

## 6. MULTI-LEVEL STAFFING MODELS FOR HUMAN CAPITAL AND ORGANISATIONAL PERFORMANCE

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### 1. INTRODUCTION

Most managers would agree that people are one of the most critical factors for business success in today's fast-changing world. Maximizing the value of employee investment requires effective leveraging and utilizing the knowledge, skills, abilities and other characteristics (KSAOs) of your valuable employees (Pratap Reddy, 2000). The employees' KSAOs at multi-level are referred to as human capital. Research suggests that there is a link between human capital and organizational performance. Research also suggests that organizations using well-developed staffing practices have better human capital development and hence better performance (Huselid, 1995). The goal of this paper is therefore to explore the staffing function in detail and understand the concept of multi-level staffing to boost human capital and organizational performance.

### 2. STAFFING DEFINED

The managerial function of staffing is defined as filling, and keeping filled, positions in the organizational structure. This includes identifying work-force requirements, inventorying the people available, and recruiting, selecting, placing, promoting, appraising, planning the careers of, compensating and training or otherwise developing both candidates and current

jobholders to accomplish their tasks effectively and efficiently (Koontz, 1990).

### 3. THE PROCESS OF STAFFING

Although recruiting is frequently perceived as the initial step in staffing function, there are a number of prerequisites. The first requisite is employment planning which is concerned with assessing individual's knowledge, skills, and abilities that are directly linked to specific jobs required in the organization. Once these critical competencies have been identified, the recruiting process begins. Armed with information from employment planning, the focus will be on the prospective candidates. Once the applications have come in, it is time to begin the selection phase. Selection has a dual focus. It attempts to thin out the large number of applications that arrived during the recruiting phase and to select an applicant who will be successful on the job. To achieve this goal, many companies use a variety of steps to assess the applicants. The candidate who successfully completes all steps is typically offered the job. Staffing must ensure that the good prospects accept the job offer. The staffing must communicate a variety of information to the applicant, such as the organizational culture, what is expected of employees, etc. Once the selection process is completed, the staffing function has come to an end. The goals, then, of the staffing function are to locate competent

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employees and get them into the organization. (Decenzo, 2002).

#### 4. CHALLENGES OF STAFFING

Staffing is broadly defined as the process of attracting, selecting, and retaining competent individuals to achieve organizational goals. Every organization uses some form of a staffing procedure, and staffing is the primary way an organization influences its diversity and human capital. The nature of work in the 21st century presents many challenges for staffing. For example, knowledge-based work places greater demands on employee competencies; there are widespread demographic, labor, societal, and cultural changes creating growing global shortfalls of qualified and competent applicants; and the workforce are increasingly diverse. A survey of 33,000 employers from 23 countries found that 40% of them had difficulty finding and hiring the desired talent (Manpower Inc., 2006), and approximately 90% of nearly 7,000 managers indicated talent acquisition and retention was becoming more difficult (Axelrod, Handfield-Jones, & Welsh, 2001).

These challenges might lead one to think that organizational decision makers recognize staffing as a key strategic opportunity for enhancing competitive advantage. Because talent is rare, valuable, difficult to imitate, and hard to substitute, organizations that better attract, select, and retain this talent should outperform those that do not (Barney & Wright, 1998). Although staffing should be one of the most important strategic mechanisms for achieving competitive advantage, organizational decision makers do not understand staffing or use it optimally. Given that the war for talent is very real and relevant to organizations around the globe, it is critical that organizations and organizational scholars recognize the value of staffing.

#### 5. HUMAN CAPITAL MEANING AND DEFINITION

An organization is made up of competencies which we can loosely call 'capital'. Its key components are 'customer capital', 'structural capital' and 'human capital'. Broadly a company's strength arises out of its customer base which purchases its products. This customer capital triggers a number of key decisions such as new product and service packages, new designs in anticipation of customer preferences and new locations from which a number of customers could be profitably served. We have heard of a company being acquired purely because of the strength of its customer base. Besides customers, the strength of an organization arises out of the efficiency of its operations. This is characterized by the manner in which its processes are designed and operated. We can call this the structural capital. But the key strength comes out of its human capital. It is the expertise of its employees which ensures that customers are acquired and retained, and the processes work efficiently to satisfy the customer's needs. We can say that human capital is the basis for the creation of customer and structural capital. The accounting system does not capture the values of these forms of capital. Indeed, even a management information system hardly captures the accretion or depletion of these critical components in the functioning of an organization (Mahalingam, 2001).

##### 5.1. Defining Human capital

Human capital is a way of defining and categorizing the skills and abilities as used in employment and as they otherwise contribute to the economy. Many early economic theories refer to it simply as labour, one of three factors of production, and consider it to be a commodity — homogeneous and easily interchangeable (Wikipedia, 2007).

## 5.2. Origin of concept

The term human capital was first discussed by Arthur Cecil Pigou: "There is such a thing as investment in human capital as well as investment in material capital. So soon as this is recognised, the distinction between economy in consumption and economy in investment becomes blurred. For, up to a point, consumption is investment in personal productive capacity. This is specially important in connection with children: to reduce unduly expenditure on their consumption may greatly lower their efficiency in after-life. Even for adults, after we have descended a certain distance along the scale of wealth, so that we are beyond the region of luxuries and "unnecessary" comforts, a check to personal consumption is also a check to investment (Pigou, 1928).

The use of the term in the modern neoclassical economic literature dates back to Jacob Mincer's pioneering article "Investment in Human Capital and Personal Income Distribution" in *The Journal of Political Economy* in 1958. The best-known application of the idea of "human capital" in economics is that of Mincer and Gary Becker of the "Chicago School" of economics. Becker's book entitled *Human Capital*, published in 1964, became a standard reference for many years. In this view, human capital is similar to "physical means of production", e.g., factories and machines: one can invest in human capital (via education, training, medical treatment) and one's outputs depend partly on the rate of return on the human capital one owns. Thus, human capital is a means of production, into which additional investment yields additional output. Human capital is substitutable, but not transferable like land, labor, or fixed capital (Wikipedia, 2007).

## 6. RECRUITMENT

Most definitions of recruitment emphasize the organization's collective efforts to identify, attract, and influence the job choices of competent applicants. Organizational leaders

are painfully aware that recruiting talent is one of their most pressing problems. Tight labor markets give applicants considerable choice between employers, particularly for those in professional, information/knowledge-based, technical, and service occupations. Some reports indicate that nearly half of all employees are at least passively looking for jobs, and a sizable minority is continually actively searching (Towers Perrin, 2006). This is such a problem that many organizations actually face a greater recruiting challenge than a selection challenge. Selection will only be effective and financially defensible if a sufficient quantity of applicants apply to the organization. Compounding this challenge is that many organizations struggle with how to attract a diverse workforce. Thus, there is growing recognition that recruiting—by itself and irrespective of selection—is critical not only for sustained competitive advantage but basic organizational survival (Taylor & Collins, 2000).

### 6.1. Employer Brand Image

One clear finding in recent recruitment research is the importance of the employer's image or reputation (Saks, 2005). Firms with more positive reputations increased the number of applicants and influenced applicant behavior. On the downside, both low- and high-ability applicants were likely to apply to organizations with a favorable reputation, thus increasing recruiting costs. On the upside, having more applicants should allow the organization to make finer distinctions and be more selective of top talent. Applicants use the firm's reputation as a signal about the job attributes and as a source of pride from being a member. Participants would accept a smaller salary as a result of joining a firm with a highly favorable reputation. In the early stages of recruitment, organizations can use publicity, sponsorship of universities and schools, word-of-mouth, and advertising to create a positive brand image. These practices are particularly important in the early stages because the applicants have little information about the firm. These practices (excluding

sponsorship) influenced employer brand image, which in turn influenced applicant decisions. Overall, employer brand image offers another possibility of sustained competitive advantage because it is rare, difficult to imitate, valuable, and cannot be substituted (Turban & Cable, 2003). Fostering favorable employer brand image can be accomplished through advertising and similar practices (Collins & Stevens, 2002) and can influence both applicant and organizational-level recruiting outcomes (Collins & Han, 2004; Turban & Cable, 2003). Employer brand image offers a way for organizations to differentiate themselves among applicants, even when they cannot compete in terms of location or wages.

## 7. PERSONNEL SELECTION PRACTICES

Personnel selection practices such as interviews, test, cognitive ability, assessment centers, situation judgment tests, work samples, etc., are used to select the applicants. For good selection, the information about the applicant should be both valid and reliable. In selection, validity is the degree to which the data predict the candidate's success as an employee. Reliability refers to the accuracy and consistency of the measurement. For example, a reliable test, if repeated under the same conditions, would give essentially the same results (Koontz, 1990). Let us examine the selection practices in detail.

**Interviews** – a selection device in which in-depth information about a candidate can be obtained. It is a universal selection tool but expensive, inefficient and often not job related. (Powell, 1996).

**Tests** – The primary aim of testing is to obtain data about the applicants that help predict their probable success as employees. Some of the benefits from testing include finding the best person for the job, obtaining a high degree of job satisfaction for the applicant, and reducing turnover (Koontz, 1990). There are literally hundreds of tests that measure intellect spatial

ability, perception skills, personality traits, etc. (John, 1998). One of the major limitations of tests is uncertainty about whether tests are really applicable (Koontz, 1990).

**Assessment centers** - It is a technique which presents applicants with a variety of exercises (e.g., mock presentation, role-play, games,) designed to measure multiple competencies such as interpersonal skills/social sentivity, communication, motivation, persuasion/influence, organization/planning and problem solving (Ployhart, 2006). Usefulness of approach of Assessment center is encouraging specifically; its reliability seems high enough to suggest that further use is warranted (Koontz, 1990). Limitations of this technique are costly in terms of time, and lack of training assessor's ability, etc,

**Situation judgment tests (SJTs)** - SJTs are predictor methods that present applicants with work-related situations. Respondents are given several behavioral choices for addressing the situation and are then asked to indicate which options are most/least effective. They appear applicable for selection at all levels, can be used to help prepare individuals for international assignments, and are useful for training and development. Because the questions present realistic work situations, they tend to be received favorably by applicants and HR personnel. However, what they measure and why they are effective remain unclear, as do a number of operational issues such as faking, optimal scoring, scaling, and structure. There is also concern whether SJTs can be implemented cross-culturally, given the somewhat context-dependent nature of judgment. (Ployhart, 2006).

**Work samples** – a selection device requiring the job applicant to actually perform a small segment of the job. Applicants demonstrate that they possess the necessary skills by actually doing the tasks. By carefully devising work samples based on job analysis data, the knowledge, skills and abilities needed for each job are determined (Decenzo,

2002). The main disadvantage of work sampling is the difficulty in developing good work samples for each job and it is not applicable to all levels of the organization (Decenzo, 2002).

### **7.1. Selection using the Internet**

Nearly every major staffing firm has adapted some form of Internet-based testing, and many organizations have already migrated from paper to Web-based selection. The rush to use this delivery platform is appealing: efficiency and cost savings, ability to administer the test globally in real time, and standardized scoring and administration. There are a variety of legal issues surrounding Internet testing, but many of the same basic issues present with traditional employment testing are present with Internet testing (Naglieri et al., 2004).

## **8. LIMITATIONS OF THE SELECTION PRACTICES**

The diversity of selection practices and tests indicates that there is no one perfect way to select employees. Experience has shown that even carefully chosen selection criteria are still imperfect in predicting performance. Furthermore, there is a distinction between what person can do, that is, their ability to perform, and what they will do, which relates to motivation. The latter is a function of the individual and the environment.

## **9. MULTI-LEVEL STAFFING: LINKING INDIVIDUAL STAFFING TO ORGANISATIONAL EFFECTIVENESS**

The reviews of recruitment and selection practices both identified a need for research showing business unit value/organizational impact. This is interesting given the most basic staffing assumption, one described in nearly every textbook written on the subject, is that recruiting and hiring better employees contributes to organizational effectiveness. If it does not, then why invest in staffing? However, there is actually little direct, empirical evidence

testing this assumption (e.g., Ployhart, 2006; Saks, 2005; Taylor & Collins, 2000). Practitioners and HR managers often has to go well beyond validity (and even utility/monetary estimates) to make a case that staffing adds strategic value to the firm.

Likewise, from a theoretical perspective, it is discouraging there is not more direct, empirical evidence linking individual differences to organizational effectiveness. There is considerable staffing research at the micro (individual) level and some staffing research at the macro (organizational) level, but each discipline rarely considers processes, constructs, and influences outside its respective level. That is, micro and macro-level research is both primarily single-level disciplines because their independent and dependent variables are contained within the same level of analysis (Ployhart, 2006). Micro level research examines how individual differences (knowledge, skills, abilities, and other characteristics; KSAOs) contribute to individual performance but assumes (or only estimates how) individual differences contribute to organizational value. Micro research is usually conducted from the perspective of industrial/organizational (I/O) psychology. Macro level research examines how HR practices (e.g., staffing) contribute to organizational performance but assumes that these practices have an effect because of their influence on employee KSAOs. Note that in macro research, these unit-level KSAOs are referred to as human capital and rarely measured. For example, research suggests that organizations using well-developed staffing practices have better performance (Huselid, 1995), but the focus is on the practice itself and not the specific human capital affected by the practice. Very relevance of staffing may be ignored because of an inability to show unit-level value. They argued multi-level theory and methods would be necessary to truly incorporate an organizational perspective into staffing.

### **9.1. Multi-level Theory**

Organizations are inherently nested and

hierarchical, for example, individuals are nested within business units such as departments or stores, which are in turn nested within the firm? Multi-level theory argues that ignoring such hierarchical structures can cause misleading interpretations and generalizations of within-level research findings. One important implication is that observations (e.g., employees) within a unit (e.g., store, organization) are likely to share similarities on particular KSAOs.

To connect levels, multi-level theory describes theoretical processes for both contextual effects and emergent effects. Contextual effects are “top-down” effects from higher to lower levels (e.g., changing an organization’s HR practices changes the behavior of individual employees). Emergent effects are “bottom-up” effects from lower to higher levels. Kozlowski and Klein (2000) noted, “A phenomenon is emergent when it originates in the cognition, affect, behaviors, or other characteristics of individuals, are amplified by their interactions, and manifests as a higher-level, collective phenomenon”. For example, a department that hires applicants on the basis of their conscientiousness should become composed primarily of highly conscientious people. Note that it takes time for bottom-up effects to occur; hence time must usually be a fundamental element in multi-level research (Kozlowski & Klein, 2000).

The bottom-up process of emergence is the critical theoretical mechanism that unites micro and macro staffing research because it helps understand how individual differences in KSAOs contribute to unit-level differences. Kozlowski and Klein (2000) described two different types of emergence that represent ends on a continuum. On one hand, composition models of emergence theorize that there is such high similarity (homogeneity) among lower level observations (employees) that the within-unit scores create a distinct aggregate-level construct. An example of a composition model is when employees share such highly similar perceptions about their organization’s climate

that a company-level climate variable is formed from the aggregation (mean) of employee climate perceptions. On the other hand, compilation models of emergence theorize that variability (heterogeneity) among lower level observations (employees) represents a unique higher level construct. An example of a compilation model is diversity, which may be represented as within-unit variability in demographic characteristics.

Thus, the concept of emergence helps articulate the creation of a higher level construct from a lower level construct. This, in turn, helps one understand how measures of individual level KSAOs should be aggregated, theoretically and empirically, to create a unit-level construct. Because they are based on similarity or homogeneity, composition models are often operationalized as the mean of all within-unit observations.

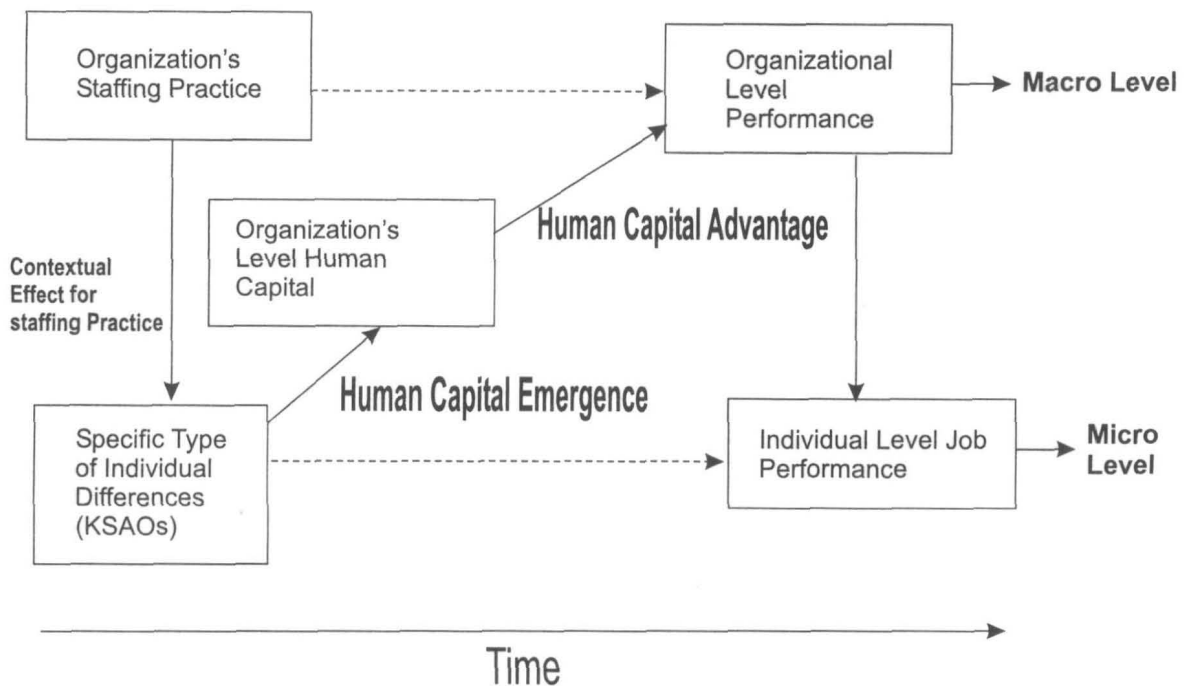
## 9.2. Multi-level Staffing Models

Multi-level staffing models are based on the integration of traditional micro-level staffing research with macro-level strategy and SHRM research. Multi-level theory is used to fuse these disciplines and explicate how individual differences contribute to the formation of unit differences. Schneider et al. (2000) described the basics for such a model, and subsequent work by Ployhart and Schneider (2000) examined the practical, theoretical and methodological concepts necessary to build a multi-level staffing model linking micro and macro perspectives. Together, this research articulates how individual differences create organizational differences, how staffing practices might influence this process, and ultimately how practitioners can show the organizational value of staffing.

Figure 1 illustrates the basic constructs and processes in multi-level staffing, in which there are two levels the micro (individual) level and the macro (organizational) level (these levels are only illustrative, and multiple intermediate levels are possible). All of the arrows are considered in multi-level staffing models, but as a point of

comparison, the dashed arrows denote the relationships examined in traditional staffing research. As noted earlier, the dashed arrows are each within a single level (micro or macro). The solid arrows thus highlight the unique aspects of multi-level modeling. First, because time is a fundamental part of multi-level

modeling, so that the starting time begins with the implementation of a staffing practice. The staffing practice represents a contextual (top-down) effect on the firm's individual KSAOs because all potential employees within a relevant job will be recruited and assessed using the same staffing system.



**Figure - 1 Basic Components of Multi-Level Staffing Models**

Second, through use of a particular selection system, individual KSAOs will become similar within the job/organization over time and contribute to the emergence of macro-level human capital (recall that in strategy and SHRM research, human capital is the term used to describe the competencies of the firm's or business unit's workforce). This is based on the attraction-selection-attrition (ASA) model (Schneider, 1987), which suggests organizations will develop homogeneity in KSAOs that are similar to, selected by, and retained within the organization. However, multi-level theory can help better articulate homogeneity and connect it to the literature on macro staffing/SHRM. Specifically, multi-level staffing models argue that what the ASA model calls homogeneity actually human capital is as described in the macro literature, and the process through which homogeneity occurs is human capital emergence. Thus, human capital emergence represents the multi-level processes through which individual-level KSAOs become organizational or business unit-level human capital.

Third, organizational-level human capital contributes to the organization's performance, such that firms with higher quality human capital will outperform those with lesser quality human capital. This is known as human capital advantage in the macro literature (e.g. Boxall, 1996). Of course, there is another means through which individual-level KSAOs may contribute to macro-level performance, and this is through better individual performance that collectively improves the effectiveness of the firm.

Thus, through the processes of human capital emergence and human capital advantage, hiring more competent employees through the use of valid selection systems should contribute to better organizational performance. These points represent some important areas of departure between multi-level staffing models and traditional staffing models. First, multilevel staffing models allow researchers to hypothesize and test the

assumptions in both micro and macro staffing disciplines. Micro research assumes better individual-level selection results in better organizational-level performance; macro research assumes HR practices influence organizational performance because the practices influence human capital. Multilevel staffing models allow researchers to test both assumptions through developing models of human capital emergence and human capital advantage. Second, multi-level staffing models allow researchers to develop cross-level models of human capital. By developing theories of emergence, researchers can more carefully articulate the structure and function of specific types of human capital (e.g., composition or compilation models). Finally, multilevel staffing models take a different approach to demonstrating the economic utility of staffing than traditional forms of utility analysis. Specifically, multi-level staffing predicts that human capital is a key determinant of organizational performance (i.e., human capital advantage), whereas many utility models would estimate this relationship via the aggregate sum of individual's performance contributions (rightmost vertical arrow in Figure 1). Furthermore, unlike utility analysis, formula-based estimates are not necessary with multilevel staffing because human capital advantage represents the correlation between human capital and organizational performance.

### 9.3. Empirical Support

Empirical support for aggregate-level human capital as a means to differentiate units has been found in several studies (Jordan, Herriot, & Chalmers, 1991; Schaubroeck, Ganster, & Jones, 1998; Schneider, Smith, Taylor, & Fleener, 1998). Support for a multilevel model of human capital emergence was provided by Ployhart, Weekley, and Baughman (2006), who found human capital emergence (operationalized via personality) was hierarchical such that emergence was stronger at lower than higher levels. The idea that human capital can exist in



different forms, with different consequences, is well articulated by Lepak and Snell (2003). The premise is that the uniqueness and strategic value of human capital and knowledge influence the types of HR practices used to manage different employee groups. Not only is human capital emergence an important concept, but different forms of human capital emergence will have different strategic value to the firm. This, in turn, requires different types of staffing practices, for example, selecting for longer term potential with knowledge-based employment while selecting for immediate job fit/performance with job-based employment.

#### 9.4. Practical Recommendations and Implications for Organizational Effectiveness

Multi-level staffing models do not negate the importance of single-level recruitment and selection research. Rather, they seek to extend this work by articulating the linkages between individual differences and organizational/business unit differences. This is essentially the "value challenge" facing staffing managers and practitioners. In this sense, the model offers a way to demonstrate the value of staffing by examining the relationships between individual differences/human capitals with individual outcomes/unit-level outcomes. Staffing practices should help an organization achieve its strategic goals and vision (nearly always expressed in unit-level terms), and the model offers a way to demonstrate that effect.

## 10. CONCLUSIONS

Staffing sits in a curious position at the dawn of the 21st century: Economic, societal, and cultural changes make organizational success and survival dependent on staffing, but many organizational decision makers and even organizational scholars fail to recognize staffing's value. Managers often plea for tools to attract and hire better people. Oftentimes, we can give managers these tools if they would only believe in them. But the research literature sometimes

has difficulty providing answers that show business value, or the answer is so onerous that it will never be implemented. Staffing should reign supremely strategic in the war for talent and sustained competitive advantage, but it is incumbent on staffing researchers and practitioners to show the organizational value of their science and practice (a concern of HR more generally). Research on traditional recruitment and selection practices is important and should continue, but this by itself seems unlikely to increase strategic value. Multi-level staffing research and models were offered as one mechanism for conveying business unit value. Every single organization in the world uses some form of staffing procedure, but there is no guarantee they use them optimally or even appropriately. This is unfortunate but is likely to continue unless research-practice gaps are closed to show the business unit strategic value of staffing.

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