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The Influence of Training Reputation, Managerial Support, and Self-Efficacy on Pre-Training Motivation and Perceived Training Transfer

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Perceptions of training program reputation remain relatively under-represented in the training literature (e.g., Facteau, Dobbins, Russell, Ladd, & Kudisch, 1995). The present study seeks to extend previous findings by examining the effects of perceived training reputation, managerial support and self-efficacy on pre-training motivation and likely transfer of training in a private training curriculum. Self-report questionnaires sent to 93 manager trainees assessed the key constructs. Our findings suggest that perceived training reputation may be tied more directly to perceptions of training transfer (r = .46) than was originally believed. Moreover, our findings suggest that pre-training motivation may not be as predictive of training transfer as previously believed (r = .27), and that pre-training motivation does not mediate the relationship between training reputation and perceived training transfer when partialling out the influences of pre-training motivation, as the obtained partial correlation (r = .39) remained significant. Limitations and suggestions for future research are noted.

It is widely known that organizational training has tremendous potential outcomes. In the United States alone, organizations spend upwards of $60 billion for training per year, and the average employee receives about 30 hours of training annually (Noe, 2002). Based on this information, one can easily see the practical interest organizations would have on increasing the effectiveness of training programs. Interestingly, a variety of approaches have been shown to influence the effectiveness of training. For instance, training content, rewards, compliance, and goal orientation seem to play a part in predicting certain training outcomes. In addition, some have suggested that pre-training motivation may influence important training outcomes, such as transfer of training (Baldwin, Magjuka & Loher, 1991; Mathieu, Tannenbaum, & Salas, 1992). Thus, although there is some evidence that pre-training motivation may influence training effectiveness, relatively little research has examined the factors that contribute to trainee's pre-training motivation (Facteau, Dobbins, Russell, Ladd, & Kudisch, 1995).

Determining the specific individual characteristics that influence the effectiveness of training is important if we are to understand how to increase the likelihood that behavior change and performance improvement will result from participation in training programs. The present study will examine the extent to which employee attitudes and beliefs about training influence pre-training motivation and transfer of training perceptions. Specifically, we will explore how the reputation of the training program, the degree of perceived managerial support, and the level of self-efficacy influence trainees' pre-training motivation and perceived training transfer.

An important aspect in transfer of training is an individual's motivation to attend and learn from training. Motivation to transfer material learned in training has been described as the trainees' desire to use the knowledge and skills mastered in the training program on the job (Noe & Schmitt, 1986). Specifically, trainees are likely to transfer new skills to their job when they: 1) are confident in using new skills, 2) are aware of work situations in which demonstration of the new skills is appropriate, and 3) believe that the knowledge and skills emphasized in the training program are helpful in solving work-related problems and job demands (Noe & Schmitt). Hence, even if trainees possess the skills needed to learn the training program content, performance in the program will be poor if motivation is low or absent.

Evidence that trainee motivation may be related to transfer of training was demonstrated by Facteau et al. (1995), who found that pre-training motivation was positively related to perceived training transfer. Thus, individuals who reported higher levels of motivation were more likely to indicate that they had benefited from the training. Additionally, research has shown that trainees who enter training with higher levels of motivation learn more and are more likely to perform better in training than their less motivated counterparts (Baldwin et al., 1991; Mathieu, Tannenbaum & Salas, 1990). Consequently, pre-training motivation may be viewed as an important antecedent of training effectiveness and is anticipated to relate positively to higher levels of training transfer. As a result, the following is hypothesized:

Hypothesis 1: Pre-training motivation will correlate positively with perceived training transfer.

Training Reputation

Another area that may impact training effectiveness is training reputation. Prior to actually taking a training course, an employee often has an expectation about the quality of the course and its' job relevance. If the training is perceived to be a waste of time, employees may lack pre-training motivation irrespective of the actual quality of the training program. In other words, the reputation of a training program or training department may affect an employee's pre-training motivation. In support of this assumption, Facteau et al. (1995) found that training reputation was positively related to pre-training motivation.

Although other researchers have acknowledged the importance of developing an understanding of factors that affect training motivation (e.g., Noe, 1986; Tannenbaum, Mathieu, Salas & Cannon-Bowers, 1991), research has not adequately examined the specific influence of trainees' perceptions of the general reputation of the training program on pre-training motivation. To our knowledge, Facteau et al.'s (1995) research is the first empirical study to demonstrate that employees' perceptions of the overall quality of available training programs influence their motivation to attend and learn from them. In other words, the reputation of the training program may affect an employee's pre-training motivation (see Figure 1). Consequently, the following hypothesis is proposed:

Hypothesis 2: The reputation of the training program will correlate positively with pre-training motivation.

Managerial Support

In addition to training reputation, another area that has been shown to impact training effectiveness is the amount of social support for training (Noe, 1986). Indeed, research has indicated some support for potential sources of social support, including top management, supervisors, peers, and subordinates (Baldwin & Ford, 1988; Goldstein, 1986; Noe 1986; Noe & Schmitt, 1986). Of these four social support sources, Facteau et al. (1995) found only supervisor support to be positively related to pre-training motivation, indicating that managers who perceived a greater degree of support from their immediate superiors for training reported greater motivation to attend and learn from training. Further, Baumgartel and Jeanpierre (1972) found that employees in a supportive organizational climate were more likely to implement knowledge and skills acquired in training. Finally, Clark, Dobbins and Ladd (1993) indicated that, even before training, the trainee may consider whether the supervisor will support efforts to transfer trained skills from the classroom to the job. Thus, it seems that if trainees do not believe their supervisor will support training transfer, they will tend to believe that the training will have limited job utility and thus may not be motivated prior to training (see Figure 1). Based on this reasoning, the following is suggested:

Hypothesis 3: Perceived managerial support will correlate positively with pre-training motivation.

Self-Efficacy

Yet another important component of training effectiveness appears to be self-efficacy. A consistent finding to emerge from training research is the central role of self-efficacy for enhancing training effectiveness and the transfer development (Mathieu, Martineau & Tannenbaum, 1993). Bandura (1986) defined self-efficacy as:

> *peoples' judgments of their capabilities to organize and execute courses of action required to attain designated types of performance. It is concerned not with the skills one has but with the judgments of what one can do with whatever skills one possesses.* (p. 391)

Individuals low in self-efficacy are less likely to be open to new situations (Hill, Smith & Mann, 1987), and less able to cope with demands and manage setbacks in challenging situations (Gist, Schwoerer, & Rosen, 1989), therefore limiting their ability to directly benefit from a training experience. On the other hand, individuals who are efficacious with regard to their ability to perform well in training will have positive attitudes towards training usefulness (Gutherie & Schwoerer, 1994). Additionally, individuals high in self-efficacy are likely to view themselves as capable of obtaining the extrinsic rewards that may result from successful training performance and subsequent opportunities to apply knowledge and skills obtained therein (Latham, 1988). For example, Gist (1989) found a positive relationship

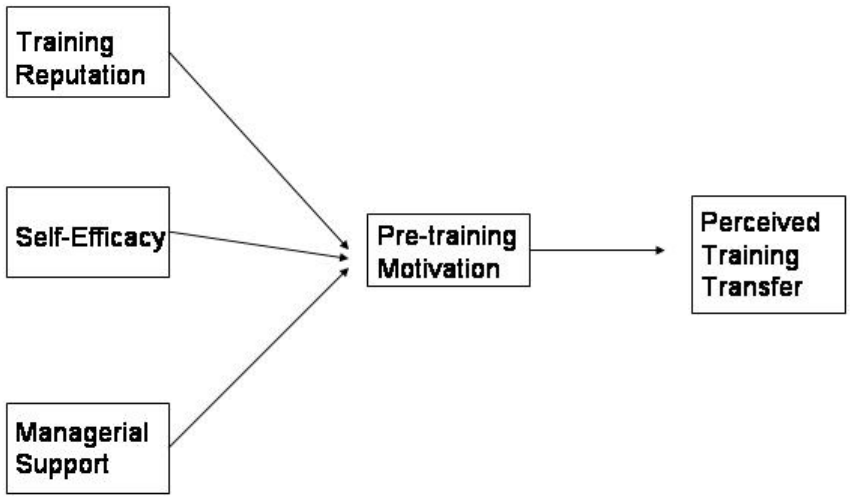
between trainee self-efficacy and training performance on an innovative, problem-solving task. Moreover, Tannenbaum et al. (1991) found that self-efficacy was associated with training fulfillment and motivation.

Besides the strong main effects of self-efficacy on training and work outcomes, self-efficacy has also been found to moderate and mediate the effects of training on transfer (Gist, Stevens, & Bavetta, 1991; Saks, 1995). Hill et al. (1987) found that work-related performance is associated with self-efficacy and adaptability to new technology. Further, self-efficacy predicts training and work outcomes, and mediates the effects of training on training outcomes (Frayne & Latham, 1987; Gist, 1989; Gist et al., 1991; Mathieu et al., 1993; Saks, 1995).

Finally, the magnitude of a trainee's self-efficacy level may also be linked with pre-training motivation. It has been shown that individuals high in self-efficacy are likely to view themselves as capable of obtaining the extrinsic rewards that may result from successful training performance and subsequent opportunities to apply knowledge and skills obtained therein (Latham, 1988). Accordingly, there may be a positive relationship between trainee self-efficacy and pre-training motivation (see Figure 1). Hence, the following hypothesis is proposed:

> *Hypothesis 4: The level of trainee self-efficacy will correlate positively with pre-training motivation.*

Figure 1
Hypothesized model demonstrating the influence of training reputation, self-efficacy and managerial support on pre-training motivation and transfer of training



Method

Participants

Participants included 93 managers employed at a large nationwide insurance firm. Of these individuals, 25 did not complete a post-training survey, providing a final sample size of 68. Approximately 57% were women and held various management positions within the company (e.g., finance, human resources, education, or administration). Approximately 63% of the respondents were Caucasian and 37% were African-American or other. The average job tenure with this company was 5.25 years.

Measures

To test the hypotheses of interest in this study, respondents completed a self-report pre-training survey measuring training reputation, managerial support, self-efficacy, and pre-training motivation. Thirty days later, trainees were asked to complete and return a scale assessing perceived training transfer. Only individuals who returned the post-training survey assessing perceptions of training transfer were included in the analyses. One-way ANOVAs indicated that no difference existed between those who did and did not return the post-training surveys on self-efficacy, perceived training reputation, managerial support, or pre-training motivation. Descriptive statistics, internal consistency reliability estimates, and intercorrelations for the five scales are included in Table 1.

Training reputation. A six-item scale developed by Facteau et al. (1995) was used to assess training reputation. The items reflected three aspects of reputation: 1) the overall quality of supervisory and managerial training courses; 2) whether they would recommend these courses to their peers; and 3) the extent to which these courses developed skills necessary for success as a supervisor or manager in their organization.

Self-efficacy. An eight-item scale to measure self-efficacy was drawn from previous research (Jones, 1986). Initial reliability estimates of this survey produced a coefficient alpha of .58; consequently, a factor analysis was conducted to determine which items should be deleted to enhance the reliability estimate. Two items were identified as being particularly problematic; an examination of the content of these items revealed that they both dealt with a lack of challenge in the current job ("I feel I am overqualified for the job I am doing" and "I could handle a more challenging job than the one I am doing") rather than self-efficacy as it is more commonly conceptualized. As such, these two items were eliminated from all subsequent analyses. The reliability estimate presented in Table 1 reflects the revised scale's properties.

Perceived managerial support. The 10 items for the perceived managerial support scale were developed by Facteau et al. (1995) based on a review of literature (Baumgartel & Jeanpierre, 1972; Baldwin & Ford, 1988; Clark, 1990; Goldstein,

1986; Noe, 1986). These items assessed the extent to which the participant's immediate supervisor provided opportunities for managers to utilize trained skills, and was supportive of their doing so.

Pre-training motivation. The nine items for the pre-training motivation scale were also developed by Facteau et al. (1995) based on previous research (Baldwin & Karl, 1987; Hicks, 1984; Noe & Schmitt, 1986). Questions include "I look forward to actively participating in training"; "I try to learn as much as I can from training"; and "I use my own time to prepare for training courses by practicing and completing assignments."

Perceived training transfer. The nine items in the perceived training transfer measure were developed by Facteau et al. (1995) and measured the extent to which managers believed that a variety of desirable outcomes (e.g. reduced turnover) occur as a result of their ability to transfer the skills learned in management training back to the job. The transfer scale was created to maximize the validity of self-reports of perceived transfer. Two examples of these items include, "Supervisors, peers, or subordinates have told me that my behavior has improved following this training exercise", and "My actual job performance has improved due to the skills learned in this training course." The timing of the perceived training transfer measure, which was only completed after respondents had returned to their jobs, allows further confidence that the perceptual data collected were meaningful indicators of likely transfer of training.

Procedure

To evaluate the effectiveness of training, pre-training and post-training surveys were distributed to trainees in the Midwestern and North Central locations of a company participating in the following leadership training modules: 1) Managing Others; 2) Interview and Selection; 3) Coaching and Feedback; and 4) Conflict Management. Collectively, the four sessions constituted the *Leadership 101 Training Program*, wherein each module consisted of voluntary classroom instruction during one paid working day. Manager trainees completed the voluntary pre-training survey at the onset of training and were informed of anonymity and confidentiality of responses. An arbitrary code number was assigned to each survey in order to associate it with the post-training survey. Trainees were assured that the information obtained would be used for research purposes only, and that no employee at the insurance firm would know the results on an individual basis. Post-training surveys were completed approximately 30 days after the completion of training. All completed questionnaires were returned directly to the first author via first class mail. An ANOVA was conducted to assess whether responses to the scales significantly differed based on training module attended. The analysis revealed no statistical differences in the aforementioned training modules across the five focal variables.

Results

Descriptive statistics and intercorrelations of key study variables are reported in Table 1. As can be seen in Table 1, the results indicated support for the first hypothesis, as pre-training motivation was indeed positively correlated with perceived training transfer, $r = .27$, $p < .05$. Moreover, empirical support was obtained for the remaining three hypotheses. Specifically, trainee perceptions of the reputation of the training program positively influenced trainee pre-training motivation, $r = .46$, $p < .01$. In addition, managerial support was positively related to an individual's level of pre-training motivation, $r = .42$, $p < .01$. Finally, level of self-efficacy also correlated with pre-training motivation $r = .60$, $p < .01$.

Additional analyses. Based on the encouraging results from our hypotheses, we decided to evaluate the model presented in Figure 1 by examining the partial correlations between the three predictor variables (training reputation, self-efficacy, and managerial support) and perceived training transfer after controlling for the proposed mediator variable of pre-training motivation. If pre-training motivation is indeed a mediator, then the previously significant correlations between the three predictor variables and perceived training transfer should decrease to near zero (Pedhazur, 1997). As seen in Table 2, this was not the case for all three predictor variables. In particular, the correlation between training reputation and training transfer remained significant, even after controlling for pre-training motivation, $r = .39$, $p < .01$. However, the correlation between the other two predictor variables and transfer did decrease to non-significant levels, and in both cases, the resulting partial correlations were near zero. Consequently, the results of this analysis indicate that pre-training motivation may indeed mediate the relationships between self-efficacy and transfer as well as between managerial support and transfer, but we found no evidence that pre-training motivation mediates the relationship between training reputation and perceived training transfer.

Based on the results of our partial correlation analysis, we decided to further explore the proposed model by using structural equations modeling (SEM: Jöreskog & Sörbom, 1993). We realize that the any conclusions drawn from this type of model testing are tenuous, given our relatively small sample size. It was our hope that the SEM results, in conjunction with the bivariate and partial correlation results, might provide some insight as to the nature of the interrelationships among the proposed predictor, mediator, and criterion variables.

Table 1

Descriptive Statistics, Intercorrelations, and Internal Consistency Reliabilities for Study Variables

	Mean	*SD*	*1*	*2*	*3*	*4*	*5*
1. Training Reputation	12.29	2.67	(.82)				
2. Self-Efficacy	13.77	3.10	.19	(.64)			
3. Managerial Support	27.24	6.70	.32**	.41**	(.90)		
4. Pre-Training Motivation	18.10	4.10	.46**	.60**	.42**	(.82)	
5. Perceived Training Transfer	22.93	3.67	.46**	.16	.18	.27*	(.83)

Note: $N = 68$; * = $p < .05$. ** = $p < .01$

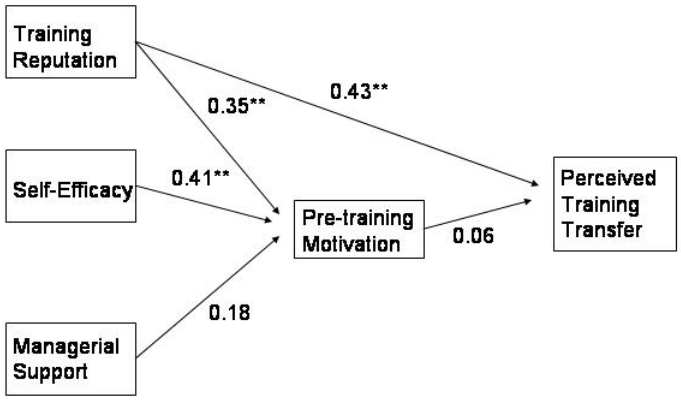
Table 2
Partial Correlations, Controlling for Pre-training Motivation, Among Study Variables

	1	*2*	*3*	*4*
1. Training Reputation	---			
2. Self-Efficacy	- .13	---		
3. Managerial Support	.16	.22	---	
4. Perceived Training Transfer	.39**	- .00	.08	---

Note: $N = 68$; ** = $p < .01$

Given the results of the partial correlation analysis, it was not surprising that the original proposed model demonstrated a significant chi-square ($\chi^2(3, N = 68) = 11.23$, $p < .05$), indicating that the hypothesized model did not, in fact, fit the data well. The fit indices were also not encouraging (Root Mean Square Error of Approximation (RMSEA) = .20; Normed Fit Index (NFI) = .86; Adjusted Goodness of Fit Index (AGFI) = .71). However, adding a direct link from training reputation to perceived training transfer based on the modification indices changed the model fit dramatically, producing a non-significant chi-square ($\chi^2(2, N = 68) = .16$, $p > .05$) and optimized fit indices (RMSEA = .00; NFI = 1.0; AGFI = .99). Whereas these results are almost certainly due in part to the low degrees of freedom present in the model, they also indicate that, for this sample, we were unlikely to describe the data better with any competing model. Further, the addition of this single new linkage produced a statistically significant improvement in model fit ($\Delta\chi^2(1, N = 68) = 11.07$, $p < .05$). The revised model, along with its standardized path coefficients, is provided in Figure 2.

Figure 2
Revised model with standardized path coefficients



Note: * = $p < .05$; ** = $p < .01$

Discussion

This study hypothesized that the reputation of training, perceived managerial support and level of self-efficacy would be positively correlated with pre-training motivation, and that pre-training motivation would be positively related to perceived training transfer. The results indicated support for all of the hypotheses in that perceptions of pre-training self-efficacy, managerial support and reputation of the training program were indeed significantly correlated with pre-training motivation. Similarly, the results also revealed that pre-training motivation was positively related to perceived transfer of training.

At its most basic level, this study provides support for the original model's interrelationships between training reputation, self-efficacy, managerial support, pre-training motivation, and perceived transfer of training. However, the supplemental analysis produced some potentially mixed findings. Specifically, the partial correlation analysis results suggested that pre-training motivation mediated the relationships between self-efficacy and transfer as well as managerial support and transfer. However, these analyses did not find evidence that pre-training motivation mediated the relationship between training reputation and transfer. Instead, the partial correlation analyses suggested that training reputation may have a direct relationship with perceived transfer of training. This suggestion is strengthened when examining the zero-order correlations among the variables. In particular, the bivariate correlation between pre-training motivation and perceived training transfer (r = .27) was much lower than the bivariate correlation between training reputation and perceived training transfer (r = .46) as well as the partial correlation (r = .39) when controlling for pre-training motivation.

That training reputation is directly associated with perceived transfer was consistent throughout our analyses and is perhaps our most important finding. Facteau et al.'s (1995) model included no such effect, suggesting that the effects of training reputation on perceived transfer would be fully mediated by pre-training motivation. Yet, the content of the "perceived training transfer" items (e.g., "I have changed my job behavior in order to be consistent with material taught in training") makes it clear how training reputation may have had its direct effect. Whereas training reputation certainly should (and did) influence pre-training motivation, what trainees know about the training program prior to entry may have an additional direct effect on whether or not their behavior changes. It is, after all, a natural human bias to allow ourselves to be affected more strongly by those experiences we believe to be relevant or meaningful. Essentially, our results suggest that we tend to get out of training programs what we anticipate we will get out of them.

Contributions

The outcomes of the study have both theoretical and practical significance. From a theoretical perspective, the findings serve to support the social link in Noe's (1986) model of training effectiveness (e.g., environmental favorability) and also several components of Facteau et al.'s (1995) model of training transfer (e.g. training reputation and pre-training motivation). Although potential antecedents to effective training are abundant, this study specifically highlighted the importance of providing training that is perceived as *reputable* by its attendants to foster the expectation to

transfer information learned in the training program to their job. To our knowledge, this is only the second research study to examine the effects of the perception of the training reputation on pre-training motivation and intentions to transfer trained material. The finding that a somewhat unique variable (training reputation) predicts perceived training transfer should entice future researchers to study this relationship further.

The outcomes of this study also have applied significance. Specifically, our findings regarding training reputation suggest that it may be particularly critical; what trainees know – or what they *believe* they know – about the training program they are going to attend may have a major impact on whether or not they believe they have taken anything away from the program. Thus, organizations should consider the general impressions of available training programs and the training department prior to actual training. Irrespective of the actual quality of training, employees may not be as motivated if they perceive training programs as ineffective and irrelevant to their jobs. This suggests that even more energy may need to be put into the marketing of training programs, including in-house programs, to maximize the likelihood of transfer. In addition, organizations may want to borrow from the feedback literature (e.g., Ilgen, Fisher, & Taylor, 1979) in order to take steps to enhance the perceived credibility of the trainer. Although future research should confirm this, it is our speculation that enhancing the credibility of the message delivered in training programs may ultimately impact the perceived reputation of the training program.

The findings of our study also suggest that managerial support and self-efficacy may be relatively less important than training reputation on perceived transfer of training. Instead, the influences of self-efficacy and managerial support may only be pertinent to pre-training motivation, if at all. The self-efficacy finding is consistent with what we might expect; individuals who believe they are capable of meeting the challenges of the training program are more likely to be motivated to attend the training than those who believe themselves incapable. Likewise, employees are likely to be motivated to attend training when they have the support of their manager. Hence, any measure of pre-training motivation should at least include items designed to assess trainees' confidence (i.e., self-efficacy) in the use of new skills and their perceived applicability of trained skills to the job, and may want to include items designed to elicit perceptions of managerial support.

An additional applied contribution has to do with the nature of the sample. Whereas the Facteau et al. (1995) study was much more comprehensive, data for that study were collected as part of a needs assessment, rather than as part of the evaluation of a specific training program. In contrast to the Facteau et al. research, this study offers results collected solely for evaluative purposes, and therefore may more directly address issues of concern to organizations interested in assessing their training programs, or predicting transfer.

Limitations

A number of limitations potentially constrain the contributions of this research. First, our final sample only included 68 participants from a single organization, leading to questions about the generalizability of our findings. These concerns should be lessened at least somewhat when we consider that the sample included individuals who had participated in several different training programs, and as such represents results which, at the very least, are general across programs in a single organization. Without question, however, future research would greatly benefit by exploring the relationships investigated in this study with a larger sample size.

Second, problems emerged with the measure of self-efficacy chosen for this study. Whereas it did relate significantly to our assessment of pre-training motivation, the internal consistency reliability estimate ($\alpha = .64$) fell into the range generally viewed as problematic, and only attained this level of reliability after the deletion of two items. The content of the items deleted suggests that the Jones (1986) scale may not have been the best measure of self-efficacy available, highlighting the criticality in the choice of scales in research as a whole.

A third possible limitation is method bias. That is, all data were collected via self-reports, and it is possible that the observed relationships are due to the method as much as the content of the scales. In order to check for likely method bias, an exploratory principal components factor analysis was conducted using varimax rotation, including all of the items except for the post-training measure. Although results were not perfect (with less than perfect reliability in any scale, this is to be expected), in general the items which were part of the same scale did tend to cluster together and not create a single common factor as would be expected if common method variance were behind the observed relationships. Ultimately, the extent to which method bias may exist is virtually unavoidable in a study of this type. Because training sessions were held in different states, with different facilitators, it was necessary to rely only on self-report data to ensure confidentiality. Furthermore, the surveys utilized highly specific items to increase accuracy and minimize potential inflation of self-report data. Because of the statistical concern with self-report data, focus phone interviews were also conducted to gather qualitative data about the trainees. Approximately 10% of the participants were telephoned to capture their first-hand impressions of the adequacy, delivery, content, and applicability of the training material. Interview responses indicated that their perceptions were directly in line with the statistical results.

Conclusions

Initially, we tested a model hypothesizing that training reputation, self-efficacy, and managerial support would be predictive of pre-training motivation, which would then predict perceived training transfer. Although support was found for all of the hypothesized relationships, additional analyses suggested that training reputation had a direct influence on perceived training transfer and that pre-training motivation may not be as predictive of perceived training transfer as previously

believed. Ultimately, the results suggest that what trainees believe they know about a training program's reputation may have more of an influence on what they get out of the training program than many other variables, including managerial support, self-efficacy, and pre-training motivation.

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Author Notes

1. Portions of this research were previously presented at the 18th annual conference of the Society for Industrial and Organizational Psychology, 2003, Orlando, Florida.
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