Title: Transfer of learning for managers: A refinement of the Baldwin & Ford (1988) model

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Abstract

Much contemporary dialogue has centred on learning transfer in the workplace. A significant part of the empirical work has utilised the popular Baldwin & Ford (1988) model as the theoretical framework. However, few empirical studies consider the applicability of this framework for management learning. What is crucial, and lacking in the literature is a re-examination of the input factors identified by Baldwin and Ford (1988) as applicable to management learning. Using data from two distinct management transfer studies, this study indicates there is a complex interaction between training design and work environment factors that influences manager’s capacity to transfer learning.

Keywords: transfer, managers, training design, work environment,
INTRODUCTION

Transfer of learning has received much attention in the literature with many studies utilising the Baldwin & Ford (1988) transfer of learning model as the basis for empirical work. However, there are few studies that have been conducted using managers as subjects in the learning transfer literature. Many organisations spend a significant amount of time and money on managers’ learning and development. Therefore it is necessary to empirically examine the specific issue of the transfer of learning of managers to understand how organisations can maximise the transfer of management learning. It is clear that learning can impact on organisational performance if the skills learnt are transferred to the workplace. If we consider the dearth of transfer research in management learning a key question is, how can the transfer of management learning be maximised? To answer this question, a secondary question needs to be considered, how do work environment and training design factors assist managers to transfer learning to the workplace? To answer this we need to identify what are the factors inhibiting and enhancing transfer across all types of organisations. It is accepted that each context will present nuances specific to the industry and organisation, yet a common model applicable to management learning would also be useful. To address this problem this paper seeks to begin the development of such a common model for management learning. To commence the development of a common model, this paper will synthesize the results of two management learning transfer studies that investigated the influence of the work environment and training design on interventions. This paper has a number of aims: firstly, to review and summarise the literature pertaining to management learning and the transfer of learning generally; secondly, to present findings from two research projects to identify factors that influence transfer; thirdly to synthesize these findings and offer a refinement of the Baldwin and Ford model (1988) and finally to present the implications and future suggested research.

TRANSFER OF TRAINING & LEARNING

Cheng and Ho (2001) suggest Baldwin and Ford’s (1988) model has attracted the majority of the empirical studies investigating how variables in the model influence the transfer of learning (e.g. Baldwin, 1992; Clarke, Dobbins & Ladd, 1993; Facteau, Dobbins, Russell, Ladd & Kudisch, 1995; Ford, Quninones, Sego & Sorra, 1992; Gist, Stevens & Bavetta, 1991; Shoobridge 2002, Tracey, Tannenbaum
The model, as displayed in Figure 1, demonstrates that training outcomes and inputs have indirect and direct effects on transfer. The three inputs; trainee characteristics, training design and work environment have received variable attention in the literature. This paper is concerned with the training design and work environment inputs for management learning.

**Training Inputs**

**Training Outputs**

**Conditions of Transfer**

![Diagram](image)

**Training Design** - An extensive range of training design elements have been highlighted in the literature as being important factors in facilitating transfer of learning. These include; the relevance or usefulness of the learning to the trainee’s job (Campbell 1996; Ford & Wroten, 1984; Baldwin & Ford, 1988; Goldstein, 1986); the principles of learning such as identical elements (Bass & Vaughan, 1966; Thorndike & Woodworth, 1901); sequencing of training material (Gagne, 1962); level of support, feedback, self management and relapse prevention strategies (Baldwin, 1987; Cominsky 1982; Marx, 1982; Wexley & Nemoroff, 1975); appropriateness of various instructional methods (Noe, 1986); behavioural modeling elements (Gist, 1989); pre training motivation (Fateau et al., 1995) ensuring that training content is consistent with job requirements (Bates, Holton & Seyler, Carvalho, 1997) and homework, feedback and practice (Howe, Burr & Olsen, 2004).
Holton (1996) argues that one cause of failure to transfer is that training design rarely provides opportunities for participants to practice the training in the workplace or may not be taught how to apply their knowledge on the job. A number of authors have considered the issue of the learning location and identified how important it is to have learning/training based in the workplace, so that the socio-cultural factors within the workplace are not ignored. (Analoui, 1993; Billet 1992 & 1994; Buckley & Caple, 1996; Lave & Wegner, 1991). Additionally Baldwin and Ford (1988) and Garavaglia (1993) highlight how the relevance of knowledge, skills and attitudes taught in training is of value in determining transfer. If the learner does not see the relevance of the learning to their immediate job or workplace then transfer will not occur. The experiential learning approach, in particular Action Learning (Revans, 1982a, 1982b) helps to address this concern through enabling learners to use an appropriate teaching methodology to the tasks, according to Foxon (1990) and Gass (1989). Equally, it has been suggested (Gass, 1989; McGraw, 1993; Stuart, 1992; Wagner & Campbell, 1994) that appropriate, but diverse activities for learning are designed to support manager’s diverse functions and roles. Revans (1983,15: 53) supports this by suggesting managerial learning is a social exchange ‘the job (is) the syllabus and the colleague ( is) the teacher’. Kolb’s (1984) Experiential Learning suggests that adults may need a mixture of activities because not everyone learns directly from their experiences. The argument is that experience alone does not teach and that learning takes place when there is reflective thoughts and internal processing of the experience. In summary a range of training design elements need to be considered and incorporated into learning methods if transfer is to occur.

Work Environment and Work Climate- There is a consensus, both in models and research that work environment and work climate influences the transfer of learning (Baumgartel, Reynolds & Pathan, 1984; Baumgartel, Sullivan & Dunn, 1978; Facteau et al. 1995; Hand, Richards & Slocum, 1973; Rouiller & Goldstein, 1993; Seyler et al. 1998; Tracey, Tannenbaum & Kavanagh 1995). However, researchers are still some way from determining which aspects of the job environment inhibit or facilitate transfer (Clarke 2002). Baldwin and Ford’s (1988) model sited environment favourability as a facilitator of transfer. Environment favourability is comprised of opportunity-to-use and social-support. Studies have predominantly explored the influence of these two variables, except for the Awoniyi, Griego and Morgan (2002) and the Kupritz (2002) study. Ford et al. (1992) explored the opportunity-to-perform construct and
found that the aims differed in terms of opportunity-to-perform due to work context and individual factors. Specifically, the differences in work context were in relation to supervisor attitudes and workgroup support. Bennett, Lehman and Forst (1999) studied trained and untrained employees’ perceptions of transfer climates that constrained or facilitated total-quality training. They found that a trained group of employees in a supportive climate reported significantly more customer orientation than an untrained group. Yet, Facteau et al. (1995) found that trainees’ perceptions of task constraints were not related to perceived transfer. This supported an earlier study by Peters and O’Connor (1980) that found that task constraints only have a significant affect if severe. Conversely, Lim and Johnson (2002) concluded that an opportunity to use what was learnt is a key variable influencing transfer. Russ-Eft (2002) indicated the opportunity to use is a function of supervisor support, as the supervisor has a lead role in providing the opportunity and the time for the trainee to practice the newly trained skill and in removing any constraints. Elangovan and Karakowsky’s (1999) framework divides the work environment factors into job-related and organisation-related environmental factors. The job-related factors included opportunity to perform, task constraints, group norms, support and context. The organisational-related factors included culture and reward systems. The theme of chief importance that emerges from these studies is that; trainee’ beliefs about opportunities to use the skills and the likelihood of receiving support from peers and supervisor is critical to transfer. (Clarke et al.1993; Baumgartel & Jeanpierre, 1972; Baumgartel, Reynolds & Pathan, 1984; Brinkerhoff & Montesino, 1995; Kozlowski & Hults, 1987; Lim & Johnson, 2002; Rouiller & Goldstein, 1993; Tracey, Tannenbaum & Kavanagh 1995). Although there is widespread endorsement for social support influencing transfer (Baldwin & Ford, 1988; Lim & Johnson, 2002; Xiao, 1996), the picture is far from clear (Clarke, 2002). Building on Noe (1986) and Noe and Schmitt (1986), Tracey, Tannenbaum and Kavanagh (1995) studied the extent to which favourability of environment (supervisors, peers, top management and subordinates) influences transfer. Surprisingly, they found that supervisor support was negatively related to transfer, yet peer and subordinate support were predictive of transfer. In summary, the studies that have been completed have provided mixed and inconsistent results.

**METHODOLOGY**
This paper compares and contrasts the factors that were found to influence the transfer of learning from two distinct transfer of learning studies. One study examined the influence of training design whilst the other examined the work environment influences of two management development interventions in an Australian city.

**Study 1** - Confidential one-on-one structured interviews were conducted to examine the training design influences on learning transfer as perceived by managers. Pre-specified research questions were set up in advance to guide the study (Denzin & Lincoln 1994; Miles & Huberman, 1994; Neuman, 2000). Eight participants from a co-hort of nineteen (mid-level managers from a State Government agency in a major city) who completed a six month leadership coaching development training aimed at learning and applying the *Matrix Coaching System*© in their workplaces were randomly selected. The researcher’s approach during the taped interviews was to maintain an objective position whilst establishing a trusting relationship (Easterby-Smith, Thorpe & Lowe 1994).

**Study 1: Findings**

The findings that follow endeavour to demonstrate, through the voices of the respondents, the five emerging categories of training design influences. They include: content relevance, homework, practice, peer pressure and managerial support.

**Content Relevance** - One of the key themes identified throughout the interviews was participants thought that enough was learned to be used on the job. All eight participants agreed that because the trainer used their real-life work situations throughout the six month training, it was useful in enhancing effectiveness and productivity in the workplace. Sample comments include; “*Probably the examples that are being utilised are real examples, the examples are being taken back into the workplace and made a real example for us to understand*” “I guess a good thing about the training also is that you learn to the level of your own intellect. So whilst someone who you know might have as much intellectual ability as another person, what they have gathered is enough for them. They take what they need and they use that” (Mar 04).

**Homework** - This category included any comments made by respondents in relation to tools and techniques used during the training. Homework, which is defined as having to practice what was taught in the training back in the workplace and reporting to the trainer the results at the following session. This was mentioned by all eight respondents as having real effects on them and their staff. Sample comments include; “*The
homework forces you to practice techniques and make the changes” “With this type of training there has been homework for us to do which is real type homework, it is a part of the coaching formula and it has effectively forced us, that is probably the wrong term to use, but it has actually pushed us towards actually utilising the coaching format and form” (Mar 04).

**Practice** - One of the largest categories to emerge in Study 1 was the effect that having to practice the learning back in the workplace had on respondent’s level of transfer. Respondents talked about how they practiced the coaching and various exercises back in the workplace and how the course structure provided opportunity to practice. Sample comments include; “Getting us to do the exercises to learn the concepts for ourselves, exercises are a lot more easy to learn” “In getting us to do the exercises, to learn the concepts ourselves, I find that by getting us to do exercises it is a lot more easier to learn, ingrained it becomes more ingrained” (Mar 04).

**Peer Pressure** - Participant’s experienced feelings of anxiousness when they were required by the trainer to report their uncompleted homework in front of their peers. The participants perceived that this report had an impact on their status or authority. One of the techniques implemented by the trainer was the requirement by each participant to report back to the whole group at the following session about how they had personally gone at practicing and implementing the learning in the workplace. This was perceived to have a direct impact on learning as this "peer pressure" meant everyone practiced and engaged in the learning process because if they didn’t it may affect their status or authority amongst their peers. Sample comments include; "There is also that obvious peer fear of not having done your homework so it is actually assisted us to get on board” “Peer pressure, reporting back to group” (Mar 04).

**Managerial Support** - All managers in the division agreed to attend the training with their direct reports (mid level managers and team leaders) in order to model the learning back in the workplace. This was seen to have enhanced the learning because every area within the division had to practice and implement the learning in the workplace. Sample comments include; “It is translating to other people and I am getting feedback that people are finding it really helpful in terms of getting sign on to issues and being able to talk about things that have maybe been inhibited in terms of their relationship” “The relationship between us has become better and improved in terms of people understanding one another as people, rather than just as managers, or as employees. We each can gain an insight of each other” (Mar 04).
**Study 2** - A case study approach was conducted to examine the work environment influences on learning transfer as perceived by managers. There were thirty-one managers from a selection of healthcare managers from four organisations who had participated in a managerial learning intervention in the past two years. Nine one and a half-hour focus groups were conducted at a variety of locations to gather the data. The theoretical underpinning of the data analysis technique used in this study was grounded theory (Glaser & Strauss, 1967). An inductive approach allowed core concepts to emerge from the data. Memos were used throughout the entire data analysis phase. QSR NVivo was used in both studies to assist the researchers to manage the data.

**Study 2: Findings**

The findings that follow attempt to illustrate, through the voices of the respondents, the six emerging categories of work environment influences. They include; impact of manager, staff morale, nature of work, politics, culture, and climate of constraint.

**Impact of Line Manager** - All levels of managers talked of their direct manager or higher levels of managers. This category contained one hundred and forty nine references to managers. Respondents talked both about their direct manager and about managers in general. All respondents agreed that the direct manager had an impact on what you were able to do or learn in your work place. Sample comments include; “I was enthusiastic and wanted to make changes, use my skills however I felt constrained by immediate management” “I get a lot of encouragement from my boss, whatever I want to do he is usually supportive of, very much that sort of thing” (Jun04).

**Staff Morale** - This category included any comments related to respondents’ feelings about the level of staff morale in their work environment. This category was multi-faceted and included both positive and negative comments. How the respondent felt about the morale either triggered motivation to learn or triggered the respondent withdrawing from learning. Sample comments include; “At the time I was feeling good about work, the morale was high, so I attended the training and really did try. If the training was available now I probably wouldn’t go” “It depends; people will do these sorts of things if they feel good about work, but if they don’t they wont go. My experience is that people won’t become involved in anything other than their basic duties when they do not like coming to work” (Jun04).
**Nature of Work** - One of the largest categories to emerge in study two was the role nature of the work played in relation to learning. Respondents frequently talked about learning barriers as features of their daily work life. Sample comments include; “All I seem to do is respond to things...in this environment you’ve got organisational crisis...patients in crisis situations, its one layer upon another. In health care we can't shut off, we've got to meet the needs of ...patient. It's not as though we can get on with the work we planned for the day, all these other things come into the day all the time. It's not like a normal office worker, my work is not just office, it's a lot of clinical work...you leave a lot of things undone, all your paperwork, you have to prioritise all the time. I don’t know how other people in other management situations operate, but we've always got to be there... attend to what comes up when it comes up” (Jun04).

**Politics** - This category included any activity that was described that would affect an individual, team or organisations’ status, power base or authority. These activities prevented learning as, for instance, managers were more concerned with protecting their patch rather than working together to improve the whole. This category incorporated both politics that were internal to the organisation and external. This was perceived to impact on learning by preventing improvement projects being initiated or because people do not want to engage in a learning process as it may affect their political position. Sample comments include; “There is plenty of examples where politically I haven’t been able to do something. For instance something may be quite obvious to me that I would like to do to run this department more efficiently, but because of the politics involved we are unable to run with them” (Jul04).

**Culture** - Certain aspects of the culture were seen to impede learning and similar cultural aspects were referred to from each case study site. There appeared to be organisational culture, professional culture and an industry culture. Hence there appeared to be similar cultural issues across four organisations. One of the similarities was a sense of competition and rivalries between organisations, departments and individuals. Sample comments include; “There is a lot of rivalry between areas, a lot of competition for scarce resources. There is a lot of human nature issues and doing things the way we have always done them in the health industry. This rivalry and attitude stifles the sharing of good work practices” (Aug04).

**Climate of Constraint** - A climate of constraint describes the beliefs respondents have concerning their organisations. In this study managers believed that they were constrained by other forces, such as lack of
resources that prevented them from learning. The climate of constraint either prevented somebody from attending a learning event, or stifled learning by implementing a particular way of working. Sample comments include; “The negative influence is mainly to do with the budget, you learn all these great things, but a lot of the time you can't implement them because you don’t have management who believe in that or even if they believe in it, they don’t have the money to put towards putting new systems into place, or buying new equipment. You're restricted a bit by budgets. You do seem to be restricted in some cases by people who are in management, don’t agree on where to spend the money, so you don’t have the opportunity to put into place what you have learnt (Jul04).

**FINDING SYNERGIES**

Examining both data sets resulted in four areas of similarity. These similarities were then analysed further and it was found that a complex interaction occurs between training design and work environment factors which influences managers’ capacity to transfer learning. The similarities included, influence of the manager, politics and peer pressure, content relevance with nature of work and lastly climate of constraint with practice.

**Influence of Manager** - In study one the managers’ involvement and role modeling of the desired behaviors assisted transfer. Whilst in study two, the respondents described their line managers as having an influence of what they were able to achieve, or implement back in the workplace. Therefore it appears that ensuring the managers’ manager is included in the training design and ensuring that they are involved in assisting the training participant to transfer learning when they return to the workplace will increase the likelihood of transfer.

**Peer Pressure and Politics** - The introduction of an element of ‘peer pressure’ was found to impact on transfer in the training design study by increasing transfer. Peer pressure is perceived to be an internal office politics activity. However in study two political activities in the work environment prevented respondents from utilising skills. Therefore this indicates that politics could have a positive or negative impact on transfer depending on the nature and type of political activity.

**Content Relevance with Nature of Work** - Incorporating real examples in the training design, labeled content relevance, in study one, assisted transfer. Whilst the nature of the work was comprehended as a
barrier to learning in study two. Therefore this indicates that tailoring the training design to include examples that are cognisant of the nature of the work is essential.

**Practice with Climate of Constraint** - Study one found that the training design provided them opportunity to practice which assisted transfer. Whilst study two found a climate of constraint prevented them from transferring skills. Therefore this indicates that ensuing they have not only an opportunity to practice in the training but also resources available to allow them to continue to use the skills in the workplace are paramount.

Each of the four similarities impacted on the transfer of learning. One of the similarities positively affected transfer whilst the remaining three were barriers and facilitators to transfer.

**DISCUSSION AND IMPLICATIONS** – The synergies between the two studies suggest a complex interaction occurs between training design and work environment factors that can have an additive effect on transfer of learning for managers. Using the Baldwin and Ford (1988) training transfer model the categories from study one and study two should be considered as training input factors for managers: Additionally, we propose that the Baldwin & Ford (1988) variables of training design and work environment are interrelated. Therefore to maximise transfer for managers’ learning these variables need to considered holistically. Our proposed refinement to the Baldwin & Ford (1988) model is displayed as figure 2. It is recognised the amendment to the model draws on limited empirical findings and may only be useful in identifying the management learning influences for the organisations that participated in study one and study two. However, implications from both studies is apparent, firstly organisations should not underestimate the crucial role that managers can play in positively or negatively effecting the transfer of learning, for self, peers, and subordinates. Prior to the commencement of a learning event, managers need to model behaviours; demonstrate their commitment to both engaging in and implementing the new learning and set aside time prior to discuss how new learning’s can be put into practice in the workplace. Politics in the workplace is an area that is noticeably absent in the transfer literature, however these studies have demonstrated how the use of peer pressure can assists transfer whilst the presence of politics in the environment can impede transfer. A person’s ability to act or be stifled for fear of being seen to be different, particularly at the management level has major implications for transfer of learning and ultimately an organisations capacity to deliver. Tailoring the training design to benefit from the internal
politics would be necessary to maximise transfer. Ensuring system supports are in place before investing in a learning program is essential.

**CONCLUSION** - In this paper we have reintroduced the applicability of a popular learning transfer model as applied to management learning. We began by establishing that the model is popular and by discussing that the transfer of management learning has not been fully considered in the literature to date. By examining two management learning transfer studies, we have introduced other factors that need to be considered for management learning transfer and refined the Baldwin & Ford (1988) model to indicate that training design and work environment are interrelated. In conclusion this study and model refinement offers a practically important exploration of issues affecting transfer. Additionally it complements existing theory and offers a refinement to a popular model to extend the knowledge on maximizing transfer of learning for managers.
REFERENCES


Awoniyi, EA, Griego, OV and Morgan, GA. (2002). ‘Person-environment fit and transfer of training’

Baldwin, TT (1987) The effect of negative models on learning and transfer from behavioural modelling: a
test of stimulus variability. 47th Annual Meeting of the Academy of Management, New Orleans, LA.
Baldwin, TT and Ford, JK (1988) ‘Transfer of training; a review and directions for future research’
   Personnel Psychology Vol 41 pp 63-105

Baldwin, TT (1992) ‘Effects of alternative modelling strategies on outcomes of interpersonal-skills training’
   Journal of Applied Psychology Vol. 77 pp 147-154

   Belmont

Bates, RA., Holton, EFL, Seyler, DL and Carvalho, MA (2000) ‘The role of interpersonal factors in the
application of computer-based training in an industrial setting’ Human Resource Development
   International Vol 3 No 1 pp 19-42

Baumgartel, H and Jeampierre, F (1972) ‘Applying new knowledge in the back-home setting: A study of
Indian managers adoptive efforts’ Journal of Applied Behavioural Science Vol. 6 No 6 pp 674-694

moderate the effectiveness of management development programmes: a review and some recent
research findings’ Management and Labor Studies Vol 9 pp 1-16

Baumgartel, H, Sullivan, GJ and Dunn, LE (1978) ‘How organizational climate and personality affect pay-
off from advanced management training sessions’ Kansas Business Review Vol 1 No 5 pp1-10

support for management learning and development’ The Journal of Management Development Vol
   23 No 3/4 pp 234-255

   & Organization Management’ Vol. 24 No 2 pp 188-216


Cominsky, IJ (1982) ‘Transfer of training in counsellor education programs; a study of the use of stimulus variability and the provision of general principles to enhance the transfer of the skill of reflection of feeling’ Dissertation Abstracts International 43 76


Ford, KJ, Quinones, MA, Sego, DJ and Speer SJ (1992) ‘Factors affecting the opportunity to perform trained
tasks on the Job’ Personnel Psychology Vol 45 pp 511-547

Foxon, M (1990) ‘Using simulations to enhance technical training’ Journal of European Industrial Training
Vol 14 No 4 pp17-20


Academy of Management Review Vol 12 pp 472-485

generalization, skills repetition and performance level’ Personnel Psychology Vol 43 pp 501-523

Glaser, B and Strauss, A.L (1967) The Discovery of Grounded Theory: strategies for Qualitative Research,
Aldline, Chicago

Goldstein, IL (1986) Training in Organizations: Needs assessment, development and evaluation, CA:
Brooks/Cole, Monterey

Hand, HH, Richards, MD and Slocum, JW JR (1973) ‘Organizational Climate and the effectiveness of a
human relations training program’ Academy of Management Vol 16 No 2 pp 185-195

transfer of learning from a managerial coaching program”, Paper presented at the 18th Annual
conference of the Australian and New Zealand Academy of Management


Cliffs, NJ: Prentice-Hall

Personnel Psychology Vol 40 pp 539-563

Development Vol 13 No 4 pp 427-447


McGraw, P (1993) ‘Back from the mountain; Outdoor management development programmes and how o ensure the transfer of skills to the workplace’ Asia Pacific Journal of Human Resources Vol 3 No 31 52-61


Thorndike, E and Woodworth R (1901) ‘The influence of improvement in one mental functions upon the efficiency of other functions’ Psychological Review Vol 8 pp 247-261


Wexley, K. and Nemeroff W (1975) ‘Effectiveness of Positive Reinforcement and Goal Setting as Methods’ Journal of Applied Psychology Vol 60 No 4 pp 446- 450