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What We Measure Well and What We Ignore

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Work psychologists have had a long-standing interest in the criterion problem and have been particularly concerned with determining how to measure job performance and success at work. Many notable industrial and organizational (I-O) psychologists have urged researchers to develop theories of employee performance (e.g., Campbell, 1990). Within the last 2 decades, we have made progress in the articulation and measurement of required tasks and behaviors at work (Campbell, 1990; Chapter 21, this volume) and the identification of contingent, discretionary behaviors that are important for person-team success (e.g., Borman & Motowidlo, 1993; Chapter 22, this volume). However, the approach to the criterion problem followed by most researchers continues to be generally narrow and reinforces the status quo in terms of what is defined as success or successful work behaviors in organizations.

The definitions of what represents success in organizations at the individual level (e.g., job performance) and the organizational level (e.g., organizational effectiveness) have not changed fundamentally over the years. There have been advances in understanding particular aspects of performance and success (e.g., contextual performance), but there have not been substantial changes in the way we think about the criteria that are used to evaluate personnel selection, training, or other interventions in organizations. Our thinking has not changed, but the context in which work occurs certainly has (Cascio & Aguinis, 2008).

The boundaries between the spheres of work, as well as between nonwork, local, national, and global or international boundaries, have steadily eroded and these domains increasingly overlap. The world of work is becoming increasingly complex and intrusive (e.g., it is common for employees to take their work with them when they go home or on vacations), and the definition of success in the workplace is constantly evolving. This implies the need for a broader view of the criterion domain. Several previous chapters in this volume (e.g., Chapters 21 and 22) provide excellent reviews and discussions about specific aspects or facets of workplace behavior and performance domains. Each of these performance aspects is important to the effectiveness and health of employees and organizations within the 21st-century workplace. In the current chapter, we argue that both traditional and emerging facets of the performance domain must be incorporated as part of the foundation for an integrated and long-term focused human resources (HR) system, and, importantly, that issues concerning the larger context, especially the interface between work and nonwork issues, must be incorporated into our criterion models to more fully capture the increasing complexities of the workplace and the diversity of the workforce. Finally, as Ployhart and Weekley so eloquently articulate in Chapter 9, this volume, using a multilevel lens, we may be better able to link individual-level HR systems to more macro indices of organizational productivity and sustainability.

WORK AND WORKFORCE IN THE 21ST CENTURY: OUTMODED ASSUMPTIONS AND BASES FOR CHANGE

The design of work and the definition of success in the workplace continue to be built around the assumption that most or all employees have an adult working at home in the role of "caregiver" (Smolensky & Gootman, 2003). That is, our models for defining successful job performance, a successful career, and a successful organization (Murphy, 1998) begin with the outmoded assumptions that each worker can and should devote a great deal of time, attention, and loyalty to the organization; that there will be someone at home to take care of the other needs; that the demands of the work and nonwork sides of life are distinct and nonoverlapping; and that the costs associated with work interfering with nonwork can be ignored (or at least are not the concern of the organization) whenever the organization places demands on its members. The way psychologists and managers have defined and measured success, in general, and work performance, in particular, makes a good deal of sense if you start with a homogenous (e.g., male, White, traditional family structure) and local (e.g., American workers) workforce, but it is not necessarily sensible in the current environment.

Given the changing nature of the workforce both within the United States and globally, it is now time to think more broadly about the conceptualization of our criteria within I-O psychology. Job performance is not the same as success. We need to clearly distinguish between job performance and success, a broader construct that might be assessed and defined across multiple levels of analysis and might be defined differently depending on whether the focus is on the short or the long term. Further, both constructs need to be considered in relation to their costs. That is, the headlong pursuit of performance in an organization might have several costs to the organization (e.g., short-term focus) and to the community (e.g., work-family conflict); different definitions of success in organizations might push employees to engage in a range of behaviors that have personal and societal costs (e.g., workaholism).

Why should we examine how success is measured in organizations? We argue that (a) success is a much broader and encompassing construct with content that spills over from work to nonwork domains; (b) success and performance must be understood within a multilevel context, recognizing that for some organizational problems and decisions, we can focus on understanding performance at a given level but that what occurs at one level may not reverberate at other levels in a similar way; and (c) we need to reexamine the costs associated with a short-term focus in the way we use HR and develop ways to incorporate a longer-term focus. I-O psychology has made significant progress in specific facets of criterion theory and measurement as shown by in-depth review chapters in this volume (see Chapters 21, 22, 23, and 25). In the following section, the concepts of ultimate or conceptual criterion and actual criteria (and the subsequent criterion relevance, contamination, and deficiency) are used to describe how I-O psychologists have contributed to the understanding of one of the most important psychological outcomes—performance success. Briefly, we review the development of task performance theory, context performance, adaptive performance, and counterproductive work behaviors. Using the notion of criterion deficiency, we identify where our current conceptualizations of success are likely to be narrow, outmoded, and deficient.

CRITERION PROBLEM IN I-O PSYCHOLOGY

The legacy of 60 years of scientific research on criteria between 1917 and 1976 was the identification of the "criterion problem" (e.g., Austin & Villanova, 1992; Flanagan, 1954). The term denotes the difficulty involved in the conceptualization and measurement of performance constructs, particularly when performance measures are multidimensional and used for different purposes.

DEFINITION AND ASSUMPTIONS OF CRITERION PROBLEM

Bingham (1926) was perhaps the first to use the word *criterion* in one of the two ways that it is frequently used today, as "something which may be used as a measuring stick for gauging a worker's

relative success or failure" (p. 1). Success was recognized as nearly always multidimensional in nature, suggesting that its sources of variability are complex. The choice of dimensions to represent or define performance depends on how broadly or narrowly one interprets the meaning of success (i.e., conceptual criterion; Nagle, 1953; Toops, 1944).

Traditionally, discussions of the criterion problem have started with the assumption that the conceptual or ultimate criterion of success is reasonably well defined and that the major problem involves the shift from conceptualizing or defining success to its actual measurement. When this shift is made, a gap is likely to develop between the "ideal" conceptualization of success and its practical or actual measurement. The relationship between conceptual and practical measurement "conceptual," "theoretical," or "ultimate criterion" (Thorndike, 1949) describes the full domain of everything that ultimately defines success (Cascio, 2000). Because the ultimate criterion is strictly conceptual, it cannot be measured or directly observed. It embodies the notion of "true," "total," "long-term," or "ultimate worth" to the employing organization (Cascio, 2000).

Implicit in this model is the questionable assumption that we all know and agree about the conceptual definition of success (i.e., the idea that the ultimate criterion is obvious and noncontroversial). Yet, key performance stakeholders (e.g., employees, organizations, families, society, and the environment) do not necessarily know or agree on the conceptual definition and content of the ultimate criterion. In short, an ultimate criterion is important because the relevance or linkage of any operational or measurable criterion is better understood if the conceptual stage is clearly and thoroughly documented (Astin, 1964). I-O psychology can and does measure some facets of success very well, but these may reflect a small, narrow proportion of the ultimate criterion.

WHAT IS SUCCESS AS DEFINED BY I-O PSYCHOLOGISTS?

Performance is one of the most important outcome variables within psychology (Campbell, McCloy, Oppler, & Sager, 1993), and I-O psychologists have been successful in constructing actual measures of performance that theoretically overlap with the ultimate or true criterion as much as possible. Yet, until recently, little attention has been given to the explication of the content or domain of performance (exceptions are Chapters 21–25, this volume). One reason for this is the Classic Model of performance, which has dominated thinking in applied research. The model states that performance is one general factor and will account for most of the variations among different measures. Therefore, the objective with performance measures is to develop the best possible measure of the general factor. However, throughout most of the history of I-O psychology, the adequacy of this "ultimate criterion" has rarely been questioned or debated. In recent decades, Campbell and others (Borman & Motowidlo, 1993; Cleveland, 2005; Johnson, 2003) have suggested that the notion of an ultimate criterion or single general performance factor has no meaning and is not the best representation of the performance construct, but the ultimate-actual criterion distinction as shown in Figure 26.1 is still a useful heuristic for understanding the nature of the criterion problem.

Task Performance

Campbell et al.'s (1993) model of performance focused on required worker behaviors in a given job and attempts to delineate the dimensions of job performance. This model guides researchers and managers in assessing and preventing criterion contamination and deficiency by articulating the most important aspects of job performance. The eight factors (e.g., job-task proficiency, non-specific task proficiency, written and oral communication proficiency, demonstrating effort, maintaining personal discipline, facilitating peer and team performance, supervision/leadership, management/administration) are assumed to be the highest-order factors that are sufficient to describe the latent hierarchy among all jobs. That is, the construct of performance cannot be

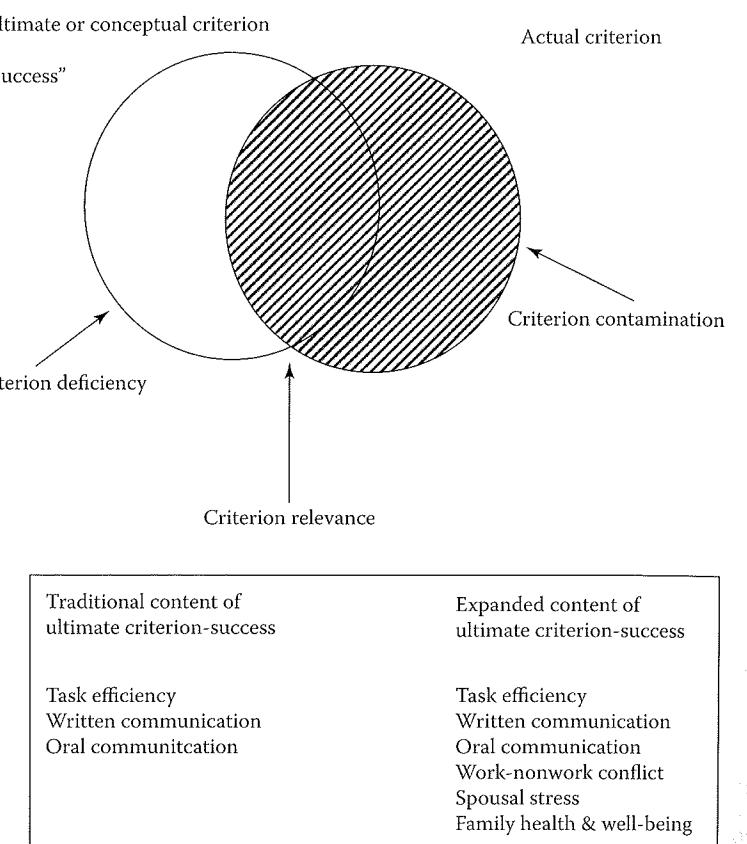


FIGURE 26.1 Criterion components: relationships among criterion relevance, contamination, and deficiency

meaningfully understood by combining these factors into a smaller subset or one general factor. Although the content of the factors may vary slightly across jobs, the focus of each is in terms of the observable and behavioral things that people do which are under their control.

There is a good deal of value to articulating what task performance actually means. However, the specific performance components articulated by Campbell et al. (1993) and others address work success from what is arguably a very narrow perspective. In particular, this model defines performance in the workplace as a set of behaviors that is independent from behavior associated with our nonwork lives, or at least that nonwork factors are not relevant for defining success at work. From this perspective, the flow back and forth between the work and nonwork spheres of life is at best a form of criterion contamination.

Contextual Performance (Organizational Citizenship Behavior)

Within the last 2 decades, several researchers have noted that job performance involves more than task performance (Borman & Motowidlo, 1993; Organ, 1988). For example, Borman and Motowidlo (1993) proposed a model of performance with two components at the highest level: task performance, as we have already discussed, and contextual performance. Smith, Organ, and Near (1983) labeled a similar construct organizational citizenship behavior (OCB).

Although task performance consists of required behaviors for a job that either directly produce goods and services by the organization or services/maintains the technical core or required tasks, contextual performance consists of behaviors that support the broader environment in which the required tasks or technical core must operate (Borman & Motowidlo, 1993). Contextual performance (or OCB) includes behaviors such as volunteering for tasks not formally part of the

job, demonstrating effort, helping and cooperating with others, following organizational rules, and supporting organizational objectives (Borman & Motowidlo, 1993). A number of these behaviors would fall under a subset of components identified by Campbell et al. (1993). Borman et al. (2001) found that the structure of citizenship behaviors could be described using three categories: personal support (behaviors benefiting individuals in the organization including helping, motivating, cooperating with, and showing consideration), organizational support (behaviors benefiting the organization including representing the organization favorably, showing loyalty, and complying with organizational rules and procedures), and conscientious initiative (behaviors benefiting the job or task including persisting with extra effort to complete tasks, taking initiative, and engaging in self development activities; Borman, et al., 2001; Johnson, 2003).

Although we do not have consensus on the dimensionality of OCBs, the articulation of contextual performance challenges traditional definitions of individual work performance (Ilgen & Pulakos, 1999). Further, as discussed in greater detail in Chapter 22, this volume, contextual performance/OCBs reflect an initial shift toward broadening work performance criteria to include performing in interdependent and uncertain work contexts (Neal & Hesketh, 2002).

Adaptive Performance

A third component of job performance, adaptive performance, is distinct from task and contextual performance (Hesketh & Neal, 1999). Adaptive performance is the proficiency with which a person alters his or her behavior to the demands of the environment, an event or a new situation (Pulakos, Arad, Donovan, & Plamondon, 2000), or an effective change in response to an altered situation (White et al., 2005). Although some dimensions of adaptive performance overlap with task or contextual performance, the dimension of addressing uncertain and unpredictable work situations may be distinct from task and citizenship performance (Johnson, 2003). Related to the construct of adaptive performance, the recent conceptualization of successful aging refers to the construct as successfully adjusting to change that is developmental (Baltes & Baltes, 1990) or as competently adapting or adjusting (Featherman, 1992; Abraham & Hansson, 1995; Hansson, DeKockkock, Neece, & Patterson, 1997). Adaptive performance is reviewed in more detail in Chapter 22, this volume.

Organizational Deviant Behaviors

Finally, organizationally deviant behaviors that have negative value for organizational effectiveness have been proposed as a fourth distinct component of job performance (Sackett & Wanek, 1996; Viswesvaran & Ones, 2000). This component is also known as counterproductive work behavior, and an excellent discussion of it is presented in Chapter 23, this volume. Organizationally deviant behavior is defined as voluntary behavior that violates organizational norms and also threatens the viability and well being of the organization and/or its members (Robinson & Bennett, 1995). Currently, there is little consensus regarding the dimensionality of counterproductivity. For example, some researchers have identified property damage, substance abuse, and violence on the jobs as facets of counterproductivity (Sackett & Wanek, 1996); withdrawal behaviors such as tardiness, absenteeism, and turnover; or even social loafing or withholding effort are included in some definitions of this aspect of job performance (Kidwell & Bennett, 1993).

CITERION DEFICIENCY: WHAT HAVE WE IGNORED?

Modern organizations are becoming more and more concerned with the notion of sustainability rather than focusing solely on profit (Senge, Smith, Kruschwitz, Laur, & Schley, 2008). The term is usually used in conjunction with the sustaining of natural resources and processes. However, sustainability can also generalize to the management of HR. Traditional criterion measures focus on aspects of short-term performance, ignoring the influence that behavior has on other stakeholders and the long-term consequences over time. This is analogous to focusing solely on profit. We need to

be aware of how current measures of success impact the future ability of employees to remain with the organization and to continue to perform in a manner that is beneficial to the organization, themselves, and society. Considering the sustainability of HR requires taking a longer-term perspective than is usually the case. Furthermore, given current trends in criterion measurement and typical failure to consider multiple stakeholders, our criteria of "success" continue to be deficient in at least two ways. First, we need to expand the notion of criteria to include aspects of individual functioning outside of the work context. Employee health and well-being, stress, marital quality, and parental performance are all potential aspects of an emerging performance domain within the larger context of our lives and are inextricably linked with work organizations (Cleveland, 2005). Behavior at work affects behavior away from work and vice versa, and a truly comprehensive definition of effectiveness and success in an organization is likely to include facets (e.g., health and well-being) that have traditionally not been thought of as part of the performance domain.

Second, the content of our criteria should continue to be broadened to explicitly recognize the multilevel implications of the construct (Cleveland, 2005; DeNisi, 2000; Murphy & Cleveland, 1995). We need to more explicitly link conceptions of individual performance and success to definitions of effectiveness and sustainability at the group, organizational, and societal level. The same behaviors and outcomes that contribute to success as traditionally defined at the individual level (e.g., high level of competitiveness, high level of involvement in work) might sow the seeds of failure at other levels (e.g., by building destructive conflict within organizations, by contributing to the failure of community institutions that compete with the workplace for employees' time and effort). These are themes that are echoed in Cascio and Aguinis (2008) and Chapter 9, this volume.

Recognition of the multilevel nature of performance is important for several reasons (DeNisi, 2000). Notably, it provides one way that we can examine how our definitions and measures of success at one level are linked with potential costs associated with or incurred at another level. Broadening the definition of the criterion space to include extra-work functioning and multilevel effects leads us to consider domains that have been given little emphasis by traditional definitions of individual performance and organizational success. Two such domains are individual well-being and organizational health.

HEALTH AND WELL-BEING

At the individual level, health is not simply the absence of ill health (e.g., Jahoda, 1958). Within Western societies, the concept of mental health also includes aspiring to learn, being reasonably independent, and possessing confidence (Karasek & Theorell, 1990).

Individual Health

Drawing on Warr's framework (1987, 1994a), variations in mental health reflect different relative emphases on ill health and good health. Mental or psychological health can be described using six dimensions: subjective or affective well-being, positive self-regard, competence, aspiration, autonomy, and integrated functioning (Warr, 2005). Well-being is the most commonly investigated facet of mental health and, according to Warr (1987), it includes two orthogonal dimensions: pleasure (feeling bad to feeling good) and level of arousal (low to high). He identified three assessable aspects of well-being that can be viewed in terms of their location on these dimensions: specifically, the horizontal axis of pleasure or displeasure, which is measured in terms of satisfaction or happiness; an axis from anxiety (high arousal, low pleasure) to comfort (low arousal, high pleasure); and an axis from depression (low arousal, low pleasure) to enthusiasm (high arousal, high pleasure). Indicators of well-being that emphasize the detection of ill-health rather than good health assess symptoms of depression, burnout, psychological distress, and physiological or psychosomatic symptoms. On the other hand, indicators of well-being that emphasize positive mental health assess high arousal/high pleasure states, such as enthusiasm. Job satisfaction is considered to be either an indicator of

health (e.g., dissatisfaction) or positive health (e.g., job satisfaction). Either way, it is thought to be a relatively passive form of mental health because, although it assesses the degree of pleasure/displeasure about a job, it does not assess arousal (Parker, Turner, & Griffin, 2003; Warr, 1997).

In addition to affective well-being, Warr (1987) identified the five other components of mental health: competence (e.g., effective coping), aspiration (e.g., goal directedness), autonomy/independence (e.g. proactivity), positive self-regard (e.g., high self esteem), and integrated functioning (i.e., states involving balance, harmony and inner relatedness). These are important components of mental health in their own right because (a) they are potentially more enduring than affective well-being and (b) competence, aspiration, and autonomy/independence represent more active states and behaviors than most measures of well-being that reflect passive contentment (e.g., job satisfaction).

How does individual well-being fit as part of a definition of effectiveness or success? First, there is considerable evidence that workplace stresses are an important source of physical and mental health problems. Warr (1987, 1999) has developed a framework that identifies key features of an environment that have been shown to be related to mental health. The ten features are described in Table 26.1 in positive terms, but low values are viewed as stressful (Warr, 2005). This table suggests that the design of jobs (e.g., variety, opportunities for skill use), workplaces (e.g., physical security), reward systems (e.g., availability of money), leadership training and development systems (e.g., supportive supervision), and design of personnel recruitment selection systems (e.g., valued social position) could all have mental health implications for the workforce. For example, given the shrinking, aging, and increasingly diverse global workforce, organizations need to rethink the primary objectives of recruitment and selection systems. Organizations may increasingly face the situation of having more job vacancies than qualified individuals to fill them. Selection systems may need to be retooled to reflect more "recruitment selection." Selection tests or measures not only may need to assess how well applicants can perform across various work contexts over a period of time, but also convey to the applicant what range of situations they are likely to encounter and what resources the organization can provide to sustain their performance and worklife health. It can certainly be argued that individuals who perform well in an environment that has adverse effects on their physical or mental health should not be necessarily described as successful.

Second, health effects today are likely to have performance effects tomorrow. That is, an employee whose health is impaired by the workplace will probably make a smaller contribution to the organization, the family, and the community over the long run than one whose employment is a source of well-being. Thus, employee well-being and health are important components to sustaining

TABLE 26.1
Job Characteristics Related to Mental Health

Opportunity for personal control
Opportunity for skill use
Externally generated goals
Money
Environmental clarity
Availability of money
Physical security
Supervision
Opportunity for interpersonal contact
Valued social position

Source: Adapted from Warr, P., Work, well-being and mental health, in J. Barling, E. K. Kelloway, & M. R. Frone, Eds., *Handbook of employee selection processes*, 347-374, Sage, Thousand Oaks, CA, 2005.

an organization's human capital. Indeed, successful organizations already are aware of the link between health and well-being, performance, and sustainability, as documented in Chapter 25, this volume. For example, IBM's corporate policy on employee well being has led the organization to develop a myriad of programs to insure employee health, well-being, and family balance. Furthermore, they tie these programs to criteria such as work-related injury and lost workdays (IBM Corporate Responsibility Report, 2008).

Organizational Health

A healthy organization is one that is competitive within the marketplace and also has low rates of injury, illness, and disability (Hofmann & Tetrck, 2003). Individual health outcomes are distinguished from organizational-level outcomes, but both are likely to be related to individual behavior at work. Together, individual and organizational effectiveness constitute the health of an organization (Parker, Turner, & Griffith, 2003). That is, a healthy organization is one that accomplishes the business-related goals that define traditional financial success and the human goals of advancing the health and welfare of the organization's members.

It is possible to move this discussion one step further and define a healthy organization as involving three dimensions: (a) competitive within the marketplace; (b) low rates of injury, illness, and disability (lack of negative outcomes); and (c) promoting long-term sustainability and well being of its constituents (e.g., work that increases the success of constituents in terms of competence, aspiration, autonomy, and balance).

Integrating Health and Well-Being Into the Criterion Space

One reason why it is useful to distinguish between performance and success is that a narrow focus on performance forces one to search for similarly narrow reasons for including factors such as health in the criterion domain. It is certainly possible to do so; unhealthy individuals and unhealthy organizations are not likely to maintain any notable level of performance over the long run. On the other hand, a focus on success does not require one to locate some performance-related pretext for including health as part of the ultimate criterion. Rather, the promotion of individual and organizational health is likely to be a valued outcome in and of itself (i.e., valued by at least some stakeholders) and does not require justification in terms of some other set of criteria (e.g., profitability). We argue that employees, their families, and their communities all have a vested interest in workplaces that promote physical and mental health and all have a vested interest in minimizing a range of negative outcomes (e.g., spillover of work-related conflicts) that might be associated with unhealthy organizations.

MULTILEVEL ISSUES IN DEFINING PERFORMANCE AND SUCCESS

Performance and success all occur at the individual, group, and organizational levels (Campbell, Dunnette, Lawler, & Weick, 1970; DeNisi, 2000); also, they can be defined within the larger context of society and environment. Performance and success are not only defined at many levels (level) of society and environment. Performance and success are not only defined at many levels of analysis, they can also be defined in terms of multiple units of time. Perhaps the most serious deficiency in many definitions of individual performance and success is the lack of awareness or concern with the relationship between choices in defining the domain at one level (e.g., Is "face time" an important part of performance and success?) and effects felt at other levels of the system (e.g., If "face time" at work is viewed as important, time spent in family or community activities is likely to decline). According to DeNisi (2000), when we acknowledge that performance is a multi-level phenomenon, then several important implications follow:

1. We assess and develop individual employee performance with the intent of ultimately affecting the performance of the team or the whole organization.
2. Individuals and teams perform in ways to allow the organization to achieve outcomes referred to as "organizational performance."

3. Performance at higher levels of analysis is more than just the simple sum of performance at lower levels; that is, it is not always sufficient to change individual performance to change team or organization performance.
4. Variables at higher levels of analysis (e.g., organizational structure or climate) can serve as constraints on (or facilitators of) the performance of individuals and teams. Therefore, we must understand the organizational context in order to fully understand the performance of individuals or teams.

In particular, thinking about performance and success from a multilevel perspective might help understand how and why the ultimate criterion should be expanded. For example, we traditionally construct and validate personnel selection systems as if the only objective of those systems was to predict future performance at the individual level (e.g., virtually all validation studies use measures of individual job performance as the criterion of choice). Yet it is clear that the goals of a personnel selection system are not solely to predict future performance; the goals are to help the organization make better strategic decisions, be profitable, and sustain productivity. Consistent with the message conveyed in Chapter 9, this volume, it is critical that the criteria are linked with unit or organizational strategy. Therefore, our criteria may include unit-, organizational-, and societal-level assessments, as well as individual-level performance assessments, to be most consistent with a firm's strategy. One plausible reason that a validated selection system does not translate into better unit performance may be the narrowly defined criteria used. There are usually real and legitimate differences in different stakeholders' definitions of "better decisions." For example, an organization may use a class of tests in personnel selection that results in predicted increases in individual performance but also results in adverse impact, in conflict between supervisors and subordinates, and in negative images of the organization. This might not be thought of as a success, even if the validity coefficients are all large and positive (Murphy, 2010). Therefore, the logic that Ployhart and Weekley develop in Chapter 9, this volume, to link individual-level selection tests to organizational business strategy should also be applied to the re-examination and development of the criterion domain. That is, relevant macro work context and nonwork factors should be included within the articulation and domain of success. Cascio and Aguinis (2008) make similar recommendations using the emerging construct they label, "in situ performance," which refers to the situational, contextual, strategic, and environmental effects that may influence individual, team, or organizational performance. By integrating or specifying these effects, we develop a "richer, fuller, context-embedded description of the criterion space that we wish to predict" (Cascio & Aguinis, 2008, p. 146). With the changing nature of work and the workforce, such criterion evolution can more fully capture how work is done in the 21st century (Cascio & Aguinis, 2008).

I-O psychologists devote a great deal of time and effort in helping organizations make high-stakes decisions about people (e.g., whom to hire, where to place them, and what behaviors to reward and sanction). A multi-level perspective suggests that these decisions can and probably should be evaluated in terms of their effects on individuals, work groups, organizations, and families and communities, and that short- and long-term perspectives should be considered. To be sure, there are many difficult issues that have to be addressed to put such a program of criterion development in place. Whose perspectives should be considered and how much weight should be given to each stakeholder in defining individual or organizational success? How should conflicts between stakeholders be addressed (e.g., it might benefit organizations but harm the communities that support them if many employees put in 80-hour weeks)? There are no simple answers to these questions, but I-O psychologists do have experience dealing with the multilevel issues in several other domains, and we may be able to draw from this research and this experience to gain insights into developing more inclusive definitions of what it means to be a success in the workplace. In particular, there is much to be learned from research on work-family conflict.

WORK-FAMILY CONFLICT AS A MULTILEVEL CRITERION PROBLEM

Research on work-family conflict provides an example of the implications of thinking about performance and success from the perspectives of multiple stakeholders. Given I-O psychologists' interest in the work context, the work side of the work-family interface has been more focal in I-O research (Major & Cleveland, 2005). Research in work-family conflict has typically emphasized the experiences of managers and professionals, as opposed to other types of workers (e.g., laborers), and has typically focused on the individual employee and his or her performance at work. Although some I-O studies have examined outcomes for employed couples (e.g., Hammer, Allen, & Grigsby, 1997), these are few and far between, and research that includes or acknowledges children is sparse indeed. Nevertheless, the field of work-family conflict can be viewed as one of the most successful examples of multilevel, multiperspective thinking, particularly if we recast some of the traditional areas of work-family conflict research in a slightly different light.

I-O psychologists have been particularly interested in the effects of work-family conflict on employee job-related attitudes. They have usually not thought of work-family conflict as a measure of success (or lack thereof), but rather as a criterion contaminant. However, it is reasonable to argue that work-family conflict should be part of the definition of success, particularly when we define success at the organizational level. That is, an organization that frequently places demands on employees that interfere with their ability to function well as spouses, parents, caregivers, etc., should be considered as less successful than similar organizations that find a way to minimize their encroachment on the family roles of their employees. The decision not to include work-family balance in the scorecard used to evaluate organizations may make sense from the perspective of some stakeholders (e.g., investors, or executives with stay-at-home spouses), but it is not likely to be in the interest of families, children, and perhaps even the larger society that provides the customers infrastructure, employees, and support that is necessary for the organization's survival. Although I-O psychologists often ignore work-family balance as a criterion of success, some organizations, such as IBM, do not. IBM has given \$213 million to dependent care services globally because its management has acknowledged that it is in the best interest of employees and the organization (<http://www.ibm.com/ibm/responsibility>).

Why should organizations care about work-family conflict? First, work-family conflict has been linked to organizational commitment, turnover intentions (e.g., Lyness & Thompson, 1999; Netemeyer, Boles, & McMurrian, 1996), turnover (Greenhaus, Collins, Singh, & Parasuraman, 1997), and stress and health (Frone, 2000; Frone, Russell, & Cooper, 1997). Second, some studies have found a negative relationship between work-family conflict and job performance (Aryee, 1992; Frone et al., 1997), particularly when performance is defined as task performance. By revealing links to outcomes that traditionally matter to business (e.g., turnover), this research illustrates that attending to work-family concerns is not simply a "moral imperative" or the "right thing" to do, but also makes good business sense. That is, a reasonable case can be made that work-family conflict is harmful to an organization's bottom line, especially over the long term.

A multilevel perspective suggests that it is not necessary (although it is likely to be desirable) to focus on the links between work-family conflict and the bottom line to justify including work-family conflict as a facet of success. Rather, there are important stakeholders (e.g., employees, their families, their communities) who have a legitimate stake in wanting to minimize work-family conflict, regardless of whether or not it affects the bottom line of the organization. This multilevel perspective is particularly important because it has been consistently found that work-to-family conflict is more likely to occur than family-to-work conflict (Eagle, Miles, & Icenogle, 1997; Gutek, Searle, & Klepa, 1991; Netemeyer et al., 1996). Organizational demands on the time and energy of employees appear to be more compelling than those of the family because of the economic contribution of work to the well being of the family (Gutek et al., 1991). Employees are often afraid to be away from the workplace and "presenteeism" takes its toll (Lewis & Cooper, 1999; Simpson,

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1998). Workers are spending more time in the workplace in response to job insecurity, workplace demands, perceived career needs, and financial pressure. That is, the most compelling finding in the domain of work-family conflict is not that family interferes with work but that work interferes with family. If we, as I-O psychologists, focus only on outcomes that directly affect the employer's interests (particularly employers' short-term interests), we are likely to dismiss the most important aspect of work-family conflict (i.e., the way work can adversely affect families) as outside of the boundaries of the criterion domain. If we consider the interests of employees, their families and their communities as a legitimate part of the definition of the ultimate criterion space, we are less likely to dismiss this important set of findings as being largely irrelevant, or at least as being someone else's problem.

Women and men in the United States increased their annual working hours by an average of 233 and 100 hours, respectively, between 1976 and 1993 (Bureau of Labor Statistics, 1997). In 1999, the average weekly full-time hours over all industries were 43.5–45.2 for certain professional groups and executives (Bureau of Labor Statistics, 1999). Many employees work longer hours, and dual-earner couples may work unusual hours or shifts. In the United States and the United Kingdom, 1993 and many in low-wage occupations work in more than one job. Despite the increasing time and effort devoted to work, employees are feeling increasing levels of job insecurity (Burchell, Felstead, & Green, 1997; Reynolds, 1997). From the perspective of multilevel systems, this increasing focus on face time, long hours, and increased insecurity is arguably evidence that organizations are increasingly unhealthy, and, therefore, increasingly unsuccessful.

Similarly, we can think of research on workers' experiences with family-friendly work policies (e.g., parental leave, flextime) differently if we broaden our definitions of performance, effectiveness, and success. For example, family-friendly policies are of limited value without a secure job, and there is evidence that many qualified employees decline opportunities to participate in these programs (Lewis et al., 1998). One way of evaluating the success of an organization would be to pay attention to the uptake rates for policies such as these. If employees report stress and dissatisfaction as a result of work-family conflict but are unwilling or unable to take advantage of workplace policies designed to reduce these stresses, this can be considered evidence that the organization is failing its stakeholders, regardless of what the balance sheet says.

Few of the studies examining the effects of family-friendly policies focus on the couple or the family as the unit of analysis. In addition, such factors as marital well-being and healthy family relations are rarely assessed. Finally, few studies in I-O psychology or management tap spousal or children's perceptions of work-family conflict and employee or parental behaviors. As a result, we know little about how family-friendly policies actually affect families. A multilevel perspective in defining success suggests that we should try to learn more about all of these issues.

Although studied far less frequently than work-related outcomes, psychological research has not completely neglected outcomes in the family domain (Major & Cleveland, 2007). Numerous empirical studies demonstrate a negative relationship between work-family conflict and life satisfaction (e.g., Adams, King, & King, 1996; Netemeyer et al., 1996); the results of two meta-analyses (Allen, Bentler, Bruck, & Sutton, 2000; Kossek & Ozeki, 1998) reinforce this conclusion. The results are similar for work-family conflict and marital functioning and/or satisfaction (e.g., Duxbury, Higgins, Thomas, 1996; Netemeyer et al., 1996) and family satisfaction (e.g., Parasuraman, Purohit, Hatchak, & Beutell, 1996). Yet again, often this research taps only the perceptions of the employed worker and does not collect information from spouses or children.

Children are virtually absent from I-O research on the work-family interface (Major & Cleveland, 1997), and when they are included, it is typically as a demographic control variable (i.e., number of children, age of youngest child) in studies of an employed parent's family demands (see Rothausen, 1999 for a review). With few exceptions (e.g., Barling, Dupre, & Hepburn, 1998), children's outcomes are seldom considered in I-O work-family research. Moreover, I-O research lacks a rich treatment of the how children and other family variables influence employee behavior (cf. Eby,

Casper, Lockwood, Bordeaux, & Brinley, 2005) or, importantly, how workplace characteristics and the employment/parental behaviors of both working parents influence the well being and work attitudes of their children. Further, current measures of success are deficient and lack consideration of children's well being. If we think about the family as one of the important set of stakeholders in defining what we mean by success, we will be more likely to consider the reciprocal effects of work and family in deciding whether our HR systems (e.g., personnel selection) are indeed leading to better decisions.

In the traditional model of success, in which the ultimate criterion is entirely focused on what is good (often in the short term) for the organization, including measures of work-family conflict in evaluations of careers, organizations, etc., would probably be dismissed as criterion contamination. If we recognize that the worlds of work and nonwork are inextricably intertwined, we are likely to reach a very different conclusion; that is, that the failure to include variables such as work-family conflict in our definitions of success has led to conceptions of the ultimate criterion that are themselves deficient.

"CLOSING IN" ON CRITERION DEFICIENCY: ONE APPROACH TO BRIDGING HR SYSTEMS WITH BUSINESS UNIT STRATEGY

Scholars in management and applied psychology have often worked from the assumption that work could and should be analyzed and understood as a separate domain from our nonwork lives. This probably made a good deal of sense for workplace in the late 19th and early 20th century (a formative period for work organizations and for I-O psychology) when White males were the predominant members of the workforce, with unpaid wives at home tending to children and nonwork needs. This characterization increasingly is not accurate of workers in the 21st century, nor is it accurate for their families. Families are more diverse in structure, and it is more likely that all adult family members are paid employees working outside of the home.

With the changing demographic composition of the workforce and working families, and the changing demands and technology within organizations, the way success is defined and measured must undergo transformation as well. We argue that this transformation in evaluation at work needs to reflect the following. First, the domain of success must encompass a more inclusive set of content, including individual employee well being, marital and family well being, and traditional indicators of task and citizenship behaviors. Second, the domain of success must reflect multiple levels of analysis, including individual employee, couples, families, teams, work units, organization productivity, and community quality. Further, the multiple levels of analysis may include varying units of time—short term including up to about 1 year to longer term including up to decades of time. For example, children often leave home at 18 years of age, and the balance between work and nonwork that is best for the employee, the child, the spouse, the organization, and the community might constantly shift during those 18 years. Some employees might attempt to maximize their career advancement before starting a family, whereas others might reenter a career after childrearing is completed. The definition of the employees' behaviors that are most desirable will probably vary over employees, over time, and over stakeholders.

Third, the set of stakeholders who have a legitimate interest in defining what behaviors should occur in the workplace are not found only at work (e.g., employees, coworkers, customers). Our definition of stakeholders must include nonworking and working spouses/partners and children. Finally, our nonwork lives should not be viewed as contaminants of job performance or success but rather as part of the ultimate criterion of success, and therefore very relevant and appropriate to assess.

IMPLICATIONS FOR SELECTION

We do not suggest that organizations measure employee marital satisfaction or fire employees after they divorce or have problematic children, nor that they use health status as selection criteria for

Chapter 25, this volume, for a discussion of work-related health, stress, and safety). Rather, just as many organizations collect and monitor various safety criteria at the organizational level (e.g., accident rates), an organization can monitor at an aggregate level the work and nonwork health of their organization. To ensure privacy for employees, information on nonwork issues can be collected at group or organizational levels of analysis about marital health and family relationships, not from individual employees. However, information on work performance using task and citizenship behaviors can be collected at individual and aggregated levels. Further, it is important that organizations tap not only perceptions of individual employees, coworkers, supervisors, and so forth, but also the perceptions of employees' partners/spouses and children. Just as 360° performance feedback programs have gained some popularity in management circles (Bracken, Timmreck, & Church, 2001), organizations should also receive feedback from nonwork sources (Shellenbarger, 2002). Using a type of family 360 may provide useful feedback to the employee.

Adopting a broader, more heterogeneous conceptualization of worker success would have important implications for the way we evaluate the validity and adequacy of our criteria and for the conclusions we reach about the validity and value of many of the systems psychologists develop for organizations. A broader concept of success may have considerable appeal for employees and their families and could even be thought of as a competitive advantage for organizations (i.e., organizations that think more broadly about defining success may be better positioned to recruit and retain particular employees) and enhance the sustainability of the organization. Perhaps one basis not reflected in the organization evaluation process. Taking a broader perspective may also provide the organization with a strategic advantage within the public's eye. In addition, organizations would gain essential insight to potential HR challenges facing working families that can provide the basis for innovative and effective interventions. Not only would I-O psychologists and managers have more actual measures to tap success, but they would also have more sources of performance information. Finally, using a multilevel orientation to tap multisource information, we plausibly can begin to (a) link our HR systems with business strategy (as discussed in Chapter 9, this volume) and (b) develop selection tools that predict *in situ* performance and more fully reflect individual success and well-being as well as organizational sustainability.

CONCLUSIONS

The way we go about predicting and understanding success in organizations (and designing personnel selection systems that will maximize success) depends largely on how we define success. Researchers and practitioners increasingly question the adequacy of traditional definitions of job performance, promotions, salary, job title, organizational level, and so forth as indicators of success. These are all important and relevant, but success almost certainly should be defined more broadly and comprehensively. As the permeability of the boundaries between work and nonwork domains increases in the 21st century, our definition of what it means to the organization, the individual, and the broader society to be a success or a failure in the workplace is likely to change.

We have argued in this chapter that criteria such as marital and family well-being are of legitimate concern to responsible organizations and are part of the ultimate criterion. The wealth of evidence shows that employees place family as their number one priority (Lewis & Cooper, 1999) and that employees' work demands regularly interfere with their ability to meet family demands, and to a lesser degree there is also some evidence that employees' family demands interfere with their ability to carry out work demands (cf. Greenhaus & Parasuraman, 1999). Business strategies that emphasize promoting long-term sustainability and concern with the construct of *in situ* performance (Cascio & Aguinis, 2008) will necessarily be concerned with determining how work and nonwork domains affect one another and with how nonwork criteria such as family well being are likely to influence the viability of organizations. The literature includes constant calls for aligning HR practices with business strategy (Chapter 9, this volume) to promote the long-term benefit of

organizations, and it is likely that understanding the effects of work and organizational demands on the quality of nonwork life will be an important factor in building and sustaining healthy organizations. Our current criteria for success (and theories of performance) are arguably deficient because we ignore the facets and structures of work that affect nonwork areas of our lives.

For example, suppose that a new performance management system led employees to work more hours at work but also led to increased stress at home. It might be reasonable to ask whether the organization should consider their new system a success or a failure. It may not be easy to determine the best balance between the positive and negative effects of this system, but it seems reasonable to at least ask the question of how interventions that have what seem like beneficial effects at one level of analysis might have negative effects at other levels. Our current narrow focus on what is good for the organization may lead us to miss the effects of what happens in the workplace on any number of domains other than work.

What happens at work does not always stay at work; the workplace affects our nonwork lives, and our nonwork lives affect the workplace. It is important to more fully appreciate the reciprocal relationships between work and nonwork and to recognize the larger developmental and cultural context in which work behaviors unfold. Including nonwork factors in our evaluations of careers, jobs, and organizations is not a source of criterion contamination. Rather, failure to consider these factors in defining success should be thought of as a source of criterion deficiency. There are many challenges in determining what to measure, how to measure it, and how to use that information, but the case seems clear—we need to take a broader (and richer) approach to defining performance and success for individuals and organizations.

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