Developing an OD-Intervention Metric System With the Use of Applied Theory-Building Methodology: A Work/Life-Intervention Example

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This article presents a new model, generated through applied theory-building research methods, that helps human resource development (HRD) practitioners evaluate the return on investment (ROI) of organization development (OD) interventions. This model, called organization development human-capital accounting system (ODHCAS), identifies return-on-investment measures for each of the elements of the human-capital employment life cycle that are impacted by OD interventions. We illustrate an application of the new model by using work/life (w/l) interventions as a test of the model. The contribution of this new model is fourfold:

- 1. It fills a gap in the literature by suggesting a holistic ROI framework for typically nonfinancial OD-type interventions.*
- 2. It is generated from an accepted applied theory-building methodology.*
- 3. It offers decision makers methods to develop "hard" evidence on which to evaluate w/l interventions.*
- 4. It has the future potential to be expanded and used to evaluate the ROI for multiple types of OD interventions.*

Human resource development interventions allow organizations to maximize their human capital across the entire employment life cycle (Rao & Rothwell, 2005). This employment life-cycle perspective includes strategic planning

and identifies seven human-capital elements: acquisition, allocation, citizenship, development, compensation/recognition/total rewards, performance management appraisal/evaluation, and conservation (e.g., retention) that drive firm performance. An efficient and effective employment life-cycle system will create and sustain a competitive advantage (Barney, 1991; Kossek & Friede, 2006). Indeed, Kearns (2003) indicated that sustainable competitive advantage is only achieved through a "whole system strategy" of human resource activities (p. 28). Through this system, alignment allows organizations to match employees with desired knowledge, skills, abilities, and motivation with positions designed to support the strategic business objectives (Torraco & Swanson, 2001).

Following Kearns (2003), this study adopted a systems view of human capital to consider the financial return on investment (ROI) of one particular area of human-capital development, namely work/life (w/l) interventions. We adopted the systems view because we were interested in understanding, from a systems perspective, how to evaluate the financial benefits of w/l interventions within a human-capital framework. In a broader sense, the problem we saw was this: How can we calculate the financial return on investment of organization development interventions that are typically difficult to evaluate? This problem is not new, as will be illustrated later in the article. However, because we analyzed the problem from the strategic human-capital employment life-cycle framework, we were able to illuminate the problem differently, identify specific areas that existing ROI frameworks missed, and generate a new ROI framework that captured the full range of financial benefits of difficult-to-measure organization development interventions.

To accomplish our goal, we initially posed one research question: Does an existing ROI model or framework exist that can identify the full financial contributions of human capital as a result of OD-type interventions? The goal was to see if a framework existed to allow organizations to attach numeric and/or monetary outcomes to OD interventions in general, and then we would apply the model to specific w/l interventions for assessment and evaluation. As the study progressed, and as the human-capital life-cycle perspective began to illuminate gaps in the existing ROI frameworks, the study began to change from *identifying an existing model* to *generating a new model*. At that time a second research question emerged, namely, can a systemic ROI model, capable of measuring the full financial contribution of OD interventions, be developed? The gaps in the existing literature convinced us that a new model needed to be developed, but initially we did not know how to build a new model. Was there an accepted process for model building? What type of research is model building?

Eventually, it became clear that the research we were doing was applied theory-building research. In other words, we were building a new theory focused on how to calculate the ROI on OD-type interventions from the human-capital employment life-cycle perspective. Although there is a debate

on the difference between the words *model* and *theory*, for the purposes of this study we will use *model* to describe the outcome of our applied theory-building research. Armed with this new understanding that we were following an accepted, legitimate path for constructing new knowledge, the second research question became: Can a systemic ROI model, capable of measuring the full financial contribution of OD interventions, be developed with applied theory-building research methods? As will be illustrated in subsequent sections, framing this study as applied theory building provided us the theoretical foundation for constructing a new model that could solve the business case problem of OD and w/l-balance interventions. Ultimately, the study produced a model that adds to the existing ROI literature by using the human-capital employment life cycle to categorize the types of improvements that OD interventions can make. Using the human-capital employment life cycle in this manner is new, and provides an illuminating perspective of how OD interventions impact the full organizational system.

The paper is organized as follows: (a) the business case: w/l interventions and ROI, (b) literature review, (c) findings, (d) a conceptual test of the new model with w/l-balance interventions, and (e) conclusions and implications for future research in HRD. We first present an overview of the business case for w/l interventions for readers to understand the context of this very important type of OD interventions.

The Business Case: W/L Interventions and ROI

Although considered innovative and viewed as a core concern among management, OD interventions like w/l interventions have rarely been measured, integrated, or aligned with the strategic business objectives of most organizations (Kossek & Friede, 2006). As an OD-intervention strategy, a number of w/l researchers have noted that discussions about w/l interventions should be reframed by presenting w/l interventions as more than a luxurious perk, and instead, articulate how they become robust business tools strategically contributing to an organization's competitive advantage (e.g., Arthur & Cook, 2003; Perry-Smith & Blum, 2000).

Work/life interventions are policies, programs, practices, and benefits that are intentionally designed to promote healthy integration, balance, enrichment, harmony, and facilitation in the interface between the domains of work and life, while also alleviating or ameliorating the bidirectional stressful demands, conflicts, and tensions between the work and life domains (Lobel & Kossek, 1996; Morris & Madsen, 2007). Accordingly, as an OD intervention, w/l interventions enable individuals to experience greater and more optimal w/l situations (e.g., balance versus conflict), enabling them to unleash levels of human expertise for maximized levels of performance.

Similar to the accountability demands being imposed upon the broader HRD discipline (e.g., Holton & Naquin, 2001), within the w/l scholarship

domain colleagues have argued for the needed development of a “business case” that demonstrates the value-added benefits for organizations that are responsive to their employees who are attempting to integrate professional (i.e., work) and personal (i.e., family or life) demands (e.g., Pitt-Catsouphes & Googins, 2005). As with other HRD interventions, the development of a “business case” regarding w/l interventions involves numerically demonstrating the economic costs and/or benefits of a particular organizational decision and is an important step in ensuring organization-wide support (e.g., Galinsky & Johnson, 1998; Halpern & Murphy, 2005).

As part of a broader human-capital business strategy linkage, w/l scholars have noted that an integrated approach of w/l interventions are good for the health and well-being of employees and their families, as well as good for the health and well-being of the employer’s bottom line—a win-win situation (Berg, Kalleberg, & Applebaum, 2003; Friedman, Christensen, & DeGroot, 1998). Kossek and Lambert (2005) have suggested that organizations are more likely to change their structures and implement w/l interventions if hard evidence of the outcomes of the business case and the strategic value of w/l interventions is demonstrated. According to Bond, Galinsky, Kim, and Brownfield (2005), 46% of employers cite the “cost” of work–family interventions as an obstacle toward their implementation. However, when w/l interventions have been adopted, the Galinsky and Bond (1998) study found that 46% of employers perceived a positive return on their investments in flexible work arrangements; 42% a positive return on leave programs; and 21% a positive return on elder-care programs.

Phillips (2005) considers the lack of appropriate human-capital metrics and the understanding of what could be measured as a major barrier to OD- (e.g., work/life) intervention implementation. Supporting Phillips’s assertions, a 2003 Mellon Financial survey of 646 organizations (“The return of,” 2004) found that although over 70% of employers believe that w/l programs enhance recruitment efforts, raise morale, and create competitive advantage for the organization, only 23% have human-capital metrics to measure the financial impact of w/l programs. Similarly, Fegley (2006) reported that only 23% of organizations “frequently” used metrics or analytics with w/l programs. In summary, the literature has suggested that w/l interventions are perceived as effective in addressing the needs of employees and their employers. However, efforts to build and establish the business case for w/l interventions are clearly needed. Our study sought to contribute toward this gap by identifying or developing an ROI model or framework, informed by the human-capital employment life-cycle perspective, which would allow HRD professionals to make accurate claims and a compelling business case for implementing w/l interventions.

The next section describes the various streams of literature we drew upon to identify, then to create, the new ROI model. Our thought was that HRD professionals would be given another tool to accomplish strategic HRD

objectives if we could identify or create a way for them to calculate ROI of OD-type interventions.

Literature Review

Two types of knowledge were required for this study. One type of knowledge was about applied theory-building research, and the authors reviewed literature in HRD and management journals focused on the methods and components of applied theory-building research. The second type of knowledge was about the phenomenon itself—the complicated and multilevel problem of calculating the ROI of organization-development-type interventions. An extensive literature review was conducted to examine the existing state of knowledge about how return on investment can be calculated. In the next section, information about theory-building research is presented. Following the theory-building research discussion, the literature review continues with presenting the ROI and w/l literatures relevant to the study.

Theory-Building Research. During the study, the authors used a technique known as “disciplined imagination” (Weick, 1989). This technique allowed the authors to move back and forth iteratively between two literature streams. The two streams were (a) ROI theories, models, and frameworks; and (b) w/l-balance interventions and existing organizational approaches to measuring w/l intervention impact. As the authors became aware that there was a gap in the existing ROI literature, the authors began to cobble together a “new” model in piecemeal fashion, until it became clear that what was happening mirrored the process of the conceptual-development phase of applied theory-building research. When this became clear, and the new understanding emerged that the study was an example of theory-building research, the authors began to examine theory-building research methods articles to confirm their processes and to follow accepted practices and standards for conceptual development.

The process of building a new ROI model to fill a gap in the literature mirrored the steps required for completing the conceptual-development phase of applied theory-building research (Lynham, 2002). This phase has been described as the most complex and challenging research phase for building applied theory (Storberg-Walker, 2007). Different processes for completing this phase have been identified in the literature (Storberg-Walker & Chermack, 2007), but there is a general consensus that the phase will produce a statement or model that describes key concepts (or variables) and how they are related to each other.

For this study, several interviews with the first author and concurrent document reviews revealed that the study followed four specific steps for conceptual development as identified by Storberg-Walker (2007). First, the authors immersed themselves in the literature of the phenomenon (e.g., measuring the ROI of w/l interventions); second, the authors determined a

research paradigm and related preliminary design issues; third, the authors mentally integrated two different conceptual research streams previously unconnected; and fourth, the authors identified the key concepts for their new model to address the gap found in the literature.

The model that was generated from the above cognitive activities was then applied to a hypothetical w/l-balance intervention to assess the degree to which the new model could measure the financial returns determined necessary in the ROI literature. The findings of this conceptual (i.e., not empirical) test are presented in a subsequent section, and the implications for future research and practice are provided for further empirical testing of the model on different types of OD interventions.

It is important to note that only upon reflection and questioning did the authors understand their research process and problem solving as applied theory-building research. This does not negate or minimize the “quality” of the theory-building research in any regard. In fact, this scenario illustrates how pervasive applied theory-building research is in the HRD discipline. Many scholars just do not name the work as such. Serendipitously, the authors had occasion to describe the work to a theorist, and subsequent interviews and document reviews illuminated the processes of conceptual development. Going forward, the model created in this study will be operationalized, refined, continually tested, and applied, and the virtuous cycle of applied theory-building research will continue. The next section of the literature review describes the content of the applied theory-building research, namely, ROI theories, models, and frameworks.

ROI Theories, Models, and Frameworks. We conducted an extensive review on the ROI literature in order to identify the key categories, computational methods, concepts, and components involved in ROI calculations. Typically, it has been difficult to measure the financial return of OD-type interventions accurately. We wanted to examine and evaluate the existing ROI literature to identify a model that could provide a comprehensive and accurate measure of w/l-balance interventions. Although the next section of this review illuminates the existing measurement practices for w/l interventions, we decided to focus the majority of our analysis on the conceptual and empirical literature on generic ROI of human-capital investments. This literature stream has a long history and key authors are cited extensively in peer-reviewed journals.

Clearly, metrics are the *sine qua non* of the business world. Metric goodness requires the development of measures that are psychometrically sound (i.e., reliable, valid) (Carmines & Zeller, 1979), possess credibility (e.g., perceived as authoritative or believable), have meaningfulness (e.g., possessing managerial value), are legitimate (e.g., perceived fairness and openness), are accurate (e.g., perceived as correct), and possess strategic value by the end user (e.g., decision makers, evaluators of performance) (Becker, Huselid, & Ulrich, 2001). Generally accepted accounting categories/levels of volume/quantity, cost, income, time, quality, and stakeholder reaction, and computational methods (i.e., rate,

Figure 1. Multilevel Model for Metric Creation

ratio, composition, and indices) and an almost infinite variety of possibilities for contextually “cutting” or cross-sections of the data (see Figure 1) (Morris & McMillan, 2005) are used in creating good metrics. Categories/levels, computational methods, and contextual cuts provide vital information useful for describing attributes and assessing relationships (e.g., strategic causal linkages) between constructs. According to Becker et al. (2001), “Good measurement requires an understanding of and expertise in measuring levels and relationships” (p. 112). Although the foundation of a good metric system is measurement of attributes, relationships that measure hypothesized causality (i.e., change in x causes y) are the goal for making decisions and assessing performance. In measuring causality, level of analysis (e.g., individual versus organization) and isolating the effects of the key variables are critical to providing managerial value confidence (Becker et al., 2001; Huselid, Becker, & Beatty, 2005; Phillips, 1997).

In terms of generally accepted accounting categories, *cost* is formally defined as a measure of resource sacrifice (e.g., time, money) incurred to obtain a benefit or service (Flamholtz, 1999). Fitz-enz (2000) describes cost as a direct measure guaranteed to get the attention of an organization’s management team. *Time* is a measure of speed that is sufficient enough to accomplish a given task. With the abundance of technology available, work is performed

faster, and organizations are expected to have quicker response times. Fitz-enz (2000) maintains that organizations that efficiently perform faster than their competition achieve a differentiating competitive advantage. *Volume* is a measure of output, tangible or intangible. Volume is traditionally measured in units produced, number of incidents, or in frequency of events. *Income* is a top-line measure of revenue or profit that is received as the result of normal business activity (Sullivan, 2004). *Quality* is a measurement of people, processes, and systems to ensure that predetermined standards are met (Fitz-enz, 2000). Quality measurements are often manifested in units of error, returns, and reworks. And finally, *stakeholder reaction* is the response of the organization's constituent group(s) or customers. Measures of stakeholder reaction are found internally (e.g., satisfaction, engagement) and externally (e.g., profits).

In terms of computation methods, *rate* is the proportion of one or more parts to the whole. Rate is traditionally expressed as a percentage or frequency. *Ratio* is the proportion of one number to the other and is often expressed as a fraction. *Composition* is the classification of the whole into its parts, with a percentage of the whole allocated to each part. Finally, an *index* is the weighted combination of distinct data into one number relative to a scale or defined anchor. These four basic methods or formulas can be used by organizations to calculate and compare measures across OD-intervention (e.g., work/life) processes (e.g., Huselid et al., 2005; Phillips & Phillips, 2005).

Finally, metrics are subject to an almost infinite number of cross-sectional analysis possibilities. Such possibilities provide organizations with additional data manageability. The data can be sectioned in any number of combinations, depending upon the constituent group the organization wishes to analyze. Some options for cross-sectional analysis are (a) by organization structure/division (e.g., department, location, product line); (b) sociodemographics (e.g., age, gender, ethnicity/race, education level, language preference); (c) employment status (e.g., union/nonunion, full-time, part-time); (d) job type (e.g., exempt or nonexempt, management or line staff); and (e) longevity or tenure (e.g., seniority level, time in position).

Selection of the ROI Frameworks for This Study. From the comprehensive literature review described above, we identified two potential frameworks that we initially hoped would provide a systems perspective from which to assess the ROI of w/l interventions. The selected frameworks were developed by Fitz-enz (2000; Fitz-enz & Davison, 2002) and Flamholtz (1999). These cost-accounting frameworks were selected based upon their noted contributions to the ROI domain, and both are well-referenced in the scholarly as well as practitioner literatures for their work in determining the economic value added and return on investment of HR practices (e.g., Hyland & Jackson, 2006).

Specifically, through the work of Fitz-enz, researchers and practitioners have been given the necessary tools and methods for accurately quantifying

and calculating the value-added contributions of an organization's human capital (e.g., Fitz-enz, 2000; Fitz-enz & Davison, 2002). Similarly, through Flamholtz's (1999) innovative work in the area of human resource accounting (HRA), scholars have a framework that provides a process for creating concepts and accounting method tools for treating people's intelligence, skills, talents, and behavioral attributes as organizational investments and assets. The primary premise of HRA is that human resource data (i.e., skills expertise, knowledge expertise, experience expertise) can be identified and measured through the recruitment, selection, hiring, training, and development processes and converted to monetary and economic value—the currency of business.

As a basis for our efforts to create a holistic OD-intervention metric system framework that could capture the varied contributions of w/l-balance interventions, we sought to compare and contrast the works of Fitz-enz and Flamholtz to explore similarities and differences between their respective framework approaches. Our purpose was to determine if the Fitz-enz and Flamholtz framework models would be adequate in accommodating our own metric system needs.

Through the lens of our knowledge and experiences in the w/l-balance area, our compare-and-contrast review suggested that the Fitz-enz and Flamholtz frameworks needed refinements and extensions to capture the ROI of w/l-balance interventions adequately. As separate and freestanding models, our review found that neither framework alone would fully capture the varied contributions of w/l-balance interventions. It was at this point of the study that we began to understand we were undertaking to build a new, integrated model, and that the study had the potential to provide HRD practitioners with a new tool to measure the ROI of OD interventions in general, and w/l-balance interventions in particular.

Two issues arose in our review that exposed the limitations of each model. First, although both framework models provided similar individual guidance to our framework-building efforts (i.e., similar model elements) (e.g., acquisition, compensation, evaluation), neither framework provided comprehensive or holistic array of elements sufficient enough to measure the varied benefits and contributions of w/l interventions as identified in the w/l literature fully. The Flamholtz and Fitz-enz models were designed for broader HR applications; we needed a more specialized framework to capture the w/l contributions identified in the existing literature. For example, elements like employee citizenship and discretionary behaviors have been demonstrated to arise from w/l interventions contributing toward improved employee and firm performance (Lambert, 2000). As a result, we combined the elements from the Flamholtz and Fitz-enz frameworks to take advantage of their unique contributions, as well as extended the combined framework with additional elements to accommodate the specialized framework needs as identified in the w/l literature.

Second, although both Fitz-enz and Flamholtz provided instructions and formula-based tools for creating metric systems (i.e., Fitz-enz provided a more extensive and detailed array of metrics), both cost-accounting framework approaches *primarily* detailed ways and examples to measure and estimate the costs, not potential income/revenue/profits, associated with human resource functions and activities. To illustrate through embedded evidence, in speaking of HRA, Flamholtz noted: “It involves measuring the costs incurred by business firms and other organizations to recruit, select, hire, train, and develop human assets” (Preface, p. xii).

It is important to acknowledge that both frameworks considered human capital as assets to be optimized, rather than expenses to be minimized. However, as cost accounting models, our review suggested they presented a more limited and traditional view of HR functions and activities which reflects a cost-center or asset depreciation mindset. Our observation of these earlier works is not intended to be a criticism. Instead, the observation is more likely the result of a necessary development phase in the evolution of HRA with the field initially needing to establish itself with valid cost-accounting methods. Now that HR cost-accounting methods have been established as credible, in contrast to this traditional cost-center approach, the next HRA evolutionary phase has arrived with more contemporary ROI approaches emphasizing the need to view investments (e.g., expenditures) in HR functions and activities (e.g., acquisition, allocation, development) as promoting revenue-generation or profit-center capabilities (Hyland & Jackson, 2006; Phillips, 2005; Sullivan, 2004) and ultimately driving organizational competitive advantage (Barney, 1991; Becker et al., 2001). As earlier foreshadowing, even Flamholtz (1999) noted that the ultimate goal of human resource management activities (e.g., acquisition, allocation, development) was to “contribute value of an enterprise by transforming raw human inputs into valuable human outputs” (p. 12).

Thus, we sought to fill the gaps we found by slightly extending and refining the Fitz-enz and Flamholtz frameworks through the addition of human-capital employment life-cycle elements and metric calculation considerations (e.g., revenue generation). Once the gaps were identified, it became necessary to return our focus to the w/l intervention literature in order to examine how w/l interventions could impact each human-capital employment life-cycle element. The next section describes this literature and how various scholars view the ROI of w/l interventions.

W/L Balance Interventions and Existing Evaluative Approaches. Up to this point, the theory-building research methods—disciplined imagination coupled with literature review and personal experience—have generated a new understanding of how a human-capital employment life-cycle perspective can more accurately portray the holistic contributions of complex, multilevel OD-type interventions. However, the ROI calculation is not enough for determining whether or not a specific intervention could be labeled a success. For the

model to be able to evaluate the degree of success for any particular w/l intervention, the model needed to add an additional concept to the existing seven human-capital employment life-cycle concepts. This new concept (or concepts) needed to give the model an evaluative mechanism from which an HRD practitioner could label the ROI of the intervention as successful, or not.

Our review of w/l literature found that a huge variety of w/l interventions exist, and that frameworks evaluating their effectiveness are connected to organizational strategy. To illustrate, the Society for Human Resource Management (Fegley, 2007) provided a listing of 257 different employee w/l benefits, which can be offered to employees as single or bundled policies, programs, practices, and interventions. According to Perry-Smith and Blum (2000), w/l interventions that are strategically bundled are more effective than single offerings in strategically influencing and driving the financial success of the enterprise. However, regardless of w/l benefit format (e.g., sole vs. bundle), Morris (2008) has noted that w/l benefits are most beneficial to employees and organizations when they are available, well publicized to build awareness, easily accessible, affordable, fully utilized, and satisfactory to the needs of the end-users. According to the 2007 benefits survey conducted by the Society for Human Resource Management (SHRM) (Fegley, 2007), Corporate America spends 20% of an employee's annual salary on legally mandated benefits and 18% on voluntary benefits (i.e., designed to fill gaps in benefit offerings). Given the annual expenditures associated with w/l interventions, the strategic effectiveness of w/l interventions seems to be enhanced for organizations when the intervention is implemented to address key business problems (e.g., reducing absenteeism), and for employees when the intervention addresses a key personal or family-related problem (e.g., emergency child care for a sick child).

Unlike the ROI literature, this literature was pointing to the importance of the specific context of the intervention, and the role of strategic implementation. In other words, this literature connected organizational strategy with w/l interventions. Whether or not, or the degree to which, a w/l intervention was successful was dependent upon the strategic needs of the organization. For example: the same w/l intervention, generating the same results, in two different organizations, will likely impact each organization differently. One organization may determine that the w/l intervention was a success, and the other may determine that the intervention was unsuccessful. The difference involves the context and the strategic needs of each organization. Successful w/l interventions, then, are not determined merely by adding up the ROI. Success depends also on the specific organizational context and the strategic needs—retention, development, hiring—of the organization. The literature review found that a number of alternative approaches existed to evaluate the strategic impact of w/l interventions. These approaches are different from the financial-based ROI frameworks described above in two ways:

1. They are specifically focused on w/l interventions, not general OD-type interventions.
2. They seem to focus on answering the question of *why* a w/l intervention should be done, rather than *how* the ROI of a w/l intervention should be calculated.

“Why” types of questions usually require consideration of the strategic needs of the organization, and that there are likely to be a variety of different answers to why a w/l intervention should be implemented in a certain organization at a certain time.

Our literature review identified an approach that was developed in the 1990s and continues to be the benchmark for today’s research on understanding how to evaluate the strategic contributions of w/l interventions. Lobel and Faught’s (1996) seminal w/l research describes four strategic approaches that have been frequently cited in support of measuring organizational outcomes of w/l-balance interventions. The four strategic approaches are: (1) the *human cost approach* which focuses on cost-reduction through savings associated with reduced costs in labor like retention, tardiness, absenteeism; (2) the *human investment approach* which examines the outcomes influenced by support systems provided by the organization to enhance recruitment, employee performance, and morale; (3) the *stakeholder approach* which attempts to monitor the gained benefits (e.g., corporate image, improved attitudes, satisfaction levels) experienced and reported by internal (e.g., employees, management, executives) and external (e.g., customers, shareholders, regulatory agencies) stakeholders; and (4) the *strategy approach* which determines how well interventions drive the organization’s ability to align and move forward with key business interventions and objectives.

A number of researchers, for example Cascio (2000) and Konrad and Mangel (2000), have successfully relied on these strategic approaches in order to assess the impact of w/l interventions. However, these researchers did not extend the assessment into the full range of the human-capital life cycle. Consequently, the assessment likely drew a partial picture of how the w/l intervention impacted the organization. It is our position that these researchers would likely have generated a more holistic assessment of the ROI if they had combined the strategic-approach perspective to the human-capital life-cycle perspective. Consequently, we contend that these four approaches are important inputs to the process of designing w/l and other human-capital interventions to drive firm performance. The strategic approach answers the important question of why a w/l intervention should be implemented. But it does not provide a framework for answering the question of how the w/l intervention impacted the organization. To answer this second question, the human-capital employment life-cycle perspective is necessary.

Disciplined Imagination, Literature, and the Emerging Model. Our literature review produced two main findings. First, the extensive review of the

ROI literature found that existing ROI frameworks do not assess the financial impact of OD-type interventions across the full spectrum of the human-capital employment life cycle. Existing ROI frameworks provide an incomplete financial assessment of the impact of OD-type interventions. Second, our review of the w/l literature found that evaluative approaches are used to assess the impact of w/l interventions on organizational outcomes, but, like the findings of the ROI literature, these approaches do not consider the full human-capital employment life cycle. Consequently, the approaches also produce only a partial analysis of the financial ROI of w/l interventions.

From the human-capital employment life-cycle perspective, both the ROI literature and w/l intervention literature present partial solutions to the problem of measuring OD-type interventions. The ROI literature provides the assessment tools for measurement, and the w/l intervention literature provides the contextual and strategic lenses for judging the success of a particular intervention in a particular organizational context.

Arguably, combining the ideas and concepts of the two literature streams can contribute toward a new understanding of how to calculate the full benefits—across the human-capital employment life cycle—of OD-type interventions. This is where the tools and methods of applied theory-building research and disciplined imagination entered the study. We believed that the existing literature was incomplete, but that if elements of the different literature streams were combined we could generate the holistic ROI framework that we were seeking. The act of combining concepts is the process of disciplined imagination (Weick, 1989) and is often used to develop new applied theories.

Initially, the concepts of the emerging model were the seven human-capital life-cycle phases combined with the specific ROI methods that could measure each of the seven human-capital employment life-cycle phases. However, upon critical examination, it became clear that these concepts alone could not generate understanding of success or lack of success for any particular intervention. These concepts alone would generate metrics without meaning. To generate meaning, the emerging model needed to include some assessment or evaluative mechanism that would indicate the degree to which an intervention met strategic objectives. Eventually it became clear that the four w/l approaches of Lobel and Faught (1996) provided the contextual and strategic type of assessment perspectives needed to complete the emerging model, and these four approaches were added to the model.

When these approaches were added to the emerging model, a new way of understanding how to calculate the ROI of OD-type interventions from a human-capital life-cycle perspective was created. Specific concepts of the model were identified in the literature, and logic and argumentation were used to legitimize their importance. Further, aligned with standard theory-building guidelines, each concept was determined to be unique and necessary for the model to “do” what it was supposed to do. Following the

“input/process/output” process model, the new model contains four “input” concepts and seven “process” concepts, and the output is firm performance. The next section presents the findings, and describes in more detail the model and its internal concepts.

Findings

This section presents the new ROI model that can illuminate the financial returns of OD-type interventions for each of the human-capital employment life-cycle elements. This holistic ROI model fills an existing gap in the w/l literature by bringing together all of the value-added pieces of a larger puzzle that previously have been examined in a piecemeal fashion. As illustrated earlier, w/l studies primarily focused on the impact of w/l interventions on one or two individual elements of the human-capital employment life cycle. Although these earlier efforts have been important, ROI calculations from these models do not capture the full ROI impact of the w/l intervention.

Please see Figure 2, where we present the organization development human-capital accounting system (ODHCAS). Our ODHCAS model illustrates the process of strategic human-capital planning and how each element of the human-capital employment cycle is impacted by OD interventions.

The individual elements of the human-capital employment life cycle then combine to produce an outcome, which we label *firm performance*. In other words, driven by one or any combination of all of the four strategic approaches (i.e., cost reduction, investment, stakeholder benefits, or strategic impact) (Lobel & Faight, 1996), Human Capital Strategic Planning is

Figure 2. Organization Development Human-Capital Accounting System (ODHCAS)

the input that initiates change and Firm Performance as the output or dependent variable resulting from the change. The center of the model illustrates how OD interventions, triggered by human-capital strategic planning, can impact each one of the employment life-cycle elements to transform inputs to outputs. By design, although we understand each of the model elements have direct importance to other elements, it was not our goal to connect them to each other. Instead, our goal was to emphasize and isolate the impact of OD interventions on each of the seven elements. Once the isolated impact on each element is realized, a system-wide additive effect can be generated. Phillips (1997) has described the importance of isolating the effects of HRD interventions in calculating ROI.

The model illuminates several key considerations. First, because organizations are unique and differ in their business goals/objectives, based upon the desired configuration of approaches for measuring the outcomes they seek, it is anticipated that one of the primary benefits of the ODH-CAS is that it can and should be customized to include the human-capital value-added drivers (i.e., core people-related capabilities or assets) and enablers (i.e., reinforcer of learning, performance, change) that strategically influence an organization's value chain (i.e., what kind of value, how that value is created) (Becker, Huselid, & Ulrich, 2001). To illustrate customization, if the organization pursues a human cost approach as an influence of human-capital strategic planning to drive firm performance, they would develop a human-capital strategic plan that would include designing OD (e.g., w/l) interventions to reduce costs like tardiness and/or absenteeism as a way to increase firm performance outputs.

Second, it is important to note that we placed the OD intervention (i.e., w/l interventions) in the center of the seven-element model with linkages to each of the human-capital employment life-cycle elements. The center placement suggests that the benefits and/or costs of OD interventions are system wide. As such, HRD professionals can examine how their interventions directly and indirectly impact human-capital efforts as they ripple throughout the entire human-capital life-cycle system of employment. As the model illustrates, we concur with the litany of research emphasizing the importance of the strategic planning function incorporating an integrated system of internal human-capital processes (e.g., acquisition) as the basis for organizational decision making in driving firm performance (e.g., Fitz-enz & Davison, 2002; Gates, 2004; Goodstein, Nolan, & Pfeiffer, 1993; Phillips, 2005; Swanson, Lynham, Ruona, & Provo, 1998). In other words, by viewing OD interventions as the core change mechanism that can impact all human-capital elements, we affirm the importance of strategic human-capital planning and its role in anticipating changes in and leveraging value from human capital in driving firm performance.

Third, the model illustrates that, influenced by the configuration of organizational approaches to measuring the impact of w/l interventions,

human-capital strategic planning will ultimately influence and drive firm performance through a system of transformational processes of inputs to outputs, and as a result, a feedback loop exists between firm performance and one or a configured combination of the organizational approaches that influence strategic planning. As with any feedback loop, the model has a feedback mechanism that allows for monitoring change, communicating needed improvements, assessing satisfaction, and recording performance outcomes as a result of the OD intervention's (e.g., w/l interventions) influence on the entire human-capital system.

Applied theory building research literature would confirm that the ODHCAS model represents completion of the conceptual-development phase of theory-building research. The concepts are defined and supported by the literature, and relationships between the inputs and outputs have been hypothesized. The next step in the applied theory-building research process would be to operationalize the model with the goal of eventual empirical testing. Working toward that goal, we decided our next step would be to extend the model conceptually into the w/l domain. Extending the model in this fashion allowed deep examination of how the model can illuminate the ROI for w/l interventions. From this exercise the next steps will be to use the model to measure an actual w/l intervention empirically.

The next section presents the ODHCAS model as applied hypothetically to w/l interventions. The section draws from the literature review and will contribute toward our eventual empirical testing of the model.

Implications for HRD: Conceptual Test of the ODHCAS Model Applied to the W/L Context

This section presents the entire ODHCAS model as applied to the w/l context. Beginning with the input and output elements of strategic planning and firm performance, the following sections define each element of the human-capital employment life cycle (e.g., acquisition, allocation, citizenship, development, compensation/recognition/total rewards, performance management/appraisal/evaluation, conservation) and provides relevant literature from the strategic HR arena explaining the element's inclusion. Table 1 provides illustrative examples from the w/l literature to demonstrate how w/l interventions impact this employment life-cycle element and offers detailed analysis of how the ROI can be generated within each ODHCAS element.

Table 2 provides an illustrative assortment of w/l metrics that have been created with the use of the multilevel model (see Figure 1) to measure w/l interventions using the ODHCAS model.

Human-Capital Strategic Planning: Getting the Right W/L Intervention Plan for Your Workforce. Regarding the input element, a central tenet of OD strategic planning is that human capital is key to value creation within organizations. Human-capital strategic planning includes an internal and external

Table 1. Illustrative W/L Literature Examples of how the ODHICAS Elements Strategically Impact Organizations

ODHCAS Element	ODHCAS Measures OD Interventions	W/L Literature Evidence	Suggested W/L Studies
Talent acquisition	Attracting talent Recruiting Selecting Hiring On-boarding	Generational cohorts have different w/l needs and expectations. W/L factors account for 67 percent of work characteristics rated as absolutely essential for attracting and recruiting talent. Applicant pool size doubles and applicant quality improves with w/l benefits.	Arthur and Cook (2003) Cascio and Young (2005) Cascio (2000) Greenhaus, Parasuraman, and Collins (2001) Grover and Crooker (1995) Konrad and Mangel (2000) Lobel and Kossek (1996) Sutton and Noe (2005)
Talent allocation	Staffing accuracy Placement: employee fit Employee adjustment	Managers who customize job assignments around w/l issues are being responsive to a dual agenda (i.e., the maximization of benefit for both the organization and employee) and experience higher productivity among employees.	Bailyn and Fletcher (1997) Lautsch, Kossek, and Eaton (2004)
Talent citizenship	Employee attitudes Employee morale Discretionary behavior	Supportive w/l cultures encourage employees to be more invested in an organization's success and provide more organizational citizenship behaviors and discretionary effort.	Galinsky and Bond (1998) Konrad and Mangel (2000) Lambert (2000)
Talent development	Training Leadership development Coaching Mentoring Succession planning	Supportive w/l cultures provide higher levels of training programs about w/l benefits and to managers.	Berg, Kalleberg, and Applebaum (2003) Dychtvald, Erickson, and Morison (2006)

(Continued)

Table 1. (Continued)

ODHCAS Element	ODHCAS Measures OD Interventions	W/L Literature Evidence	Suggested W/L Studies
Talent compensation, recognition, and total rewards	Effectiveness	Although many employers prefer to offer lucrative w/l benefits in exchange for paying above-average salaries/wages, employees report they feel more valued when the organization voluntarily offers w/l benefits.	Crooker, Smith, and Tabak (2002) Grover and Crooker (1995)
	Efficiency		
	Equitable total rewards mix (pay, benefits, recognition)		
	Meet employee economic and psychological needs		
Talent performance management, appraisal, and evaluation	Assess/evaluate	Employees with increased w/l conflict receive lower evaluations.	Galinsky and Bond (1998)
	Employee productivity	Employees who accessed and utilized w/l programs receive higher performance evaluations.	Lambert et al. (1993)
	Employee readiness	Managers need training on implementing w/l interventions when conducting performance appraisals.	Madsen (2003)
	Employee promotions		Vincola (1998)
	Employee performance		
Talent conservation	Reduce absenteeism	W/L interventions reduce absenteeism, turnover, tardiness, job insecurity, distraction, depression, and health-related stress. W/L interventions promote higher levels of employee engagement and loyalty.	Batt and Valcour (2003)
	Reduce turnover		Grover and Crooker (1995)
	Reduce tardiness		Konrad and Mangel (2000)
	Increase satisfaction		Sutton and Noe (2005)
	Improve morale		
Improve loyalty			

Table 2. Illustrating the ODHCAS with the Use of the Multilevel Model for Creating W/L Metrics^a

ODHCAS Elements	Volume	Cost	Income	Time	Quality	Stakeholder Reaction
Human-capital strategic planning	Number of w/l suggestions from workforce	Expenditures for w/l program compared to total spent on HR budget	Total market share	Management hours spent in w/l planning compared to HR planning	Perception of w/l benefits	Number of industry benchmarking w/l programs
Talent acquisition	Number of applicants per job offer	Reduction in spending for recruiter fees	Recruitment as percent of revenue	Time to fill	Diversity of applicant pool	Management satisfied with hires
Talent allocation	Number of transfer requests due to unmet w/l issues	Orientation cost reduction due to w/l programs	Increased production income	Nonproductive time due to w/l issues	Scrap rate reduction due to FTE focus due to w/l programs	Employee person-environment (P-E) satisfaction
Talent citizenship	Number of full-time employee (FTE) volunteers contributing personal time to firm's community-based programs	W/L intervention cost-sharing agreement with FTEs	FTE charitable contributions to sick-bank for critically ill employees and colleagues	Number of discretionary hours attributable to w/l interventions	FTE fitness center utilization (percent)	Level of FTE morale attributable to w/l interventions
Talent development	Number of w/l training programs for managers and FTE	Total W/L program cost	W/L profit center external consulting revenue	W/L training as a percent of total training	Number of accidents prevented because of w/l	Workforce reports of usefulness of w/l programs
Talent compensation, recognition, rewards	Number of sign-on bonuses retained as substitute to w/l programs	W/L benefits as percent of revenue	Active w/l FTE compensation as percent of revenue	Monthly flextime hours	Management salary tied to w/l	Pay equity ratio by gender

(Continued)

Table 2. (Continued)

ODHCAS Elements	Volume	Cost	Income	Time	Quality	Stakeholder Reaction
Talent conservation	Voluntary turnover rate versus involuntary turnover rate due to w/l	Voluntary turnover cost due to unmet w/l issues	Sales rates of telecommuters to nontelemmuters	Retention rates of A-level talent due to w/l programs	Error ratios among consumers of w/l programs	Level of employee pride due to w/l programs
Talent performance employee management, appraisal, and evaluation	Percent of w/l utilization	Manpower costs	Level of discretionary and value-added contributions	Completion time	Appraisal consensus	Perceptions of fairness with w/l programs
Firm performance	Workforce awareness of w/l initiatives	W/L benefits as percent of total operations cost	Improved level of telecommuting productivity	First to market	Number of competitors benchmarking w/l interventions	Number of w/l national recognitions

Note: The metrics listed above are for illustrative purposes only and are not intended to be used as an organizational work/life scorecard or dashboard. Additionally, the metrics included reflect examples of computational methods (i.e., ratio) and can be configured to address contextual cuts (e.g., by gender, by department) as described in Figures 1 and 2.

^aAdapted from Morris and McMillan (2005); McMillan and Morris (2006).

analysis of an organization's current state of human-capital strengths, weaknesses, opportunities, and threats. A human-capital strategic plan outlines a directional roadmap and the tactical actions necessary for achieving future performance, learning, and change objectives through human capital (Swanson et al., 1998). According to Sullivan (2004), being "strategic" means being "future focused," and thus, strategic planning regarding w/l should be about developing a verbal description of the mental picture or vision of a business strategy by incorporating w/l interventions that are connected to the driving force(s), or DNA, for what the organization is destined to look like financially in the future. Assuming an effective and clear business strategy is in place (e.g., human cost reduction, increased investment, stakeholder perceptions, strategic impact) (Lobel & Faught, 1996), the goal of OD strategic planning involving w/l interventions should be to articulate, in concrete terms, how w/l interventions promote employee effectiveness and cost efficiency (i.e., tactical HR), as well as drive revenue creation (i.e., strategic HR) in the human resource function in supporting the overall business strategy (Gates, 2004; Kossek & Friede, 2006). The ODHICAS is designed to measure human-capital strategic-planning efforts by formulating metrics that would demonstrate how central or core w/l interventions are to the organization's human-capital strategic-planning process. Illustrative examples of how w/l interventions influence an organization's strategic-planning efforts with supporting w/l metrics are included in Table 2.

Firm Performance: Getting the Right Organizational Outcomes Through W/L Interventions. In terms of output, firm performance is a general descriptor of an organization's economic health and well-being demonstrated by the use of qualitative and/or quantitative measures (e.g., profit, market share) that are strategically relevant to the organization's vision, mission, and goals. According to Church and McMahan (1996), most early OD efforts failed to assess critical organizational-level impacts (i.e., competitive advantage, efficiency, and effectiveness) of firm performance. However, in a corrective effort, HRD scholars like Swanson and Holton (1999) have begun developing assessment systems that examine multilevel results of firm performance (i.e., system, financial), learning (i.e., knowledge, expertise), and stakeholder perceptions.

Regarding firm performance, the effect of w/l interventions on firm performance is one of the most understudied aspects in w/l literature—possibly because many w/l interventions have not been incorporated into the business strategy of the organization. While a great deal of focus has been made on the cost efficiency effects of w/l interventions on diversity, productivity, absenteeism, turnover, etc., with the exception of a few studies (e.g., Arthur & Cook, 2003; Perry-Smith & Blum, 2000), much less focus has been done on how w/l interventions impact financial indicators of corporate income, such as earnings per share, return on equity, profits, and stock prices (e.g., Cascio & Young, 2005). Inclusion of firm performance is necessary in establishing the business case for OD interventions, because the worth of all HRD interventions

should be judged on the organization results to which they are intended to contribute (Kearns, 2003). As Kearns has noted: "If there is no value added then the (HRD) activity in question, by definition, has added no value" (p. 115). The ODHICAS is designed to measure firm performance efforts by formulating metrics that would demonstrate how w/l interventions strategically assist the organization in driving key performance indicators like profits, increased market share, public image, or other mission-critical outputs of the organization. Illustrative examples of how w/l interventions influence an organization's firm performance efforts with supporting w/l metrics are included in Table 2.

Having described the input and output of the ODHICAS model, we now focus our attention on each of the seven human-capital elements of the ODHICAS.

Talent Acquisition: Getting the Right Workforce Through W/L Interventions. Driven by present and future workforce needs, talent acquisition includes the strategic processes of recruiting, selecting, hiring, and on-boarding human capital (Flamholtz, 1999). Fitz-enz and Davison (2002) maintain that human capital is an asset to organizations and, therefore, strategic procurement efforts around human capital must follow processes similar to the processes of acquiring "capital equipment, supplies, and energy" (p. 43). The key to adding the greatest expected future value to the organization is through the acquisition of high-caliber human capital—talent that is often in short supply (Lockwood, 2003). Tables 1 and 2 provide examples of how the ODHICAS is designed to measure organizational talent-acquisition efforts with OD interventions (e.g., w/l interventions).

Talent Allocation: Getting Talent in the Right Assignment Through W/L Interventions. Talent allocation involves staffing assignments that rightly place the most qualified talent into assigned jobs, roles, and tasks in such a way that fully utilizes individual talent capacity and expertise (e.g., knowledge, skills), maximizes individual and organizational productivity, and promotes employee citizenship behaviors through individual and job satisfaction, all of which provide a greater return for the organization (Fitz-enz & Davison, 2002; Flamholtz, 1999). The criticality of allocation was shown in the Buckingham and Clifton (2001) study, which found that only 20% of employees believed they were working in jobs that fully utilized their strengths, and thereby undermined their level of engagement. Tables 1 and 2 provide examples of how the ODHICAS is designed to measure organizational talent allocation efforts with OD interventions (e.g., w/l interventions).

Talent Citizenship: Getting Talent to Have the Right Attitude and Behavior Through W/L Interventions. Citizenship behavior is discretionary behavior that benefits others, as well as enhances overall organizational effectiveness (Smith, Organ, & Near, 1983). As it is discretionary, the behavior is not enforceable or formally recognized as a job requirement by the organization. In most

cases, the discretionary effort usually reflects positive attitudes, dispositional correlates, and positive personal choices on behalf of the employee (Organ & Ryan, 1995). Citizenship behaviors often include acts of altruism, conscientiousness, courtesy, sportsmanship, and civic virtue towards others (Organ, 1988). Tables 1 and 2 provide examples of how the ODHCA is designed to measure organizational talent citizenship efforts with OD interventions (e.g., w/l interventions).

Talent Development: Getting the Right Strengths Through W/L Interventions. Developing talent for the purpose of unleashing human expertise for the purposes of improving performance through the expansion of knowledge, skills, and experiences is critical to an organization's efforts to establish and build competitive advantage (Swanson & Holton, 1999, 2001). According to Drucker (2002), in a competitive knowledge economy, "developing talent is business's most important task. . . ." (p. 71). The strategic development of human capital includes the conversion of inherent talents into mature strengths, enabling employees to maximize their performance potential (Buckingham & Clifton, 2001). Sullivan (2002) describes a learning organization as "one that truly values the personal and professional growth of its employees" (p. 102). Fitz-enz (2000) maintained that training value goes beyond cost payback, "if you spend time and money helping people learn and grow, you make a deposit in their loyalty bank" (p. 99). Similar to the core assumptions of HRD, Fitz-enz further suggested that providing training shows employees that the organization cares about not just performance, but also about their personal and professional goals. Tables 1 and 2 provide examples of how the ODHCA is designed to measure organizational talent development efforts with OD interventions (e.g., w/l interventions).

Talent Compensation, Recognition, and Rewards: Getting the Right Mix Through W/L Interventions. Compensation and rewards includes the pay, promotion, and benefits (defined as indirect compensation, financial or otherwise, that provides added psychological safety, promotes goodwill and rewards employment) that are provided to employees in exchange for the work performed (Fitz-enz, 2000; Flamholtz, 1999; Martocchio, 2006; Milkovich & Newman, 2005; Rosenbloom, 2005). Competitive compensation practices result in greater motivation yielding higher levels of performance, customer service, and product development activities (Sullivan, 2002, 2004). Furthermore, Sullivan maintains that employees who perceive inadequate pay and benefits will perform their job at as little as 85% of personal capabilities. Tables 1 and 2 provide examples of how the ODHCA is designed to measure organizational talent compensation, recognition, and total rewards efforts with OD interventions (e.g., w/l interventions).

Talent Performance Management, Appraisal, and Evaluation: Getting the Right Performance Through W/L Interventions. Performance management, appraisal, and evaluation is an integrated and interactive process that

includes assessing employees' work behavior and providing them feedback about their level of contribution and performance during a specified time period toward reaching individual and organizational goals. Herling (2001) has noted that competitive advantage is achieved through high performers demonstrating expertise (i.e., optimal/exceptional performance), not competence (i.e., satisfactory performance). Performance management systems gauge and monitor these levels of performance activity. Tables 1 and 2 provide examples of how the ODHICAS is designed to measure organizational talent performance management, appraisal, and evaluation efforts with OD interventions (e.g., w/l interventions).

Talent Conservation: Keeping the Right Capacity/Expertise Through W/L Interventions. Talent conservation is the process of maintaining, preserving, and safeguarding the maximum capacity of human capital (Flamholtz, 1999). According to Flamholtz, "unless systematically monitored and maintained, the capabilities of human resources may deteriorate. . . . and the organization will have to incur either retraining costs or replacement costs to rebuild its human capabilities" (p. 16). According to Watkins (2001), "if people are assets, anything that diminishes those assets will diminish the organization's expected realizable value" (p. 82). Similarly, Swanson and Holton (2001) have offered the following caution: "An organization system that is mature, works well, and yields great returns will not necessarily remain in that state. A variety of forces cause organizations to deteriorate or disappear" (p. 268). Tables 1 and 2 provide examples of how the ODHICAS is designed to measure organizational talent conservation efforts with OD interventions (e.g., w/l interventions).

In summarizing this section, the primary implications of the ODHICAS are that it illuminates for HRD researchers and practitioners a significant number of opportunities for testing hypotheses and developing solutions that enable the organization and its employees to operate better, faster, more cheaply, and more safely. To illustrate the value of the ODHICAS, concerning *talent acquisition*, the ODHICAS would assist HRD professionals in testing and measuring the strategic impact of OD efforts designed to improve the quality and size of applicant pools and increase the speed of the on-boarding process of new applicants. Concerning *talent allocation*, the ODHICAS could be used to test OD efforts designed to impact staffing accuracy, quality of match, and fit of employees with their job environments and assigned jobs. Regarding the influence on *talent citizenship*, the ODHICAS would be used to examine how OD efforts foster healthy and productive employee attitudes and increase the discretionary efforts of employees. In terms of *talent development*, the ODHICAS could be used to increase and maximize the expected return value of the employee's potential as influenced by training and development opportunities. Concerning *talent compensation, recognition, and total rewards*, the ODHICAS could evaluate OD efforts designed to improve the effectiveness and efficiency of wage and benefits systems. In terms of *talent performance management, appraisal, and evaluation*, the ODHICAS could be

used to assess the impact of OD efforts designed to improve employee productivity, worker readiness, bench strength, and the likelihood of promotion of valued employees. Finally, in terms of talent conservation, the ODHICAS could be used to demonstrate how OD efforts to reduce absenteeism, tardiness, and turnover strategically impact the organization's key business goals.

The next and final section of this article places this new model in the larger context of justifying OD interventions, and HRD in general, to a skeptical, business-case-driven audience. The ODHICAS model is one answer to the problem of gaining legitimacy for interventions typically called "soft" and secondary to a legitimate business need. Through the ODHICAS model, HRD practitioners are provided with a tool that enables analysis and measurement, across the human employment life cycle, of critical human-capital interventions.

Reflections and Conclusions

Passion for this article initially began through an MBA student's in-class question during a work/life-balance workshop in an MBA curriculum. During the wrap-up portion of the workshop session, the MBA student asked: "Is there a credible business case for 'soft-issues' like w/l-balance? Specifically, how do we know OD interventions (e.g., w/l interventions) impact our HR people-related areas like recruiting and retention, which ultimately drive firm performance?" Unfortunately, I (the lead author) was unable to provide a good answer at the time.

But many thoughts were swirling around in my mind. Although I had conducted research in the w/l-balance area for a considerable number of years, I was not aware of a holistic model that would enable me to answer this MBA student's questions effectively. From my awareness of the w/l literature, I knew of studies that had addressed separate components of the business case (e.g., w/l programs improve absenteeism) (e.g., Arthur & Cook, 2003; Crooker, Smith, & Tabak, 2002; Madsen, 2003), but I could not immediately identify a holistic model that could be used for decision making and problem solving, could contribute to an organization's efforts in mapping human-capital strategy, and would illustrate the full range of benefits associated with w/l interventions. Later, however, I also began to realize that at the core of the student's questions was something deeper, which was a concern as to whether or not our work as HRD professionals really matters within a business context. Admittedly embarrassed for not having an immediate in-class response, and even a little more irritated afterwards with what I presumed was the assumption behind this student's question, I became energized and fueled by this challenge.

My coauthors and I began this article's journey to address questions like the one I had encountered in class. We believed we needed "something" to communicate in a language that business understood and would accept as

credible. As HRD professionals communicating about the HRD work we do, we knew that inspiring anecdotes and impressive inferential speculations would not adequately address questions and concerns raised by business and management education students who have been trained to think with a positivistic mindset. Instead, fueled by the passionate belief that everything we do in OD is economically, strategically, and managerially important, we needed an empirically verifiable method for demonstrating and communicating how the full impact of OD interventions, like w/l-balance interventions, ripples across and throughout the entire strategic human-capital framework—a belief that extends HRD's influence well beyond our traditionally documented areas of expertise in training, career, and organization development. Influenced by the echoes of the Church and McMahan (1996) critique of early OD efforts ringing loudly, we were driven to demonstrate how OD efforts, like w/l interventions, have broad business-case merit; contribute to critical organizational-level concerns such as competitive advantage, organizational efficiency and effectiveness; and ultimately drive firm performance (Lambert, 1999).

Thus, relying upon integrated streams of literature describing ROI frameworks, tools for creating metrics, and an extensive base of literature in support of w/l interventions, we created the ODHICAS to provide grounded evidence to demonstrate that a genuine business case does exist. More importantly, the business case can be holistically measured with the use of an integrated network of metrics that demonstrate how “softer” OD interventions, like w/l interventions, provide a broad and comprehensive range of value-creating assets and benefits—not just cost-reduction measures—that contribute to the organization's business strategy and performance.

As we considered the possibilities of the ODHICAS, we envisioned that it would provide HRD professionals a strategic and managerial tool that would assist them in making decisions as well as demonstrating how OD interventions create value in helping every part of the HR process work efficiently and effectively together (Kearns, 2003). We also envisioned that the ODHICAS would assist HRD researchers and practitioners create objective and credible leading and lagging indicators to document progress, measure accomplishment, secure management support, test hypotheses, and isolate key causal processes that drive individual and organizational performance stemming from their OD-intervention efforts (e.g., Becker et al., 2001; Burkholder, 2007; Cohen & Trompeter, 1999; Holton & Naquin, 2001).

Given the increased demands for accountability, HRD professionals need to demonstrate their strategic expertise in developing human-capital metrics that establish and validate the business case for investments being made in their organizations (Swanson & Holton, 2001). The value of strategic HRD in improving performance, maximizing capability, and increasing sustainability has been established by a number of HRD scholars (e.g., Gilley & Gilley,

2003; Grievies, 2003; Torraco & Swanson, 2001; Yorks, 2004). In business, value must be measured through metrics. Clearly, some might criticize the usage of metrics as being dehumanizing and too mechanistic (e.g., Sullivan, 2004). As HRD professionals, it is our assumption that we will be ethically sensitive and responsible to this concern and not allow this error in judgment to happen. However, we also contend that HRD's relevance to broader audiences in the business community require us to measure our worth and communicate our importance effectively. The broader audience includes C-suite executives and skeptical decision makers who, like the MBA student in class, may need to be convinced about how HRD interventions can strategically contribute toward improved performance over a wide range of the human-capital life cycle. Metric systems, like the ODHICAS proposed in this article, move the HRD discipline forward in speaking the language that these key business people understand and appreciate—return on investment.

Finally, as a next phase of applied theory building research unfolds, the ODHICAS model can be applied in different organizational contexts, with different strategic human-capital needs. Although a model such as the ODHICAS will likely not be predictive, evidence of how contextual and strategic differences may impact the ROI will be helpful to future HRD decision makers as they plan, design, and develop new OD and w/I types of interventions. For example, next steps include applying the ODHICAS tool as one way to measure the impact of OD and/or w/I interventions across a spectrum of organizations with different strategic needs. Over time, evidence may lead toward amending or changing the model to calculate the ROI of HRD interventions more accurately.

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