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Perceived Organisational Justice as a Predictor of Employees' Motivation to Participate in Training

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ABSTRACT

Employees' training motivation arising from their judgements of justice can be a critical asset that a business has for gaining a sustained competitive advantage over rivals. This study sought to examine the effect of three (distributive, procedural, and interactional) justice perceptions in predicting employees' motivation to participate in training activities. On the basis of theoretical linkages between the constructs, full mediation and partial mediation models by perceived benefits of training were developed. The models were tested using SEM (Structural Equation Modelling) on responses from 302 nurses of four public hospitals in the Republic of Korea. The results showed the partial mediation model is a dominant model. Implications and limitations of the current study and directions for future work are discussed.

INTRODUCTION

Training activity remains a very large part of human resource development (HRD) practice (Nordhaug 1989). As a planned attempt by an organisation to facilitate employee learning, training enhances individual competency by increasing employees' skills (Gritz 1993) and supporting career advancement (Tharenou 1997). Furthermore, organisational training activities are recognised as being able to become sources of competitive advantage (Barney 1995) through their impact on employees' productivity (Ng & Siu 2004) and their contributions to business objectives (Dobson & Tosh 1998). However, training alone is not the answer to a sustained competitive advantage for organisations. Training motivation is a key component of helping employees to become the engine of an organisation and make significant differences. If training is to be connected with individual and organisational performance, employees must be motivated and the continuous pursuit of development activities by individuals can be a key aspect in attaining training effectiveness in organisations (Noe 1986). Indeed, the training literature has not only recognised training motivation as one of the most important predictors for actual training participation (Mathieu, Tannenbaum & Salas 1992), but also established the construct as one key determinant of post training satisfaction, and the transfer of knowledge acquired to the work situation (Baldwin & Ford 1988, Ford, Kozlowski, Kraiger, Salas & Teachout 1997).

Similar to the topic of training motivation, a great deal of attention has been given to the topic of workplace fairness that has a motivational attribute beyond the reactive quest for equity (Campbell & Pritchard 1976). As a popular topic in human resource management, organisational behaviour, and Industrial/Organisational [I/O] psychology, it is also referred to as 'organisational justice' (Greenberg 1990). Organisational justice research, which focuses on the role of fairness in the workplace, has demonstrated that the perception of fairness is associated with a variety of individual work attitudes, such as satisfaction (DeConinck & Stilwell 2004) and commitment (Lowe & Vondanovich 1995), and individual behaviours, such as absenteeism (De Boer, Bakker, Syroit & Schaufeli 2002) and citizenship behaviour (Organ 1990, Moorman 1991).

Indeed, the employees' motivation to learn and a desire for fair treatment are deeply rooted in human nature and inherent elements of organisations. As such, these core values can impact organisational effectiveness by shaping human resource practices and employee attitudes towards them. There has, however, been little research on the association between organisational justice and training motivation. Even these studies have largely focused on the methods and settings to maximise performance in training programmes while generally ignoring the importance of training context results from strategic HR coordination. For example, Quinones (1995) found a significant positive relationship between fairness perceptions and motivation to learn in a conceptual model developed to examine pre

training motivational effects. Furthermore, Cole and Latham (1997) examined the effects of training in procedural justice and demonstrated a significant positive relationship between procedural justice and outcome expectancies in training supervisors. In short, previous research has not only done little to evaluate the influence of fairness as an organisation's social context, but the relevant research also has neglected to approach the constructs from a comprehensive and strategic HR angle. Thus, the purpose of this research was to investigate the impact of organisational justice in predicting employees' motivation to participate in training activities.

On the basis of the coordinated angle between HRM and HRD, this research focused on the identification of an optimal model of motivation to participate in training by using structural equation modelling (SEM). The value of identifying the optimal model of motivation to participate in training lies in understanding the importance of strategic HR activities and developing these as a source of competitiveness, which highlights a strategic approach to HRD is fundamental to the adoption of a comprehensive HRM approach in the organisation (Keep 1989, Ruona & Gibson 2004). Consequently, the initial part of this paper provides an overview of the relevant literature that links the concepts of organisational justice, motivation to participate in training, and outcome benefits that are likely to be achieved from this lineage. The predicted relationships between these concepts (postulated in the first section) were evaluated in a study, with 302 nurses in four South Korean hospitals, is described in the second part of the paper. In the third part of this paper, the results of the analysis of the data that were captured from the nurses are presented. This third sector, which also features a number of Tables, is followed by a discussion and conclusion to elucidate the salient implications and consequences of the findings in terms of HRD practices.

LITERATURE REVIEW AND HYPOTHESES

The following review provides a background to examine the impact of organisational justice on employees' motivation to participate in training activities. Core theories and beliefs of each construct are first overviewed through conceptualising the constructs, and then the theoretical hypotheses between the constructs are established.

Organisational Justice

As a commitment to an ethical principle of fairness, organisational justice is a significant body of research on work motivation (Gilliland & Chan 2001, Latham & Pinder 2005). Empirical evidence has supported that organisational justice is associated with a variety of positive work attitudes and behaviours (Konovsky & Cropanzano 1991, Barling & Philips 1993, Brockner & Wiesenfeld 1996). The organisational justice construct has been partitioned into at least three factors: distributive justice, procedural justice, and interactional justice. Distributive justice reflects the extent to which an individual perceives an outcome they receive is 'fair'. Research in distributive justice began as an extension of equity theory (Greenberg 1987). According to equity theory, individuals compare a ratio of their perceived inputs into and outcomes derived from a relationship with that of a referent other. Thus, the outcomes serve as the individual's sources of information and form the basis for the subsequent fairness judgement, which becomes a referent point for future behaviour.

While distributive justice concerns the fairness of allocated outcomes, procedural justice is concerned with the fairness of the formal procedures governing organisational decisions. In this type of justice, the outcome is irrelevant; rather, the focus is on the process by which it was administered. Procedural fairness is important to employees because it offers some control over the processes and outcomes of decisions, thereby reassuring them about the likely fairness of their long term outcomes (Thibaut & Walker 1975).

As a third concept, interactional justice reflects the quality of interpersonal treatment during the implementation of formal procedures of decisions (Bies & Moag 1986). Examples of interactional justice include being treated with kindness, consideration, respect and dignity (Posthuma, Dworkin & Swift 2000). Although controversy continues regarding the structure of justice, this research accepts the perspective that interactional justice is a construct separated from procedural justice (Cohen-Charash & Spector 2001, Colquitt, Conlon, Wesson, Porter & Ng 2001). Interactional justice primarily affects attitudes and behaviours toward the person carrying out the treatment (e.g., a supervisor) whereas procedural justice reflects reactions to the organisation as an entity (Bies & Moag 1986).

Pre training Motivation

It is a well known fact that trainees who enter training with high levels of pre training motivation are more likely to complete training than their less motivated peers (Baldwin, Magjuka & Loher 1991). With regard to training participation motivation, the training literature has largely dealt with such pre motivational concepts as motivation to learn and motivation through expectations. Motivation to learn refers to an employees' desire to learn the content of training (Noe & Schmitt 1986). With this perspective, early studies focused mainly on the amount of learning that trainees acquire during training. More recent research, however, has accepted a theoretical standpoint that motivation to learn can arise from the employees' view of training participation (Mathieu & Martineau 1997).

For example, Birdi, Allen and Warr (1997) proposed that motivation to learn is most relevant to how much an employee learns during training, but it has also been used to explain how much employees participate in training activities. This expanding notion of motivation to learn has helped with the theoretical maturation of the construct. Baldwin, et al. (1991) reported that employees' motivation to learn was linked to actual learning in a training programme that was designed to improve skills for performance appraisal and feedback. Moreover, Noe and Wilk (1993) noted that an employee's motivation to learn is critical for training effectiveness.

As its name implies, motivation through expectations is rooted in Vroom's (1964) expectancy theory. This underpinning is to the extent that an employee believes that the training activity will lead to certain valued outcomes that he or she is more likely to be motivated to pursue. In addition, Maurer and Tarulli (1994) suggested that to effectively motivate all employees to develop themselves it is necessary for them (i.e., employees) to understand fully the perceived benefits and the value placed on those benefits. This is due to the fact that there are different perceptions among employees. Nordhaug (1989) identified three different types of benefits that employees obtain from participation in training programmes: job, career, and personal related benefits. These perceived training benefits, functioning as extrinsic or intrinsic rewards, have been found to affect attitudes or motivation to engage in training and development activity (Maurer & Tarulli 1994, Maurer, Weiss & Barbeite 2003).

Organisational Justice Dimensions and Motivation to Participate in Training

A premise of organisational justice is that relative fair procedures enhance employee acceptance of organisational outcomes. All three forms of organisational justice as a criterion for accepting organisational decisions can reinforce the employees' positive work attitudes and behaviours (Erdogan 2002). In this regard, it is thought that employees who feel they have been treated fairly are more likely to be motivated to participate in training. That is, distributive, procedural, and interactional justice experiences lead employees to expect that they will be treated fairly in the long run, which will engender a positive regard for the organisation and its leaders, and will promote employees' motivation to participate in training. This is consistent with other research that has shown the role of organisational justice in predicting positive outcomes, thereby promoting trust and loyalty in employees (Barrett-Howard & Tyler 1986, Joy & Witt 1992). These imperatives provide the underpinning for the accompanying three hypotheses.

Hypothesis 1a. Distributive justice perceptions will positively predict employees' motivation to participate in training.

Hypothesis 1b. Procedural justice perceptions will positively predict employees' motivation to participate in training.

Hypothesis 1c. Interactional justice perceptions will positively predict employees' motivation to participate in training.

Organisational Justice Dimensions and Perceived Benefits of Training

Employees' perceptions of organisational justice can generate anticipation that appraisal in a training programme, as well as opportunities for training, will be fair. This positive expectation, in turn, may stimulate in employees a perception of favourable training outcomes through their conviction of effort-outcome expectancies. In short, if individuals believe there is a fair link between training and appraisal/rewards, then it is likely that the usefulness of training for their current, future, and personal objectives can be better recognised on the basis of organisational trust (Sweeney & McFarlin 1993, Brockner, Wisenfeld & Martin 1995). That is, distributive, procedural, and interactional justice perceptions are developed through the employees' assessment of their treatment by the organisation. Subsequently, they will use their judgements of these dimensions of justices to estimate the benefits they will receive resulting from involvement in training activities. Cole and Latham (1997) found this association in their empirical study using a procedural justice dimension. In this way, the perceptions of justice are thought to affect individuals' perception of training benefits, which leads to the following three rational statements.

Hypothesis 2a. Distributive justice perceptions will positively predict employees' perceived benefits of training.

Hypothesis 2b. Procedural justice perceptions will positively predict employees' perceived benefits of training.

Hypothesis 2c. Interactional justice perceptions will positively predict employees' perceived benefits of training.

Perceived Benefits of Training and Motivation to Participate in Training

Training researchers have suggested that the expectation of gaining valued benefits from training is an important predictor of training participation (Dubin 1990, Salas, Cannon-Bowers, Rhodenizer & Bowers 1999, Tharenou 2001). In particular, Mathieu and Martineu (1997) suggested that this motivation through expectation is an improved approach to training motivation as it places training participation into a motivational framework. Also, further support for this notion is that employees who participate in training and development events may see their participation as rewarding (Nordhaug 1989). The perceived training benefits, which play a role as either extrinsic or intrinsic rewards, will affect the employees' motivation to engage in the training activity. Furthermore, the expectation of usefulness or value of training may have an influence on knowledge and skills that participants acquire during the training, as well as their post training reactions (Clark, Dobbins & Ladd 1993, Tracey, Hinkin, Tannenbaum & Mathieu 2001). In this way, it is likely that the more job, career, and personal related benefits that employees feel they can obtain through the training activities, the greater their degree of motivation to participate in the training activities. From these theoretical foundations, the following relationship is speculated.

Hypothesis 3. Perceived benefits of training will positively predict employee's motivation to participate in training.

METHODOLOGY

Participants

The participants were 302 full time nurses from four public hospitals in Seoul, South Korea. The average size of the hospitals is about 1,400 beds staffed by about 900 full time nurses. As could be expected from a traditionally female dominated profession, the majority (99.3 per cent) of the sample was women. The average age of the respondents was 31 years, and many (59.2 per cent) were university graduates. A total of 174 (57.6 per cent) of the respondents had less than five years of job tenure, and 165 (54.6 per cent) also had less than five years of organisational tenure.

Procedure

After initial contact with and approval from the administrator at each hospital, cluster sampling was conducted. Each medical ward was considered as a cluster. There was an average of 20 samples (respondents) per medical ward from five wards in each hospital. The selected medical wards differed from each hospital, but surgical and general internal medical wards were common to all hospitals. The four hospitals provided a list of potential participants and subsequently, 400 surveys were sent out to selected employees by the researcher. A follow-up postcard was mailed approximately ten days after the initial delivery. Completed surveys were received from 321 respondents, with 302 being useable, for a response rate of 75.5 per cent.

Measures

All constructs were measured using reliable multi item scales from the human resource management or I/O psychology literature. In some cases, scale items were adapted slightly to fit the current research context. For example, the word 'organisation' was substituted for 'hospital' since the participants worked in public hospitals. In addition, it was necessary to translate the measures (originally developed by English speakers) into Korean for administration purpose. A five point Likert scale was employed for all measures (the item responses ranged from 1 = strongly disagree to 5 = strongly agree).

Organisational Justice

Organisational justice was measured with 18 items from the Niehoff and Moorman (1993) scale. This justice scale consisted of three dimensions measuring perceptions of distributive justice, procedural justice, and interactional justice. Distributive justice assessed the fairness of different work outcomes, including pay level, work schedule, and job responsibilities. Examples of distributive justice items were, 'My work schedule is fair', and 'I believe my level of pay is fair'. Procedural justice assessed the degree to which job decisions include mechanisms that insure the gathering of accurate and unbiased information, employee voice, and an appeals process. Examples of procedural items were, 'The decisions my hospital makes in the level of organization are in an unbiased manner', and 'My hospital has procedures that are designed to allow the requests for clear explanation or additional information about a decision'. Interactional justice assessed the degree to which employees felt their needs were considered and also the degree to which adequate explanations were made for job decisions. Examples of

interactional items were, 'When decisions are made about my job, my supervisor considers my personal needs with the greatest care', and 'When making decisions about my job, my supervisor offers reasonable explanations that I understand clearly'. The alpha reliabilities of these scales were .84, .87, and .90; respectively.

Motivation to Participate in Training

Motivation to participate in training refers to the employee's desire to participate in training activities and to learn the content of their programme. This scale was measured with 10 items. These items have been used in previous training research (Bartlett 2001), with several items being slightly modified from the Noe and Schmitt (1986) instrument. Seven items assessed motivation to learn in training and development activities, and the other three items assessed general motivation to participate in training and development activities. Example items were, 'I try to learn as much as I can from education/training programmes', and 'I am willing to invest effort to improve skills and competencies for learning purposes'. The alpha reliability of this scale was .70.

Perceived Benefits of Training

Perceived benefits of training refer to a motivational construct reflecting expectation that favourable outcomes will result from involvement in training. Benefits resulting from training were measured with 12 items of the perceived benefits of training scale (Noe & Wilk 1993), which is an adaptation of Nordhaug's (1989) scale composed of three subscales to measure job, career, and personal related benefits. Five items were included in the job related benefits scale, and three and four items were included in the career and personal related benefits; respectively. All items on this scale started with the statement, 'Participating in training programmes will...', with an example statement from the job related benefits subscale that ended with 'help me perform my job better'. An example from the career related benefits subscale was, 'Participating in training programmes will help me reach my career objectives'. An example from the perceived personal benefits subscale was, 'Participating in training programmes will help my personal development'. The alpha reliability of the perceived training benefits scale was .85.

Analyses

SEM was used to test the theoretical models via path analysis (see Figure 1). One of the advantages of covariance structure analysis is that it affords the decomposition of covariance among variables in the model, thereby enhancing the interpretation of relations, as well as showing a pattern of the effects of one variable on another (Pedhazur & Schmelkin 1991). By using the two step approach advanced by Anderson and Gerbing's (1988), the measurement and structure models were examined in separate steps. First, the measurement model was analysed to test the adequacy of the hypothesised factor structure for all constructs. Second, several structural models representing the hypothesised path structure between latent and measured variables were evaluated. For the measurement and structural models, the analyses were conducted with LISREL 8.30 (Joreskog & Sorbom 1993). All analyses used maximum likelihood estimation, and analyses were performed on the variance and covariance matrix.

RESULTS

To confirm and cross validate the factorial structure of all five study variables in the hypothesised model, confirmatory factor analysis (CFA) using LISREL 8.30 (Joreskog & Sorbom 1993) was conducted. Differing from exploratory factor analysis, confirmatory factor analysis allows for better integration of theory and measurement (Hughes, Price & Marrs 1986). The confirmatory method is particularly advantageous in that it provides significance tests and goodness-of-fit indices for hypothesised models (Church & Burke 1994). The results of the overall confirmatory factor analysis are shown in Table 1, which illustrates there is a statistically significant loading (ranging from .30 to .77, $p < .05$) on the corresponding latent variable. The CFA confirmed that the measurement model fits the data very well with a non normed fit index (NNFI) of .95, comparative fit index (CFI) of 0.96, adjusted goodness of fit index (AGFI) of 0.89, root mean squared error of approximation (RMSEA) of .05, and a chi-square of 200.68 ($p < 0.001$) based on 109 degrees of freedom.

Table 1 Confirmatory Factor Analysis (CFA) Loadings

Indicator	Factors				
	1	2	3	4	5
Distributive Justice 1	.54				
Distributive Justice 2	.63				
Distributive Justice 3	.52				
Procedural Justice 1	.60				
Procedural Justice 2	.62				
Procedural Justice 3	.58				
Interactional Justice 1		.73			
Interactional Justice 2		.71			
Interactional Justice 3		.76			
Interactional Justice 4		.77			
Job related Benefits			.41		
Career related Benefits			.62		
Personal related Benefits			.47		
Motivation to Participate in Training 1				.51	
Motivation to Participate in Training 2				.48	
Motivation to Participate in Training 3				.35	
Motivation to Participate in Training 4				.30	

Notes: a. Factor 1 = Distributive Justice. b. Factor 2 = Procedural Justice. c. Factor 3 = Interactional Justice. d. Factor 4 = Perceived Benefits of Training. e. Factor 5 = Motivation to Participation in Training. f. $\chi^2 = 200.68$, $df = 109$, and $p < .001$. NNFI = .95; CFI = .96; AGFI = .89; RMSEA = .05. In general, a good fit to the data is indicated by non significant values of chi-square, RMSEA values which approach zero, and values of NNFI, CFI, and AGFI which approach unity.

Intercorrelations and reliabilities of the exogenous and endogenous variables in the structural equation model are shown in Table 2. All the variables had reliabilities (coefficient alphas) at or above the .70 threshold that is recommended by Nunnally (1978). The zero order correlations were all in the expected directions and worked as preliminary confirmation of the prescribed hypotheses. Above all, organisational justice dimensions were positively correlated with each other, but not to the extent to imply that they were measuring the same thing (correlations ranged from .34 to .50).

Table 2 Descriptive Statistics and Correlations (N = 302)

Variables	Mean	S.D.					
			1	2	3	4	5
1. Distributive Justice	3.00	0.64	0.84				

Variables	Mean	S.D.	1	2	3	4	5
2. Procedural Justice	2.72	0.62	0.42***	0.87			
3. Interactional Justice	3.25	0.79	0.50***	0.34***	0.90		
4. Perceived Benefit	3.38	0.56	0.22**	0.23***	0.20**	0.85	
5. Motivation	3.67	0.51	0.17**	0.19**	0.21**	0.40***	0.70

Notes: a. S.D. = Standard deviation of the means. b. Perceived benefit = Perceived benefits of training, and Motivation = Motivation to participate in training. c. Bold values across the diagonal are reliability alphas. d. ** $p < .01$, and *** $p < .001$.

Table 3 presents fit indices for each of the partial and the full mediation models. Since there was uncertainty in the way of association between organisational justice dimensions and motivation to training participation, the two models were compared in light of the mediation effect of the perceived benefits of training.

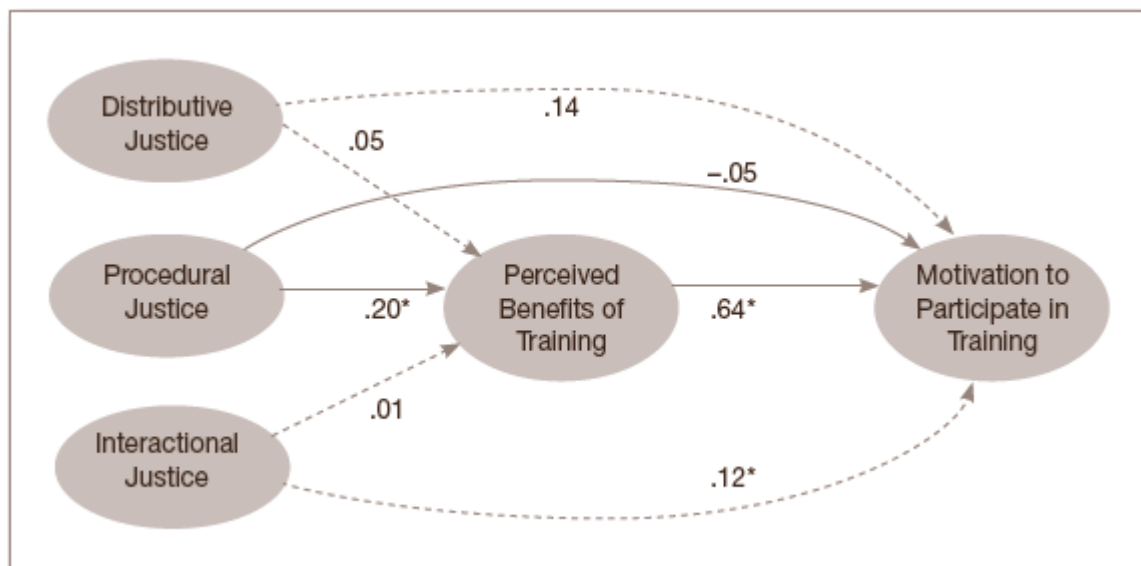
Model	χ^2	df	χ^2 change	NNFI	CFI	AGFI	RMSEA
Measurement model	200.68	109	–	.95	.96	.89	.05
Partial mediation model	200.68	109	–	.95	.96	.89	.05
Full mediation model	212.72	112	12.04*	.95	.96	.89	.06

Notes: a. In comparison to the full mediation model (see Figure 1), the partial mediation model additionally constrains the paths from distributive, procedural, and interactional justice to motivation to participate in training in the same condition. b. * $p < .05$.

The partial mediation model predicts direct as well as indirect (i.e., through perceived benefits of training) effects of the justice perceptions on the motivation to participate in training. As seen in Table 3, this model provided a good fit to the data ($\chi^2 = 200.68$, $df = 109$, $p < .001$; NNFI = .95, CFI = .96, AGFI = .89, RMSEA = .05). On the other hand, the alternative full mediation model is created by deleting the direct paths from the three justice perceptions to employees' motivation to participate in training. This model also provided an acceptable fit to the data with a slight change in the fit index of RMSEA (.06). Since the full mediation model is nested within the partial mediation model, the two models were compared in terms of the chi-square difference test (James, Mulaik & Brett 1982). Consequently, the difference in chi-squares, 12.04 with three degrees of freedom, was significant, suggesting that the partial mediation model was a better fit model than the full mediation model.

Figure 1 presents the standardised path coefficients of the partial mediation model as a best fit model. The hypotheses were investigated using the estimated path coefficients of the partial mediation model. Hypothesis one predicted that the three dimensions of organisational justice would have a significant positive relationship with employees' motivation to participate in training. As shown in Figure 1, however, only interactional justice had a significant positive relationship with the motivation to participate in training ($\gamma_{23} = .12$, $p < .05$). Hypothesis two predicted each dimension of organisational justice would be positively associated with employees' perceived benefits of training. Only procedural justice had a significant positive relationship with the perception of training benefits ($\gamma_{12} = .20$, $p < .05$). Hypothesis three explored the potential positive influence of benefits of training on the motivation to participating in training. This hypothesis was supported as the perceived benefits of training produced a positive relationship to the motivation to participate in training ($\beta_{21} = .64$, $p < .05$). Accordingly, except for the distributive justice dimension, the procedural and interactional justice had an indirect or direct influence on employees' motivation to participate in training.

Figure 1 Structural Path Estimates of the Partial Mediation Model as a Best Fit Model



DISCUSSION

This research attempted to show that perceptions of fairness influence employees' motivation to participate in training. Through structural equation modelling, support was found for the research hypotheses. The following discussion highlights the primary findings of this study. Justice perceptions affected motivation to participate in training. While interactional justice directly influenced motivation to participate in training, procedural justice influenced the variable through perceived benefits of training. More specifically, the relationship between procedural justice and motivation to participate in training was mediated by employees' perceptions of training benefits. This finding shows that procedural justice and perceived benefits of training are associated and may, therefore, function as a better predictor for employees' motivation to participate in training. That is, when procedural justice is linked with motivation through expectation, it is more likely to be associated with employee motivation to participate in training. In contrast, interactional justice was a direct predictor that stimulates employees' motivation to participate in training without requiring an extrinsic training benefit. This observation demonstrates that interactional justice appeals primarily to employees' intrinsic motivation. Intrinsic motivation has been found to be the main factor to predict employees' participation in training activities (Maurer, Mitchell & Barbeite 2002). A perception of interactional justice is likely to be a robust predictor for employees' pre training motivation. In short, this pattern of results indicates that procedural justice perceptions affected reaction toward the organisation and interactional justice perceptions affected reactions toward supervisors (Masterson, Lewis, Goldman & Taylor 2000).

Distributive justice had a non significant impact on employees' perceived benefits of training and their motivation to participating in training. Considering that training is recognised as an organisational event the observed finding is logical. Distributive justice has been acknowledged as an important predictor of personal outcomes such as satisfactions with pay and job when compared with procedural justice (Folger & Konovsky 1989, Greenberg 1990, McFarlin & Sweeney 1996). Thus, in explaining the range and scope of individual responses to an organisational event of training, procedural and interactional justice can be a more relevant factor.

Perceived benefits of training indicated a statistically significant positive relationship with employees' motivation to participation in training. This outcome was a replication of the findings from previous studies showing that an expectation of gaining valued benefits from training is an important predictor of training participation (Nordhaug 1989, Dubin 1990, Tharenou 2001). Thus, the more job, career, and personal related benefits that employees feel they can obtain from participating in training activities, the greater their degree of motivation to participate in such activities.

Results from this study, however, should be interpreted with an acknowledgment of the following boundaries. A serious constraint of the current research was its reliance on self report measures. Since the same source reported organisational justice, perceived benefits of training, and motivation to participate in training, it is likely that common method variance inflated true relationships between these variables. Although the findings of this study are strengthened somewhat by the use of structural equation modelling, a longitudinal design and more sources of data would be useful to assess the causality of the hypothesised relationships. A second feature of the current research was that the relationships observed between variables reflected individuals' perceptions of reality, and not independent objective observations. The third restriction of the current study is related to the representativeness issue of the sample. As with all research, there are contextual limits based on the sample. In this case, the sample represented only one industry (health care) in only one country (Korea).

CONCLUSION

Three salient conclusions can be made. First, employees' justice perceptions are a critical predictor of their motivation to participate in training and the partial mediation model is a dominant model in predicting the relationships. This is consistent with the view that each dimension of justice (distributive, procedural, and interactional) is associated with a variety of positive work attitudes and behaviours. Moreover, these dimensions of justice often work interactively (Konovsky & Cropanzano 1991, Barling & Philips 1993, Brockner & Wiesenfeld 1996). Second, the differentiated perceptions of justice dimensions can guide different reactions to training participation. That is, employees' perception of procedural justice necessitates such additional aids as perceived benefits of training to affect the motivation to participate in training activities, whereas interactional justice operates, itself, as a motivator for employees which may affect their motivation to participate in training activities. Third, employees' perceptions of training benefits are a strong motivating force for training participation. The more benefits employees think they can obtain from participating in training activities, the greater their degree of motivation to participate in such activities.

This study has important implications for HR practitioners or departments that are developing strategic HR systems or conducting activities where employee motivation for training is of interest. First, the framework of this study offers a diagnostic tool for assessing the abilities of organisations to utilise the potential of HR activities in reaching strategic goals. That is, by examining how the strategic coordination between HRM-HRD can be achieved in practice to achieve competitive advantage, institutional cells can not only obtain an important guide to build a competitive HR system, but also describe more explicitly the relationship between the objectives of the organisation and HR activities. Second, this study suggests a need for better understanding the fairness process in a HR system. In order to gain a better understanding about an individual's training motivation and organisational training effectiveness, HR practitioners or relevant associated departments are encouraged to pay attention to both procedural and interactional justice before the employee is engaged in the learning activity. Furthermore, they should consider separate approaches to procedural and interpersonal learning dimensions according to the organisational objectives for the given situation. Third, the findings of this study also suggest that HR practitioners or their auxiliary departments need to 'act up' to the formal organisational procedures and pursue the quality of interpersonal treatment. Not as simply providers or managers of HR practices, HR practitioners or their department should involve themselves in high quality workplace fairness, as well as support efforts to encourage the strengthening of this competitive HR system. By realising the full potential of the notion of organisational justice, they could enable organisational training design to be effectively linked with the important aspects of organisational life, such as performance appraisal, compensation, and employee relationship management (ERM) under the umbrella of corporate strategy.

This study raises several issues for future research. First, further research endeavours might examine the nature of procedural and interactional dimensions during specific pre training situations. Although interactional justice is often criticised as not being an independent construct, but instead represents the interactional side of procedural justice (Greenberg 1993), a number of studies have demonstrated that people also react to their perceptions of the interactional treatment they receive from decision makers (Bies & Moag 1986, Shapiro 1993, Brockner & Wiesenfeld 1996, Rahim, Magner & Shapiro 2000). Illuminating the relationship between these two justice climates and training related outcomes could contribute to expanding the existing knowledge in the training effectiveness literature. Second, future research should seek to explore more appropriate assessments of an individual's attitude and behavioural intention toward training or development activities. In this study, the endogenous (dependent or mediating) variables did not reflect employees' actual motivation during the training activity, but focused on their pre training motivation prior to engagement. Furthermore, since the scale used for measuring employees' perception of training benefits was developed in 1980s, it may be outdated to reflect today's more complicated organisational learning and training situations. Future research needs to investigate training related motivation in actual training settings, along with the new development of a measurement scale. Last, more research needs to be conducted in various samples to confirm validation of the theoretical model assessed in this study. Research in additional countries and occupational settings would be valuable to investigate the significance of relationship centred training effectiveness as perceptions of the justice dimensions and training benefits or motivation to participate in training are likely to be moderated by different research contexts including culture, industry, and organisational position.

AUTHOR

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APPENDICES

Appendix 1 Exploratory Factor Analysis Results of the Organisational Justice Items

Descriptions	Factors		
	1	2	3
Eigenvalues	5.924	1.955	1.239
Percentage of variance explained	44.165	14.571	9.234
Cumulative percentage of variance explained	44.165	58.736	67.970
My work schedule is fair.	.430	.222	.652
I believe my level of pay is fair.	.329	.277	.839
I consider my workload to be quite fair.	.330	.240	.793
Generally, the rewards I receive here are quite fair.	.307	.340	.883
I feel that my job responsibilities are fair.	.373	.316	.677
The decisions my hospital makes in the level of organisation are in an unbiased manner.	.273	.693	.524
My hospital makes sure that all employees' concerns are heard before job decisions are made.	.267	.797	.404
My hospital has procedures to collect information for making decisions accurately and thoroughly.	.170	.846	.247
My hospital has procedures that are designed to allow the requests for clear explanation or additional information about a decision.	.180	.866	.265

Descriptions	Factors		
	1	2	3
Eigenvalues	5.924	1.955	1.239
All decisions of my hospital are applied consistently and impartially across all affected employees.	.349	.692	.191
My hospital has procedures that allow an employee to appeal or challenge a decision.	.222	.760	.239
When decisions are made about my job, my supervisor treats me with kindness and consideration.	.573	.059	.209
When decisions are made about my job, my supervisor considers my personal needs with the greatest care.	.823	.284	.396
When decisions are made about my job, my supervisor treats me with a truthful manner.	.893	.212	.378
When decisions are made about my job, my supervisor shows concerns for my rights as a nurse.	.872	.254	.423
Concerning decisions made about my job, my supervisor usually discusses the expected impacts of the decisions with me.	.847	.339	.370
When making decisions about my job, my supervisor offers reasonable explanations that I understand clearly.	.861	.302	.323
My supervisor explains clearly any decision if it is related to my job.	.794	.229	.307

Notes: a. N = 302. b. Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. c. Factor 1 = interactional justice, Factor 2 = procedural justice, and Factor 3 = distributive justice.

Appendix 2 Exploratory Factor Analysis Results of the Motivation to Participate in Training and the Perceived Benefits of Training Items

Items	Factors			
	1	2	3	4
Eigenvalues	4.593	1.658	.923	.714
Percentages of variance explained	36.076	13.025	7.248	5.605
Cumulative percentage of variance explained	36.076	49.101	56.349	61.954

Motivation to Participate in Training

I try to learn as much as I can from education/training programmes.	.425	-.274	-.108	.524
I believe I learn more from education/training programmes than other.	.376	-.317	-.177	.572
I am inclined to be motivated to learn the skills emphasised in education/training programmes.	.459	-.305	-.174	.482
I am willing to exert considerable effort in education/training programmes in order to improve my skills.	.473	-.209	-.061	.422

Items	Factors			
	1	2	3	4
Eigenvalues	4.593	1.658	.923	.714
I believe I can improve my skills by participating in education/training programmes.	.508	-.280	-.131	.475
I am able to learn the materials presented in most education/training programmes.	.313	-.206	-.134	.432
I am willing to invest effort to improve my skills and competencies related to my current job.	.304	-.217	-.150	.410
I am willing to invest effort to improve skills and competencies for learning purposes.	.196	-.324	-.489	.448
I am willing to invest effort to improve skills and competencies for promotion purposes.	.146	-.148	-.081	.281
Education/ training programmes are not helpful to me because I have all the knowledge and skills that are required to successfully perform my job.	.319	-.099	.055	.219

Perceived Benefits of Training

Participating in education/ training programmes will...

Help me perform my job better.	.558	-.300	-.259	.353
Give me a needed break from my job.	.292	-.664	-.418	.268
Help me improve the relationship with my manager.	.286	-.604	-.307	.297
Help me improve the relationship with my co-worker.	.336	-.667	-.303	.374
Help me stay up to date on new skills and processes related to my job.	.550	-.377	-.212	.386
Give me an opportunity to pursue different career paths.	.620	-.554	-.544	.383
Give me a better idea of the career path I want to pursue.	.594	-.624	-.391	.426
Help me get to my career objectives.	.574	-.532	-.429	.399
Help my personal development.	.552	-.270	-.197	.378
Increase my chances of getting a promotion.	.504	-.473	-.805	.445
Help me obtain an increase in salary.	.334	-.556	-.734	.285
Help me extend my relationships to employees from other departments.	.305	-.509	-.284	.301

Notes: a. N = 302. b. Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. c. Factor 1 = Job, Factor 2 = career, Factor 3 = Personal, and Factor 4 = Motivation to Participate