Factors affecting transfer of training.

The case of Greece.

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Abstract

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The contemporary globalized world requires professionals in any industry to acquire cross-sectional knowledge and constantly develop their skills and competences in order to be able to perform better at their jobs. Numerous studies examine the factors affecting transfer of training to the actual workplace. In this text, emphasis is given mainly on Baldwin and Ford’s proposed model of transfer process. Trainee characteristics, training design and work environment, along with their sub-categories, are mostly evident to affect training transfer. A comprehensive approach of the most important evidence is hereby provided in order to help training professionals regarding training delivery decisions. Greece is hereby examined as a case study, by presenting the results of a survey conducted to the students of International Hellenic University.

Keywords: transfer of training; training ROI; trainee characteristics; motivation theories; training in Greece

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Introduction

The contemporary globalized world requires professionals in any industry to acquire cross-sectional knowledge and constantly develop their skills. Organizations tend to invest even more every year for learning and development programs which reveals the top priority of training practitioners: to unlock the full potential of their workforce. In 2017, total training expenditures in the US increased 32.5% compared to 2016, from $70.6 billion to $93.6 billion (Training industry report, 2017, “Training Magazine”). The importance of training and development is also evident by training budget increases: from 316 respondents (small-medium and large enterprises) of the survey of Training Magazine, 36% stated that company’s budget regarding training activities was increased for 2017 and from those, 67% said that the increase was due to scope of training while 54% that added training stuff in the organization.

The provision of training and development interventions is important not only for organizations but for individuals as well. Employees who participate in adult training activities tend to demonstrate lower levels of unemployment and higher levels of organizational engagement. Training participants develop their skills constantly which leads to increased performance levels and realization of personal career goals. Approximately 40% of learning and development practitioners in large organizations in US and Canada, recognize that one of the main objectives of training is support career development for employees (LinkedIn Workplace Learning report, 2017).

At the same time, however, it is widely acknowledged that training results are very difficult to measure. A vast majority of training professionals agrees that the number one challenge is the provision of adequate ROI and demonstrate measurable results of training activities to the stakeholders (LinkedIn Workplace Learning report, 2017). One way to tackle this challenge is to achieve positive training transfer. In other words, behaviors, skills and competences acquired during training, successfully transfer to the workplace. Saks (2002), estimated that 40% of training participants do not transfer immediately after training, 70% hang back transfer one year later and only 50% of investment in training lead in increased performance.
In 1988, Baldwin and Ford, in the first integrated literature review in the field, identified the conditions of transfer to include “both the generalization of learned material to the job and the maintenance of trained skills over a period of time on the job”. After recognizing the “transfer problem”, Baldwin and Ford (1988) provided a model of transfer process in order practitioners and researchers to use it as a framework for research on factors affecting training transfer. The authors distinguished amongst training inputs, outputs and conditions of transfer. In training inputs they include trainee characteristics, training design and work environment, resulting in learning and retention in order to meet generalization and maintenance.

Following Baldwin and Ford’s (1988) research, “there has been an outpouring of both conceptual and empirical research, all aiming to bridge the gap between training and workplace performance” (Grossman and Salas, 2011). In 2007, Burke and Hutchins identified 170 articles in their integrated literature review, presenting an adequate picture of the research that have been conducted in the field and the importance that the notion of transfer holds in the academic world.

In 2007, Velada et al., examined the relationship between training design, individual characteristics and work environment and found that those factors are positively related with training transfer. Bossche et al. (2010), argued that when feedback about the level of training transfer is provided within the workplace, then it is more probable “to close the gap between the current performance and the desired goal of full application of what is learned during training”. In 2011, Grossman and Salas, argued that due to cost efficiency and resource limitations, organizations are not in position to take into consideration the numerous factors affecting transfer indicated in the literature. Thus, the authors distinguish among the most important factors affecting training transfer, based on empirical studies’ results since Baldwin and Ford’s review (1988).

The purpose of this paper is to provide a clear understanding of the most important factors affecting training transfer, based on the model of transfer process by Baldwin and Ford (1988), following the steps of Grossman and Salas (2011), as evaluated by Grossman and Salas (2011). Each factor is analyzed individually, with the provision of examples and suggestions to training practitioners in order to achieve an optimal level
of measurement of training transfer. No integrated literature review is attempted in any case since it would be beyond the scope of this study.

Furthermore, in the last section is presented the case of Greece. Since there is no extensive literature regarding transfer of training in Greece, we present the results of the empirical study conducted by Brinia and Efstathiou (2011) along with the results of our own empirical survey.
Defining transfer of training

Transfer of training can be defined as the application of learned behavior and knowledge acquired during a training program or session into the workplace, and to be maintained over a rather long period of time on the job (Baldwin and Ford, 1988). In 1990, Laker categorized transfer in near and far: near transfer as the condition where learning is applied in contexts identical or similar with those where original learning occurred, and far transfer as the condition where learning is applied in contexts dissimilar with those where original learning took place (Yamnill and McLean 2001). Furthermore, training transfer can be divided in positive transfer of training and negative transfer of training according to “the degree to which trainees effectively apply the knowledge, skills and attitudes gained in a training context to the job (Baldwin and Ford, 1988).

According to the literature, there are numerous factors affecting transfer of training in to the job context. Since the recognition of the “transfer problem” by Baldwin and Ford (1988), many scholars tried to explain what elements constitute a successful training program, whereas afterwards trainees are able to transform acquired skills into higher performance results in their workplaces. A comprehensive starting point is the Model of the Transfer Process developed in 1988 by Baldwin and Ford in the first integrated literature review regarding the full aspects of the concept of training transfer. In figure 1 it is illustrated a contemporary and somewhat different depiction of Baldwin and Ford’s (1988) model as adapted from Grossman and Salas (2011) but the changes in vocabulary do not affect the explanatory value of the model.
The original idea behind the model was to provide a comprehensive understanding of what transfer of training stands for and how it could be explained and examined. To start with, the authors introduced three broad categories of factors affecting transfer of training. Training inputs, comprised by trainee characteristics, training design and work environment. Training outputs, including the learning and retention, referring specifically to the overall skills, knowledge and behaviors acquired through original learning and the degree these were retained after the completion of training. Transfer conditions, generalization and maintenance, refer to the fundamental elements of successful transfer where the skills, knowledge and behaviors learned are generalized in the workplace context and maintained for a significant amount of time.

The model of transfer process establishes 6 significant direct and indirect relations in order to provide a thorough explanation of training transfer concept. It is evident that trainee characteristics, training design and work environment are affecting learning and retention directly but only trainee characteristics and work environment have a direct effect on transfer conditions. Training design and transfer conditions are affected indirectly through the learning and maintenance processes. To be more
specific, the successful design of a training program which will be understood by and useful to trainees, is highly possible to lead to successful and positive transfer. At the same time, cognitive ability, motivation and self-efficacy along with transfer climate and support, seem to contribute directly to transfer without the need for learning the training material.

Without doubt this is only a framework in order to try to conceptualize transfer of training and the factors affecting it. Aforementioned factors do not affect transfer the same degree and do not incur the same significance as to what degree are important for successful and positive transfer. For example, what is more essential for human resource developers in order to conduct a lucrative training program? It could be the ability of trainees to learn, their motivation, the content of the program and how much related it is to actual job conditions, or none of them and the only reason for success to be the peer support and the positive transfer climate trainees enjoy before, during and after the training.

In order to answer these question we should clarify the notions behind the factors affecting transfer and offer an adequate theoretical framework. From the three broad categories of Baldwin and Ford’s model of the transfer process, the sub-categorization of training inputs has a significant place amongst transfer scholars and researchers. Trainee characteristics, training design and work environment have been the dominant issues in recent empirical studies concerning training transfer, that is, because by understanding the linkages between training inputs and transfer, a better perception is provided to training practitioners whose ultimate goal is to increase job performance levels.
Trainee Characteristics

As indicated in Grossman and Salas (2011), the most significant personality traits of training participants are their cognitive ability, self-efficacy, motivation and their perceived utility of training. In other words, the possibility of transfer to occur increases if a participant is a quick, easy and intelligent learner, if he or she believes that can complete a training session, if he or she is motivated to put as much effort needed and if he or she finds a clear link between targeted skills and real job situations.

Cognitive Ability

Looking in the field of psychology numerous studies can be found which measure the importance of one’s intellectual ability in the overall learning outcome. Intellectuality, intelligence, general mental ability or cognitive ability all refer to the same notion: the ability of individuals to “understand complex ideas, adapt to their environments, learn from experiences and engage in various forms of reasoning” (Grossman and Salas, 2011).

In 1989, Kanfer and Ackerman’s study suggested that trainees’ performance is strongly related and affected by their attentional resource capacity which, in turn, is related with a person’s cognitive ability. In the most recent meta-analytic study on the subject by Blume et al. (2010), the authors investigated, among other things, the relationship of cognitive ability and training transfer between open and closed skills and they found a “moderately strong, positive relationship between cognitive ability and the transfer of closed skills (.41)”.

Although cognitive ability is not the only predictor of training transfer, it is commonly accepted that trainees with a not so strong ability to engage into complicated subjects could not be able to transfer skills, knowledge and behaviors into the workplace because those might have never been learned in the first place. For transfer of training to be positive, skills, behaviors and knowledge should be learned and retained overtime (Baldwin and Ford, 1988).
For example, we can take a sales training program whereas participants are required to achieve higher sales target after the completion of the program. During the training sessions they learn new conduct for persuading customers, new negotiating skills and also they are being taught tips of how to tackle difficult to persuade customers. Taking as a fact that those skills and behaviors have been tested and it is evident that they produce results, then if each one of the participants use them will achieve the desired results. But what happens if someone could not understand dynamics behind training material? Then it is highly possible not to be able to transfer the training material because learning never happened in the first place. It is important to mention, however, that in order to have valid answers about the realization of learning we need to consider evaluation processes based on Kirkpatrick’s four levels of training evaluation, but this is beyond the scope of this particular paper. Thus, cognitive ability is one of the most significant predictors of training transfer because it plays a crucial role in the overall realization of training objectives to increase job performance. Training practitioners and organizations could use the results of empirical research on the subject and therefore create more suitable training programs for their employees. By knowing participants’ abilities to follow training with certain complexity, they will, for example, provide training sessions with different levels of difficulty, thus making retention and transfer a more approachable scenario.

**Self-Efficacy**

In 1982, Bandura provided a definition for self-efficacy as “judgments individuals make about their competency to perform a defined task” (as cited in Burke and Hutchins, 2007). Self-efficacy denotes the level of confidence trainees have on their particular abilities in order to conclude a certain training program and increase their respective job performance by applying acquired knowledge, skills and behaviors. It is true that trainees who demonstrate lower self-efficacy are more likely to give up their efforts to complete a specific training program and eventually fail to transfer acquired skills. In the relevant literature, self-efficacy has been examined alongside motivation in several studies (Colquitt et al. 2000; Chiaburu and Marinova, 2005) which indicates that self-efficacy provides predictions for transfer in both direct and indirect ways (through
motivation to transfer as will be discussed further). They argue that trainees who are confident in their abilities to learn and retain skills, are more motivated and, thus, have higher possibilities to achieve positive transfer. Velada et al. (2007) found that performance self-efficacy significantly predicted transfer of training over time (.30) supporting even further the belief that individuals “are able to change their performance when they want to” (Holton et al. 2000, as cited in Velada et al. 2007). Clearly, if we go back to the sales training example, we can assume that, despite one’s cognitive ability, a higher level of self-efficacy could lead to maximizing effort on behalf of the trainee which, in turn, contributes to actual learning, retention and transfer. Blume et al. (2010), examined pre-training and post-training self-efficacy and found a moderate relation with transfer in both cases (.22 and .20 respectively). This indicates that it does not matter whether trainees are confident before or after the training occurs, as long as they sustain a certain level of self-efficacy continuously. On the other hand, however, Vancouver and Kendall (2006) supported that self-efficacy could negatively related with training transfer. They argue that too much confidence is possible to harm learning, retention and transfer because individuals will abandon any extra effort in the training process. To be more specific, if a person feels that is sufficiently prepared and equipped for a certain task, then this over-confidence will lead to restfulness and no additional effort will be put forth, resulting only in partial attainment of new skills, behaviors and knowledge. In sales training example, salespersons with high self-efficacy are most probable to complete the training program believing that they did not learn anything new regarding ways to increase sales volume. As a result they will continue to use their previous ways of selling, while participants with a moderate confidence level will apply newly acquired competencies on the job more easily and they might be able to achieve better results.
Consistently with cognitive ability, self-efficacy is a factor affecting training transfer that should not be ignored by organizations. Even if some employees have low or no confidence in their abilities, there have been evidence in the literature that self-efficacy gives room for modification through targeted interventions (Burke and Hutchins, 2007). Through a consistent intervention scheme, training practitioners...
could enhance the possibilities of transfer provided they have already evaluated if such actions are necessary, if they do not want to cultivate over-confidence instead.

**Motivation**

In every case of achieving a goal, motivation is the key to succeed. The same applies in training transfer as well, because motivation has demonstrated a much significant relation with transfer the last decade. “Motivation refers to the processes that account for an individual’s intensity, direction and persistence of effort toward attaining a goal” (Robbins and Judge, 2009, as cited in Grossman and Salas, 2011). “Training motivation refers to the intensity and persistence of efforts that trainees apply in learning-oriented activities, before, during, and after training (Tennenbaum and Yukl 1992, as cited in Burke and Hutchins 2007). From the aforementioned definition we can extract three types of motivation: pre-training motivation, motivation to learn and motivation to transfer (Burke and Hutchins, 2007). Overall motivation has to do with trainees’ belief in the successful completion of the training program and the valued aftermath that follows.

In Blume et al.’s meta-analysis (2010) was found that motivation has a strong relationship with transfer (.24), and even stronger when transfer was evaluated by one’s self (.35). In their work, Chiaburu and Lindsay (2008) found a significant .43 when correlated motivation to transfer with actual transfer, and a much smaller .07 for effect of motivation to learn on training transfer. They also tested the relationship between motivation to learn and motivation to transfer (.26) which indicates that, eventually, motivation to transfer affects transfer indirectly, through participants wish to learn.

For a better and more comprehensive understanding of the reasons why motivation is so important when it comes to transfer learned competences on the job, it is important to consider the rationale behind the willingness of individuals to do so. In other words, we should turn to theories that help explain such human behavior. There are two most prominent motivation theories: *expectancy theory* and *equity theory*.

Vroom (1964) provided a definition of expectancy to be “a momentary belief concerning the likelihood that a particular act will precede a particular outcome” (as
cited in Yamnill and McLean, 2001). Expectancy theory consists of three components: *expectancy, instrumentality* and *valence*. Using the sales training example, let us assume that participants were offered a reward for increasing sales volume and the person who will meet new sales target by using skills learned in training, will get doubled bonus compared to the regular that was going to receive anyway for meeting the target. At this time, each participant expects to be the one to achieve the goal, believes that the company is going to double the bonus (instrumentality) and, ultimately, wants the doubled bonus for self (valence).

If all three components of expectancy theory are high, then this particular participant is highly motivated to exert in training sessions. Participants will put effort in training which, in turn, will provide performance increase and eventually will lead to the reward. In the event when the participant demonstrates zero expectancy then there will be no motivation to put any effort in training whatsoever.

Equity theory is based on the conception of fair treatment in reference to others. Developed by Adam (1963), the theory denotes that individuals evaluate the fairness of their rewards by comparing their input/output ratio to the input/output ratio of “referent others”. Inputs may include time, skill, ability, determination, suggestions, commitment, effort etc., while outputs refer to financial rewards, career growth, job security, recognition, salary raise and many more. As a result, individuals feel demotivated when they realize that their inputs are greater than their outputs. In other words, if the participants of sales training understand that no matter the amount of effort they put in training their performance increase will make no difference for the company, it is highly possible to stop trying and even drop out of the training sessions.

Motivation is of great importance in transfer literature. Training practitioners should take into serious consideration motivation as factor affecting training transfer and try to motivate employees into participating in training programs. Employees may have limited time available or may be extremely overloaded with work that training is of minor importance to them. By providing incentives and rewards employees feel that “by attending training he or she is likely to gain equity in pay or other sought-after rewards, (and) there is a greater chance that learning will occur, and such learning will transfer to the job” (Noe, 1986).
Perceived utility/instrumentality

Along with the impact of motivation on training transfer, there is the expected value of training by the trainee. For transfer to occur and learn behaviors to be applied on the job, the participants should feel that what they learned is of actual use in real job situations. A very important role plays the relevance perceived by trainees which enables them to correlate learned skills and behaviors with problems that they deal with every day at work. If relevance is high, then it is most probable for transfer to occur.

According to identical elements theory, (by Thorndike and Woodworth in 1901), “transfer is improved by increasing the degree of correspondence among the training setting stimuli, responses, and conditions and those related factors operative in the performance setting” (Yamnill and McLean, 2001). In other words, training participants who highly utilize the benefits stemming from learned material and are able to conceptualize those benefits into increased performance, are more likely to achieve positive transfer than others. Velada et al. (2007) significantly correlated training transfer with the perceived applicability of training by trainees.

Training instrumentality is very important because it goes hand-in-hand with motivation. And if motivation is crucial for achieving transfer then instrumentality gains a lot of ground too. The lack of value of training will ultimately lead to lack of motivation and then inevitably to no transfer.

Consequently, training practitioners have to be very accurate when they choose amongst employees to participate in a training program. The most important factor to take into consideration from the beginning is the level of relevance between that person’s job description and the actual training curriculum.
Training design

The second category of training inputs affecting transfer is the creation and structure of a training program capable of delivering successful results that will lead to positive transfer outcomes. The use of the right training design strategy is of great importance. There is a variety of training design and teaching strategies suggested in the literature to help achieve transfer (Burke and Hutchins, 2007) but, according to our transfer process model (figure 1), we will focus on behavior modelling, error management and realistic training environments.

Behavior modelling

As a part of Social Learning theory developed by Bandura in 1977, behavioral modelling denotes that people tend to learn presented behaviors of the right way to perform a task. Later, participants are exposed to models of successful use of these behaviors and then they have to practice what they learned and receive feedback. The process of behavioral modelling appears to have results when it comes to transfer (Decker, 1980) because the provision of opportunities to training participants to observe and practice certain behaviors “enhances their ability to learn and retain new information” (Grossman and Salas, 2011).

In 2005 Taylor et al. conducted a meta-analysis of 117 studies evaluating 6 training outcomes and found that when both positive and negative models where used in interpersonal skills training program, behavioral modelling was more effective in transfer terms (Burke and Hutchins, 2007). Thus, behavioral modelling affects transfer significantly when participants are exposed to mixed models of behavior and they are free to make their own choices during practice.

It is important to mention, however, that behavioral modelling is not the only strategy to design a successful training program, that is, in transferring learned skills and competencies. Training practitioners should consider but not be limited in choosing behavioral modelling as a base for designing training programs. The right design strategy is an outcome of how participants are evaluated regarding their cognitive ability and, nonetheless by the transfer outcome that is desired to be achieved.
**Error management**

“People make mistakes“ people say. These mistakes, however, often help us to take a lesson and do not repeat them in the future. On this notion is based error management design strategy, whereas trainees who are allowed to make errors are exposed to most effective training transfer results. “Error-based training allows trainees to anticipate what can go wrong, and equips them with the knowledge of how to handle potential problems” (Grossman and Salas, 2011). Heimbeck et al. (2003), compared transfer results between trainees who received error training and those who did not and found that error training was highly beneficial for transfer to occur. By showing training participants what could go wrong, not only prevention is achieved but, also, participants incorporate this information and learn how to react if real life situations deviate from what was expected. One interesting point regarding error management, is that it enhances participants’ value perception for training itself. According to Burke and Hutchins (2007), the use of error-based examples is the same with “sharing with trainees what can go wrong if they do not use the trained skills back on the job”. Hence, the instrumentality of the program increases and positive transfer occurs successfully.

Error management is not a stand-alone training design strategy. It should be incorporated in every training program because it can be viewed as a utile instrument in the hands of training practitioners. Learned skills and behaviors are retained more effectively if compared with their “flawed” version so as trainees acknowledge the value of the training itself and motivate to transfer on their job.

**Realistic training environment**

The overall setting in which training takes place in very critical for transfer. Calling upon identical elements theory again, positive transfer occurs when taught material encompasses similar situational characteristics with actual job realities, the same applies with the overall training environment. The similarity of the premises and the equipment, for instance, used in training with the actual workplace provide a fruitful ground for positive transfer of training.

On-the-job-training is a great example of a realistic environment training. When training is conducted on real-job situations is more probable for learned competencies
to transfer. Participants are far more familiar with the setting upon which training applies and they can match acquired skills more easily with job requirements. Thus, they value training, are highly motivated to learn and to transfer on the job because they realize that it provides solutions to real problems they confront every day at work.

A very good example of the usefulness of realistic training environment can be drawn from workplace safety training settings. It is very common for large corporations especially operating in heavy industries (i.e. automobile) to implement training programs regarding work safety, including related legislation provisions, and most importantly prevention techniques to avoid serious or even fatal accidents. For employers who handle heavy equipment, it is highly significant to get trained by expert operators in real-time job situations. This kind of realistic training environment guarantees transfer because it provides useful guidelines for avoiding undesirable mistakes leading to industrial accidents.
Work environment

The importance of work environment after the completion of a training program is easy to comprehend. Assuming that there is a perfectly designed training program with highly motivated and intelligent participants but when the program is completed no one at the organization is prompt to accommodate the newly acquired knowledge. For that reason, participants will lose their willingness to transfer learned competencies and behaviors back to their workplaces because they found no support from peers and managers. According to the transfer process model (Figure 1), work environment variables include transfer climate, support, opportunity, and follow-up.

Transfer Climate

Transfer climate can be defined as “observable or perceived situations in organizations that inhibit or facilitate the use of learned skills” (Rouiller and Goldstein, 1993, as cited in Grossman and Salas, 2011). In 1993, Rouiller and Goldstein provided a framework for organizing the characteristics of a positive transfer climate. They argue that transfer climate items can be classified in two broad categories: situational cues and consequences. Situational cues include (manager) goal cues, social cues, task cues, and self-control cues. Consequences include feedback (positive, negative or none) and punishment. According to this framework, positive transfer climate is achieved when managers set goals for trainees to use their new skills, trainees receive support from their peers, needed equipment is in place, trainees are able to practice and they receive feedback after they apply new skills on the job. After conducting their study, Rouiller and Goldstein (1993) found that “attributes of the setting (organizational transfer climate) influence the transfer of training behavior on the job”.

Assuming that there is a training program, for instance, aiming at providing knowledge on how to use more sophisticated computer software. The program proceeded well and all participants concluded it successfully. Going back at work, however, the software was not installed in their computers, with managers demonstrating a procrastinatory attitude about the installation dates. As a result, time passes and no action is taken so the possibility of transfer fades significantly. Trainees will end up
forgetting what they learned and the initial objective of the training program will be never reached.

Transfer climate one of the most important factors affecting transferability of new skills and competences (Blume et al., 2010). Colquit et al. (2000) found a .37 correlation coefficient for work climate and transfer. Thus it is very important for trainees to return in an environment which facilitates transfer of new abilities. Training practitioners should focus more on setting up a transfer-friendly workplace. Otherwise the overall effort put on before and during training will be meaningless and unimportant.

**Support**

As in transfer climate, peer and supervisor support is very important in transfer. Support could be reviewed along with transfer climate but there is evidence in the literature that affects separately training transfer and significantly as well (Burke and Hutchins, 2007).

The role of supervisor support on transfer has been widely examined in the literature (Burke and Hutchins, 2007). Actually, Blume et al. (2010) found that supervisor support is one of the most significant predictors of transfer. The provision of support by supervisors can take various forms, for example by encouraging trainees to transfer new skills, recognizing and rewarding their effort or even including them in discussions for introducing new training programs (Grossman and Salas, 2011). Moreover, managers should set performance level goals before training so as to motivate trainees to achieve these goals (Grossman and Salas, 2010). The provision of feedback and especially positive, is also a form of supervisor support that facilitates transfer (Burke and Hutchins, 2007). The acquisition of knowledge is a subjective process and its individual understands things in different ways. By providing feedback and coaching, supervisors help trainees to conceptualize learned skills on the job and achieve positive transfer of training.

At the same time, the role of support by peers and colleagues plays a significant role in transfer as well. Chiaburu and Marinova, (2005) significantly correlated peer support with skill transfer (.65) in their study, while Hawley and Bernard (2005) found that
“networking with peers and sharing ideas about course content helped promote skill transfer 6 months after training” (as cited in Burke and Hutchins, 2007).

Going back to the example about training on sophisticated computer software, it is easy to understand the positive impact on transfer would have had if managers supported the installation of new software to trainees’ personal computers. Additionally, if trainees discussed about newly acquired competences on this software with their colleagues then the possibility of retaining learned skills overtime would increase.

**Opportunity to perform**

Closely linked with transfer climate and support, opportunity to perform learned skills is another significant element of positive transfer. Otherwise, the transferability of new skills is minimized and the lack of opportunity to perform becomes the most significant transfer barrier (Burke and Hutchins, 2007). Furthermore, opportunity could be realized as a form of support (Grossman and Salas, 2011), from both supervisors and peers, whereas support can provide trainees with numerous opportunities to apply new competencies on the job settings.

By providing trainees with the appropriate equipment and time they need, managers will witness a significant positive transfer and retention of skills overtime (Grossman and Salas, 2011). On the other hand, if trainees return in an environment where the workload is vast and there is no time or opportunity to apply new skills, then transfer will never occur. Training practitioners should take into serious consideration that transfer does not occur overnight. Trainees need time and space to perform well and it is a manager’s job to ensure that employers who have recently participated in training programs would benefit with limited workload and more time availability.

**Follow-up**

Completing a training program does not mean that learning stops to occur (Grossman and Salas, 2011). For successful positive transfer, trainees should be able to undertake post-training initiatives that will help them enhance and comprehend acquired knowledge and skills. Receiving performance feedback, for example, is crucial. Velada
et al. found that feedback on performance after training is significantly correlated with transfer (.65).

Along with practice and discussion, trainees can contemplate about the things they learned during training (Grossman and Salas, 2011) and even clarify some missing points in the training material. There are various examples where follow-up can indeed induce transfer of training. For instance, in the medical sector doctors are trained throughout their professional lives whereas in computer skills training programs as discussed above, follow-up is important due to continuous technological advancements.

For training practitioners, it would be helpful to introduce several job aids (Salas et al. 2006) which are “tools that are designed to assist with job performance and further facilitate transfer of training” (Grossman and Salas, 2011). Some examples of job aids are informational, procedural, decision-making and coaching (Grossman and Salas, 2011).
The case of Greece

Facts about training in Greece

It is globally known that Greece for the past 8 years is going through a phase of deep financial recession. The country suffered from approximately 30% loss of its GDP (Hellenic Statistical Authority) since 2009 and the outburst of the financial crisis. Unemployment levels reached a historical high of 25% while at the same time total labor cost reduced significantly. The backbone of Greek economy is small and medium enterprises, which play a vital role in the overall economic development of the country (2014, IME GSEVEE), still trying to recover from the crisis. In numbers, 99.9% of the total enterprises in Greece are very small, small and medium, providing an 86.9% of total employment, producing 73.2% off total added value (SBA Fact Sheet, 2017, Greece).

However, in 2009, only 18.6% of SMEs encountered in any training activity in Greece, being the third worst percentage in Europe, rising in 23% in 2010 (Eurostat Database). The importance of training is undoubtable, especially within contexts of economic downturn. Benefits stemming from continuous training are not, in any case, debatable. Developing a strong human capital provides a strong competitive advantage for each business, increases employability within the population of a country, decreasing, at the same time, unemployment and poverty levels. Since Greece suffers from high unemployment for the past 9 years, it is crucial to understand that training is a means to outrun this malfunction of the economy.

In 2014, IME GSEVEE (Small Enterprises’ Institute of the Hellenic Confederation of Professionals, Craftsmen and Merchants) conducted a study regarding training needs of SMEs and the impact of training programs, providing facts of paramount importance. The scholars of IME GSEVEE studied adult training needs in six large Greek cities. They included 553 completed questionnaires whereas 27% of whose where adults who had never participated in any training program (control group) and the remaining 73% have participated in training programs of IME GSEVEE (main group). From the research was detected that, regarding the evaluation of training program items, almost 30% of the main group and 25% of the control group consider important
the training material, 15% and 25% job relativity and 20% of both the instructors. These findings indicate that a well-constructed training material plays a significant role in evaluating training programs, whereas job relativity is most important for those who have never participated in any training program whatsoever (control group). Moreover, the scholars conclude that enhancing the skills and qualifications of trainees along with the consequent optimization of organizational performance, where the key motivational factors for participation in training programs.

There is no doubt that more research is needed in the field of employee training in Greece. Provided figures indicate that the country is still far behind efficiency in terms of the provision of training in employees in all levels and industries. Literature is incomplete and the lack of updated data is an impediment in evaluating the country’s performance. It is worth mentioning, though, that research is only possible for large organizations which provide eligible number of participants/sample.

**Literature Review**

In 2012, Brinia and Efstathiou conducted a study of factors affecting training transfer on safety in the workplace based on evidence from a big aluminum factory in Greece. As this is the only study regarding training transfer factors applied in Greek context, it is worth reviewing their findings. Although the findings are related with a single economic sector (industrial/manufacturing), they provide a comprehensive view of “how strong the factors that affect training transfer where in (their) workplace”. Based on the model of Baldwin and Ford (1988), the key research question was “within the specific industrial setting and according to trainees, are the factors that affect the transfer of training back to the workplace sufficiently developed?” (Brinia and Efstathiou, 2012).

The research was conducted in a large Greek aluminum factory which employs more than 1100 employees and accounts for 1.7% of the Greek GDP. The company conducted a substantial number of training programs per year resulting in all employees to have participated at least in one training program regarding safety. According to the authors, “the seriousness of this type of training, was the reason we decided to examine these specific courses, among all other programmes held in the
company”. The sample included 134 workers and some supervisors and the research was held three to 15 months after attendance. (Brinia and Efstathiou, 2012)

The key findings of this research were rather interesting. The research showed that motivation to learn and motivation to transfer were the most important factors affecting transfer, followed by opportunity to use training, personal career goals, motivation from work, organizational commitment, content of training, colleagues’ support, supervisors’ support (Brinia and Efstathiou, 2012). In this context, employees displayed a vivid interest regarding transfer because it is a matter of life and death. Transfer was vital to occur because otherwise workers could be victims of fatal work accidents. Consequently, it is not surprising that motivation to learn, motivation to transfer and opportunity to use training come first in line. Moreover, the authors indicate that there have been no dismissals for bad performance in the company for a decade which explains that organizational commitment and support are also included in the list.

Despite its limitations, the aforementioned study provides a solid example of practices followed in large Greek organizations regarding training and training transfer. However, we can only assume that similar practices are implemented in other economic sectors of the country and in SMEs as well.

**Own empirical research**

Having taken into consideration the lack of research in Greece regarding factors affecting transfer of training, it was decided to conduct an own study and present some simple but important statistics on the matter.

**Scope of the study**

The present study aims at presenting the current situation in Greece about transfer of training to the workplace. The study does not provide solid evidence about the level and the quality of transfer in the country, but underlines the need for further research to be conducted on this matter. The statistics described further below are subject to limitations.
Methodology

The study was conducted through the distribution of questionnaires to a random sample of 1000 people via email, through the databases of International Hellenic University (see Appendix) and it is addressed only to individuals who are currently working in Greece, or have worked in Greece sometime in the past. This was taken into consideration in the questionnaire from the first question:

Q1. Are you currently working in Greece or have worked in Greece sometime in the past?
   - Yes
   - No

If the answer was “No” then the questionnaire ended automatically and the respondent did not have the ability to continue.

The questionnaire is anonymous and consists of 23 questions. 21 out of 23 questions were structured with multiple choice answers, one includes a Likert scale from 1 to 5 (strongly disagree to strongly agree) and one is open but with limited text available. Due to the fact that the questionnaire was sent to individuals who work or worked to different workplaces, it was considered proper to include some general questions regarding personal details of one’s workplace and working experience, along with a few demographic questions (table 1).

Table 1: General questions

<table>
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<tr>
<th>Q2. Gender</th>
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<tr>
<td>Q3. Age</td>
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<td>Q4. Are you currently employed?</td>
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<tr>
<td>Q5. How many years of working experience do you have?</td>
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<td>Q18. What is the highest educational degree you have obtained?</td>
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<td>Q19. How many years have you been working at your current job?</td>
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<td>Q20. Do you work part-time or full-time?</td>
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<td>Q21. What is your current job title? (if you do not have a job title, please indicate your main activity)</td>
</tr>
<tr>
<td>Q22. Since you started working for this company, how many times have you been promoted to a higher-level job?</td>
</tr>
<tr>
<td>Q23. How many people do approximately work at your workplace?</td>
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</table>
The main body of the questionnaire consists of questions extracted based on the Model of transfer process by Baldwin and Ford (1988), which is thoroughly analyzed in this paper. The purpose of the questions was to identify the several factors affecting training transfer (table 2). The structure of the questionnaire was chosen to be simple and straight-forward, without many and complex questions. That is because it is open, with no specific targeted respondents, for example from a specific organization or industry, so it should easy for everyone to understand the questions and complete it without spending a lot of time and effort.

Table 2: Main questions

| Q6. Have you ever participated in an in-house training program? (organized or paid by your company/employer) |
| Q7. If yes, did you want to participate or it was mandatory by your company? |
| Q8. Did you find the training sessions difficult for you or you could easily keep up with the rest of the participants? |
| Q9. Were you promised any rewards for your participation? (For example promotion, financial rewards etc). |
| Q10. If you chose "other" please explain. |
| Q11. After the completion of the training program, did you get what you were promised in terms of rewards? (Applicable only if your answer was positive in the previous question. Otherwise please choose "n/a") |
| Q12. During the training session, you found the training material interesting and well organized. |
| Q13. The training material was relevant to your job. |
| Q14. You could easily use what you learned back to your job. |
| Q15. Your supervisor/manager was very supportive before and after training. |
| Q16. Your colleagues/co-workers were very supportive before and after training. |
| Q17. Did you observe an improvement in your performance after training? |

In table 3, are displayed the detailed relations between each question and the factor intended to be investigated.
Table 3: Relations

| Q7. If yes, did you want to participate or it was mandatory by your company? | Motivation |
| Q8. Did you find the training sessions difficult for you or you could easily keep up with the rest of the participants? | Cognitive ability |
| Q9. Were you promised any rewards for your participation? (For example promotion, financial rewards etc). | Motivation |
| Q12. During the training session, you found the training material interesting and well organized. | Training Design |
| Q13. The training material was relevant to your job. | Training Design |
| Q14. You could easily use what you learned back to your job. | Condition for transfer |
| Q15. Your supervisor/manager was very supportive before and after training. | Supervisor support |
| Q16. Your colleagues/co-workers were very supportive before and after training. | Peer support |
| Q17. Did you observe an improvement in your performance after training? | Opportunity to perform |

**Key findings**

The questionnaire was sent to 1000 email addresses from International Hellenic University students for years 2016 and 2017. In total, 78 questionnaires were completed successfully. The vast majority of respondents (50 out of 78) is between 25 to 35 years old (64.1%), with 80.8% being employed (66 of 78 responses) by the time they completed the questionnaire. Furthermore, 56.4% of the respondents are at the beginning of their professional lives, since they have 0-6 years of working experience so far, 32.1% has been working more than 9 years and 11.5% have 6-9 years of working experience. Regarding educational level, 78.2% holds a master’s degree. One in three respondents is currently employed in small enterprises (33.3%) with no more of 10 employees.

According to the literature, motivation is one of the most important factors affecting transfer of training in the workplace (Grossman and Salas, 2011). In our study, the results are somewhat different. The correlation coefficient between question No7 for motivation and question No14 for transfer is only a low .12, which means that most of the respondents, although participated willingly in the training session in question, they did not use what they leaned back to their job easily. It can be assumed that the
question was not strongly related to motivation but the same result appears when correlating question No9, including the provision of rewards, with transfer question No14. In this case, the coefficient is slightly higher, .15, but the change is of trivial importance.

Cognitive ability and transfer appear to have a negative relationship of -0.11, but it still remains very low to be able to withdraw accurate conclusions, as it is with the relationship between motivation and transfer.

In the literature, it is also stated that when colleagues and supervisors/managers demonstrate a positive and supportive attitude towards trainees before, during and after training then transfer is highly possible to occur. In our study, the respondents had to reply to the question about supervisor and peer support which took place before and after training, not during. The results are very interesting, .44 for peer support and .35 for supervisor support. Along with peer and supervisor support, we tested the relationship between opportunity to perform and transfer and we found a positive relationship of .37. These findings support the notion that when trainees receive supportive behaviors from their working environment, they tend to use newly acquired skills and competences more effectively in the workplace.

The strongest relationship, however, was detected between training design and transfer of training, with a correlation coefficient of .61. This result clearly indicates that when training material is well organized and relevant to the trainees’ job description, then transfer occurs successfully.

Limitations

The current study is only a simple step towards more sophisticated types of studies which should take place in Greece about training transfer. The fact that there was limited time availability led to a small number of respondents, only 78, which is not a sufficient sample size to study training transfer and draw conclusions for a whole country. Moreover, hereby the answers do not represent a specific training program or a limited time period for every respondent. This means that the answers might be vague because we are not in a position to know how much time has passed since the completion of the training program in question.
Conclusions

Training professionals in organizations all over the world are trying to implement successful training programs by spending millions of dollars in order to develop the workforce and achieve a higher performance results. They struggle with low budgets and they are always accountable to stakeholders and boards of directors about the effectiveness of their plans along with their budget disposals. Training results are not always evident to the naked eye. Consequently, training professionals need measures and guidelines in order to identify whether or not training programs provide the predicted results which are for participants to be able to transfer newly acquired skills and competences to their workplaces.

Baldwin and Ford (1988) provided a comprehensive model for the transfer of training, including important factors that affect transfer. They argued that transfer is generalization and maintenance of knowledge and it is affected by training inputs, including, trainee characteristics, training design and work environment to achieve training outputs as learning and retention overtime. Since Baldwin and Ford, several studies have taken place trying to provide clear explanations about training transfer (Burke and Hutchins, 2007) and the factors that are most important for transfer to occur (Grossman and Salas, 2011).

Trainee characteristics affecting transfer include cognitive ability, self–efficacy, motivation and perceived utility of training. In other words, for transfer to occur, trainees should understand taught material, be motivated about participating in the program and perceive this participation as useful for their performance improvement. Training design has to do the way training material is organized. Is this case, behavioral modelling, error management and realistic training environments have proven to be the most effective training strategies for enhancing transfer. Finally, the amount of support trainees receive from their peers and supervisors, the opportunity they have to perform after training is completed and the follow-up techniques that are put in use constitute the overall work environment necessary for successful transfer.

For Greece, research is needed in the field of transfer as literature has limited evidence to offer. The country struggles with financial crisis the last 8 years and
austerity policies do not leave room for money spent ineffectively. This is why organizations should provide their support to scholars to conduct more studies about training transfer in Greek organizations. In this essay, we provided limited evidence about transfer but it was clearly identified that training design and supportive environment play a more important role than motivation.

In conclusion, training transfer is a multifactorial concept and cannot be explained within a few words. Literature provides important evidence about the numerous factors affecting transfer but it is not possible for training professionals to include all these factors when deciding to implement a training program. It is important they can use sufficient guidelines and choose whatever fits best their overall objectives.
Bibliography


Robbins, S.P. and Judge, T.A., Organizational Behavior (2009)


Woodworth, R.S. and Thorndike, E.L., 1901. The influence of improvement in one mental function upon the efficiency of other functions.(I). *Psychological review, 8*(3), p.247


**Other References**

Eurostat Database

Hellenic Statistical Authority

IME GSEVEE 2014 - Small Enterprises’ Institute of the Hellenic Confederation of Professionals, Craftsmen and Merchants (IME ΓΣΕΒΕΕ, Ινστιτούτο Μικρών Επιχειρήσεων Γενική Συνομοσπονδία Επαγγελματών Βιοτεχνών Εμπόρων Ελλάδας)

Τίτλος μελέτης: Διερεύνηση αναγκών εκπαίδευσης στις μικρές επιχειρήσεις και επιπτώσεων των εκπαιδευτικών προγραμμάτων

LinkedIn Workplace Learning report, 2017

SBA Fact Sheet, 2017, Greece

Training industry report, 2017, “Training Magazine”
Appendix

Factors affecting transfer of training in the workplace.

The following survey is part of the empirical research for my dissertation: "Factors affecting transfer of training: The case of Greece" and it is addressed to people who are now working in Greece or have worked in the past. Therefore, I would be grateful if you would spend 5 minutes in order to complete the questionnaire below. The questionnaire is anonymous.

*Required

1. Are you currently working in Greece or have worked in Greece sometime in the past? *
   
   Yes
   
   No *(After the last question in this section, skip to "Thank you.")*

2. Gender *
   
   Female
   
   Male

3. Age *
   
   25-30
   
   30-35
   
   35-40
   
   40-45
   
   45+

4. Are you currently employed? *
   
   Yes
   
   No

5. How many years of working experience do you have?
   
   1-3
   
   3-6
   
   6-9
   
   9+
6. Have you ever participated in an inhouse training program? (organized or paid by your company/employer) *
   Yes
   No

7. If yes, did you want to participate or it was mandatory by your company? *
   I participated willingly
   I had no choice, it was mandatory

8. Did you find the training sessions difficult for you or you could easily keep up with the rest of the participants? *
   Yes, it was very difficult
   No, I found it easy to follow

9. Were you promised any rewards for your participation? (For example promotion, financial rewards etc). *
   Yes, promotion
   Yes, I got a raise
   No, there were no rewards
   Other

If you chose "other" please explain.

10. After the completion of the training program, did you get what you were promised in terms of rewards? (Applicable only if your answer was positive in the previous question. Otherwise please choose "n/a") *
    Yes I did
    No I didn't
    N/A
11. During the training session, you found the training material interesting and well organized. *

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<tr>
<td>Strongly disagree</td>
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<tr>
<td>Strongly agree</td>
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</tbody>
</table>

12. The training material was relevant to your job. *

It was relevant
It was irrelevant

13. You could easily use what you learned back to your job. *

Yes
No

14. Your supervisor/manager was very supportive before and after training. *

Yes
No

15. Your colleagues/co-workers were very supportive before and after training. *

Yes
No

16. Did you observe an improvement in your performance after training?

Yes
No

17. What is the highest educational degree that you have obtained? *

Bachelor’s or equivalent
Master’s or equivalent
Doctoral or equivalent
Other
18. How many years have you been working at your current job? *

0-1
2-4
5-8
9-11
12+

19. Do you work part-time or full-time? *

Part-time
Full-time

20. What is your current job title? (if you do not have a job title, please indicate your main activity). *

21. Since you started working for this company, how many times have you been promoted to a higher-level job? *

One time
Two times
Three times
Never Other

22. How many people do approximately work at your workplace? *

1-10
11-20
21-50
51-100
101-200
201-300
301+

Thank you!

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