

Saimaa University of Applied Sciences
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Training Transfer improvement at organizational level

Master's Thesis 2014

Abstract

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Training Transfer improvement at organizational level, 139 pages, 10 appendices

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This thesis is a study of Training Transfer (TTransfer) as the process of application at a workplace all knowledge, skills, attitudes and capabilities gained after different trainings. The highest value of TTransfer for business is continuous improvement of job-related performance. The main purpose of this research was to analyse various methods of TTransfer enhancement in order to develop effective and flexible tool with recommendations to use.

The theoretical research was undertaken through precise review of diverse scientific literature, webinars and the Internet discussions. Empirical part was a largely qualitative study, however quantitative analysis was conducted with comparative diagrams and charts. Using best practices approach, the research carried out semi-structured interviews with experts in the human resource development (HRD) area.

Based on the findings, more than 120 factors affecting TTransfer were classified, including 23 newly suggested. A model of TTransfer factors was developed with the most significant variables, which is the basis for suggested TTransfer Strategy. On the meeting before and after training, the manager, learner and HR professional should approve actions for TTransfer maximization using the suggested TTransfer Strategy form and guide with a set of questions to follow. These proposed universal tools, as results of this study, are recommended to apply practically for TTransfer improvement.

Keywords: training effectiveness, application after training, training transfer, training transfer factors, training transfer improvement

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Abbreviations

HR – Human Resources

HRD – Human Resource Development

KSA – knowledge, skills and attitude

L&D – Learning and Development

TTransfer – Training Transfer

1. Introduction

This thesis is a study of Training Transfer (TTransfer) and the methods of its improvement, which are correlated to different factors influencing TTransfer success. Training Transfer, as the ultimate objective of every corporate - sponsored learning investment, is the process of application in the workplace of all knowledge, skills, attitudes and capabilities gained after training. The main value of TTransfer for business is positive impact on job-related performance improvement and, consequently, on organizational outcomes. It is very important for companies and their Human Resource Development (HRD) function to ensure that trainings were transferred at work as the core measure of training effectiveness. The research thoroughly scrutinizes the TTransfer phenomenon at organizational level in order to analyse and propose the most effective strategy to enhance and maximize after-training applications on the job.

1.1 Rationale and background

More than ever, organizations are looking for ways to endure and thrive in challenging economic times through effective human resource development strategies (Trautman 2013). Learning agility and speed are essential to remaining competitive, perhaps even viable, in today's increasingly knowledge - driven global economy (Alan 2011). Maintaining competitive advantage through the single most important source, human capital, requires ongoing investment in employee development. Business expects that training investments will be paid off by the dividends in terms of greater effectiveness, improved productivity, enhanced customer satisfaction, better commitment, higher retention, and so forth. It is indisputable that the true results of training and its effectiveness are represented in the learner's ability to demonstrate on the job what has been learned. If there is TTransfer success, the training, in fact, is worthy of investment. Therefore, finding solutions that will achieve the intended training objectives and turn learners into idyllic performers is a challenge which every company seeks to overcome.

Notwithstanding that TTransfer have been studied for several decades, still a major theme in the training literature is the existence of transfer issues in organizations. This problem is serious because trainings are unlikely to affect organizational results when as little as 10 percent to 40 percent of the knowledge or skills taught in training programs are effectively transferred to the workplace. (Baldwin & Ford 1988; Ford & Kozlowski 1997; Fitzpatrick 2001; Broad 2005; Burke & Hutchins 2007.) That happens mostly because there is usually no strategy in place to support TTransfer, which considers different factors influencing its success. Leveraging TTransfer improvement methods, this study intends to make an application for after the training happens as well as additionally attaching and increasing the value that Learning & Development (L&D) delivers to business. This is connected with the expectations that TTransfer will be a major differentiator for high-impact learning organizations in the next 10 years. (Bersin 2011.)

Most of previous studies have focused on individual level transfer for a particular training program and emphasised the need for transfer research from universal perspective. In order to meet this need, TTransfer is examined at the organizational level in this study to cover some of the stated research gaps and research-to-practice linkage in the L&D and HRD fields.

To sum up, nowadays, companies are beginning to recognize that training without TTransfer is a waste of time and resources. Considering, TTransfer importance for business and the high rates of transfer failure as well as gaps in theory, there is a need for more knowledge on TTransfer improvement, which is the main focus of this study.

1.2 Objectives and Research questions

The primary purpose of this research project is to analyse various methods of TTransfer improvement in order to develop an effective tool with recommended strategies to enhance TTransfer at the organizational level. Therefore, on the one hand, this paper stresses the necessity of researching TTransfer phenomenon theoretically and suggests the necessity of empirical investigation. On the other hand, this research is intended to suggest practical, plain-

language, flexible strategies and guidelines that have high potential for improving TTransfer within different training programs. The final results should serve HRD practitioners with the solutions that can be readily applied practically for their work and decision making.

To address the main objective and fulfil the existing research gaps, this study seeks the answers to research sub-questions and achieves sub-objectives which are stated in Table 1.

OBJECTIVES	RESEARCH QUESTIONS
<p>DEVELOP EFFECTIVE TOOL which can IMPROVE Training Transfer</p>	<p>What is the EFFECTIVE METHOD TO IMPROVE Training Transfer?</p>
<p>1. Understand the link between Training effectiveness and Training Transfer</p>	<p>1. What is the main part of Training effectiveness?</p>
<p>2. Propose new Training Transfer definition</p>	<p>2. What is the definition of Training Transfer?</p>
<p>3. Discover reasons of Training Transfer importance</p>	<p>3. Why Training Transfer is important for business?</p>
<p>5. Classify all the Training Transfer factors in a structured way</p>	<p>5. What are the factors which influence Training Transfer ?</p>
<p>6. Propose new model of Training Transfer factors with the most important ones</p>	<p>6. What are the most important factors influencing Training Transfer?</p>

Table 1. Objectives and research questions.

The understanding of the link between Training effectiveness and TTransfer is pre-condition of the research. Importance of TTransfer and its definitions variety make the sense of TTransfer value for business. Finally, the analysis and prioritization of factors that may contribute to, or detract from, TTransfer success, are used as a main framework for the methods of TTransfer improvement.

1.3 Study structure

For the purpose of response to the stated research questions and achieve objectives, its logical order is directly connected with the study outline. The structure has three main parts which are presented in Figure 1.

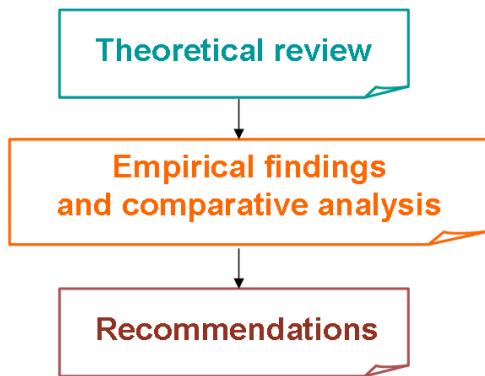


Figure 1. Study structure.

Theoretical review part has the combined scope of theoretical and empirical findings from scientific literature in the area of TTransfer. Empirical and theoretical findings as well as the researcher's opinion are connected all together through comparative analysis. Finally, the recommendations part provides proposals with implication for practice.

1.4 Methodology

Accurate review of diverse scientific sources is conducted for the theoretical part of the study. This included the educational, industrial, and social psychology literature, as well as general management and HRD materials. Additionally, several webinars, the Internet blogs and discussions with consulting companies specialising to the topic of TTransfer and training effectiveness, are used.

Empirical part is a largely qualitative study, however several statistical questions are integrated and quantitative analysis is conducted with diagrams and charts. Using best practices approach the research is based on in-depth semi-structured interviews with HRD experts. Thematic and prioritization analysis of the data is conducted.

1.5 Delimitations

A number of limitations should be kept in mind when interpreting the results for theoretical part of the research, which is **the first group of delimitations**. The main limitation is the concentration on trainings with all types and forms, whereas other learning activities are not covered. Another area of interest to the

current study relates to performance on the job after training – Training Transfer. Organizational level of TTransfer instead of individual level for a particular training program can be added as another limitation. Moreover, the attention is mostly given to the Limited factors type of scientific literature which suggests methods for TTransfer enhancement in direct correlation with factors influencing transfer success.

The second group of delimitations is connected to the results of empirical study. Firstly, scientific diversity of research methodology is closely connected with the time frame limits of the researcher. Therefore, the future study using various research methods and types of data collection is recommended. The other, probably, the most critical limitation for the empirical part is sample size, which is confined. Increasing of the size can improve the validity, reliability and results of findings. Occupational groups and participants' backgrounds are additional frames for the empirical results.

2. Theoretical review of Training Transfer

2.1 Training Transfer definition

The difference between learning and training

More than ever, organizations are looking for ways to endure and thrive in challenging economic times through effective human resource development strategies. Keeping sharp and retaining their most valued asset, human capital, firms have used various training and development interventions to leverage knowledge into competitive business results (Hutchins et al. 2010). A shift in Human Resource Development (HRD) in recent years from training as a top-down, isolated intervention to supporting and encouraging ongoing individual learning was viewed as a part of integrated approach to creating competitive advantage through people in the organisation. Sloman (2003) investigates the extent to which the shift from training to learning is taking place by analysing 12 case study organisations in 2003. He concludes findings by proposing a new paradigm for trainers: *Interventions and activities that are intended to improve knowledge and skills in organisations will increasingly focus on the learner.*

Emphasis will shift to the individual learner (or the team), and thus will be encouraged to take more responsibility for own learning.

Two key factors, according to Sloman (2003), have started the ball rolling towards this new approach:

- First, the impetus is coming from learners themselves, who prefer to learn through informal activities such as on-the-job training rather than through deliberate interventions that constitute training;
- Second, from an organisational perspective, intellectual capital has become critical for competitive advantage. As organisations turn to knowledge-intensiveness and change is constantly on the agenda, committed individuals with the appropriate knowledge and skills and a willingness to learn further are the key to success.

Learning is determined as the process by which a person constructs new knowledge, skills and attitudes (KSA), whereas training is one of several responses an organisation can take to promote learning. (Sloman 2003.)

Another key difference between training and learning is learning can occur anywhere at any time and generally is a long term process; while training is the activity, received at a specific place and time and generally is event driven. The role of training is to provide very well-planned instruction with specifically defined objectives, structure, and activities to enable people to master specific skills and knowledge, in the classroom or online. On the other hand, learning focused primarily on achieving permanent changes in behaviour. Learning interventions provides an individual with the opportunity to achieve the changes through personal experience, practice and information sharing. (Rosenberg 2013.)

To understand these two definitions better, it is helpful to illustrate the major differences in table format (Table 1).

Training	Learning
Knowledge and skills development	Behaviour change
Short term skill uplift	Long term change
Equips for known challenges	Equips for ambiguous future
Meets current organisational requirements	Defines organisational future
Focuses on the group	Is focused by individuals
Primarily structured	Primarily organic
Postpone work	Divert work

Table 1. Training versus Learning.

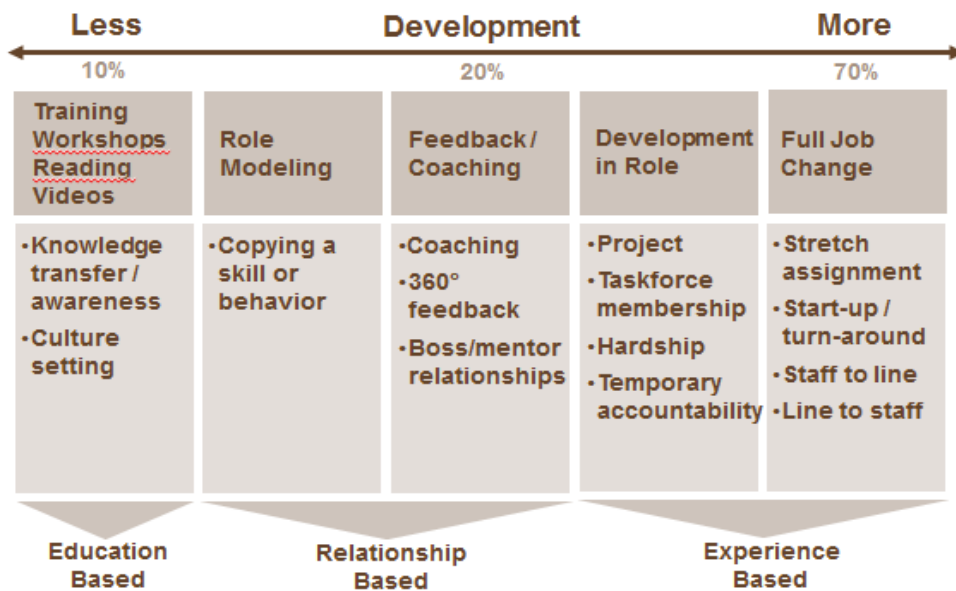


Figure 1. 70:20:10 Framework. (Organizational Talent Review in Novartis 2014).

The training-to-learning shift can additionally be connected with the 70:20:10 Framework, which was accredited to Lombardo & Eichinger (1996), and suggested that lessons learned are roughly 70% from tough jobs, 20% from other people, and 10% from trainings and self-education as shown in Figure 1 above.

This Framework enables individuals, teams and organisations to adapt and learn at the speed of business using different learning activities in order to continue development. Additionally, the other benefits of the framework include:

- shift to a high performance and learning organisation culture;
- improve productivity with affordable activities;
- support organisational agility and resilience;
- increase employee engagement;
- drive a strategic and responsive learning function;
- increase the impact and efficiency of development solutions. (Jennings 2014.)

The 70:20:10 Framework represents new blended learning approach with an emphasis on doing rather than learning. This doesn't diminish training's value; rather, it opens up new opportunities to be more successful and efficient in improving performance through learning activities. The main limitation of this study is the concentration on training as a part of learning process, whereas other learning activities are not covered.

Training effectiveness

In order to understand how and why training is successful or not, various components of training effectiveness should be specified. To begin with, training effectiveness can be defined as the extent to which training yields desired or relevant outcomes. There is not a single, all-encompassing, universally accepted training effectiveness criterion, nor should there be. Different training programs have different goals and processes, and thus require different measures of training effectiveness. However, while the specific measures may vary, it is possible to categorize effectiveness measures on the basis of similar features. (Tannenbaum et al. 1993.)

A notable exception was the theory of Donald Kirkpatrick (1976, according to Phillips & Stone 2002), where the concept of training effectiveness was decomposed into several separate outcomes: reactions, learning, behaviour, and organizational results. According to Kirkpatrick, training can have an impact on any (or all) of these outcomes. Jack J. Phillips has added a fifth level of evaluation to Kirkpatrick's model, which he calls Return on Investment (Level 5). (Phillips & Stone 2002.) On Table 2 there is the comparison of two authors on training effectiveness models.

Kirkpatrick	Phillips
Level 1: Reaction	Level 1: Reaction, Satisfaction, Planned Action
Level 2: Learning	Level 2: Learning
Level 3: Behavior	Level 3: Application
Level 4: Results	Level 4: Business Impact
	Level 5: ROI

Table 2. D. Kirkpatrick and J. Phillips training effectiveness models (Tannenbaum et al. 1993).

Although training effectiveness models have been used as evaluation tool to measure deficiencies in performance, the challenge is in finding training solutions that will achieve the intended objectives and turn learners into idyllic performers. Notwithstanding the complexities of training, it is indisputable that the true success of training is represented in the learner's ability to demonstrate on the job what has been learned. It is, thus, irrefutable that training well done is, in fact, worthy of investment. (Cheng 2008.)

The only reason that trainings exist is to drive business outcomes (Smith 2007, pp. 10). Training and development drives business outcomes by equipping people with new knowledge, skills and attitudes (KSA), which when applied to their work improve performance, resulting in better service, higher revenues,

improved quality and so forth, which collectively produce a competitive advantage for the organization. It is this myth, that training is the "silver bullet" that will improve organisational outcomes without the need to ensure the application in the workplace environment after the training. To move organisations forward, a greater emphasis now needs to be placed on linking training to workplace behaviour (Alan 2011.) Ensuring trained skills are used in the workplace, or transferred to the job, remains of critical importance for Human Resources researchers and practitioners (Burke & Hutchins 2008). There is a lot of theoretical evidence that a significant purpose of training and development is to improve performance (Swanson 1995), and training is of little value to organizations unless it is transferred in some way to performance (Holton et al. 1997), as well as the statement that training outputs should emphasize performance, not just learning (Siriporn & McLean 2001).

It goes without saying that one of the most important levels from D. Kirkpatrick and J. Phillips training effectiveness models is the application on the job after a training (Level 3), which then will lead to business results as a natural consequence. That is why another area of interest to the current research relates to the application after training or performance on the job.

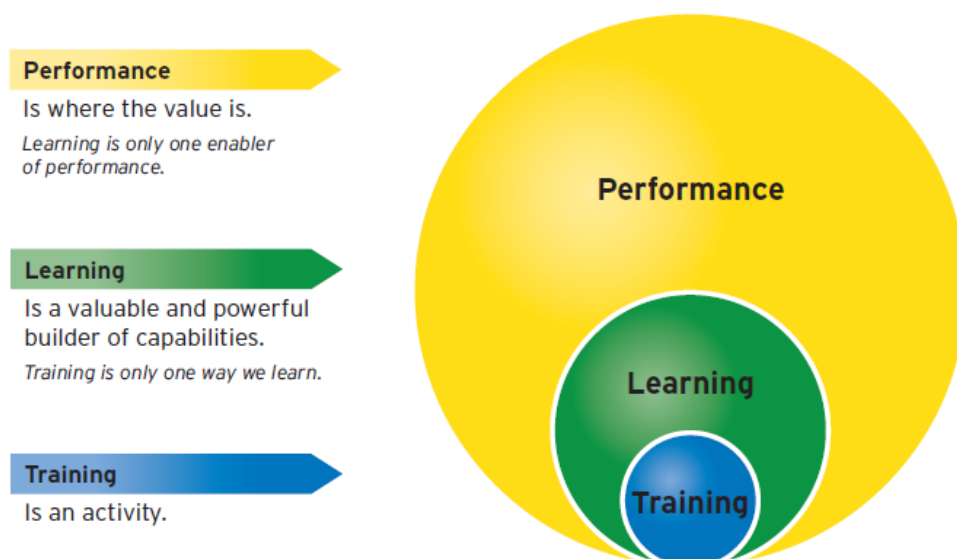


Figure 2. Training-learning-performance correlations (Rosenberg 2013).

In order to understand how performance, learning and training are connected together, providing unique value commensurate with its strengths, Figure 2 illustrates these relationships. The link “training to performance” will be the main theme of this study and in the next paragraphs scientific definition of this link – Training Transfer (TTransfer) will be scrutinized.

Definitions and classification of Training Transfer

Learning is, at its best, a continuous process, and training as its essential part, does not end with the completion of a course. The best learning organizations keep track of ongoing application and training impact to performance from participant and company perspectives, which is scientifically detraind as TTransfer. More than 25 definitions of TTransfer were found, which approves the sense of complexity of the topic and indicates that this transfer to the workplace is correlated with many factors. The main 10 definitions are presented in chronological order in Appendix 1.

The early definitions (1976-1987) were more concentrating on abstract context of application and the importance of change. In the 90’s the biggest emphasis was around work environment and application with job specific conditions as well as more deeper view of the TTransfer through the generalization and maintenance of trained skills on the job. During 2000-2012, the time intervention and general simplicity was added to the definition.

Finally, the definition of TTransfer from Calhoun et al. (2010) is the most closely correlated with the research: “The process of putting learning to work in a way that improves performance.” An important part of the definition is the concept of transfer as a process. In other words, it takes place over time, involves multiple steps, and is influenced by a number of factors; it is not a “one and done” event. The second key element of the definition is that TTransfer involves “putting learning to work” – that is, applying newly acquired skills and knowledge to the actual work of the participants and organization. A training program counts as a success only when the learning is applied on the job. If the new knowledge and skills never make it out of the classroom or the learners’ heads into actual job-related performance, then no benefit accrues. Lastly, the definition makes clear

the ultimate purpose of training and development area: performance improvement.

In scientific literature TTransfer is divided into two main groups. The first is connected with three forms according to Ellis (1965):

- positive transfer in which performance on one task aids a second task;
- negative transfer when one performance inhibits the other;
- zero transfer in which no effect occurs or the effects cancel each other.

Positive transfer is indicated by some essential ingredients, such as a presumption of prior learning of knowledge and skills in an off-the-job context; application of the knowledge and skills on the job; and maintenance of knowledge and skills over a reasonable time period (Newstrom 1986). In contrast, zero transfer implies that training had no effect and negative transfer suggests that the training had an inhibiting effect on job performance (Ellis 1965).

The second grouping of TTransfer is done by Spitzer (1984) and Laker (1990), who claim two types of learning transfer exist: near transfer and far transfer. According to them, knowledge and short-term skills development can be immediately applied to one's present job and results in near transfer while underlying theories, principles, and concepts are conceptually applied to more diverse situations and can result in far transfer.

After the identified connection among learning, training effectiveness and TTransfer, the next chapter is devoted to the transfer problem as well as TTransfer necessity and importance for business.

2.2 Importance of Training Transfer in organizational context

There is strong consensus that acquisition of KSA through training is of little value if the new characteristics are not generalized to the job setting and are not maintained over time (Kozlowski & Salas 1997). Even successful training programs cannot guarantee that newly learned knowledge and skills will be

transferred to the workplace. When there is no transfer, there are no benefits, without transfer, training adds no value. In other words, training is useless if it cannot be translated into performance.

According to Swanson (1995), for HRD (Human Resources Development) to become a core business process, performance is the key. Transfer of training is a core issue with respect to linking individual change to the requirements of the organizational system (Swanson 1995, according to Yamnill & McLean 2001).

An ideal picture of Transfer during and after training is a typical learning curve, which is shown at Figure 3. Although, it does not proceed smoothly: the plateaux and troughs are normal features of the process, the general progress shows the growth of competency during the time. Therefore, the application of the gained skills and knowledge has occurred.

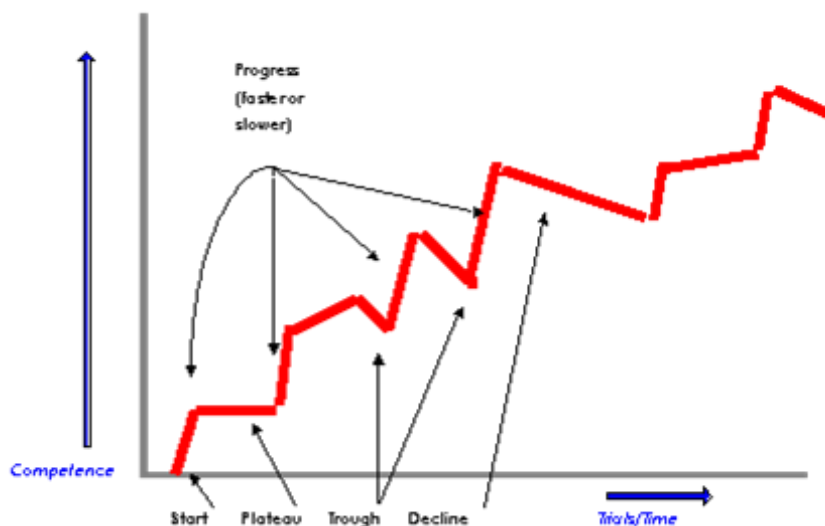


Figure 3. Learning curve (Atherton 2013).

The progress of learning and growth of a competence additionally can be viewed through stages of Reynolds' (1965) model (Figure 4) and Taylor model (Figure 5). These models represent the evolution of new KSA with the time and application on the job. Thus, the final phase is characterised by an ability to teach the gained skills, which is the high mastery – Second Nature according to Atherton (2013) and mature practice according to Taylor (2007).

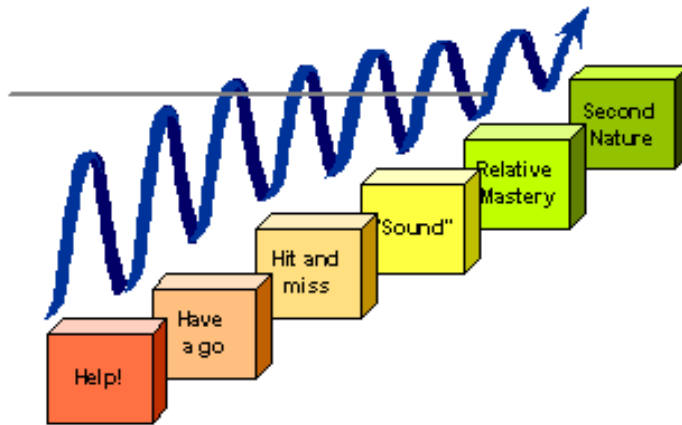


Figure 4. Modified Reynolds' model of Learning curve (Atherton 2013).

Thus, improving TTransfer represents a huge opportunity for Training and Development departments in HRD organizational structure (T&D) to increase the value it delivers. That is why a recent research report by Bersin & Associates stated: "Based on our research, we expect learning transfer support to be a major differentiator for high-impact learning organizations in the next 10 years" (Bersin, J. 2011).

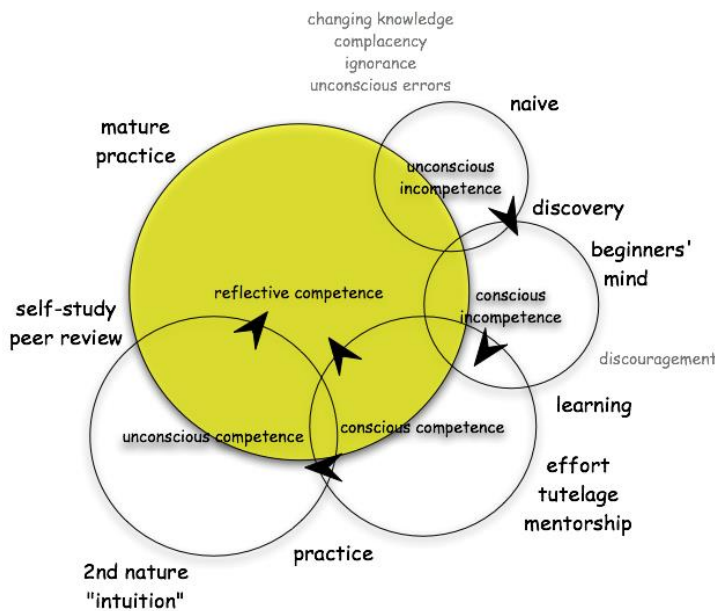


Figure 5. Conscious competence learning model (Taylor 2007).

Training, as a ticket to performance improvement, is often a bumpy and difficult road. Notwithstanding that transfer issues have been studied for several

decades, and still a major theme in the training literature is the existence of a transfer problem in organizations (Baldwin & Ford 1988; Burke 2001). This problem is serious, as it means that individuals are failing to improve their behaviour and performance on the job, such that training is unlikely to affect organizational performance (Kozlowski et al. 2000).

Different statistics were found in the topic of TTransfer success. In a recent survey by McKinsey & Company (2010), only one-quarter of executives felt that their investment in training actually improved performance (Getting More from Your Training Programs 2010). For some two decades, researchers have noted the dismal rate of transfer in organizations in what has become known as the “transfer problem” and have continued to report that only about 10% of learning transfers to the job (Fitzpatrick 2001). Another estimation from empirical studies was done by Kirwan & Birchall (2006) that only 10–20 % from what is learned during the training is applied in the workplace. According to Bersin (2006), only a small portion of training budgets is spent to determine the effect of training on job performance and those organizations that do evaluate results often find little impact. One of the more optimistic estimates suggests that no more than 15% of learning transfers to the job (Cromwell & Kolb 2004). Other studies of transfer rates find typical average is only in the 10%–40% range (Baldwin & Ford 1988; Ford & Kozlowski 1997). This finding presents a serious problem for organizations, given that transfer of training is considered the primary leverage point by which training influences organizational level outcomes and results (Kozlowski et al. 2000).

The real picture of Learning Curve and TTransfer might be illustrated in Figure 6. As shown, there is a myth that training brings people directly to competence (line 1), but usually the best that can be expected is to get people ready to continue building skills back on the job (line 2). Always there is risk that what participants learned will occur as atrophy (line 3). However, the ultimate result still can be that learners will reach higher levels of competence, even mastery (line 4).

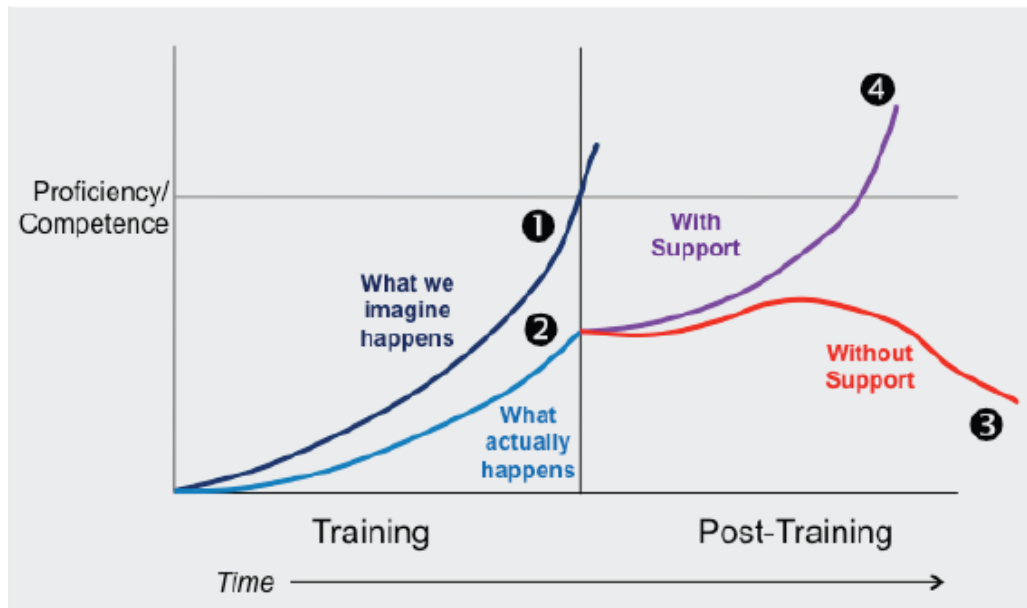


Figure 6. Rosenberg Learning Curve (Rosenberg 2013).

Nowadays, companies are beginning to recognize that training without TTransfer is a waste of time and resources. Improving TTransfer is the single greatest opportunity for learning professionals in order to improve the value produced by training and development. Considering, on the one hand, TTransfer importance for business and, on the other, the high rates of transfer failure, there is the need for more knowledge on the factors affecting the transfer process, which is discussed in the next chapter.

2.3 Factors influencing Training Transfer

In response to the transfer problem, training researchers have identified and studied different factors that facilitate the TTransfer. However, most of these studies have focused on individual and situational factors or on interventions for improving individual level transfer of training for instance, for a specific training program. However, there have been several limited attempts to study transfer of training at the organizational level. Ford & Weissbein (1997) discussed the need for transfer research from an organizational perspective and suggested that “research is needed that explores transfer not only from an individual program perspective, but also from a departmental and organizational perspective” (p. 38). This perspective is consistent both with Holton et al.’s (2003) finding that transfer systems differ across organizations and with Rouiller and Goldstein’s

(1993) proving that different transfer climates exist in organizations. If such differences exist across organizations, then it follows that transfer of training must also differ across organizations. Although some advances have been made in transfer research at the group level of analysis, the focus has still remained on the transfer of individuals following participation in a particular training program rather than transfer at the organizational level. TTransfer in this research is considered an organizational-level variable, such that the transfer of training will vary across organizations, as will the activities that organizations incorporate into their training programs to facilitate transfer. Therefore, TTransfer factors in the present study are scrutinised at the organizational level, which is added as limitation.

There are numerous factors which can influence training effectiveness. In this chapter, the need for better understanding what are those many factors that may contribute to, or detract from, training effectiveness will be emphasised via chronological literature review, discussion of different classifications of these factors as well as the comparison of their value and influence to TTransfer. According to Burke & Hutchins (2008) there are three major classifications of the factors which influence TTransfer:

The first classification is viewed as primary transfer influences (Alvarez, Salas, & Garofano 2004; Baldwin & Ford 1988; Burke & Hutchins 2007; Ford & Weissbein 1997; Salas, Cannon-Bowers, Rhodenizer, & Bowers 1999), which are also divided to three main factors' categories:

- **Learner characteristics** include attributes regarding the trainee's ability, motivation, personality, perceptions, expectations, or attitudes and many others that influence transfer.
- **Training program characteristics** refers to the instructor's plan or blueprint for the learning intervention, typically based on needs assessment information and firm goals, or the activities occurring during training delivery—all of which can influence transfer.
- **Work environment** refers to any influence(s) on transfer existing or occurring outside the learning intervention itself.

The second major classification is based on the work of Broad (2005) and Broad and Newstrom (1992), which specifies the time period when the activity or action occurs. Practices that support TTransfer from training interventions occurred at different time period:

- **Before** refers to activities occurring before the learning intervention that support transfer;
- **During** refers to activities occurring during the learning intervention that support transfer;
- **After** refers to activities occurring after the learning intervention that influence transfer.

The third major classification is also based on Broad (2005) and Broad and Newstrom (1992); it specifies the stakeholder or party who is most heavily involved in the transfer support action taking place. Broad's work identifies trainees, trainers, and supervisors as the three primary stakeholders affecting TTransfer:

- **Learner** is the trainee participating in the relevant learning intervention as training;
- **Trainer** is the instructor who designs, develops, and (co-)delivers the intervention;
- **Line manager** refers to the trainee's immediate supervisor or line manager.

However, other participants were suggested by the researcher according to various theoretical resources and past experience as the following:

- **TOP manager** is the higher level manager who represents upper level layers of organizational structure in a company;
- **Peers of learners** who can be the same participants of one training program as well as colleagues who work together and cooperate with the learner;

- **Subordinates of learner** who are in the same team according to the organizational structure;
- **HR professionals** whose job to organize, coordinate and support different trainings and other learning and development activities.

Having classifications stated above in mind, Burke & Hutchins (2008) recommend not to limit TTransfer with the category of time period. They advise to extend beyond the classic before, during, and after evaluation of transfer: it is important to consider that transfer is not necessarily time-bound. “Put simply, the transfer problem is not rooted in a specific time phase and, thus, its remedies should not be either”. (Burke & Hutchins 2008.) Broad (2005) acknowledges that transfer strategies used in one period may extend to other periods. Such tactics help extend beyond the training itself, promotes for continuous on-the-job learning and involve all “players” through the process of transfer enhancement. Therefore, in this chapter, the analysis of TTransfer factors is organised according to the suggestions of different scientists, and the factors are widely scrutinised according to the first classification – primary transfer influences as a first-priority factors. However, the second and third classifications as the duration of the transfer process at specific time phases and the stakeholder who take part in will be considered and discussed additionally in general terms with the empirical emphasis. Following theoretical findings, TTransfer will be viewed as not time-bound and all the participants have already included to the first classification directly, which is the main focus of this chapter.

Profound theoretical analysis of all possible factors according to the first classification, primary transfer influences, is conducted in this study, which resulted in 120 different factors affecting TTransfer. All the factors were classified to 3 categories, 5 major groups and 32 sub-groups. The whole TTransfer factors’ analysis is represented in Appendix 3. All of these categories play an important role in TTransfer by moderating, mediating or directly predicting transfer success.

1. INDIVIDUAL LEARNER CHARACTERISTICS		2. TRAINING PROGRAM CHARACTERISTICS	3. WORK ENVIRONMENT CHARACTERISTICS	
1.1. Personal factors	1.2. Motivation factors		3.1. Work system factors	3.2. People-related factors

Table 3. Classification of factors influencing Training Transfer (3 categories, 5 major groups).

Analysing the variety of factors, which either directly or indirectly affect TTransfer and comparing them with each other, the main 5 major groups of factors are examined further, which are presented at Table 3. In this chapter, the distinction of some factors for each of the group is organized around some of the most frequently discussed and sound factors in the theory. Literature review of TTransfer factors is presented first in order to review the development of the research on this topic and deeply understand how these factors were recognised and empirically approved as important for training effectiveness during different time bounds.

2.3.1 Literature review of Training Transfer research evolution

To identify how training interventions influence performance outcomes in organizations, many researchers have conducted TTransfer studies, which have revealed numerous findings about the effect of such transfer factors on employee and organizational performance outcomes (Holton, Ruona & Leimbach 1998). In order to examine the evolution of important studies, those who have separately proposed full or partial TTransfer influencing factors, the literature review is organized chronologically and grouped into four time stages. Great contribution to the literature review was added by Cheng & Hampson (2008), whose research is the main part of the following review below. Additionally, the stage for the time period From the Year 2008 to Onwards was added to refresh the latest updates for the TTransfer topic.

From the 1960s to the Late 1980s

The contributions of Baldwin and Ford (1988), Kirkpatrick (1967), Noe (1986) and Noe and Schmitt (1986) were early and influential. Kirkpatrick (1967) established the four major indicators for training evaluation, with the contribution to the transfer literature - the provision of the training effectiveness taxonomy. Olsen's (1998) definition relates the transfer process to the behaviour indicator of Kirkpatrick's (1967) taxonomy. Noe (1986) and Noe and Schmitt (1986) adopted the same definition of transfer of training and further expanded Wexley and Latham's (1986) notion of trainability (a function of ability and motivation) to include an environmental component.

These early publications influenced Baldwin and Ford (1988), who reviewed the major empirical studies of TTransfer that were done on or before 1987. They also completed a critical evaluation of the transfer literature and proposed a systems model of transfer of training. Their framework highlights the importance of such training inputs as trainee characteristics (ability, personality, motivation), training design (principles of learning, sequencing, training content), and work environment (support, opportunity to use) on training outputs (learning, retention) and the key transfer outcomes such as generalization (application of learned outcomes to a variety of situations) and maintenance (continuing to use the new methods).

From the Early to the Late 1990s

During this period, there was an explosion of empirical research on the transfer of training. Relevant studies in this period were influenced mainly by the work of Baldwin and Ford (1988) and Noe (1986). Empirical research was designed to examine the dependent and independent variables suggested by both of these 'classic' review papers. Updated narrative review papers that have addressed their implications have also been published (Noe & Ford 1992; Tannenbaum & Yukl 1992). As noted by Ford and Weissbein (1997), much progress has been made during this period.

Two notable post-training interventions (goal setting and relapse prevention training) were proved to enhance the transfer process (Burke & Baldwin 1999; Gist et al. 1991; Tziner et al. 1991; Werner et al. 1994). Arthur et al. (1998) also revealed that delays in the actual application of training on the job created significant skill relapse. Pre-training self-efficacy has been found to be a highly important variable in understanding training and job performance (Mathieu et al. 1993; Stajkovic & Luthans 1998). The positive effect of post-training self-efficacy on transfer behaviour has also been proposed (Mathieu et al. 1993). Research in this period has revealed varying results. Some studies have consistently shown that declarative knowledge, skill acquisition and post-training self-efficacy predict transfer behaviour (Ford et al. 1998; Tannenbaum et al. 1991).

After an explosion of empirical studies during the early to mid-90s, some researchers suggested not following up the studies that have been done in the past. Narrative literature reviews published in this period include Ford and Weissbein (1997) and Holton et al. (1997). Ford and Weissbein (1997) reviewed 20 published empirical studies and suggested that progress had been made to confirm the influence of work-environment variables on transfer outcomes. A more stringent review has also been undertaken by Alliger et al. (1997) using the promising scientific techniques of meta-analysis, reviewing major journals pertaining to variables related to training effectiveness; a total of 34 studies and 115 correlations. They reported that utility-type reaction measures (whether trainees think the training is going to be useful to them) were more strongly related to learning and transfer performance than affective-type reaction measures (whether trainees 'liked' the training).

From the Year 2000 to 2008

From the year 2000, new approaches to integrative transfer model development have been raised. Colquitt et al. (2000) meta-analytically summarized the literature on training motivation with a prescribed model specifying several linked stages in the order of (1) locus of control peer support, (2) pre-training self-efficacy, individuals' beliefs pertaining to training values, and job/career variables, (3) motivation to learn, (4) training outcomes, and (5) training transfer.

It was found that team leaders can shape the degree of transfer through informal reinforcement (or punishment) of transfer activities. (Smith-Jentsch et al. 2001.)

Naquin and Holton (2002) tested the antecedents of a new variable, motivation to improve work through learning (MIWL), which had been raised by Baldwin et al. (2000) and Naquin & Holton (2001). MIWL is a multidimensional variable that combines four previously independently tested variables – motivation to train, performance outcomes, training attitudes and motivation to transfer. Gaudine & Saks (2004) conducted a longitudinal quasi-experiment to test the effects of two independent variables (i.e. relapse prevention and transfer enhancement post-training intervention) on three dependent variables (i.e. self-efficacy, transfer behaviour and performance). Unexpectedly, the results failed to support the effectiveness of the post-training intervention.

Hutchins and Burke (2006) reviewed the literature using relapse prevention as a post-transfer intervention. Saks and Belcourt (2006) studied the effect of activities before training (supervisor involvement, training attendance policy), during training (training rewards, training feedback) and after training (supervisor support, organization support) on transfer of training. One of their important findings showed that pre-training and post-training activities were more strongly related to transfer than were activities during training.

A group of researchers also attempted to establish a generic instrument, namely the learning transfer system inventory (LTSI), to measure transfer and its antecedents in real work settings (Holton et al. 2000). The LTSI classified 16 constructs (identified based on extant literature) into four categories: trainee characteristics, motivation, work environment and ability. Holton and Baldwin (2003) made research progress by building an action-oriented approach to transfer intervention on the LTSI. In considering this, Holton et al. (2003) made use of part of the data in the LTSI database and showed that transfer systems were correlated with organizational types, organizations and training types.

Chiaburu & Marinova (2005) examined the influence of contextual factors, such as supervisor support and peer support, and individual predictors, such as goal

orientation and training self-efficacy, on pre-training motivation and skill transfer. Researches empirically proved that trainees entering training programs with higher levels of motivation report higher levels of skill transfer. In turn, pre-training motivation was predicted mainly by individual factors, such as mastery-approach goal orientation and training self-efficacy and, to a lesser extent, by contextual factors such as peer support.

From the regression analyses results, Lim & Morris (2006) observed that the trainees' immediate training needs seemed to be the most influential variable that affected perceived learning and learning transfer, while organizational climate was determined as an influential variable for trainees' perceived application of learning as well.

From the Year 2008 to Onwards

Cheng & Hampson (2008) have reviewed the existing literature on transfer of training and found that there are inconsistent and puzzling findings in the empirical researches. They emphasised research focus on the decision role of trainees in the transfer process as the key component which can illuminate the transfer of training. They proposed to apply the theory of planned behaviour which explained the transfer process by the focus on behavioural intention (i.e. transfer intention) and its antecedents.

The Lim & Johnson (2008) study showed results that work environment factors related to supervisors were among the strongest factors influencing transfer. In fact, ensuring a supportive work climate may be the single most important requirement for the successful transfer of learning. The second key factor in learning transfer is the opportunity for trainees to apply what they have learned to their jobs. Assigning work projects that relate to the training content, before the training occurs, during the training, and even after the training, should promote TTransfer. (Lim & Johnson 2008.)

Scaduto, Lindsay & Chiaburu D. (2008) identified and proved that the individual who has a good relationship with his or her supervisor (which enhances communication of organizationally relevant and important information) stands a much better chance of benefiting from training, which will lead to positive

outcomes both for the individual and the organization. In their recent study, Bossche et al. (2010) identified empirically that there is a positive effect of experiencing the provided feedback as helpful shows that not all feedback has an equal effect on transfer of training. Their research indicates that it is more beneficial for transfer of training to increase the amount of people providing feedback. Findings of Jodlbauer et al. (2011) suggested that even if employees are currently dissatisfied, training can still be effective given that an organization supports the motivation to transfer by promising positive transfer consequences.

Mostly during this period, the research and importance of the TTransfer in business was commercialized and new consulting companies were created to support and help with TTransfer enhancement. There were about 9 companies found during this research who mainly focused on the topic of TTransfer and improvement strategies for business. Interestingly, with the development of the Internet and on-line technologies, these companies provide IT solutions as a part of their services which collect, analyse TTransfer factors, help and guide participants of TTransfer during different time periods as well as assess and communicate the TTransfer results. The technical and research inventions, which these companies provide during their work, enrich the theoretical data base of TTransfer resources. Companies research their customers, frequently providing statistical and qualitative reports and articles about the study of TTransfer phenomenon and the results of proposed systems or strategies to use for TTransfer improvement. Moreover, these companies create their own research environment and on-line communities, organizing and participating in best-practices conferences, workshops and webinars, providing additional theoretical and practical values for the study of the TTransfer. The list of 5 TTransfer consulting companies and their IT solutions with the factors, which they believe are the most influential for TTransfer, are specified in the Appendix 2.

The next section is devoted to discuss different factors influencing TTransfer according to the first classification – primary transfer influences as first-priority factors, which follows the structure presented in Table 3.

2.3.2 Individual learner characteristics

The first category of factors, Individual learner characteristics, has 2 groups, such as Personal factors and Motivation factors. In recent years, research focusing on antecedent or pre-training and post-training influences on subsequent training outcomes and effectiveness has increased significantly. A key antecedent category is the individual characteristics of trainees, or what trainees bring to the training setting (Mathieu, Tannenbaum & Salas 1992; Noe 1986; Noe & Ford 1992; Salas & Cannon-Bowers 2001). A wide range of individual characteristics found to predict training motivation and outcomes (Colquitt, LePine & Noe 2000).

Personal factors

Personality dimensions, both narrow traits (simple skills and hobbies) and wider traits (mental and physical abilities, personality) have been proposed by Digman (1990) to be a group of factors which influence training effectiveness and thus, the TTransfer. Their effect on training outcomes nevertheless remains 'a relative void in the literature' (Mount & Barrick 1998, pp. 852), except for a couple of studies. The research done by early studies of Fox, Taylor & Caylor (1969) and McFann (1969) summarized, suggests that trainees with greater ability will demonstrate better training performance and higher scores on learning measures. This has important implications for selecting employees for training, particularly if training is costly and failure is possible. Silver et al. (1995) found locus of control (i.e. a person feels in control of events in his/her life), conscientiousness and anxiety are significantly related to transfer behaviour and emphasise significant relationship between locus of control and skill acquisition. Ford et al. (1998) revealed that both mastery and performance orientations predict post-training self-efficacy positively and negatively, respectively. According to other authors, there are more individual characteristics that affect the transfer of training process and include cognitive ability, achievement motivation, motivation to learn and to transfer, self-efficacy, and valence (Colquitt et al. 2000; Mathieu et al. 1992; Noe 1986); job involvement, organizational commitment, organizational cynicism and job satisfaction (Mathieu et al. 1993; Tannenbaum et al. 1991; Tesluk et al. 1995;

Velada & Caetano 2007). Of these characteristics, performance self-efficacy has been found to strongly relate to both learning (Gist et al. 1991; Mathieu et al. 1992; Quinones 1995) and transfer of training (Ford et al. 1998). Additionally, some studies (Ford et al. 1998) have indicated that trainees with higher self-efficacy are more likely to transfer training to the job. Holton et al. (2000) defined performance self-efficacy as an individual's general belief that they are able to change their performance when desired. Hence, when a trainee feels confident in his or her ability to perform, the more likely he or she will transfer such knowledge and/or skill to the job (Velada et al. 2007). Ability to transfer is another potentially important transfer outcome, unexplored previously in the training literature. Ability to transfer is similar to self-efficacy, which has been linked to behavioural change in the training context (Latham & Frayne 1989), but it is considered as broader concept. It is defined in the Burke study as the degree to which trainees are capable of coping with situations that threaten skill maintenance. (Burke 1997).

The recognition of different personal factors challenges HR professionals to use this knowledge to enhance training design, delivery, and evaluation as well as TTransfer issues (Schwoerer et al. 2005). Individual characteristics are hypothesized to impact a number of other variables for TTransfer. First of all, trainees' abilities are hypothesized to influence learning and training performance. Non-ability factors (attitudes) are hypothesized to influence trainees' expectations, desires, and pre- and post-training motivation (Tannenbaum et al. 1993). These are motivational factors which are also worth considering, and they are presented below in the way of the theoretical analysis of various academic opinions and study results tested empirically.

Motivation factors

There is evidence suggesting that there are differences in the amount of training motivation among trainees, and that it relates to the success of the trainees in the subsequent training program (Goldstein & Ford 2002). The relationship between the motivation of an individual and his/her work-related behaviour has

attracted a great deal of attention since the early 20th century (Herzberg et al. 1959; Maslow 1943; Münsterberg 1913, according to Goldstein & Ford 2002).

A more specific example demonstrating the link of training motivation to performance, comes from a study conducted by Fecteau and colleagues (1995), who found a correlation of 0.45 between training motivation and TTransfer. Researchers also examined specific components of training motivation (motivation to learn) as a factor influencing training outcomes, and have found it to be a key variable in linking training characteristics to training outcomes (Quinones 1997). In a study by Ford (1997), for instance, self-reports of motivation to use trained knowledge and skills emerged as a crucial factor in predicting TTransfer. Axtell et al. (1997) described motivation to transfer as the key variable in determining the transfer of interpersonal skills after 1 month, and Holton et al. (2000) ultimately defined motivation to transfer as a central variable in their learning transfer model affecting post-training individual performance. Chiaburu & Tekleab (2005) investigated both individual and contextual predictors of TTransfer, maintenance and generalization. Their findings suggest that training motivation is directly related to all components of training effectiveness (positive correlation with TTransfer, maintenance and generalization).

According to Noe & Schmitt (1986), motivation to transfer is defined as the trainee's desire to use the knowledge and skills learned in training and additionally, it is affected by trainees' confidence in using the skills and their belief that the use of new skills may solve work-related problems or improve their performance. The other definition is presented by Burke & Hutchins (2007, p. 267), where they refer training motivation to the intensity and persistence of efforts that trainees apply in learning-oriented improvement activities before, during, and after training. Motivation to transfer was also hypothesized in Holton's (1996) model to connect learning with individual performance change.

According to Holton (1996), influences on transfer motivation fall into four categories:

- **Intervention Fulfilment** refers to the extent to which training meets or fulfils training expectations and desires. Training motivation is similar to motivation to transfer because it is a measure of the trainees' perception of the relationship between training success and future job performance.
- **Learning results.** Tannenbaum et al. (1991) also found that performance during training had an independent relationship with post training motivation. More successful learners would be expected to feel better able to perform, and therefore, more motivated to transfer. In contrast, less successful learners would be expected to be less motivated to transfer learning.
- **Job Attitudes.** People with high commitment and job satisfaction would be more likely to exert effort to transfer. Participants with more positive job attitudes would be expected to be more motivated to transfer learning to performance.
- **Expected Utility or Payoff.** Clark, Dobbins & Ladd (1993) found that trainees who perceived training to have more job and career utility were more motivated. These findings prove the statement that individuals will be more motivated to transfer if they perceive that their effort will lead to rewards that they value (Porter & Lawler 1968).

Additionally, there are other factors which different scientists underline. Transfer studies have consistently found that participants' positive expectations - or not having negative expectations - have an impact on whether they apply their leaning. Neuroscientists conducted an experiment where they manipulated positive and negative expectations of students while their brains were scanned and then tested their performance on cognitive tasks. It appears that when primed with negative descriptors, their brains expected to do poorly ("self-fulfilling prophecy") and did not show signs of surprise or conflict when an error was made. However, when primed with positive descriptors, their brains reflected on what they did wrong and, presumably, worked to figure out how they could have done better (Carnes 2014). Trainees' work related attitudes can clearly affect their receptiveness to training. In particular, their level of

commitment to the organization is likely to predispose them to view training as more or less useful. Job (dis)satisfaction is a prominent factor in industrial and organizational psychology research because of its influence on the work context (Kinicki et al. 2002; Locke 1976). The empirical research on the role of job dissatisfaction in the TTransfer process through 220 participants of Jodlbauer, S. et al. (2011) proves that the buffering effect of motivation to transfer on the relationship between job dissatisfaction and TTransfer exists only in the case of high positive consequence expectations. Motivation to transfer only has an impact if dissatisfied persons expect to gain positive rewards or acknowledgment. Although there certainly is a destructive side of job dissatisfaction, the research results demonstrate that organizations can counterbalance this negative effect on TTransfer by supporting and acknowledging their employees' effort to transfer their newly gained knowledge and skills to their daily work life. (Jodlbauer et al 2011.)

Thus, motivational factors play a vital role in the transfer process. According to Liebermann & Hoffmann (2008), the main goal for HR professionals and training designers should be to foster the trainees' motivation to use new skills on the job.

2.3.3 Training program characteristics

A comprehensive review of theoretical research analysis related to training program characteristics, as the second major category out of three, influencing TTransfer, is provided below. Each sub-group of this category is described from theoretical and empirical research findings from the literature. Training needs analysis is emphasised specifically which should evaluate individual, organizational, and task factors, and drive subsequent training design. To the extent that the training needs analysis accurately identifies the actual need, the link between job performance and results/organizational effectiveness should be strong. That is, if the needs analysis is accurate, performance changes that occur due to training should contribute to organizational effectiveness.

Training needs analysis

The relationship between needs analysis and transfer is not a new idea; researchers have long suggested conducting needs analysis to identify obstacles to transfer (Hesketh 1997; Holton et al. 2000), and included it as a primary point of departure in evaluation and effectiveness models to ensure that training content will influence change in learners and result in positive return-on investment (Alvarez et al. 2004; Broad 2005). Thus, transfer success tends to increase when training objectives are aligned with organizational goals. According to Broad (2005), needs assessments could be useful for predicting transfer and designing interventions to buttress transfer for certain learner profiles. Watad and Ospina (1999) reported increased performance resulting from a management development program that enabled participants to strategically link local decisions and work operations to the organizational mission. A training needs analysis should reflect individual, organizational, and task characteristics, and should drive the training method and content (Tannenbaum et al. 1993).

Using goal-setting theory, researchers have suggested that trainees are more likely to apply new learning when they are presented with a skill utilization objective. Hence, leaving aside the controversy as to whether or not participation is important in goal setting, Wexley & Baldwin (1986) report that the setting of behavioural targets does in fact lead to higher transfer levels. This may be the case, as demonstrated by Frayne & Latham (1989), because goal setting provides cues useful for enhancing perceived self-efficacy. (Tziner et al. 1991.) Therefore, the expected results or “the picture of the end” in measurable terms should be identified and agreed with all participants for successful transfer, which additionally usually provides a valuable reality check on the utility of the proposed training program.



Figure 7. Phases of training need analysis (Alan 2011).

Several authors consider that accuracy of need identification is quite important in each stage and setting organizational objectives before training design

begins is the cornerstone of successful improvement and TTransfer (Rouiller & Goldstein 1993; Lim 2000; Hutchins & Burke 2007). According to Alan (2011), the process of Training needs assessment should include several stages presented in Figure 7.

Identifying the organisational outcomes that training will serve to achieve, it is necessary to answer the question: what is the end benefit to the organisation of this training? One of the purposes of setting measurable organisational goals is to set the scene for effective training course design. If it is known what the organisation wants from training in terms of organisational outcomes, the training can be designed around these outcomes and better serve the organisation, improving TTransfer. The next step in training needs analysis, Alan (2011) proposed on-the-job behaviour identification (the current state and desired changes), which linked to the previously found organisational outcomes. Once the new and modified behaviours are known and agreed upon, the course objectives and learning outcomes may be constructed around the required behaviours. The learning outcomes should be stated in action terms, with any underpinning knowledge, skills and required attitudes specified. After proper training needs assessment, agreed with by all participants, influencing TTransfer, the training design stage should follow.

Training design

Numerous researchers have studied the influence of training design factors on TTransfer, as they seem to be some of the most influential affecting transfer of learning in the workplace (Brinkerhoff & Gill 1992). A thorough review of the TTransfer literature has suggested that at least two categories of training design constructs exist: content design and instructional methods. In terms of content design, researchers have examined several salient transfer design factors that have included content match and task similarity between learning and transfer settings (Baldwin & Ford 1988; Rouiller & Goldstein 1993; Axtell, Maitlis, & Yearta 1997; Kontoghiorghes 2002; Lim 2000, according to Hutchins & Burke 2007), inclusion of general rules and principles for learners to apply when returning back to their individual jobs and tasks (Goldstein 1986), and greater

specificity of learning content to be applied in transfer settings, such as specific behaviours and procedures (Clark & Voogel 1985).

Identifying effective training methods to foster learning transfer is a major concern of trainers and has been a focus of training research for many years according to Reid & Bates (2011). Because of the increasingly dynamic and complex nature of the jobs and roles that characterize modern organizations, flexibility and adaptability are far more important components of performance today than in the past. That is why from TTransfer perspective, adaptive performance parallels a concern for “adaptive transfer”, and the challenges facing trainers are concerned with preparing learners with the capacity to apply learning acquired in training to tasks that go beyond and are often substantially different from the tasks and applications covered during training. (Reid 2011.)

Saks & Belcourth (2006) in order to examine the relationship between training activities during training and transfer identified through empirical research that the only significant activity was training experiences and conditions that closely resemble those in the actual work environment. Although empirical research on the relationship between transfer and the use of interactive training activities remains scant, designing training content that is aligned with job tasks has been found to correlate with TTransfer (Holton et al. 2000; Lim & Morris 2006; Rodríguez & Gregory 2005). It is important to identify which parts of the training content and design represent specific parts of the training program. However, Bates (1997) insisted that a key aspect of training design is formulating a training program that directly addresses individual and organizational problems. A number of studies have suggested that the issue of relevance of knowledge, skills, and attitude taught in training is of critical value in determining transfer (Ameel 1992; Baldwin & Ford. 1988; Garavaglia 1993). Thus, not only instructional design but also the relevance of instructional content is important, and are necessary components of conditions supporting TTransfer. Additionally, a good deal of recent research indicates that active learning design elements are far better for fostering adaptive transfer than our traditional guided training approaches. It focuses on using specific training design elements to build the cognitive, motivational, and emotional processes that support adaptive transfer.

In fact, recent research has convincingly demonstrated that active learning training design elements work: they can enhance important training outcomes, particularly adaptive transfer (Bates 2011).

Lim, D., Johnson, S. (2008) findings suggest implications in training design to promote higher learning transfer. If the primary focus of training is on far transfer, the recommended instructional strategies are to teach general theories and principles and entice the trainees to practice applying their learning in different contexts (Goldstein, 1986). If the focus of training is on near transfer (i.e., applying learning to situations that are similar to the learning context), the recommended instructional strategies are to teach learning content that is identical to the job tasks (Baldwin & Ford, 1988), to emphasize greater specificity in the application of the learning content to the job (Clark & Voogel, 1985), to encourage overlearning of the content for greater transfer (Noe 1986), and to emphasize the procedural nature of the trainees' tasks in the instruction (Clark & Voogel, 1985).

Programmed interventions

Employees need to be engaged in the learning process and later workplace application if training is to be effective. Of vital importance here is the pre-course briefing between the supervisor and the staff member. This discussion serves to inform the participants of the nature and purpose of training and to identify specific development opportunities it affords. This is also the place to introduce discussion about how the principles, techniques and skills learned will be applied practically once the participant returns from the training event. The supervisor is also in the best position to ensure that participants have completed any pre-requisite reading or exercises. Most important of all, the pre-course briefing sends a powerful message that the organisation cares about the employee's development and is serious about seeing the benefits of training. (Tannenbaum et al. 1993.)

Self-regulatory/management behaviours in the training setting (Frayne & Latham 1987; Gist et al. 1990; Latham & Frayne 1989) have been found to have direct and indirect effects on trainee transfer. Relapse prevention (RP), a

self-management model originating from clinical psychology, has been studied in the Transfer research for about 20 years, but its associated findings lack a measure of consistency (Hutchins & Burke 2006). RP acknowledges the importance of the transfer environment in maintaining behavioural change. Generally, RP provides trainees with a personalized program for exercising greater control over their behaviour and work environment in order to better maintain learned behaviours (Burke 1997). The model shown in Figure 8 suggests RP's effect on transfer outcomes in the post training period, and proposes that RP training affects five transfer outcomes.

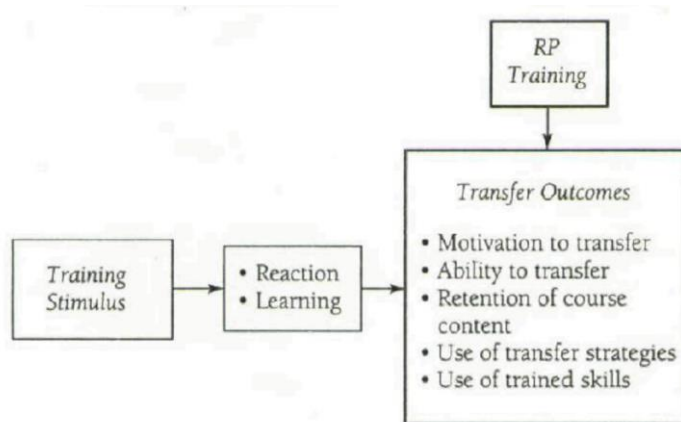


Figure 8. Model of proposed effects for RP training on transfer outcomes in the post-training period (Burke 1997).

In his late research of Relapse Prevention, Burke (2009) found out that the modified relapse prevention module produced higher transfer outcomes in supportive climates (versus unsupportive climates). According to different authors in scientific literature there is an opinion that trainees should be aware of and implement strategies for increasing transfer. Several possible reasons exist why RP produces positive results. It may serve to reinforce the perception of applicability of trained skills; it may have strengthened or consolidated the acquired knowledge; it may help trainees develop the behavioural repertoire for dealing with application situations which are not ideal for implementation, and/or it may provide the flexibility in skill usage needed to overcome barriers in unexpected job situations, or it may have helped trainees develop greater levels of self-efficacy in transferring skills (Tannenbaum et al 1993; Burke 1997; Hutchins & Burke, 2006).

Research indicates that individual goal-setting activities are especially conducive to participants applying the skills. Goal-setting may take the form of the supervisor negotiating a personal action plan with each participant in the pre-course briefing and improve it together with learner on post-course briefing. Ideally, the action plan will document proposed workplace applications of the requisite skills, resources required, when the skills are to be applied and how the results are to be reviewed and by whom. The plan will need to be reviewed regularly for completion of the action items (Alan 2011). Conditions of practice such as feedback and knowledge of results have been considered important factors in the design of training programs (Machin 2002). The post-course briefing with supervisor and trainer is a good juncture at which to identify, plan and agree with the staff member where and how the skills will be applied (Haccoun 1997). Programmed intervention makes holding trainees accountable for skill and knowledge transfer through the use of sanctions, follow-up reporting on performance outcomes, and as a part of performance appraisal have been positively linked to increased transfer (Taylor et al. 2005). Hence, it has been theoretically suggested that interventions can be added on to the training content of a training program for the exclusive purpose of facilitating the transfer of training.

Trainer characteristics

There are a lot of studies supporting the importance of trainer characteristics in transfer (Hastings, Nichols, & Carrier, 1997; Towler & Diboye, 2001; Yelon et al. 2004). Eden (1990) maintained that trainee achievement can be enhanced considerably by increasing trainees' performance expectations. Adding this to the above context, instructors who expect trainees to perform well will enhance the trainees' own expectations regarding their respective performance which, in turn, leads to higher performance. In Yelon et al.'s study (2004), qualitative data from 73 physicians attending faculty development programs indicated that trainees' intentions to transfer stemmed from how trainers modelled ideas they taught, the way trainers treated the trainees, and how trainees felt during instruction. Undoubtedly, trainers play a key role in supporting transfer by preparing individuals for training, designing training materials and settings, and

consulting with managers and other stakeholders to support trainee post-training performance.

Evaluation on transfer / training results

In terms of the influence of evaluation on transfer, Bates (2003) has observed that “assessment of transfer makes trainees, trainers, and others accountable for transfer success and helps create a culture that values learning and its application to the job” (p. 264). Bersin (2006) reported in a study of best practices in training measurement in which training managers at more than 140 companies were surveyed, found that organizations are spending only about 2.6% of their total training budget on evaluation and that organizations continue to struggle with how to practically determine the value of training (Burke & Hutchins 2008). According to Bates (2003), and Longnecker (2004), only 14% of the work environment practices dealt with evaluation or assessment of transfer, indicating practitioner recognition of the importance of evaluation and consistent with authors who suggest that mere measurement of transfer affects trainees’ use of training at work. Put simply, what gets measured gets done; so if firms measure transfer, there is a better chance of being successful with application of gained KSA after training.

Meta-analytic evidence shows that post-training knowledge has a smaller relationship with TTransfer than even some individual differences and contextual variables (Colquitt et al. 2000). Therefore, it was proved that the determinant of learning objectives did not significantly affect TTransfer, and how much learners learned during training is not the most important among other variables. The learner reaction was actually also reported as having impact on transfer success. Alliger et al. (1997) empirically found the relationship between affective reactions and transfer to be 0.07; Colquitt et al. (2000) reported a corrected correlation coefficient between reactions and transfer of 0.11.

Training effectiveness is usually assessed via a training evaluation study, which involves comparing post-training performance to a specified criterion or standard. There is not a single, all-encompassing, universally accepted training effectiveness criterion. Different training programs have different goals and

processes, and thus require different measures of training effectiveness. However, while the specific measures may vary, it is possible to categorize effectiveness measures on the basis of similar features. There is voluminous literature on the topic how to evaluate or assess training results and training effectiveness, however this area is not broadly explained in this research, but accepts it as one of the important factors influencing TTransfer.

2.3.4 Work environment characteristics

A review of the literature has suggested that work environment factors that most affect TTransfer can be classified into two categories: factors related to the work system and people-related factors.

Work system factors

Work system factors include an open communication climate, a change resistance climate (Rainey 1983; Rouiller & Goldstein 1993), organizational commitment for training and TTransfer (Darden, Hampton, & Howell 1989), the opportunity or need to use training, the pace of work flow (Ford et al. 1992), the match between training and department goals, and the availability of tools to apply training (Richey 1990). Among these work system factors, the opportunity or need to apply knowledge and skills immediately to trainees' jobs has been repeatedly emphasized in several studies; when trainees lack the opportunity to use what they have learned in training, it is unlikely that a high degree of transfer will occur (Ford et al. 1992; Lim 2001). In Clarke (2002), limited opportunity to perform skills on the job was the highest barrier to successful TTransfer (Hutchins & Burke 2007). Assigning work projects that relate to the training content to trainees before the training occurs, during the training, and even after the training was also considered an effective way to promote TTransfer (Lim 2001). Trainee perceptions of the transfer climate influence transfer outcomes directly (Kontoghiorghes 2001; Lim & Morris 2006; Mathieu et al. 1992 according to Hutchins & Burke 2007), and indirectly as a moderator between individual or organizational factors and transfer (Burke & Baldwin 1999). The correlation coefficient between climate and transfer was fairly strong at 0.37 (cumulative sample size = 525) in Colquitt et al. research (2000).

Research in the area of organizational learning culture (Awoniyi, Griego, & Morgan 2002 according to Bates & Khasawneh 2005) shows how an organization's value of learning can have an impact on employee performance as a result of training. Organizational climate is at least as important as learning in facilitating transfer (Rouiller & Goldstein 1993).

Transfer climate was described by Schneider and Rentsch as a "sense of imperative" (1995, according to Holton, Bates, Seyler, 1997, p. 97) that arises from a person's perception of his or her work environment. It influences the extent to which that person can use learned skills on the job. Transfer climate is seen as a mediating variable in the relationship between the organizational context and an individual's job attitudes and work behaviour (Holton, Ruona & Leimbach, 1998). Transfer climate (whether a workplace is supportive of efforts to apply new learned outcomes or not) may either support or inhibit learning application in the workplace (Mathieu et al. 1992). The effect of transfer climate on trainees' ability, post-training self-efficacy, and motivation to transfer has been found to be significant (Rouiller & Goldstein 1993; Tracey et al. 1995; Tziner et al. 1993; Xiao 1996).

Holding trainees accountable for using training on the job has a significant influence on transfer success. In the meta-analysis by Taylor et al. (2005), a larger effect size ($n = 117$ studies) was found for job behaviour/ transfer when sanctions and rewards for skill transfer were used. Longnecker's (2004) survey of 278 managers indicates that a primary learning imperative to increase transfer of learning is enhancing accountability for application such as requiring a trainee's report post-training. Aids on the job used during training are helpful for replication in the work environment for employee use on the job. These include models, guides, diagrams, manuals, templates and checklists. Other opportunities to enhance the benefits of training include the development of forms, macros, go-no go gauges and "poke yoke" devices. Such on-the-job aids will serve to increase TTransfer and improve workplace productivity and product quality and service.

The evidence of using new technology to support transfer was provided by Eddy and Tannenbaum (2003), who report a case example of Electronic

Performance Support System to maximize transfer for HR professionals. As it was discussed in Literature review, the current period, from the year 2008 to onwards, appears as the era of IT solutions, such as on-line technologies, which are offered by consulting companies, which are specialised on support of TTransfer enhancement. Additionally, Wang and Wentling (2001) studied an e-coaching program where online coaching improved transfer of training for participants from 18 countries. Therefore, new technology is poised to help HR professionals efficiently locate resources, support processes and guide decision-making on an as-needed basis. Indeed, practitioners who are not well-versed in the use of technology may keep a TTransfer support tool as a fairly remote concept. Research in the use of new technologies to support transfer is mostly case-based or anecdotal (Eddy & Tannenbaum 2003; Rossett & Mohr 2004). Future work should explore the myriad of performance support technology on transfer.

People-related factors

In terms of people-related factors, several academic studies have verified that support from supervisors, co-workers, and peers (Ford et al. 1992; Foxon 1997; Russ-Eft 2002), availability of a mentor (Richey 1990; Lim 2001), and positive personal outcomes (Holton 2000) are three major transfer-enhancing factors. As several researchers have suggested, supervisory variables impose a critical influence on the likelihood of successful transfer (Baldwin & Ford 1988; Georgenson 1982; House 1986; Huczynski & Lewis 1980; Lim 2001). On the other side, according to Lim's study (2000), among the many people related work environment factors, three factors appeared to influence transfer more than others: discussion with supervisors about using the new learning, the supervisor's involvement or familiarization of the training, and positive feedback from the supervisor (Lim & Morris 2006).

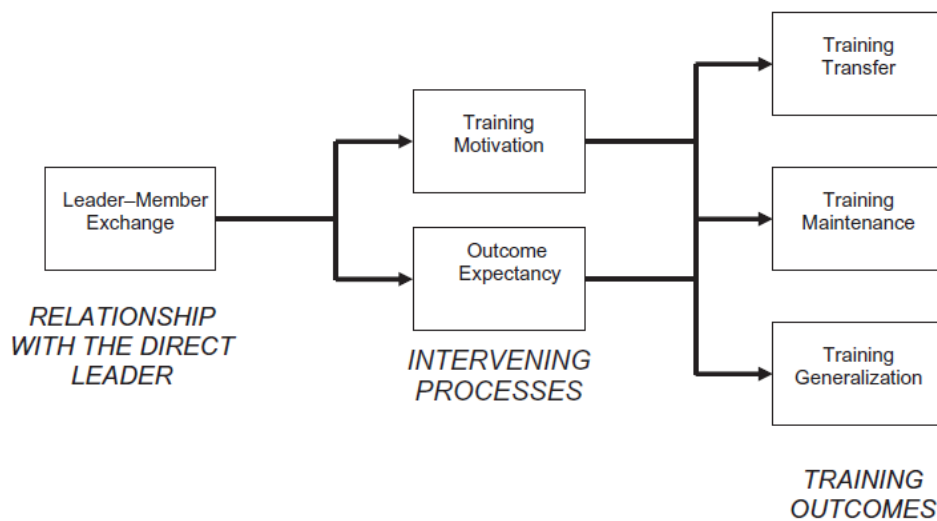


Figure 9. Leader influences on training effectiveness model (Scaduto et al. 2008).

A number of additional post-training activities following a training program have been identified in the transfer literature. One of the most important is organizational support for training in terms of policies, practices, and procedures, as well as social support from supervisors and peers (Cromwell & Kolb 2004). Post-training follow-up programs such as booster training, buddy systems, and sessions to discuss transfer progress can also be used to facilitate transfer (Baldwin & Ford 1988; Tannenbaum & Yukl 1992). Supervisors play a key role in the post-training environment by providing feedback, encouragement, reinforcement, goal setting, and by ensuring that trainees have opportunities to practice and apply newly learned behaviours on the job (Baldwin & Ford 1988; Ford et al. 1992; Kraiger et al. 2004; Machin 2002; Tannenbaum & Yukl 1992). The role of supervisors in influencing and supporting trainee transfer has been widely supported in quantitative and qualitative studies (Broad & Newstrom 1992; Brinkerhoff & Montesino 1995; Burke & Baldwin 1999; Clarke 2002). Foxon (1997) found that trainees' perception of managerial support for using skills on the job correlates with increased report of transfer ($r = 0.36, p > 0.001$).

It was empirically proved by Scaduto, A., Lindsay, D., Chiaburu D. (2008) that the existence of direct relationships between learner-manager exchange and

training outcomes has implications for the individual (in terms of training material learned and performed on the job) and for the organization, which is demonstrated in Figure 9.

The importance of on-the-job coaching / mentoring once training participants return to the job is now well documented. Assistance with on-the-job may be synchronous or asynchronous, in person or mediated by technology. Assistance includes on-the-job mentoring for more immediate skill requirements and coaching for more long-term development or career needs. Planning for mentoring and coaching in the training design and implementing such helps convey to participants that management is serious about inculcating the new behaviours and TTransfer. Peer support, focusing predominantly on supporting the use of learning on the job, emerged as and shows significant relationship with skill transfer (Chiaburu & Marinova 2005). Hawley and Barnard (2005) found networking with peers and sharing ideas on course content promoted skill transfer 6 months post-training (Hutchins & Burke 2007). Factors argued to affect transfer of training through social peer support include setting learning goals, giving assistance or offering positive feedback (Hawley & Barnard 2005; Nijman et al. 2006).

Thus, three main factors' categories were examined above when close attention was paid to the most important groups inside each category. According to different authors and researchers, various important factors for TTransfer can be viewed in a systematic way, organised and reflected in TTransfer models, which will be the main topic of the next chapter.

2.4 Models of Training Transfer

The classification of the most important factors and their inter-correlation, which affect TTransfer are represented in a structured way by proposed models of TTransfer. Several authors organized the research around the phenomenon in the way of constructing TTransfer model. In order to look at the factors influencing application after training more precisely, various TTransfer models will be indicated and discussed in this chapter.

	Time Dimension	
	Transfer Initiation	Transfer Maintenance
Trainee characteristics	performance outcome expectancies (2)* self-efficacy (4)	flexibility to meet unique needs of job self-efficacy (3) effort to performance expectancies (5) trainee enthusiasm (6) relapse prevention strategies (7) effort to performance success (10)
Training design characteristics	overlearning (1) instructor effectiveness (6)	proactive inhibition or interference (4)
Work environment characteristics	management support (3) opportunities to perform (5) modeling trained behaviors (7) job aids (8)	reward system (2) management and peer support (8) clarification of responsibilities (9) job aids (11)
	Generalizability	
	Near Transfer	Far Transfer
Trainee characteristics	—	—
Training design characteristics	identical elements (1) specify where and how to apply skills (2) overlearning (3) focus on procedural knowledge (4)	general principles (1) stimulus variability (2) discuss applications of training (3)
Work environment characteristics	opportunity to perform and feedback on tasks trained (5)	encouragement to apply training to situations not trained (4)

* The numbers after each entry refer to Laker's list of factors that may affect transfer.

Table 4. Laker's model of factors affecting TTransfer (Ford 1990).

Laker's model of factors affecting TTransfer (1900) attempts to bring conceptual and operational clarity to the TTransfer factors. He proposes a multidimensional perspective that identifies generalization and time as the two key dimensions of transfer, and contends that each dimension consists of two basic components — near and far transfer for the generalization dimension, and transfer initiation and transfer maintenance for the temporal dimension. Laker also suggests that different factors play a role in the success or failure of each of these four components of transfer. He supposes that this dual-dimensionality view of transfer has important implications for training design and for the evaluation of training. An examination of Table 4 shows some interesting results.

First, the factors identified by Laker as affecting transfer initiation and transfer maintenance tend to fall within the trainee and work-environment

characteristics. The factors identified as affecting near and far transfer, on the other hand, focus mainly on training-design characteristics. An organizing framework also shows more clearly the factors that are common across multiple transfer components. For example, over learning and the opportunity to perform were identified as important factors affecting both transfer initiation and near transfer.

Thayer and Teachout (1995) developed a model of the transfer process that portrayed the climate for transfer of training and the transfer-enhancing activities that occur during the training program as influencing the training and transfer outcomes (see Figure 10). Thayer and Teachout subsequently created the climate for transfer questionnaire to assess the two main components of transfer climate.

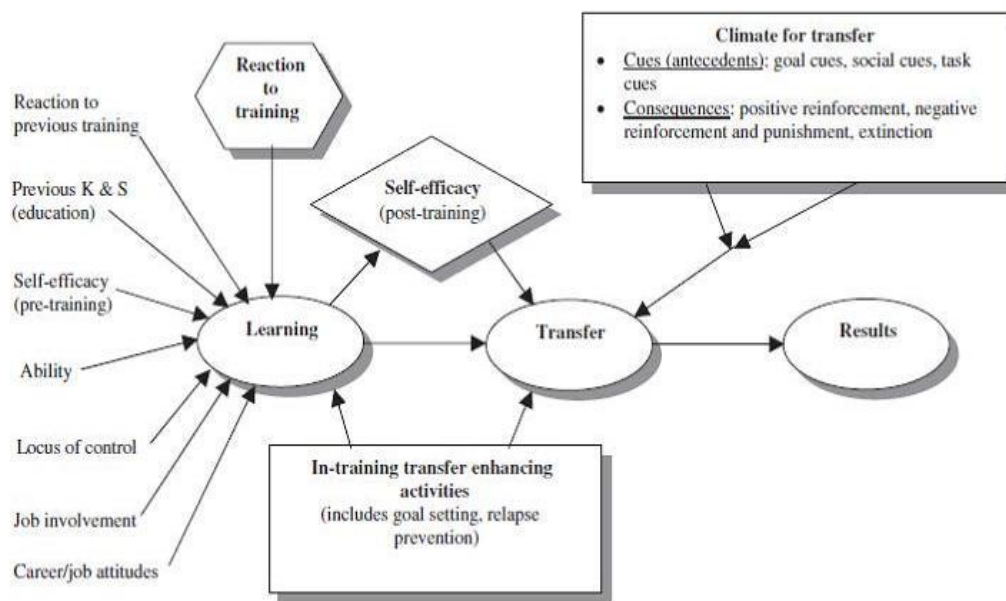


Figure 10. Transfer training model (Thayer Teachout 1995 according to Machin & Fogarty 2004).

Tracey et al. (2001) tested a model that linked individual and organisational factors related to trainees' preparedness for training with two training effectiveness measures: reactions and learning. Pre-training self-efficacy and pre-training motivation were treated as endogenous variables that mediated the relationship between several exogenous variables (job involvement,

organisational commitment, and work environment) and the two types of outcomes (reactions and learning). Work environment was found to be directly linked to both pre-training self-efficacy and pre-training motivation, while pre-training self-efficacy also mediated the relationship between the work environment and pre-training motivation.

Hollon's TTransfer model (1996) provides a conceptual evaluation model of training focused on individual performance. This model proposes three primary outcomes of training intervention; learning, individual performance, and organizational results. These outcomes are defined, respectively, as achievement of the learning outcome desired in an HRD intervention, change in individual performance as a result of learning being applied on the job, and results at the organizational level as a consequence of change in individual performance. Figure 11 illustrates Holton's transfer of training model, which suggests and emphasizes three crucial factors affecting implementation and transfer — motivation to transfer, transfer climate, and transfer design (Yamnill & McLean 2001). Individual performance is at the core of Holton's transfer of training model. Learning is expected to lead to individual performance change only when the three primary influences on transfer behaviour are at appropriate levels.

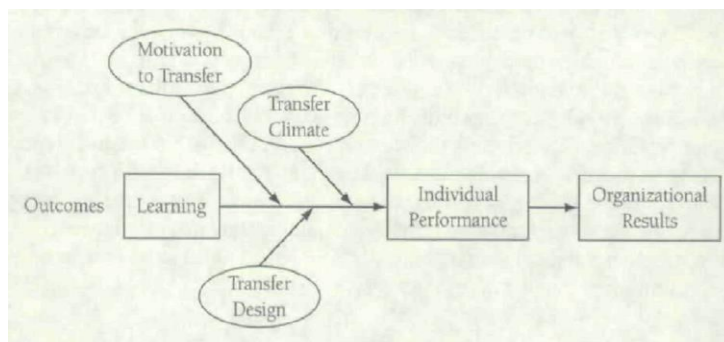


Figure 11. Factors affecting transfer of training (Holton 1996, p.17).

In the later research, Holton together with Bates and Ruona (2000) developed the Learning Transfer System Inventory (LTSI) by common factor analysis to evaluate the specific factors on those dimensions affecting the transfer of training process.

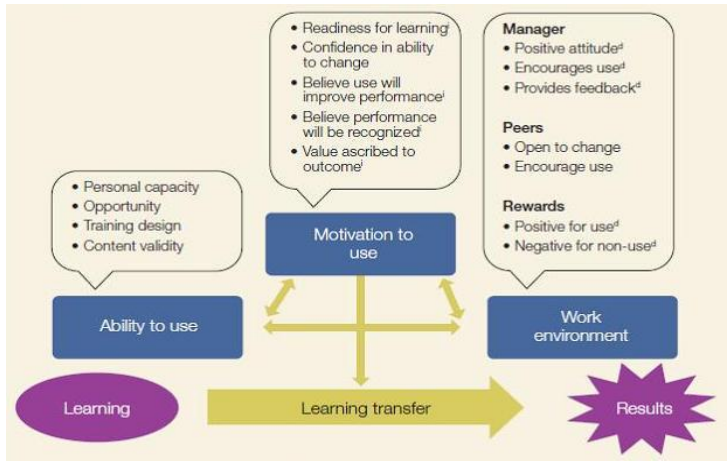


Figure 12. Training Transfer model of sixteen factors of the LTSI (Holton et al. 2000).

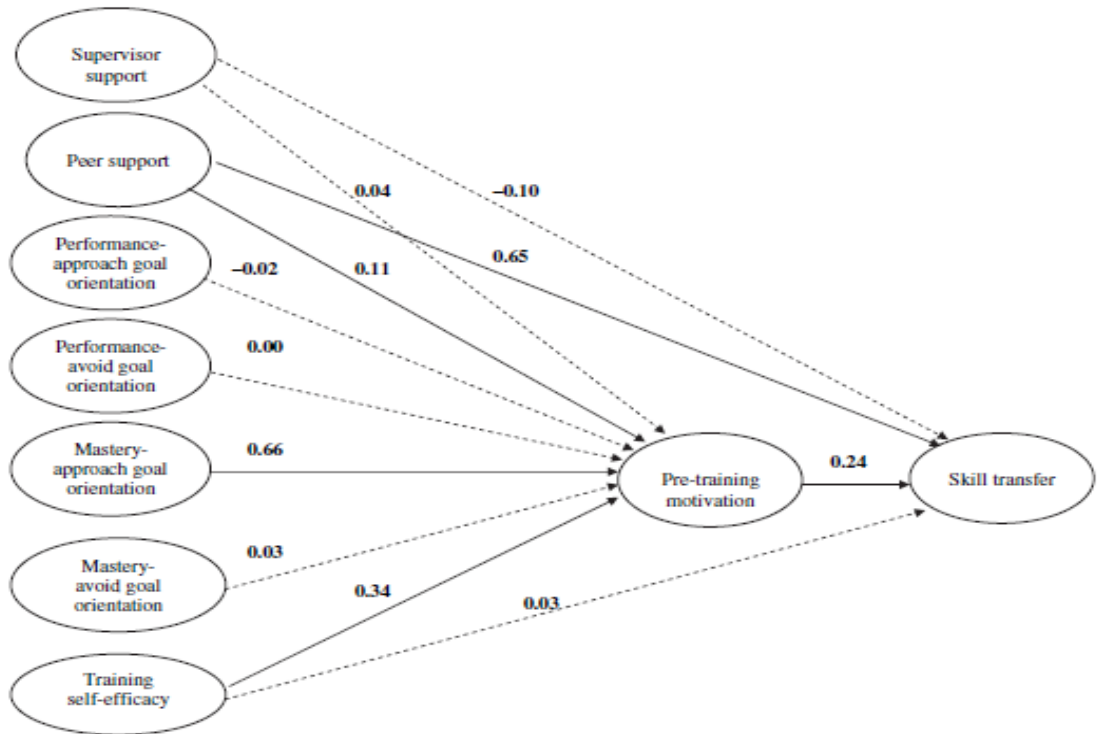


Figure 13. Training Transfer model with empirical findings (Chiaburu & Marinova 2005).

The LTSI was based on and established on previously discussed conceptual models and research (Holton et al. 1997) and includes 16 factors that either facilitate or inhibit TTransfer. The sixteen LTSI constructs provide a comprehensive assessment of factors that influence transfer, including

program-specific transfer factors and general transfer factors (Figure 12). The sixteen constructs were categorized into four major groups: trainee characteristics, motivation, work environment, and ability (Noe & Schmitt 1986). It comprises sixty-eight items grouped into sixteen constructs which are more deeply analysed in Appendix 4. It has been argued that the LTSI is the only research-based instrument for assessing a comprehensive set of factors affecting transfer of learning (Chen et al. 2005; Holton et al. 2000). Whereas studies have been conducted to validate the LTSI measure (Chen et al. 2005; Holton et al. 2000; Khasawneh et al. 2006), little has been done to empirically demonstrate the relationship between LTSI measures and transfer of training. Additionally, the LTSI appears to exclude important individual difference variables such as cognitive ability, locus of control and training retention (Baldwin & Ford 1988), and environmental factors such as continuous learning culture (Tracey et al. 1995).

Chiaburu and Marinova (2005) explored contextual (i.e. supervisor support and peer support) and individual (goal orientation and self-efficacy) predictors of proximal (pre-training motivation) and distal (skill transfer) training outcomes in order to examine both individual and organizational factors related to training outcomes. Researchers created the model of TTransfer and tested it in their empirical study, which results are presented in Figure 13. The results also show the utility of disentangling organizational supports according to their sources, the usefulness of training self-efficacy as a predictor of training outcomes and, most importantly, the positive relationship between mastery-approach goal orientation and pre-training motivation.

As adapted from Colquitt et al. (2000), **Cheng and Hampson (2008)** listed and integrated pertinent variables in their TTransfer model. According to authors, this is not an exhaustive list of all the tested variables, but only those that were important and could be classified under the four popular categories – individual characteristics, job/career variables, situational variables, and training outcomes. Additionally, the transfer process consists of two major transfer variables – motivation to transfer and the transfer behaviour itself. The latter is the same as Alliger et al.'s (1995) concept of job behaviour, which is the

performance of learned (off the job) behaviour in the work setting. The four pertinent training outcome variables in Figure 14 can be classified using the scheme by Kraiger et al. (1993): (1) declarative knowledge (cognitive outcomes); (2) skill acquisition (skill-based outcomes); and (3) reaction to training and post training self-efficacy (affective outcomes).

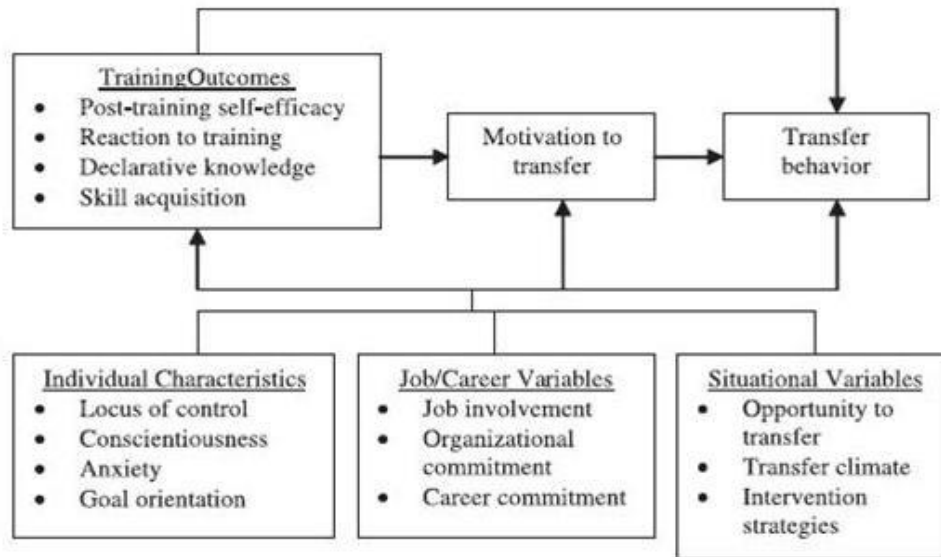


Figure 14. Pertinent variables in Training Transfer model (Cheng & Hampson 2008).

Burke and Hutchins (2008) proposed TTransfer model, which advances transfer theory by extensive body of stakeholder and time period research, refining categories of major transfer influences, and identifying specific moderating variables of transfer.

Researchers believe that this refined model of TTransfer realistically represents the complexity of transfer as understood in the HRD discipline and the confluence of multiple factors on transfer within modern organizations (Figure 15). The focus in the model is on performance as the ultimate criterion variable which is often absent in transfer models and research. Temporal dimensions go beyond the classic before, during, and after phases to reflect that transfer strategies can work across all these phases (Broad 2005) and thus are not time-bound. Major transfer influences have not only design and delivery, and

work environment elements, but also trainer characteristics as well as the influence of evaluation itself. The model suggests inclusion of moderating variables that may affect trainees' use of trained skills on the job and associated transfer interventions. Support already exists for the effect of work design and job content on transfer. Moreover, by focusing on the trainer as the primary data resource for transfer practices, authors give voice to an underexplored source of transfer theory development within the HRD area.

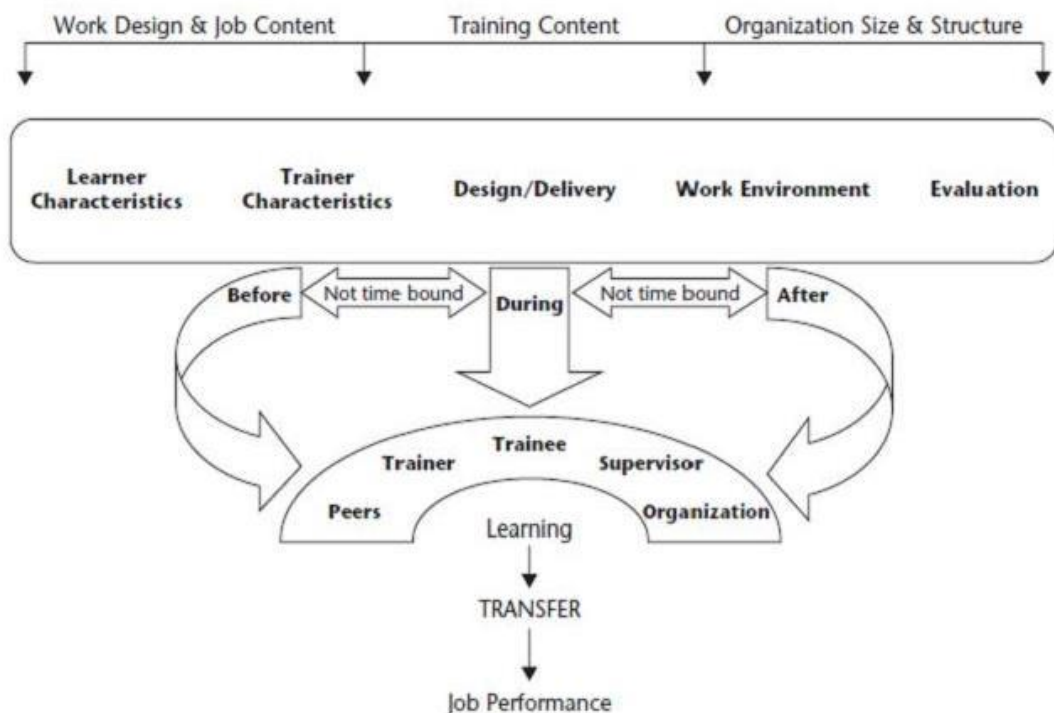


Figure 15. A proposed model of transfer (Burke & Hutchins 2008).

Finally, the transfer of training models and the review of transfer of training theories can help to understand that many TTransfer factors affect performance change. In the scientific literature there are a lot of opinions on these factors, however, it is important to find out what has the most and least influence on TTransfer and prioritize it, which is reviewed in the next chapter.

2.5 Training Transfer factors prioritization

The TTransfer literature has identified many factors that are likely to facilitate and affect application after training, however not many studies have concentrated on the prioritization of these factors and there is limited research using best practices approach methodology empirically. Many studies are linked to a particular training program, which is not the case for the present research, because all the factors are considered as a part of a larger training system that can influence the transfer of training throughout an organization. Before the exploration of ways to encourage TTransfer to achieve greater training impact, it is necessary to discuss factors, which affect TTransfer, according to the importance prioritization. In the previous chapters this question is partly reviewed according to primary transfer influences respectively.

In terms of primary transfer influences classification, which is the main part of this chapter, and stakeholders who participate and influence TTransfer, various contradictory studies with different results were found. However some research findings and their results are represented below in order to discuss the prioritisation done by theoretical studies using best practices approach. Trainee input and involvement, attendance policy, and supervisor involvement are considered as significant pre-training activities. Identical elements are significant during training. Therefore, supervisor and organizational support are significant post-training activities. The finding that supervisor involvement and support are significant factors both before and after training is consistent with previous studies that have found supervisor support to be important for transfer of training (Brinkerhoff & Montesino 1995; Cromwell & Kolb 2004; Facticeau et al. 1995). Furthermore, the significant relationships for supervisor and organizational support are consistent with Tracey et al.'s (1995) finding that the social support system plays a central role in facilitating the transfer of training.

The Saks, et al. (2006) study verifies the finding from a different perspective in immediacy of time. As the study's quantitative findings indicate and the qualitative findings support, the trainees experienced a certain degree of need to transfer learning to their jobs and tasks if training content and job functions were related. When the time factor is involved (immediate needs to use the

training content), the study indicated that the trainees were motivated not only to transfer their learning but also to learn better when they expected to use immediately what they had learned in training. Moreover, the researchers found significant correlations between instructional factors and the trainees' perceived learning applicability immediately after the training. (Saks & Belcourth 2006.)

In the empirical study of best practices done by Burke & Hutchins (2008), the most frequently identified strategies to support TTransfer used in the work environment (49%), in the training design and delivery phase (46%). In terms of primary stakeholders, respondents commented on the role of trainers (48%) and supervisors (25%) as most involved in supporting transfer best practices. Results for the prioritization of transfer factors according to the authors are listed in Table 5.

<i>Transfer Factor</i>	<i>Frequency (%)</i>
Transfer influences	
Learner characteristics	3 (2%)
Trainer characteristics	8 (4%)
Design and development	104 (46%)
Work environment	112 (49%)
Time period	
Before	28 (12%)
During	70 (31%)
After	74 (32%)
<i>Not time-bound (NTB)</i>	56 (25%)
Stakeholder support	
Trainee	53 (23%)
Trainer	109 (48%)
Supervisor	57 (25%)
Peer	2 (1%)
Organization	7 (3%)

Note: Emergent factors are in italics. Transfer influences were coded as 1 = learner characteristics, 2 = trainer characteristics, 3 = design and development, 4 = work environment; time period was coded as 1 = before, 2 = during, 3 = after, 4 = NTB (not time-bound); stakeholder support was coded as 1 = trainee, 2 = trainer, 3 = supervisor, 4 = peer, 5 = organization.

Table 5. Frequencies of transfer categories (Burke & Hutchins 2008).

Interestingly, the learner characteristics, including attributes regarding the trainee's ability, motivation, personality, perceptions, expectations, or attitudes

that influence transfer, have quite low ratings (2%), which contradicts some theoretical studies on the Motivation factor's importance (Mathieu et al. 1992; Tannenbaum et al. 1991; Baldwin et al. 1991; Quinones 1997; Holton et al. 2000; Goldstein & Ford 2002). For example, Holton et al. (2000) and Chiaburu & Tekleab (2005) ultimately defined motivation to transfer as a central variable in post-training individual performance and suggest that training motivation is directly related to all components of training effectiveness (positive correlation with TTransfer, maintenance and generalization). Finally, training professionals identified the time after (32%) and during (31%) training interventions as the most pivotal for affecting transfer.

A vast amount of research was provided on the TTransfer factors in the context of different time period primarily occurring before, during, or after the learning intervention, which influence transfer either directly or indirectly through their effects on learning (Baldwin and Ford, 1988). According to Wexley and Baldwin (1986) the period after training seems to be the most crucial in facilitating positive transfer. Several authors also suggest that post-training transfer interventions must be explored (Baldwin & Ford 1988; Noe & Ford 1992 according to Tannenbaum & Yukl 1992). Additionally, Saks, A., and Belcourth, M. (2006) proved empirically, that training activities before and after training are more strongly related to transfer than training activities during training. As was indicated, the pre-training activities explained 21% of the variance in transfer, training activities during training explained 20% of the variance in transfer and the post-training activities explained 24% of the variance in transfer. Thus, overall, the pre- and post-training activities explained more variance in transfer than the activities during training and also explained significant incremental variance in transfer over and above that explained by the training activities during training.

Additionally, the research done by Dr. Brent Peterson (Bersin 2011) has shown that pre-work contributes to the effectiveness of learning, and clearly, time spent in the learning experience is valuable. What is significant, based on this finding by Peterson, is that approximately 50% of the ultimate effectiveness of learning

can be attributed to what happens after the learning experience ends as shown in Figure 16.

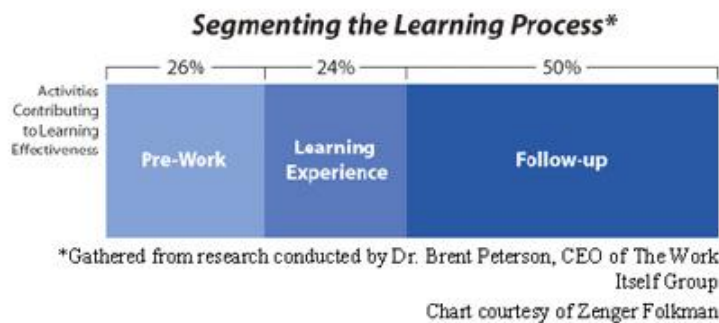


Figure 16. Prioritization of the Training Transfer factors (Bersin 2011).

Despite the fact that TTransfer has been a topic of great interest since the 1960s (Kirkpatrick 1967; Baldwin & Ford 1988; Burke & Hutchins 2009), and a significant number of studies were identified (>170; for an overview, see Burke & Hutchins, 2009), there is still no agreement on the number or nature of factors influencing transfer and their importance prioritization, nor of the way in which they interact with each other. Therefore, effective solutions to enhance TTransfer and training effectiveness, which are analysed in the next chapter, require consideration of the factors and their prioritization.

2.6 Methods for Training Transfer improvement

Though the literature continues to report a transfer problem in organizations, little attempt has been made to examine what organizations do to improve transfer and how these attempts relate to their level of transfer of training. Some of these activities have been tested at the individual level of analysis and there is evidence that transfer systems differ across organizations (Holton et al. 2003), which is accepted in this study. Thus, the theoretical review of methods for TTransfer improvement will be discussed and correlated with the organizational context. Because TTransfer is itself a process which is affected by different factors, it needs to be planned and managed with the same care as the rest of a training program with the consideration of the knowledge of the most important factors accordingly.

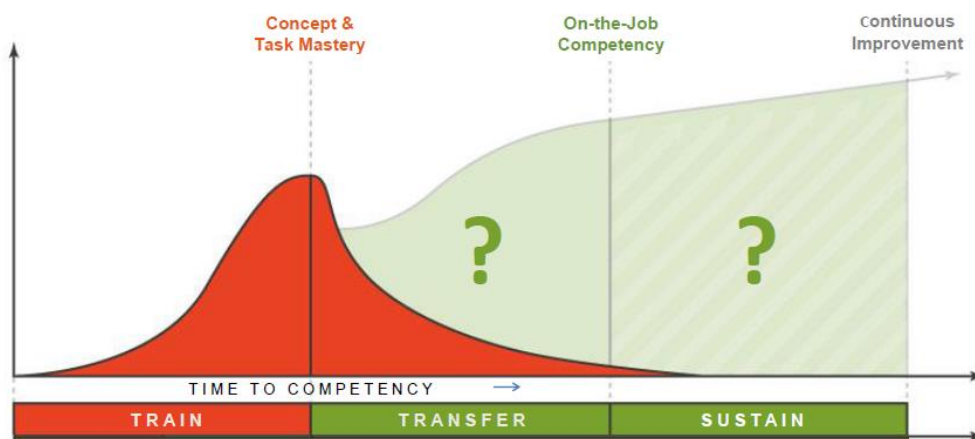


Figure 17. Learning curve and Training Transfer (Rosenberg 2013).

This chapter will look at the classic learning curve from organizational perspectives and will provide some theoretical findings around questions represented in Figure 17: how can organizations improve TTransfer and maintain the application after the training over long period of time within different work situation in order to achieve continuous improvement?

The methods for TTransfer enhancement can include different actions and strategy to follow. The term “transfer action” means the use of any technique or method to help ensure that knowledge and skills learned are executed as planned on the job to achieve the intended results. The term “transfer strategy” is used to identify the approach taken with the stakeholders to get the transfer action to be accepted and implemented. To put it another way, transfer action is “what we will do to influence transfer” and transfer strategy is “how we will make the action happen”. (Stone 2008.)

Numerous activities throughout the training process have been suggested in the scientific literature within the organizational context (Broad & Newstrom 1992; Burke 2001; Machin 2002; Tannenbaum & Yukl 1992). The analysis of academic theory is demonstrated in Figure 18, where 3 types of source for methods for TTransfer improvement are identified.

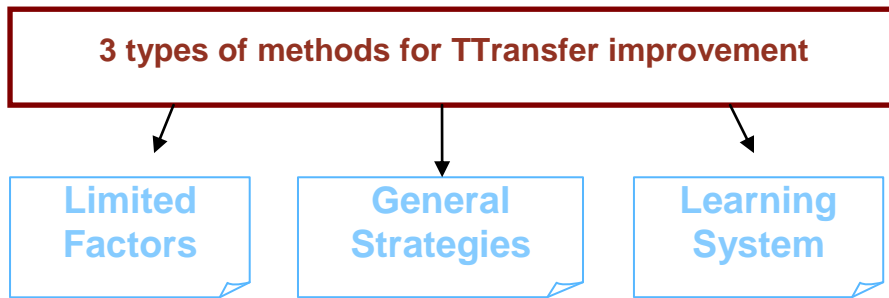


Figure 18. Methods for Training Transfer improvement: classification of sources.

The first type, Limited Factors, provides a list of potential enabling actions for TTransfer improvement which are correlated to the factors, however their limitation is in the unsystematic approach, usually restrained factors are discussed by authors and the list of factors is incomplete. This type is mostly connected with this study and will be discussed below when the other two will be shortly reviewed. The second type, General Strategies, represents no or weak correlation with factors influencing TTransfer improvement and provides general advice and suggestions on the actions and strategies. This type is the least structured and more complex. The third type, Learning System, comes mostly from scientific books where authors do not narrow with TTransfer area of research specifically but consider it as a part of Learning system in the organization as a whole. This resource provides wide theoretical view on the phenomenon, however quite detailed, complicated to apply and therefore less realistic. Not all these types of methods for TTransfer improvement sources are discussed and analysed in the chapter, and more attention is given to the first type in order to follow factors analysis structure.

Limited factors type in scientific literature represents the factor analysis and suggests the activities for TTransfer enhancement in correlation with those factors. The review of some sound theoretical findings is organized in the same sequence as was used for TTransfer factors analysis previously.

Individual learner characteristics and personal factors are not widely covered, possibly because of the nature of these factors as given which is difficult to change. Leimbach & Emde (2011) discussed about learner readiness: It would seem obvious that learners need to be prepared to learn if their learning experience is to be effective. Yet few organizations pay enough attention to

motivation, enthusiasm and positive anticipation prior to a learning session starting the learning experience before the planned sessions, and doing so in a way that engaged the learner's interest and participation. More attention is attached to Motivation factors as one of the most complicated variables to manage. Velada et al. (2007) proposed that organizations can improve TTransfer by ensuring that trainees believe that they have the capabilities to successfully learn the new material (self-efficacy) and utilize their new knowledge, skills and abilities on the job. This can be improved by (1) showing trainees that other employees who have received the training have successfully improved their job performance, (2) providing trainees the opportunity to experience mastery of the training material in the training environment and (3) modelling the appropriate behaviours so that trainees can conceptualize how gained knowledge, skills, attitudes can be utilized outside of the training context. According to Malcolm et al. (2005), before learners can master a new skill effectively they must be convinced it will help improve their organization's performance, recognize that their own performance is weak in that area, and then actually choose to learn. To avert these outcomes, companies must help employees to internalize the need for change and to develop the desire to gain the skills that will bring progress. The best method is to include trainees or their peers in determining what changes need to be made and why, thereby creating credible ambassadors for the effort. If this isn't possible, a similar purpose is served by beginning a training program with an analysis of the existing performance problems of the individuals or business units involved and of how the new skills will address these problems (Cermak & McGurk 2010). The same idea is supported by DeSmet et al. (2010), discussing that in the beginning of a training program, analysis of the existing performance problems of the individuals or business units involved and of how the new skills will address these problems can motivate participants to learn. In a related course of action, it is also possible to utilize self-management interventions; as self-management provides explicit instruction in metacognitive activities related to self-regulation, it may also elicit mastery goal orientation (Gist et al. 1990).

Training self-efficacy is related to pre-training motivation; therefore interventions aimed at increasing training self-efficacy should be designed. Indeed, research

indicates that some of the self-efficacy antecedents are verbal persuasion, logical verification, behaviour modelling and past experience (Bandura 1986). Thus, both practitioners designing interventions for training outcome optimization and trainers operating in the instructional environment have a number of options to increase self-efficacy.

Another option is related to managing attributions for unsuccessful outcomes, as suggested by Steiner et al. (1991). Specifically, guiding trainees to attribute their failure to unstable causes might enhance (or at least not decrease) trainee self-efficacy. Alternatively, selection based on self-efficacy levels might be useful when training is done in multiple waves. Employees with higher levels of self-efficacy can be trained in the first wave and serve as models for those in subsequent waves, given that those who succeeded at the same task can enhance the self-efficacy of their peers. Big role for the motivation of learner in scientific literature is given to stakeholders who participate in the process; however there is little attention on how to involve them for the learner's effectiveness and impetus.

For the **Training program characteristics**, there are many more resources in the literature. Research on instructional methods has suggested that transfer of training seems maximized (1) when there is greater similarity in stimuli and responses between training and the transfer environment (Holding 1965, according to Yamnill et al. 2001), (2) when "overlearning" occurs during the training process (Hagman & Rose 1983, according to Yamnill et al. 2001), (3) when post-training interventions such as goal setting (Wexley & Nemeroff 1975, according to Yamnill et al. 2001) and action planning (Foxon 1997, according to Yamnill et al. 2001) of learning transfer exist, (4) when tutoring and coaching follow after training is completed (Holton et al. 2000), and (5) when various instructional methods, such as application examples, the use of analogies, and computer simulations, are employed during the training experience (Huczynski, 1993, according to Lim 2001). In recent research, the setting of minimum design ratio was recommended: for every 1 minute of content delivered, design in 3 minutes of practice. Highly transferable training gives participants large amounts of time to practice and new skills that are not adequately practiced

have lesser chances of being transferred (Maximising Transfer 2013). Leimbach & Emde (2011) propose opportunities for structured follow-up activities, creation of specific action plans, or opportunities to practice behavioural models. Transfer support forms such as the goal-planning sheet in the participant materials and notes for the instructor, explaining the purpose of the activity, how to introduce, how much time to allocate, and criteria for acceptable action items can additionally help according to Basarab (2013). Holding virtual retreats that bring the participants and instructors back together to review content and skills learned in class and discuss successful transfer techniques keep the learning fresh (Maximising Transfer 2013).

Near transfer and far transfer can be viewed as a series of goals or objectives of training and should be reflected in the content and design of training. So it is critical to identify in advance the situations in which training is to be applied. However, if we accept the hypothesis that training strategies differ in terms of the types that facilitate near transfer versus far transfer. Research reviewed by Clark & Voogel (1985) suggested that the following recommendations could increase the likelihood of near transfer:

- The more the training content and program reflect the workplace, the more successful the near transfer (Baldwin & Ford 1988).
- The greater the specificity about where and how the training is to be applied to the job, the more successful the near transfer (Clark & Voogel 1985).
- The more over-learning of the task is encouraged, the more successful the near transfer (Noe 1986).
- The more the procedural nature of the task is emphasized, the more successful the near transfer (Clark & Voogel 1985).
- The more the application of the training is restricted to only those areas for which the trainee was prepared, the more successful the near transfer (Clark & Voogel, 1985).

The following actions may hypothetically influence the acquisition of far transfer:

- The better trainees understand the underlying principles, concepts, and assumptions of the skills and behaviours they are learning, the more successful the far transfer (Goldstein 1986).
- The more trainees practice in different contexts and use novelty in their practice exercises, the more successful the far transfer (Baldwin & Ford 1988; Goldstein 1986).
- The more encouragement trainees receive during training to discuss and apply the training in situations of their own choosing, the more successful the far transfer (Noe 1986).
- The more encouragement trainees receive after training to apply the training to situations other than those for which they were trained, the more successful the far transfer (Goldstein 1986).

For **Work environment characteristics** and work system factors, it is important for organizations to create environments that support the transfer of newly trained KSA to the work environment. One way this can be accomplished is by creating a climate in which all employees perceive that training is an important aspect of organizational life that will help employees become productive members of the organization (Baldwin & Ford 1988; Tracey et al. 1995). Considering the organization itself as a major stakeholder, if learning is a value, it can have a direct impact on employee performance and TTransfer improvement. Culture of learning importance should be created individually by its owners and management team and supported for every employee (Lim et al. 2006).

Rouiller & Goldstein (1993) offered a conceptual framework for operationalizing transfer climate; they suggested that transfer climate consists of two types of workplace cues which should be incorporate for TTransfer improvement. The first set of workplace cues - situation cues - remind trainees of opportunities to use what they have learned when they return to work. There are four types of situation cues:

- Situation Cues. These cues serve to remind trainees of their training or provide them with opportunities to use their training when they return to their jobs;
- Goal cues. These cues serve to remind trainees to use their training when they return to their jobs;
- Social cues. These cues arise from group membership and include the behaviour and influence process exhibited by supervisors, peers and subordinates;
- Task cues. These cues are concerned with the design and nature of the job itself;
- Self-control cues. These cues refer to various self-control processes that permit trainees to use what they have learned.

The second set of workplace cues - consequence cues - is the feedback trainees receive after they apply the knowledge, skills, and attitudes they gained in the training to their jobs, they encounter consequences that affect their use of what they have learned. There are four types of consequences, two of them must be avoided (punishment, no feedback) and other two are needed to apply:

- **Positive feedback.** Trainees are given positive information about their use of trained behaviour; for example, new managers who successfully use their training receive a salary increase;
- **Negative feedback.** Trainees are informed of the negative consequences of not using their learned behaviour; for example, area managers are made aware of new managers who are not following operating procedures (Rouiller & Goldstein 1993, pp. 383).

People-related factors within Work environment characteristics get scrupulous attention in the academic literature in the case of methods for TTransfer improvement. The idea to extend stakeholders beyond trainers, trainees, and supervisors was proven as worthwhile. As research has shown that peer support as being significantly influential on effects of transfer (Burke & Hutchins

2008), peer collaboration, networking, and the sharing of ideas relating to the content can act as support for skill transfer in trainees. (Hawley & Barnard 2005). Additionally, participants learn really well when working with other participants - each gains in the exchange. Trying out new things and getting immediate feedback are excellent transfer enablers. These pairs may also become learning partners post training to support and coach each other - another good tip for increasing transfer. However, there is a risk here that some participants will coach/support incorrect behaviours (Leimbach & Emde 2011). As organizational supports are important for skill transfer, interventions aimed at changing related employee perceptions can be devised. This can be done, for example, through formal processes such as policies and directives. Peer support can be enhanced through the creation of knowledge management and performance appraisal systems that encourage and reward knowledge sharing and reciprocal support (Chiaburu & Marinova 2005).

The importance of management involvement in training process for TTransfer has been discussed for a long time. Outcomes are much better when business leaders participate in the design and delivery of training programs and connect them to the new ways of working (Cermak & McGurk 2010). However, managers lack the skills on how to best support employees post-program and maximize TTransfer. One solution which can be used successfully is to conduct so-called management team preparation sessions, which include problem recognition by management and identify the obstacle to solving the problem as a lack of skills (training). Then the proposed course or curriculum should occur, which has:

- Performing instructional design and course development;
- Redesigning work process and tools participants will use when applying their new/enhanced skills;
- Preparing the management team to ensure successful TTransfer.

Encouraging managers to provide clear performance objectives enables employees know exactly what they are expected to do. Managers should provide the necessary support (resources) for high performance and establish

clear rewards for performance and prompt feedback to let employees know whether their performance meets the established standards after training (Yamhill & McLean 2001). By holding management team preparation sessions, management engagement in the training process and the likelihood of successful TTransfer are increased (Freifeld 2013).

Finally, after scrutinizing all possible scientific and theoretical sources, the understanding of the need for more structured and easy-to-apply approach in methods for TTransfer improvement was identified. The next chapter will provide empirical view on the TTransfer phenomenon, keeping in mind the main objective of this study – to suggest the system of methods for TTransfer improvement which can be used in the organizational context for different training programs and enable maximum TTransfer. The Empirical structure of this research is sustained with the Theoretical part and comparison analysis is provided in Recommendations chapter. Therefore, the next chapter is devoted to empirically test the TTransfer findings from theory and enrich the research with business assessment of the TTransfer in this area, using the best practice approach.

3. Research design of Empirical study

3.1 Introduction

One of the initial choices to be made when research is planned is the nature of the research - quantitative and qualitative are two most common approaches. Qualitative research is empirical research where the data gathered is not likely to be numerical, and theory is often generated from the data collected. Qualitative research is therefore often more interpretive in nature, in that it seeks to interpret the experiences of others in the context of the research, rather than attempting to quantify their reaction to an experience (Denzin & Lincoln, 2005). This study attempts to determine the individual experiences of experts in HRD area with the specialization in Learning & Development (L&D) on an individual basis and how they view TTransfer necessity, factors influencing TTransfer as well as methods for TTransfer improvement in the organizational context. The research questions, which were analysed through

the lenses of theoretical findings previously, are in this part of the study empirically tested and discussed. This examination of personal experiences was better suited to a qualitative approach as the data collection methods utilised allowed exploration of the personal experiences in a way that a quantitative approach may not have. This research is, therefore, a predominantly qualitative study based on subject matter experts' knowledge and practically confirmed estimation.

The relevance of the empirical research for TTransfer additionally can be defined by the previously gathered empirical findings about TTransfer problem, low attention for TTransfer area among other HR disciplines and limited studies of training practitioners' views on the issue.

In a survey of 150 organizations, training professionals reported that less than 20 per cent of employees successfully transfer their new knowledge and skills 6 months after training (Saks & Belcourth 2006). This situation, coupled with the low percentage of firms and trainers that actually assess behavioural training outcomes in terms of job performance and return-on-investment (Balaguer et al. 2006; Rivera & Paradise 2006), suggests that there is a lack of grounded knowledge of empirical TTransfer findings.

Empirical findings surrounding transfer may be overlooked, given the attention garnered by other areas of training practices, such as training design and delivery methods, or by HR in general. As an example, items tapping HR professionals' knowledge of training made up only 13 per cent (four items) in the Rynes et al. (2002, according to Hutchins & Burke 2007) survey compared with other HR areas (i.e. compensation and benefits, staffing, employment and management practices) with only one item tapping TTransfer. Notably, Zenger et al. (2005, according to Hutchins & Burke 2007) suggest that a lack of emphasis in supporting TTransfer might be attributed to an imbalance between the resources provided by firms for each phase of the instructional design process and the actual value each phase contributes to sustained performance improvement. Specifically, the authors estimate that 85 per cent of training resources are dedicated to designing and delivering training, with the remaining 15 per cent divided between front-end analysis and follow-up (i.e. transfer and

evaluation) activities. However, when considering the value of each phase to overall performance improvement, the authors suggest that 50 per cent of all performance improvement resulting from training interventions may be attributed to TTransfer support and measure performance. Based on this work alone, the discrepancy between the importance of transfer to performance improvement is an area of concern. (Hutchins & Burke 2007.)

Although transfer researchers have made substantive strides in theoretical studies of TTransfer success and its link to organizational outcomes (Colquitt et al. 2000), limited studies have explored the extent to which training practitioners' transfer beliefs are consistent with findings in the research literature and empirical evidence of HR professionals best practices was not recognised widely (Hutchins & Burke 2007).

3.2 Methodology and data collection

Within the training or HRD literature and scientific empirical research, best practices approach exists as a precedent and can be found mostly in the larger domain of HR management rather than in TTransfer area. What this line of research suggests is that there is a need to capture best practices data as reported by professionals and compare it with established theory. Unfortunately, best practice reports in training, or specifically for the transfer of training, are limited, lacking in practicality, dated, or often anecdotal in nature (Burke, L., Hutchins, H. 2008). Best practices data from experienced training professionals is gathered as empirical part of the study to support the organizational level of analysis in this research, avoiding the narrow vision of the TTransfer through the individual level and for a particular training program. Therefore, best practices methodology allows the consideration of TTransfer as an organizational-level variable, such that the transfer of training will vary across organizations, as will the activities that organizations incorporate into their training programs to facilitate transfer.

This study utilises in-depth interviews as the main type of data collection, which is one of the respected ways for best practices methodology, with the data gathered being predominantly qualitative. The aim of an in-depth interview is to

delve more deeply into the experiences of individuals (Cohen et al. 2003). The semi-structured interview has some structure in having some fixed questions, but allows the interviewer to probe more deeply into areas of interest. It also allows the raising of issues of concern to the interviewee that may not have been completely relevant to the topic. This ensures that the interviewer was free to explore more deeply the participants' individual experiences, but also enabled the assessment of TTransfer phenomenon to be fully examined. The process of the discussion from the beginning assumes flexibility around the main questions and opens sharing of successful or unsuccessful stories within TTransfer topic, which uncovers new insights and issues. Additionally, the nature of the research, in assessing the success of TTransfer and its importance, meant that there was less focus on validity as an external construct – there were no 'right' answers. The interview has its appropriate structure and themes classification, and all the participants have similar amounts of experience in HR and L&D area. However, the limitations of best practices approach include a degree of lack of measurable components for the analysis of the difference among participants in their personal and motivational characteristics as well as diverse experience, industry of business and corporate cultures.

The questions of the interview are organised in accordance with the research questions sequence and with theoretical structure of the study. The relevant themes and subcategories are grouped to 4 main blocks of the interview. All the questions are prepared in the connection with several important points to take into consideration during the interview, such as approximate time for discussion of each question, what exactly is expected to be analysed during the answer and after the interview, how it is going to be measured afterwards, hints for hand-out usage and main theoretical findings on the topic of question for the cases if a participant would like to know about the scientific view on the topic of discussion. The interview structure is created in a logical way, so that during the conversation the main objectives of the research appear step by step and the complexity of TTransfer topic is increased by the time and the level of understanding of the previous theme. The list of questions including previously discussed structure of the subcategories is presented in Appendix 5. Hand-outs

are prepared before the interview and used during the process, whereas the new package is formed for each participant. The hand-outs are filled in during the interview and some data is collected and analysed through individual spread sheets and their answers. The diverse format of the interview includes not only verbal channel of communication, but also visual and active participation in filling in the forms are operated, which helps participants to be involved all the time during discussion. Clean sheets of paper are also used during the conversation when the researcher and the participant outline the TTransfer areas of interest and visualize different aspects of TTransfer effects in organizational context.

Semi-structured interviews in general also have some limitations, with the problems of restricted time frames, difficulty in the recognition of ideal vs real situations and social desirability bias. For example, sometimes not all factors were understandable for participants and in the task to prioritize different factors, a participant did not ask for clarification because of the time limits or certainty of correctness, and provided its own vision on the meaning. This can negatively influence validity and research results in the end.

3.3 Participants and sample

Best practices studies, by their bounded nature, do not utilise random samples for selecting participants. There was no randomness in the selection of the interview participants, who were a volunteer sample. The restriction of the purposive sample was organised with different parameters in mind:

Occupation groups: high level managerial positions with the function HR and L&D for current or past state and with experience in the middle managerial status. This group of participants was chosen by reason of the area of the research and the opportunity of participants to look at the TTransfer issue from different perspectives and previous experience.

Experience in HRD area: at least 10 years of experience, which guarantees the mature view on the topic and possibility of successful and unsuccessful experience with TTransfer at organizational context.

Industry of business: each participant represents different industry and specifics of business, such as: maintenance engineering and consulting company, training and consulting company, head office of pharmaceutical company, pharmaceutical production company (Technical Operations). All the companies represent international business in Russia. It was hoped that interviewing individuals from different organisations would allow examination of whether their viewpoints differed and the reasons for any differences according to the specifics.

Opportunity for interview time: the main focus is on the in-depth interview that is why the requirements of time can be viewed as one of the restrictions, because not every participant might have the time needed. Each interview was about 2.5-3 hours, depending on how long the interviewee chose to speak about the questions. However the planned time was calculated for 1.5 – 2 hours, which led to more detailed discussions and additional issues were raised.

Sample size: Cohen et al. (2003) outline the difficulties of determining the correct sample size, but note that the “correct sample size depends on the purpose of the study and the nature of the population under study” (p. 93). The difficulty in determining sample size in qualitative research is echoed through much of the literature (DePaulo 2000; Hakim 2000; Sandelowski 1995). DePaulo (2000) suggests that the sample must be big enough to hear most or all of the perceptions that might be important. Another issue with choosing sample size is in assessing what the likely response rate might be – Hakim (2000) suggests that a response rate of less than 50% is inadequate. Taking into account the specifics of current research, respondents’ rate is 100%.

A sample of four participants was interviewed to ensure that all restrictions were met and the specifics of this research require to emphasise the quality and amount of the information rather than the amount of participants. Cohen et al. (2003) recommend that “one conducts interviews with as many people as necessary in order to gain the information sought” (p. 278). As with most research, it would have been desirable to have interviewed more individuals to determine whether additional data could be gained. However, there were

limitations to the time that the researcher could spend on this, and as interview transcription is extremely time consuming, a limit was set. As similar themes emerged during the interviews, it could be argued that more interviews might have only confirmed the findings, rather than resulting in the emergence of new information.

3.4 Research Procedure

For the in-depth interview participants were chosen from those who had volunteered to participate and were qualified according to the sample requirements. All of the participants had worked with the researcher either previously or work at the present moment together, therefore the motivation and commitment level was high from each party which was helpful in the process. The researcher contacted the prospective participants by e-mail to determine their availability and confirm whether they agreed to participate. A number of prospective participants were either not available at the proposed time or had workload issues that prevented their attendance at the meeting. As a result an additional email was sent to find the most appropriate time and place for everybody. A confirmatory email was sent several days prior to the session thanking them once again and confirming the date, time and place of the session. In this e-mail attachment were Power Point slides in PDF format with the following structure:

- **Main features of the interview:** date of the interview, agenda of the interview, main objective, research topic, best practices approach explanation and what participants can gain out of the interview;
- **Structure of the interview:** each topic according to sequence of interview and main outcomes are presented in structured way (Appendix 6).

Four interviews were undertaken, which included the introduction part where the main features of the meeting, the focus and objectives of the research were covered beforehand. The interviews were held in a place that felt comfortable to the interviewees – these varied between their offices, staffrooms, and meeting

rooms. One interview was conducted via the Internet due to remoteness of the participant. The time for this interview was less than for others because it was more difficult to concentrate relying on web-based communication. Still the results were sufficient and all the required forms were filled in on-line, during the conversation. The interviews were all taped, with the permission of the interviewee, and a full transcript made of the tapes. The interviews were held in March 2014.

3.5 Data analysis

As mentioned above, one of the major distinctions in research is between quantitative and qualitative data, which both demand quite different ways to analyse data. Even in projects such as this, where on the face of it the methodology is qualitative, data can be collected in such a way to facilitate different types of examination. Thus, it is crucial for the researcher to choose the proper method of data analysis prior to undertaking the research, as this may significantly affect the data gathering process and substance. Qualitative analysis of interviews can range from summarising the discussion, to identifying themes, to elaborate coding schemes (Fern 2001). Summarising the discussion is of limited benefit to the researcher, as little interpretation can occur (Braun & Clarke 2006). This study, therefore, has utilised the qualitative method of thematic analysis to undertake the data analysis for all the qualitative data. Thematic analysis seeks to identify prominent or recurrent themes that 'emerge' from qualitative data, and interpret the data in the light of these themes. Themes are identified by "bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone" (Leininger 1985, p. 60, according to Braun & Clarke 2006). One of the crucial aspects of thematic analysis is establishing what is meant by a theme (Braun & Clarke 2006). The literature indicates that a theme is not necessarily what is mentioned most – there is no measure of how many times something has to be mentioned to qualify as a theme. Braun and Clarke also underline that when determining key themes, it is not necessarily those that are mentioned most, "but rather on whether it captures something important in relation to the overall research question" (p. 81). Themes can either emerge from the raw data (Braun &

Clarke, 2006) or may be expanded on by an examination of the literature (Aronsen 1994 according to Braun & Clarke 2006). Fereday and Muir-Cochrane (2006) suggest that a combination of data, literature and theoretically driven theme development provides a richer analysis.

In addition to the thematic analysis, as several statistical questions was integrated to the interviews, some quantitative analysis was undertaken by the computer package itself, which will be interpreted by the researcher. This will be incorporated into the findings.

Procedure

The procedure was developed in light of the literature outlined above and follows that outlined in Braun & Clarke (2006) summarised in Table 6 below.

Phases of thematic analysis		
1.	Familiarising yourself with your data	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2.	Generating initial codes	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code
3.	Searching for themes	Collating codes into potential themes, gathering all data relevant to each potential theme
4.	Reviewing themes	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5.	Defining and naming themes	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6.	Producing the report	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis

Table 6. Phases of thematic analysis (Braun & Clarke 2006, p. 86).

An iterative process was undertaken of reading and rereading the data to saturation to establish the themes. The theme coding used to analyse this

research was a combination of inductive and a priori deductive coding. Inductive coding is a data driven approach where the coding is derived from the text – in this case the qualitative data, transcripts and filled forms from the interviews. A priori deductive coding is where the coding is derived from the research question, sub-questions and the theoretical background. Finally, some quantitative data appeared with the statistical questions for TTransfer factors prioritization and the influence of different participants in TTransfer process. This data was analysed using standard computer package of programs and represented in the forms of diagrams and comparative charts.

Additionally, comparative analysis of the data with the prioritization approach was conducted in order to correlate theoretical, empirical findings together with the researcher opinion and assessment. The researcher opinion in this project hypothetically represents the best situation as the quintessence of ideal picture, which is a part of recommendations of this study to consider.

3.6 Ethical Issues

There are some ethical considerations to be taken into account with this study. As with all research it was important that the participants gave their informed consent to the research. Participants in all parts of this research were made aware of the fact that the information gathered would be used in this research project as well as the final results from the research can utilised by other organizations or interested parties to enhance their TTransfer success and training effectiveness.

As it was previously outlined, the participants were given a brief outline of the study prior to their becoming involved in the research process. Partly it was done by the e-mail, where the interview overview and agenda was provided. In the beginning of an interview, within the introduction part, participants were verbally given a general description of the process, the time involved, a broad outline of the study, and an outline of the purpose for which the information was being gathered, as it was not perceived that this would influence the participants. The other purpose of the introduction was to motivate for open

sharing ideas and experiences as well as to gain support for the relevance and importance for business of TTransfer problem to be solved.

Because the study involved participants giving some personal information one of the ethical considerations was preserving the confidentiality and privacy of the participants. As Cohen et al. (2003) state, “the greater the sensitivity of the information, the more safeguards are called for to protect the privacy of the research participant” (p. 61). This was done in several ways. There was a commitment to confidentiality in the consent form given to participants with the explanation that each interviewee is coded and there will be no name revealed in the research. The participants were not required to place their name on the hand-outs or other papers connected to the study. And finally, and extremely importantly, individual participants are not identifiable by any descriptions in the written research. Several times during the interview process, when sensitive issues were raised, the researcher assured the interviewees of the confidentiality of the process.

As this project is investigation of the actions and strategies for TTransfer improvement, thus not dealing with any personal information and personal feelings, it is not envisaged that there are any significant conflict of interest issues.

3.7 Limitation of empirical research

A number of limitations should be considered when interpreting the results of this empirical study. First group of limitations is concentrated within scientific diversity of research methods and also the reason of their influence is closely connected with the time frame conditions of the researcher. As it was discussed before, the nature of this research has qualitative method; however, the quantitative method might be the option that could enhance the results additionally. Limited by the best practice methodology the research might be enriched using other possible variables, such as case study as an example. The choice of type of data collection as semi-structured interviews might also be seen as hold-back point, whereas the application of focus groups, on-line and written surveys, project study, integrative reviews and other types might provide

much more data for detailed and comprehensive research. The other, probably, the most critical limitation for the empirical project is sample size, which is quite small for this research, so there could be issues about whether it is representative enough. The increasing of the size can improve dramatically the validity, reliability and results of the study findings. Therefore, future research using various research methods, methodology, type of data collection and a bigger sample size is recommended.

The second group of the empirical limitation is focused on the internal features connected with the participants and their background. However, other demographic considerations, such as gender and age, are less relevant to this study. The industry and the international status of companies, which the interviewees are related to, represent obvious limitation. As outlined above, this study used purposive samples, and this brings issues of whether participants who volunteer can be considered as representative. Occupational groups, experience in HR and level of participants are additional frames for the empirical results. According to the personal information about the interviewees, they have higher-level positions and experience in the training field and consequently are motivated to stay abreast of academic transfer research and deeply understand the TTransfer issues given their job responsibilities.

A limitation in the thematic analysis was that for the purposes of completing this thesis there was only one coder of the data. Ideally, the validity of the coding would be improved by getting at least one other person to code the responses, to ensure that the researcher's bias or other issues had not affected the coding. However, given this is an individual project, involvement of others in coding was not possible.

Finally, the researcher's opinion which is compared with the empirical and theoretical findings and based on the results of this comparative analysis and personal practical experience as well as proposed recommendations might be viewed as subjective sentiment and can be challenged.

4. Findings and Discussion

The best practices approach and in-depth semi-structured interviews as collection method utilised in this project, combined a great deal of data that will be used to answer the research question and sub-questions respectively. This data included perceptions, based on the experience, knowledge and practical examples of subject-matter experts, who represent high-level professionals in HRD and L&D areas of different international companies. As the most appropriate method of analysis of this data that emerged from the research is thematic analysis, this section seeks to outline the themes that emerged from the analysis. Because the interviews also produced relevant quantitative data regarding the factors, influencing TTransfer and the participants, who affect the TTransfer success on different stage of training process, some statistical analysis has been undertaken to contribute to the findings and provided in the form of diagrams and comparative charts. These findings are discussed in the context of the themes that emerged from the theoretical part of the study, and also the research question and sub-questions. Comparative analysis of the data is conducted in order to correlate theoretical, empirical findings together with the researcher opinion and assessment. The researcher opinion in this project hypothetically represents the best situation as quintessence of ideal picture, which is a part of recommendations of this study to consider.

4.1 Training Transfer definition

The structure of questions in the interview for the TTransfer definition part was organised with built-up approach in order to logically come to the general understanding what is the main objective of the project, what are the research question and sub-questions and therefore, TTransfer itself, step by step.

For coming to the TTransfer definition discussion, the question about the difference between Training and Learning and their purposes was open, which revealed different views on how business divides these two areas. In Table 7 the main ideas of interviewees are presented. From practical point, the participants shared their views, providing examples.

	Training	Learning
Definition	development of a person to be able to work in a specific area	continuous improvement of a person to be a master, a real professional in a specific area
	narrow and focused improvement of professional skill or ability	holistic and can be close not only to work requirements but also to personal development
	springboard for business as a form of learning	Lean 6 Sigma approach
	process of training in focus	a form of development the competitive advantages from the most valuable resource - people
	the instrument of transmission new knowledge, skills from expert to less experienced person	investment to personnel which should be returned
		the system of training management
		different ways of learning at the same training
Purpose	to get the specific proficiency which will be used only at the job	to make an expert, high-level professional
	to meet different external and internal requirements	to motivate in more complex way, for the future
	to motivate which will lead to better quality and commitment	to organise the process of training management in the most effective way
	to correspond to frequently changed business environment	to improve the effectiveness of work
	to help to adapt for new requirements of business	to observe the information and apply
		to create the culture of development

Table 7. Definitions and purposes of Training and Learning.

Some aspects were not found in literature around this difference and contained powerful ideas. One of the respondents compares training with a springboard for business, which helps a company to reach a lot, like jump further, and the more reliable and correct springboard is used, which is directly connected with application after the training success, the more “distance” the company will overcome in organizational results. The practice with trainings was compared in analogy with a springboard practice: the more familiar it becomes to use different jumping-off places, the more understanding achieved how to manage training effectively and with the best possible results. The other opinion on the difference in business, as training is for only narrow professional goals and specific area related to the job, whereas learning can be more holistic and close not only to work requirements, but also to personal development, which not always correlated to the business functions. Lean 6 Sigma was mentioned as an approach for learning where there is no end. However, many ideas were close to those investigated in the theory overview: training is a form, a tool, an instrument, a part of development while learning is a continuous improvement, a process, an investment, a system, a way.

The following observation was discussed during the conversation: when the training occurred, the learning might not happen, and at the same time, the learning process might happen without a training intervention. This lead to the consideration of purposes of both phenomena and the reasons why the shift from training to learning had occurred. Mostly every interviewee shared the reason of fast changing business environment and its requirement for competitive advantages, where training and learning can be one of the most effective supporters from HR management perspectives. The culture of development, as alternative purpose of the learning process is worth particular attention as well. The other reason of the shift from training to learning was determined as the consequence of rapid improvement of HRD area and HR profession, where new ways to enhance the results out of HR work were invented and implemented in many companies worldwide.

The definition of TTransfer was not asked for from participants directly, however it was referred to in the question, what companies can get after the training and

what is the most important component influencing the training effectiveness. Several versions were gained for the training results choice; among the answers were the following:

- new insights and information;
- deeper knowledge;
- change in behaviours;
- understanding of conscious incompetence;
- reaching of conscious competence level;
- application on-the-job;
- new tools and methods, how to use these tools;
- new skills and attitudes;
- achieved learning and individual objectives.

Almost all of the participants mentioned the application after the training and motivation to apply on the job as the most essential outcomes for business which participants can bring back as a return of investment. Therefore it was as a natural consequence out of application after the training, greater results in performance and business in general will appear, which is correlated with the theoretical findings directly. Considering theoretical review, in which more than 25 definitions of TTransfer were found, and empirical discussions with subject-matter expert's results, the researcher proposes the optional TTransfer definition as the following:

Continuous process of learning that new knowledge, skills and attitudes, gained after training **are transferred** to **application and adaptation** to workplace within **different context** and **complex task situations**.

An important part of the definition is the concept of transfer as a process which continues over time and hopefully will be never finished because it can be

improved to different levels with no limit for perfection, as was discussed in the theory review: called as Second Nature according to Atherton (2013) and mature practice according to Taylor (2007). The second key element of the definition is the state of finished transfer (transferred to) which implies the change has occurred in reactions, attitudes, knowledge and skills after training. Finally, because of the TTransfer is interminable, it includes not only the fact of application, but also constant use and re-use through maintenance and adaptation with ever-changing job environment and new complex variables and requirements at work. Additionally, the researcher emphasized from the literature analysis the TTransfer definition done by Calhoun et al. (2010): “The process of putting learning to work in a way that improves performance.” No doubt, owing to TTransfer success, improved performance takes place over time, which results can be measured in the frame of learning objectives / individual objectives / organizational objectives.

4.2 Importance of Training Transfer at organizational context

The question why TTransfer became urgent for business was expanded through the discussion of Achievement stories when the TTransfer had appeared. This helped to reveal TTransfer barriers and problems, which are compared with the reference to theory review and statistics in this section.

Achievement Stories methodology, as a simple and powerful tool, was used to identify positive TTransfer experience and TTransfer measurement opportunities. One of the examples was made with an internal Leadership training program, when the feedback was organised among learner, trainer and line manager after 1, 2 and 3 months. The discussions were valuable for every participant of the meeting because the learner had a chance to share the obstacles for TTransfer, the manager tried to discuss the ways how to help with the overcoming those problems and motivate for the application, and trainer advised some tips for TTransfer improvement and provided feedback on the progress and preliminary results. One of the interviewees told a story where the external statistical course was taken. He was promoted to higher position and the training was perceived as the way of suitability test. Therefore the motivation was driven not only by the positive but also partially by negative

personal outcomes, which proved the power of motivation factor in general. Another story was about internal training on communication skills which lead the participant to increase several levels of learning model according to the theory of Taylor (2007): firstly from the unconscious incompetence to conscious incompetence, then from the latter to conscious competence and lastly to the process of development the unconscious competence level. The main focus in the application success is explained by the interviewee as the motivation and self-efficacy. After good results in TTransfer with the first internal training, the participant continued with self-development in the area of communications, taking part in external trainings on his own account. The next achievement story for TTransfer was about the presentation skills internal training, which allowed changing the format of communication between marketing and sales departments at long last. The main indicators which made it possible were joint team efforts of trainer, HR professionals and managers of the departments. The technical training and its effective application as the other achievement story, was mentioned, when the participants had lower level of manual skills than was required by the company. Therefore, during the course they had the theory part, the pre- and post-tests, and hands-on part, having equipment to try newly learnt skills and perform during the learning process. Each participant of this course was assigned to a mentor, who had high level of expertise and worked together during the first practicing and the technology was in place immediately. These conditions and facilities added value to TTransfer occurring in this case.

Despite the positive experience, every respondent shared the concern that even successful training programs often cannot guarantee that newly learned knowledge and skills will be transferred to the workplace. It was the joint agreement in opinions on the fact that when there is no transfer, there are no benefits and value for business. Respondents showed that the TTransfer issue is a new topic for business, and motivation to deal with such problems around the TTransfer phenomenon is high. Several times during the interviews, the Learning Curve and TTransfer were mentioned as the main concern of experts. This is correlated with the theoretical improvement of the expectations that TTransfer will be a major differentiator for high-impact learning organizations in the next 10 years (Bersin 2011). The theoretical review approves the empirical

evidence - there is strong consensus around TTransfer importance as a real application within the changing work environment conditions. The fact that training is useless if it cannot be translated into performance is completely accepted by the researcher. Improving TTransfer has the vast opportunities to increase the value delivered by L&D for business. If there is a chance to make a difference for organizations and learners, and this chance always exists, improving TTransfer is the missing ingredient.

As it was agreed with all participants of the empirical study, that training investments are not fully returned and effective if there is no performance and TTransfer. The replies of the root causes of TTransfer failure in general are presented in Table 8. Almost all respondents provided the same categories for the reasons of unsuccessful TTransfer and thus prerequisites for future discussion of factors influencing TTransfer were created. The most emphasised items were around learning culture development and maintenance, TTransfer Strategy in place and its level of effectiveness and supportive organizational environment importance.

Root causes categories	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Learning culture	The assumption that the application is natural and there is no need for	Insufficient learning culture	Immature learning culture	No culture that supports application on the long run
TTransfer strategy	There is no structured way for TTransfer control and maintenance	No tracking of TTransfer processes and results	Focus on training not learning	
Organizational environment	No expectations from TTransfer participants, from managers in the first place	Organizational environment is not supportive	Not result oriented companies	Work place environment is playing against or not playing for TTransfer

Management involvement	Managers have limited time and resources			No leadership commitment and expectations
Change management		Resistance to change and accompanied fears	Difficult to manage the TTransfer - fear for going out from safe situations	
Motivation		Going out from the comfort zone for accepting		Low individual motivation

Table 8. Root causes of TTransfer failure.

During the conversation it was logically concluded that TTransfer, as a continuous process, involves multiple steps over time, and is influenced by a number of factors which directly or indirectly affect its possibility for success.

4.3 Factors influencing Training Transfer

Both in the empirical and in the theoretical part of the study, different factors that facilitate TTransfer are analysed at the organizational level. The classification of TTransfer factors is presented in this chapter in the same order and priority as it was done in the theoretical part. Therefore, the first classification is viewed as primary transfer influences. The second specifies the time period when TTransfer process was occurred. The third classification determines participants who are most heavily involved in the transfer. Following theoretical findings, TTransfer is not necessarily time-bound (Burke & Hutchins 2008) and all the participants have already included to the first classification directly, which is, therefore, the main focus of this chapter.

4.3.1 Training Transfer Primary influences classification

After the in-depth discussion about different factors affecting TTransfer, which were found in the scientific literature (more than 120 different factors), the participants were asked to spend as much time as needed to look at each major

group and sub-group (5 major groups and 32 sub-groups) and prioritize step by step according to the influence on TTransfer success.

Category	1. INDIVIDUAL LEARNER CHARACTERISTICS		2. TRAINING PROGRAM CHARACTERISTICS	3. WORK ENVIRONMENT CHARACTERISTICS	
	1.1. Personal factors	1.2. Motivation factors		3.1. Work system factors	3.2. People-related factors
Participant 1	5	1	4	2	3
Participant 2	4	2	1	3	5
Participant 3	5	1	2	4	3
Participant 4	5	4	3	1	2
Medium	4.75	2	2.5	2.5	3.25
Place	5	1	3	2	4
Researcher opinion	5	1	4	2	3

Table 9. Data analysis of TTransfer factors' group prioritization.

Much work has been done together with the participants discussing each single group of TTransfer and analysing their prioritisation. In order not to overload them with the information, the first classification and investigation were organised around the 5 major groups (Table 9). All the data was prioritised using a five-point scale, where 1st rate is assigned to the most important group of factors and the 5th rate is the least important for TTransfer success.

However, the quest to prioritize these major TTransfer factors groups was mostly conducted after discussion of different sub-groups and factors of TTransfer. This was done specifically to let the participants deeply understand the complexity and diversity of each factor group and make the decision on the final prioritization in the end. Therefore, the main summary of 5 major groups TTransfer factors is presented in the end of this chapter, after detailed examination of each sub-group respectively.

It is necessary to put special emphasis on the fact that during the empirical interviews several sub-groups and factors were added as newly invented and

proposed. Some of the factors were added by the researcher as a suggestion for future study. In Appendix 7 the new sub-groups and factors are presented with marks of different colours.

4.3.1.1 Individual learner characteristics

Personal factors – sub groups prioritization

The same prioritization approach of data analysis is used for sub-group investigation, which is presented in Table 10 and Figure 19 accordingly. Abilities and personalities of a learner were considered as two the most influential among other Personal factors.

Category	1. INDIVIDUAL LEARNER CHARACTERISTICS				
Major group	1.1. Personal factors				
Sub-groups	Abilities	Personality	Demographics	Experience	Learning style
Participant 1	1	4	5	2	3
Participant 2	1	2	5	3	4
Participant 3	1	2	4	3	5
Participant 4	4	2	5	3	1
Medium	1.5	1.5	3.5	2.25	2.5
Place	1	2	5	3	4
Researcher opinion	1	2	4	3	5

Table 10. Data analysis of Personal factors sub-group prioritization.

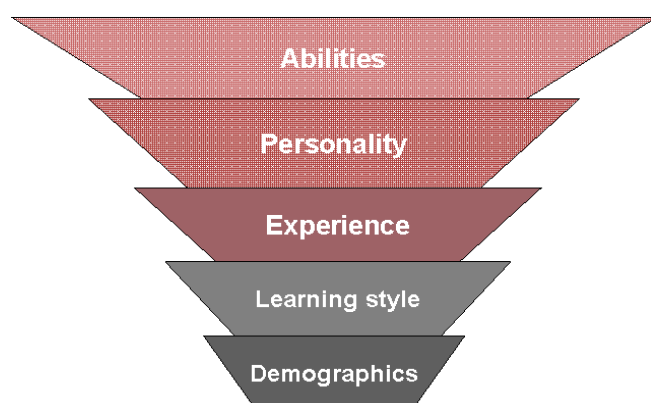


Figure 19. Personal factors sub-group prioritization, empirical overview.

According to the themes analysis, the main understanding of these factors is connected with the extent to which individuals have a range of capabilities, including: cognitive ability, physical ability, task specific abilities, and trainability. Several others resources were mentioned additionally, including time, energy and mental space in their work lives to make changes required to use learning on the job. During the conversation about the personality factor, there were some concerns about direct connection between personality and training effectiveness.

Personal factors – detailed factors determination

The next step in the discussion was to go into details with the classification of each sub-group and underline some of the most influential and valuable. In Table 11 these factors are emphasised with different colours, whereas the recurrence of two or more choices by different respondents are represented in red and only one choice which was not repeated by others is in blue. The researcher opinion is highlighted with yellow colour.

Additionally, in order to sum up the empirical findings for Individual learner characteristics, the voting for each factor is represented in Figure 20. In general, it is clear that there were different experiences and views of the experts based on the judgement, however the proportion for several votes is quite high which increases the validity of this research.

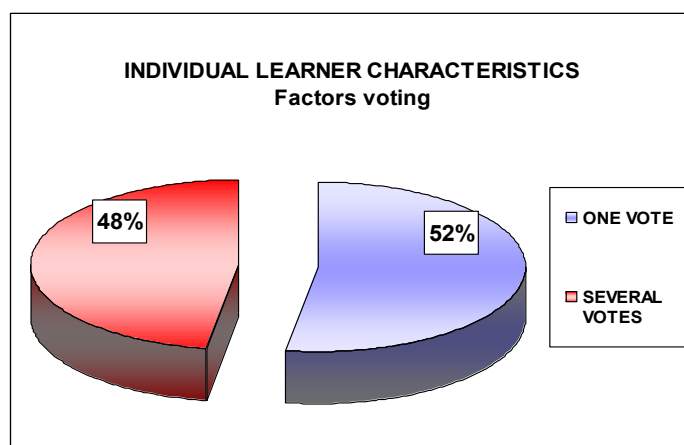


Figure 20. Voting proportion for factors within the Individual learner characteristics.

Looking at the most emphasised factors step by step, the cognitive ability was studied by Colquitt et al. (2000), who performed an extensive meta-analysis (n = 310) based on 20 years of training research and found the (corrected) correlation coefficient between the ability and TTransfer was 0.43. Additionally, in this empirical study, learning trainability which was connected to the learning agility, need for achievement, education experience with task and with the company and pragmatic learning style, was separated from other factors. The researcher emphasised locus of control and sees this phenomenon as belief of an individual that everything in his/her own control (internal) or everything is under control of external forces (external). Silver et al. (1995) found locus of control as significantly related to transfer behaviour.

1. INDIVIDUAL LEARNER
1.1. Personal factors
Abilities:
cognitive ability
psychomotor ability
skill acquisition
learning rates / trainability
task specific ability
Personality:
locus of control
ego strength
need for achievement, affiliation
conformity
conscientiousness
anxiety
Demographics:
family history
age
gender
education
Experience:
with company
with task
with previous training
Learning style:
pragmatist
reflector
theorist
activist

Table 11. Detailed factors determination within Personal factors sub-group.

Motivation factors – sub groups prioritization

For Motivation factors sub-group investigation, results of data analysis are presented in Table 12 and Figure 21. Motivation to learn, motivation to transfer and self-efficacy were selected as the three most important out of ten variables. The analysis is done for the 5 items in order to limit all the factors to the most sound.

The motivation to learn was related to the opportunity for voluntary participation, which lead to higher, greater learning, increased self-efficacy, and more positive trainee reactions than mandatory attendance. The researcher supports this choice and believes that learners who value the outcomes training will provide them (such as skill development) achieve higher transfer success. Motivation to transfer was connected by the respondents with the expectations in job performance change. Empirical study in the scientific literature approves this by Axtell et al. (1997), who found motivation to transfer was a significant predictor of positive transfer. Nijman et al. (2004) found that motivation to transfer moderately predicted transfer ($B = 0.33$, $p < 0.05$, $R^2 = 0.79$).

Category	1. INDIVIDUAL LEARNER CHARACTERISTICS									
Major group	1.2. Motivation factors									
Sub-groups	Expectations	Desires	Attitudes	Goal orientation	Self-efficacy	Learner readiness	Motivation to attend	Motivation to learn	Motivation to transfer	Motivation to maintain
Participant 1					4	5		1	2	3
Participant 2			1	2		4		5	3	
Participant 3				3	4	5		1	2	
Participant 4		3		5	2	4		1		
Mean				3.33	2	3.25		1.75	1.67	
Place	(6)			4	3	5		1	2	
Researcher opinion			5	(6)	3	4		1	2	

Table 12. Data analysis of Motivation factors sub-group prioritization

Self-efficacy was considered as an important dependent variable, which is related to subsequent task performance, according to the respondents' experience. One of the most powerful tools to increase self-expectations of performance was mentioned as pre-training briefings among line manager and learner, where the former believes that the learner has high success potential and is able to apply his/her abilities in the jobs and, therefore, change the performance when he/she wants to.

This point also is seen as evidence in the theory studied by several researchers (Ford et al. 1998; Gaudine & Saks 2004; Stevens & Gist 1997), who suggest that self-efficacy is positively related to transfer generalization and transfer maintenance Interventions that have been designed to increase learner self-efficacy have produced increases in skill transfer§ (Gist et al. 1991; Morin & Latham 2000).

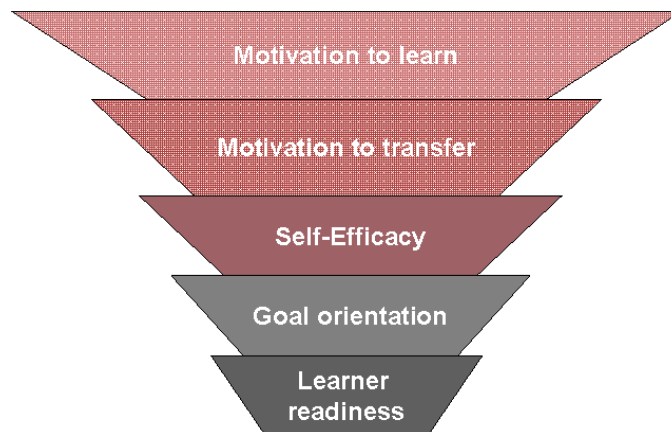


Figure 21. Motivation factors sub-group prioritization, empirical overview.

Learner readiness sub-group, which was proposed by a respondent as a new possible category, was placed the 4th place out of ten variables by the researcher, because it is believed that the extent to which individuals are prepared to enter and participate in learning, the learner should be not only motivated but also have enough resources for the application before and after training. However, according to empirical findings, Goal orientation sub-group was placed on the last place, whereas the researcher pointed the Attitudes as well, which is confirmed in the theoretical literature by Tannenbaum, et al.

(1991) who found that participants with more positive job attitudes would be expected to be more motivated to transfer.

Interestingly, some sub-groups of TTransfer factors, such as Desires and Attitudes did not receive a lot of attention. In the theoretical literature it was proved that learners' work related attitudes and desires clearly affect motivation to learn and to transfer as well as job satisfaction (Locke 1981).

Motivation factors – detailed factors determination

Going into details with the valid factor investigation within the Motivation factors sub-group analysis, the main insights are shown in Table 13.

1. INDIVIDUAL LEARNER
1.2. Motivation factors
Expectations:
positive / negative
training format
challenge
degree of interaction
focus on content
performance results
learning results
transfer results
pay off / incentives
Desires:
training format
challenge !!!
focus on content
Attitudes:
commitment to company
job attitude
intent to remain
career planning
job satisfaction
job involvement
reactions to previous training
co-worker / teammate relations
organizational cynicism
Goal orientation:
performance
learning / mastering

Self-Efficacy:
physical self-efficacy
cognitive self-efficacy
task-specific self-efficacy
Learner readiness
Motivation to attend
Motivation to learn
Motivation to transfer
Motivation to maintain

Table 13. Detailed factors determination within Motivation factors sub-group.

Respondents made special mention of the Expectations sub-group, suggesting new groups of TTransfer such as:

- learning results expectations;
- performance results expectations;
- transfer results expectations.

The scientific literature proves that participants' positive expectations - or not having negative expectations - have an impact on whether they apply their leaning (Carnes, B. 2014). Many respondents mentioned that all the factors from the Attitudes sub-group are similar and dramatically influence each other. Despite the fact that Desires as sub-group was chosen as not in 5 of the most important variables, through the detailed factors determination, challenge factor was noted by three or more respondents. Goal orientation to performance was also additionally mentioned by several interviewees. Additionally, the researcher emphasised the following factors:

- pay off / incentives (Expectations sub-group);
- commitment to company, career planning (Attitudes sub-group).

For the former there are several notices in the scientific literature. Learners who perceived intrinsic reasons to attend training reported higher levels of motivation to attend and learn in training (Facteau et al.1995).

For the latter, there is notable research support for the high positive relationship between an employee’s level of organizational commitment and TTransfer ($r_c = 0.45$ in Colquitt et al., 2000; $r = 0.61$ according to Hutchins & Burke 2007). Additionally, trainees who perceive training to be useful for achieving their job and/or career goals will experience higher transfer success, which was proved in the meta-analysis by Colquitt et al. (2000), the (corrected) correlation coefficient was 0.30 for the career planning-transfer relationship and 0.22 for career exploration-transfer.

4.3.1.2 Training program characteristics

Training program characteristics – sub groups prioritization

The results of the empirical prioritization for the categories of factors put Training program characteristics in the 3rd place out of five. This is one of the most studied areas in the TTransfer literature. The detailed data analysis for sub-group investigations is presented in the Table 14 and Figure 22 accordingly. The correlation with the found theoretical materials on this theme is added.

Category	2. TRAINING PROGRAM CHARACTERISTICS					
Sub-groups	Training needs analysis	Training design	Programed interventions	Training type	Trainer characteristics	Training results evaluation
Participant 1	1	2	6	5	3	4
Participant 2	5	1	6	4	3	2
Participant 3	1	6	3	5	2	4
Participant 4	1	2	4	5	3	6
Mean	1.75	2.25	3.25	3.5	2	3
Place	1	3	5		2	4
Researcher opinion	1	2	3		4	5

Table 14. Data analysis of Training program characteristics prioritization.

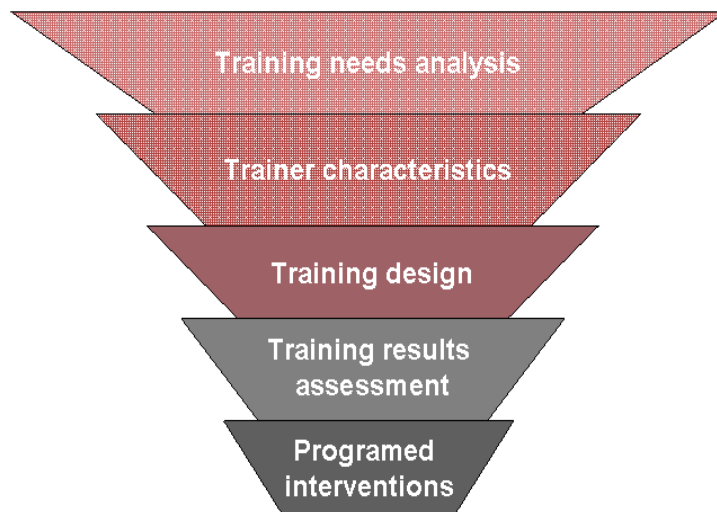


Figure 22. Training program characteristics prioritization, empirical overview.

The importance of Training needs analysis was supported by almost every respondent and commented that if the needs analysis is accurate, this will drive subsequent training design to the right direction and therefore, performance changes that occur due to training will contribute to organizational effectiveness. Although no empirical research was found that examined the impact of various methods of identifying training needs on training effectiveness, some research was done about the trainees who set specific, but challenging goals (Brown, 2005; Locke et al., 1981; according to Tannenbaum et al. 1993), which have reported higher transfer outcomes than those setting no goals or 'do your best' goals. Kontoghiorghes (2001, according to Hutchins & Burke 2007) found that transfer was correlated with the development of learning goals and objectives ($r = 0.37, p < 0.05$).

As noted previously, the researcher believes that training needs analysis should evaluate individual, organizational, and task factors and the need should be formulated including the following aspects within their logical interconnection and strong linkage:

- link to departmental and organisational outcomes;
- link to individual annual objectives;
- individual objectives for application on-the-job and behaviour change;

- learning objectives.

The 2nd place of the prioritization was provided to Trainer characteristics by the respondents, while the researcher gave the 2nd place to Training design sub-groups. Although trainer characteristics are outlined in studies supporting its importance for TTransfer (Hastings, Nichols, & Carrier 1997; Towler & Diboye, 2001; Yelon, Sheppard, Sleight, & Ford, 2004 according to Hatala & Fleming 2007), still they are quite limited. On the side of the influence of training design factors on TTransfer, numerous scientists reported these factors to be some of the most influential affecting transfer of learning in the workplace (Brinkerhoff & Montesino 1995). Thereby, respondents underlined Training design sub-group with the 3rd place in the hierarchy, while the researcher gave the 4th place to Trainer characteristics sub-group.

Training results evaluation shows that 4th place was given out of the empirical analysis when the researcher places it on the last priority among other five variables. It is theoretically approved by Bates (2003) that the influence of evaluation on transfer makes learners, trainers accountable for transfer success and helps create a culture that values application to the job after training” (p. 264). However, the researcher gave more scores to Programmed interventions in comparison with the evaluation factor, which respondents assured as the last place out of five. The theory and practical findings made the researcher to set this priority, as Programmed interventions strengthen the learning outcomes and assure that they will be followed by the formulation of individual objectives and their application on-the-job, when different participants of the TTransfer are engaged. Moreover, there is evidence in the theory that programmed intervention make holding trainees accountable for skill and knowledge transfer through the use of sanctions, follow-up reporting on performance outcomes and as a part of performance appraisal has been positively linked to increased transfer (Taylor et al. 2005).

Training program characteristics – detailed determination

The same approach with data analysis in details was finalised for Training program characteristics as it was done previously with other groups of factors.

In the Table 15 most influential and valuable factors are presented, whereas the recurrence of two or more choices by different respondents are represented in the red colour and only one choice which was not repeated by others is in the blue colour. The yellow filled is indicated the researcher opinion.

2. TRAINING PROGRAM CHARACTERISTICS
Training needs analysis:
management / learner involvement
link to departmental / company objectives
link to annual individual objectives
individual objectives for application
learning objectives
Training design:
management involvement
far / near transfer specifics
content validity / relevance to work environment
diverse instructional / media /active learning
over-learning with retention
error-based training
cognitive load of information
use of technology
Programmed interventions:
TTTransfer Strategy meeting (preparation)
pre-training meeting with Manager / Trainer / other
pre-requisite reading or exercises
manager's attendance on training
Relapse Prevention by Trainer in the end of training
action plan for application (prepared in the end of
post-training meeting with Manager / Trainer / other
internal cross-function training
TTTransfer Strategy meeting (evaluation)
Training type
Trainer characteristics:
trainer's expectations
expressiveness
professional knowledge / skills
structured thinking
training atmosphere
trainer treatment of learners
focus on apply and maintain new learning on the job
Training results evaluation:
training reaction / attitude change

learning objectives
training performance (skills on training)
link to annual individual objectives
individual objectives for application (job)
link to departmental / company objectives

Table 15. Detailed factors determination within Motivation factors sub-group.

Additionally, in order to observe empirical findings for Training program characteristics within the voting proportion, Figure 23 is created. In this prioritization session, the opinions are divided and mostly represented as one vote for the factor emphasis in comparison with the Individual learner characteristics (52% for one vote, 48% for several votes). This proves the fact that Training program characteristics cover a large area of factors (30 factors), which mostly created the necessary prerequisites for this difference. Besides that the interviews shown that respondents have diverse experience and knowledge on the Training program phenomenon which is replicated on the analysis accordingly.

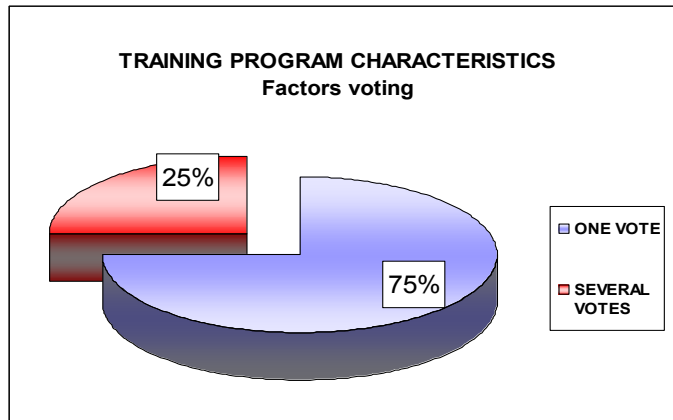


Figure 23. Voting proportion for factors within the Training program characteristics.

Going step by step, the importance of Training needs analysis was approved by the respondents and the mostly emphasised factors were management / learner involvement and link to departmental / company objectives, whereas researcher highly supports that TTransfer success tends to increase when training objectives are aligned with organizational goals. This suggestion is also

proved in the theory, as Montesino (2002) found trainees who self-reported the highest usage of training perceived a significantly higher alignment between training and the strategic direction of the organization. Watad & Ospina (1999, according to Hutchins & Burke 2007) reported increased performance resulting from a management development program that enabled participants to strategically link local decisions and work operations to the organizational mission.

It is worth mentioning that the researcher proposed new factors to be included in Training needs analysis sub-group, such as link to departmental outcomes and link to annual individual objectives, which are followed from the items previously discussed in this study. According to the researcher and respondents, every single factor is vital in this pre- analysis of expected results as it has direct influence on TTransfer success.

The results of empirical findings around Training design sub-group are mostly correlated both with the theoretical evidence and researcher's opinion. For management involvement, Kontoghiorghes (2001, according to Hutchins & Burke 2007) found that training retention (measured at 3–9 months after training) was moderately correlated with the management participation in developing goals and objectives of training ($r = 0.43$, $p < 0.0001$). Other support for stakeholder involvement in training design is ultimately suggestive (Baldwin & Magjuka 1991; Brinkerhoff & Montesino 1995; Broad 2005; Clark et al. 1993, according to Hutchins & Burke 2007). Far and near transfer specifics also received great support from scientists which is widely discussed in the Theoretical part of this project. Respondents shared the idea that transfer success will be limited if the training content is not relevant to tasks trainees will encounter on the job, which got support from Axtell et al. (1997) who found that the content validity of the training information was highly correlated to transfer immediately after and at 1 month after training ($r = 0.61$, 0.45 , $p < 0.01$, respectively). Content relevance has also been found to be a primary factor in predicting trainee perceptions of successful transfer in a cross-sectional transfer study of Thai managers (Yamhill & McLean 2005) and in a study on Korean management trainees (Lim & Johnson, 2002). Finally, active learning methods

significance for TTransfer was studied by Burke et al. (2006), who in a meta-analysis (n = 95) of health and safety training methods, found that including active training methods such as behavioural modelling, feedback and dialogue increases learning and TTransfer.

Within Programmed interventions, the researcher would like to additionally point out the importance self-management strategies (Relapse Prevention), for learners to apply on the job, which directly increases transfer success. The researcher proposes Relapse Prevention to be implemented not only by HR professionals but also by Trainers in the end of training. Moreover, self-regulatory/management behaviours in the training setting (Frayne & Latham 1987; Gist et al. 1990; Latham & Frayne 1989 according to Hutchins & Burke 2007) have been found to have direct and indirect effects on TTransfer. Particularly, Relapse prevention, as self-management model, has been studied in the TTransfer research for about 20 years and proved its effectiveness for TTransfer (Hutchins & Burke, 2007). Additionally TTransfer Strategy meetings before (preparation) and after training (evaluation) are recommended by the researchers, which is discussed in more detailed way in the Recommendations chapter.

Finally, the necessity of Trainer characteristics and Training results evaluation factors were extensively discussed previously and show the correlation among empirical and theoretical studies as well as the researcher's opinion.

4.3.1.3 Work environment characteristics

Work system factors – sub groups prioritization

The second large group with 7 sub-groups and 29 groups of factors influencing TTransfer is analysed empirically and brought into correlation with theoretical findings and researcher estimation, is presented with the same prioritization approach of data analysis. Sub-group investigation is analysed in the Table 16 and Figure 24 accordingly.

Category	3. WORK ENVIRONMENT CHARACTERISTICS					
Major group	3.1. Work system factors					
Sub-groups	Task & job characteristics	Transfer climate	Learning culture	Organizational culture	Organizational Policies & procedures	Organizational history
Participant 1	4	6	3	2	1	5
Participant 2	5	1	3	2	4	7
Participant 3	1	2	3	4	6	7
Participant 4	3	4	1	2	5	7
Mean	2.25	1.75	1.75	2	3.75	5.25
Place	4	2	1	3	5	
Researcher opinion	4	2	1	3	5	

Table 16. Data analysis of Work system factors sub-group prioritization.

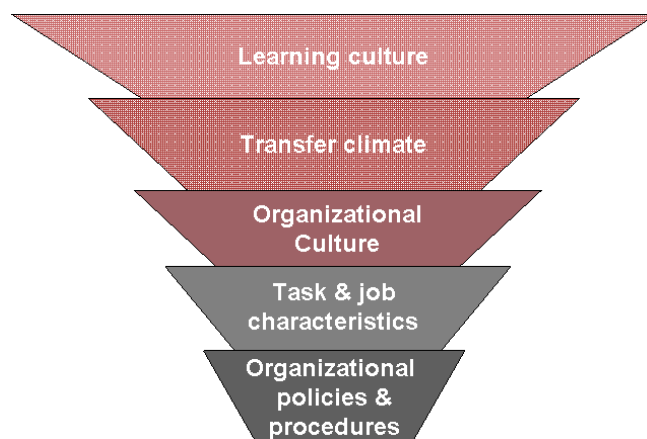


Figure 24. Work system factors sub-group prioritization, empirical overview.

Learning culture, Transfer climate and Organizational culture were assigned as the first three places out of seven variables. Respondents shared the opinion that these sub-groups are very similar and they cannot be separated from one another. Moreover, their interconnection and interference was specifically emphasised by many interviewees. This received sound support in the area of organizational learning culture (Awoniyi, Griego, & Morgan 2002; Bates & Khasawneh 2005; Egan, Yang, & Bartlett 2004, according to Hutchins & Burke 2007) showing how an organization's value of learning can have an impact on

employee performance as a result of training. Organizational climate is at least as important as learning in facilitating transfer (Rouiller & Goldstein, 1993).

There is solid empirical support for the organizational climate–transfer relationship (Mathieu et al. 1992; Tracey et al. 1995; Burke & Baldwin 1999; Colquitt et al. 2000; Kontoghiorghes 2001; Lim & Morris 2006 according to Hutchins & Burke 2007). The researcher agrees with the prioritization and approves the fact that perception of the organizational climate toward transfer has considerable impact on transfer success. Task and job characteristics, Organizational policies & procedures were unanimously selected by respondents and the researcher which are analysed in more detailed way in the next section of this chapter.

Work system factors – detailed determination

The next step in the discussions was to go into details with the classification of each sub-group and underline some of the most influential and valuable. In the Table 17 these factors are emphasised with different colours, as done previously.

3. WORK ENVIRONMENT
3.1. Work system factors
Task & Job Characteristics:
roles and responsibilities
task complexity
task type
task difficulty
immediate opportunity to apply KSA
availability of tools to apply KSA!!!
aids on the job
new technologies on-the-job
Transfer climate
resource availability (time, equipment)
workload
job security
authority/autonomy
leniency for trial and error !!!
learner's accountability for transfer
manager's accountability for transfer
Learning culture:

learning processes application
programmed interventions commitment
knowledge management
internal trainers development
communication rules
Organizational Culture
openness to innovation / risk taking
organizational commitment for training and
Resistance to change
Organizational Policies & Procedures:
TTransfer Strategy !!!
new technologies for TTransfer support
budget restrictions
Organizational History:
size
growth/decline

Table 17. Detailed factors determination within Work system factors sub-group.

Additionally, in order to sum up the empirical findings for Work environment characteristics, the voting for each factor is represented in Figure 25. The proportion of similar opinions of experts is quite high (43%), which testifies to the effect that these factors are seen as either barriers or opportunities for respondents within the analogous frameworks.

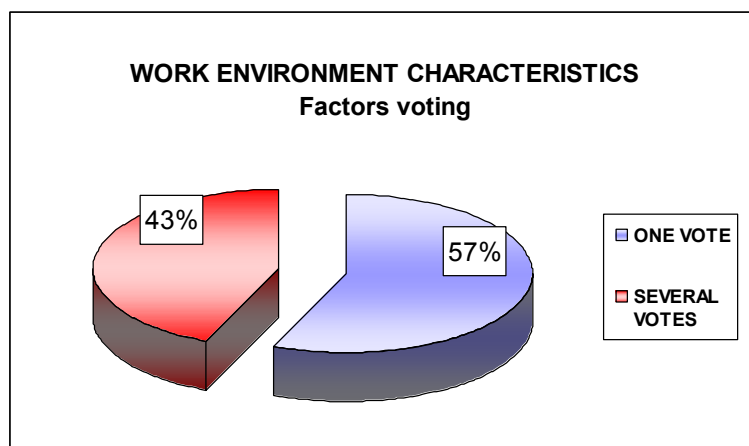


Figure 25. Voting proportion for factors within the Work environment characteristics.

In the sub-group Task & Job Characteristics, respondents mostly noted immediate opportunity to apply, and availability of tools to apply (more than 3

votes), as the most significant for TTransfer. This is directly correlated with the researcher's view and proved by the scientists theoretically. In Clarke (2002), limited opportunity to perform skills on the job was the highest barrier to successful TTransfer.

Leniency for trial and error was mostly emphasised by respondents (more than 3 votes) and the researcher supports this opinion, based on the experience. No empirical evidence was found in the scientific literature, where future research might be elaborated.

The opinion of the experts and the researcher, that learner's and manager's accountability are essential factors for TTransfer, is additionally supported by several scientists. (Taylor et al. 2005; Longnecker's 2004; Saks and Belcourt 2006.)

Several new factors were proposed by the researcher for the Learning culture sub-group, such as:

- **learning processes application** – the system of learning, how effectively the leaning processes are built and implemented in organization;
- **programmed interventions commitment** – the extent which programmed interventions are supported and motivated to use;
- **knowledge management** – the system that is used to identify important information (for learning purposes), collect it from those who possess it, store it and share it with others. Mostly it is course materials storage and sharing the knowledge among learners in this case;
- **internal trainers development** – the system of sharing and improvement of the internal intellectual capital.

Special attention was assigned by participants to the factor – Resistance to change as a part of Organizational Culture sub-group. The most frequently mentioned by the experts, it is defined as perception by individuals to resist or discourage the use of new knowledge and expertise.

Organizational policies & procedures sub-group was added with suggested by the researcher new groups:

- TTransfer Strategy – structured and documented system of TTransfer improvement and maintenance;
- new technologies for TTransfer support – innovation solutions which manage and support TTransfer through resources allocation, processes support and decision-making guidance on an as-needed basis.

TTransfer Strategy was significantly emphasised by the respondents and the suggestion for its necessity on mandatory basis for L&D functions was provided, which is entirely supported by the researcher’s opinion. Research in the use of new technologies (Eddy & Tannenbaum 2003; Rossett & Mohr 2004, according to Hutchins & Burke 2007) additionally proves the importance of this factor for performance support technology on TTransfer and is in the correspondence with experts and the researcher’s views.

For People-related factors sub-group investigation, results of empirical data analysis are represented in the Table 18 and Figure 26. The analysis is done in order to correlate and discuss findings from the interview results, theoretical evidence and the researcher’s view.

People-related factors – sub groups prioritization

Category	3. WORK ENVIRONMENT CHARACTERISTICS			
Major group	3.2. People-related factors			
Sub-groups	Trainee Selection / Notification Process	Transfer Support	Transfer coordination	Personal positive / negative outcomes
Participant 1	4	1	2	3
Participant 2	3	1	2	4
Participant 3	2	1	3	4
Participant 4	3	2	4	1
Mean	2	1	2.25	2.25

Place	2	1	3	4
Researcher opinion	4	1	2	3

Table 18. Data analysis of People-related factors sub-group prioritization.

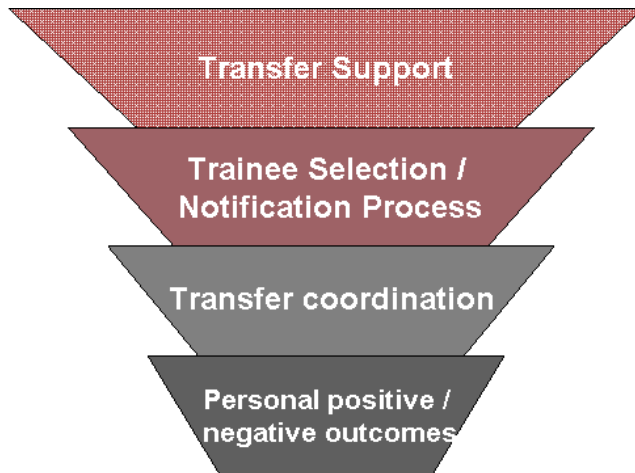


Figure 26. People-related factors sub-group prioritization, empirical overview.

Transfer support sub-group, to the extent to which different participants of the TTransfer reinforce learning on-the- job was selected by majority of experts and the researcher. In terms of people-related factors, several academic studies have verified that support from supervisors, co-workers, and peers (Ford et al. 1992; Foxon 1997; Russ-Eft 2002), availability of a mentor (Richey 1990; Lim 2001), and positive personal outcomes (Holton 2000) are three major transfer-enhancing factors. Different factors inside the Transfer support sub-group are analysed in more detailed way in the next section of this chapter - detailed determination.

Trainee Selection / Notification Process sub-group was selected by the experts as the second variable out of four, which was mostly linked to motivation to learn and the opportunity for voluntary participation. The researcher agrees with the statement of a respondent that this lead to higher, greater learning, increased self-efficacy, and more positive trainee reactions than mandatory attendance. However, the researcher chose the last place for Selection / Notification Process sub-group, considering that Transfer coordination and Personal positive / negative outcomes sub-group impact the TTransfer in grater way in comparison. The former was assigned by respondents with the 3rd place

and the latter with the 4th place in the prioritization hierarchy respectively. The theoretical approval for both the necessity for Transfer coordination (Eddy & Tannenbaum 2003; Alan 2011) and Personal positive / negative outcomes importance is supported in the theory; nevertheless it still seems limited and needs additional empirical evidence.

The researcher is firmly convinced that without a co-ordination to wrap up all processes and factors influencing TTransfer together, procedures and role descriptions may be ineffective and non-active. HR professionals play vital roles as the main coordinator in order to prevent the communication within the TTransfer processes among its participants staying piecemeal and incomplete. It is only through managers, supervisors and training professionals working together in partnership to achieve TTransfer success and therefore, assure that an organisation improves the performance of learners and maximizes investments in trainings.

Personal positive outcomes was determined by the respondents as the degree to which applying learning on the job leads to outcomes that are positive for the individual. According to the organizational culture and strategies, for financial / non-financial incentives and motivation connected to the Learning processes and TTransfer particularly, different rewards were listed by experts, which the new learning may lead, such as:

- increased productivity and work effectiveness;
- increased personal satisfaction;
- additional respect;
- a salary increase or reward;
- the opportunity to further career development plans;
- the opportunity to advance in the organization.

Negative personal outcomes was additionally discussed with the interviewees and by the themes analysis, the main accent was identified on the system of

punishment and reward in the company, which is connected to Learning processes and TTransfer particularly. The list of possible negative outcomes was concluded out of the themes analyses, such as:

- reprimands,
- penalties;
- peer resentment;
- manager's criticism and opposition;
- overload with new work;
- the likelihood of not getting a raise if newly acquired expertise is used.

The researcher is wholly in the agreement with experts' opinion on the Personal positive / negative outcomes sub-group relevance for TTransfer improvement. Additionally, the interconnection with the Positive / negative outcomes expectations as a factor of Motivation factors group should be noticed. Therefore, both these factors are in the direct influence to TTransfer.

In the theory, this area of research was closely correlated with intrinsic / extrinsic variables for outcomes as well as the motivation of learners. Trainees who perceived intrinsic reasons to attend training reported higher levels of motivation to attend and learn in training (Facteau et al. 1995). Similarly, Kontoghiorghes (2001, according to Hutchins & Burke 2007) found intrinsic variables, such as a sense of recognition, were found to be more influential on the retention of training ($r = 0.34$) compared with extrinsic factors such as pay ($r = -0.07$) and promotions ($r = 0.05$). In contrast, a meta-analysis on behavioural modelling training methods ($n = 117$) by Taylor et al. (2005) indicates transfer outcomes were greatest when extrinsic rewards (such as transfer being notated in performance appraisals) were instituted.

Empirical data analysis in detail was conducted for People-related factors, which is represented in the Table 19, where the most influential and valuable factors are distinguished by colour. The recurrence of two or more choices by

different respondents is represented in the red colour and only one choice which was not repeated by others is in the blue colour. The special sign (!!!) is pointed at the maximum votes of the respondents for one factor (3 or more). The yellow filled indicates the researcher opinion.

People-related factors – detailed determination

3. WORK ENVIRONMENT
3.2. People-related factors
Trainee Selection / Notification
voluntary attendance !!!
mandatory attendance
communication medium / accuracy
Transfer Support:
supervisor support
supervisor opposition
peer support
subordinate support
participants support to each other
access to trainer / trainer support
coaching / mentoring
buddy systems
Transfer coordination:
interaction between departments
management involvement (top and
HR and manager relationships!!!
HR support
Personal positive / negative

Table 19. Detailed factors determination within People-related factors sub-group.

The special notice is required for factors from Transfer Support sub-group. Many respondents emphasized the supervisor support and trainer support as extent to which they reinforce learning on-the-job, give encouragement and feedback to learner. This is corresponded both to the researcher opinion and the theoretical findings. The role of supervisors in influencing and supporting Transfer widely supported in quantitative and qualitative studies (Broad & Newstrom 1992; Brinkerhoff & Montesino 1995; Burke & Baldwin 1999; Clarke 2002 according to Hutchins & Burke 2007). Foxon (1997, according to Hutchins

& Burke 2007) found that trainees' perception of managerial support for using skills on the job correlates with increased report of TTransfer ($r = 0.36$, $p > 0.001$). Supervisor feedback, coaching and mentoring were mentioned by experts in addition as formal and informal indicators from an organization about an individual's application after training and job performance. Through these managerial tools learners receive constructive input and assistance when applying new abilities or attempting to improve work performance, which plays important role in TTransfer success.

Moreover, respondents and the researcher specifies the peer support, assuming that learners are more likely to use what they learn in training when they get help and support from their co-workers. This is also replicates the theoretical findings, where in the Chiaburu & Marinova research (2005) peer support emerged as significant relationship affecting skill transfer through post – and pre-training motivation. Hawley and Barnard (2005) found networking with peers and sharing ideas on course content promoted skill transfer 6 months post-training.

4.3.1.4 Summary of data analysis - TTransfer factors' group prioritization

As was mentioned in the beginning of this chapter, the main summary of the prioritization data for 5 TTransfer factors' groups is presented in the end, as it was done specifically for validity of the experiment. After the scrutinizing all the factors and sub-groups of factors, respondents are filled with the understanding each group of factors and can make their decision based on the gained knowledge about TTransfer.

For more comprehensive picture of the TTransfer factor groups' priority, Figure 27 demonstrates average places chosen via the intensive debates with participants of empirical study, whereas the researcher opinion is represented on Figure 28. The main differences are underlined with dissimilar colours. The analysis of these priorities is followed below.

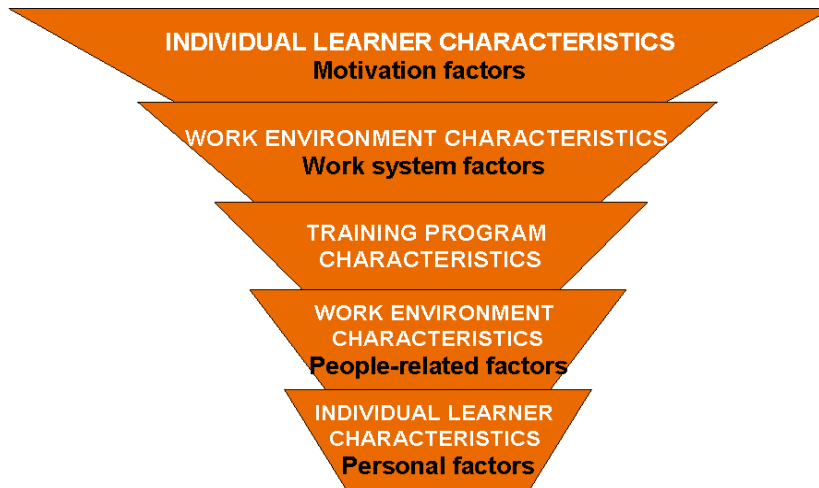


Figure 27. TTransfer factors' group prioritization, empirical findings overview

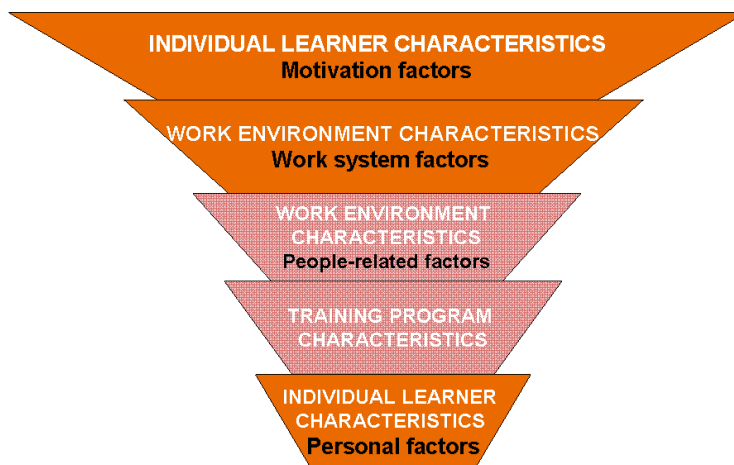


Figure 28. TTransfer factors' group prioritization, the researcher's opinion overview

According to the empirical data analysis, the most important group of factors is **Motivation factors group (1st place)** as a part of Individual learner characteristics category, which is also connected with the findings from previous discussions. Talking about the Motivation factors, Kanfer & Ackerman (1989, according to Tannenbaum et al. 1993) definition of motivation was used, which refers to the direction of attentional effort, intensity of effort, and the persistence of that effort. The main comment for the choice was provided by the experience of experts, who proved that if workers are motivated to utilize their knowledge and expertise at work, they will do their best to let TTransfer happen and to keep it going for generalisation and maintenance of the application within different job contexts. There was a version of the motivation factors as non-

ability factors (attitudes) which influence trainees' expectations, desires, and pre- and post-training motivation.

In comparison of the time spending on different factors discussions, the Motivation factors group demanded more time resources than any others. In order to audit the factors, themes analysis of participants' replies provides several sub-topics close to the factors inside the group of Motivation factors.

The empirical results of this study replicate prior theoretical findings (Mathieu et al. 1992; Tannenbaum et al. 1991; Baldwin et al. 1991; Holton et al. 2000; Goldstein & Ford 2002) and provide support for the proposition that those trainees entering training programs with higher levels of motivation report higher levels of skill transfer. However, in the comparisons of empirical research which was found in the scientific literature, Burke & Hutchins (2008) in particular, there are contradictions, because the results of their empirical study of best practices shows low ratings (2%) for the learner characteristics factors, which includes motivation.

The researcher's opinion approximates to current empirical study results and corresponds to the statement that Motivation factors group includes one of the most vital variables for TTransfer success and therefore, for training effectiveness. Additionally, it is worth to emphasise that Motivation factors may be slightly different at different points in the process and operate throughout the stages: before, during, and after training. Prior to training, potential learners may be able to decide whether to attend training, or which training to attend. At that point, motivation to attend is crucial. As they enter training, and during training, learners can display different degrees of motivation to learn. Finally, after training, for transfer to occur, learners need motivation to apply and maintain any new knowledge, skills and attitudes they may have acquired during training. Therefore, Motivation factors are hypothesized to influence learning directly, training performance indirectly, and to moderate the relationship between training performance and subsequent job performance.

The second place is divided by **Work system factors** as a part of Work environment characteristics category and Training program characteristics

category. However the place for the former is given as 2nd place and for the latter as 3rd place, according to the comments of the participants. The environment that support the transfer of newly trained knowledge, skills and attitudes is more important aspect of organizational life and directly improves TTransfer possibility which is how these factors were emphasised by respondents in comparison with the Training program characteristics importance.

Work system factors were understood by the interview participants mostly as the extent to which workers are provided with or obtain resources and tasks on the job enabling them to use their knowledge and expertise. Additionally, several respondents pointed to their experiences when the employees' perceptions of transfer climate were related to effort to apply training. Learners who reported that their transfer environment had a high appreciation for performance and innovation, encouraged risk taking, and allowed freedom to set goals, also reported greater effort to apply their training.

People-related factors as a part of Work environment characteristics category received the 4th place according to the empirical results. Respondents paid more attention to Transfer Support sub-group where several participants of the support were discussed more closely. Through themes analysis, there were some shared ideas identified in this area. Supervisor support for TTransfer was determined as the extent to which manager assistances and reinforces learning on the job. Finally, the distinguishing feature of Work environment characteristics in general was noted as the groups of factors assigned, may influence TTransfer both before and after training. After training, the importance of Work environment characteristics were reported by the interviewees as occurring more frequently than any other transfer influence factors.

The significant relationships for supervisor and organization support as a part of Work environment characteristics are consistent with other research findings in the theory (Noe & Schmitt 1986; Fecteau et al. 1995; Tracey et al. 2001; Ruona et al. 2005) that the social support system plays a central role in facilitating the transfer of training. Moreover, in the empirical study of best practices done by Burke & Hutchins (2008), in terms of transfer influences, the most frequently

identified strategies used are connecting to the work environment (49%). Several recent studies (Nijman et al. 2006; Chiaburu & Marinova 2005; Hutchins & Burke 2007; Scaduto et al. 2008) confirmed the importance of the work environment and showed positive training climate contributed to post-training behaviour, even after controlling for learning and pre-training behaviour. In summary for the empirical and theoretical findings, it appears that the work environment plays essential role in TTransfer improvement.

While the respondents approved the fact that well-organized and working People-related factors in the organization can be important for TTransfer effectiveness, it is still second lowest of the five categories in the prioritization scale. Work environment characteristics are seen by the researcher as variables that considerably influence TTransfer, though. People-related factors mostly affect Motivation factors, while Work system factors influence job performance directly. No doubts, Work environment characteristics play important role in creating a context in which individuals can learn, as well as apply, what they have learned in training. Therefore, both of these factors are vital for TTransfer improvement and maintenance according to the researcher.

The 3rd place was assigned for Training program characteristics according to the comparative data analyses. Training design was generally mentioned by interviewees within the correlation to TTransfer as the extent to which learning has been designed to match job requirements and give learners the ability to transfer to the job application. Additionally, the extent to which learners judge the learning content to reflect job requirements accurately was emphasised by respondents.

On the one hand, design-related relationships and its influence to TTransfer were investigated in theoretical (Arthur et al. 2003), prescriptive (Cannon-Bowers et al. 1998) and empirical studies (Gist 1997; Kraiger et al. 1995; Warr & Bunce 1995 according to Hutchins & Burke 2007). Much of the scientific research has focused on training design factors that influence transfer, therefore a lot of theoretical literature supports the importance of a transfer design that maximizes the trainee's ability to transfer in enhancing TTransfer (Holton 2005). The present study also extends and proves the theory by

demonstrating empirically high place in the prioritization scale for groups of factors influencing TTransfer (the 3rd place). In addition, numerous researchers have studied empirically the influence of Training program characteristics on TTransfer, as design factors seem to be some of the most influential factors affecting transfer of learning in the workplace (Brinkerhoff & Gill 1992). For instance, the most recent empirical study of best practices done by Burke & Hutchins (2008) investigate quite important role for Training program characteristics (46%) to support TTransfer.

On the other hand, following the fact that there is the evidence that training design characteristics have been investigated more often than other variables (Alvarez et al. 2004; Baldwin & Ford 1988; Holton et al. 1997; Tannenbaum & Yukl 1992), it may cast doubt on the not fully completed research and less studied other factors and their inter-correlation and difference for the influence on TTransfer success. As suggested by Zenger et al. (2005), firms unfortunately place more emphasis on designing and facilitating training courses while neglecting other TTransfer factors. This emphasis may misdirect efforts of companies and HR professionals, who subsequently mostly rely on training design effect. The researcher partly supports this comment, because companies, trainers and scientists disproportionately focus efforts on Training program characteristics rather than helping learners apply and maintain new learning on the job, it inaccurately reinforces the assumption that learning is a sufficient condition for transfer to occur.

Finally, of the last place of five, **Personal factors** as a part of Individual learner characteristics were assigned according to the empirical findings of this project. During the discussions, it was likely concluded that experiences are useful predictors of training expectations, desires, and self-efficacy, although there has been no research examining those relationships.

Learning agility was mentioned through the connection with trainability as a useful predictor of training and job performance, particularly for manual jobs, and for short-term criteria. As with some of the other predictors, learning agility was discussed as factor which might be considered for selecting trainees in situations where training is costly or time consuming.

Personality dimensions, both narrow traits (simple skills and hobbies) and wider traits (mental and physical abilities, personality) (Digman 1990 according to Tannenbaum et al. 1993) have been proposed in the theory to be a group of factors which influence training effectiveness and thus, the transfer of training. Their effect on training outcomes nevertheless remains a relative void in the literature (Mount & Barrick 1993, p. 852). The researcher is in agreement with the empirical findings of this study on the last significance of the Personal factors. The main reason for that is the evidence that it is practically impossible to change or improve the personal characteristics of learners.

4.3.2 Time period classification of TTransfer

The second major classification, based on the work of Broad (2005) and Broad and Newstrom (1992), specifies the time period when the activity or action occurs. This classification will be discussed in the frame of empirical and various theoretical findings, as well as the researcher's view will be compared with the results.

Practices that support TTransfer from training interventions for different time periods primarily occur before, during, or after the learning intervention:

- **Before** refers to activities occurring before the learning intervention that support transfer;
- **During** refers to activities occurring during the learning intervention that support transfer;
- **After** refers to activities occurring after the learning intervention that influence transfer.

It is necessary to underline that following the theoretical findings (Broad 2005; Burke & Hutchins 2008), TTransfer is mostly viewed as not time-bound in this project and all the participants have already included to the first classification directly. The empirical data research for Time period classification is based on the themes analysis methods and prioritization approach and closely correlated with the third classification of factors – participants of TTransfer process.

According to experts' opinion, unique knowledge and experience, different time periods for TTransfer effectiveness is statistically analysed and the prioritization of the data is presented on Figure 29.

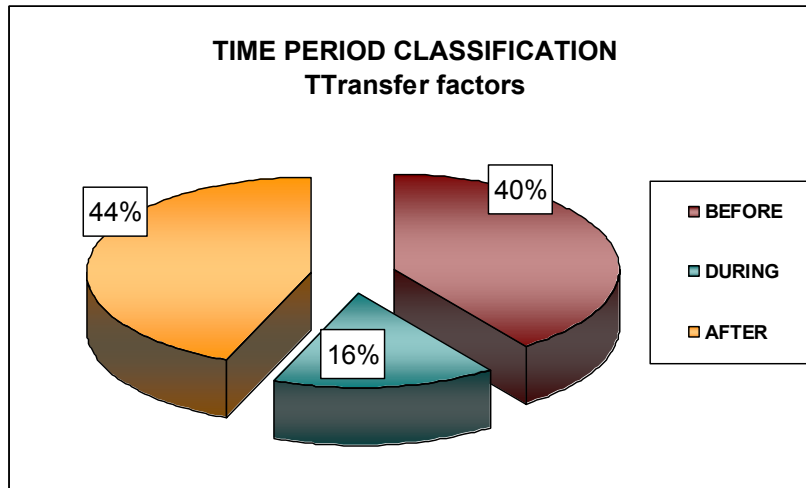


Figure 29. Time period classification of TTransfer.

The researcher's vision for the Time period classification of TTransfer is in compliance with empirical studies. From the theoretical perspectives there are several studies with quite diverse results. Some of the findings in academic literature approve the empirical results. For example, Saks, A., Belcourth, M. (2006) proved empirically, that training activities before and after training are more strongly related to transfer than training activities during training. The pre- and post-training activities explained more variance in transfer than the activities during training and also explained significant incremental variance in transfer over and above that explained by the training activities during training according to Salas & Mathieu (1993). While according to Wexley and Baldwin (1986) the period after training seems to be the most crucial in facilitating positive transfer. On the other hand, the research done by Dr. Brent Peterson has shown that pre-work contributes to the effectiveness of learning and therefore, TTransfer success, on 26%, the ultimate effectiveness of learning can be attributed to what happens after the learning experience on 50%, whereas the time during training is considered 24% of the significance for TTransfer (Bersin 2011).

4.3.3 TTransfer participants classification

The third major classification of TTransfer is based on Broad (2005) and Broad & Newstrom (1992); it specifies the stakeholder or party who is most heavily involved in the transfer support action taking place. In the scientific literature there were no findings, which can prove to contradict the suggestions done by respondents and the researcher in this section. Theoretical studies, related to deep analysis of the TTransfer participants are limited and typically focused on the TTransfer impact in the frame of training program, but not on the organizational context. More theoretical and empirical research is needed on the TTransfer participants influence with the interconnection to Time period classification. Therefore, in this section, the study elaborates TTransfer participants' classification based on the empirical findings and the researcher opinion.

In the theory, Broad's work identifies trainees, trainers, and supervisors as the three primary stakeholders affecting TTransfer:

- **Learner;**
- **Trainer;**
- **Line manager.**

However, additional participants were suggested by the researcher according to other theoretical resources and past experience as the following:

- **TOP manager;**
- **Peers of learner;**
- **Subordinates of learner;**
- **HR professional.**

Moreover, two other participants were identified during the empirical research and proposed by the respondents as the following:

- **Personal mentor** (who can be a different person in comparison with the supervisor);
- **Family members.**

Through in-depth comparison analysis of the empirical data for Time period classification and TTransfer participants' classification, using the prioritization approach, their interconnectivity is presented in Figure 30, Figure 31, Figure 32.

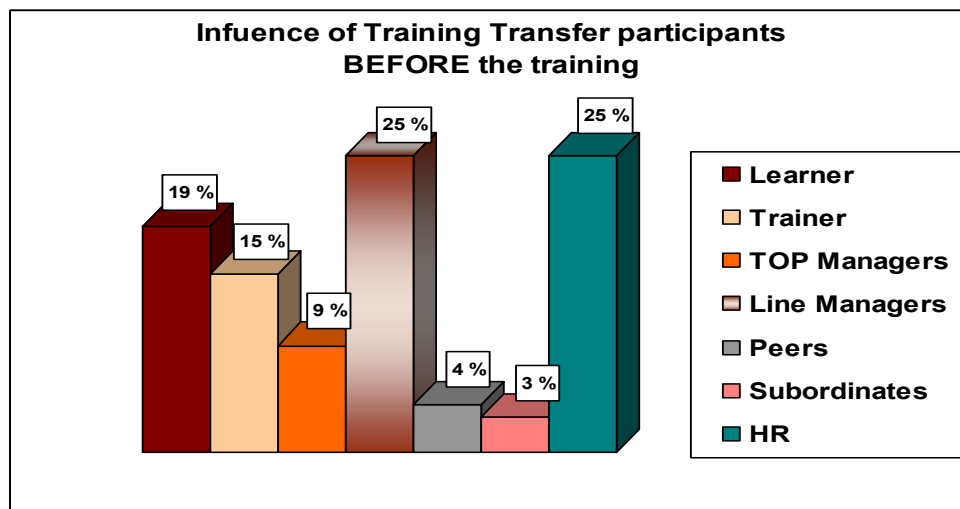


Figure 30. Training Transfer participants' influence before the training.

Before the training, the main influential roles are assigned to line manager (25%), HR professional (25%) and the learner (19%). Whereas trainer, TOP managers, peers and subordinates have less impact on TTransfer success according to the experts' opinion. The researcher partly supports the empirical findings, considering the TOP managers and peers may have stronger impact on TTransfer.

During the training, presented in Figure 31, the influence of learner, trainer and HR professional is evident. Participation of line manager and TOP manager is suggested by respondents. The researcher is in line with the empirical findings for the TTransfer participants' influence during the training, acknowledging the minimal impact from peers and subordinates during the training phase.

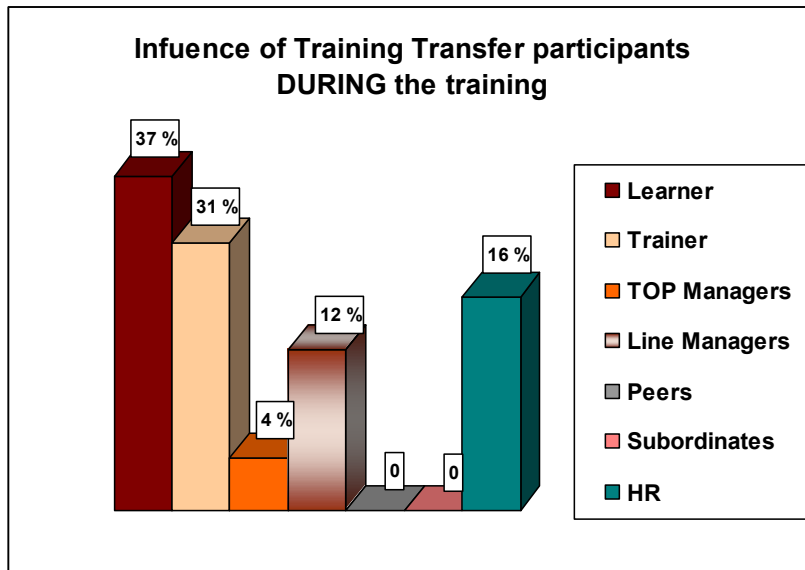


Figure 31. Training Transfer participants' influence during the training.

TTransfer participants' influence after the training is characterized by active and important involvement to the TTransfer process of learner, line manager and HR, according to the empirical data analysis results. The other participants share almost the same value for TTransfer success. The researcher partly agrees with the empirical results and suggests more powerful role for Trainer and TOP manager for the stage – after the training presented in Figure 32.

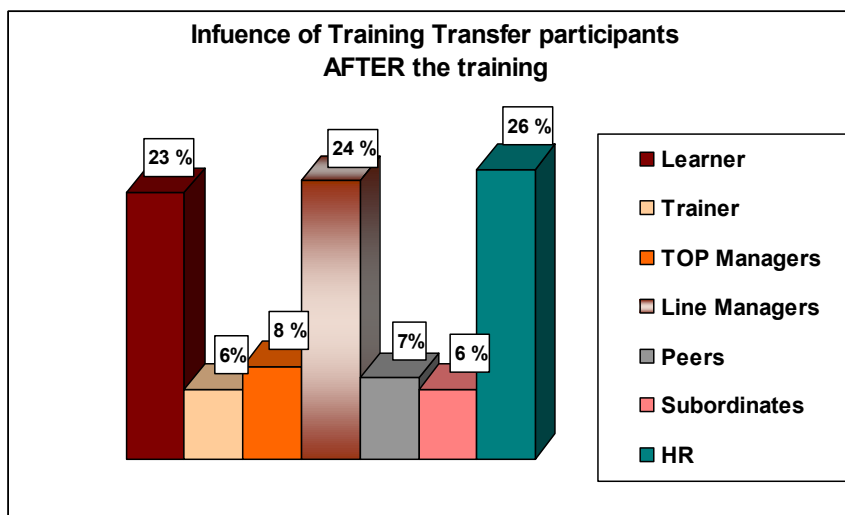


Figure 32. Training Transfer participants' influence after training

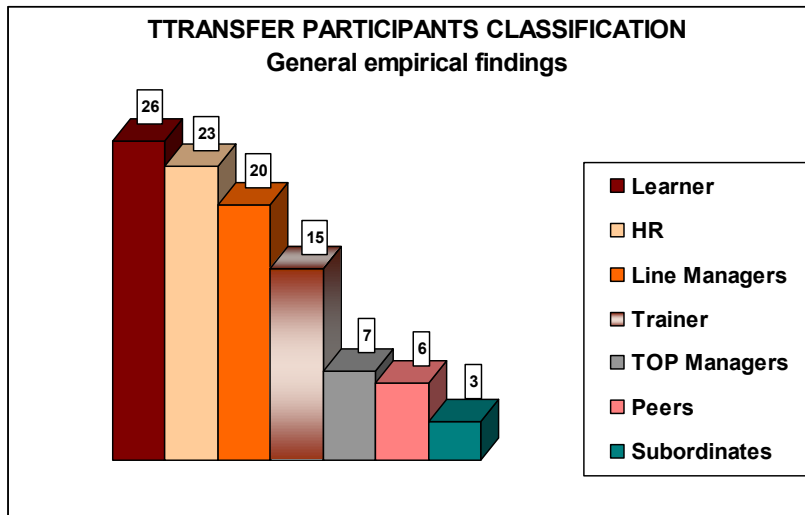


Figure 33. Training Transfer participants' classification, general empirical findings.

Finally, the summary of the TTransfer participants' classification and its interconnection between empirical results and the researcher's opinion is provided on the Figure 33 and Figure 34 respectively. As it was mentioned, the evidence from the theoretical perspectives is needed additionally for the issue of correlation of Time period classification and TTransfer participants' classification, which is not included in the summary analysis.

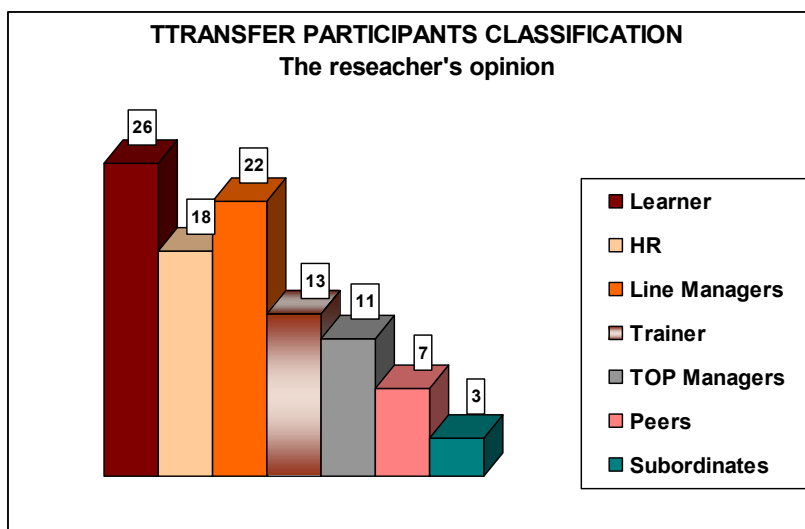


Figure 34. Training Transfer participants' classification, the researcher's opinion.

Comparing general findings from experts' and the researcher's vision, the main difference is assigned to the HR, trainer and TOP manager roles. The researcher considers the responsibilities of line manager and TOP manager not only support and control, but also assure that the work environment characteristics are in place to enhance TTransfer. Therefore, these roles directly and indirectly impact Motivation factors, Works system factors and People-related factors. Moreover, the line manager's and TOP manager's involvement is recommended in the Training program characteristics influence, such as immediate participation in the Training needs analysis, Training design adaptation and Programmed interventions. Trainer participation – is the other distinction between respondents' and the researcher's opinion. It was mentioned during the interviews that ideally trainer should participate not only in support of the Training program characteristics but also actively influence the Work environment and Motivation factors accordingly. However, the real picture is shown on the Figure 33 with 7 % trainer's involvement.

In this case, as it was stated previously, the learner opinion in this project hypothetically represents the best situation as the quintessence of the ideal picture, which is a part of recommendations to consider.

To keep in mind the assumption based on the theoretical findings (Broad 2005; Burke & Hutchins 2008) that TTransfer is considered as not time-bound, because such tactics help extend beyond the training itself, promotes for continuous on-the-job learning and involve all “players” through the process of transfer enhancement. However, the researcher suggests sticking to that idea for the first classification of TTransfer - primary transfer influences, because it is important for such prioritization not to be limited by time frames. Moreover, the TTransfer participants and time phases are included to the classification by default, but not mentioned. Practically, that can give freedom to consider and manage these aspects (time and participants) more flexibly according to the specific training program in place.

However, Time period classification and TTransfer participants' classification can be taken into consideration mostly for TTransfer improvement actions and strategies determination and planning. Therefore, they are crucial for the

analysis of TTransfer and should be examined additionally with the first classification of TTransfer influences. That approach allows looking at the TTransfer phenomenon from different perspective and including all necessary features in order to improve and maximize TTransfer. Empirical findings on the recommendations from the subject-matter experts, participated in the research are presented in the next chapter accordingly.

4.4 Methods for Training Transfer improvement

The main objective of the present research is to develop an effective tool which can help to improve TTransfer for different trainings. During the empirical discussions a lot of suggestions and ideas were collected, which can maximize the chance for application on the job. As a result, the following initial methods were summarized as the Top 12 best practices for TTransfer improvement:

1. **Define the value** which training program brings to learners and business. This should be stated as desired outcomes after training, important for the learner and the company. For instance, the expectation that learning maximizes returns, increases agility, improves quality, decreases time-outs, and minimizes risk. However, learners should be led to have realistic expectations for training.
2. **Agreed in the success criteria.** This is a measurement of the improved performance, how exactly the expected results will be evaluated in the end. Therefore, it will be possible to see why the TTransfer accrued and how it was identified. The ideal standard can be assumed as a criteria and learner performance can be compared against the agreed standard.
3. **Put efforts to improve trainee motivation** prior to training, that can lead to better training outcomes.
4. **Design the training** program with on-the-job application in mind. The training should be aligned with the expected application and relevant to the company specifics.
5. **Develop and agree the interventions** to meet the defined objectives. Interventions designed to increase trainee commitment to the organization can enhance the opportunity for TTransfer.

6. **Preparing action planning** in the classroom straight after the training. Trainer can be responsible for this initiative to be implemented.
7. **Hold Follow-up trainings.** Keep the learning fresh and emphasise the importance of application bringing the participants and trainer back together to review content and skills learned in class and discuss successful experience with application.
8. **Reward and recognize learners** to motivate them to apply to performance. Consider offering non-monetary rewards that instil pride and serve as an incentive for learner, for example Annual award of lunch with the CEO.
9. **Involve the manager.** Managers must do more than simply endorse a training program. They should have clear responsibilities and provide tactical support and on-time motivation before and after the training. This can include meetings on the Action plan implementation, feed-back sessions, mentoring or coaching. Additionally, managers should provide the supportive environment at the work place and involve peers to help learner in application after the training.
10. **Measure training results and business impact.** Trainees should understand that the organization or sponsor expects them to apply what is learned and that there will be an assessment of training impact by collecting data from them and other stakeholders, such as clients.
11. **Use internal communication channel.** Consider using intra-company social media activities to drive transfer. Establish systems, for example, the Intranet page, where learners can ask questions, offer support, and share best practices and materials
12. **Treat TTransfer as a project.** Assign the stages, get commitment out of responsible participants and share the results with the company.

The suggested methods for TTransfer improvement are taken into account in the next chapter where suggested recommendations are provided, which concludes the outcomes of the project with proposed model of TTransfer factors and TTransfer Strategy.

5. Recommendations

This chapter is built according to the researcher opinion, which is in turn based on the comparative analysis of theoretical and empirical findings as well as on the researchers' experience with and vision of the TTransfer phenomenon. Model of TTransfer factors and TTransfer Strategy Form were developed in order to achieve the main research objectives and provide the reliable and flexible tool for practical implication in HRD area of business improvement.

5.1 Proposed classification of factors influencing Training Transfer

The recommendations in this section are based on the simplified approach, mostly because business values “easy to get – easy to do” solutions and current requirements for HRD area are focused on the simplicity, quality, speed and results. Therefore, the broad classification of factors influencing TTransfer, including more than 120 features, is not appropriate from practical point of view. The researcher believes that the best way to simplify any data is the linkage to the strategic principles, which is suggested in the proposed classification for TTransfer factors. Scrutinizing categories, groups and sub-groups of the factors, the comparative analyses for strategic connection was executed, which is resulted to the four strategic areas categorization (Figure 35).

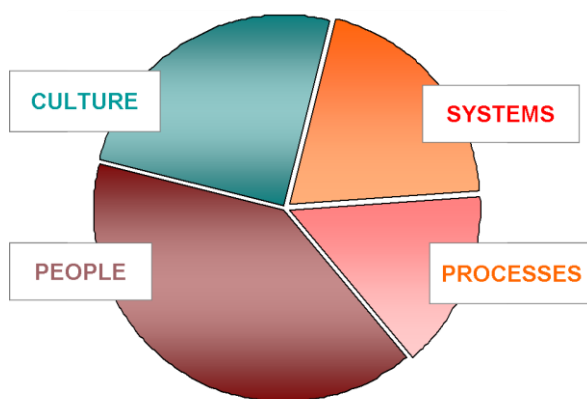


Figure 35. Strategic categorization of the TTransfer factors.

The correlation among theoretical and empirical findings and researcher's vision for TTransfer factors classification and prioritization is represented on Figure 36.

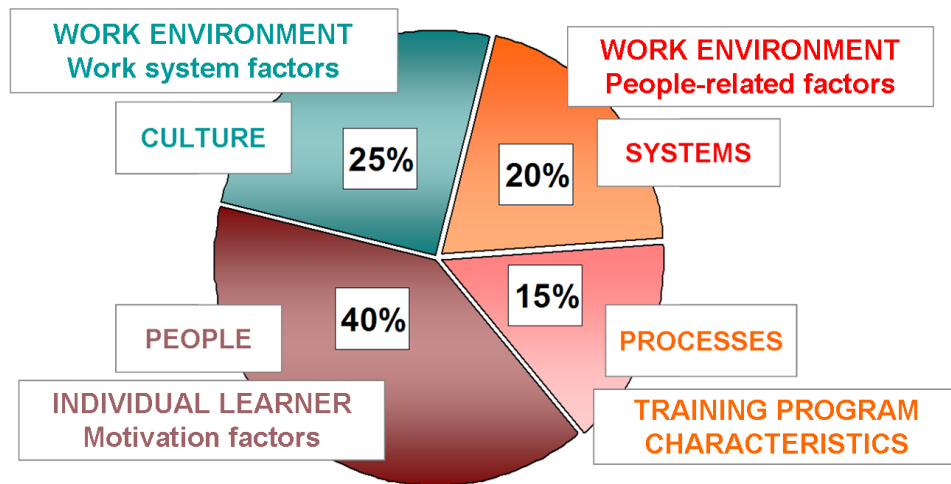


Figure 36. Connection between strategic and primary transfer influences classification.

The connection between proposed strategic classification and theoretical classification – primary transfer influences, TTransfer factors can be described in comparison with the achievement of an important goal. If people are motivated and ready to apply new KSA after training – this is the main factor to move forward and not to stop, like first steps in the direction of a great goal. If the work environment is supportive for TTransfer – this is the transportation on this road, which helps on the way to move faster and effectively. If other people, who follow the same way for success of application, help with the direction and resources, that gives additional faiths and keeps not to wander out of the way to the goal. Eventually, Training program characteristics symbolize the way, the road to this goal. If the way was chosen properly and in right direction and there is correlation with all other factors, it finally brings to the great goal, which is TTransfer success and application on-the-job improvement in this project.

It is important to show the difference in the value of each factor group, because that may accent the priority for the consideration of the factors for a training program. Thus, analysing the factors which can influence to TTransfer success and discussing strategies for TTransfer maximisation for training, manager and learner can make an emphasis on the most important areas. However, the researcher concedes that for different training programs there might be personal priorities in the TTransfer factors and their impact, which can be

adjusted according to the specific situation with the decisions and strategy for TTransfer support additionally.

More detailed Strategic area classification for TTransfer is done in the frame of reference to sub-group prioritization, which is demonstrated on Figure 37, Figure 38, Figure 39 and Figure 40 respectively. Each area is displayed with three major sub-groups of factors, according to the researcher opinion. Additionally, for each sub-group of TTransfer factors, the responsible TTransfer participant is assigned with the abbreviations: HR – for HR professional, M – for line manager and L – for learner. It goes without saying that there are other participants who directly or indirectly influence different TTransfer factors, therefore these roles' appointment is not strictly limited by the participants, and was done for coordination and responsibility control reasons. All the sub-factors and assigned participants are logically connected and correlated.

The next step in prioritisation is not proposed by researcher in this section of the chapter, partly because it was done previously in the Empirical Findings and Discussion chapter. Moreover, more detailed specifics of different TTransfer factors are used in the TTransfer Strategy recommendations in the form of questions, which are proposed by the researcher.

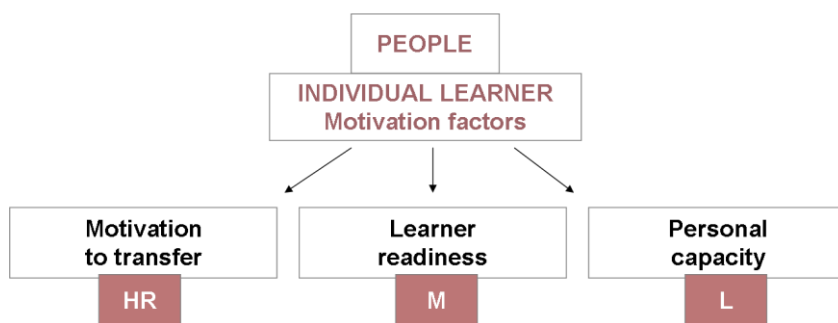


Figure 37. Proposed Motivation factors sub-group classification.

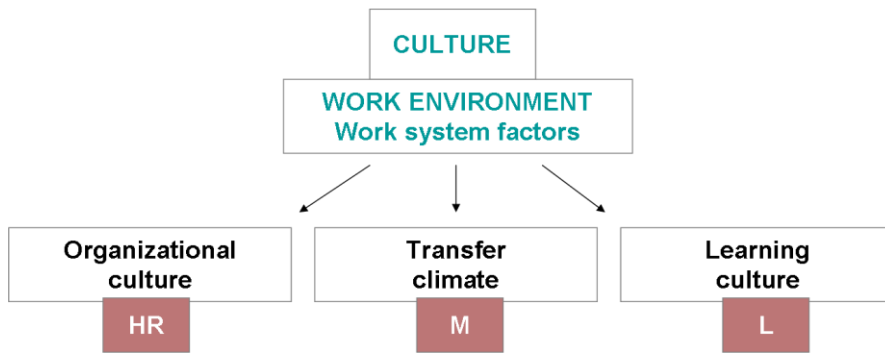


Figure 38. Proposed Work system factors sub-group classification.

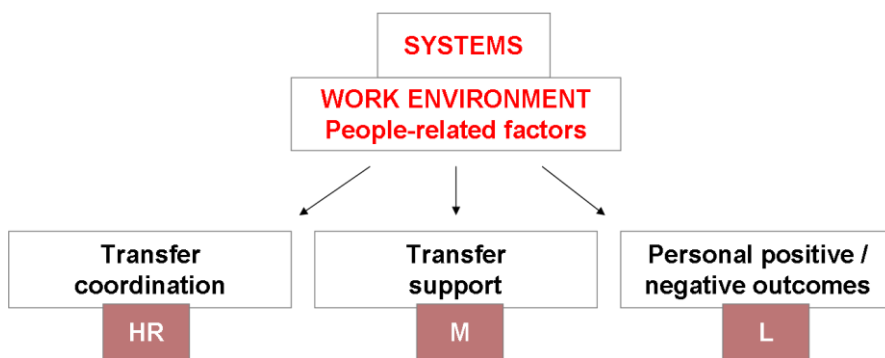


Figure 39. Proposed People-related factors sub-group classification.

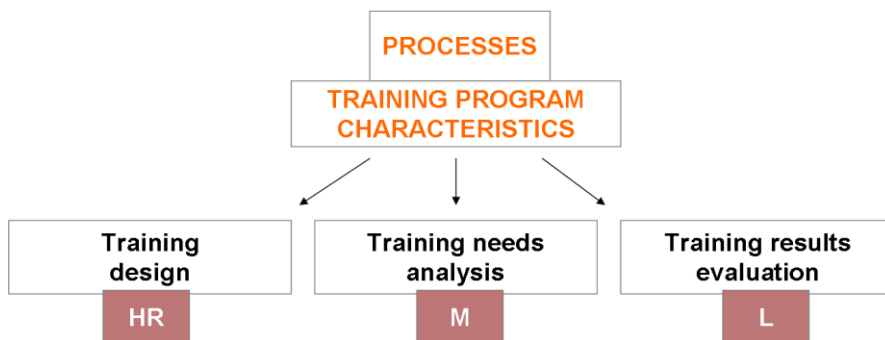


Figure 40. Proposed Training program characteristics sub-group classification.

5.2 Proposed model of Training Transfer factors

Transfer models are presented in the scientific theory as a way to structure different variables which impact Transfer either directly or indirectly. Some findings correlate strictly to Transfer factors, emphasising the most vital

according to the theorists (Laker 1900; Chiaburu & Marinova 2005; Cheng & Hampson 2008). Further to important TTransfer factors, other models provide additional components to consider, separating the concepts such as Learning, Transfer, Job performance, Organization results, Evaluation of Training results (Holton et al. 2000; Thayer et al. 2004; Burke & Hutchins 2008). TTransfer models were not discussed with the respondents taking into account the study limitation foremost and in order not to overload participants with the theoretical information on TTransfer.

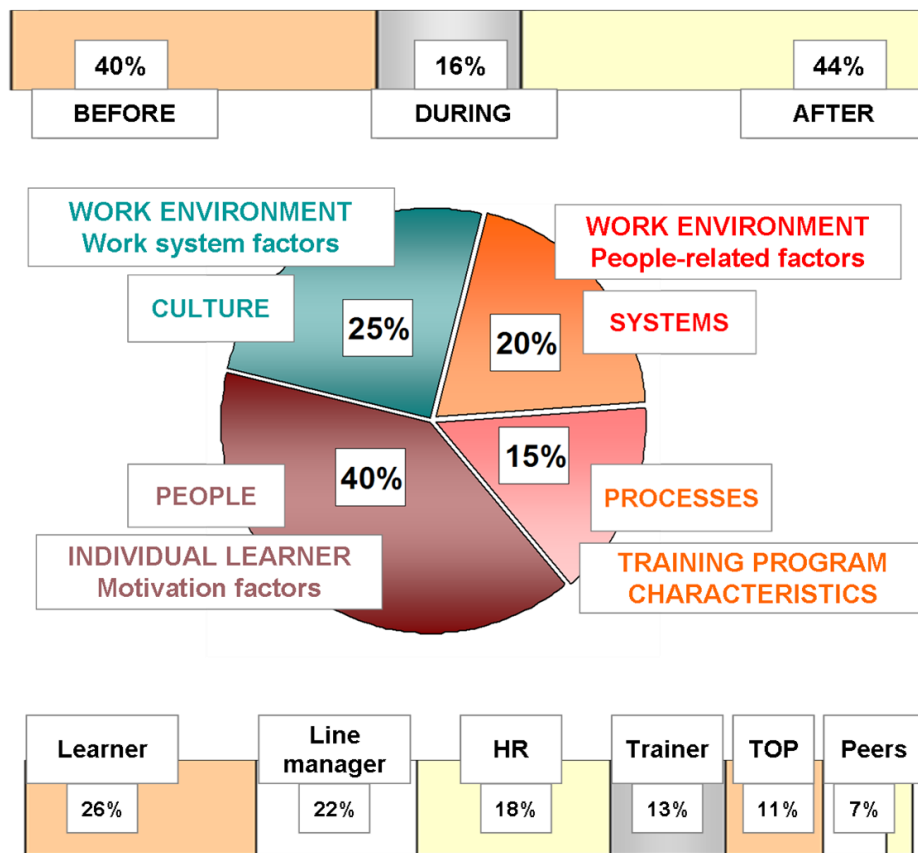


Figure 41. Model of Training Transfer factors, detailed representation.

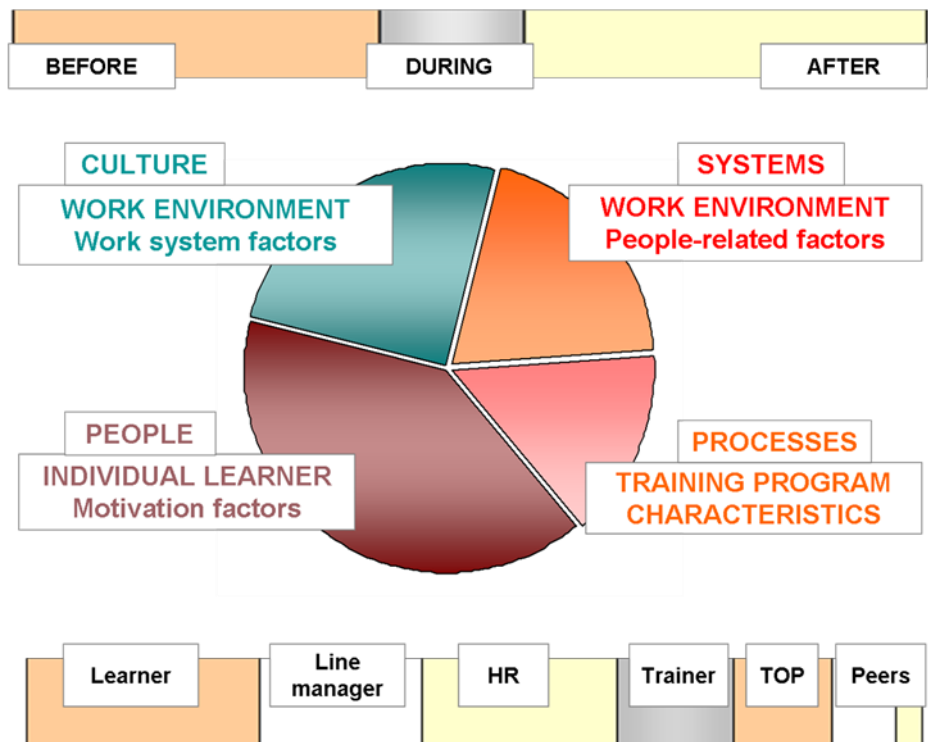


Figure 42. Model of Training Transfer factors, general representation.

In the proposed model of TTransfer factors, the notion of TTransfer includes the process of learning and job performance as well as the processes of Training needs analysis and Training results evaluation. The organizational outcomes or business results are considered by the researcher as natural consequences of the TTransfer and do not appear on the proposed model.

Two options for model of TTransfer factors are presented below, which can be used for different purposes respectively. The model in Figure 42 demonstrates the researcher's opinion in the estimation of proposed value for different TTransfer factors classifications. This can be viewed as general observation for the weight of each variable which can guide HR professionals and TTransfer participants with the prioritization for the TTransfer factors. Figure 43 shows general view of the proposed TTransfer factors and supports only the main concept of classifications, whereas all the factors display the importance value indirectly, without percentage specification. As the main framework for TTransfer improvement strategies, recommended by the researcher in the next chapter, general model of Training Transfer factors will be used accordingly.

5.4 Proposed Training Transfer Strategy

Based on the suggested Model of Training Transfer factors and three types of TTransfer factors classification, people involved are the most essential factors for positive TTransfer. The researcher proposes learners role to be one of the most significant in the process of TTransfer. No doubts, other TTransfer participants are also widely involved with supportive roles. The main initiative and efforts for TTransfer success should be made by learner, line manager and HR professional. Manager, as vital inspirer and driver, have strong hold on learner's commitment to TTransfer and its improvement. HR professional, as critical coordinator of TTransfer process and eventually its success, provides the link among all TTransfer participants and their required actions and communications. Thus, these three major TTransfer participants have leading functions and actively participate in the proposed TTransfer Strategy implementation.

TTransfer Strategy is the structured and documented system of TTransfer improvement. It involves participants, actions and expected results, which are meant to be done, achieved and reported. The main idea for these actions is the fact that they are made, coordinated and agreed on in the meetings before and after training by learner, line manager and HR professional. That means TTransfer participants own the actions and have high commitment to its implementation, because they were jointly formulated. The ready decisions and actions recommended by the third party are often subconsciously not accepted.

In order to direct TTransfer participants' attention to the most important aspects (TTransfer factors) to be discussed and agreed on the TTransfer Strategy meeting, the researcher suggests using specific set of questions. The proposed questions are structured within the model for TTransfer factors and in accordance to the suggested sub-group classification, provided on the Figure 38, Figure 39, Figure 40 and Figure 41 of this chapter. As a result, learner, line manager and HR professional have no chance to get lost because they can follow prepared set of questions as the base of the TTransfer Strategy meetings. The completed list of questions is represented in the Appendix 8.

The quality of suggested questions for the TTransfer meeting determines the quality of the agreed TTransfer Strategy. To assure the responsibilities for different TTransfer factors, each question is connected to proposed model of TTransfer factors and responsible participants' involvement. Despite the fact that questions have well-structured logic, they can be used among learner, line manager and HR professional according to business needs and training specifics. Some of them can be left and not covered.

The first set of questions according to TTransfer factors group is designated for HR professional who asks them to learner and line manager. The difference in the structure of the questions assigned for TTransfer participants is specified in Table 20, Table 21, and Table 22.

Structure questions to HR	Questions start from (example)
1. Check: Learner and Manager opinion	Why do you believe ...?
2. Involve: Manager	How Manager can help Learner ...?
3. Involve: Learner	What can Learner do to ... ?
4. Do: inform and encourage	As a part of HR responsibility, according to the context of training

Table 20. The structure of questions assigned to HR professional.

Structure questions to Manager	Questions start from (example)
1. Check: Learner	How do you explain to Learner ...?
2. Involve: Learner	How can Learner ...?
3. Do: support to Learner	What can you do to support / help ... ?

Table 21. The structure of questions assigned for line manager.

Structure questions to Learner	Questions start from (example)
1. Check: Learner	Do you have / believe ...?
2. Involve: Manager	How Manager can help ...?
3. Do: Learner	What can you do by yourself ... ?

Table 22. The structure of questions assigned for learner.

In order to fix and appoint all the answers to questions which in return appeared as agreed actions for TTransfer success, the TTransfer Strategy form is proposed to use during the meetings. The form is a table which should be filled in during the discussion mostly by learner and line manager as the evidence of the plans stated and achieved for the application of training. The form is presented in Appendix 10 as a tool for TTransfer Strategy implementation, which helps to improve application after training.

The first part of the form is dedicated to Training needs assessment and Training results evaluation as a part of TTransfer process and factors which significantly influence TTransfer success. Training needs analysis is indicated through the linkage among 4 main types of objectives which should be formulated and agreed upon by learner and line manager. One of the objectives is entered by default in the place for the section Individual objectives for application on-the-job as “To implement TTransfer Strategy on time”, which emphasizes the importance for TTransfer Strategy commitment and realization. Evaluation of training results is directly correlated with stated objectives and actions. This can be finalized during the second meeting after some time of training completion, when the results will be possible to see and measure. In order to assess their achievement, there is space for ratings in the form which should be filled in. It is suggested to underline those objectives which are relevant for the evaluation of the specific training, because some of them might require long time passed after the training or a lot of efforts and resources are needed for the estimation process. This is correlated with the theoretical findings that not every training should be evaluated for all levels of performance and flexible approach is needed in most cases. Therefore, the decision on which objectives should be rated or not and when it should be done, is made by the TTransfer participants and fixed in the section for Training results evaluation. Every company has its own unique approach for the Training results evaluation and rating measurements, which is not directly discussed in this project but left as an open section in the form. The confirmation for Training needs assessment and Training results evaluation processes finalized is consolidated by the section for learner, line manager and HR professional signatures and dates of the meetings.

The second part of the TTransfer Strategy form is consecrated to the general picture for model of TTransfer factors, which demonstrates the logic of the discussion for TTransfer Strategy and as structure of the next part in the form.

The third and the last part of the TTransfer Strategy form is devoted to the main purpose of the meeting – define, agree and fix the actions which will assure TTransfer success. Each section is structured in accordance with the TTransfer factors priority and arranged in order of importance magnitude: Processes – Systems – Culture – People. Therefore, all the established actions for TTransfer success will be presented according to their importance and necessity. The main areas which should be filled in the form are recommended as optional, underlined with the blue colour, nevertheless it can be decided by TTransfer participants what to include and record in the form. The place for assessment learner part in TTransfer Strategy form is left as the suggestion to finalise the accomplishments of agreed actions. This emphasised the role of learner in TTransfer process as the most accountable and important TTransfer improvement. The measurement may vary in different companies and participants of the meeting can additionally discuss how it should be done and assessed. Finally, the proof of stated and concerted actions is provided by the section for TTransfer participants' signatures and dates.

TTransfer Strategy form is useful when setting pre-conditions of the planning and preparation stage for most of trainings in a company. However some of trainings might not need the consideration of all the TTransfer factors and the form can be filled in partially. It depends on different variables such as training type, training objectives and financial expenditures. The TTransfer Strategy tool is universal and can be very flexible for profoundness of the TTransfer factors analyses. For example, for some important and resources demanding trainings, every factor group should be comprised and analysed in accordance to actions to assure TTransfer success. In these circumstances the entire TTransfer factors model will work perfectly. On the other hand, for an external, nonrecurring technical training, the cycle of TTransfer factors might be limited to first two out of four available parts in the model: Processes and Systems.

Finally, three main proposals of this study are model of TTransfer factors, TTransfer Strategy form and the list of questions as a guide for the meetings before and after training. The decision on why and how to use these tools should be made and accepted by learner, line manager and HR professional, who are the main executors and drivers of TTransfer success. The flexibility of the approach gives opportunity to adjust different TTransfer factors and jointly agree on actions for TTransfer improvement in compliance with business needs and expectations.

6. Conclusions

TTransfer as the process of application on the workplace of all knowledge, skills and attitudes gained after training, is a vital part of the training effectiveness. This application provides high value for business resulting in performance improvement and, therefore, organizational outcomes. The primary purpose of this study was to analyse various methods of TTransfer improvement in order to develop effective tool with recommendations to use. This paper stressed the necessity of researching TTransfer phenomenon theoretically and intended to suggest practical and flexible strategies that have high potential for enhancing TTransfer within different training programs.

The research undertaken to achieve this main purpose and answer several research sub-questions, consisted of a literature review and data gathered from the subject matter experts in HRD area through semi-structured interviews and best practices methodology. The conclusions drawn from this data, as well as implications for practice and suggestions for further research additionally extend the transfer literature. The final results, which are discussed below, can serve HRD practitioners with the solutions for TTransfer improvement that can readily applied practically in business.

6.1 Conclusions on the Objectives and Research questions

The research revealed very different perspectives on the TTransfer phenomenon, confirming that there is no simple answer to the main research

question. Conclusions of this study were structured in the order as research sub-questions and sub-objectives were stated.

Training effectiveness

Theoretical and empirical findings determined training effectiveness as the extent to which training yields desired or relevant outcomes and therefore, assurance that trainings were transferred at workplace. Training effectiveness models of D. Kirkpatrick and J. Phillips were scrutinised and the most important component was found as the application on the job after training (Level 3). This was theoretically called and empirically accepted as Training Transfer. The link Training effectiveness – TTransfer was deeply analysed and correlated to the link “training to performance”.

Training Transfer definition

More than 25 definitions of Training Transfer were found in the scientific literature, which proves the sense of complexity of the topic. The definition of TTransfer from Calhoun et al. (2010) was the most closely related to present research: “The process of putting learning to work in a way that improves performance.” Empirically, training purpose was examined as the main definition of TTransfer, whereas there is no transfer, training interventions add no value.

Considering theoretical review and empirical results, the TTransfer definition was proposed as the following: **Continuous process** of learning that new knowledge, skills and attitudes, gained after training **are transferred to application and adaptation** to workplace within **different context** and **complex task situations**.

Training Transfer Importance

The fact that training is useless if it cannot be turned into performance as well as high importance of TTransfer success for business was investigated in the theory. The evidence of TTransfer failure, the gap in research-to-practice linkage in the HRD fields was revealed in the empirical part of the research. Therefore, the empirical and theoretical connection was found on TTransfer

significance within the changing work environment conditions. Transfer in business is the bridge to continuous performance improvement. Moreover, in order to deliver greater value and justify training investments nowadays, one of the biggest challenges for HR professionals is to reassess and start with a renewed conviction about the importance of TTransfer and their responsibility to influence it.

Literature review of Training Transfer research evolution

To sum up the literature review, the first stage, From the 1960s to the Late 1980s, was characterized as theoretical fundamentals formation and this time the classical approaches to TTransfer were created and invented. The second stage, From the Early to the Late 1990s, is time for practical evidence with challenging the empirical approval of previously researched theory. The third period, From the Year 2000 to 2008, was distinguished by the empirical findings for more and more new factors affecting TTransfer and proposals for TTransfer improvement. The fourth stage, From the Year 2008 to Onwards, was concentrated on the connection of all previous scientific data and puzzling results out of it. Additionally, the interaction with business needs resulted in new consulting companies launched with TTransfer focus. The first period for fundamentals statement, the second period with empirical approval and the last period as new technology era for TTransfer, were viewed as the most important stages for TTransfer research evolution.

Training Transfer factors classification

Both in theoretical and empirical parts of the study, different factors that facilitate the TTransfer were analysed at organizational level. Therefore, the first and main classification was viewed as primary transfer influences. The second classification specified the time period when TTransfer process occurred. The third classification, determined participants who are mostly involved in the TTransfer process.

Profound theoretical analysis of all possible factors according to the first classification was conducted in this study, which resulted in more than 120 different factors affecting TTransfer. All the factors were classified to 5 major

groups and 32 sub-groups. Analysing the variety of influencing variables, 23 new factors were proposed either by the participants of the empirical study or by the researcher. All of these categories play an important role in TTransfer by moderating, mediating or directly predicting transfer success.

Training Transfer factors prioritization

The analysis of theoretical and empirical findings connected with the researcher vision was represented respectively. In this case, the researcher opinion represents the comparison and recommendations. The main part of TTransfer factors prioritization was done empirically, because of the limited resources in the theoretical literature. The statistical analysis and work with quantitative data was also presented in this study in the form of diagrams and charts. Detailed prioritization of each group and sub-group of TTransfer factors was organised empirically in a five-point scale.

The first classification of factors - primary transfer influences

According to the empirical data analysis, the importance of TTransfer factors group can be represented as the following:

Rating	Empirical results	The researcher opinion
1st place	INDIVIDUAL LEARNER CHARACTERISTICS Motivation factors	INDIVIDUAL LEARNER CHARACTERISTICS Motivation factors
2nd place	WORK ENVIRONMENT CHARACTERISTICS Work system factors	WORK ENVIRONMENT CHARACTERISTICS Work system factors
3rd place	TRAINING PROGRAM CHARACTERISTICS	WORK ENVIRONMENT CHARACTERISTICS People-related factors
4th place	WORK ENVIRONMENT CHARACTERISTICS People-related factors	TRAINING PROGRAM CHARACTERISTICS
5th place	INDIVIDUAL LEARNER CHARACTERISTICS Personal factors	INDIVIDUAL LEARNER CHARACTERISTICS Personal factors

Table 23. TTransfer factors' group prioritization, empirical findings vs the researcher opinion.

Therefore, the only two factors from empirical findings were prejudiced by the researcher: Training program characteristics and Work environment characteristics, People related sub-group.

The second classification of factors - time period

The researcher's vision for this classification of TTransfer is in compliance with empirical findings, which are resulted in the following importance ratings:

- 40% - Before the training stage,
- 6% - During the training stage;
- 44% - After the training stage.

The third classification of factors - TTransfer participants

In the scientific literature there were no findings, which can approve or contradict the suggestions done by respondents and the researcher in this section. The most important roles according to subject-matter experts should go to learner (1st place), HR (2nd place) and line manager (3rd place), whereas the researcher proposed to place the line manager to 2nd place and HR to the 3rd place according to the significant input of direct supervisors to TTransfer success.

To sum up, all TTransfer factors and their prioritization was crucial for the analysis of TTransfer and were taken into consideration for TTransfer improvement suggestions. The comparative approach allowed looking at the TTransfer phenomenon from different perspective and including all essential factors in order to maximize TTransfer.

Methods for Training Transfer improvement

TTransfer improvement methods were analysed in direct connection with TTransfer factors. Top 12 best practices for the methods of TTransfer improvement, which were summarized as the outcome of empirical discussions had great importance for the recommendations part. They were considered as

the requirements for new suggested solutions of TTransfer improvement. These requirements are reflected in the recommendations part.

6.2 Recommendations

Recommendations are based on the comparative analysis of theoretical and empirical findings as well as on the researchers' opinion on TTransfer phenomenon. The main result of this part is **the proposed model of TTransfer factors** and **TTransfer Strategy form**. They were developed in order to achieve the main research objective and provide the reliable and flexible tool for practical implication in HRD area.

First of all, new categorisation was used in the **proposed model of TTransfer factors**, because the broad classification of more than 120 factors influencing TTransfer is not appropriate for practice in business. Strategic connection was executed and resulted to **the four areas of categorization**: People, Culture, Systems and Processes. Newly proposed model of TTransfer factors demonstrates different values for TTransfer factors classifications which were identified previously. This can be viewed as a guide for HR professionals and TTransfer participants on priorities for the TTransfer factors.

Moreover, the next more detailed strategic area classification for TTransfer was done in the frame of reference to sub-group prioritization, where each area was displayed with three major and the most important sub-group of factors. Additionally, for each sub-group of TTransfer factors, the responsible TTransfer participant was assigned. All the sub-factors and assigned participants were logically connected and correlated in the suggested **TTransfer Strategy form** as the tool for improvement of TTransfer.

Proposed TTransfer Strategy form should be filled in during mandatory meetings among learner, line manager and HR professional before and after training. **The first part of the form** is dedicated to Training needs assessment and Training results evaluation. **The second part** of the TTransfer Strategy form is consecrated to the general picture for model of TTransfer factors, which demonstrates the logic of the discussion. **The third and the last part** of the TTransfer Strategy form is devoted to the main purpose of the meetings –

define, agree and fix the actions which will assure TTransfer success. Each section is structured in accordance with the TTransfer factors priority. Therefore, all the established actions for TTransfer success finally will be presented according to their necessity.

In order to direct TTransfer participants' attention to the most important aspects (TTransfer factors) to be discussed and agreed upon during the meeting, it is suggested to use specific **set of questions**. Each question is connected and structured within both the proposed model of TTransfer factors and responsible participants' involvement. As a result, guiding by questions to answer and fill in TTransfer Strategy form, participants strengthen personal commitment as their own developed process to be implemented and concluded.

6.3 Implications for practice

The study has important practical implications. The opportunity to apply recommended solutions in practice might be considered through the check out with the requirements which were agreed with the participants of empirical research as significant directions to be followed.

Requirements for new tool of TTransfer improvement:

- **Have structured and systematic approach** – the proposed TTransfer Strategy form has the structure of three main parts, which was discussed in previous section. The systematic approach is provided by the commitment of three major TTransfer participants to the meetings, which should be organized before and after the training:
 - 1) **In the meeting before the training**, each part of the TTransfer Strategy form should be discussed and agreed upon. The ratings and the dates for the meeting after training should be assigned in the end of this meeting;
 - 2) **On the meeting after the training** the Evaluation of Training results and TTransfer Strategy implementation by learner should be assessed. All the results should be discussed and finalized by the participants respectively.

- **Use the most important TTransfer factors** – three TTransfer factors classifications are used in the proposed TTransfer Strategy form, such as primary TTransfer influences, TTransfer participants and time period variables.
- **Is universal and flexible for different trainings** - the decision on why and to which extent use model of TTransfer factors and TTransfer Strategy form should be made by the participants, who are the main executors and drivers of TTransfer success. The flexibility of the approach let the users involve or exclude different TTransfer factors and processes either to fill in those parts of the form or leave them blank. This should be decoded in compliance with business needs and expectations. As programs, audiences, and purposes of training vary, there will always be a need to adapt the solution to particular situations, to incorporate new ideas, which the proposed methods allow to be considered.
- **Owned and committed by participants** - learner role should be assigned as one of the most significant in the process of TTransfer. Whereas line manager and HR professional have supportive roles accordingly. The main focus for this requirement is the acknowledgement of the self-made, coordinated and agreed on actions, which TTransfer participants own and appreciate.
- **Recorded, controlled and evaluated** - TTransfer Strategy form as a pre-condition of the planning and preparation stage for most of trainings in a company should be discussed, agreed on and evaluated during these meetings. Record of the actions for each TTransfer participant should filled in and signed during the meetings.

It can be concluded that the main purpose of this study was achieved by the proposed solutions for HR professionals to use in order to improve and maximize TTransfer at organizational level. These solutions were summarised in the proposed TTransfer Strategy form which included newly developed model of TTransfer factors and actions. During the meetings before and after training,

actions for TTransfer enhancement should be agreed and recorded by learner, line manager and HR professional. Additionally, in order to cover the most important factors for TTransfer and decide actions which can strengthen these factors, a specific set of questions for the meetings was proposed. Therefore, suggested tools can be readily applied in practice at HRD work for TTransfer success. However, the proper communication should be organized and commitment achieved among TTransfer participants beforehand in order to integrate suggested methods to learning and organizational culture.

6.4 Future directions for research

If there were opportunities to apply the proposed methods for TTransfer improvement at a case company, an area for further research would be to explore how well it worked, what obstacles it overcame and what results can be gained out of implemented TTransfer Strategy form and systematic meetings before and after the trainings.

Exploring additional respondent variables and a larger sample size and collecting other sources of data would enhance future transfer studies. Consulting companies, which specialised in TTransfer improvement, might be added as empirical interviewees. Their customers' experience is a unique source of practically approved solutions. Differentiation of the research methods can additionally provide opportunities for better understanding TTransfer factors and possible methods to enhance TTransfer success.

Finally, research of the scope of other learning activities such as Relationship-based and Experience-based, and transfer improvement of gained KSA out of these activities could be widened. This seems to be an area that has not been extensively researched within HRD literature. It would be useful to undertake the same framework as was done in this research: examine factors which influence transfer of different learning activities, identify the most important ones and propose the solutions for application. This can add value to extend the research of HRD literature. Practically, this study can benefit organizations with effective solutions to use for all learning activities and assure continuous improvement for business through L&D value.

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Appendices

Appendix 1

Training Transfer definitions

1. The remaining transfer outcomes are retention of course knowledge (Kirkpatrick, 1976), use of cognitive and behavioural transfer strategies (Marx, 1982), and demonstration of behavioural change (Kirkpatrick, 1976), which we refer to as use of trained skills.
2. Transfer of learning is the application of skills and knowledge learned in one context being applied in another context (Cormier & Hagman 1987).
3. Transfer of training is effectively and continuing applying the knowledge, skills, and/or attitudes that were learned in a learning environment to the job environment (Perkins, D., Salomon, G. 1992).
4. Transfer of learning is “the effective and continuing application, by trainees to their jobs, of the knowledge and skills gained in training both on and off the job” (Broad & Newstrom, 1996, p. 6).
5. Transfer of training occurs when the knowledge learned is actually used on the job for which it was intended (Olsen 1998). More precisely, Ford and Weissbein (1997) defined that transfer of training involves the generalization of learning, trained skills, and behaviors from the training environment to the work environment, and the maintenance of trained skills and behaviors. (Saks, A., Belcourth, M. 2006).
6. Transfer of learning is defined as ensuring the knowledge and skills acquired during a learning intervention are applied on the job. The goal is for learners to transfer 100% of their new knowledge and skills to their jobs, resulting in a higher level of performance and an improvement in the quality of services in organizations (Sullivan, 2002).
7. Transfer of training is the effective and continuing job application of the knowledge and skills gained in training. It is important to consider that transfer is not necessarily time-bound (Burke & Hutchins 2008).
8. Learning requires two fundamental activities. In the first, we acquire new knowledge, skills, attitudes, behaviors and / or competencies; in the second, we apply what was acquired. “Transfer of training” is the process of applying new skills and knowledge from training to the person’s job (Kirwan, C. 2009).
9. How knowledge learned (through training) can become knowledge applied on the job (Hutchins, H. et al., 2010).
10. Transfer — the process when employees begin to implement plans of action, which lead to successful transfer of skills (Basarab, D. 2012).

Appendix 2

Consulting companies with Training Transfer support specialization

- **LTS Global** – the company vision is to revolutionize learning transfer. The company solutions are based on the latest research and best evidence - but are practical, easy and affordable. TransferLogix, is the IT solution, which the company offers with its latest creation, brings the power of Web 2.0 tools to solve the transfer problem. The company classify 16 TTransfer factors, which grouped into three main categories: 1) Ability to Use Knowledge and Expertise, 2) Motivation to Use Knowledge and Expertise, 3) Work Environment Designed to Support Use of Knowledge and Expertise.
- **Fort Hill Company** - a learning technology firm, creates simple and innovative tools that improve workplace performance and drive stronger business results. Results Engine® is the first-ever web-based learning and development tool designed to engage participants and their managers on-the-job after training. Fort Hill Company identified six challenges that were consistent and pervasive enough to warrant further investigation and might be considered as factors influencing TTransfer: 1) Demonstrating business results, 2) Supporting learning transfer, 3) Evaluating and improving programs, 4) Engaging learners in training opportunities, 5) Engaging stakeholders, 6) Getting managers involved.
- **Bersin & Associates** - the leading research and advisory firm focused solely on enterprise learning, talent management, talent acquisition and strategic HR. The company's WhatWorks® membership program offers actionable information, tools, benchmarking, and services to help HR and L&D professionals drive operational results. For the TTransfer support, the company offers to use Six Disciplines (6Ds) Learning Framework, which also can be viewed as a tool for TTransfer improvement: 1) Define Outcomes in Business Terms, 2) Design the Complete Experience, 3) Deliver for Application, 4) Drive Follow-Through, 5) Deploy Active Support, 6) Document Results.

- **Dave Basarab Consulting** – offers an end-to-end comprehensive approach that includes training strategy, instructional design, development, delivery, post program training transfer, and evaluation (via the unique Predictive Evaluation methodology). Virtual Chief Architect Dave Basarab has combined all of these individual training elements with his user-friendly, comprehensive Learning to Performance approach. The approach includes 3 main factors, which also specifies special subcategories or action to apply for TTransfer success: 1) Organizational support by management team, 2) Transfer by participants, 3) Application support by trainers.
- **Apply Synergies** - a strategic consulting firm that specializes in helping learning organizations design, develop and measure effective learning and performance support strategies to meet the 5 moments of learning need. Their product is Electronic Performance Support Systems, which is developed with the consideration to organizational specific factors and situation in order to support and improve TTransfer. According to the Apply Synergies, there are 5 factors, which influence TTransfer: 1) Intelligence Function, 2) Learning Mindset, 3) Leadership Behavior, 4) Organizational Support, 5) and Learning Technology.

Appendix 3

Factors influencing Training Transfer

1. INDIVIDUAL LEARNER CHARACTERISTICS		2. TRAINING PROGRAM CHARACTERISTICS		3. WORK ENVIRONMENT CHARACTERISTICS	
1.1. Personal factors		1.2. Motivation factors		1.1. Personal factors	
1.2. Motivation factors		1.2. Motivation factors		1.2. Motivation factors	
Abilities:	Expectations:	Training needs analysis:	Task or job characteristics:	Trainee selection / notification process	
cognitive ability	positive / negative	accuracy of need identification	roles and responsibilities	voluntary vs mandatory attendance	
psychomotor ability	training format	management / learner involvement	task complexity	communication medium / accuracy	
skill acquisition	challenge	behaviours/learning objectives	task type	Transfer support:	
learning rates / trainability	degree of interaction	alignment to departmental / company objectives	task difficulty	supervisor support	
task specific ability	focus on content	Training design:	immediate opportunity to apply KSA	peer support	
Personality:	pay off / incentives	management involvement	availability of tools to apply KSA	subordinate support	
locus of control	Desires:	far / near transfer specifics	aids on the job	coaching / mentoring	
ego strength	training format	content validity / relevance to work environment	new technologies	buddy systems	
need for achievement,	focus on content	diverse instructional / media / active learning methods	Transfer climate	Transfer coordination:	
affiliation	challenge	error-learning with retention	resource availability (time, equipment)	interaction between departments	
conformity	Attitudes:	error-based training	workload	top management's involvement	
conscientiousness	commitment to company	cognitive load of information	job security	HR and manager relationships	
anxiety	job attitude	use of technology	authority/autonomy	Personal positive / negative outcomes	
Demographics:	intent to remain	Programmed interventions:	leniency for trial and error		
family history	career planning	pre-requisite reading or exercises	learner's accountability for transfer		
age	job satisfaction	pre-course briefing between manager and learner	manager's accountability for transfer		
gender	job involvement	Relapse Prevention	Learning culture		
education	reactions to previous training	manager's attendance on the training	Organizational culture		
Experience:	coworker / teammate relations	post-course briefing	openness to innovation / risk taking		
with company	organizational cynicism	transfer support forms	organizational commitment for training and transfer		
with task	Goal orientation:	Training type	Organizational policies & procedures:		
with previous training	performance learning / mastering	Trainer characteristics:	HR procedures		
Learning style:	Self-efficacy:	trainer's expectations	budget restrictions		
pragmatist	physical self-efficacy	expressiveness	Organizational history:		
reflector	cognitive self-efficacy	professional knowledge / skills	size		
theorist	task-specific self-efficacy	structured thinking	management-labor relations		
activist	Motivation to attend	trainer atmosphere	growth/decline		
		trainer treatment of learners			
	Motivation to learn	focus on apply and maintain new learning on the job			
	Motivation to transfer	Training results evaluation:			
	Motivation to maintain	training reaction / attitude change			
		learning (knowledge)			
		training performance (skills on the training)			
		job performance (skills on the job)			
		business results / organizational effectiveness			

Appendix 4

LTSI factors supported Training Transfer (page 1)

<i>Factor</i>	<i>Definition</i>	<i>Sample Item</i>
<i>Training specific scales</i>		
Learner Readiness	Extent to which individuals are prepared to enter and participate in training.	Before the training I had a good understanding of how it would fit my job-related development.
Motivation to Transfer	Direction, intensity, and persistence of effort toward utilizing in a work setting skills and knowledge learned.	I get excited when I think about trying to use my new learning on my job.
Positive Personal Outcomes	Degree to which applying training on the job leads to outcomes that are positive for the individual.	Employees in this organization receive various "perks" when they utilize newly learned skills on the job.
Negative Personal Outcomes	Extent to which individuals believe that <i>not</i> applying skills and knowledge learned in training will lead to negative personal outcomes.	If I do not utilize my training I will be cautioned about it.
Personal Capacity for Transfer	Extent to which individuals have the time, energy, and mental space in their work lives to make changes required to transfer learning to the job.	My workload allows me time to try the new things I have learned.
Peer Support	Extent to which peers reinforce and support use of learning on the job.	My colleagues encourage me to use the skills I have learned in training.
Supervisor Support	Extent to which supervisors/ managers support and reinforce use of training on the job.	My supervisor sets goals for me which encourage me to apply my training on the job.
Supervisor Sanctions	Extent to which individuals perceive negative responses from supervisors/ managers when applying skills learned in training.	My supervisor opposes the use of the techniques I learned in training.

Appendix 4

LTSI factors supported Training Transfer (page 2)

Perceived Content Validity	Extent to which trainees judge training content to accurately reflect job requirements.	What is taught in training closely matches my job requirements.
Transfer Design	Degree to which (1) training has been designed and delivered to give trainees the ability to transfer learning to the job, and (2) training instructions match job requirements.	The activities and exercises the trainers used helped me know how to apply my learning on the job.
Opportunity to Use	Extent to which trainees are provided with or obtain resources and tasks on the job enabling them to use training on the job.	The resources I need to use what I learned will be available to me after training.
<i>General scales</i>		
Transfer Effort—Performance Expectations	Expectation that effort devoted to transferring learning will lead to changes in job performance.	My job performance improves when I use new things that I have learned.
Performance—Outcomes Expectations	Expectation that changes in job performance will lead to valued outcomes.	When I do things to improve my performance, good things happen to me.
Resistance-Openness to Change	Extent to which prevailing group norms are perceived by individuals to resist or discourage the use of skills and knowledge acquired in training.	People in my group are open to changing the way they do things.
Performance Self-Efficacy	An individual's general belief that they are able to change their performance when they want to.	I am confident in my ability to use newly learned skills on the job.
Performance Coaching	Formal and informal indicators from an organization about an individual's job performance.	After training, I get feedback from people about how well I am applying what I learned.

(Holton et al., 1996).


Appendix 5

Interview questions for empirical research of Training Transfer (page 1)

T	Topic	Questions	Activities	Theory	
1		What is Training Transfer (TTransfer)?			
3	Learning vs Training – what's the difference	How do you define Training? What is training in your company?		Training is an activity (one of several responses) othat an organisation can take to promote learning, which is formal - planned and prepared by experts (Professional training)	
3	We can train someone to hit a baseball in an hour, but it takes years to learn the game.	What is the main purpose of training? (Generally or in your company)		Improve a single knowledge / or a short term skill (how to) Meets current organisational requirements - achieve a single goal / deal with a problem Focuses on the group Primarily structured - beginning, middle and ending	
3		How do you define Learning? What is learning in your company?		Learning is the process by which a person constructs new knowledge, skills, capabilities and attitudes Behaviour change Long term change Equips for ambiguous future Defines organisational future Is focused by individuals	
3	Learning and business – what's the matter	What is the main purpose of learning? (Generally or in your company)		1) Take more responsibility for learning by participants 2) Emphasis to the individual learner 3) To develop a culture (climate) that supports effective and appropriate learning 4) Continuation of the process 5) Longer-range, future-based planning to deve	
3		Could you share, what is the difference between training and learning, how do you see that?		The significant difference is training as an "event". Learning is about fully engaging learners in the learning process. Learning is what an individual does; training is something they receive.	

Appendix 5

Interview questions for empirical research of Training Transfer (page 2)

<p>Many companies changed their emphasis from Training to Learning. There is the rule 70-20-10 for all learning activities, where only 10 % for Trainings /educational sources, 20% of learning - from guided interactions and feed back, and 70% - being on the job</p>	<p>Why there was a shift from training to learning?</p>	<p>1) Continuous improvement with all part of development connected - learning organization 2) Impetus is coming from learners themselves, who prefer to learn through informal activities such as on-the-job training rather than through 'deliberate intervention</p>
<p>3</p>	<p>Why there was a shift from training to learning?</p>	<p>1) Continuous improvement with all part of development connected - learning organization 2) Impetus is coming from learners themselves, who prefer to learn through informal activities such as on-the-job training rather than through 'deliberate intervention</p>
<p>3</p>	<p>In my research I limit the topic by studying only professional trainings among all others learning activities:</p> 	<p># 1 Prepared learning activities, write down there the types of training</p>
<p>3</p>	<p>In today's complex organizations, it's not how much you know or can do, but how much you use on the job</p>	<p>I decided to include all types of training: - Soft skills / Hard skills - External / Internal However, if we take the connection between different trainings and take them as continue process - this will be a part of learning</p>
<p>3</p>	<p>What do participants receive in the end of a training? What can be gained after a training?</p>	<p>1) Reactions 2) Attitude Change 3) Knowledge 4) Performance on the Training 5) Performance on the job 6) Results/Organizational Effectiveness</p>

Appendix 5

Interview questions for empirical research of Training Transfer (page 3)

5		<p>What is the most important component for business among all? And for a participant of a training? What can provide this? What about APPLICATION ON THE JOB ?</p>		<p>5) Performance on the job 6) Results/Organizational Effectiveness APPLICATION ON THE JOB</p>										
3	<p>TTransfer and its components</p>	<p>In my research, this application of new knowledge, skills, attitudes after a training I call it Training Transfer</p>	<p># 1 Prepared components - turn back this part and put in pen: Ttransfer = Application after a training</p>	<p>Kirkpatrick Phillips</p> <table border="1" data-bbox="630 362 917 739"> <tr> <td>Level 1: Reaction</td> <td>Level 1: Reaction, Satisfaction, Planned Action</td> </tr> <tr> <td>Level 2: Learning</td> <td>Level 2: Learning</td> </tr> <tr> <td>Level 3: Behavior</td> <td>Level 3: Application</td> </tr> <tr> <td>Level 4: Results</td> <td>Level 4: Business Impact</td> </tr> <tr> <td>Level 5: ROI</td> <td></td> </tr> </table>	Level 1: Reaction	Level 1: Reaction, Satisfaction, Planned Action	Level 2: Learning	Level 2: Learning	Level 3: Behavior	Level 3: Application	Level 4: Results	Level 4: Business Impact	Level 5: ROI	
Level 1: Reaction	Level 1: Reaction, Satisfaction, Planned Action													
Level 2: Learning	Level 2: Learning													
Level 3: Behavior	Level 3: Application													
Level 4: Results	Level 4: Business Impact													
Level 5: ROI														
3	<p>Magical measure stick "If you cannot measure it, you cannot manage it." Peter Drucker's aphorism More extremely: if you can not measure. it does not exist</p>	<p>A lot of companies put more attention to TRAINING RESULTS EVALUATION rather than to the APPLICATION. Why is so, how do you think?</p>		<p>The most important - is to get application first and then there is a sense to measure it. A lot of companies, investing to trainings pay more attention to MEASURE-SHOW THE RESULTS. Hence the ultimate purpose of training evaluation must be to assess the level of application on the job.</p>										
2	<p>Why Training Transfer is important for business?</p>													


Appendix 5

Interview questions for empirical research of Training Transfer (page 4)

5	Facts about TTransfer success and application in real life	What about real life example, can you remember any Achievement Story when you experienced the application after the training (positive TTransfer) ? How did you realize that it was a success / how did you measure that?	Types of TTransfer: - positive transfer in which performance on one task aids a second task; - negative transfer when one performance inhibits the other; - zero transfer in which no effect occurs or the effects effectively cancel each other.
3	TTransfer importance – the value left in the classroom	Why there are not a lot of examples of successful stories on TTransfer from your opinion?	Researchers estimates that only about 10 percent of gained on the training actually transfers to job performance
3	Research-to-Practice gap among academics and practitioners in HR	So many literature I found on the topic actually and identified that there is research -to-practice gap. What is your opinion, why this literature and research findings are not fully used by HR and business?	
3	Training investments discussion	What the main financial reasons to invest for company to TTransfer improvement?	Companies are beginning to recognize that training without training transfer is a waste of time and resources.
3	What factors do affect Training Transfer ?		

Appendix 5

Interview questions for empirical research of Training Transfer (page 5)

3	<p>TTransfer participants</p>	<p>Who are usually participate in and influence TTransfer?</p>	<p># 2 put them step by step on the top of the paper after the expert's reply</p>	<p>* Top managers; - line managers; - learners; - other learners from the same class (buddy); - trainers; - peers of participants; - subordinates of participants; - HR professionals</p>
5	<p>Continuous Improvement Cycle and its components for TTransfer</p>	<p>Lets look at Continuous Improvement Cycle for Learning. This can be used in trainings as well. 1. How the TTransfer participants could be involved in each step? 2. According to your opinion, what is the most important stage? Why?</p>	<p># 2 Prepared the Cycle, during the discussion - write down BEFORE / DURING / AFTER</p>	<p>Planning and Development - BEFORE THE TRAINING Implementation - DURING THE TRAINING Follow up - AFTER THE TRAINING</p>
5	<p>Main business factors affect TTransfer</p>	<p>If we take each stage, in your business, what are the main factors which affect TTransfer: 1. BEFORE 2. DURING 3. AFTER</p>		
5	<p>According to the Theory, there are some factors which are classified by 3 main areas: - Individual Learner Characteristics - Training program design - Work Environment characteristics Could you find some examples for each according to your experience</p>	<p>Write down on the paper with the Cycle</p>	<p>* Learner Readiness - Design for Transfer - Organizational Alignment</p>	

Appendix 5

Interview questions for empirical research of Training Transfer (page 6)

	In Theory I found a lot of different factors (120) and classified them to the main categories (32). Let's look at them according to 5 sections.		
3	In theory: 120 factors / 32 categories	Could you share an example, when one of section from 5 of them, played an important role in the TTransfer (After training application), according to your experience.	# 3 Printed 5 sections with space
5	TTransfer factors prioritization by importance for business	Could you prioritize these 5 sectors for TTransfer influence. Form your opinion, why this first three are the most important?	# 3 Printed 5 sections with space
10		1. Could you please, prioritize other factors according to each section based on your experience with TTransfer in business. 2. Lets look at the most important. Why so?	# 4 - 1.1.+1.2. # 4 - 2 # 4 - 3.1.+3.2. Printed 5 sections with space (1-2); 3-4 - together on the A4) 3 papers
15	Coffe-break + put all 15 factors to the 3 tables		
5		We took the most important factors (15) and put them to the table according to the priorities (5 sections - factors). I include the participants and the sequence of the process - BEFORE - DURING - AFTER, because they also important indicators for us, as we	# 5, # 6, # 7 Prepare the 3 papers (tables) with 15 space-free rows: BEFORE - DURING - AFTER, Write down there factors 3 papers with X
			1. Personal Factors - 2 2. Learner Expectations 3. Training program characteristics 4. Work system factors 5. People-related factors
			1. Personal Factors - 2 2. Expectations - 5 3. Training program characteristics - 3 4. Work system factors - 3 5. People-related factors - 2
			1. Personal Factors - 2 2. Expectations - 5 3. Training program characteristics - 3 4. Work system factors - 3 5. People-related factors - 2 TOTAL: 15





Appendix 5

Interview questions for empirical research of Training Transfer (page 7)

4		What are the Strategies for TTransfer improvement?	
10	Different participants of TTransfer process / BEFORE - DURING - AFTER training	Lets take each 5 factors (or maybe more ?) and define what are the recommendations for TTransfer maximization - or BEFORE - DURING - AFTER.	The term "transfer action" means the use of any technique or method to help ensure that knowledge and skills learned are executed as planned on the job to achieve the intended results. The term "transfer strategy" is used to identify the approach we will
5		Lets stop on each stage participants: on BEFORE - DURING - AFTER. What could you recomments them for Ttransfer mprovement?	
Finally =)			
3		As a learner reply to the last question, please: I learn in the coolest way when ?	

Appendix 6

Invitation for the interview

 <p style="text-align: right;">Saimaan ammattikorkeakoulu Saimaa University of Applied Sciences</p> <h3 style="text-align: center;">Training Transfer improvement at organizational level</h3> <p>Interview with [REDACTED]</p> <p style="text-align: right;">Marina Babkina</p>	<p style="text-align: right;">Learning x Transfer = Results</p>  <h4>Main features of the interview</h4> <ul style="list-style-type: none"> • DATE: [REDACTED] • RESEARCH TOPIC: Training Transfer – the process of putting learning to work in ways that improve performance • BEST PRACTICES APPROACH: in-depth interview with subject matter expert (<i>this is you =</i>) • IN SECTIONS: Ideal situation / Current situation / Theory <p><i>Through sharing we always gain...</i></p> <p>Training Transfer insights:</p> <ul style="list-style-type: none"> • Last theoretical and practical updates in literature • The whole picture of WHAT IS IDEAL and WHAT IS NOW • Final Thesis with recommendations to apply • Having a good time (<i>hopefully not more than 2 hours =</i>) 																						
<h4>Structure of the interview - Learning Transfer (LTransfer)</h4> <table border="1"> <tr><td>1</td><td>What is Training Transfer (TTransfer)?</td></tr> <tr><td>1</td><td>Learning vs Training – what's the difference</td></tr> <tr><td>2</td><td>Learning and business – what's the matter</td></tr> <tr><td>3</td><td>TTransfer and its components</td></tr> <tr><td>4</td><td>TTransfer and Training effectiveness</td></tr> <tr><td>5</td><td>TTransfer and Training Evaluation (Kirkpatrick / Phillips levels)</td></tr> <tr><td colspan="2">2 Why Training Transfer is important for business?</td></tr> <tr><td>1</td><td>Facts about TTransfer success and application in real life – suggestions / reasons</td></tr> <tr><td>2</td><td>Research-to-Practice gap among academic and practitioners in HR</td></tr> <tr><td>3</td><td>TTransfer importance – the value left in the classroom</td></tr> <tr><td>4</td><td>Training investments discussion</td></tr> </table>	1	What is Training Transfer (TTransfer)?	1	Learning vs Training – what's the difference	2	Learning and business – what's the matter	3	TTransfer and its components	4	TTransfer and Training effectiveness	5	TTransfer and Training Evaluation (Kirkpatrick / Phillips levels)	2 Why Training Transfer is important for business?		1	Facts about TTransfer success and application in real life – suggestions / reasons	2	Research-to-Practice gap among academic and practitioners in HR	3	TTransfer importance – the value left in the classroom	4	Training investments discussion	<h4>Coffee break</h4> 
1	What is Training Transfer (TTransfer)?																						
1	Learning vs Training – what's the difference																						
2	Learning and business – what's the matter																						
3	TTransfer and its components																						
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<h4>Structure of the interview (continue)</h4> <table border="1"> <tr><td>3</td><td>What factors affect Training Transfer ?</td></tr> <tr><td>1</td><td>TTransfer participants</td></tr> <tr><td>2</td><td>Continuous Improvement Cycle and its components for TTransfer</td></tr> <tr><td>3</td><td>Main business factors affect TTransfer : • Learner Readiness • Design for Transfer • Organizational Alignment</td></tr> <tr><td>4</td><td>In theory: 6 factors / 32 categories / 120 sub-categories</td></tr> <tr><td>5</td><td>TTransfer factors prioritization by importance for business</td></tr> <tr><td colspan="2">5 What are the Strategies for TTransfer Improvement?</td></tr> <tr><td>1</td><td>Different participants of TTransfer process / Pre – During – After the training Ideas, Recommendations</td></tr> </table>	3	What factors affect Training Transfer ?	1	TTransfer participants	2	Continuous Improvement Cycle and its components for TTransfer	3	Main business factors affect TTransfer : • Learner Readiness • Design for Transfer • Organizational Alignment	4	In theory: 6 factors / 32 categories / 120 sub-categories	5	TTransfer factors prioritization by importance for business	5 What are the Strategies for TTransfer Improvement?		1	Different participants of TTransfer process / Pre – During – After the training Ideas, Recommendations	<h4>Thank you !!!</h4>  <p style="text-align: center;">Thank you for your support and encouragement!</p>						
3	What factors affect Training Transfer ?																						
1	TTransfer participants																						
2	Continuous Improvement Cycle and its components for TTransfer																						
3	Main business factors affect TTransfer : • Learner Readiness • Design for Transfer • Organizational Alignment																						
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5	TTransfer factors prioritization by importance for business																						
5 What are the Strategies for TTransfer Improvement?																							
1	Different participants of TTransfer process / Pre – During – After the training Ideas, Recommendations																						

Appendix 7

Newly proposed factors influencing Training Transfer

1. INDIVIDUAL LEARNER CHARACTERISTICS		2. TRAINING PROGRAM CHARACTERISTICS		3. WORK ENVIRONMENT CHARACTERISTICS	
1.1. Personal factors		1.2. Motivation factors		3.1. Work system factors	
3.2. People-related factors					
Abilities: cognitive ability psychomotor ability skill acquisition learning rates / trainability task specific ability	Expectations: positive / negative training format challenge degree of interaction focus on content	Training needs analysis: accuracy of need identification link to departmental / company objectives link to individual annual objectives individual objectives for application learning objectives	Task & job characteristics: task complexity task difficulty availability of tools to apply aids on the job new technologies on-the-job Transfer climate	Traine selection / notification process voluntary attendance mandatory attendance communication medium / accuracy Transfer support: supervisor support supervisor opposition peer support subordinate support	
Personality: locus of control ego strength need for achievement, affiliation conformity conscientiousness anxiety	learning results performance results transfer results pay off / incentives Desires: training format focus on content challenge	Training design: management involvement far / near transfer specifics content validity / relevance to work environment diverse instructional / media / active learning methods over-learning with retention error-based training cognitive load of information use of technology	resource availability (time, equipment) workload job security authority/autonomy leniency for trial and error learner's accountability for transfer manager's accountability for transfer Learning culture: learning processes application programed interventions commitment knowledge management (course material storage) internal trainers development communication rules Organizational culture openness to innovation / risk taking organizational commitment for training and training transfer resistance to change Organizational policies & procedures: TTransfer strategy new technologies for TTransfer support budget restrictions Organizational history: size growth/decline	participants support to each other access to trainer / trainer support coaching / mentoring buddy systems Transfer coordination: interaction between departments management involvement (top and middle) HR and manager relationships HR support Personal positive / negative outcomes	
Demographics: family history age gender education	Attitudes: commitment to company job attitude intent to remain career planning job satisfaction job involvement reactions to previous training coworker / teammate relations organizational cynicism	Programed interventions: TTransfer Strategy meeting (preparation proof) pre-training meeting with Manager / Trainer / other Learners pre-requisite reading or exercises manager's attendance on the training Relapse Prevention by Trainer in the end of training action plan for application (prepared in the end of training, agreed with Manager after the training) post-training meeting with Manager / Trainer / other Learners Internal cross-function training TTransfer Strategy meeting (evaluation proof) Training type Trainer characteristics: trainer's expectations expressiveness professional knowledge / skills structured thinking training atmosphere trainer treatment of learners focus on apply and maintain new learning on the job Training results evaluation: training reaction / attitude change learning (knowledge) training performance (skills on the training) job performance (skills on the job) business results / organizational effectiveness			
Experience: with company with task with previous training					
Learning style: pragmatist reflector theorist activist	Goal orientation: performance learning / mastering Self-efficacy: physical self-efficacy cognitive self-efficacy task-specific self-efficacy Learner readiness Motivation to attend Motivation to learn Motivation to transfer Motivation to maintain				

* filled with the blue color - respondents' input
* filled with the yellow color - researcher's input

Appendix 8

Questions for Training Transfer Strategy meeting (page 1)

PEOPLE

Individual learner characteristics - Motivation factors

1. Motivation to transfer (HR)

- 1) Do you plan to use new KSA (knowledge, skills and attitudes) after training and how? **(to Learner and to Manager)**
- 2) Why do you believe it will make the difference in the future for your performance? **(to Learner and Manager)**
- 3) What can the manager do to motivate you to learn and apply KSA? **(to Learner) (Fill HR part)**
- 4) Encourage the motivation to attend, motivation to learn, motivation to transfer and maintain. Give examples. **(as a part of HR responsibility, according to the context of training)**

2. Learner readiness (Manager)

- 1) How do you explain to Learner how this training is related to the job and performance? **(to Manager)**
- 2) How can Learner prepare for the KSA application on the job? **(to Manager)**
- 3) What can you do to prepare Learner for the KSA application on the job (provide enough time for preparation, access to information materials, improve Learner's self-efficacy and motivation, etc.)? **(to Manager) (Fill Manager part)**

3. Personal capacity (Learner)

- 1) Do you have time, energy and self-assurance about applying your ability and new KSA on the job? **(to Learner)**
- 2) How can the Manager help to overcome possible obstacles that hinder the use of new KSA on the job? **(to Learner)**

- 3) What can you do to prepare yourself for application of new KSA on the job? **(to Learner)** **(Fill Learner part)**

Appendix 8

Questions for Training Transfer Strategy meeting (page 2)

CULTURE

Work environment characteristics - Work system factors

1. Organizational culture (HR)

- 1) Do you believe our company values learning in general and new ideas implementation after this training? **(to Learner and to Manager)**
- 2) How can the Manager help you to implement new ideas after this training? **(to Learner)** **(Fill HR part)**
- 3) What can you do to overcome the natural Resistance to change after this training? **(to Learner)** **(Fill HR part)**
- 4) Emphasize company commitment to invest in people development (trainings in this case) and in new ideas implementation. Encourage openness to change. Give examples. **(as a part of HR responsibility, according to the context of training)**

2. Transfer climate (Manager)

- 1) How do you explain to Learner that it is a part of his/her responsibilities to apply new KSA on the job after this training? **(to Manager)**
- 2) What can the Learner do to have immediate opportunity to apply skills after this training? **(to Manager)**
- 3) How can you provide resources for immediate opportunity for Learner to apply new KSA after this training (equipment, additional time within current workload, information materials, mentoring for first weeks, etc.)? **(to Manager)** **(Fill Manager part)**

3. Learning culture (Learner)

- 1) Do you support Training process and how it is organized in our company? **(to Learner)** Training program interventions list (Appendix 9) – the responsibility of Learner, please, look at the list.
- 2) Which activities from the list can help you to remember and apply new KSA on the job and when? **(to Learner)** **(Fill Manager part)**

Appendix 8

Questions for Training Transfer Strategy meeting (page 3)

- 3) How can the Manager help you to accomplish the chosen activities? **(to Learner)**
- 4) Who else can help you to accomplish the chosen activities? **(to Learner)**
Chose from the options: Trainer, TOP manager, Personal mentor, Peers or other participants from your group, Subordinates of learner, HR professional, Family members).

SYSTEMS

Work environment characteristics People-related factors

1. Transfer coordination (HR)

- 1) Do you receive enough support from HR for training organization and future application of new KSA after this training? **(to Learner and to Manager)**
- 2) How can HR additionally help you and Manager to support application of new KSA after this training? **(to Learner)** **(Fill HR part)**
- 3) Shortly explain HR coordination work and the link among Learner – Manager – HR – Trainer – Training company. Encourage open relationships and accountability among all the participants. Give examples. **(as a part of HR responsibility, according to the context of training)**

2. Transfer support (Manager)

- 1) How do you explain to Learner the importance of your assistance and support from other participants (mostly from Trainer, TOP manager, Personal mentor, Peers, HR) for the new KSA application on the job)? **(to Manager)**

- 2) What activities from Training programmed interventions list (Appendix 9) can you support to help Learner to apply new KSA after this training? **(to Manager)**
(Fill Manager part)
- 3) How can the Learner help you to follow the Training programmed intervention activities (scheduling, reminders, etc.)? **(to Manager)**
- 4) What can you do to provide personal recognition to Learner if new KSA on the job were applied and stated objectives were achieved on time? **(to Manager)**
(Fill Manager part)

Appendix 8

Questions for Training Transfer Strategy meeting (page 4)

3. Personal positive / negative outcomes (Learner)

- 1) Do you believe that the application of new KSA will lead to personal recognition that you value? What can it be? Increased productivity and work effectiveness influence to the annual objectives and performance, increased personal satisfaction, additional respect, a salary increase or reward, the opportunity to further career development plans, the opportunity to advance in the organization. Any other options? **(to Learner)**
- 2) Can you assume, if you will not apply new KSA, negative outcomes might be followed from Manager, TOP Manager or other participants? What might it be? Reprimands, penalties, peer resentment or disrespect, too much new work, the likelihood of not getting a raise, etc. Any other options? **(to Learner)**
- 3) What is the best way for Manager to recognize that you learned and applied new KSA? **(to Learner)** **(Fill Learner part)**
- 4) How can you link this training and its application to your future career and development plan? **(to Learner)** **(Fill Learner part)**

PROCESSES

Training program characteristics

1. Training design (HR)

- 1) Why should Manger and Learner screen Training program beforehand? **(to Learner and to Manager)** Look at the options for Training program draft (external training program, suggestion from trainer or HR, etc.).
- 2) What kind of Training program characteristics will be the most effective for this training to be applied? **(to Learner and to Manager):**
 - **Training organization:** date and time, amount of days, participants, place, etc. **(Fill HR part)**
 - **Training design:** learning designed to clearly link it to on-the-job performance, opportunity to apply new skills during the trainings, training conditions, relevant to work environment, far / near transfer, diverse instructional / media / active learning

Appendix 8

Questions for Training Transfer Strategy meeting (page 5)

- methods, examples / activities / exercises clearly demonstrate how to apply new KSA, etc. **(Fill HR part)**
 - **Training type:** mandatory / optional, external / internal, hard skills / soft skills, etc. **(Fill HR part)**
 - **Trainer:** professional knowledge / skills, experience with this training, focus on apply and maintain, etc. **(Fill HR part)**
- 3) Is it necessary to contact the trainer for Training program discussion to understand the program, verify content validity, adapt for relevance to the work environment, suggest learning designed to clearly link it to on-the-job performance, etc.)? **(to Learner and to Manager) (Fill HR part)**
 - 4) Encourage Learner for active participation, demand for application of KSA during the training, asking questions about the linkage to application after this training and work environment relevance, networking with trainer and other learners. Give examples. **(as a part of HR responsibility, according to the context of training)**

2. Training needs analysis (Manager)

- 1) How do you explain to Learner, why Training needs analysis and objectives-setting is crucial for this training? **(to Manager)**
- 2) Which objective - setting component is relevant for this training? **(to Learner and to Manager)**

According to the Training process policy in our company, Training needs analysis should include the following objective - setting components:

- link to departmental and organisational outcomes;
- link to individual annual objectives;
- individual objectives for application on-the-job and behaviour change;
- learning objectives.

Appendix 8

Questions for Training Transfer Strategy meeting (page 6)

- 3) Could you formulate required objective - setting components together? **(to Learner and to Manager)** **(Fill Training needs analysis part)**
- 4) What will help to understand that one or another objective is achieved, how to measure the accomplishment? **(to Learner and to Manager)** **(Fill Manager part)**

3. Training results evaluation (Learner)

- 1) Why do you believe that Training results evaluation is important? **(to Learner)**
- 2) Out of the Training need analysis, which objective achievement should be evaluated as the result of this training? **(to Learner)** **(Fill Training needs analysis part – outline objectives for evaluation)**
- 3) For the chosen objectives, how it is possible to evaluate (wow survey / test / 360 assessment, action plan implementation etc.)? How can the Manager and HR participate in this evaluation? **(to Learner)** **(Fill Learner part)**
- 4) When is the best date to meet for finalization of training results evaluation? **(to Learner and to Manager)** **(Fill Learner part)**

Appendix 9

Training programmed interventions

BEFORE THE TRAINING
TTransfer Strategy meeting (preparation proof)
pre-training meeting with Manager / Trainer / other Learners
pre-requisite reading or exercises
DURING THE TRAINING
manager's attendance in the training
Relapse Prevention by Trainer in the end of training
AFTER THE TRAINING
action plan for application (prepared in the end of training, agreed with Manager after the training)
post-training meeting with Manager / Trainer / other Learners
internal cross-function training
TTransfer Strategy meeting (evaluation proof)

Appendix 10

Training Transfer Strategy form (page 1)

1. Training needs analysis and Training result evaluation



#	Learning objectives	Measures	Ratings

#	Link to individual annual objectives	Measures	Ratings

#	Individual objectives for application on-the-job	Measures Performed Transfer actions	Ratings
1.	To implement Transfer Strategy on time		

#	Link to departmental and organisational outcomes	Measures	Ratings

This is the confirmation that Training results evaluation is performed and approved by:

Learner name / Signature

Date

Line manager name / Signature

Date

HR responsible name / Signature

Date

TOP manager / Signature

Date

