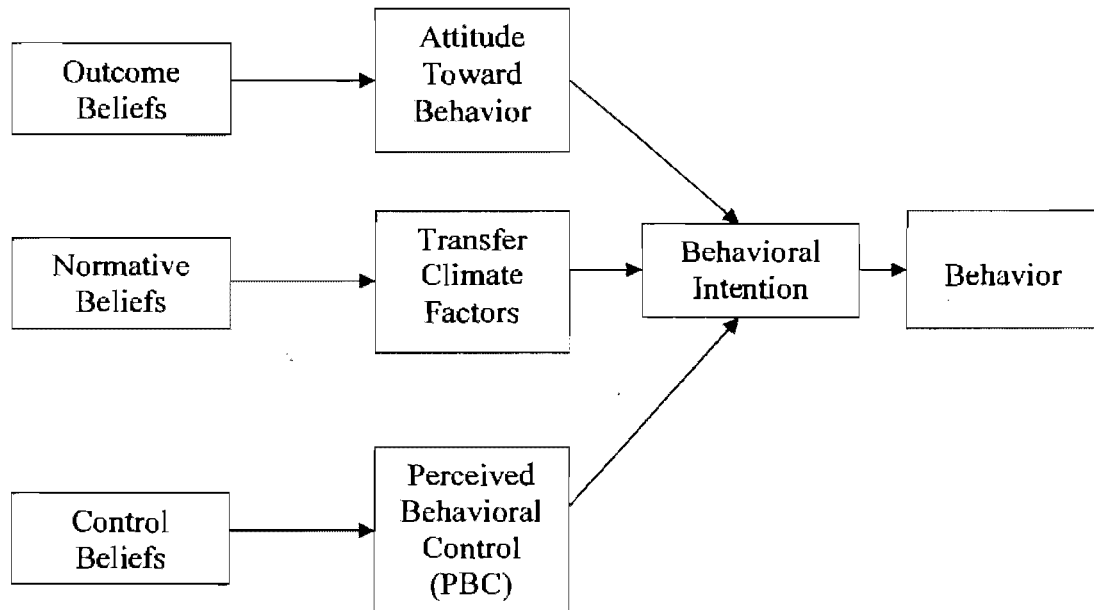


Figure 3. Implementation of Transfer Climate Factors in the TPB Model.

METHODS

Participants

The research was conducted in a large corporation that owns and operates over 300 retail stores in Canada, the US and Europe. This organization (hereafter known as Retailer) specialises in footwear, leather and fashion accessories.

Every store consists of a manager, assistant manager, cashier, other support staff and an average of 6 sales associates. Depending on the volume of the businesses, some of the sales associates work full-time while others work part-time.

A total of 96 sales associates from 24 stores participated in this study. Ninety five percent of the employees were between 18 and 30 years old, and eighty percent were female. These sales associates worked at the company for an average of 15 months (S.D = 21.14), and had been in their current position for an average of one year (S.D = 15.7).

The Training Program

One of the training programs offered by the retailer is the Customer Service Skills Training course (CSS), which is the focal point of this study. This training program is mandatory for all employees who work as sales associates.

The training consists of two days of on-the-job training delivered by the store managers or his/her assistant. It is administered to 1-2 sales associates at a time.

The training program focuses on interpersonal skills, sales techniques and principles of customer relations. Sales associates are trained in customer service techniques such as greeting, presentation of product, reassuring customers and selling methods. Additionally, sale associates are presented with different customer service scenarios that depict different sales relevant situations that may occur on the job. Using discussion techniques, trainees are taught how to apply the principles learned to resolve each of them. Finally, once the training is completed associates provide farther coaching on implementation of trained skills. This shadowing may be more or less intense, and more or less lengthy, depending on the degree to which trainees implement the learned skills, as well as the availability of the experienced associate.

Procedure

Upon completing CSS training, sales associates were asked by store managers to participate in the study. Those that agreed received the questionnaires and an introductory letter regarding instructions and the purpose of the study.

At first, sales associated were requested to complete the TPB and demographic questionnaire. The transfer climate questionnaire was administered two weeks after the training took place. Some of the participants returned their questionnaires on the same day while others returned them a few days later. All questionnaires were distributed randomly by Human Resources assistants through company mail, and returned directly to the author in a sealed envelop. Out of 240 questionnaires, 96 sales associates agreed to participate in the study - a 40% return rate. Most of the responses, about 80%, came from trainees working in stores in Ontario, Alberta, Newfoundland, British Columbia, New Brunswick and Québec. Though some questionnaires were distributed to stores in the US and the UK, there was no attempt in this study to measure the effect of location.

Measures

Research questionnaires included demographic items, TPB items (based on guidelines from Francis et al., 2004), and the Rouiller and Goldstein's (1991) transfer climate measure. The Appendix shows all questionnaires. The following variables were measured:

TPB constructs

Trainees' attitudes, subjective norms, PBC and intentions were assessed from scores on the TPB questionnaire. The questionnaire contained 16 Likert-style items, 5 point scale, ranging from 1= *strongly disagree* to 5= *strongly agree*, developed from TPB questionnaire manuals (Francis et al., 2004), that were adapted for our study.

Dependent Variable

Intentions. Intentions are the function of an individual's positive or negative evaluation of performing the behaviour, as well as their perception of social pressure to perform or not to perform the behaviour in question. The 'Intentions' to transfer variable was assessed by four items (items 1, 8, 12 and 16 in the TPB questionnaire presented in Appendix B). This scale showed acceptable internal consistency ($\alpha = .70$). The items were then summed and averaged to produce the final intentions measure ($M = 4.33$, $S.D = .83$)

Independent Variables

Attitudes. Attitudes are the function of an individual's underlying beliefs regarding the outcomes that may be achieved by engaging in the behavior, as well as the

value that one places on these outcomes. The 'Attitudes' towards transfer variable was assessed by four items (items 2, 5, 9 and 13 in the TPB questionnaire presented in Appendix B). That scale shows acceptable internal consistency ($\alpha = .84$). The items were then summed and averaged to produce the final attitudes measure ($M = 4.35$, $S.D = .88$)

Subjective Norms. Subjective norms refer to perceived social pressure to perform or not to perform a behavior. The 'Subjective Norms' variable was assessed by four items (items 3, 6, 10 and 14 in the TPB questionnaire presented in Appendix B). The scale shows acceptable internal consistency ($\alpha = .70$). The items were then summed and averaged to produce the final subjective norms measure ($M = 4.27$, $S.D = .97$)

PBC. PBC refers to the degree to which an individual feels that performance or non-performance of the behavior in question is under his or her volitional control. The 'PBC' variable was assessed by four items (items 4, 7, 11 and 15 in the TPB questionnaire are presented in Appendix B). The PBC scale shows acceptable internal consistency ($\alpha = .70$). The items were then summed and averaged to produce the final PBC measure ($M = 3.91$, $S.D = 1.14$).

Transfer of training climate

The transfer of training climate was assessed using 30 Likert-style items, 5 point scale, ranging from 'strongly disagree' to 'strongly agree', that define the eight scales developed by Rouiller and Goldstein (1991). There were three to four items per scale. Climate items were training specific and categorized into the following scales:

Goal. The 'Goal' variable was assessed by four items (items 1, 9, 18 and 23 in the transfer climate questionnaire presented in Appendix B). That scale shows acceptable internal consistency ($\alpha = .76$). The items were then summed and averaged to produce the final goal measure ($M = 4.35$, $S.D = .85$).

Social. The 'Social' variable was assessed by four items (items 2, 10, 19 and 24 in the transfer climate questionnaire presented in Appendix B). That scale shows acceptable internal consistency ($\alpha = .72$). The items were then summed and averaged to produce the final social measure ($M = 3.90$, $S.D = 1.01$).

Task. The 'Task' variable was assessed by three items (items 3, 12 and 25 in the transfer climate questionnaire reproduced in Appendix B). That scale shows acceptable internal consistency ($\alpha = .70$). The items were then

summed and averaged to produce the final task measure ($M = 4.09$, $S.D = .94$).

Self Control. The 'Self Control' variable was assessed by four items (items 5, 11, 17 and 30) in the transfer climate questionnaire reproduced in Appendix B) That scale shows acceptable internal consistency ($\alpha = .70$). The items were then summed and averaged to produce the final task measure ($M=3.89$, $S.D = 1.13$).

Positive Feedback. The 'Positive Feedback' variable was assessed by four items (items 4, 13, 20 and 26 in the transfer climate questionnaire presented in Appendix B). That scale shows acceptable internal consistency ($\alpha = .70$). The items were then summed and averaged to produce the final positive feedback measure ($M = 3.91$, $S.D = 1.05$).

Negative Feedback. The 'Negative Feedback' variable was assessed by four items (items 6, 14, 21 and 27 in the transfer climate questionnaire presented in Appendix B). This scale's α (.69) is marginally acceptable. The items were then summed and averaged to produce the final positive feedback measure ($M = 3.0$, $S.D = 1.10$).

Punishment. The 'Punishment' variable was assessed by four items (items 7, 15, 22 and 28 in the transfer climate questionnaire reproduced in Appendix B). As with the negative feedback scale, its internal consistency is

marginally acceptable ($\alpha = .69$). The four items were then summed and averaged to produce the final positive feedback measure ($M = 1.88$, $S.D = 1.04$).

No Feedback. The 'No Feedback' variable was assessed by three items (items 8, 16 and 29 in the transfer climate questionnaire reproduced in Appendix B). That scales shows acceptable internal consistency ($\alpha = .70$). The three items were then summed and averaged to produce the final positive feedback measure ($M = 2.04$, $S.D = 1.12$).

RESULTS

The data analyses are described in two separate sections: (1) preliminary analysis; (2) hypothesis testing

Preliminary Analysis

Intercorrelations

Table 1 presents the intercorrelations as well as the means, standard deviations, N and alpha coefficient for trainees' attitudes, subjective norms, PBC, intention to transfer training and transfer of training climate factors. All alpha coefficients reach the value of .70 (or higher) levels indicating reasonable internal consistency for all scales. Moreover, the correlations between the independent variables and the 'intentions to transfer' dependent variable range from a low of .16 to .62, and except for the correlation between perceived behavioural control (PBC) and the intentions variable ($r=.16$), they are all statistically significant at $\alpha = .05$. All significant intercorrelations are in the expected direction.

Table 1.

*Means, Standard Deviation, and Correlation Among Transfer
of Training Climate Factors and Theory of Planned Behaviour
Variables*

	<i>N</i>	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Positive Feedback	96	4.28	.91	(.81)					
2. Self-Control	96	3.95	.92	.00	(.75)				
3. Intentions	96	4.35	.72	.40**	.41**	(.70)			
4. Attitudes	96	4.35	.73	.61**	.23*	.45**	(.84)		
5. Subjectiv Norms	96	4.27	.68	.21*	.29**	.56**	.45**	(.70)	
6. Percieved Behavioural Control	96	3.52	.65	-.01	.23*	.16	.14	.12	(.70)

* $p < .05$.

** $p < .01$.

() = Coefficients Alpha

Factor analysis

In order to test the sixth hypothesis, an exploratory factor analysis with principal axis factoring solution was conducted to assess the underlying structure of the transfer climate measure. Then, a correlational analysis was conducted between the extracted factors and intentions to transfer training.

Exploratory factor analysis with a varimax rotation was used since all factors in Rouiller and Goldstein's transfer climate inventory (1991) are conceptually orthogonal.

The results revealed 6 factor solutions (eigen value ≥ 1) that accounted for 46.21% of the intercorrelations of the responses. Factor loading of .40 or higher were used to select items to describe a factor and cross-loading items were eliminated from the analysis. Internal consistency of the first two factors was .82 for the first and .75 for the second factor. Therefore, subsequent analyses relied on these two factors which together accounted for 25% of the total variance. Factors three, four, five, and six were excluded because their internal consistency was below the acceptable low ($\alpha < .70$). Factor loadings (after rotation) for this analysis, including alpha and variance, are displayed in table 2.

Based on the factor loadings, a subset of items (those with loadings greater than 0.40 on one factor and with loadings lower than 0.40 on all other factors) were used to define (and label) each factor. These specific items, assigned to each factor, were then averaged to produce an interpretable factor. This procedure assigns an equal weight (i.e. 1) to each item within each factor and items used to define one factor are not used in defining another.

Factor 1 was saturated by five items ($\alpha=.81$) that consist of two goal items, two positive feedback extinction items, and one social cue item. This factor accounted for 13.43% of the data set correlation. The factor thus represented positive cues and reinforcements that were given by managers to trainees about their use of the trained behaviour, and is labelled 'positive feedback' (Rouiller & Goldstein, 1993).

The second factor (5 items, $\alpha=.75$) consisted of three self-control items, one task cue item and one social cue item. The factor accounted for 11.27% of the correlation matrix. It represented conditions that permit trainees to use what has been learned in training and is labelled 'self-control' (Rouiller & Goldstein, 1993).

Table 2.

Factor Loadings for the Transfer of Training Climate

Factor:	1	2
Alpha	.81	.75
Var.exp.	13.43	11.27
Item:		
TC23	.77	
TC13	.69	
TC20	.69	
TC10	.67	
TC1	.42	
TC11		.86
TC12		.63
TC30		.53
TC2		.49
TC5		.43

Note: Only factor loadings greater than .40 are shown
 TC denotes transfer of training climate items
 Var.exp. refers to variance explained

Regression Factor Scores

The unit weighted factor scores of the two climate factors previously described does facilitate the interpretation of the scales. However, such a procedure will tend to inhibit the orthogonality of each factor relative to all others. As the intent is to input these 'factors' into a regression, the loss of orthogonality may well create colinearity problems that may compromise the interpretation of the regression coefficients. To resolve this potential problem regression factor scores were also computed.

The use of regression factor scores is an alternative mechanism for creating scales. In this case each factor is constructed using all of the items. However, the items are differentially weighted - within each factor - based on the unrotated factor loadings for each. The advantage of this procedure is that it maintains the orthogonality of the factors. Its disadvantage is that the label and substantive interpretation of the factor is murkier.

The correlation between the unit weighted factor and the regression factor scores however, was very high (0.90 and 0.91 for the two factors respectively). This indicates that each regression factor score reflects the same underlying construct as does its respective unit weighted factor. Hence, the use of the regression factor scores was

maintained in the analysis (to eliminate colinearity) but the interpretation of these factors could be meaningfully based on the unit weighted factors.

Test of Hypotheses

H1: The relationship between trainees' attitudes and intentions to transfer training

Hypothesis 1 stated that trainees' attitudes towards transfer of training were positively correlated to intention to transfer training. To test this hypothesis, a simple correlation between these variables was calculated. The resulting correlation between attitudes and intentions to transfer training was positive and significant ($r(96) = .62, p < .01$). Hypothesis 1 is therefore supported. So, the more positive the attitude that trainees have towards transfer of training, the more likely is their intentions to transfer training.

H2: The relationship between Subjective Norms and Intention to Transfer Training

The second hypothesis stated that trainees' subjective norms towards transfer of training were positively correlated to intention to transfer training. A correlation conducted on the data indicated that subjective norms and intentions were positively and significantly correlated ($r(96) = .56, p < .01$), which provides support for hypothesis 2. Therefore, the more trainees believe they have the

support of their organizations to transfer, the more likely they will intend to transfer.

H3: The relationship between Perceived Behavioural Control (PBC) and Intention to Transfer Training

The third hypothesis stated that trainees' PBC was positively correlated to intentions to transfer. The correlation between PBC and intention to transfer training was not significant, ($r(96) = .16$), therefore, the hypothesis was rejected. These results indicate that there is no detectable relation in this data set between intentions to transfer and the trainees' perceptions of control.

H4: TPB constructs and prediction of behavioural intentions

The fourth hypothesis stated that Attitudes, subjective norms and perceived behavioral control significantly predict intentions to transfer training. In order to test this hypothesis, a multiple regression analysis was performed between intentions as the dependent variable and attitudes, subjective norms and PBC as independent variable. Table 3, set 1 displays the unstandardized regression coefficients (β), R square (R^2) and Variance Inflation Factor - VIF that detects the

presence of multicollinearity (Kutner, Nachtsheim, Neter, & Li, 2005). With multiple correlation coefficient $R = .70$, attitudes, subjective norms and PBC significantly predicted intentions to transfer training ($F(3,92) = 29.60, p < .001$) which provide support for hypothesis four. Only two variables: attitudes ($\beta = .46, p < .001$) and subjective norms ($\beta = .30, p < .001$) contributed significantly to predict intentions to transfer training. Intercorrelations between PBC and attitudes as well as between PBC and subjective norms were not significant.

According to Kutner et al. (2005), VIF in excess of 10 indicates extreme multicollinearity that prevents interpretation of the coefficients, while value of 1 shows no colinearity. As may be seen from the results, all VIF values are close to one, which means that multicollinearity among the three predictors variables is not a problem.

Table 3.

Multiple Regression Analysis Summary for Set 1 and 2,
Predicting Intentions to Transfer Training (N = 96)

Variable	B	SEB	β	VIF
Set 1				
Attitudes	.39	.07	.46*	1.265
Subjective Norms	.30	.07	.34*	1.258
Perceived Behavioural Control	.05	.07	.06	1.024
Set 2				
Attitudes	.42	.08	.62*	1.187
Climate Factors				
Positive Feedback	.05	.07	-.08	1.000
Self-Control	.18	.05	.32*	1.000
Perceived Behavioural Control	.03	.07	0.01	1.075
Note. For set 1 $R^2 = .49$; $F(3, 92) = 29.60$, $p < .001$ For Set 2 $R^2 = .50$; $F(3, 92) = 22.63$, $p < .001$				

H5: The importance of subjective norms over attitudes and perceived behavioural control in predicting intentions to transfer training

Hypothesis 5 suggested that subjective norms were the dominant predictor of intention to transfer training. Traditionally, the test of the relative importance of several predictors relies on an examination of beta coefficients following the computation of linear multiple regression. However, recent work (Budescu, 1993) has shown that this regression approach does not offer an optimal nor stable ordering of predictors. Instead, 'Dominance Analysis' was developed.

Dominance Analysis

Dominance Analysis (Budescu, 1993) is a recently developed procedure that determines the relative 'dominance' or importance of the predictors in a multiple regression analysis. These statistical procedures were developed because other techniques that rely on regression coefficients and correlations are unable to provide a stable ordering of the relative importance of the independent variables. Courville and Thompson (2001), for example, show that for a wide variety of measures and/or replications different orderings of the predictors'

importance can be detected. As presented by Azen and Budescu (2003), dominance analysis focuses on the proportion of variance in dependent variables (Y), that is accounted by predictors (X) in all possible subset models. Budescu uses the notation $R^2_{Y.X}$ to represent the proportion of variance in Y that is accounted for by the predictors in the model X. Levels of analysis for p- predictors are defined as all $2^{(p-2)}$ subset models for pairs of predictors. Hence, the relative importance of predictor is established as their unique independent contribution to the overall predictions (R^2).

As indicated in table 4, three levels are shown: the first is denoted as $k=0$, the second as $k=1$ and the third is $k=2$. These comparisons are essential to determine whether a predictor has complete dominance over other predictors in each level of comparison, or if the dominance is conditional. The first level, $k=0$, describes the increase in goodness of fit of the null model associated with the addition of each variable. Level $k=1$ describes the average dominance in which a model consisting of one predictor is improved by adding one of the additional predictors. Finally, level $k=2$ describes the average dominance in which a model consisting of two predictors is improved by adding one of the additional predictors.

Comparing values in those levels indicates that attitudes (X_1) dominate subjective norms (X_2) alone (.39 > .31), as well as in the presence of PBC (X_3) thus attitudes dominate subjective norms ($x_1 D x_2$).

In addition, attitudes dominates PBC (X_3) alone (.39 > .009), as well as in the presence of subjective norms (.18 > .001). Thus, attitudes dominate PBC ($x_1 D x_3$).

Finally, subjective norms dominate PBC alone (.31 > .009), as well as in the presence of attitudes (.01 > .001). Thus, subjective norms dominate PBC ($x_2 D x_3$). As a result, the three predictors are ranked according to their relative dominance importance: attitudes are the most dominant predictor for trainees' intentions, and subjective norms are more dominant than PBC ($x_1 D x_2 D x_3$).

Contrary to our fifth hypothesis and in light of the results of the dominance analysis, attitudes rather than subjective norms are the dominant predictors to transfer intentions. As revealed by the analysis, trainees' attitudes toward the transferred behaviour were the most dominant predictor of intentions. Whether the trainee intends to use his or her learned skills depends mostly on the perceived usefulness and the perceived importance of doing so. Table 4 presents dominance analysis for the independent variables in the TPB.

Table 4.

Dominance Analysis of Predictors in the Theory of Planned Behaviour $p=3$

Subset model (X)	$R^2_{Y.X}$	Additional contribution of:		
		X_1	X_2	X_3
Null and $k=0$ average	0	.39	.31	.03
X_1 Attitudes	.39	--	.01	.001
X_2 Subjective norms	.31	.18	--	.001
X_3 PBC	.03	.38	.30	--
$k=1$ average		.27	.19	.001
X_1X_2	.49	--	--	--
X_1X_3	.39	--	.01	--
X_2X_3	.31	.18	--	--
$k=2$ average		.18	.01	--
$X_1X_2X_3$.49			
Overall average		.28	.20	.02

Note: The column labelled $R^2_{Y.X}$ represents the variance in Y explained by the model appearing in the corresponding row. Columns labeled X_i contain the additional contributions to the explained variance gained by adding the columns variable (X_i) to the row model.

Predictors:

X_1 : Attitudes

X_2 : Subjective norms

X_3 : Perceived behavioural control

H6: The Relationship Between climate factors and Intentions
to Transfer Training

In order to test this hypothesis, the regression factor scores were used to predict the intentions to transfer training.

Hypothesis 6 stated that transfer climate factors positively correlated with intentions to transfer training. As predicted by this hypothesis, transfer climate factor 'positive feedback' was positively correlated to intentions to transfer training ($r(96) = .40, p < .01$). Transfer climate factor 'self-control' was positively correlated to intentions towards intentions ($r(96) = .41, p < .01$). Hence hypothesis 6 is supported.

H7: Predicting intentions to transfer training, using
climate factors instead of subjective norms

Hypothesis 7 stated that: Substitution of climate factors for subjective norms leads to higher levels of prediction of intentions to transfer in the TPB model.

In order to test this hypothesis, a multiple regression analysis was performed between intentions as the dependent variable and attitudes, climate factors and PBC as independent variables. Table 2 set 2 displays the

unstandardized regression coefficients (B), standard errors (SEB), standardized regression coefficients (β), R square (R^2) and Variance- Inflation Factor - VIF that detects the presence of multicollinearity (Kutner et al., 2005). For set 2, with multiple correlation coefficient $R = .71$, attitudes, climate factors and perceived behavioral control variables significantly predicted intentions to transfer training ($F(4, 91) = 22.63, p < .001$). Only two variables: attitudes and self control contributed significantly to predict intentions to transfer training. Intercorrelations among independent variables were significant except for the two climate factors. Results of the second regression analysis demonstrate that substitution of subjective norms for climate factors yield equivalent global prediction with no real shift in the regression coefficients: $R^2 = .49$ for TPB model, compare to $R^2 = .50$ using climate factors. Therefore hypothesis seven is rejected. This suggests that substitution of culture factors for subjective norms does not yield higher levels of prediction of transfer.

DISCUSSION

The goal of the present study was to predict transfer of training intentions. The study explored individual variables as well as organizational ones, as perceived by respondents.

Consistent with the theory of planned behaviour, the study considered trainees' attitudes, subjective norms, perceived behavioural control and their relation to intentions. Transfer of training climate was introduced to assess the relationship between transfer climate and trainees' intentions to transfer training. By doing so, we were able to infer whether substitution of subjective norms to transfer climate factors yielded higher levels of prediction of transfer.

Based on the results, we were able to determine that attitudes and subjective norms were associated with intentions to transfer training. Additionally, dominance analysis showed that trainees' attitudes towards intentions to transfer training were a more important predictor of intentions than subjective norms and perceived behavioural control respectively. A positive association was also found between positive organizational transfer climate cues and intention to transfer training. Perceived behavioural

control was not related to intentions in the data set. As a whole, attitudes, transfer climates and PBC predicted intentions to transfer training. The following sections will present implications, limitations and future directions based on the results obtained in this study.

Attitudes

As predicted by the first hypothesis, attitudes were positively associated with trainees' intentions to transfer training. Forty percent of the total explained variance was attributed to trainees' attitudes.

General intentions to use and apply customer service techniques were associated with trainees' favourable perceptions about the use of the skills. More specifically, intentions to transfer were associated with the perception that applying new skills would prove to be useful, important and beneficial (instrumental perceptions). These results converge with earlier studies (Axtell et al., 1997; Clark et al., 1993; Saks et al., 2002) that stress the importance and function of trainees' attitudes in transfer training.

As demonstrated by the dominance analysis, trainees' attitudes were the most important dominant predictor towards intention. Although predicted otherwise (Hypothesis

5 postulated that subjective norms are the most important dominant predictor), it is suggested, according to Ajzen and Fishbein (1980), that for some behaviours, attitudes are more dominant than subjective norms and perceived behavioural control. Further, Ajzen (1991) has indicated that relative importance of attitudes, subjective norms and PBC in the prediction of intentions will vary across behaviours, such that in some situations only one predictor will have dominance over the others, while in other situations others will be more dominating.

Subjective Norms and Intentions to Transfer Training

As predicted by the second hypothesis, subjective norms were positively associated with trainees' intentions to transfer training - 30% of the total variance explained was due to trainees' subjective norms. These findings suggest that social pressure may have significant correlation with intentions, and that the expectations of supervisors or peers could have a direct relation with intentions to transfer training. These results reinforce the pivotal role that immediate supervisors play in intentions to transfer, and perhaps to actual transfer behaviour. In other words, trainees who hold beliefs that

supervisors and peers support their skills use are more likely to transfer training.

Perceived Behavioural Control (PBC)

Contrary to the third hypothesis, our study shows that PBC did not relate to intentions to transfer training. Results show that trainees' level of control beliefs or self-efficacy over the target behaviour was not significant. As argued by Ajzen (1991): the magnitude of the PBC-intention relationship is dependent upon the type of behaviour and the nature of the situation. In this study, the decision about whether to use the trained skills is not entirely up to the trainee, which reflects a belief that the transfer skills can be influenced by others (such as managers and organizational norms). Thus the trainees' control perceptions over the behaviour in question are low. Armitage and Conner (2001) asserted that both measures of PBC, namely self-efficacy and perceptions of control, account for variance in behaviour, while self-efficacy alone accounts for the most variance in intention. Based on this information, a paired samples t test indicated that trainees' self-efficacy was significantly different from control perceptions, $t(95) = 3.90$, $p < .001$, effect size d

= .39 The difference, as defined by Cohen (1988), is medium.

Additionally, regression analysis revealed a significant association between self-efficacy items and intentions to transfer. 14% of the total explained variance was due to trainees' self-efficacy perceptions over transfer of training. As shown by Haccoun and Saks (1998), previous studies have come up with the same results - the present result is thus coherent with those previously found. No significant results were found between control items and intentions. We can assume that PBC was partially associated with intentions to transfer training. Thus, the more trainees were confident and at ease to apply the new skills, the more they intended to transfer. Taking that into consideration, in order to improve trainees' self-efficacy beliefs, organizations should provide their employees with resources such as skill building workshops, and on-the-job learning opportunities (Maurer & Palmer, 1999). Modeling and encouragement by supervisors may also be effective in facilitating transfer (Brinkerhoff & Montesino, 1995).

TPB as Predictor of Intentions to Transfer Training

As predicted by hypothesis 4, attitudes, subjective norms and PBC simultaneously predict intentions to transfer training. Thus the finding from this study reinforces the importance of determinants of intentions to transfer training such as attitudes and subjective norms.

Transfer Climate Factors

As predicted by hypothesis 5, transfer of training climate was found to be correlated with intentions to transfer training. Congruent with other studies (Rouiller & Goldstein, 1993; Tracey et al., 1995), these results demonstrate the importance of work environment on the application of newly acquired skills: trainees, it seems, do pay attention to organizational characteristics including reward systems, as well as managerial and peer behaviour in the development of their transfer intentions.

The exploratory factor analysis revealed that transfer of training climate was characterized by two factors. The first factor 'positive feedback' was represented by positive cues and reinforcements provided by managers to trainees about their use of the trained behaviour. The second factor, 'self-control' (Rouiller & Goldstein, 1993) represented conditions and/or process that permit trainees

to use what has been learned in training. An example of this is when trainees were allowed to practice real and job-relevant problems or when trainees are trained to deal with difficult situations.

As a result, providing trainees with reinforcement for their use of trained behaviour and avoiding negative feedback and punishment will promote transfer of trained behaviour. Ash (1997), Bradfield (1993), as well as Gumuseli and Ergin (2002) confirmed that employees that are oriented and supported by their managers and peers displayed higher levels of post-training transfer.

As shown by the second factor, training should expose trainees to possible obstacles and/or problems that may occur later as they begin to implement their training. Discussing these issues during and after training may help trainees to deal with difficult situations that could inhibit transfer (Rouiller, 1989). Marx (1982) developed a relapse prevention model that suggest that long-term maintenance of behaviour can be encourage by reviewing and anticipating future problems. Tziner, Haccoun and Kadish (1991) demonstrated that relapse prevention promoted post training mastery of training content. Haccoun and Labrèche's (1998) meta analysis of interventions designed to enhance transfer shows that relapse prevention, is, by far

the most powerful. In their analysis, relapse prevention alone enhanced transfer by 16%.

Prediction of intentions to transfer training, using
climate factors

Contrary to hypothesis 7, substitution of subjective norms for climate factors did not lead to higher levels of prediction of intentions to transfer training.

The set of independent variables, which included climate factors instead of subjective norms, predicted intentions to transfer, however results of the regression analyses for the prediction of intentions demonstrate that substitution of subjective norms yield almost the same predictive ability for both cases.

Our test of a model based on the TPB demonstrated the efficacy value of attitudes and subjective norms in predicting trainees' intentions to transfer training. In effect, the operationalization of 'norms' as defined by the TPB produces the same conclusion when they are operationalized as the climate factors defined by Rouiller and Goldstein (1993). As the Rouiller and Goldstein operationalizations are more within the context of training research, this suggests that their constructs can be effectively substituted for the norms issues. This study,

then, demonstrates the integration of a construct used in Industrial/Organizational Psychology literature with the 'norms' construct that is more dominant in social psychology.

Substituting climate factors with subjective norms increases the utility of the model. Climate factors are more detailed and provide more information about training context that may increase precision and applicability of the model regarding transfer, moreover climate factors are more habitual measures in transfer studies than norms. In studies using the TPB, subjective norms are concerned with the likelihood that important others approve or disapprove the performance of given behavior (Ajzen, 1991). However, this focus overlooks the characteristics of organization, and job situation that may promote or inhibit transfer of training. Thus, application of transfer factors as an alternative of subjective norms could provide an outline for specific development and implementation of intervention to facilitate transfer of training.

Using climate factors does not only explain the extent to which trainees believe important others in the organization influence their intentions to transfer, but also identify specific characters of such influences. As

shown earlier, climate factor 'self control' (along with attitudes) significantly predict intentions to transfer.

Practical Implications

From a practical perspective, the results from this study emphasize the importance of trainees' attitudes and transfer climate in organization. Understanding the variables that influence the transfer can be used as guidance toward facilitation of application of newly acquired skills and behaviour, and thus increases the likelihood that positive transfer will occur.

This study shows that trainees' intentions to transfer can be predicted by their attitudes as measured immediately after participation in a training program. According to Ajzen (2005), underlying beliefs toward behaviour should be assessed to create favourable attitudes towards transfer. Within this context, in order to effectively enhance trainees' attitudes towards customer service techniques, the organization should seek to 'convince' trainees that the skills taught in training are indeed useful for enhanced job performance. This recommendation is consistent with Maurer and Palmer (1999), who suggested that the skills taught in training be linked to job relevant outcomes valued by the trainees.

In terms of transfer climate, the results implied that organizations must ensure that an adequate support system exist to allow employees to engage in transfer behaviour, and that the organizational culture should encourage managers and peers to support others when employing new skills and behaviour. This includes assistance in skills application to the job, cooperation and support of managers.

Finally, our study shows that assessment of transfer climate factors in conjunction with attitudes may serve as a diagnostic tool that assesses trainees' intentions, as well as perceptions of transfer climate. This tool will provide useful information on whether trainees intend to transfer or not. Additionally, the tool will identify specific climate factors that may be used to develop and implement interventions to facilitate transfer. Limitations

Some limitations of this study should be noted. A key problem is that the study measured intentions, not behaviours. Although intentions are antecedents of behaviour (Ajzen, 1991), it remains an open question as to whether or not they will predict behaviour in a specific context. However a meta-analysis of 185 studies testing the TPB revealed an intention - behaviour correlation of .47

(Armitage & Conner, 1999, 2001). Thus intentions may, ultimately, prove a worthwhile proxy for transfer, though, far from a perfect one.

Another set of problems may derive from common method variance. According to Podsakoff, Mackenzie, Lee, & Podsakoff (2003), respondents may have a tendency to maintain consistency in their answers in order to appear rational. Another problem may stem from the need for social approval and acceptance which lead respondents to present themselves in a favourable light.

Depending on the behaviour in question, Armitage and Conner(2001) showed that social desirability accounted for 5% of the variance in respondents' attitudes and intentions. However, it should be noted that other studies involving the TPB did not show evidence of social desirability (Armitage & Conner, 1999).

The questionnaire structure may also affect study results. Since items in our questionnaire were randomly set, intermixing items of different constructs, as Podsakoff (2003) noted, may create co-variation among different contrasts.

Future Research Directions

Future research is needed to determine whether or not intentions to transfer training actually result in applications of learned skills in the work place. It would be useful to design a study that could incorporate a longitudinal methodology exploring behavioural change and maintenance of that behaviour over time.

Further studies are also suggested to investigate different sources of transfer of training climate cues and their effect on the trainees. This refers to the extent to which trainees transfer their skills as a result of managerial or peers' influence.

Conclusion

The results of our study suggest that attitudes as well as climate factors predict intentions to transfer training. Positive attitudes, as well as pertinent climate factors might increase intentions to transfer training.

Although substitution of subjective norms for climate factors did not yield any increased levels of prediction of transfer, climate factors are more specific and more habitually used as a measure in transfer studies. Therefore, transfer of training may be more effective if, in addition to training, targets of intervention include an

evaluation of trainees' attitudes and climate transfer in
the organization.

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APPENDIX A

Description of Demographic Variables

Characteristics of Participants

APPENDIX A

Description of Demographic Variables

Characteristics of Participants

Gender (N=96)

Female	Male
81.3%	18.7

Age (N=96)

Under 20	21-30	31-40	41-50	50 and above
43.8%	51.0%	3.1%	1%	1%

Employment - in months (N=96)

Mean	S.D	Mode	Minimum	Maximum
15.5	21.14	5	1	93

Time - in months at Current Position (N=96)

Mean	S.D	Mode	Minimum	Maximum
12.2	15.7	5	1	81

Retail Experience - in months (N=96)

Mean	S.D	Mode	Minimum	Maximum
36	33.6	5	0	168

Job Type (N=96)

Full Time	Part Time
41.6%	58.3%

Education level (N=96)

High School	College	Undergraduate	Graduate	Other
40.6%	27.1%	25.0%	6.3%	1%

APPENDIX B
Questionnaires

Hello,

At our organization, we are always looking to improve the training provided to our team members in the stores.

Attached you will find a questionnaire that asks your opinion about our training programs in general and our Customer Service training in particular.

This questionnaire was developed by an individual doing his graduate studies in Industrial Psychology at the University of Montreal, located close to our head office.

Your answers to his questions will provide us with information as to how effective are our training programs. This information will also provide the researcher with the data he needs to complete his research.

The questionnaire consists of 63 questions and should take approximately 10 minutes to complete.

Please complete this survey, put it in the return envelope and give it back to your manager by next Friday.

This is completely confidential – we do not need you to fill out your name

Sincerely,

Director, Organizational Development

CONSENT FORM

Title of research project: The Effect of Trainees' Attitudes on the Intentions to Transfer Training

Researcher : Amir Shoham, Faculté des études supérieures, Université de Montréal

Research director : Professeur R. Haccoun

A) INFORMATION FOR PARTICIPANTS

1. Objectives of research

The purpose of this study is to further our knowledge about effective transfer of training. The study investigates trainees' beliefs and their effect on the process of effective training.

2. Participation in this research

Participation in this research will entail filling in a questionnaire about how social interactions affect one's decision to use what has been learned in a course and to transfer it to their workplace.

It will take approximately ten minutes to answer the questions. They will be handed out at the end of training session.

3. Confidentiality

The information that you provide will be confidential. You will not even be identified by name.

4. Advantages and Inconveniences

By participating in this research, you are contributing to learning about the effectiveness of transfer of training. There are no inconveniences - answering this questionnaire will not inconvenience you in any way, other than the ten minutes it will take to answer the questions.

5. Rights to withdraw

Your participation is completely voluntary and you can choose to stop filling the questionnaire at any time, with no questions asked.

B) CONSENT

I declare that I understand the above noted information. All questions about my participation in this research have been answered, and I understand the goal, nature and advantages related to this research. I am aware that there are no risks or inconveniences related to this research.

After reflecting for a reasonable amount of time, I consent freely to take part in this research. I am aware that I can withdraw at any time, without prejudice and without needing to justify my decision.

Signature : _____ Date : _____

Surname : _____ Name : _____

I declare that I explained the goal, nature and advantages of this research. I mentioned that there are no risks or inconveniences by participating, and I answered all questions to the best of my knowledge.

Signature of researcher _____ Date: _____

Surname _____ Name: _____

For all questions regarding this research, you can contact Amir Shoham (researcher), at (information retirée / inform or at (information retirée / information withdrawn)

A copy of the information and signed consent form must be given to the participant.

All complaints relative to your participation in this research can be address to the ombudsman of Université de Montréal, phone number (514) 343 - 2100 or at the following email address: ombudsman@umontreal.ca

(16 Questions)	
Each question in this section refers to the Customer Service Training	
1. I want to use customer service techniques taught by my Store Manager.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
2. Using the customer service techniques taught by the Store Manager is:	Useless 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Beneficial
3. My Store Manager thinks that:	I Should 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> I Should Not use the skills taught in the Customer Service Training.
4. I am confident that I can use customer service skills while working at the store.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
5. Using the Customer Service Techniques taught by the Store Manager is:	Worthless 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Useful
6. It is expected of me that I will use the skills taught in the Customer Service Training program.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
7. For me to use the customer service skills as taught in the program is:	Easy 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Difficult
8. I am using the customer service techniques.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
9. Using customer service techniques taught by the Store Manager is:	Important 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not Important to me.
10. I feel that the team expects me to use the skills taught in the Customer Service Training program.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
11. I can decide whether or not to use the customer service skills in the store.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
12. I intend to use the company's customer service skills.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
13. Using the customer service techniques taught by the Store Manager is:	Essential 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not Required for success.
14. My colleagues, whose opinion I value, tend to:	Apply 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Not Apply what they learned in the Customer Service Training program.
15. Whether or not I will use the company's customer service skills is entirely up to me.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree
16. I plan to use the company's customer service techniques.	Strongly Disagree 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> Strongly Agree

(30 Questions)					
For the following questions, indicate how much you agree or disagree using 1 for opinions of strongly disagree, 5 for strongly agree and the range in between (2 to 4) for more moderate opinions.					
Mark \checkmark in the box that best corresponds to your answer.					
	Strongly Disagree 1	Somewhat Disagree 2	Neither Agree nor Disagree 3	Somewhat Agree 4	Strongly Agree 5
1. The Store Manager discusses performance expectations (based on training) with sales associates shortly after training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
2. New Sales Associates discuss problems that may arise when using training material with their team members.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
3. The job of a Sales Associate is designed in such a way as to allow them to use the skills taught in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
4. Newly trained Sales Associates who successfully use their training will receive a salary increase or extra commission.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
5. I practice using the skills that I learned in Customer Service Training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
6. The Store Manager and team members refuse to accept suggestions from newly trained Sales Associates that are different from those learned in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
7. Experienced Sales Associates make fun of the techniques learned in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
8. The Store Manager does not notice when newly trained Sales Associates use what they have learned in the training program.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
9. The Store Manager sets objectives for newly trained Sales Associates, which encourages them to use the training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
10. The Store Manager makes sure that newly trained Sales Associates have the opportunity to use their new skills immediately after training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
11. My training program teaches me which skills to use when dealing with difficult customers.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
12. Training tools are available in the store to support what newly trained Sales Associates learned in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
13. Newly trained Sales Associates who use what they have learned can expect to receive praise, such as being told that they have performed well, from their manager and/or supervisor.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
14. The Store Manager notices right away if newly trained Sales Associates do not use techniques learned in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
15. When newly trained Sales Associates use the techniques learned in training, the team thinks that they are not productive.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

	Strongly Disagree 1	Somewhat Disagree 2	Neither Agree nor Disagree 3	Somewhat Agree 4	Strongly Agree 5
16. Newly trained Sales Associates are not aware of how their training impacts their career advancement.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
17. In the training program, I learned how to handle mistakes that I might make later in sales.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
18. The Store Manager expects newly trained Sales Associates to make use of their training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
19. Newly trained Sales Associates discuss how to use their training with the Store Manager and other Sales Associates.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
20. The Store Manager and other Sales Associates appreciate newly trained team members who perform according to what they were taught in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
21. When newly trained Sales Associates do not use their training, they can expect negative feedback.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
22. Other Sales Associates disagree with the use of the techniques that newly trained Sales Associates use.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
23. The Store Manager helps trained Sales Associates set realistic goals based on their training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
24. The Supervisor and Store Manager meet regularly with newly trained Sales Associates to discuss ways to apply training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
25. Techniques taught in training apply directly to the jobs of new Sales Associates.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
26. Team members appreciate new Sales Associates who use skills taught in training.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
27. Newly trained Sales Associates who do not use their training do not get a raise.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
28. When Sales Associates use the techniques learned in training, other Sales Associates tell them that they are not performing correctly.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
29. Store Managers and other Sales Associates do not seem to care if new Sales Associates use their training on the sales floor.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
30. The training program prepared me for crisis situations on the sales floor.	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>

Thank you for taking the time to fill out this questionnaire

Please put the questionnaire in the envelope that has been provided, seal it and return it to the Store Manager.

APPENDIX C

Means and Standard Deviations for Each Questionnaire

APPENDIX C

MEANS AND STANDARD DEVIATIONS FOR THEORY OF PLANNED
BEHAVIOUR QUESTIONNAIRE

Theory of Planned behaviour: Intention

Item #	N	Mean	S.D
1	96	4.18	1.02
8	96	4.13	1.00
12	96	4.51	0.65
16	96	4.51	0.65

Theory of Planned behaviour: Attitude

Item #	N	Mean	S.D
2	96	4.34	0.86
5	96	4.40	0.75
9	96	4.46	0.88
13	96	4.20	1.01

Theory of Planned behaviour: Subjective Norms

Item #	N	Mean	S.D
3	96	4.20	1.30
6	96	4.50	0.74
10	96	4.30	0.91
14	96	4.08	0.93

Theory of Planned behaviour: Perceived behavioural control

Item #	N	Mean	S.D
4	96	4.60	0.89
7	96	4.26	0.92
11	96	3.25	1.40
15	96	3.53	1.35

MEANS AND STANDARD DEVIATIONS FOR TRANSFER OF TRAINING
CLIMATE

TRANSFER OF TRAINING CLIMATE: GOAL ITEMS

Item #	N	Mean	S.D
1	96	4.40	0.90
9	96	4.27	0.91
18	96	4.56	0.65
23	96	4.18	0.93

TRANSFER OF TRAINING CLIMATE: SOCIAL ITEMS

Item #	N	Mean	S.D
2	96	3.94	0.86
10	96	4.31	0.86
19	96	3.92	1.01
24	96	3.42	1.29

TRANSFER OF TRAINING CLIMATE: TASK ITEMS

Item #	N	Mean	S.D
3	96	4.38	0.64
12	96	4.22	0.98
25	96	3.68	1.21

TRANSFER OF TRAINING CLIMATE: SELF-CONTROL ITEMS

Item #	N	Mean	S.D
5	96	4.25	0.80
11	96	3.89	1.28
17	96	3.86	1.07
30	96	3.42	1.35

TRANSFER OF TRAINING CLIMATE: POSITIVE-FEEDBACK ITEMS

Item #	N	Mean	S.D
4	96	2.91	1.47
13	96	4.13	1.12
20	96	4.39	0.80
26	96	4.21	0.82

TRANSFER OF TRAINING CLIMATE: NEGATIVE- FEEDBACK ITEMS

Item #	N	Mean	S.D
6	96	1.90	1.14
14	96	3.83	0.98
21	96	3.39	1.13
27	96	2.90	1.16

TRANSFER OF TRAINING CLIMATE: PUNISHMENT ITEMS

Item #	N	Mean	S.D
7	96	1.86	1.04
15	96	1.70	0.95
22	96	2.08	1.06
28	96	1.86	1.12

TRANSFER OF TRAINING CLIMATE: NO- FEEDBACK ITEMS

Item #	N	Mean	S.D
8	96	1.82	1.13
16	96	2.58	1.21
29	96	1.71	1.02