

ORGANISATIONAL BARRIERS TO TRAINING TRANSFER:

The Role of Workplace Social Controls and Normative Behaviour in Workforce Development

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The work organisation can build the capacity of workers to deal with work related issues by developing and implementing formal training policies and programs. However, unless these programs also include strategies to develop coworker support for the training content and objectives, effective training transfer will fail to occur. To examine the implications of workplace differences on training transfer, a longitudinal research study of 200 volunteer participants is currently being conducted.

The Building Trades Group of Union's (BTGU) drug and alcohol program is designed to enhance the capacity of building workers to deal with their own drug and alcohol issues and drug and alcohol issues in the workplace. As part of the program's overall strategy to achieve this aim, a two hour training course is presented to all first year apprentices enrolled in trade courses relevant to the building industry. Apprentices enrolled in these courses can be divided into two main industry groups - commercial and housing. This provides a unique opportunity to examine the relationship between the workplace environment and effective training transfer. The workplace conditions, and the informal and formal controls regarding drug use, vary significantly between commercial and housing worksites.

It is expected that the formal and informal controls regarding drug use, evident in each individual's workplace, will significantly influence whether effective training transfer occurs. In addition, it is expected that informal controls will be the most significant source of influence. This finding will have significant implications for the design and implementation of workforce development programs and policies. The research design, methodology and implications of the research program for workforce development are outlined here.

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BACKGROUND

A key workforce development issue is the effectiveness of training and educational programs. An effective program results not only in increased knowledge, skills and abilities, but also the application of these in the workplace. Effective transfer is evident when the knowledge, skills and abilities acquired in the training context produce the desired behavioural

change in the context of the workplace. Over the last 20 years a large amount of research has been generated regarding the effectiveness of training programs (for more complete reviews, see Tannenbaum and Yukl, 1992; Salas and Cannon-Bowers, 2001). One major conclusion that emerges from a review of this research is that training transfer (ie the degree to which trainees apply what is learnt to their workplace) is paramount to the effectiveness of training and education programs.

Factors that Influence Training Transfer

A number of factors have been identified as impacting on training transfer. Individual trainee characteristics such as motivation (Mathieu, Tannenbaum and Salas, 1992; Colquitt, LePine and Roe, 2000) and self efficacy (Mitchell, Hopper, Daniels, George-Falvy and James, 1994; Stevens and Gist, 1997; Stajkovic and Luthans, 1998) have been shown to have a significant influence on training transfer. The pre-training environment (Quinones, 1995; Smith-Jentsch, Jentsch, Payne and Salas, 1996) and training design (Driskell, Willis and Copper, 1992; Schmidt and Bjork, 1992; Smith-Jentsch, Salas and Baker, 1996) have also been shown to impact on transfer. In addition, the post-training (workplace) environment appears to play a particularly important role. For example, supervisory support for training and organisational support (in the form of formal policy and practices relating to the training) have been shown to influence transfer (Burke and Baldwin, 1999). Workplace social and peer (coworker) support for the training can also influence transfer (eg Fecteau, Dobbins, Russel, Ladd and Kudisch, 1995; Tracey, Tannenbaum and Kavanagh, 1995).

The Organisational Context

While research relating to training effectiveness identifies numerous factors that can impact on transfer, it also highlights the importance of the workplace environment in training transfer and learning (Latham, Millman and Miedema, 1998) and in pre-training self-efficacy (Tracey, Hinkin, Tannenbaum and Mathieu, 2001). In addition, it is also evident that there has been a shift in research focus from examining these factors as individual influences on transfer and learning, to examining training as a system embedded within an organisational context (Salas and Cannon-Bowers, 2001).

This has led to the development of theoretical frameworks that are useful for understanding how the organisational context impacts on transfer and learning. Rouiller and Goldstein (1993) for example, identify organisational factors such as workplace cues (goal cues, task cues, social cues and self control cues) and consequences (positive and negative feedback, punishment, no feedback) that are related to training. According to Rouiller and Goldstein, these cues and consequences guide individual learning and training transfer, and therefore contribute to an organisational “climate” that can either inhibit or enhance learning and training transfer.

Kozlowski and Salas (1997) draw from organisational systems theory to provide a similar “climate” framework for understanding how the organisational context impacts on learning and transfer. The dominant feature of this framework is the distinction between different levels that comprise the organisational system. These levels are the individual, the team and the organisation, which operate together as interacting subsystems within the overall organisational system. From this perspective complex events (such as training transfer) cannot be understood by reducing the system to its individual elements. Rather, Kozlowski and Salas (1997) highlight the importance of characterising contextual factors and processes involved in learning and training transfer within an organisation. These contextual factors and processes can influence an individual’s training responses through their perceptions of the organisational environment (Yamhill and McLean, 2001).

Despite the usefulness of these two theoretical frameworks for understanding the relationship between the workplace context and training transfer, little is understood regarding the social and cognitive processes that are involved in this relationship. Moreover, organisational systems theory does not fully explain inconsistent levels of workplace influence (individual, team and organisational). For instance, the organisation may support the training through formal policy and procedures, however transfer may not occur if the training receives no support from the work team or the individual. Similarly, the transfer “climate” framework identifies contextual cues and consequences that can impact on transfer, but does not fully explain why cues and consequences may be inconsistent with each other in different contexts. An example of this is inconsistencies between organisational cues and consequences, and work group cues and consequences. As such, it may be useful to examine training transfer and learning from a perspective that builds on these two perspectives and offers a more comprehensive explanation of the social and cognitive processes that underly learning and training transfer. This is the social identity approach.

The Social Identity Approach

As a psychological meta theory, the social identity approach to understanding human behaviour and motivation also provides an explanation of how the organisational context impacts on learning and transfer. The social identity approach provides a framework for understanding group processes and intergroup relations evident in the workplace that can influence work related behaviours, including motivation to learn and training transfer. This approach has its origins in social identity theory (Tajfel, 1978, 1982; Tajfel and Turner, 1979) which was further expanded by the development of self categorisation theory (Turner, 1985; Turner, Hogg, Oakes, Reicher and Wetherell, 1987). A complete review of research relating to the social identity approach is beyond the scope of this paper. Instead, the approach will be briefly described and the implications for understanding the social and cognitive process involved in workforce development will be outlined. For detailed reviews, see Abrams and Hogg (1990, 1999), Ellemers, Spears and Doosje (1999), Terry and Hogg (2000).

Social Identity

According to the social identity approach, individuals can adopt a personal identity as a unique person (based on idiosyncratic characteristics) and a social identity that reflects their membership of social groups, including occupational groups and work teams. Social identity is an individual’s self conception as a group member. It can be defined as an individual’s knowledge that they belong to certain social groups that have some emotional and value significance for the individual (Tajfel, 1972). Social identities such as family, gender, religion, ethnicity and occupation are important parts of the individual’s self concept that provide meaningful and significant self-references through which individuals perceive themselves and the world around them (Bar-Tal, 1998).

Consistent with social psychology in general, the social identity approach assumes the individual self concept, or self perception, is best understood in terms of a cognitive structure consisting of multiple concepts of self image (or self schema). This cognitive structure is context dependent, that is the functioning of this cognitive structure depends on an interaction between the characteristics of the individual perceiver and the situation being perceived (Turner, 1987). For example, in the context of family and friends the individual’s cognitive structure may reflect individual attitudes and beliefs, while in the context of the workplace this cognitive structure may reflect the individual’s perceptions of being a team or occupational group member, rather than an individual. From this perspective an individual’s self concept can be seen as a collection of self images that form a continuum with individual characteristics at the personal extreme and social category characteristics at the social extreme (Turner, 1981). Corresponding

to this continuum are variations in both perceptions and behaviour. In situations where social identity (group membership) is a salient feature of the context, individuals tend to act as group members and in situations where one's personal identity is salient they do not. However, the degree to which group membership can influence individual beliefs and behaviours depends on the degree to which the individual is psychologically attached to the group (ie membership has emotional and value significance for the individual).

Self Categorisation

A central tenet of the social identity approach is the process of categorisation which allows the individual to partition the world into comprehensible units in order to make sense of the world and their place within it. This categorisation process involves the psychological accentuation of differences between categories, and psychological attenuation of differences between individuals within these categories (Abrams and Hogg, 1990). When self categorisation occurs, differences between the individual members of a particular group become less important to group members, while differences between this group and other groups become more important.

The social identity approach proposes that group behaviours are the result of self categorisation. Individuals can be members of many social groups or categories. Therefore, self categorisation is assumed to be a hierarchical system of classification operating at different levels of abstraction and inclusion (Turner, 1987). Levels of abstraction include the:

- superordinate level of one's self concept as a human being
- intermediate levels of self concept based on ingroup/outgroup membership
- subordinate levels of self concept as a unique individual.

According to Turner (1999) it is the relative salience of different levels of abstraction that determine the degree to which self perception is personalised or depersonalised. In situations where social identity is more salient than personal identity, self categorisation occurs at the intermediate level of in/out group membership and involves a cognitive process of depersonalisation. In these contexts individuals perceive themselves less as unique personal identities, and more as similar, prototypical representations of the in-group category relevant to the context (Turner, 1999). When individuals categorise themselves and others in terms of in- and out-group membership, group prototypes, stereotypes and norms are accentuated, and the individual is perceptually and behaviourally depersonalised (Hogg and McGarty, 1990). According to the social identity approach this depersonalisation of self perception as a result of self categorisation is the basic process that underlies group behaviour.

Social Identity, Self Categories and Behaviour

Social identities and self categories are socially comparative, reality based representations of both oneself and others, which vary with the social context (Turner, 1999). According to Turner the salience of a particular social identity is dependent on the both the individual (willingness to adopt or refer to a self category) and the specific context under consideration (the fit between the self category and the reality of the situation). Behaviour is motivated by the need for positive self identity that emerges in an interaction between salient social identities, specific contexts of comparison, and situationally relevant social values. A central component of this motivational process is how much the individual identifies with the group (ie regards group membership as central, valued and ego involving). In situational contexts where group membership is a salient feature, an individual's motivation to comply with the situational relevant expectations and conform to the situational relevant behaviours of organisational groups will be dependent on how much they identify with these groups.

The Social Identity Approach and Training Transfer

The social identity approach appears to be particularly useful for understanding how the workplace context can impact on employee behaviour and attitudes. Employees are members of work organisations, industries, occupations, work groups and work teams. As such, the workplace is a context where group membership can be a salient feature of the environment. Indeed, there is a large amount of research support for the social identity approach to understanding work related behaviours and attitudes (for a complete review see Haslam, 2001). For example, the degree to which employees identify with groups within the workplace has been shown to be associated with collective action (Veenstra and Haslam, 2000), motivation (van Knippenberg and van Schie, 2000), turnover intentions (Abrams, Ando and Hinkle, 1998) and numerous other work related behaviours (Haslam, 2001). Research also reveals that the workplace context involves multiple workplace identities such as organisational identity (Ashforth and Mael, 1989), and work group identity (van Knippenberg and Schie, 2000). In addition, work group identity appears to be a more significant source of influence regarding work related behaviour and attitudes than organisational identity (Brewer, 1991, 1993; van Knippenberg and van Schie, 2000). As a result, the social identity approach offers a useful framework for understanding training transfer and for understanding the social and cognitive processes involved in the relationship between workplace context and transfer. Building on transfer climate and organisational theories, it offers an explanation of how individual, group and organisational levels of cues and consequences evident in the workplace context function to influence training transfer.

From a social identity perspective, transfer of training is influenced by the amount of organisation and work group support for training depending on the extent to which the individual identifies with the organisation and/or work group. Organisational support for training includes policies and procedures that outline expectations and behaviours relevant to the training. Work group support includes informal norms and practices, such as coworker behaviours and expectations relevant to the training.

In situations where there are inconsistencies between organisational support and work group support, individuals are more likely to be influenced by their work group. From this perspective, it is clear that the organisation can support training by implementing training programs designed to enhance transfer and formal policy and procedure related to the training, however, effective transfer is unlikely to occur if work group support is inconsistent with organisational support.

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PROPOSED RESEARCH

It is apparent that the social identity approach is useful as a framework for understanding the relationship between the workplace context and training transfer. To date, however, there appears to be no empirical research that has adopted this perspective. In order to address this issue, a study is being conducted that will examine the relationship between the workplace context and training transfer from a social identity perspective. To achieve this aim, the research will evaluate an existing workplace drug and alcohol safety training course that is presented to apprentices entering the workforce. The study will identify conditions of the workplace context that either enhance or inhibit transfer and the extent to which social identity moderates this process. A longitudinal (time series) research design will be adopted to compensate for the lack of a control group and to allow for inferences regarding causality.

METHODOLOGY

The Training Course

The training course examined is part of a workplace drug and alcohol safety and rehabilitation program that operates within the building and construction industry. Incorporating peer education and peer intervention, the program's major aim is to reduce harm caused by alcohol and other drugs. The program utilises workplace occupational health and safety committees to deal with work related drug use, and provide access to rehabilitation services. The program also raises worker awareness of the industry policy and general drug related health and safety issues by conducting onsite worker education sessions, training safety personnel, and presenting a two hour drug and alcohol safety in the workplace course to new apprentices. The aim of this training is to raise the apprentice's awareness of the industry policy and program and the health and safety issues surrounding drug and alcohol use.

The nature and diversity of the building and construction industry provides a unique opportunity to examine the impact of the organisational context on training transfer. For example, many apprentices are employed by large organisations and work on large construction sites with formal policies and practices regarding occupational health and safety (eg formal training, occupational health and safety committees, safety officers etc). However, a significant number work for smaller organisations on small housing sites which have either very informal or nonexistent occupational health and safety committees (due to the size of the workplace the supervisor or employer takes direct responsibility for health and safety issues). As such it could be expected that larger work sites would be more likely to provide organisational support for the training. In addition, on larger construction sites coworkers are more likely to have attended an onsite educational session or safety committee training and therefore more likely to provide coworker support.

It is therefore expected that some apprentices will be exposed to workplace contexts where both the organisation and the work group support the program and the training content. Alternatively, some apprentices will be exposed to a context where neither the organisation, nor the work group supports the program and training content. In addition some will be exposed to a context where the organisational support for the program and training content is inconsistent with the work group's expectations and behaviours regarding the training.

Participants

Participants will be 200 first year building trade apprentices enrolled in metropolitan training institutions in South Australia (Marleston TAFE, Gilles Plains TAFE, Regency TAFE and Peer Training). The choice of first year apprentices as participants was not an arbitrary decision. An earlier study of the South Australian apprentice population (Pidd, 1999) revealed that a significant proportion of first year building trades apprentices engaged in work related drug use which shows that the behaviour the training aims to reduce or discourage is evident in previous populations.

In addition, there is a large literature indicating that adolescent new entrants to the workforce may be particularly susceptible to workplace influences on attitudes and behaviours regarding drug and alcohol use. As such, these influences may impact on the degree to which drug and alcohol training transfers to the workplace. For example a large amount of research (eg Graham, Marks and Hansen, 1991; Duncan, Tildesley, Duncan and Hops, 1995; Ary, Duncan, Biglan, Metzler, Noell and Smolkowski, 1999) indicates that peer influence plays a significant role in adolescent drug use. As adolescents enter the workplace they are exposed to a new peer group (coworkers and other apprentices) with pre-existing attitudes and behaviours regarding drug and alcohol use. This may influence training transfer.

In addition, a review of contemporary research regarding work related drug use (Allsop and Pidd, 2001) indicates that the overall workplace culture, including structural and social controls regarding drug use, can play a significant role in individual attitudes and behaviours regarding drug use. As new entrants, first year apprentices undergo an intensive formal and informal socialisation process that occurs when they are exposed to this workplace culture. As such, workplace influences on training and drug related behaviours might be more significant during the early socialisation process that occurs in the first year of training.

Method and Measures

Prior to the training course the apprentices will be administered a pre-training survey designed to assess their knowledge, attitudes and behaviours regarding drug and alcohol use, and workplace identity. Immediately following the training course a post-training survey, designed to assess knowledge, attitudes, intentions to use drugs, and training reactions, will be administered.

In addition, trainees will receive a more detailed survey to be completed in their own time and then returned to the researcher. This survey will include measures of workplace identity, perceived organisational support, perceived coworker support, and perceived supervisor support for the training. In addition, the survey will include measures of attitudes and behaviours relating to workplace drug and alcohol use.

The apprentice participants will also receive additional surveys incorporating the same or similar measures at three and six months after training. This design allows assessment of changes in training related performance and attitudes over time. In addition, this design will also assist in identifying continuity and change in both workplace identities and workplace support. In particular, the study will examine the following research hypotheses:

1. The degree of transfer will depend on the degree of organisational, supervisor and work group support for the training in the workplace
2. When organisational support and work group support are inconsistent, training transfer is more likely to be influenced by the extent of work group support (or non-support)
3. The degree that organisational support or work group support impacts on training transfer depends on the degree to which the individual identifies with either group.

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Timeframe

Initial data collection began in May 2002. Further data will be collected on two further occasions during the six months following training. It is anticipated that all data will be collected by March 2003. The project is expected to be completed by April/May 2003.

Expected Outcomes or Key Findings

It is expected that the project will provide a more comprehensive understanding of the relationship between the workplace context and training transfer. Confirmation of the hypotheses will demonstrate that coworker (work group) support is essential for effective training transfer. In particular, while training courses can be designed to enhance transfer and organisational structures can be established (such as policies and procedures that support the training), work group non-support can still inhibit effective training transfer.

Potential Contribution to Research and Practice

It is anticipated that the hypotheses will be supported. In doing so the project will:

- generate reliable and valid data concerning the drug consumption patterns of a significant number of employed adolescents
- generate reliable and valid data concerning the relationship between the workplace context and training transfer
- identify barriers to the effectiveness of workplace training and education programs designed to reduce drug related harm
- generate reliable and valid data regarding the cognitive and social processes evident in the workplace that can impact on workforce development and training transfer
- provide a comprehensive theoretical framework for understanding the relationship between the workplace context and training transfer
- lead to the development of more effective training programs in general
- lead to the development of more effective workplace programs aimed at reducing drug related harm
- identify post-training reaction and other evaluation measures that are significantly associated with self reported behavioural changes (effective training transfer).

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