CHAPTER TWENTY-SEVEN

Assessing the Impact of Organizational Consulting

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Most psychologists who provide consulting services within organizational settings are motivated by the same desire as our colleagues who work in the other arenas where the art and science of psychology is applied: the desire to make a constructive difference. Just as our clinical counterparts labor to assist their clients in successfully meeting the personal challenges of living with others and with themselves, organizational consulting psychologists seek to enhance the effectiveness of organizations and the people who work in them. But how do we know if and when we are making a difference that matters? What are methods to assess consulting impact that have been used historically, and what approaches and tools are needed for today and the future? The authors' attempt to address these questions is the subject of this chapter. Specifically, we will summarize why it is especially important to evaluate the results of consulting efforts, and what some of the challenges to doing so are. Next, we will present some of the types of outcomes often sought by organizational leaders who utilize the services of consulting psychologists, and review literature on some past approaches to evaluating consulting interventions. Finally, we will offer some case illustrations and recommendations for the further development of outcome evaluation for psychologists who provide consultation to organizations.

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WHY EVALUATING CONSULTING IMPACT IS IMPORTANT

Aside from personal motivations to make a difference, why is the evaluation of consulting impact so important? There are three main reasons: (1) our clients demand it; (2) our economic and professional viability depend on it; and (3) the ethics of our profession require it.

These three reasons are closely interconnected. Most organizations face imposing challenges with limited resources. Whether a not-for-profit human service organization, government agency, educational institution, or *Fortune* 500 multinational corporation, organizations today function in a demanding and highly competitive landscape in which the pressures to deliver superior performance are greater than ever. Consulting psychologists are one among many groups of service professionals who compete for the mind share, time, and budget resources of organizations. Executives and managers within those organizations must make prudent decisions about investing those resources in ways that will yield the greatest return on investment.

Psychologists who understand and can help deliver the outcomes and results that organizational leaders are working to achieve offer significant value. The need for accountability in organizational consulting has never been higher, just as it is critical in the clinical arena (Cone, 2000). Consultants who aren't able to make compelling connections between their services and desired organizational outcomes will be marginalized. Unlike some professional service providers, such as accountants and lawyers, consulting psychologists do not provide services that organizations are required to have by law. There is no captive market in organizational consulting. Furthermore, budgetary constraints are present in almost every type of organization. Psychologists who want to remain in business must show how their services contribute tangible, cost-effective value to the organization's ability to execute its mission. Thus, the ability to assess the impact and demonstrate the value of consultation is an increasing imperative if we are to serve our clients well and remain economically viable.

The third reason why we must develop our focus on evaluating the impact of our consultation is that our professional code of ethics requires it. The most recent version of the American Psychological Association (APA)'s *Ethical Principles of Psychologists and Code of Conduct* (1992) contains several general principles and standards that we believe require consulting psychologists to pay careful attention to the impact of their interventions and their presence in organizations. In our view, the principles of competence, professional and scientific responsibility, and concern for others' welfare all contain language that urges examination of the effect of our conduct and methods on our organizational clients. The general standards on evaluation, assessment, or intervention address the duty to provide evidence of the usefulness and proper

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application of techniques. Although these ethical principles and standards are at this writing under revision (with input from the Division of Consulting Psychology), there have also been other efforts to explore the particularly complex ethical challenges inherent in organizational consultation (Lowman, 1998; Newman, 1993; Newman, Gray, & Fuqua, 1996). These authors have delved into many of the moral and ethical dilemmas that confront psychologists consulting in organizations, but each in their own way address the responsibility to engage in collaborative dialogue with our clients about their organizations' purposes, and how our services will be utilized to achieve desired ends.

The Challenges of Outcome Evaluation in Organizational Consulting

Warner Burke, in his book *Organization Development: A Normative View* (1987), aptly compared the evaluation process of OD practice with an annual physical examination, in that most people agree that it is important, but few people want to go to the expense and trouble of making it happen. The cost of doing a thorough evaluation of organizational consultation is clearly one major impediment. Most organizations don't have much of a budget for engaging consulting psychologists, much less for evaluating the results of their efforts. Furthermore, except for those with access to the resources of a university, most practicing consulting psychologists have severe limitations on their capacity to support outcome research in their work. Also, many psychologists who have gravitated toward organizational consulting are more drawn to practice than to research, and often have deficits in both motivation and skills for doing it. With time, money, and even motivation in short supply, it is easy to see how evaluation studies of impact often get left out of the service mix.

Even in situations in which both the consultant and the organization are committed to assessing the impact of consultation and have the resources to do it, there are challenges associated with the difficulty of measuring so-called soft or multidetermined outcomes such as leadership, morale, or process improvement. Also, as Burke (1987) notes, there are many constituents in organizations—sponsoring executives, managers, employees, shareholders, customers, and others—with different vested interests and varied perspectives about the benefits and appropriate focus of consultation and its evaluation. Some stakeholders believe they know what will constitute a good outcome and that it will be self-evident. Others favor a rigorous, scientifically valid measurement methodology. However, organizations present a plethora of challenges to sound experimental design. The impossibility of controlling the variables that contribute to changes in organizations makes sound experimental design difficult at best. Cook, Campbell, and Peracchio (1990) provided a thorough treatment of the issues of manipulability, validity, and causality in field research, and examined a host of threats to the application of results from one setting to the next. No wonder

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Blanton (2000) challenged the practicality of using standard psychological research methods in organizational consultation. This territory is extremely complex, with many subtle elements in the terrain. Good maps and aerial photographs are tough to come by.

Despite these challenges and forces of resistance, the imperative remains to develop commitments from our clients to assess the impact of organizational consulting efforts and assemble the resources to design and fund these efforts appropriately. Investments in this regard will yield rich dividends for our clients and contribute to the continued development of our practice and profession. A good beginning is to consider and understand what organizations are trying to accomplish and the outcomes that matter to them.

THE OUTCOMES THAT MATTER TO ORGANIZATIONS

Before addressing the question of how psychologists might assess the impact of organizational consultation, it is worth considering the types of outcomes that organizations value and consider important. Describing the outcomes that matter to organizations can be difficult because they depend so strongly on the characteristics of the organization itself. In our experience, hard-driving, bottom-line, low-margin businesses will have much different outcome requirements than not-for-profit social organizations. However, all organizations, regardless of the business they are in, have some core interrelated dimensions that can be used as a basic taxonomy for organizing our discussion of outcome evaluation. These basic dimensions can be characterized as *mission, people, structure* and *systems,* and every organization has desired outcomes that can be related to one or more of these dimensions.

The mission dimension pertains to the mission or purpose of the organization, and the strategy or strategies to achieve that mission. The people dimension addresses the human resources who devise and implement the mission and strategy. The structure dimension is concerned with how the work of the organization is divided, and how the various components work in concert. The systems dimension relates to the various mechanisms that integrate the mission, people, and structure dimensions (for example, communication, technology, and compensation). For each of these dimensions, there are outcomes that are needed for effective and efficient organizational functioning. The following list contains examples of outcomes or desired states related to these organizational dimensions:

Mission Dimension

- All members of the organization are clear and aligned about the mission and strategy of the organization.
- The strategy of the organization co-evolves with conditions in the external environment.

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- The desired values and culture of the organization are behaviorally evidenced throughout the organization.

People Dimension

- The selection of people into the organization results in a highly competent work force.
- Talented individuals are retained by the organization.
- New employees of the organization are well oriented, trained, and integrated into the organization such that they rapidly reach high levels of productivity.

Structure Dimension

- There is efficiency and minimal redundancy in the use of resources.
- Departments operate with the resources and authority they need to execute their tasks well.
- Assignments and responsibilities change to keep up with changes in the size of the organization.

Systems Dimension

- Employees are informed in a timely manner about what they need to know to do their jobs effectively.
- The compensation system enables the organization to offer salary and benefits that effectively reinforce desired job performance.
- The accounts payable process results in just-in-time payments.

The outcomes listed above are of a very general nature. Depending on the organization, more specific outcomes related to each dimension are commonly articulated. For example, many *Fortune* 500 companies with whom we have worked have dozens of very specific quantitative outcome objectives in each of the organizational dimensions listed, and have identified specific metrics to gauge whether or not those objectives are achieved.

The Role of the Consultant

The role of the consultant also has a bearing on the decision about what outcomes will be sought and measured. Some consulting firms do analysis and recommendations only. They will provide a careful examination of the issues and make suggestions for improvement, but they will not implement the solutions. In these circumstances, we have found the perception that good advice and well-constructed recommendations have been provided is probably a good outcome measure. Other consultants are more focused on *how* to implement the changes the organization desires. In these cases, the outcome might very well center on the successful implementation of the desired change. There might

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or might not be an expectation that the change will produce a desired result, but the consultant is held accountable for the implementation itself (for example, IT consulting).

Finally, there are organizational consultants who promise to do whatever is necessary to achieve a desired end result. They are often careful to negotiate the definition of the outcome fully with the organization itself, with the measure of success being the achievement of the result. Not many consultants are willing to take this stance, and it does pose the question of management roles, but organizations are increasingly asking for hard results from consultants, so it seems likely that demands for actual measurable outcomes will become increasingly important.

These three scenarios make it obvious that what is desired as an outcome is often less a concrete fact than a negotiated agreement. Organizations will sometimes ask for outcomes that are impossible, or so improbable that it would be unwise to even attempt them without further refinement (for example, "Make a good manager out of him."). At other times, they ask for outcomes that bear little likely relationship to the work being done (for example, "Raise the stock price by 5 percent as a result of your intervention."). There are also times when organizations know more about what they do not want than what they do want (for example, "This team is not working together well and needs to be fixed."). It is important for organizational consultants to clarify carefully, and thoroughly understand the outcomes desired and the resources necessary to achieve them.

Having come to an understanding that organizations will vary in their outcome expectations and will sometimes make unreasonable demands, it is also possible to classify outcomes according to the types of outcomes on which consulting psychologists are typically engaged to work: process outcomes, specific outcomes, long-range outcomes, and unreasonable outcomes.

Process Outcomes

Process outcomes are those results that derive from the consulting relationship itself. Process outcomes are the benefits derived from the consultation process. The facts that the consultant is an outsider, has unique experience or knowledge, and often has a different perspective, can be valuable to organizations. Although these types of outcomes are often difficult to measure, client executives usually have no difficulty knowing when they have benefited from the consulting process and when they have not.

The first process outcome that organizations appreciate and often seek from consultants is clear thinking about the nature of the problem and its resolution. Schein, in his seminal book *Process Consultation* (1969), refers to the fact that managers often need help in diagnosing their own needs. In many cases, executives have lived with, or have been part of the problem so long, that they have difficulty removing themselves from it or maintaining objectivity about it.

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They appreciate the consultant who can get to the heart of the issue and bring clarity to what has been frustrating and sometimes emotionally charged. In addition, the consultant often defines the issue differently than the organization might have assumed. In most cases, problems are less the result of a single individual than the operation of old patterns that are no longer effective. Often, changing the way problems have been defined will present new ideas about their probable resolution. Organizations appreciate such reframing. This process can restore hope.

A second process outcome is the addition of expertise and perspective about human resource issues. Most businesses are adept in dealing with machinery, distribution systems, financial systems, and other relatively predictable and manageable interactions. They know that if they manipulate X, there is a better than average chance that the result they desire (Y) will occur. In dealing with people, however, the same principle does not apply, and expectations for change can be unreasonable and even idealistic. Consulting psychologists can provide a valuable service by providing perspectives regarding human motivation, managing change, and serving as a sounding board regarding decisions that will significantly affect people.

A third process outcome is the consultants describing or helping to modify the processes that create, and continue to support, the issues of concern. In many cases, organizational problems result from systems that once worked well, but have outlived their usefulness. Such difficulties manifest gradually over time, and organizations often have difficulty determining the signs or solutions. Organizational consultants provide such perspective and can suggest ways to move beyond the difficulty. In many cases, business people are excellent problem solvers, but they might not have as good diagnostic skills, so they might be trying to resolve the wrong issue. The consultant's ability to define the problem in terms of ongoing systems, and to describe the heart of the issue clearly, often allows the organization to solve the problem itself.

For example, in one company, the presenting problem was a lack of depth and talent in mid-management. The CEO had actually demanded more and better talent at that level for some time, but could not seem to get it. After looking at the organization, the consultants determined that the COO (who was a very close and personal friend of the CEO) was not competent in the job. For some years, the COO had hired individuals of lesser talent, seemingly to cover his own lack of ability. The presenting problem was clear, but the system issues behind the problem were not clear and presented considerable complexity in constructing a resolution. Organizations might find the consultant's information difficult to absorb, but they generally appreciate the clarification of the issue from a systems perspective. Process outcomes include consultation around modifying the processes involved in selecting, integrating, rewarding, and planning for the succession of people.

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Specific Outcomes

It is our experience that consulting psychologists are frequently engaged by organizations to assist in the attainment of specific outcomes in any of the core dimensions of organization classified earlier. Specific outcomes are results that are identifiable, measurable, and commonly understood by all concerned. There is often a specific issue that needs resolution through the behavior of the organization's employees. The issue is typically obvious to all, and commonly understood to need resolution. The problem is that the organization has not been able to resolve it. While there might be many reasons why the issue persists, the desired result is typically not in doubt. Three major types of specific outcomes are discussed below.

The first type of specific outcome is that targeted toward a narrow, but specified result. For example, in one company the credit department had set credit limits so high that sales were lost with little obvious benefit in return. The credit department rather stubbornly held to the standards in spite of heated demands by senior executives that they loosen the limits. In this case, the solution was straightforward (credit limits had to be eased), but the reasons for its resistance were certainly less than clear (why is the credit department so reluctant to change?). It is probable that after some negotiation, the desired result would center on relaxed credit standards with support and follow-through from the credit department. The consultant then would be free to identify the problem, identify and propose solutions, or actually manage the solution depending on the preference of the consultant.

Other examples of targeted outcomes include improving the performance of managers and faltering executives, executive integration into new situations, increasing cross-departmental cooperation, reducing territorial conflicts, and decreasing management distrust or even incompetence. We have found that most large organizations have many such issues. Organizational consultants will likely find themselves in high demand if they can develop a reputation for resolving these types of issues successfully.

Another type of specific outcome occurs when an organization wants an identified business result to occur. Examples include requests to increase sales, lower costs, raise the stock price, have 10 percent less turnover, have a higher percentage of internal promotions, and increase the percentage of successful offers to desirable candidates. These outcomes are ambiguous, because what leads to their attainment is multifaceted. In addition, the outcome is a desired state rather than the resolution of an identified problem. It is easy in this category for organizations to request unreasonable outcomes, and for consultants to tackle issues that should be more clearly defined. While the desired outcome is clear, the underlying dynamics of the issue typically are not, and the attainment of the outcome can be complex indeed. There is no question, however, that these outcomes are highly desired by most organizations.

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The last type of specific outcome is related to comparisons either to an ideal or across a range of participants. For example, it is not unusual for companies (especially those merging) to ask for an assessment to identify their most capable managers. If there are too many managers and some must go, the organization wants to be sure to retain the best ones. They typically ask for a ranking based on specified criteria for retention. It is also common for companies to ask for assessments against various benchmarks. Organizations sometimes set goals for employee surveys, for example, with targets established for particular categories. For example, organizations often want employee satisfaction at a high level, and might set specific quantitative targets. Department and regional managers in such circumstances are often held accountable for employee survey results, and might hire organizational consultants to help them. It is also common for organizations to set targets based on performance data from comparable organizations in their industry. They often know what the target looks like, but might not know how to get there. Consultants who can provide such a road map are well appreciated.

Long-Range Outcomes

Organizations will often request outcomes that involve changes within the organization over considerable time. While there might be specific outcomes within the long-range goal, the outcomes desired are grander and much more complex. Two types of long-range goals are described below.

We will call the first type *betterment outcome.* These outcomes describe a desire to make something better than it is currently. Examples include better morale, more teamwork, closer integration, better communication, and so on. These outcomes describe a situation in which there might not be a particular problem, but management believes that it could be done better than it is currently. They are typically long-range in nature because there is seldom a defined outcome, and the intervention can go on for some time. In fact, interventions can go on indefinitely if management is unusually perfectionistic or idealistic. The now faded concept of reengineering (Hammer and Champy, 1993) would fall in this category.

The second type we will call *change outcome.* Change outcomes are requests to directly change something about the organization. Examples include requests to change the culture from collegial to performance, change individual executive skills (for example, the ability to listen, work better with others), change leadership (for example, assisting with the integration of a new CEO, work on leadership style), or company reorganization with changes in lines of reporting authority or responsibility. The measure of success here involves the successful transition from one organizational state to another. These types of outcomes are usually straightforward in principle and highly desirable, but might be difficult to implement. They almost always occur over extended periods of time.

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Unreasonable Outcomes

It is important to understand that organizations can and will make unreasonable demands of their organizational consultants. They often assume, wrongly, that with enough effort and know-how, anything can be done. They assume that people can be influenced, directed, or otherwise convinced, to do things that might not be perceived to be in their best interests. It is not unusual for organizations to ask the consultant to address these unreasonable expectations.

Examples of unreasonable outcomes might include goals such as making people happy with management decisions, developing employee loyalty to the organization, creating a cohesive atmosphere, developing more cooperation, raising the stock price, and so on. These are frequently products of unclear thinking, resulting in a desire to shoot at something even if the target is not in sight. In addition, these outcomes are probably impossible even in the long term. The development of such things as loyalty, cohesion, or cooperation will always be problematic, depending on the circumstances at the time. Although organizations will ask for these unreasonable outcomes and find them desirable if achieved, the wise consultant will think more than twice about entering into them.

The process of clearly defining the desired outcomes for any psychological consultation engagement is a critical component that will greatly influence the design of interventions and the ultimate success of the endeavor. In our view, best consulting practice dictates that this process be undertaken in collaboration with the key constituents in the organization who will be significantly affected by the consultation, and only after thoughtful, careful assessment and diagnosis.

MEASURING THE IMPACT OF CONSULTING

Assessing the impact of consulting services is something many organizations would like to do. They want to know what kind of return they are receiving on their investment. In our experience, impact is assessed very informally. Assessing impact typically involves verbal reports from recipients and the organizational sponsor, or satisfaction and performance surveys. These data provide anecdotal evidence regarding perceived impact, but can fall short in demonstrating specific outcomes of the consulting services provided.

There are many reasons for a lack of rigor in this area, two of which include a lack of time and tools. First, when a project has ended or is nearing completion, a lot of employee and organizational time has already been devoted. Thus, the idea of taking more time and effort to assess impact receives little adherence. Second, there is a paucity of tools that can be used to effectively assess impact for the vast variety of interventions conducted. While these are salient

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reasons for the lack of impact assessment, most consultants and organizations would agree that assessing more accurate and business-oriented outcomes is important.

At present, there is a relative scarcity of specific tools and methods for assessing consulting in the field of consulting psychology. However, there has been some research in areas such as organizational development and I-O psychology that might provide valuable information about assessing consulting impact. In the following section, we discuss specific methods for evaluating the outcomes that matter within the basic dimensions of mission, people, structure, and systems. We review and summarize a broad range of relevant studies falling within this taxonomy. Our attempt is to uncover useful tools and methodologies that can be used by consultants and organizations alike to more accurately assess the impact of consulting services. It is not within the scope of this chapter to conduct a comprehensive review of these areas. We simply discuss potential tools and past work that consulting psychologists can incorporate in their tool kits.

EVALUATING THE OUTCOMES THAT MATTER

The next sections describe outcomes for each organizational dimension in the taxonomy of desired outcomes.

Mission

Consulting psychologists implement a variety of interventions designed to contribute to the various desired outcomes within the mission dimension. Outcomes in this dimension include: a clear understanding of the organizational mission and strategy; alignment of strategy with the external environment; and organizational values represented by behavior. Many interventions exist for attempting to achieve these results, as do methods to assess their impact.

One outcome that falls under this dimension includes people in an organization exhibiting behaviors that represent the values and culture of the organization. One type of intervention that could possibly be used to facilitate the realization of this outcome would include the implementation of a 360-degree feedback (Huet-Cox, Nielsen, & Sundstrom, 1999a) or survey program designed to assess specific behaviors that represent organizational values. For example, a key organizational value might include open communication. In this case, the 360-degree survey would include items describing specific behaviors promoting or demonstrating open communication such as “Consistently shares vital company or departmental information”; or “Provides constructive performance feedback.” The assessment of these behaviors would likely be followed by feedback given to employees based on the survey results. In most 360-degree

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feedback programs, this is followed by the creation of development plans, which serve as road maps to improving specific key competencies (Huet-Cox, Nielsen, & Sundstrom, 1999b).

A very practical method for assessing the outcomes of such interventions involves readministering surveys and comparing results from the initial administration. Once the second set of survey results are tallied, analyses can be used to determine the existence of significant differences (for example, ANOVA, MANOVA) or relationships (for example, correlation). This type of outcome assessment would provide very specific indicators of intervention impact.

Another intervention example under the *mission* dimension includes the development of an effective organizational strategy that is aligned with the competitive environment. In this case, strategy is defined as ". . . a patterned stream of decisions which focus on resource allocations in an attempt to reach a market position consistent with a firm's environment" (Mintzberg, 1973, p. 45). A consulting psychologist might intervene with a training program focused on strategy alignment, or work individually with those responsible for strategic decisions. One way to assess the impact of such an intervention would be to get verbal or written feedback from each participant in the program. This feedback would center on participants' perceptions of greater knowledge and ability to align internal strategy with the environment. The percentage of participants who felt that they knew a lot more about strategy alignment after the training would indicate the degree of impact. Another method for measuring impact would be to test each participant's knowledge regarding strategy alignment. A final method for assessing impact would be to use and compare surveys assessing strategy, environment, and performance. Lukas, Tan, and Hult (2001) used surveys to determine the relationship between the environment, strategic orientation, and the performance of 330 electronics firms in China. The authors used correlational analyses to determine the strength of these relationships. Results indicated that most firms demonstrated high environment-strategy coalignment, but that this coalignment only had mixed implications on organizational performance. Another study related to strategy that used surveys to measure impact examined the relationship between board appointments and board involvement in strategic decision-making (Carpenter & Westphal, 2001). This study hypothesized that directors who were assigned to other boards from similar companies would be more involved in strategic decisions for the focal company. After analyzing data from 263 CEOs and 564 corporate directors, results supported the authors' hypotheses. Though assessing impact using surveys is valuable, some executives might want other outcome measures involving financial performance.

Henderson (1999) examined firm strategy, age dependence, and financial performance of U.S.-based computer firms. This study analyzed financial data to assess the impact of specific strategies. While Henderson used fairly complex

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statistical techniques and models in his analyses, this study demonstrated one method for using financial data as an outcome assessment. While there are relatively few examples in the literature describing outcome assessments within the mission dimension, there are many more within the people dimension.

People

In our experience, consulting psychologists are consistently called upon to help achieve outcomes within the people dimension. Some outcomes that matter within this dimension include whether, as the result of consulting, a highly competent work force was selected, whether talented employees were retained, and as a result of training, the extent to which employees reached and maintained high levels of productivity.

Most companies want to select the very best people. Consulting psychologists are frequently used to implement selection systems or augment a current selection system. There are several ways to assess the impact of such consulting interventions.

The degree of employee retention can be a key indicator of impact. In addition, the success of people selected within the organization by consulting efforts can offer another key measure of impact. Most organizations maintain relevant records consistently, so outcome assessment becomes a matter of accessing archival records. An alternative method of evaluating selection impact involves the measurement of person-organization fit. One key goal of employee selection is selecting people whose values are aligned with those of the organization. Chatman (1991) assessed the impact of a selection system by measuring person-organization fit using the Organizational Culture Profile (Chatman & Caldwell, 1991). Although this assessment of impact, as with others, was survey-based, it differed from others in that it did not directly assess the job performance of those selected. There are also several other techniques, such as utility analysis, that can be used to assess the monetary impact of selection systems (Cascio, 1991).

Many organizations invest significant amounts of money on selection, and the executives who lead these companies justifiably expect a return on their investment. However, few personnel selection programs are evaluated using such criteria, even though methods for doing so have long been available (see, for example, Brogden, 1949; Cronbach & Gleser, 1965). The numerous techniques used to assess the *utility* of a selection program provide valuable information that can potentially be used by consulting psychologists as outcome measures for selection programs they provide for client organizations. Utility can be defined as, "the degree to which its [i.e., the selection system] use improves the quality of the individuals selected beyond what would have occurred had that device not been used" (Cascio, 1991, p. 298). Quality, then, can be defined as, ". . . the proportion of individuals in the selected group who are considered successful . . . the average standard score on the criterion for the

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selected group, or the dollar payoff to the organization resulting from the use of a particular selection procedure" (Cascio, 1991, p. 298).

Evaluating Selection Outcomes. Consulting psychologists are often tasked with facilitating this process. For example, a selection test might be developed by a consulting psychologist to aid in the selection of computer programmers for a large software firm. There are several different methods for assessing the impact of this test. One method might involve interviewing each hiring manager after an employee has been selected to gather feedback on how things are going. Another method involves calculating the retention percentage of all those selected using a particular test. But, what if a senior executive wants to know the financial impact of this specific selection technique? One method for providing this type of impact assessment involves conducting a utility analysis (see, for example, Russell, 2001; Schmidt & Hunter, 1998; Thornton, Murphy, Everest, & Hoffman, 2000). Schmidt, Hunter, McKenzie, and Muldrow (1979) used this technique in a very similar situation. They estimated the impact of using a valid selection test for computer programmers. Results indicated that given certain parameters, a more valid selection procedure demonstrated an average gain in productivity of $64,725 per employee selected over nine years.

Consulting psychologists also frequently develop and utilize assessment centers for management selection (Goldsmith, 1990; Hough & Oswald, 2000; Thomas, Dickson, & Bliese, 2001). Assessment centers are typically expensive, and many organizations want to know what impact they are having. One method for measuring the impact of an assessment center is to calculate the net financial gain for the organization. Cascio and Ramos (1986) did just that by examining the impact of assessment centers in selecting first-level management. The authors examined a selection group comprised of 1,116 managers with an average tenure of 4.4 years. Employing utility analysis, the authors identified a net financial gain for the organization of $13 million by using the assessment center.

Russell (2001) examined, longitudinally, the impact of selecting top-level executives using competency ratings. Russell looked at the performance of ninety-eight executives over time. Using the Brogden-Cronbach-Gleser (BCG) Model (Brogden, 1949; Cronbach & Gleser, 1965), the author concluded that each executive selected using the competency procedure would account for an additional $3 million in additional profit per year.

In another, more dramatic, example, Hunter and Hunter (1984) examined entry-level jobs for the federal government. They concluded that substituting a less valid selection procedure for one that's highly valid would result in productivity losses costing approximately $3.12 billion. Utility can be calculated using several different methods.

There are several techniques for assessing utility, and each has its own advantages and disadvantages. The Taylor-Russell Utility Model (Taylor &

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Russell, 1939) makes use of a validity coefficient that is based on current employees who were assessed prior to hire. The model classifies hired employees into successful and unsuccessful categories, and assumes they make equal contributions. This utility model is most appropriate for assessing the impact of selecting people for positions where differences in performance and ability beyond the minimum needed do not add any benefit to the organization.

Other Outcome Evaluation Models. The Naylor-Shine Model (Naylor & Shine, 1965) makes an assumption of linearity between validity and utility. This approach implies that ". . . the higher the validity, the greater the increase in average criterion score for the selected group over that observed for the total group" (Cascio, 1991, p. 299). This model is generally more useful than the Taylor-Russell Utility Model in assessing the utility of selection systems.

The BCG Model (Brogden, 1949; Cronbach & Gleser, 1965) assumes that the relationship between test scores and job performance is linear. This seems to be a logical assumption that can be made in the vast majority of selection situations. A key component of this model is the use of SD_y, the standard deviation of dollar-valued job performance in the selection group, in the estimation equation. One initial drawback to this model was the lack of appropriate methods for estimating SD_y. However, several alternative estimation methods have since been developed that make the use of this model more manageable.

Finally, the Schmidt-Hunter Global Estimation Procedure (Schmidt, Hunter, Pearlman, & Shane, 1979) reasons that job performance represented in dollar amounts is normally distributed. This model, then, permits a more reasonable method for estimating SD_y.

The results presented in some of these studies demonstrated that there are approaches to assessing the financial impact of selection services provided by consulting psychologists. However, utility analysis can also be used to assess the financial impact of other interventions such as training (Morrow, Jarrett, & Rupinski, 1997), changes in pay-level policies (Klaas & McClendon, 1996), and quality circles (Barrick & Alexander, 1992). There are many other ways to assess the impact of consulting services, but different utility analyses clearly provide methods for assessing their financial impact.

Organizations also want productive new hires to stay with the company as long as possible. One intervention that an organizational consulting psychologist might use to increase the likelihood of this desired outcome involves the use of realistic job previews (RJPs) (Phillips, 1998). A consultant might design a program that effectively previews different positions for possible candidates. Methods for assessing the impact of an RJP intervention include calculating the rate of attrition from the recruitment process, analyzing performance reviews for each candidate hired, using a survey to assess job satisfaction, and calculating turnover of selected candidates. All of these techniques for impact assessment were used

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in studies reviewed by Phillips. This author conducted a meta-analysis on studies reporting the impact of RJPs, and found that the RJP method was related to lower attrition from the selection process, lower turnover, higher job satisfaction, and higher levels of performance.

Having a multicultural work force is another desired organizational outcome falling within the people dimension. One intervention for achieving a multicultural work force involves the implementation of diversity programs. Consulting psychologists frequently implement diversity programs (see, for example, Wright, Ferris, Hiller, & Kroll, 1995). Wright et al. assessed the impact of diversity programs using a unique technique called the *event study methodology,* which is commonly used in financial economics research (see, for example, Dodd & Warner, 1983). This technique involves the analysis of a firm's stock price immediately surrounding the announcement of an event of interest. In this case, the authors analyzed stock price fluctuation connected to recognition announcements by the Department of Labor for exemplary affirmative action programs. Many other methods exist for assessing the impact of interventions within the people dimension, but we now turn our focus to the structure dimension.

Structure

The structure dimension includes desired organizational outcomes such as efficiency and minimal redundancy in the use of resources, adequate information technology, effective technical systems, an organizational hierarchy that facilitates decision-making and performance, and role responsibilities that keep up with changes in the organization. Many organizations don't have the internal capacity to realize these desired outcomes (Dewett & Jones, 2001; Pickering & King, 1995; Prahalad & Hamel, 1990), so they rely on consulting psychologists for help.

The CEO of an organization might believe, for example, that her company is not operating as efficiently and effectively as she might hope. In an effort to find out what might be happening, she calls on a trusted advisor to conduct an organizational study and make specific recommendations for improvement. After an extensive and detailed analysis of the organization, the advisor recommends the implementation of a different information technology infrastructure. The CEO heeds this advice, and a new information technology (IT) system is in place within months. Assessing the impact of a new IT system on the organization is also done by consulting psychologists. Several methods for assessing the impact of IT systems are described by Dewett and Jones (2001) in a review. Impact was assessed in this study by measuring the codification of employees' knowledge base (Anand, Manz, & Glick, 1998; Rockart & Short, 1989), efficiency improvement (Pickering & King, 1995; DeSanctis & Gallupe, 1987), innovation promotion (Davidow & Malone, 1992; Prahalad & Hamel, 1990), specialization (Barabba &

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Zaltman, 1990), formalization (Huber, 1990), decentralization (Fulk & Dutton, 1984), and learning (Cohen & Levinthal, 1990).

Systems

Similar in some ways to the structure dimension is the systems dimension. Desired outcomes within the systems dimension include keeping employees informed in a timely manner, maintaining compensation systems that support effective job performance, and sustaining administrative mechanisms to fully support the organization.

A common intervention employed by consulting psychologists to achieve desired systems outcomes involves reward structures (Lawler, 1990, 2000). For example, work team performance has been linked to the way team members are rewarded (DeMatteo, Eby, & Sundstrom, 1998; Sundstrom, De Meuse, & Futrell, 1990). In some organizations, work team members are rewarded for individual performance, which works in opposition to many of the dynamics promoting work team performance. An intervention to create better team performance might involve implementing a team-based reward structure. Once an intervention such as this takes place, its impact must be assessed. One option for the consultant would be the use of surveys for measuring team member perceptions of fairness. Dulebohn and Martocchio (1998) assessed the impact of an incentive-based pay plan by measuring team member perceptions of procedural and distributive justice after the intervention. Another method for assessing impact would be to assess team and individual performance before implementing a new reward system and after.

Another intervention within the system dimension involves the implementation of skill-based pay. Murray and Gerhart (1998) examined the impact of implementing skill-based pay systems in a manufacturing organization. They assessed impact by measuring production, quality, and labor cost. Each of these was measured using the organization's archival records. Labor cost was measured as actual wage expense divided by the quantity of good parts produced. Quality was measured by the percentage of defective units in the total units allowed through the production process. Productivity was measured as labor hours per part.

Interventions and Outcomes in OD

The field of consulting psychology has often not focused on establishing methods for assessing the impact of organizational consulting. However, several other fields have evaluated outcomes and offer useful methods for consulting psychologists. One such field is organizational development (OD) and change. Several significant reviews (see, for example, Guzzo, Jette, & Katzell, 1985; Macy & Izumi, 1993; Neuman, Edwards, & Raju, 1989; Pasmore, Frances, Halderman, & Shani, 1982; Porras & Robertson, 1992) have been conducted that summarize common organizational interventions and methods for assessing

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their impact. We attempt to review these studies to offer further methods for assessing the impact of organizational consulting.

Types of Interventions. The plethora of initiatives, interventions, and techniques are almost too numerous to count. However, past reviews of over 400 organizational development and change studies (Guzzo et al., 1985; Macy & Izumi, 1993; Neuman et al., 1989; Pasmore et al., 1982; Porras & Robertson, 1992) have provided specific and distinct categories of interventions. For example, Neuman et al. separated interventions into three categories: (1) human processes—interventions to help improve human functioning and process, such as training, participation in decision-making, team building, grid organizational development, and feedback; (2) technostructural—interventions that improve work content and method, the relationship between workers, job redesign, enlargement, and enrichment and work schedule changes; and (3) multifaceted—interventions involving multiple approaches.

Macy and Izumi (1993) created four categories of types of interventions: (1) structural—significant changes in an organization's hierarchical structure, such as self-directed work teams, changes in goal setting, feedback, and compensation systems; (2) human resources—changes employed with the organization's existing hierarchical structure, such as employee and manager training, job enrichment, team building, and selection; (3) technological—changes in the mechanical, informational, or process technologies, such as office computers, software, improved manufacturing systems, and computerized process and control systems; and (4) total quality management (TQM)—changes to improve the quality of organizational products and services, such as increased customer focus, customer and supplier partnerships, employee inspection of materials, process, and outputs. Although studies in these reviews ($n > 400$) included specific interventions, they also included specific outcome measures. We now review these outcome measures to help identify methods or key metrics for assessing the impact of consulting services. Guzzo et al. (1985) reviewed almost 100 intervention studies in an attempt to identify which interventions had the greatest impact. This review labeled the key criterion as productivity, and divided it into three specific outcomes: (1) output, including quantity, quality, and cost effectiveness; (2) withdrawal, referring to turnover and absenteeism; and (3) disruption, including accidents, strikes, and other costly disturbances. Results indicated a positive relationship between specific interventions and most of the outcome measures ($d = .44$).

Other Reviews. In another review of the organizational change literature, Macy and Izumi (1993) examined 131 studies, looking at the connection between organizational change initiatives and financial outcomes. Similar to the Guzzo et al. Study (1985), Macy and Izumi defined outcomes as: (1) quantity (output, sales,

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actual dollars, and productivity); (2) quality (rejects, repairs, defects, customer service returns, rework, yield, and amount of scrap); and (3) costs (repairs, errors, downtime, labor costs, overtime, recruitment and training costs, and office and manufacturing supplies). The majority of this outcome data was collected within two years of the interventions. Results indicated a strong relationship between the initiatives undertaken and the outcome variables ($d = 1.27$).

Pasmore et al. (1982) conducted a qualitative analysis of studies examining socio-technical system-based change. The key outcomes assessed in this review were categorized as turnover and absenteeism. Findings indicated that 100 percent of the studies that used both training and compensation system changes as interventions were able to decrease absenteeism and employee turnover. However, the magnitude of the effects were highly variable. While this review considered studies with relatively objective criteria, other reviews have analyzed studies utilizing job satisfaction and more attitudinal data as criteria.

Neuman et al. (1989) considered 126 studies that used organizational change initiatives to improve employee satisfaction and other attitudes. Employee satisfaction included satisfaction with pay, coworkers, and advancement opportunities. Attitudes included those about self (self-identity and decision-making), others (interpersonal trust of coworkers, social support, and peer support), the job (commitment and job involvement), and the organization (organizational commitment, attitude toward the company, and organizational trust). Results indicated that the organizational interventions employed were more positively related to attitudes than satisfaction.

The wide variety of outcome measures speaks to the widely varied contexts in which organizational interventions were used. For example, studies varied by organizational size, type (that is, public, private, and governmental), worker type (that is, managerial, blue collar, sales, and clerical), and length of time between intervention and outcome assessment. Each of these factors, along with many others, would be involved in determining which outcome measures would be most appropriate for specific consulting situations.

IMPLICATIONS AND RECOMMENDATIONS FOR CONSULTING PSYCHOLOGISTS

In this chapter, the case for assessing the impact of consulting endeavors delivered by psychologists in organizational settings has been presented, along with a variety of methods and examples for doing so. The outcome evaluation process should be an essential aspect of high-quality consulting, not just an add-on or afterthought following consulting intervention. Well-developed organizational consulting practice dictates that consultants engage in thoughtful

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dialogue, examination, and articulation of the outcomes and results their clients are seeking, prior to proceeding with any intervention or programmatic design. The clarification and articulation of desired outcomes should inform the design of services and interventions.

In reviewing the literature on outcome evaluation in consulting, it is clear that there is a need for much more in the way of both research and practical methods that consulting psychologists can use in applied organizational settings. The field of consulting psychology can certainly borrow from I-O psychologists, who have historically evidenced a more empirical approach to their work, and, consequently, have constructed a more substantial case literature.

As we proceed in developing our focus and capability on assessing the impact of psychologically informed consultation to organizations, it is important to note an important caveat. Not all consultation provided by psychologists to organizations readily lends itself to quantitative or utility analysis. There are many instances in which consulting psychologists contribute advice and counsel that enriches or reframes the perspectives of an executive or manager that cannot adequately be measured by simple outcome or financial metrics. For example, psychologists are consulted by CEOs or board committees to consider the merits of a proposed merger or acquisition. In our experience, the value contributed by consulting psychologists is critical judgments about the formidable difficulties that would be posed by attempting to integrate the cultures and management teams of the respective organizations. As a result of the psychologists' analysis and recommendations, the merger discussions are halted and the CEO or board committee terminates the deal. In such cases, it is impossible to determine the effects had the deal gone through. In other examples; consulting psychologists can be asked to provide input regarding the termination of a key manager, employees' reaction to the closing of a plant, or the likely effects of a major organizational restructuring. Executives who retain the services of consulting psychologists in such cases call upon them to render opinions or help think through key decisions that involve matters of judgment and conscience. These matters do not lend themselves to any methods of simple outcome evaluation.

In summary, we are not advocating a human factors approach to outcome evaluation in all circumstances where consulting psychologists provide services to organizations. Even the best-trained and experienced psychologists cannot engineer precisely desired outcomes in the complex landscape of organizational practice. We believe, however, that consulting psychologists have a duty to commit ourselves, much more rigorously than ever before, to the examination and refinement of the explicit and implicit outcomes organizations seek, and to the assessment of the impact we have when we apply the science and art of psychology in organizational settings. We also believe this commitment will improve the quality and impact of the consultation and organizational effectiveness.

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