

Factors Affecting the Transfer of Training among Civil Servants: The Case of Mongolia

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Abstract

The purpose of this article is to examine causal relationships among factors that affect the transfer of training. A mixed methods approach was used, which included quantitative and qualitative methods. The findings indicate that positive transfer happens in conjunction with individual characteristics, training design, and work environment. Based on the findings and limitations of this study, the following recommendations should be considered in relation to the future training of civil servants and the development of Mongolia. First, in order to enhance the positive transfer of training, training should be developed systematically and operate as a partnership among stakeholders. Secondly, pre- and post-training evaluation is needed to look for change in how well learners have mastered the skills and knowledge. Finally, organizations can maximize their return-on-investment with regard to training and implement value-creating strategies through effective transfer of training by considering all three determinants.

Keywords: transfer of training, individual characteristics, training design, work environment, learning

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ปัจจัยที่มีผลกระทบต่อการถ่ายโอนการเรียนรู้จากการฝึกอบรมของบุคลากรภาครัฐ: กรณีศึกษาของประเทศไทย

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บทคัดย่อ

การศึกษาในครั้งนี้มีวัตถุประสงค์เพื่อทดสอบความสัมพันธ์เชิงเหตุผลระหว่างตัวแปรเกี่ยวกับการถ่ายโอนการเรียนรู้จากการฝึกอบรม โดยใช้แนวทางการศึกษาแบบผสมผสาน (*mixed methods*) ซึ่งรวมทั้งวิธีการเชิงปริมาณและเชิงคุณภาพ ผลการศึกษาชี้ให้เห็นว่า การถ่ายโอนการเรียนรู้เชิงบวกเกิดขึ้นร่วมกับลักษณะส่วนบุคคล การออกแบบการฝึกอบรม และสิ่งแวดล้อมของงาน ขึ้นอยู่กับมิติอย่างที่เกี่ยวข้อง อย่างไรก็ตาม จากผลและข้อจำกัดของการศึกษา มีข้อเสนอแนะในการพิจารณาถึงความสัมพันธ์ของการฝึกอบรมให้แก่บุคลากรภาครัฐกับการพัฒนาในประเทศไทย ประกอบด้วย ประการแรก เพื่อเป็นการส่งเสริมการถ่ายโอนความรู้จากการฝึกอบรมทางบวก การฝึกอบรมจะต้องมีการพัฒนาอย่างเป็นระบบและดำเนินการในลักษณะการเป็นหุ้นส่วน (*partner*) กับผู้มีส่วนได้ส่วนเสีย ประการที่สอง การประเมินก่อนและหลังการฝึกอบรมต้องมีการดำเนินการเพื่อพิจารณาว่าผู้เรียนมีทักษะและความรู้เปลี่ยนแปลงไปมากน้อยเพียงใด ประการสุดท้าย องค์กรสามารถทำให้ได้รับผลตอบแทนสูงสุดจากการลงทุนเกี่ยวกับการฝึกอบรมและการนำกลยุทธ์ที่สร้างคุณค่าไปปฏิบัติผ่านการถ่ายโอนความรู้จากการฝึกอบรมที่มีประสิทธิภาพโดยการพิจารณาปัจจัยดังกล่าวทั้งสามประการ

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Introduction

The public sector has the important function of providing public goods and public services, and maintaining public order. With the rapid pace of globalization and technological change today, organizations require the development of a more focused and coherent approach to the development and management of people. Therefore, public organizations should pay attention to human resources development in order to better shoulder their social responsibilities. Without training and development, public organizations cannot maximize their use of human capital (Pham et al., 2010: 3). The fundamental purpose of training is to help people develop skills and abilities which, when applied at work, will enhance their average job performance in their present job (Tziner et al., 1991). Furthermore, organizations have realized the importance of training as a tool in gaining a competitive edge because training programs are seen as an organizational investment and not as an expense.

There is also growing pressure on public organizations to show results of programs. According to Brewer (2007:14), formal investments in organizational training and development are wasted because most of the knowledge and skills gained in training are not fully applied by trainees back on the job. The underlying reason is that most training outcomes fail to produce the sustained transfer of new knowledge, skills, and attitudes to the job (Subedi, 2004:592), which means that employees fail to apply the skills they have acquired to their jobs (Casper, 2005: 6). However, organizations and employees can achieve their goals if acquired skills are transferred effectively to the workplace (Bhatti & Kaur, 2010:657). Thus, the learning process is never complete until new knowledge and skills are finally transferred to the work environment.

Mongolia is a developing country which is located in the north of central Asia, bordering the Russian Federation and the People's Republic of China. The total size of the territory is 1,566,500 square kilometers and the population is 2.9 million (National Statistical Office, 2013). In Mongolia, between 1921 and 1990, for about 70 years, there was a socialist economic system. The country shifted to

a market-oriented economy in 1990. The political structure of Mongolia consists of legislative, executive and judicial branches. The President is the head of state and holds largely a symbolic role under Mongolia's constitution.

The Mongolian government has initiated a number of reform strategies aimed at improving the quality of life of the citizens, and to establish efficient and effective management systems. According to the Civil Service Council (CSC) of Mongolia (2009), the effectiveness with which the new policies are implemented is largely dependent on the quality of civil service administration and the ability of civil service staff to operate effectively in the changed environment. Thus, the reform of public administration should be built on the development of human resources.

For example, the capacity building that has been undertaken has often not been sustained because of the turnover in senior positions, sometimes apparently for political rather than performance reasons. For this reason, the Mongolian government requires more stability in civil service employment, combined with a greater commitment to building the capacity of its civil servants (CSC of Mongolia, 2008: 67). According to the Civil Service Council of Mongolia (2011), the educational level of civil servants is classified as follows: 48.8 percent of all civil servants possess a higher education diploma or university-level education. Specifically, 10.8 percent have a higher education diploma, 31.2 percent have a bachelor's degree, 5.5 percent have a master's degree, 1.3 percent have a doctoral degree. However, 51.2 percent of all civil servants have less than a higher education diploma. For example, 20.3 percent have a special education diploma, 21.3 percent have completed secondary schooling, 8.5 percent have not completed secondary schooling, 0.9 percent have completed primary education, and 0.2 percent are uneducated.

In general, Mongolia has underinvested in the capacity of its civil servants and human capital is underutilized in the public sector. Despite the considerable amount of money and resources the Mongolian government spends on its training investments, it has not yet determined to what extent such investments

benefit the organization. This implies that training programs have not achieved the desired results. For example, many complaints have been directed toward civil servants for their ineffectiveness and inefficiency. Conducting a lot of training does not mean that the training programs are effective if there are no improvements in productivity.

The reason behind this is that training and development in Mongolia is focused on controlled access to courses in order to maintain administrative systems rather than the learning of their organizations. This may be related to the structure of the public organization which is hierarchical and centralized. Moreover, the issue of training transfer has recently come up in the Mongolian public sector. Hence, the training and development of civil servants in Mongolia have faced the challenge of how to ensure the transfer of newly acquired skills and knowledge to the workplace successfully.

In addition, training evaluation in Mongolia is mostly focused on influences within the training context but ignores other influences within an organization that affect the performance outcomes of the learning. The effectiveness of any training program should not be evaluated based on the participants' performance while attending the training alone, but should also include the application of the knowledge and the skills learned during the training to the workplace.

Thus, the transfer of training is an interesting issue to be studied and it has historically been a critical topic of research in human resource development. Specifically, success and failure factors related to the transfer of training have always been the center of interest among researchers.

Research Objective

The objective of this study is to examine the causal relationships among factors that affect the transfer of training. To meet the purpose of this study, the following research question guides the study: What are the causal effects of the individual characteristics, training design, and work environment on the transfer of training?

Review of the Literature

The transfer of training

Transfer of training is defined as the degree to which trainees effectively apply the knowledge, skills and attitudes gained in the training context to the job (Baldwin & Ford, 1988:63). According to Baldwin and Ford (1988), for transfer to occur, learned behavior must be generalized to the job context and maintained over a period of time on the job. Similarly, Weldy (2009: 61) stressed that transfer involves a three-step process: learning or mastering the information covered during a training program, using the new skills and knowledge on the job, and maintaining the change in behavior over time. This means that the application of skills has been described as an ongoing exercise rather than a once-off task (Baharim, 2008: 20). It is not enough to learn, or apply something new, but also employees should maintain a learning behavior (Yaghi, 2006:25). In other words, learning behavior resembles a long-term anticipation and commitment to retain and utilize particular skills.

In the workplace, how to integrate learning with work tasks is a key issue. Learning at work is defined as observed changes in workplace behavior attributable to new knowledge, skills and takes places in the context of use and application. In other words, learning in the workplace cannot be separated from the context where knowledge and skills are used and are expected to result in positive changes in workplace behaviors and job performance. Employees are required to learn continuously and further apply what they have learned in training to real job problems, beyond what they could show at the end of training and what they could understand and memorize (Park & Wentling, 2007:312). After all, transfer of training is one of the major indicators to measure the success of learning.

There are two main reasons why the transfer of training is important, as follows:

- 1) In a world characterized by globalization and technological advances, life-long learning has become a necessity and organizations need to reposition themselves as learning organizations to maintain high quality outcomes.

In this regard, the transfer of training provides the vehicle for this to occur and derives more from a knowledge base (Subedi, 2004: 594). Further, creating competence requires knowledge to be applied to tasks by persons possessing certain skills.

In other words, the transfer of training is the improvement of learning in a new task through the transfer of knowledge from a related task that has already been taught (Torrey & Shavlik, 2009: 2). For example, the transfer of training focuses on learning by requiring individuals to learn, and transfer knowledge and skills learned in training back to the job (Weldy, 2009: 62). This means that the transfer of training could be a value creation process of employees for their organization to sustain a competitive advantage.

2) Improved accountability and evaluation systems have highlighted the importance of return-on-investment and the need to promote training programs that do have impact. For instance, some researchers (e.g., Baldwin & Ford, 1988; Broad & Newstrom, 1992) have realized that only a fraction of the skills and knowledge learned during training are really transferred back to the job, which means that it can be questioned to what extent such investment benefits the organization (Kontoghiorghe, 2001: 248). Similarly, Baharim (2008:1) stated that the main purpose of the transfer of training is to enhance the return-on-investment. However, determining the return-on-investment of training begins with an evaluation framework (Burkett, 2010:5), because the effectiveness of training depends ultimately on whether the learned outcomes are used in the workplace. Trainees can react positively to the training and can learn something, but it does not mean they will apply the training they have acquired once they are back on the job. Hence, the key criterion for evaluating training effectiveness is the extent of the transfer of training.

Overall, the transfer of training is an essential tool for learning and managing knowledge in organizations. Further, this is the first prerequisite of organizational sustainability and personal survival for employers and employees.

Thereby, the transfer of training has become even stronger given today's changing job requirements, the view of people as the key to competitive advantage, and the movement towards learning as a key mechanism for fully utilizing human resources (Ford & Weissbein, 1997:22).

Determinants of the transfer of training

Among the variety of models of transfer of training and related factors, Baldwin and Ford's (1988) framework and Holton et al.'s (1997) conceptual model are the most frequently cited and utilized in transfer studies. Baldwin and Ford (1988) established a framework defining the transfer of training as a function of three sets of constructs: 1) trainee characteristics, including ability, personality, and motivation; 2) training design, including a transfer design and appropriate content; and 3) work environment, including support and practical opportunities for use. According to this model, individual characteristics and work environment have a direct impact on the transfer of training, while training design also has an indirect impact in this framework.

Holton and his colleagues (Holton et al., 1997, 2007, 2008) have built a comprehensive and generalizable model of transfer of training (Learning Transfer System Inventory). This model illustrates individual performance as a function of a person's motivation to learn, environmental elements, ability elements, and secondary influences such as self-efficacy and learner readiness, characteristics, training design, and the work environment.

These frameworks have guided many transfer studies. Thus, the following section discusses some research studies that have examined the influence of individual characteristics on the transfer of training. This is followed by further sections describing the influence of training design on the transfer of training, and work environmental factors that affect the transfer of training.

Individual characteristics

According to Baldwin and Ford (1988), three types of individual characteristics can influence training and transfer outcomes. These include the trainee's level of ability, personality attributes, and motivation. However, of these characteristics, the trainee's motivation has been found to strongly relate to both learning (e.g., Gist et al., 1991; Mathieu et al., 1992) and transfer of training (e.g., Baldwin & Ford, 1988; Ford et al., 1998). Motivation to transfer learning can be described as the trainee's desire to use the knowledge and skills that have been learned in the training program on the job (Pham et al., 2010: 26). For example, expectancy theory suggests that learning is most likely to occur when employees believe they can learn the content of the program (Noe, 2008: 133). Similarly, trainees with higher motivation are more likely to transfer the training they have acquired to their jobs. Also, Velada et al. (2007:285) stated that when a trainee feels confident in his or her ability to perform, the more likely he or she will transfer such knowledge and skills to the job. In addition, Pham et al., (2010:26) found that the higher the motivation to transfer, the more transfer will occur. Thus, the motivation of trainees is positively related to perceived training transfer.

Training design

Training design refers to factors built into the training program to increase the chances that transfer of training will occur (Noe, 2008: 170). Training design seems to be one of the most influential factors affecting the transfer of training in the workplace (Lim & Morris 2006: 89). For example, Velada and Caetano et al., (2007: 289) found that training design is a significant predictor of training transfer, which includes purposeful elements that are part of the training program to enhance the possibility of transfer (Barnard, 2005: 20). One factor that inhibits the transfer of training is training design.

Although a variety of training design characteristics (e.g., principles of learning, sequencing and training content) which affect the transfer of training has been suggested in the literature (e.g., Baldwin & Ford, 1988; Yamnill & Mclean,

2001; Holton & Baldwin, 2003; Noe, 2008), empirical investigation of the effects of goal setting, feedback, and instructional methods on the transfer of training is quite limited. Therefore, this study attempts to address the following:

1) Training objective refers to the purpose and expected outcome of training activities (Noe, 2008: 139). Goal-setting theory holds that once a hard task is accepted, the only logical thing to do is to try until the goal is achieved. This implies that good training objectives provide a clear idea of what the trainees are expected to do at the end of the training (Noe, 2008: 140). In other words, employees learn best when they understand the objective of the training program.

2) Training content is the material that is covered in the training (Greg & Kenneth, 2011: 349). The content of any training program is intuitively important as a factor in effective learning and in transferring that learning to job performance. Trainees are more likely to transfer the training content to the work context when they have previous knowledge and practice on how to apply the newly learned knowledge and skills to the job. Furthermore, when training instructions are congruent with job requirements, an increased likelihood of transfer should exist (Velada et al., 2007: 284). Additionally, trainees who perceive training content accurately to reflect job requirements and to be useful in reaching desired job goals will be more motivated to learn, and then to transfer the training that they have acquired to the workplace (Yamnill, 2001:16). Moreover, transfer is facilitated when trainees are taught not just applicable skills, but also the general rules and theoretical principles that underline the training content (Bhatti & Kaur, 2010: 659).

3) Instructional method is how the training content is organized and structured for the learner (Greg & Kenneth, 2011: 351). The transfer of training seems to be maximized when various instructional methods, such as application examples and the use of analogies, are employed during the training experience (Lim & Morris, 2006:90). Particularly, hands-on methods are ideal for developing

skills and behaviors, getting the trainee directly involved in the learning. This method may include on-the-job training, simulations, self-directed learning, case studies, role plays and behavior modeling (Noe, 2008: 260). For example, most hands-on methods provide a better learning environment and transfer of training than presentation methods (Noe, 2008: 258). However, for each method, a high, medium or low rating is provided for the transfer of training (Noe, 2008: 260).

4) Feedback or evaluation is information about how well people are meeting the training objectives (Noe, 2008: 145). Instructors like to feed the results of daily evaluations back to participants as it encourages them to take responsibility for the results. Bhatti and Kaur (2010) found that utility reaction was more strongly related to transfer than was affective reaction. In other words, the process of developing planned actions enhances the transfer of the training to the work setting (Phillips & Stone, 2002: 4).

Work environment

Transfer climate refers to trainees' perceptions about a wide variety of characteristics of the work environment that facilitate or inhibit the use of trained skills or behavior (Noe, 2008: 176). When employees perceive that the organizational climate is supportive, they are more likely to apply their new knowledge to the work environment (Velada & Caetano et al., 2007: 285). Similarly, Rouiller and Goldstein (1993) stated that a positive organizational climate is important in order for transfer of training to occur. Noe (1986) also found that trainees cannot fully apply it to the workplace if there is not enough support or the surroundings are not conducive for such application. Transfer climate characteristics include manager and peer support, opportunity to use skills, and consequences of using learned capabilities, as follows:

1) Supervisory support is the extent to which supervisors support and reinforce the use of training on the job (Holton & Baldwin, 2003: 66). For example, Baldwin and Ford (1988) found that senior management support has a direct impact on training effectiveness. Russ-Eft (2002: 48) also found a positive

correlation between ratings of support from immediate supervisors and training outcomes. This implies that if trainees do not believe their supervisor will support training transfer, they will tend to believe that the training will have limited job utility and thus may not be motivated prior to training (Switzer et al., 2005: 23).

2) Peer support is the extent to which peers reinforce and support the use of learning on the job (Holton & Baldwin, 2003: 66). According to Yaghi (2006:8), the employees' application of new skills is contingent upon the influences of other people, particularly co-workers as peers, and is not contingent on only the abilities or capabilities of trainees themselves, also found a significant relationship between peer support and the application of new knowledge.

3) Opportunity to use is the extent to which trainees are provided with or obtain resources and tasks on the job, enabling them to use the training on the job. Holton and Baldwin (2003: 67) found that the lack of opportunity to perform tasks results in low performance; trainees receive different opportunities to transfer, and the various transfer opportunities may affect transfer outcomes. For example, if organizations provide more practical experience for trainees to apply their newly-acquired skills and knowledge, work performance is likely to be improved. Thus, opportunity to transfer is proposed to be related to transfer outcomes.

Learning as a mediating variable

Learning is the extent to which trainees change their attitudes, improve their knowledge, and increase their skills as a result of attending training. Learning can lead to behavior change and without learning no change in behavior will occur. The reason for this is that training cannot be transferred unless learning has occurred (Weldy, 2009:61). Hence, successful learning is needed before the increased knowledge can be transferred to the job (Delahaye, 2005: 365). This means that learning is a driver of training transfer (Baldwin & Ford, 1988). Further, Baldwin and Ford (1988: 65) found that training outcomes of learning and retention are seen as having direct effects on conditions of transfer. That is to say, for

trained skills to transfer, training material must be learned and retained. In turn, learning is viewed as directly affected by training input variables such as training design, trainees' characteristics, and work environment characteristics. Therefore, these training inputs have an indirect effect on transfer through learning.

Conceptual Framework

This study aims to explore the determinants of training transfer by empirically analyzing how different sets of variables simultaneously influence the transfer of training. Based on a review of the literature, this study utilizes a conceptual framework adapted from Baldwin and Ford's (1988) Model of Transfer Process. The conceptual framework of this study is presented in Figure 1 as follows:

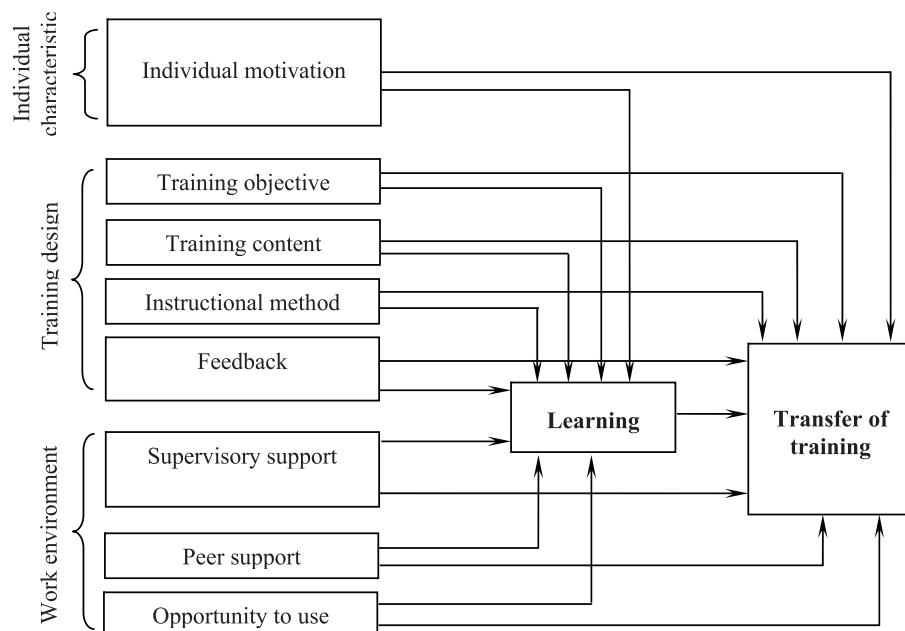


Figure 1. Conceptual framework of this study

This framework consists of two endogenous variables, namely, learning and the transfer of training, and a set of three exogenous variables comprising individual characteristics, training design and work environment.

From the conceptual framework presented in Figure 1, the major factors which are expected to have a positive direct effect on learning and transfer of training can be seen. Such factors include individual motivation, training objective, training content, instructional method, feedback, supervisor's support, peer support and opportunity to use. In turn, those factors have a positive indirect effect on transfer of training through learning. This means that learning has also a positive direct effect on the transfer of training.

However, unlike sub-dimensions in training design from previous researches (Baldwin & Ford, 1988) were proposed in this study. Also, this study addresses whether each sub-dimension influences the transfer of training directly, indirectly or both.

Hypotheses of the Study

From research questions and the proposed conceptual framework of this study, the following hypotheses are derived:

Hypothesis 1. Individual motivation, training objective, training content, instructional method, feedback, supervisory support, peer support and opportunity to use have positive direct effects on learning and the transfer of training.

Hypothesis 2. Learning has a positive direct effect on the transfer of training.

Hypothesis 3. Individual motivation, training objective, training content, instructional method, feedback, supervisory support, peer support and opportunity to use have positive indirect effects on the transfer of training through learning.

Research Methodology

This study used the questionnaire as a survey instrument for collection of data and information. Quantitative techniques were mainly used; however, qualitative analysis was also adopted for explanation of the research result. And, the unit of analysis was set at the individual level in this study.

Sample and data collection. Data were obtained by means of survey administration and interviews. The actual survey was distributed to 300 senior officers (respondents) who work in various public organizations such as ministries, government agencies and municipalities of Mongolia. From the 300 questionnaires that were distributed, 291 questionnaires were collected and the final sample size of valid cases was 285 (equivalent to a response rate of 95 percent). Qualitative data were obtained from interviewing 10 respondents in order to clarify information obtained from the quantitative study. In addition, hypothesis testing was subjected to statistical procedures such as path analysis which depicts causal relationships among the variables.

Measures. The measure of the transfer of training as the dependent variable was based on the studies of Tesluk et al. (1995). The independent variables were measured with items from the LTSI (Holton & Baldwin, 2003). The instrument design utilized an 8-point Likert scale. There were 65 total items on the survey: six questions measuring the characteristics of trainees, 28 questions measuring training design, 17 questions measuring work environment, five questions measuring learning and nine questions measuring transfer of training, respectively.

Validity and reliability. In order to assess the extent to which each of the variables represents a separate construct, an exploratory factor analysis was performed. The results of the factor analysis were that all items were loaded strongly (above 0.5) on all components. This means that all variances fit well with their component, in conformity with the study. In addition, one form of reliability is relevant in judging construct validity. The reliability of the scales of all items was satisfactory. Specifically, Cronbach's alpha values exceeded the recommended value of 0.7, indicating adequate internal consistency.

Findings and Discussion

The result of this study demonstrates the importance of individual characteristics, training design, and work environment on the transfer of training. This result is discussed more fully in the following section.

Hypothesis 1. Individual characteristics, training design, and work environment factors have positive direct effects on learning and the transfer of training. This hypothesis was partially corroborated in the current study.

The finding of the path analysis showed that four out of eight sub-indicators, namely, individual motivation, training objective, peer support, and opportunity to use produced positive direct effects on learning and the transfer of training. But supervisory support, one of the work environmental sub-dimensions, was found to have a negative direct effect only on learning ($\text{Beta} = -.168$), while training content in training design has a positive direct effect only on the transfer of training ($\text{Beta} = .212$). In general, this is in accordance with Baldwin and Ford (1988), who found that the trainee's characteristics (e.g., motivation), training design (e.g., content), and work environment (e.g., support and opportunity to use) factors had direct effects on learning.

This study indicates that when trainees believe in their capabilities to transfer learning, they are more likely to perceive that they can transfer the training to the work context. This correlates with Pham et al. (2010: 26), who found that the higher the motivation to transfer, the more transfer will occur. Furthermore, the training objective had a positive direct effect on learning and the transfer of training in the current study. This was revealed in the different sub-indicators in the training design of Baldwin and Ford's (1988) study. According to goal setting theory, goal setting helps participants to understand the desired results of each program and motivates them to achieve these results (Silberman, 2006: 49). As the interviewees mentioned, the training objective is the first element that supports the learning process and eventually training transfer. Another sub-indicator in training design, namely training content, had a positive direct effect only on the transfer of training. This finding differed from that of Baldwin and Ford (1988), who found that training content has a positive direct effect only on learning. However, the results of this study were consistent with Holton which found that "cognitive learning may well occur but the program participants may not have an opportunity to practice the training in the job context or may not

be taught the manner in which to apply their new knowledge on the job." This means that training content could have a direct effect on the transfer of training. In sum, learning objectives and training content are basic criteria for improving the transfer of training.

However, the correlation between instructional method and feedback in training design with the transfer of training were not statistically significant; hence, they were excluded from the model of this study. The results of the interviews indicated that most training programs are conducted using the instructor presentation method, which may not be the most effective method because there is very little feedback for the participants.

Further, the finding of this study indicates that peer support and opportunity to use are positive direct effects on learning and the transfer of training. This result is in accordance with Baldwin and Ford (1988). For example, peer support has been shown to increase the likelihood of learning transfer (Casper, 2005: 148). This implies that trainees that have a higher degree of peer support reported a greater degree of transfer of learning. Moreover, the opportunities to apply and facilities at the work places also play their parts ensuring successful training transfer, that trainees receive different opportunities to transfer, and the various transfer opportunities may affect transfer outcomes. However, supervisory support in work environment appeared to have a negative direct effect only on learning in the current study. According to Baldwin and Ford (1988), the direct effect of supervisory support on learning was supported; however, it is important to understand that when learning occurs in training, the work environment factor may have either a supporting or inhibiting influence, as suggested by Rouiller and Goldstein (1993). When considering the results of the interviews, the conclusion is that the barrier mainly came from the work environment, particularly the supervisor. Therefore, the supervisor may have both positive and negative effects on learning. However, the results of the present study were not consistent with Baldwin and Ford's (1988) approach in that supervisory support directly affected the transfer of training. This means that

support from supervisors does not directly affect the transfer of training but does, rather, directly and negatively affect learning.

Hypothesis 2. Learning has a positive direct effect on the transfer of training. The result of testing this hypothesis was supported by the literature, as Baldwin and Ford (1988) found that learning and retention are seen to have a positive direct effect on the conditions of transfer. For example, it was found that learning had a positive direct effect on transfer of training ($\text{Beta} = 0.741$). Moreover, learning accounted for 54.9 percent of the variance in transfer of training, which is quite respectable. This means that civil servants perceive that evaluating learning is essential because there is no change in behavior, as shown in studies by Baharim (2008).

Hypothesis 3. Individual characteristics, training design, and work environment factors have positive indirect effects on the transfer of training through learning. This study also found partially consistent results with previous studies; hence, this hypothesis was partially supported.

The finding of the path analysis showed that the indirect effects on the transfer of training were expressed by individual motivation (0.270), training objective (0.202), supervisory support (-0.124), peer support (0.173), and opportunity to use (0.106). However, this study obtained findings that differed somewhat from previous studies, such as that of Baldwin and Ford (1988). For example, only training objective in training design had a positive indirect effect on the transfer of training through learning, and other sub-indicators of training design were not indirectly correlated with the transfer of training. This result is consistent with the results of the interviews, as mentioned earlier, which indicates that the training objective is the first step that supports the learning process and eventually training transfer. However, training content, instructional method, and feedback were not seen to indirectly influence the transfer of training because these factors did not show any significant effect on learning. This is perhaps related to the nature of training and the setting in which it is developed, such

as what training materials are used for the participants or what instructional methods and assessments are employed in the training.

Amongst the sub-indicators of work environment, only supervisory support had a negative indirect effect, and the other two sub-indicators had positive indirect effects on the transfer of training. This suggests that senior officers may have some difficulties with their supervisors in terms of applying newly-acquired knowledge to the job, as Holton and Bates et al. (1997) have shown. Specifically, their study found that the work environment can be a barrier to the worker's use of knowledge and expertise. In other words, a negative indirect effect of supervisory support on the transfer of training is related to the learning process. This means that initially the supervisor gives negative feedback to employees in terms of learning, as found in the interviews, because they may be overloaded with work, are busy or have political reasons, which in turn may possibly lead to an insignificant relationship with the transfer of training. That is why supervisory support has a negative indirect effect on the transfer of training.

The final model of this study, with estimates of the effect of each path, is shown in Figure 2. This figure indicates that the individual characteristics, training design and work environmental factors had partial direct and indirect effects on the transfer of training, depending on their sub-dimensions. Their indirect effects were mediated by learning, with a path coefficient of 0.741.

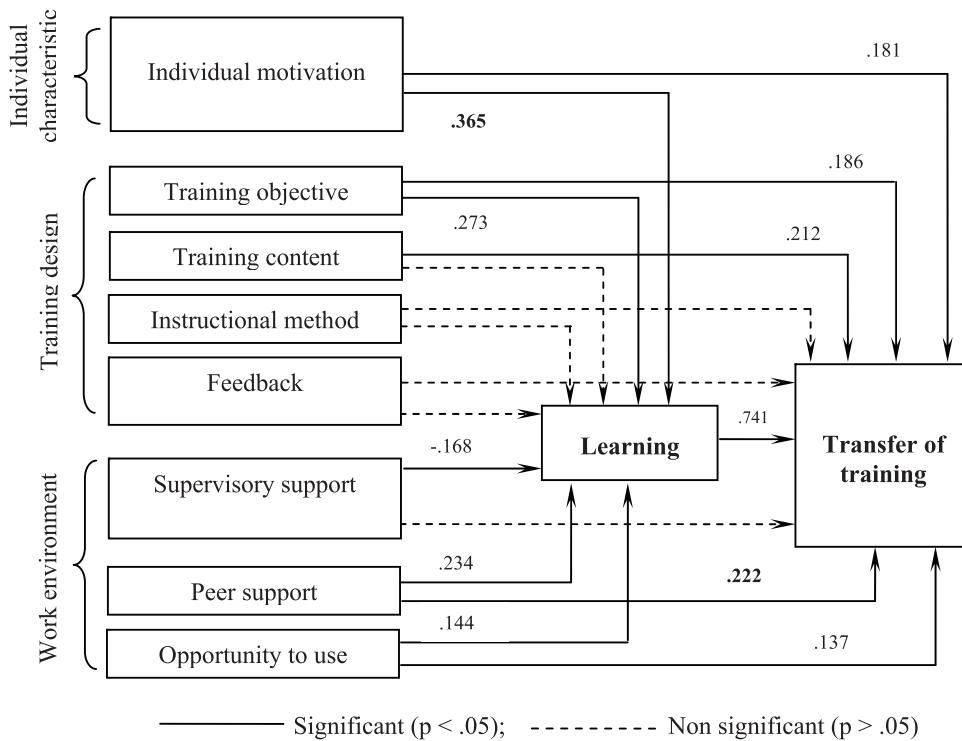


Figure 2. Revised model of the study

In Figure 2, at the same time, both direct and indirect effects on the transfer of training were estimated from individual motivation, training objective, peer support, and opportunity to use. And, their total effects on the transfer of training accounted for individual motivation at $0.451(0.181 + 0.270)$, training objective at $0.388 (0.186 + 0.202)$, peer support at $0.395 (0.222 + 0.173)$, and opportunity to use at $0.243 (0.137 + 0.106)$. This shows that individual motivation had the strongest total effect on the transfer of training. Employees' believe that having the motivation to learn and applying new knowledge influences the transfer of training directly and indirectly.

Moreover, the training content of the training design had a positive direct effect on the transfer of training rather than indirectly influencing the transfer process. Hence, its total effect on the transfer of training was $0.212 (0.212 + 0)$. Similarly, supervisory support in the work environment had only a negative

indirect effect on the transfer of training, which means that supervisor support did not directly influence the transfer of training, and its total effect was -0.124, which comes from 0 + (-0.124).

Overall, success in transfer of training is achieved by individuals who have high motivation to learn or transfer, clear training objectives, appropriate training content, and a supportive work environment which includes peers, supervisors and opportunity to perform.

Conclusions and Recommendations

This study presents findings from empirical research on factors affecting the training transfer of civil servants in the case of Mongolia. The study sought to isolate which factors were important and impacted on the transfer of training, and enhanced our understanding of training transfer in the public sector.

The research undertaken here has sought to test the three hypotheses discussed above. The application of path analysis identified the causal relationships among the variables proposed in the model of this study. The explanations given are based on the review of the literature in addition to an analysis of quantitative and qualitative data to support the findings.

The overall findings of this study suggest that Hypotheses 1 and 3 were partially corroborated, and that Hypothesis 2 was fully corroborated. The results of the path analytical model indicated that both the direct and indirect effects of individual motivation, training objective, peer support and opportunity to use on the transfer of training were positive. This means that employees' perceptions of the success in the transfer of training depended on the sub-indicators of individual characteristics, training design, and work environment. However, this is partially consistent with the literature because the sub-indicator in work environment, supervisor's support, had a negative indirect effect on training transfer, which means that there was not a direct relationship between them. Further, training content also did not have an indirect effect on the transfer of training through learning; rather, it had only a positive direct effect on the transfer of training.

Amongst all of the sub-indicators proposed in the model, peer support had the strongest positive direct effect on the transfer of training. Additionally, individual motivation also had the strongest positive indirect effect on the transfer of training. This means that individual motivation and peer support played the most prominent role in the transfer of training.

In general, one may conclude that the transfer of training would have a better chance of becoming successful when employees have a high motivation to learn and transfer, when transferable training design is developed, and when the organization provides a supportive work environment, as seen in other studies (e.g., Baldwin & Ford, 1988; Holton & Bates et al. 1997; Yamnill & Mclean, 2001; Noe, 2008). In other words, what can also be inferred from the findings of this study is that training transfer is not dependent on any exclusive factor but is, rather, a function of a set of factors taken as a systemic whole.

Theoretical and practical implications

The present study extends the work of Baldwin and Ford (1988) by demonstrating the transfer of training empirically. Furthermore, the result of this study reinforces the role of training objectives (e.g. Yamnill & G.Mclean, 2001; Noe, 2008), training content (e.g., Baldwin & Ford, 1998; Holton & Baldwin, 2003), motivational factors (e.g. Baldwin & Ford, 1988; Noe, 2008; Casper, 2005; Pham et al., 2010), and work environmental factors such as supervisor's support, peer support and opportunity to use (e.g. Baldwin & Ford, 1988; Rouiller & Goldstein, 1993; Holton & Bates et al, 1997; Noe, 2008), which comprise the systemic whole that accounts for the transfer of training.

Moreover, the current study added to the existing knowledge in transfer research by examining the direct and indirect effects of major factors with some unlike sub-dimensions from previous studies on the transfer of training.

Limitations of the study

The transfer of training was measured by self-reporting in the form of questionnaires rather than on actual behavior, and this may have influenced

the pattern of results. Hence, future research studies should reexamine the determinants of training transfer by using other data sources, data collection methods, and data analyses.

Recommendations

Based on the findings and limitations of this study, the following recommendations should be considered when training and development programs are implemented for Mongolian civil servants in the future.

In order to achieve more transfer of training, training should be developed according to two principles: systematic design and development, and partnerships among trainer, employee and manager. For example,

1. For individual characteristics, training programs should be designed in ways to ensure that incentives are offered, such as holding training programs in attractive locations, offering paid time off from work to attend, designing a program that is interesting and enjoyable, and making the success of the program a prerequisite for promotion.
2. A systematic process is needed for designing and developing training in order to improve learning and training transfer.

• Training is intended to serve specific areas of an organization, and on limited resources (e.g., budgets) are available in the case of Mongolia. Hence, it is necessary to prioritize training needs. Once the assessment phase has been completed, it is important to translate the issues identified in that phase into clear objectives. However, learning objectives should be application-oriented towards what participants will need to do on the job, and specify learning tasks rather than general objectives.

• The training content should focus on doing a few important things very well rather than covering all possible topics. For example, training content should include exercises that practice the repeated application of ideas in different contexts and problems, and ensure that what trainees face in training are similar

to those on the job. However, to be effective, care should be taken to leave enough time to both design and develop all of the necessary materials.

- The instructor presentation method should be supplemented by hands-on methods (e.g., case study, role play, discussion and simulation), which will get trainees directly involved in learning processes and in developing skills and behaviors.
- Daily evaluation is needed to gain feedback that instructors can use immediately to reinforce, develop, or correct performance. This may anticipate barriers to the transfer of training and reveal how application might occur in the job context, which means that the process of developing planned actions enhances the transfer of training.

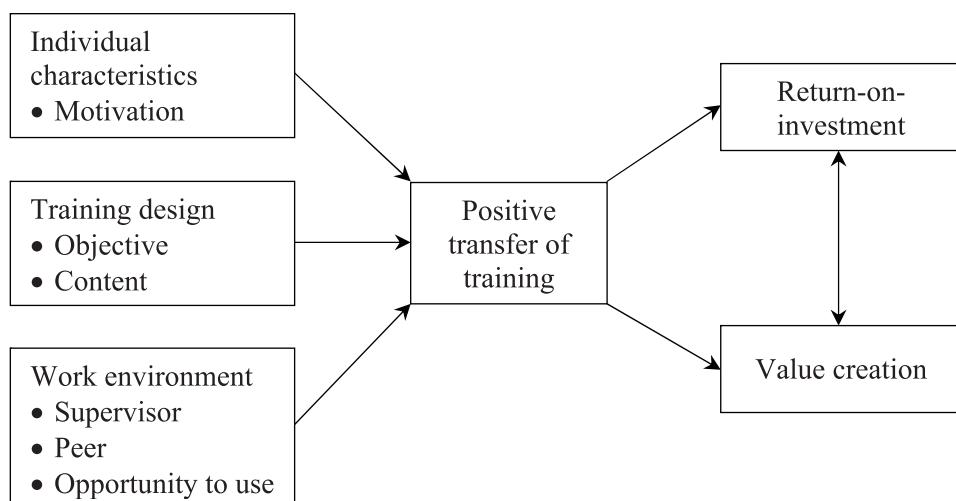
3. What can the organization do to foster training transfer before, during, and after the training?

- Before training: When managers work in partnership with trainers and trainees, transfer is much more likely to occur. For example, managers can work with employees based on a behavioral contract, which would include specific statements about how the employee will use the newly-acquired knowledge and skills on the job and how the supervisor will support those efforts.
- During training: The manager should monitor their capability and progress once staff have attended the training. For example, trainees' attempts to transfer training are more likely to succeed when they have discussed course content and materials with their boss during the training.
- After the training: The manager and trainee should work together to ensure transfer. Managers can use certain techniques including giving positive reinforcement for using the trained skills, and publicizing successes in the use of the trained skills. Managers might also consider reducing job pressures in the first few days that trainees are back from training to allow the trainees time to test out their new knowledge and skills. Furthermore, managers should create

opportunities for employees to refresh their knowledge and skills so that they are not lost, such as providing necessary support in the form of equipment, supplies, and other resources.

4. Evaluating learning is essential for the transfer of training. Evaluators can test employees by using a quiz or case study both at the beginning and at the end of training in order to look for how they will use their new capabilities in the job context. This level of evaluation plays a significant role in the transfer of training because learning can directly lead to behavioral change.

5. Based on the theoretical implications and empirical findings of this study, the following model is recommended for future studies on the transfer of training:



According to Figure 3, the findings of this study indicate that the positive transfer of training could happen in conjunction with 1) high motivation to transfer, 2) specific learning objectives that encourage people to be more persistent, 3) the application of assignments-oriented training content, which helps trainees to understand the link between the learned capability and real-world applications, 4) partnerships among stakeholders, such as trainees, trainers, and managers or co-workers, and 5) providing necessary support in the form of equipment, supplies and other resources for trainees to refresh their knowledge and skills.

This implies that the transfer of training would not provide any desired effects if only one of the factors is focused upon. Further, the transfer of training is a key vehicle for linking individual change to the requirements of the organizational system.

In this regard, organizations can maximize their return-on-investment with regard to training and implement value-creating strategies through positive transfer of training by considering all three determinants. Strategies can be linked to practice by implementing value-creating strategies through the transfer of training that is a value-creation process of employees, and in turn, that process can produce effective and measurable payback for the job. Furthermore, it may create real human capital. The implication here is that return-on-investment and value-creation processes are complementary to one another.

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