

The Dark Side of War for Talents and Layoffs: Evidence from Korean Firms

Ji-Young Ahn, Ph.D.
Assistant Professor of Management
School of Business, Ewha Womans University
52 Ewhayeodae-gil, Seodaemun-gu
Seoul 120-750, Korea
Tel. 82-2-3277-6714, Fax.82-2-3277-2777
E-mail: jy-ahn@ewha.ac.kr

Abstract In this study, we examine the effect of the war for talent on firm performance. We suggest a negative effect of layoff on the relationship between the war for talent and firm performance. Moreover we argue that investment in employee development for the period of war for talent and layoffs is a key solution to the current organizations, which implement both war for talent and layoff to increase organizational flexibility without suffering extra productivity losses and increased voluntary turnover. Using a longitudinal survey conducted by the government sponsored research institution over 653 Korean firms, the results show that war for talent does not have a significant impact on firm performance. However, findings indicate a negative relationship between war for talent practices and financial performance (productivity and ROA) when conducting layoffs, and a positive effect of the interaction between war for talent and layoff on turnover as expected. Lastly, the results indicate layoffs may be tolerable within firms pursuing “war for talents” as long as investments in employee developments are continued during layoff periods.

Keywords: War for talents, layoffs, employee developments, firm performance

The recent business environment of rapid change and innovation has called for considering how managing human resources (HRM) can contribute to organizational effectiveness. The strategic HRM literature building on resource-based view (RBV) has long argued that one of key elements for organizational success is acquiring and retaining human resources that are valuable, unique, and difficult to imitate (Barney, 1991; Lepak and Snell, 1998). It is no wonder that many firms put greater efforts to win the talents and “war for talents” continue to heat up. Talents are largely defined as individuals who have the knowledge, skills and values required for today and tomorrow, work hard and give their discretionary energy to the firm’s success, and make a real contribution via their work (Ulrich, 2006). The notion of “war for talents” is referred to as firm’s initiatives to attract top talents from external labor market and retain them (Chambers et al, 1998). Despite the popularity of “war for talents” as strategic initiatives to gain competitive advantage, empirical research on the impact of these practices on organizational performance is largely absent. Thus, one objective of the study is to examine the economic effect of “war for talents” HR practices on organizational performance.

Another key issue in this study is the use of layoffs within organizations pursuing “war for talents”. Evidence shows that many firms put a greater emphasis on the “war for talent” during the corporate restructuring periods since the global financial crisis in 2008 (Hewitt’s survey of 2008). “Layoff”, the elimination of jobs in an organization, is used as a management tool not only for cost-cutting, but also enhancing flexibility through removing employees whose skills no longer fit organizational goal or strategy (Zatzick & Iverson, 2006). In this vein, it appears that layoff is consistent with the notion of “war for talents” in that both can help adjust workforce competencies. However, to some degrees, both practices implicitly send incongruent messages to employees. Therefore, we argue that two sets of HR practices, when occurred together, could be detrimental to organizational performance from the survivor employees’ perspective,

suggesting that “war for talents” threaten their competitive advantage when conducting layoffs.

Our final objective is to explore *how* firms could use layoffs along with “war for talents” practices, when needed, without experiencing negative effects on performance. We drew resource-based and human capital views to address this issue. We argue that investments in employee development can mitigate the negative impact of layoffs on the relationship between the “war for talents” practices and firm performance. As long as firms continue to make investments in employee developments during the layoff periods, “war for talents” practices may not be incongruent with layoffs. We argue that providing enhanced support and skill development to surviving employees will mitigate the negative effect of perceived contract breaches caused by both practices.

Using a longitudinal survey conducted by the government sponsored research institution over 653 Korean firms, we measure both “war for talents” practices and layoff at three points in time to test the prediction that investments in employee developments attenuate the negative effects of layoffs in firms implementing “war for talents” practices.

Theoretical background and Hypotheses

War for talent and organizational performance

The rationale behind “War for talent” implicitly assumes the existence of multiple HRM system within a single organization. The idea is that firms are better able to manage diverse workforce by using multiple HRM systems which differentiates the value of human capital than does a firm with a single HRM system. Proponents of multiple HR systems within a firm (e.g., Lepak and

Snell, 1999; Lepak, Takeuchi and Snell, 2003) pointed that “one-size-fits-all” approach (Lepak and Snell, 1999) is unrealistic and differentiated HR system can help the attraction and retention of talents, leading to a greater performance. Conversely, some researchers in favor of single HRM system within the firm (e.g., O’Reilly II and Pfeffer, 2000; Pfeffer, 1998) contended that differentiated HR system across employees hurts the organizational performance (e.g., Bloom, 1999). This is because such difference may discourage cooperation (Deutsch, 1985) and demotivate employees who do not belong to talents group.

There are several reasons that organizations strive to acquire an outstanding workforce outside the organization. First, firms are able to promptly acquire valuable knowledge and skills they cannot develop internally. This is particularly pronounced when firm seek innovation and change (Powell et al., 1996). Second, when a firm hires outside talents to improve performance of existing competencies, it may be helpful to exploit the firm’s current knowledge and capabilities (Groysberg and Lee, 2009), leading to a greater performance. Talents with high level of ability and with past achievement history tend to generate profits which outweigh search costs. As Williamson (1986) noted, it is unlikely that knowledge workers suffer productivity losses or performance decline when they move to another company. Thus, knowledge and skills gained from hired talents will play a complementary role to exploit and expand current capabilities, and then such complementarity may lead to higher productivity (Ichniowski et al., 1997). In sum, these arguments suggest that hiring talents will enhance the organizational capabilities. This leads to the following hypothesis.

H1a: More extensive use of “war for talent” practices will have a positive effect on organizational performance

On the negative side, “war for talents” can hurt organizational performance in the following reasons. First, “war for talent” put an emphasis on the individual rather than team, implying that firm performance is simply the sum of the contribution of individual employees (Maister, 1993). Scholars have argued that individual-oriented work practices such as individual merit pay do not always lead to a higher performance due to excessive internal competition (Pfeffer, 2001), perceived unfairness and demotivation of non-talent employees (Kochan & Osterman, 1994; Pfeffer, 1994), hamper cooperation (Bloom, 1999) and sharing knowledge inside firms (Pfeffer, 2001).

Second, the glorification of outsiders (Pfeffer, 2001) will bring about a tendency to derogate the firm-specific knowledge and skills accumulated for a long time, so that it may send a fallacious signal to the employees and hamper to build up the firm-specific tacit knowledge. The preferential treatments that hired talents may receive, including relatively higher position compared to comparable employees inside with similar job experiences, higher compensation, and additional organizational support and benefits, will be salient to other employees (Salancik and Pfeffer, 1978). Moreover, equity perspective predicts that comparison with new hired talents may cause a negative effect on employees’ perception of fairness (Adams, 1965; Festinger, 1954). Such comparison process exacerbates the supposed negative response due to uncertainty in that outsiders’ performance will not be easily covered in the first 2-3 years. Studies find that it takes 2-3 years for newcomers to contribute to firm’s performance (e.g., Hitt et al., 2001; Gabarro, 1985) including developing new skills specific to the company (e.g., Groysberg et al., 2006; Hitt et al., 2001; Gabarro, 1985) and internal network (Groysberg and Lee, 2008; Groysberg and Lee, 2009). Moreover, hired talents’ knowledge, skills, and capabilities will not be easily leveraged and utilized into the new organization (Hitt et al., 2001; Coff, 1997). Some studies found that not all talents have the social and managerial skills needed to manage employees and leverage their

own human capital (Hitt et al., 2001; Pfeffer, 2001). Thus, the benefit of the “war for talent” may not outweigh investment costs.

The negative impact of “war for talents” on performance will be particularly pronounced in collectivistic cultural context. The traditional HRM practices in Korea were rooted in the organizational identity and collective sense of “organization man” rather than emphasis on individual. The practices with respect to the “war for talent” can discourage senior managers who have been devoted to their company from the entry-level and who have continued to develop firm-specific tacit knowledge for a long time. This leads to the following hypothesis 1b.

H1b: More extensive use of “war for talent” practices will have a negative effect on organizational performance

War for Talents, Layoffs, and Performance

Layoffs are pervasively used to enhance firm’s efficiency in contemporary organizations (Brockner et al., 2004) and the simultaneous use of the war for talent and layoffs became a management fashion in practice. The main purpose of layoff is to lower labor costs, maximize the efficiency, and increase profitability (Brockner et al., 2004; Zatzick and Iverson, 2006). Despite its expected positive effect, empirical results of layoffs on organizational performance are at best mixed (Yu and Park, 2006; Brockner et al., 2004; Zatzick and Iverson, 2006). Some studies show that layoffs can have negative effects to the surviving employees, such as perceived psychological contract violation (Rousseau and Aquino, 1993; Edwards, Rust, McKinley and Moon, 2003), decreased commitment and employee productivity (Appelbaum, Everad, & Hung, 1999; Brockner, 1992), declined job involvement (Brockner, Grover and Blonder, 1988), threat of

job insecurity (Brockner et al., 1993; Fisher, 1991), increased job stress and symptoms of burnout (Casio, 1993), and voluntary turnover (Spreitzer and Mishra, 2002).

We argue that layoffs can be more detrimental to organization focusing on the “war for talent” in the following reasons. First, organizations that implement both “war for talents” and layoffs together can send inconsistent messages to surviving employees, thereby damaging organizational trust of survivors. The former implies a “workforce expansion” by hiring the best people possible while the latter put an emphasis on “workforce reduction” by terminating some existing employees. Such incongruence sent by HRM practices, so-called “double-bind communication”, causes a negative effect on employees’ trust in management (Bowen & Ostroff, 2004).

In addition, the simultaneous use of layoff and war for talents practices can hurt knowledge exchange/sharing and creation (Fukuyama, 1995; Collins & Smith, 2006) As noted above, the use of these practices may send negative signal that accumulating firm-specific knowledge is not worth pursuing. Further, employees may perceive that hired talents are their rivals who stole their position and limit promotional opportunities. Casciro and Lobo (2008) found that negative affect for the other party reduced the reliance on task competence as a criterion for the choice of work partners. Thus, hired talents’ knowledge, ideas, and skills cannot be easily transferred and leveraged to incumbent employees in these organizations.

Moreover, these practices may lead survivors to withdraw from the organization. Employees suffering from “survivors’ syndrome” through the layoff process including anger, stress, and insecurity tend to lower their effort, commitment, involvement into the job, and intention to stay in the organization. The possibility of losing coworker will lead to a loss in co-worker complementarity. Hayes et al.(2005) found that the departure of one pair of employees would increase the probability of other’s turnover. Employees will be dejected when a coworker or boss

who spent a lot of time working with and investing in firm-specific skills each other departs from the firm. In particular, they argued that the departure of a long-tenured manager would have a larger impact on turnover probability for a long-tenured other one, and managerial turnover is significantly higher when the incoming manager has shorter tenure with the firm. Therefore, a simultaneous implementation of these practices will lead to increase the turnover of the long-tenured managers who have substantial firm-specific knowledge and skills.

Finally, the simultaneous use of the “war for talent” and layoffs could harm a perceived fairness of survivors. Studies found that survivors’ reactions are influenced by organizational justice (Spreitzer and Mishra, 2002; Mishra & Spreitzer, 1998). The survivors who were highly committed to organization before layoff felt that they were handled unfairly as compared to the employees with lower commitment to their firm (Brockner, Tyler, and Cooper-Schneider, 1992).

In Korean firms, the implementation both “war for talent” and layoff practices may be particularly detrimental to organizational effectiveness. In countries emphasizing collectivism, group harmony and job security are regarded as critical factors to achieve the organizational goal (Kim, Park, & Suzuki, 1990). It is no wonder that the layoffs and external talent can break the logic of job security and group harmony (Shah, 2000). Therefore, we propose the hypothesis related to the interaction effect as follows:

H2: The interaction of “war for talent” and layoffs has a negative effect on organizational performance

War for talent and Investments in Employee Developments in layoff firms

Although the simultaneous implementation of both “war for talent” and layoffs potentially negative impact on employee productivity and employee retention, it is necessary to respond their HRM to the business environment (Beltran-Martin et al., 2008). As Barney (1995) notes, "Although firm's resources and capabilities have added value in the past, changes in customer tastes, industry structure, or technology can render them less valuable in the future" (p. 51), firms should sometimes not only flexibly acquire the skills which is fit to constantly varying customers' needs, but also quickly remove the skills which is no longer fit to the market. Then, it is worth asking how organizations, pursuing “war for talent” and layoffs, can retain their firm-specific human capital and maximize organizational flexibility without suffering extra productivity losses and increased turnover.

We argue that continued investments in employee development for the period of implementing both practices can mitigate the negative impact of “war for talents” on firm performance during the layoffs. Firms' investments for employee development may improve not only firm-specific skills, but also extensive general skills and knowledge for employees' overall career development. Investments in the development of generic skills are incurred by workers whereas investments in firm-specific training are incurred by the firm (Lepak and Snell, 1999). Evidence shows that enhancement in employability through firms' investments in employees' general skill has a positive effect on firm performance and employee retention rather than causes turnovers (e.g., Bae and Lawler, 2000; Delery and Doty, 1996; Lee and Bruvold, 2003). Additionally, Zatzick and Iverson (2006) indicated that individuals who view themselves as marketable may perceive layoffs are less threatening. Therefore, we posit that firm's investment to improve both firm-specific skills and general skills can attenuate the negative effects of the simultaneous implementation of “war for talent” and layoff practices on the firm performance.

In a similar vein, continuous investments in employee development provide potential benefits

to organizations which pursue “war for talent” and layoff practices. When layoff decisions were announced, employees’ initial levels of trust may erode (Mishra and Spreitzer, 1998). Then, survivors who initially had distrust in the top management will change their perception when the organization constantly would put substantial efforts in developing employees’ personal interests. Even during the layoff, the employees’ belief that top management cares them may lead to a less threatening appraisal and resultant constructive responses (Mishra and Spreitzer, 1998). In other words, continuous investments in employee development indicate that firms set high values on internal firm-specific knowledge and employees’ career management. Therefore, employees may become “active advocates (Mishra and Spreitzer, 1998)”. Then, they may change their perception that both hiring high performers from outside the firm and layoffs are “necessary actions” to enhance organizational performance, thereby helping with top management. The perceived legitimacy of the organizational account for a layoff was positively related to survivors’ procedural justice perception (Mansour-Cole and Scott, 1998). Thus, employees are not afraid to take risks or to develop novel ways to improve situation (Mishra and Spreitzer, 1998; Rusbult et al., 1988). Ultimately, they seek to achieve the goals of the “war for talent” and layoff efforts with constructive attitudes, and develop firm-specific skills with more efforts in return for receiving reciprocal investment from the firm (Rousseau, 1995). Overall, the trust in top management caused by continuous investment in employee development will facilitate more organizational attachment, which may in turn, lead to lower voluntary turnover after layoffs (Spreitzer and Mishra, 2002; Lee and Bruvold, 2003).

Moreover, combining three practices including “war for talents”, layoff, and continuous investment in employee developments will facilitate to share, exchange, and create knowledge from a variety of sources. Organizational climate of trust and cooperation is widely considered as critical for increasing both social interaction and the likelihood of information exchange among

employees (Collins and Smith, 2006; Mayer et al., 1995; Nahapiet & Goshal, 1998). Thus, high levels of trust and cooperation also increase employees' tendencies to offer help, promote the exchange of valuable ideas among core knowledge workers. Consequently it can lead to innovation and firm growth (Collins and Smith, 2006). Casciro and Lobo (2008) found that favorable feeling toward someone increase a person's reliance on competency, facilitating access to organizational resources related to the task. Thus, employees are willing to not only acquire new skills and novel information from hired talents to flexibly respond to the fast-paced business environment, but also transfer their tacit knowledge to work together effectively.

Finally, when combined "war for talents", investments in employee development during layoffs will lead to an increase both numerical flexibility and functional flexibility of the organization. Organization will achieve the numerical flexibility (Atkinson, 1984) through the adjustment of number of employees by hiring and termination based on the needs. In addition, functional flexibility (Atkinson, 1984), which is related to employees' ability to accomplish a large number of diverse tasks (Wright and Snell, 1998; Beltran-Martin et al., 2008), will be increased through the constant training and education opportunities and transferred knowledge and skills from the hired talents. Studies show that high level of functional flexibility leads to higher organizational effectiveness (Cordery et al., 1993; Lepak et al., 2003; Beltran-Martin, 2008; Kelliher and Riley, 2003). Even during the layoffs, the opportunities to develop employees' careers through the extensive training/development practices and acquire new skills from the hired top performers would improve the competitiveness and help the employees manage their expanded roles more effectively. In sum, these practices result in enhancing employees' perceived control, and resultant productivity growth and strong commitment (Brockner et al., 2004).

Overall, the interaction of the three practices - war for talents, layoffs, and continuous

investments in employee development – will mitigate the negative effects predicted in Hypothesis 2, and then help increase employee productivity and retain employees. Therefore, we propose three-way interaction hypothesis as follows :

H3: The interaction of the “war for talents”, layoffs, and continuous investments in employee development will have positive effect on organizational performance (increase in labor productivity and organizational profitability)

Methods

Sample

To test hypotheses for this study, we used Human Capital Corporate Panel (HCCP) Survey in 2005, 2007, and 2009, which was collected by the Korean Research Institute for Vocational Education and Training (KRIVET) and KISLINE data from the Korea Information Services (KIS) from 2004 to 2010. We constructed this sample because it was longitudinal and contained information on a variety of practices related to the “war for talent” and education practices for employees, the number of detailed layoff and voluntary turnover, and financial information.

The survey respondents consisted of business strategy managers, HRM managers, and HRD managers, and each individual responded to the items related to their areas. KRIVET conducted the face-to-face interview and collected information. Over 450 Korean companies participated in this survey each year. Participation of the survey was limited to the companies with over 100 employees. However, to generalize the result of the study across the industry, firm size, and type (i.e., KOSDAQ, listed corporations), we did not limit the other organizational characteristics for this research. We used these 3 years (i.e., 2004, 2006, 2008) of data to acquire the HR-related

information, but used all publicly available data 2004 through 2009 to obtain financial information.

First, we compared variables that presented in each year and renamed them which were measured by the same items in different names as unified variables. In addition, after we listed up companies included in these surveys, we dropped companies that participated in the survey only one year. Then, we dropped nonprofit organizations from this study due to the lack of financial information. 410 companies included in 2005 survey participated in 2007, and 358 of the companies that participated in 2007 also responded to the survey in 2009. Therefore, our usable sample was 358 companies that completed the survey.

Measures

War for talents The companies that pay attention to the “war for talent” utilize diverse attraction and retention tools. Our measure of the extent of execution on the “war for talent” had two dimensions, recruitment tool to attract talents and retention tactics for them. We measured the extent of the implementation of the two-dimensional “war for talent” as the items as noted below. All the “war for talent” items were dummy coded as 1 if a company has the practice and 0 if it does not. We then calculated the number of the yes(1)-response. Included are items related to recruitment tools and diverse recruitment channels.

Recruitment Tools - Competitive compensation packages The firms are willing to provide the proactive initiatives, especially competitive compensation package to attract and retain superior talents (Horwitz, Heng and Quazi, 2003; Haesli and Boxall, 2005; Kim and Bae, 2005; Lawler and Finegold, 2000), because high-performers are likely to not only reject the job offer including noncompetitive compensation package, but also leave companies where they feel underpaid

(McKinsey & Company, 2001). In this study, we used 2 items to measure the monetary reward tactics representing competitive compensation packages as follows: ‘Providing signing bonus for top talents when hiring them’ and ‘Providing talents with higher salary compared with other employees who have similar job experiences to them’. Especially, signing bonus, which is one of the recruitment tactics, is well known as attraction tool commonly used to hire promising applicants from the external labor market (Kim and Bae, 2005) and to gain acceptance rate of job offers (Carlson, Connerley, & Mecham III, 2002).

Diverse Recruitment Channels According to RBV, the core resources that enable the firm to create sustainable competitive advantages are rare and valuable. Thus, the firms that strive to win the “war for talent” use a variety of recruitment tools to attract best people in the tight labor market. To measure those practices, we used 6 items which asked the respondents whether the practices, such as overseas recruitment, organizing a unit to exclusively take charge of recruiting talents, establishing database for the top candidate pools in the industry, utilization of search firms, and other recruitment tools, were being implemented in the organization or not. Since there are a lot of difficulties in recruiting sufficient number of top talents who meet the on-going business needs in local market, a lot of firms rely heavily on overseas recruitment (Haesli & Boxall, 2005). And it is able to be achieved through creating an extensive network of contacts at local and international recruitment agencies (i.e., the use of headhunters) (Horwitz et al., 2003; Haesli and Boxall, 2005; Phillips, 2008) or the efforts of the recruiting team which has full charge of hiring best people. Moreover, the firm establishes database for the top performers in the industry and regularly updates to continuously contact top talents.

Retention tactics The extent of the firm’s intensity of the talent retention was measured by whether the retention practices, including support of the top management and the existence of the HR manager(s) who is (are) in exclusive charge of retaining talented people, are being

implemented in the organization or not. One of the common retention strategies is related to work environment, in particular, encouragement from the top management is one of the most effective and popular strategies to retain the talented employees (Horwitz et al., 2003).

Layoff rate Respondents reported the number of employee laid off during a year. This survey clearly distinguished layoffs from voluntary turnover and other types of turnover, such as resignations, retirements, and firings for cause (i.e., dismissal in disgrace). Because layoffs are decided and implemented to achieve an organizational strategic aim and designed to enhance organizational performance and responsiveness to environmental change (Zatzick and Iverson, 2006; Kozlowski et al., 1993; Freeman and Cameron, 1993; Yu and Park, 2006).

We included “honorable” retirement, forced transfer to a job into the subsidiary, and involuntary turnover caused by spin-off as well as dismissal for managerial reasons. In the Korean context, honorable retirement has been regarded as an involuntary tool for employment adjustment unlike an early retirement in the US context (Yu and Park, 2006). Although an early retirement may be classified as voluntary turnover and often as an alternative to layoffs (Balkin, 1992), honorable retirement is used for downsizing in Korean organization.

We calculated the layoff rate over two-year period as the current year layoff plus previous year divided by the number of total employees in the year that was surveyed plus the number of layoff for two years. Especially, the number of production employees in the manufacturer was excluded from those numbers because the HR practices for them (production workers) were not comparable to the ones for other employees.

Investments in employee development We measured extent of the investments in employee development by implementing how many practices and policies to build employees’ knowledge and skills. Our measurement items consisted of extensive training and education policies and programs including two dimensions of HRD(Human Resources Development) – training focused

on firm-specific skills(e.g., succession plan, CDP) and practices for developing employees' general skills(e.g., providing tuition fee of the local / overseas graduate school). The extent of the firm's investment in employee development is measured by calculating the number of the practices that are formally provided for the purpose of employee development. The items used in this study to measure the extent of the investments in employee development were comprised 18 practices, including the following items : (a) e-learning program, (b) leave for training and development, (c) providing time to get the certificate at work, and so on.

All the "investments in employee development" items were dummy coded as a dummy variable 1 if a company implements the practice (Yes) and 0 if it does not(No). And then, we calculated the number of the yes(1)-response.

Dependent Variables

We chose three organizational performance indicators as dependent variables referring to the literature examining organizational-level measures of performance linked with HRM practices (e.g., Rogers and Wright, 1998; Dyer and Reeves, 1995). First, we measured employee productivity improvement by differencing productivity (t+1) – productivity (t)(e.g., Yu & Park, 2006; Chen et al., 2001). Productivity improvement has been used in various research in HRM area as proxy of the firm performance (e.g., Huselid, 1995; Zatzick and Iverson, 2006; De Meuse et al., 1994). We used *net income per employee* to measure employee productivity. In some recent SHRM research, revenues per employee are used to measure productivity (e.g., Datta, Guthrie, & Wright, 2005). However, it is not appropriate to account for productivity change resulting from layoff because job cut make sales per employee rise (Cappelli, 2000a; Zatzick & Iverson, 2006). In addition, it would often cost too much to implement practices to attract and retain superior talents. Therefore, it is important to use a measure of employee productivity capturing both revenue generated by employees and costs associated with the "war for talent"

management.

Secondly, we measured organizational profitability in the perspective of firm's financial performance. We chose ROA improvement as an indicator of operational performance because it is not only commonly used in the SHRM(e.g., Delery and Doty, 1996) and layoff research((De Meuse et al., 1994; Yu and Park. 2006), but also it reflects how efficiently firm's assets are utilized to generate sales (De Meuse et al., 1994). The measure of ROA was the change in ROA $(t+1) - ROA(t)$. We computed ROA as the ratio of net income to total assets

Lastly, we measured turnover rate in the perspective of the HR outcomes. Respondents were asked to provide the exact number of the firm's voluntary turnover during a year. In this survey, the number of production employees in the manufacturer was excepted because the HR practices for them (production workers) were not comparable to the ones for other employees. Turnover rate is computed as the number of the voluntary turnover during a year / the number of total employees (Production employees were excluded.).

Control Variables

We used various control variables. First, we considered variables related to *organizational characteristics*, including *organizational size, age, industry* (Gerhart, Wright, McMahan & Snell, 2000; Beltran-Martin et al., 2008), *type of business strategy, changes in several factors of business and market* (difficulties in a forecast of demands; changes in technologies, market share of main products, and organizational structures, and development and introduction of new products) as control that can account for an association between HR practices and firm performance. Several empirical studies have highlighted an important role for product and markets in firm's downsizing (Gilson, 1990) and recruitment decision. Moreover, survivors deemed new technology an acceptable reason for layoffs. Thus, we controlled the elements

related to changes in business, such as main products, technologies, and organizational structure and changes in market, including market share and demands. Based on the previous studies in the HRM field, we measured *size* as the logarithmic transformation of the number of employees (Huselid et al., 1997; Beltran-Martin et al., 2008).

We also included *the extent of firm's implementation of outplacement assistance programs* for laid-off workers as one of the control variables. We measured the extent of firm's efforts for victims' outplacement as the number of practices (such as providing victims with training programs, financial support to assist their starting a new enterprise and another job, and so on) in the organization. In prior research on layoffs (e.g., Brockner et al., 1990; Mishra and Spreitzer, 1998), authors focused on how survivors perceived the outcomes for victims, including adequacy of outplacement assistance and discharge allowance. They argued that survivors can be seem to estimate the downsizing as less threatening if laid-off workers receive adequate benefits and organizational support.

In addition, we considered elements related to *unions* as control variables, because a basic goal of unions is to protect members' job security and work environment (Zatzick and Iverson, 2006; Barling et al., 1992; Iverson and Pullman, 2000). Moreover, unionized firms need to consider union involvement as a critical factor for the successful adoption of HR practices (Kim and Bae, 2005). Thus, variables related to unions, such as the existence of labor union and union power would influence war for talent, layoffs, and employee development.

RESULTS

Table 1 presents the descriptive statistics and correlations for variables in the study. Among the independent variables, war for talent and investment in employee development were correlated. But VIF is less than 2 (1.383, 1.767, respectively), so the multicollinearity is not a problem. Table

2 and 3 presents the results of the hierarchical regression analyses. Table 2 shows the results of the effect of independent variables on productivity change (net income per employee) and ROA change. We present results in a hierarchical regression fashion to better depict the variance explained by the different sets of predictor variables. In step1 of table 2, which contains only the control variables, the coefficient for organization size is statistically significant and positive. In step 2, all of the independent variables were added to test Hypothesis 1. However, against our expectation, the explained variance from the war for talent is not statistically significant, neither positive nor negative. Layoff rate is significantly negatively associated with productivity ($\beta = -.29, p < .001$) and ROA ($\beta = -.32, p < .001$).

TABLE 1 Descriptive Statistics^a

	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. War for talent	2.30	1.55																			
2. Layoff rate	0.07	0.12	.051																		
3. Investment in employee development	5.38	3.23	.435**	-.051																	
4. Productivity	11060	180103	.080**	-.291**	.108**																
5. ROA	0.01	0.29	-.020	-.317**	.081**	.715**															
6. Turnover rate	0.15	0.22	.032	.409**	-.108**	-.348**	-.605**														
7. Organization size ^b	5.89	1.13	.306**	-.212**	.495**	.174**	.098**	-.174**													
8. Organization age	26.94	17.25	.019	-.047	.093**	.087**	.022	-.117**	.287**												
9. Industry_finance	0.08	0.27	.167**	.069	.292**	.085**	.007	-.013	.196**	.098**											
10. Industry service	0.24	0.43	.044	-.009	-.091**	-.043	.042	.013	-.163**	-.374**	-.161**										
11. year_2006	0.17	0.37	.069*	.364**	.023	-.006	-.016	.084*	.030	.001	-.005	.017									
12. year_2008	0.17	0.37	.029	.115**	.006	-.044*	-.066**	-.084*	-.003	.079**	.004	-.045	-.200**								
13. Changes in Business	3.12	0.93	.282**	.037	.296**	.024	-.032	.043	.221**	.036	.121**	-.176**	.016	.017							
14. Changes in market	2.98	0.97	.123**	.005	.112**	.019	-.031	.036	.038	-.004	.081**	-.078**	-.029	.127**	.347**						
15. Business strategy	2.09	0.77	.236**	-.079*	.218**	.012	-.012	-.013	.194**	.050	.080**	-.060*	-.009	-.003	.330**	.125**					
16. Extent of outplacement program	0.09	0.40	.153**	.078*	.319**	.064**	.010	-.025	.305**	.081**	.195**	-.033	.024	.015	.072**	.035	.087**				
17. Dummy_union ^c	0.74	0.44	.037	.083*	.164**	.049	.061*	-.093**	.281**	.302**	.083**	-.207**	.139**	.234**	.064*	.074**	-.025	.100**			
18. Union power	1.59	1.76	.012	-.009	.232**	.079**	.070**	-.140**	.372**	.344**	.176**	-.181**	.036	.063**	.068*	.035	.009	.197**	.724**		
19. Unemployment rate	3.47	0.21	-.065*	-.262**	-.017	.049*	.095**	.084*	-.011	-.091**	-.002	.044	.115**	-.918**	-.027	-.133**	.008	-.028	-.333**	-.089**	

^a n=296, **: p<.01, *: p<.05; two-tailed tests

^b Logarithm, ^c Coded "1" if union exists in the organization, "0" if not

Coefficients for investment in employee development are significantly positive (productivity: $\beta = .12$, $p < .05$; ROA: $\beta = .10$, $p < .05$). Thus, neither Hypothesis 1a nor 1b was supported.

Hypothesis 2 suggests a negative interaction between war for talent and layoff for firm performance. As shown in Table 2's step3, the interaction effect of war for talent and layoff is statistically significant and negative (productivity: $\beta = -.38$, $p < .001$, $\Delta R^2 = .030$; ROA: $\beta = -.48$, $p < .001$, $\Delta R^2 = .047$). Additionally, the results of the regression analyses depicted in step 3 of Table 3 also provide information related to Hypothesis 2, which propose a positive effect of two-way interaction of war for talent and layoff on turnover. As shown in Table 3, the interaction effect is statistically significant and positive ($\beta = .49$, $p < .001$, $\Delta R^2 = .054$). Therefore, we can interpret these results as showing that simultaneous use of war for talent and layoff practices has a negative effect on organizational effectiveness. Therefore, Hypothesis 2 is supported.

Hypothesis 3, which proposes a positive effect of the three-way interaction among war for talent, layoff, and investment in employee development on firm performance. It is necessary to enter all the two-way interactions along with the three-way interaction to identify the true three-way interaction effect and interpret it (Aiken & West, 1991). The findings presented in step 4, table 2 and 3, show that the three-way interaction among three independent variables is positive and significant when regressed on productivity ($\beta = 1.09$, $p < .001$, $\Delta R^2 = .134$) and ROA ($\beta = 1.37$, $p < .001$, $\Delta R^2 = .180$), and negative and significant when regressed on turnover ($\beta = -.84$, $p < .001$, $\Delta R^2 = .122$). Interestingly, as shown in table 2, all of the two-way interaction effects on financial performance (productivity and ROA) are negative although the two-way interaction between investment in employee development and layoff is not significant. In next chapter, we explained the interpretation of these findings more specifically.

TABLE 2
Results of Regression Analyses for Productivity and ROA^a

Variables	Productivity				ROA			
	Step1	Step2	Step3	Step4	Step1	Step2	Step3	Step4
(1) Control variables								
Organization size	.16***	.04	.04	.06	.11**	-.01	-.02	.00
Organization age	.04	.01	.00	-.01	.00	.01	.00	-.02
Industry_finance	.04	.03	.02	.02	-.00	.01	-.01	0.01
Industry_service	.00	-.01	-.01	-.01	.06*	.02	.02	0.03
Changes in business	-.01	-.07†	-.06	-.04	-.03	-.06	-.04	-.02
Changes in market	.02	-.04	-.03	-.02	-.01	-.04	-.04	-.02
Business strategy	-.02	-.07†	-.07†	-.06†	-.01	-.03	-.04	-.03
Extent of outplacement program	.02	.05	.04	.01	-.03	.02	.02	-.03
Union	.01	.12†	.12†	.04	.11*	.14*	.15*	0.05
Union power	-.02	-.01	-.01	.06	-.03	-.06	-.06	0.04
Year dummies	yes	yes	yes	yes	yes	yes	yes	yes
(2) Independent variables								
War for talent		-.03	.07	.40***		-.05	.07	.42***
Layoff rate		-.29***	.04	.40**		-.32***	0.1	.59***
Investment in employee development		.12*	.12**	.12†		.10*	.11*	0.09
(3) Two-way interactions								
War for talent X layoff			-.38***	-1.57***			-.48***	-1.91***
War for talent X investment in employee development				-.42***				-.43***
Investment in employee development X layoff				-.12				-.26
(4) Three-way interactions								
War for talent X layoff X investment in employee development				1.09***				1.37***
N	1290	690	690	690	1,312	697	697	697
F	4.19***	7.76***	9.02***	15.92***	3.36***	6.97***	9.32***	20.05***
R ²	.038	.147	.177	.311	.030	.133	.180	.360
Adjusted R ²	.029	.128	.157	.291	.021	.114	.160	.342

^a †: p<.10, *: p<.05, **: p<.01, ***: p<.001; All p-values are based on two-tailed tests.

DISCUSSION

Our first purpose in this study is to examine the impact of “war for talents” practices on organizational performance. Based upon a large survey of 358 publicly traded Korean firms and archival financial data for six years, we do not find strong evidence of a significant impact of “war for talents” on the improvement of a firm’s productivity and efficiency. There are explanations for the absence of an effect. It suggests that attracting and retaining certain types of human capital such as “star employees” or “top performers” are very costly. Thus, early investments in such human capital on average may not produce substantial enough benefits to offset the costs in a short-term period in Korean economy. The returns to this approach will increase as new talents develop relational and managerial competencies and transfer their own skills to new environment.

The simultaneous use of layoffs and “war for talents” practices has become part of a management strategy for adjusting workforce competencies. We found that the hypothesized interaction of “war for talents” and layoffs had a negative effect on firm performance, suggesting that “war for talents” threaten their competitive advantage when conducting layoffs. In addition, we found that the relationship between war for talents and turnover will be positive when firms experience layoffs. There are reasons to expect such relationship. Layoffs breach the psychological contract between a workplace and its employees (Casio & Wynn, 2004). Organizations that implement both “war for talents” and layoffs together can send inconsistent messages to employees. Such inconsistency in HRM practices may deteriorate trust and loyalty to organizations. Moreover, layoff survivors tend to perceive unfair when firm’s resource allocation such as lucrative incentives and various retention tactics are exclusively centered toward top talents. Thus, survivors are less willing to cooperate with new talents so that new talents are difficult to utilize their own competencies.

Moreover, such detrimental impact on firm performance is particularly pronounced in collectivistic culture like Korea. When both practices occur together, group harmony and collaboration, which has been the critical factor for organizational success during past decades, will be substantially weakened, which in turn hamper organizational performance.

Our final objective was to understand *how* firms could use layoffs along with “war for talents” practices, when necessary, without experiencing negative effects on performance. We found that investments in employee development can mitigate the negative impact of layoffs on the relationship between the “war for talents” practices and firm performance. Some scholars helps explain these findings that firms use a combination of “war for talents” and layoffs to remain flexible and to adjust workforce competencies to their changing environments (Lepak and Snell, 1998). Our results suggest that layoffs may be acceptable within firms pursuing “war for talent”, as long as continued investments in employee development are made during layoff periods. Continued investments such as skill training, sponsoring school program, and job enrichment in employee developments help layoff survivors recover from ‘survivor’s syndrome’ including anger and job insecurity and rebuild trust and commitment to organizations. Furthermore, when combined layoffs, continued investments in employee development opportunities help firms gain numerical and functional flexibility in the management of their workforces. Such investments can enhance employees’ knowledge, skills, experience, and marketability (Zatzick & Iverson, 2006), thereby increasing productivity growth and employee morale (Brockner et al., 2004). This result is also consistent with Lepak and Snell (1999)’s proposition that firms need to use multiple employment modes to utilize different market opportunities: an organization’s HR strategies should change as employee value and uniqueness change over time. Overall, these findings are also consistent with previous layoff research, suggesting that downsizing is more successful when they are part of a planned change, rather than when they are part of cost-

cutting tool (Cameron, Freeman, & Mishra, 1993; Pfeffer, 1998; Zatzick & Iverson, 2006).

Our study also has limitations that suggest future research and refinements. First, our use of a dichotomous measure meaning the existence of a formal HR practice was a limitation. We could not assess the actual usage of “war for talents” practices and employee development programs. However, we did confirm that our measure of presence of employee development is significantly correlated to the actual dollar amount firms spent on education, training, and developments, which is obtained from the archival financial data.

Second, there is a lack of measures of employee perceptions of “war for talents” practices, investments in employee developments and layoffs. Many studies have emphasized the negative employee perceptions associated with layoffs and “war for talents”. We do not have behavioral data to measure perception by employees that influence employee behavior and performance although we provide a theoretical explanation for these underlying processes. Hence, there is an essential need for field research that directly examines the effects of HRM practice on employee relations, perceptions, and behavior.

It is also worth noting whether our focus on Korean workplaces limits the generalizability of our findings. Layoffs and “war for talents” practices have become a common business practice and are viewed as an important device with which management directs firms through changing environments around the world (McKinley et al., 2000; Pfeffer, 1998). However, geographical context may matter as there is a great deal of variation in the regulatory environment with respect to layoffs (Zatzick & Iverson, 2006). Korea has a relatively limited “safety net” than some other countries such as Canada. The lack of a safety net may make it more difficult for firms to justify the layoff decision. Thus, further research is necessary to verify that our findings are generalizable to other countries.

Considering the full range of practices, our evidence does not suggest a reverse-causal explanation wherein relatively less successful organizations were more likely to use the

layoffs and the extensive “war for talents” in order to challenge status quo. Our findings with respect to the lagged structure of differenced outcome, capturing the improvements after a certain HRM practices are inconsistent with a reverse-causality perspective. However, our study calls for a further study that will examine the long-term effect of “war for talents” and its interaction of layoffs on organizational performance.

In conclusion, this research has potentially significant implications for human resource management as well as for managerial practices. Yet evidence to present that “war for talents” do not improve performance calls for further study. We extend this finding to include workplaces undergoing layoffs. When continued investments in employee development will attenuate psychological contract violation by providing support and skill development to surviving employees, thus maintaining productivity.

References

- Adams, J.S. 1965. Inequity in social exchange. *Advances in experimental social psychology*. 62: 335-343.
- Aiken, L. S., & West, S. G. 1991, *Multiple regression: Testing and interpreting interactions*, Beverly Hills, CA: Sage.
- Armstrong-Stassen, M. 1994. Coping with transition: A study of layoff survivors. *Journal of Organizational Behavior*, 15: 597-621.
- Appelbaum, S. H., Everard, A., & Hung, L. 1999. Strategic downsizing: Critical success factors. *Management Decision*, 37: 535–552.
- Atkinson, J. 1984. *Flexibility, Uncertainty and Manpower Management*, IMS Report No.89, Institute of Manpower Studies, Brighton.
- Bae, J., & Lawler, J. 2000. Organizational and HRM strategies in Korea: Impact on firm performance in an emerging economy, *Academy of Management Journal*, 43: 502–517.
- Balkin, D.B. 1992. Managing employee separations with the reward system, *Academy of Management Executive*, 6(4): 64-71.
- Barling, J., Fullagar, C., & Kelloway, E. K. 1992. *The union and its members: A psychological approach*. New York: Oxford University Press.
- Barney, J. 1995. Looking inside for competitive advantage. *Academy of Management Executive*, 9(4), 49-61.
- Barney. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99 -129.
- Becker, G. 1964. *Human Capital*. New York: Columbia U. Press.
- Beechler, S., & Woodward, I. C. 2009. The global "war for talent", *Journal of International Management* 15, 273-285.
- Beltran-Martin, I., Roca-Puig, V., Escrig-Tena, A., & Bou-Llugar, J.C. 2008. Human Resource Flexibility as a Mediating Variable Between High Performance Work System and Performance. *Journal of Management*. 34(5): 1009-1044.
- Blau, P. M. 1964. *Exchange and Power in Social Life*, New York: John Wiley & Sons.
- Bloom, M. 1999. The performance effects of pay dispersion on individuals and organizations, *Academy of Management Journal*, 42(1): 25-40.
- Bond, M., Leung, K., & Wan, K. 1982. How does cultural collectivism operate? The impact of task and maintenance contributions on reward distribution. *Journal of Cross-Cultural Psychology*, 13, 186–200.
- Bowen, D. E., & Ostroff, C. 2004. Understanding HRM-firm performance linkages: The role of the “Strength” of the HRM system, *Academy of Management Review*, 29(2): 203–221.

- Brockner, J. 1992. Managing the effects of layoffs on survivors. *California Management Review*, 34(2): 9–28.
- Brockner, J., & Greenberg, J. 1990. *The impact of layoffs on survivors: An organizational justice perspective*. In *Applied Social Psychology and Organizational Settings*, edited by J. Carroll, pp. 45–75. Hillsdale, NJ: Erlbaum.
- Brockner, J., Grover, S. L., & Blonder, M. D. 1988. Predictors of survivors' job involvement following layoffs: A field study. *Journal of Applied Psychology*, 73: 436 – 442.
- Brockner, J., Grover, S., Reed, T., & Dewitt, R. 1992. Layoffs, job insecurity, and survivors' work effort: Evidence of an inverted-U relationship. *Academy of Management Journal*, 35, 413–425.
- Brockner, J., Konovsky, M., Cooper-Schnieder, R., Folger, R., Martin, R., & Bies, R. J. 1994. Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss. *Academy of Management Journal*, 37: 397-409.
- Brockner J., Spreitzer, G. M., Mishra, A. M., Hochwarter, W., Pepper, L., & Weinberg, J. 2004. Perceived control as an antidote to the negative effects of layoffs on survivors' organizational commitment and job performance, *Administrative Science Quarterly*, 49: 76 –101.
- Brockner J, Tyler TR, Cooper-Schneider R. 1992. The influence of prior commitment to an institution on reactions to perceived unfairness: the higher they are, the harder they fall. *Administrative Science Quarterly*, 37: 241-261.
- Brockner, J., Wiesenfeld, B. M., Reed, T. F., Grover, S., & Martin, C. 1993. Interactive effect of job content and context on the reactions of layoff survivors. *Journal of Personality and Social Psychology*, 64, 187–197.
- Brockner, J., Wiesenfield, B., Stephan, J., Hurley, R., Grover, S., Reed, T. 1997. The effects on layoff survivors of their fellow survivors' reactions. *Journal of Applied Social Psychology*, 27: 835-863.
- Cappelli, P. 2000b. Managing without commitment. *Organizational Dynamics*, 28(4): 11–24.
- Carlson, K D., Connerley, M. L., & Mecham, R. L. 2002. Recruitment Evaluation: The case for assessing the quality of applicants attracted, *Personnel Psychology*, 55, 461-490.
- Casciaro, T., & Lobo, M. 2008. When Competence Is Irrelevant: The Role of Interpersonal Affect in Task-Related Ties, *Administrative Science Quarterly*, 53 : 655–684.
- Cascio, W. F., Young, C. E., & Morris, J. R. 1997. Financial consequences of employment-change decisions in major US corporations, *The Academy of Management Journal*, 40(5): 1175-1189.
- Cascio, W. F. 1993. Downsizing: What do we know? What have we learned, *Academy of Management Executive*, 7(1): 95-104.
- Chambers, E., Foulon, M., Handfield-Jones, H., Hankin, S., Michaels III, E., 1998. The war for talent. *The McKinsey Quarterly* 3, 44–57.
- Chang, E. M. 2002. Distributive justice and organizational commitment revisited: moderation by

- layoff in the case of Korean employees , *Human Resource Management*, 41(2): 261–270.
- Chang, E.M., & Han, J. H. 2006. Does pay-for-performance enhance perceived distributive justice for collectivistic employees?, *Personnel Review*. 35(4): .397-412.
- Chen, P., Mehrotra, V., Sivakumar, R., & Yu, W. W. 2001. Layoffs, shareholders' wealth, and corporate performance, *Journal of Empirical Finance*, 8: 171-199.
- Coff, R. W. 1997. Human Assets and Management Dilemmas : Coping with Hazardous on the Road to Resource-Based Theory, *Academy of Management Review*, 22(2): 374-402.
- Collins, C. J., & Smith, K. G. 2006. Knowledge exchange and combination: The role of human resource practices in the performance of high technology firms, *Academy of Management Journal*, 49: 544-560.
- Cordery, J., Sevastos, P., Mueller, W.,& Parker, S. 1993. Correlates of employee attitude toward functional flexibility, *Human Relations*, 46(6): 705-723.
- Datta, D. K., Guthrie, J. P., Basuil, D., & Pandey, A. 2010. Causes and Effects of Employee Downsizing: A Review and Synthesis, *Journal of Management*, 36(1), 281-348.
- Delery, J. E., & Doty, D. H. 1996. Modes of theorizing in strategic human resource management: Test of universalistic, contingency, and configurational performance predictions, *Academy of Management Journal*, 39: 802-835.
- De Meuse, K. P., Bergmann, T. J., Vanderheiden, P. A., & Roraff, C. E. 2004. New evidence regarding organizational downsizing and a firm's financial performance: A long-term analysis, *Journal of Managerial Issues*, 16: 155-177.
- De Meuse, K.P., Vanderheiden, P.A., & Bergmann, T.J. 1994. Announced layoffs: their effect on corporate financial performance, *Human Resource Management*, 33(4): 509-530
- Deutsch, M. 1985. *Distributive justice: A social-psychological perspective*. New Haven, CT: Yale University Press.
- Dougherty, D., & Bowman, E. H. 1995. The effects of organizational downsizing on product innovation, *California Management Review*, 17: 28-44.
- Dyer, L. & Reeves, T. 1995. HR strategies and firm performance: what do we know and where do we need to go?, *The International Journal of Human Resource Management*, 6: 656-670.
- Edwards, J. C., Rust, K. G., McKinley, W., Moon, G. 2003. Business Ideologies and Perceived Breach of Contract during Downsizing: The Role of the Ideology of Employee Self-reliance, *Journal of Organizational Behavior*, 24: 1 – 23.
- Evans, P., & Genadry, N. 1999. A duality-based prospective for strategic human resource management. In G. R. Ferris (Ed.), *Research in personnel and human resources*: Suppl. 4, 367-395. Greenwich, CT: JAI.
- Festinger, L. 1954. A theory of social comparison processes. *Human Relations*, 7(2): 117-140.

- Fisher, A. B. 1991. *Morale crisis*. Fortune, June 6: 70-80.
- Freeman, S.J., & Cameron, K.S. 1993. Organizational downsizing: a convergence and reorientation framework, *Organization Science*, 4(1): 10-29.
- Fukuyama, F. 1995. *Trust: Social Virtues and the Creation of Prosperity*. NY: Free Press.
- Gabarro, J. J. 1985. When a New Manager Takes Charge. *Harvard Business Review*. 63(3): May-June, 110-123.
- Gerhart, B., Wright, P. M., McMahan, G. C., & Snell, S. A. 2000b. Measurement error in research on human resources and firm performance: How much error is there and how does it influence effect size estimates?, *Personnel Psychology*, 53: 803-834.
- Gilson, S. 1990. Bankruptcy, boards, banks, and blockholders, *Journal of Financial Economics* 26: 355-387.
- Groysberg, B. & Lee, L.E. 2008. The effect of colleague quality on top performance : the Case of security analysts, *Journal of Organizational Behavior*, 29: 1123-1144.
- Groysberg, B. & Lee, L.E. 2009. Hiring Stars and Their Colleagues : Exploration and Exploitation in Professional Service Firms, *Organization Science*, 20(4): 740-758.
- Groysberg, B., McLean, A., Nohria, N., 2006. Are leaders portable? *Harvard Business Review* 1–10 (May 1).
- Grant, R. M. 1996. Toward a knowledge-based theory of the firm, *Strategic Management Journal*, 17(special issue): 109-122.
- Guthrie, J. P., & Datta, D. K. 2008. Dumb and dumber: The impact of downsizing on firm performance as moderated by industry conditions, *Organization Science*, 19: 108-123.
- Guzzo, R. A., & Noonan, K. A. 1994. Human resource practices as communications and the psychological contract, *Human Resource Management*, 33: 447–462.
- Haesli, A., & Boxall, P. 2005. When knowledge management meets HR strategy: an exploration of personalization-retention and codification-recruitment configurations, *The International Journal of Human Resource Management*, 16(11): 1955-1975.
- Hayes, R.M., Oyer, P., & Schaefer, S. 2005. Coworker Complementarity and the Stability of Top-Management Teams, *The Journal of Law, Economics, & Organization*, 22(1) 184-212.
- He, Z. L., & Wong, P.K. 2004. Exploration vs. exploitation: An empirical test of the ambidexterity hypothesis. *Organization Science*. 15(4): 481–494.
- Hewitt Associates, 2008. Studies reveal local responses to the global downturn. Retrieved from <http://www.hewittassociates.com>.
- Hitt, M.A., Bierman, L., Shimizu, K., & Kochhar, R. 2001. Direct and moderating effects of human capital on strategy and performance in professional service firms: A resource-based perspective, *Academy of Management Journal*, 44(1): 13-28.
- Hofstede, G. 1991. *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.
- Horowitz, F.M., Teng Heng, C., & Quazi, H.A. 2003. Finders, keepers? Attracting, motivating

- and retaining knowledge workers, *Human Resource Management Journal*, 13(4): 23-44.
- Huckman, R. S. & Pisano, G.P. 2006. The firm specificity of individual performance: Evidence from cardiac surgery, *Management Science*, 52(4): 473-488.
- Huselid, M. A. 1995. The impact of human resource management practices on turnover, productivity, and corporate financial performance, *Academy of Management Journal*, 38: 635– 672.
- Ichniowski, C., Shaw, K., & Prennushi, G. 1997. The effects of human resource management practices on productivity: A study of steel finishing lines, *American Economic Review*, 87: 291–313.
- Iverson, R. D., & Pullman, J. A. 2000. Determinants of voluntary turnover and layoffs in an environment of repeated downsizing following a merger: an event history analysis. *Journal of Management*, 26: 977–1003.
- Kang, J. K., & Shivdasani, A. 1997. Corporate restructuring during performance declines in Japan. *Journal of Financial Economics*, 46: 29-65.
- Kelliher, C., & Riley, M. 2003. Beyond efficiency: some by-products of functional flexibility. *The Service Industrial Journal*, 23(4): 98-113.
- Kim, D., & Bae, J. 2005. Workplace innovation, employment relations, and HRM: two electronics companies in South Korea, *The International Journal of Human Resource Management*, 16(7): .1277-1302.
- Kim, K., Park, H., & Suzuki, N. 1990. Reward allocations in the United States, Japan, and Korea: A comparison of individualistic and collectivistic cultures, *Academy of Management Journal*, 33(1): 188-198.
- Kochan, T., & Osterman, P. 1994. *The Mutual Gains Enterprise*, Boston, MA: Harvard Business School Press.
- Kozlowski S. W. J., Chao G. T., Smith E. M., & Hedlund J. 1993. Organizational downsizing: Strategies, interventions, and research implications. *International Review of Industrial Organizational Psychology*, 8: 263-332.
- Kogut, B., & Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology, *Organization Science* 3: 383–397.
- Lawler, E. E., & Finegold, D. 2000. Individualizing the organization: Past, present, and future, *Organizational Dynamics*, 29: 1–15.
- Lee, C.H., & Bruvold, N. 2003. Creating value for employees: investment in employee development, *he International Journal of Human Resource Management*, 14: 981-1000.
- Lepak, D.P., Takeuchi, R., & Snell, S.A. 2003. Employment Flexibility and Firm Performance: Examining the Interaction Effects of Employment Mode, Environmental Dynamism, and Technological Intensity. *Journal of Management*. 29(5): 681-703.
- Lepak, D. P.. & Snell. S. A. 1999. The human resource architecture: Toward a theory of human capital allocation and development, *Academy of Management Review*, 24: 31-48.
- Luthans, B. M., & Sommer, S. M. 1999. The impact of downsizing on workplace attitudes: Differing

- reactions of managers and staff in a health care organization, *Group and Organization Management*, 24: 46-70.
- Maister, D. H. 1993. *Managing the Professional Service Firm*. Free Press, Boston.
- Mansour-Cole, D. M., & Scott, S. G. 1998. Hearing it through the grapevine: The influence of source, leader-relations, and legitimacy on survivors' fairness perceptions, *Personnel Psychology*, 51: 25-54.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. 1995. An integrative model of organizational trust. *Academy of Management Review*, 20: 709–734.
- McKinsey & Co. 2001. A Computer Legend in the Making', McKinsey Quarterly, Special to CNET News.com (July 14), <http://news.com.com/2009-1017-269929.html>. Accessed 20 Aug 2002.
- Mishra, A. K., & Spreitzer, G. M. 1998. Explaining how survivors respond to downsizing: the role of trust, empowerment, justice, and work redesign, *Academy of Management Review*, 23: 567-588.
- Nahapiet, J. & Ghoshal, S. 1998. Social Capital, Intellectual Capital and Organizational Advantage, *Academy of Management Review*, 23(2): 242-266.
- O'Reilly, C. A., M. L. Tushman. 2004. The ambidextrous organization. *Harvard Business Review*, 82, 74–81.
- O'Reilly, C.A. III., & Pfeffer, J. 2000. *Hidden value: How great companies achieve extraordinary results with ordinary people*, HBS Press, Boston, MA.
- Pfeffer, J. 2001. Fighting the war for talent is hazardous to your organization's health, *Organizational Dynamics*, 29(4): 248 –259.
- Pfeffer, J. 1998. *The human equation: Building profits by putting people first*, Boston: Harvard Business School Press.
- Pfeffer J. 1994. *Competitive advantage through people*. Boston: Harvard University Press.
- Powell, W.W., Koput, K., & Smith-Doerr,L. 1996. Interorganizational collaboration and the locus of innovation: Networks of learning in biotechnology, *Administrative Science Quarterly*, 41: 116-145.
- Quinn, J. B. 1992. *Intelligent enterprise*. New York: The Free Press.
- Rogers, E. W., & Wright, P. M. 1998. Measuring organizational performance in strategic human resource management: problems, prospects and performance information markets, *Human Resource Management Review*, 8: 311-331.
- Rousseau, D. M. 1995. *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.
- Rousseau, D.M., & Aquino, K. 1993. Fairness and Implied Contact Obligations in Job Termination: The Role of Remedies, Social Accounts, and Procedural Justice, *Human Performance*, 6:135–149.
- Rumelt, R. P. 1984. Towards a strategic theory of the firm. In B. Lamb (Ed.), *Competitive strategic management* (pp. 556–570). Englewood Cliffs, NJ: Prentice-Hall.

- Rusbult, C. E., Farrell, D., Rogers, G., & Mainous, A. G. 1988. Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction, *Academy of Management Journal*, 31: 599-627.
- Salancik, G. R., & J. Pfeffer, J. 1978. A Social Information Processing Approach to Job Attitudes and Task Design, *Administrative Science Quarterly*, 23:224-253.
- Shah, S., 2000. Sources and patterns of innovation in a consumer products field: innovations in sporting equipment. Sloan, Working Paper #4105.
- Sherer, P. D. 1995. Leveraging human assets in law firms: Human capital structures and organizational capabilities. *Industrial and Labor Relations Review*, 48: 671-691.
- Spreitzer, G. M., & Mishra, A. K. 2002. To stay or to go: Voluntary survivor turnover following an organizational downsizing, *Journal of Organizational Behavior*, 23: 707–729.
- Teece, D. J., Pisano, G.P., Shuen, A.. 1997. Dynamic capabilities and strategic management. *Strategic Management Journal*, 18: 509–533.
- Trank, C.Q., Rynes, S. L., & Bretz R.D. 2002. Attracting Applicants in the War for Talent: Differences in Work Preferences Among High Achievers, *Journal of Business and Psychology*, 16(3):, 331-345.
- Tsui, A. S., Pearce, J. L., Porter, L. W., & Tripoli, A. 1997. Alternative approaches to the employee-organization relationship: Does investment in employees pay off?, *Academy of Management Journal*, 40: 1089 –1121.
- Ulrich, D., 2006. The talent trifecta. *Workforce Management* 32–33 (September 10).
- Wright, P. M., & Snell, S. A. 1998. Toward a unifying framework for exploring fit and flexibility in strategic human resources management, *Academy of Management Review*, 23(4): 756-772.
- Wernerfelt, B. 1984. A resource-based view of the firm, *Strategic Management Journal* 5(2): 171–180.
- Williamson, O. E. (Ed.). 1986. *Transaction-cost economics: The governance of contractual relations*. California: Jossey-Bass Publishers.
- Yu, G. C., & Park, J. S. 2006. The effect of downsizing on the financial performance and employee productivity of Korean firms, *The International Journal of Manpower*. 27(3): 230-250.
- Zatzick, C. D., & Iverson, R. D. 2006. High-Involvement Management and Workforce Reduction : Competitive Advantage or Disadvantage?, *Academy of Management Journal*. 49(5): 999-1015.