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Leader Influences on Training Effectiveness of Construction Professionals: The Case of Nigeria

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Abstract: The purpose of this study is to examine how the relationship between leaders and employees under them (leader–member exchange, LMX) impact training transfer, training maintenance and training generalisation of employees that has been trained on various continuous professional development programmes. Using a survey research, 160 construction professionals that have attended continuous professional development (CPD) programmes of their respective professional bodies were asked to respond to the structured questionnaires. Direct supervisors of sampled respondents were also interviewed to corroborate the responses of their followers. The data generated were subjected to both inferential and descriptive statistics. The findings in this study indicates that LMX, training motivation and outcome expectancy are positively related to training effectiveness. The practical contributions of this study are twofold: The first has to do with leadership. The professional who has a good relationship with his or supervisor stands a much better chance of benefitting from the training. Secondly, leaders can directly influence their employees' training motivation and this has a positive impact on how they transfer new skills, maintain them over time and how they use them in other domains of their jobs.

Keywords: Leader influences, Motivation, Training effectiveness, Construction professionals, Nigeria

INTRODUCTION

A performance improvement intervention that is used almost universally in organisations is training. Training is defined as a planned learning experience designed to bring about permanent change in an individual's knowledge, attitudes or skills (Noe, 2009). As organisations strive to enhance performance through their human capital, workplace learning professionals and trainers are increasingly expected to deliver results. Formal learning interventions in the contemporary workplace are designed and delivered with the expectation of improving organisational and employee performance. Ensuring that skills acquired during training are used in the workplace, or transferred to the job, remains of critical importance for researchers and practitioners (Scaduto, Linday and Chiaburu, 2008). In recent years, investments in training activities have increased all over the world (Velada et al., 2007). However, unsettling questions continue to be raised about the return on this investment. The exact amount of transfer varies from author to author; some indicate that only 10% of all training-related expenditures actually result in the transfer of recently acquired skills and knowledge back to the job (Fitzpatrick, 2001). According to Burke and Baldwin (1999), there is much evidence suggesting that a considerable part of organisations' investment in training does not result in optimal transfer. To improve job performance, the skills and behaviours learned and practiced during training have to be transferred to the workplace, maintained over time, and generalised across contexts (Holton and Baldwin, 2003). This "transfer problem" presents a big

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challenge for organisations, given that training is considered to be a primary leverage point by which organisations influence their corporate performance (Kozlowski et al., 2000). As transfer of training remains an important issue for researchers and practitioners (Holton and Baldwin, 2003), it becomes essential to investigate relationships that include central, but less frequently studied training effectiveness predictors. Researchers have called for studies on training effectiveness, in an effort to include both individual and organisational contextual factors as antecedents of transfer of training (Colquitt, LePine and Noe, 2000; Quinones, 1997). For example, although work environment aspects are important for training transfer (e.g. Burke and Hutchins, 2007), they are not sufficiently examined in existing literature. It has also been suggested that future studies look at the role of motivation in the relationship between contextual factors and learning, and other training outcomes (e.g. training transfer, maintenance and generalisation). For example, Tracey et al. (2001) discuss the importance of future research examining the impact of training motivation on different effectiveness criteria, and similar research needs were suggested in other studies (Cheng and Ho, 2001; Tracey et al., 2001). Specifically, whereas acknowledging that individual characteristics are related to training motivation and training outcomes, Colquitt and colleagues (Colquitt, LePine and Noe, 2000) maintain that researchers tend to ignore situational aspects. Therefore, there are calls for studies where the social context is connected with training motivation and transfer (Colquitt, LePine and Noe, 2000), and specifically for connecting leader–member exchange (LMX) and training dimensions. The aim of this study is to examine how LMX impact training effectiveness. More specifically, training effectiveness outcomes include transfer of training, training maintenance and training generalisation. Transfer of training is defined as "the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in a training context to the job" (Baldwin and Ford, 1988). Training maintenance is defined as the reproduction of trained skills in a new setting, and training generalisation refers to the adaptation of trained skills to a more complex task situation (Ford et al., 1998).

The Relationship between a Leader and a Follower

LMX theory posits that leaders and members engage in a role development process during which differentiated role definitions develop between a leader and an individual employee (Graen and Cashman, 1975). Whereas low-quality relationships involve rudimentary exchanges that typify the basic employment contract, high-quality relationships are characterised by mutual trust, respect, and loyalty between leader and employee. Based on the concepts of social exchange (Blau, 1964) and reciprocity (Gouldner, 1960), LMX theory posits that the exchange relationship creates a feeling of obligation in members to reciprocate high-quality relationships (Graen and Uhl-Bien, 1995). As such, high-LMX employees are sometimes referred to as "trusted assistants" who are committed to the leader and who enhance their leader's effectiveness (Liden, Sparrowe and Wayne, 1997). Research has demonstrated that LMX is related to important employee and organisational outcomes such as job performance, organisational citizenship behaviour, job satisfaction, organisational commitment, retention and openness to organisational change (e.g., Hofmann, Morgeson and Gerras, 2003; van Dam, Oreg and Schyns, 2008). It is generally expected that high-LMX employees engage

in more learning activities than do low-LMX employees (e.g., Driver, 2002; Maurer, Pierce and Shore, 2002; Paparoidamis, 2005). Although researchers proposed that supervisor support is positively related to training transfer (e.g. van der Klink, Gielen and Nauta, 2001; Velada et al., 2007), there are limited empirical studies examining the relationship between a leader and a follower. This relationship is frequently referred to as LMX (e.g. Gerstner and Day, 1997; Murphy and Ensher, 1999). Built into these exchange relationships is the fact that leaders form different relationships with each follower, making it possible that at any given time, a leader will have many different exchange relationships with various subordinates (Gerstner and Day, 1997; Wang et al., 2005) and discretionary behaviours, or behaviours that go beyond formal task requirements (Ilies, Nahrgang and Morgeson, 2007). In addition, LMX has been linked to many different organisational outcomes and has been found to have a positive relationship with job satisfaction (Murphy and Ensher, 1999), organisational commitment (Gerstner and Day, 1997) and a negative relationship with turnover (Gerstner and Day, 1997). As related to training, Velada and coauthors (Velada et al., 2007) recently investigated whether aspects of the work environment (performance feedback and supervisor support) predicted the transfer of training. Specifically, performance feedback from the supervisor that was received after training had a significant correlation with skill transfer. In their study, performance feedback was defined as an indication from management about how well an employee is performing on the job. Feedback concerning the newly acquired knowledge and skills, and how these relate to job performance, increases the probability of its transfer to the workplace (Velada et al., 2007). Although positively related to training transfer, the other component of the work context – supervisor support – did not predict skill transfer. This is a finding that is consistent with several other studies examining support coming from a vertical source (e.g. Chiaburu and Marinova, 2005; van der Klink, Gielen and Nauta, 2001). These inconsistent results of supervisor support on training transfer may be because support dimensions are proximal and specific to training transfer aspects. For example, supervisors engage in discussions with the employees (Lim and Johnson, 2002) and provide feedback (Velada et al., 2007). Unfortunately, more distal aspects and diffuse support aspects, such as the relationship of the employee with one's direct leader (or LMX) and its influence on training effectiveness, have received little empirical attention. The current study focuses on filling this gap and examining how LMX impact training effectiveness.

Processes Leading To Training Effectiveness

The current study focuses on training motivation and outcome expectancy as individual factors having an effect on training outcomes. For example, there are particular training characteristics that are essential preconditions for learning, such as training motivation (Goldstein and Ford, 2002), the first individual factor investigated in the present study. Training motivation refers to the "intensity and persistence of efforts that trainees apply in learning-oriented improvement activities before, during and after training" (Burke and Hutchins, 2007). There is evidence suggesting that there are differences in the amount of training motivation among different trainees, and that it relates to the success of the trainees in the subsequent training program (Goldstein and Ford, 2002). For example, Scaduto, Linday and Chiaburu (2008) investigated both individual and

contextual predictors of training transfer, maintenance and generalisation. Their findings suggest that training motivation is directly related to all components of training effectiveness (positive correlation with training transfer, maintenance and generalisation). Furthermore, high-quality leader–member relationships have a positive influence on employees' levels of empowerment, which are described by Kang and Stewart (2007) as a motivating factor and supported empirically in other studies (Liden, Wayne and Sparrowe, 2000). In addition, because LMX relationships are based on social exchanges, there is a perceived commitment on the part of subordinates to reciprocate high-quality relationships (Hofmann, Morgeson and Gerras, 2003). One way in which subordinates can reciprocate these relationships is by engaging in discretionary behaviours. Reciprocation is not limited to these behaviours, and employees can also engage in such behaviours as paying attention to skill application in a work setting (Hofmann, Morgeson and Gerras, 2003). More importantly, employees will be motivated to maintain the skills in time (training maintenance) and will go the extra mile and generalise these skills to new situations (training generalisation).

The second individual factor of interest influencing training effectiveness is outcome expectancy. According to Stone and Henry (2003), outcome expectancy is defined as "the consequence of an act and not the act itself". Concretely, the central idea of expectancy theories is that the influence on an individual to take on a specific behaviour is a function of: (1) his or her expectations that the behaviour will result in a specific outcome and (2) the sum of the valences (or values) that he or she gains from the outcome. In a training context, in most cases, learners who are motivated have two beliefs: (1) making an effort during training will result in learning and (2) the material they learn will be useful for achieving valued outcomes back on the job (Brown and Ford, 2002). There is both theoretical and empirical support for the importance of this second belief, which is related to Vroom's (1964) expectancy theory (Brown and Ford, 2002). This theory suggests that the motivating force behind specific choices originates mainly from perceptions of the utility or value of that choice (Brown and Ford, 2002). According to Vroom's theory (1964) an individual is more likely to pursue choices, and make an effort, when he or she believes the result will be valued outcomes. Empirical support for the importance of utility perceptions demonstrated a high correlation between beliefs in the value of training and specific motivation to do well in training (Alliger et al., 1997) Leaders, through their complex relationships with followers, can have an influence on follower expectancies, in that they provide formal rewards for task performance and for discretionary behaviours (by having a choice on positioning specific employees in the in- or out-group through high or low LMX relationships). Therefore, a good relationship between the leader and the follower would include communication about what behaviours are tied to good – and bad – performance. If the organisation has done a good job of aligning the training outcomes with necessary employee performance, then the benefits of training transfer would be apparent to the employee, subsequently adding to their outcome expectancy regarding the training. Put another way, if the leader and follower agree (through a good LMX relationship) on what is important from a performance standpoint, and if they see the training as contributing to this desired performance, then employee outcome expectancy would increase because training is a path to the performance desired by the leader (and the organisation).

Therefore, based on the previous discussion, the following hypotheses are proposed:

> H_{oa}: LMX will not be positively related to (a) training transfer, (b) training maintenance and (c) training generalisation.
> H_{1a}: LMX will be positively related to (a) training transfer, (b) training maintenance and (c) training generalisation.
> H_{ob}: Training motivation not will be positively related to (a) training transfer, (b) training maintenance and (c) training generalisation.
> H_{1b}: Training motivation will be positively related to (a) training transfer, (b) training maintenance and (c) training generalisation.
> H_{oc}: Training motivation will not mediate the relationship between LMX and training outcomes (transfer, maintenance, generalisation).
> H_{1c}: Training motivation will mediate the relationship between LMX and training outcomes (transfer, maintenance, generalisation).
> H_{od}: Outcome expectancy will not mediate the relationship between LMX and training outcomes (transfer, maintenance, generalisation).
> H_{1d}: Outcome expectancy will mediate the relationship between LMX and training outcomes (transfer, maintenance, generalisation).

RESEARCH METHOD

The study embraces both quantitative and qualitative methods of data collection. Relevant information is sourced from construction professionals (architects, builders, quantity surveyors and civil engineers) who have participated in various continuous professional development programmes organised by their respective professional bodies. This class of professionals were selected because it is mandatory for them to undergo continuous professional training before they will be registered to practice. Respondents were asked to indicate their judgement on identified leader member exchange factors, training transfer factors, training maintenance factors, training generalisation factors, training motivation factors and outcome expectancy factors. A 5-point scale was used to assess the importance of these factors. Section A addresses questions on name and type of organisation, years of construction industry experience. For each factor, an important index was determined. Questions on section B to G are quantitative in nature. Section B comprises 24 questions on leader member relationship, Section C comprises 15 question on training transfer, Sections D, E, F and G comprise 2, 3, 10 and 3 questions respectively on maintenance, generalisation, motivation and outcome expectancy. The population upon which the respondents were stratified comprises government establishment (120 respondents), contracting organisations (100 respondents) and consultancy firms (100 respondents). Using stratified random sampling technique; a total number of 160 respondents were selected for study from each group. Focus group interview were also conducted with all the direct leaders of construction professionals that were sampled. The outcome of the interview is summarised below.

Measures

In this study previously published scales was used to collect data relevant for the study. All measures were assessed using a 5-point Likert-type scale (1 = strongly disagree; 2 = disagree; 3 = neither agree nor disagree; 4 = agree; and 5 = strongly agree). Cronbach's alpha is the most widely used criteria to measure the reliability of items for each construct. LMX: This construct was measured with the LMX7 designed by Graen, Novak and Sommerkamp (1982). It consisted of seven items; "I always know how satisfied my supervisor is with what I do", α = 0.85. Training motivation was measured using a scale developed by Noe and Schmitt (1986) (15 items, "I try to learn as much as I can from training programs", α = 0.79). The training outcome expectancy was based on a scale developed by Stone and Henry (2003) and adapted for organisational outcomes (eight items, "Working with the techniques from this course will result in obtaining better work outcomes" and "Knowing and applying skills learned in class will help advance my career", α = 0.89). Three variables (training transfer, training maintenance and training generalisation) were used in measuring training outcomes. The scales were adapted from Xiao (1996), Gist, Stevens and Bavetta (1991) and Tesluk (1995).

RESULTS

Data collected from Section A of the research instrument shows that 44 (27.5%) of the respondents are architects, 39 (24.4%) are quantity surveyors, 37 (23.1%) are civil engineers while the remaining 40 (25.0%) are builders. Majority of the respondents 68 (42.5%) had more than 25 years construction industry experience, while 42 (26.25%) had experience ranging between 15–20 years. Others are 30 (18.75%) for industry experience ranging between 10–14 years while the last group recorded 20 (22.5%) for industry experience of 5–9 years. The implication of this result is that most of the respondents had enough knowledge and experience to make useful contribution to this area of research.

Table 1(a). Professional Group of Respondents

Professional Groups	Frequency	Cum. Freq.	Percentage	Cumulative Percentage
Architects	44	44	27.5%	27.5%
Quantity surveyors	39	83	24.4%	49.9%
Civil engineers	37	120	23.1%	75.0%
Builders	40	160	25.0%	100.0%
Total	160			

Table 1(b). Industry Experience of Respondents

Industry Experience	Frequency	Cum. Freq.	Percentage	Cumulative Percentage
(5–9) years	20	20	12.5%	12.5%
(10–14) years	30	50	18.75%	31.25%
(15–20) years	42	92	26.25%	57.50%
More than 25 years	68	160	42.5%	100.0%
Total	160			

Relationship between LMX and Performance Outcomes

Means, standard deviations and correlations are presented in Table 2. Hypothesis 1, predicted direct positive relationships between LMX and the three performance outcomes. As expected, LMX was positively related to transfer ($r = 0.303$, $p < 0.05$), maintenance ($r = 0.253$, $p < 0.05$) and generalisation ($r = 0.302$, $p < 0.05$) of training skills. Hypothesis 2 predicted a direct positive relationship between training motivation and the three performance outcomes. As expected, training motivation was positively related to transfer ($r = 0.466$, $p < 0.05$), maintenance ($r = 0.446$, $p < 0.05$) and generalisation ($r = 0.237$, $p < 0.05$) of training skills. Therefore, Hypotheses 1 and 2 were supported. Additionally, outcome expectancy was positively related to transfer ($r = 0.531$, $p < 0.05$), maintenance ($r = 0.455$, $p < 0.05$) and generalisation ($r = 0.342$, $p < 0.05$). Lastly, as shown in Table 1, LMX was positively correlated to both training motivation ($r = 0.358$, $p < 0.05$) and outcome expectancy ($r = 0.271$, $p < 0.05$).

Table 2. Means, Standard Deviations, Correlations and Reliabilities

Variable	Mean	SD	1	2	3	4	5	6
Leader-member exchange	3.04	0.84	(0.91)					
Training motivation	3.49	0.40	0.358**	(0.83)				
Outcome expectancy	3.70	0.70	0.271*	0.423**	(0.93)			
Training transfer	3.49	0.67	0.303*	0.466**	0.531**	(0.87)		
Training maintenance	3.7	0.65	0.253*	0.446**	0.455**	0.433**	(0.92)	
Training generalisation	3.86	0.77	0.302*	0.237*	0.342**	0.330**	0.338**	(0.81)

*$p < 0.05$; $n = 160$, ** $p < 0.01$, SD = Standard deviation

Regression Results

Hypothesis 1 was also supported from the regression analysis. As shown in Table 3, LMX is positively related to transfer ($\beta = 0.358$, $p < 0.05$), maintenance ($\beta = 0.303$, $p < 0.05$) and generalisation ($\beta = 0.253$, $p < 0.05$).

Hypotheses 3 and 4 predicted a mediating effect of training motivation and outcome expectancy, respectively. According to extant literature, the following relationships must be investigated in order to demonstrate mediation. First, the relationship between the predictor (LMX) and the outcome variables (transfer, maintenance and generalisation) must be significant. As shown in Table 3, LMX was positively related to these outcomes. Second, the predictor must be related to the mediators. As shown in Table 2, LMX was positively correlated to both training motivation and outcome expectancy. Third, the path between the mediators and the criteria must be tested, and the positive relationships between the training motivation and the transfer outcomes are supported (see Table 3, all correlation coefficients higher than 0.40, $p < 0.05$). For Hypothesis 3, the effect of the LMX on the outcome variables, controlling for training motivation should decrease (for partial mediation), or become non-significant (for full mediation).

After entering training motivation into the equation, the relationship between LMX and transfer (β = 0.00, non-significant [ns]), maintenance (β = 0.00, ns) and generalisation (β = 0.00, ns), became non significant; hence, the mediating test was meaningful for all three of the outcome variables, supporting Hypothesis 3. Training motivation fully mediated the relationship between LMX and transfer (β = 0.423, $p < 0.05$), maintenance (β = 0.531, $p < 0.05$) and generalisation (β = 0.455, $p < 0.05$).

Table 3. Hierarchical Regression Analysis Results

Predictors	**Outcome Variables**					
	Training transfer		Training maintenance		Training generalisation	
	Step 1 (β)	Step 2 (β)	Step 1 (β)	Step 2 (β)	Step 1 (β)	Step 2 (β)
Distal variable						
Leader-member exchange mediators	0.358*	0.00	0.303*	0.00	0.253*	0.00
Training motivation		0.423*		0.531*		0.455*
Outcome expectancy		0.237*		0.283*		0.305*
R^2	0.128*	0.179*	0.092*	0.282*	0.064*	0.207*
ΔR^2	0.056*	0.168*	0.109*	0.271*	0.338*	0.196*
F	10.02*	14.84*	6.89*	26.70*	4.64*	17.79*
ΔF		4.04*		8.33*		8.78*

Hypothesis 4 predicted a mediating effect of outcome expectancy. The same procedure used for the previous hypothesis was used to test this hypothesis. In addition to the relationship between LMX and the criteria (demonstrated above, for Hypothesis 3), as shown in Table 2, LMX was positively related to outcome expectancy. The path between the mediator and the criterion must be tested using LMX and outcome expectancy as predictors of the outcome variables. After entering outcome expectancy into the equation, the relationship between LMX and transfer became, again, non significant (with standardised coefficients close to zero); hence, the mediating test was meaningful for all three outcome variables. There was support for Hypothesis 4, and outcome expectancy fully mediated the relationship between LMX and transfer (β = 0.237, $p < 0.05$), maintenance (β = 0.283, $p < 0.05$) and generalisation (β = 0.305, $p < 0.05$)

Findings from Interview

Majority of the leaders are of the opinion that LMX are positively related to (1) training transfer, (2) training maintenance and (3) training generalisation. This provides support that leader – follower congruence on LMX does matter. According to the leaders where the relationship between a leader and a follower is favourable, the impact of this relationship on training transfer, training

maintenance and training generalisation is usually positive. Their views are consistent with the inference drawn from the responses of followers on the relationship between LMX and training outcomes.

The leaders interviewed are in agreement that training motivation is positively related to (1) training transfer, (2) training maintenance and (3) training generalisation. According to them followers with higher pre-training motivation have greater learning outcomes as compared to followers with lower pre-training motivation. This corroborates the responses of the followers. The outcome of interviewing the leaders also indicates that motivation mediates the relationship between LMX and training outcomes (transfer, maintenance and generalisation). They insisted that motivation to learn in training has a large effect on (transfer, maintenance and generalisation). They are of the opinion that training outcomes are higher for motivated trainees than unmotivated trainees.

The leaders interviewed are of the opinion that trainees who perceive the work setting as providing the necessary resources to perform job tasks and have supportive interpersonal relationships with supervisors, characterised by open communications and opportunities to receive feedback and reinforcement are likely to transfer, maintain and generalise their training. This provides support that outcome expectancy mediates the relationship between LMX and training outcomes (transfer, maintenance and generalisation).

DISCUSSIONS AND CONCLUSIONS

Theoretical and Practical Study Contributions

The purpose of this study was to examine how LMX impact training effectiveness (training transfer, training maintenance and training generalisation). This study focus on this particular aspect of the work environment to compensate for the scarcity of research in this area (Burke and Hutchins, 2007) and attempt to contribute both theoretically and practically to the training effectiveness and leadership research domains. In this study, empirical test was used to test the relationship among the study variables. The findings in this study suggests that leader member relationship was positively related to training effectiveness (training transfer, maintenance and generalisation). This results is supportive of previous research findings (Scaduto, Linday and Chiaburu, 2008; Chiaburu and Tekleab, 2005; Colquitt, LePine and Noe, 2000; Ilies, Nahrgang and Morgeson, 2007; Kozlowski et al., 2000). Knowing the nature of their standing with their leader, to help them solve work issues and, more generally, having an effective work relationship with their leader (all aspects of LMX as evaluated in this study), are beneficial for training transfer. The results of the study also indicate that training motivation was positively related to training transfer, maintenance and generalisation. This agrees with the findings of Scaduto, Linday and Chiaburu (2008). The study also found out that outcome expectancy was positively related to training transfer, maintenance and generalisation. This result is consistent with the findings of Stone and Henry (2003) and Brown and Ford (2002). According to this literature, outcome expectancy influences training effectiveness. The central idea of expectancy theories is that the influence on an individual to undergo training is a function of his or her expectations that the training will result in a

specific outcome and this will correspond to the sum of valences he or she expects to gain from such training. The study further discovered that training motivation fully mediated the relationship between LMX and training effectiveness and outcome expectancy mediated the relationship between LMX and training effectiveness. As suggested in prior theories, but captured to a limited extent in empirical work in a training setting, leaders are powerful motivating forces and can manage the outcome expectancies of their followers (e.g. Scaduto, Linday and Chiaburu, 2008). The findings demonstrate the importance of leader–follower relationships. Showing processes through which the leader influences employees' training effectiveness, especially in managing the performance–outcome link (conceptualised as outcome expectancy) is important.

The practical contributions of this study are twofold. The first has to do with leadership. The existence of direct relationships between LMX and training effectiveness has implications for the individual (in terms of training material learned and performed on the job) and for the organisation. Therefore, less than ideal relationships and exchanges between employees and their leaders can stall training transfer and related outcomes (maintenance and generalisation). This point to the fact that the effectiveness of training programs and the design interventions extends beyond the individual participating in the training, the particular type of training, the intervention design features to the relationship between the leader and those that were trained. The individual who has a good relationship with his or her supervisor (which enhances communication of organisationally relevant and important information) stands a much better chance of benefiting from the training. This in turn leads to positive outcomes, both for the individual and the organisation. The second aspect is related to training motivation and outcome expectancy as intervening processes. Leaders can directly influence their employees training motivation and this has a positive impact on how they transfer new skills, maintain them over time and how they use them in other domains of their jobs. Of importance here is the fact that employees do not enter, remain and exit the training situation in a neutral state. The entire experience is influenced by their perception of the relationship with the direct leader. This can either enhance or hinder (in the case of a negative LMX relationship) their motivation. Leaders are also a source for trainees' outcome expectancies, and this study shows the need to actively manage information in this particular domain. Practically, leaders can (and should) inform their followers on how their performance during training is related to outcomes of interest to the employees. In conclusion, this study has advanced knowledge of training effectiveness and leader influence on training transfer.

Future Research Directions

This study suggests a number of directions for future research. One area that needs more attention is on the reasons for the low rates of organisations that incorporate training activities to improve transfer before, during and after training. While many studies have attempted to improve transfer through various interventions, relatively few have sought to understand why it remains a problem. In this regard, more research is needed on both transfer generalisation and maintenance.

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