

Significance of Usefulness: A Congruency Model of Relevant Research Criteria

Dr. Holly R. Rudolph, Management, Murray State University
Dr. Joy V. Peluchette, Management, University of Southern Indiana

Abstract

In an effort to enhance the relationship between the practitioner's research needs and the researcher's response to these needs, this paper proposes a congruency model of relevant research criteria utilizing Thomas and Tymon's (1982) five components of research relevance. The model poses a series of questions that can be raised by each party as research is conducted, thereby increasing the practical relevance of academic research. Discussion is also extended to how research relevance relates to the scientific research process.

Introduction

The relevance of academic research to practitioners has been a topic of increasing attention in organizational literature over the past decade (Cummings, 1978; Susman & Evered, 1978; Kilmann, 1979; Beyer & Trice, 1982; Corwin & Louis, 1982; Kilmann, Thomas, Slevin, Nath, & Jerrell, 1983; Shirvastava & Mitroff, 1984; McGuire, 1986). In fact, special issues of *Administrative Science Quarterly* (December 1982, March 1983) have been devoted to this topic. Even the popular press has started to echo the concerns of researchers and practitioners alike as to the relevance of academic research. *Business Week's* article entitled "Is Research in the Ivory Tower Fuzzy, Irrelevant, Pretentious?" (Byrne, 1990, p. 62) is indicative of the new wave of press attention given to this topic.

Ideally, academic research is supposed to involve two interested parties--the academic researcher and the practitioner. The scenario should be that the practitioner provides the researcher with impending organizational problems, and the researcher, having the time and expertise to study these problems, provides the practitioner with useful and "relevant" solutions. For a variety of reasons, however, these two parties have become more and more isolated so that neither party is serving the others' interests.

Although this can be a problem in any field, there appears to be no argument that the lack of research

utilization is particularly striking in the social sciences (Cheng & McKinley, 1983). Already at a disadvantage in terms of funding, social scientists at many institutions have been faced with a loss of grants and other sources of financial support. In an effort to retain their credibility and support, these disciplines are attempting to show a shift in their orientation to more practical, relevant, and utilizable research. Thus far, much of this appears to be "all talk" due to the number of constraints which still exist in both the academic and corporate environments. However, the increasing recognition and discussion of this issue indicate that the shift in orientation to more relevant research may be a reality in the near future.

One of the more interesting attempts to address this problem has been Thomas and Tymon's (1982) "necessary properties", or standards, for assessing and guiding research relevance in the organizational sciences. Although their criteria have been lauded by many in the academic arena, there has been little attempt to follow-up on their work and expand its application. For example, Thomas and Tymon focus on the academic researcher, and argue for the use of the practitioner as a frame of reference when applying the criteria of relevance. However, their approach fails to recognize that the same criteria can be used by practitioners in evaluating the relevance of academic research.

In addition, it is unclear how their criteria should be used by the academician in pursuing the scientific research process. The question arises as to whether some criteria are more important at certain stages of the research process than others. For example, non-obviousness refers to ". . .the degree to which a theory meets or exceeds the complexity of common sense theory already used by a practitioner" (Thomas & Tymon, 1982, p. 348). Is non-obviousness referring to the theory construction and "front-end" of the research process, or is it referring to the nature of the findings generated? This distinction is not clear.

It is the purpose of this paper, therefore, to further clarify the Thomas and Tymon (1982) criteria by developing a descriptive model which shows the relationship between the researcher and practitioner as each attempts to apply the five components of relevance--descriptive relevance, goal relevance, operational validity, non-obviousness, and timeliness--in evaluating academic research. A model will also be presented that illustrates how the Thomas and Tymon criteria can be used during the various phases of the academic research process to enhance the usefulness of research being generated.

Congruency Model Of Relevant Research Criteria

It is apparent, when evaluating current empirical research, that the main stimulus to scoring high on any set of relevant research criteria is the degree of congruency between the practitioners' needs and the researchers' responses to these needs. In an effort to assist both parties in achieving a congruent relationship, the model in Figure 1 is proposed.

On the researcher side of the model, there are various characteristics of his/her environment which influence the manner in which ideas are formulated, the types of constraints that exist, and the way the research criteria are responded to. As academicians make an effort to increase the relevance of their research, practitioners need a method of determining whether the research generated adequately meets the need for effective problem-solving within the constraints of their organization. By posing the Thomas and Tymon criteria into a series of questions for both parties, each can determine the degree to which congruency exists and the type of feedback necessary for future cooperative endeavors. Each aspect of the model will be discussed below.

Researcher's Environment and Constraints

Within the academic environment, the researcher sets out to conduct meaningful research. Although he/she

may have good intentions, the ideas for this research may or may not be consistent with problems facing the practitioner. The reasons for this dilemma stem from several sources including the nature of the academic environment, the academic reward structure, and limitations in training and orientation of academic researchers. These factors warrant further discussion.

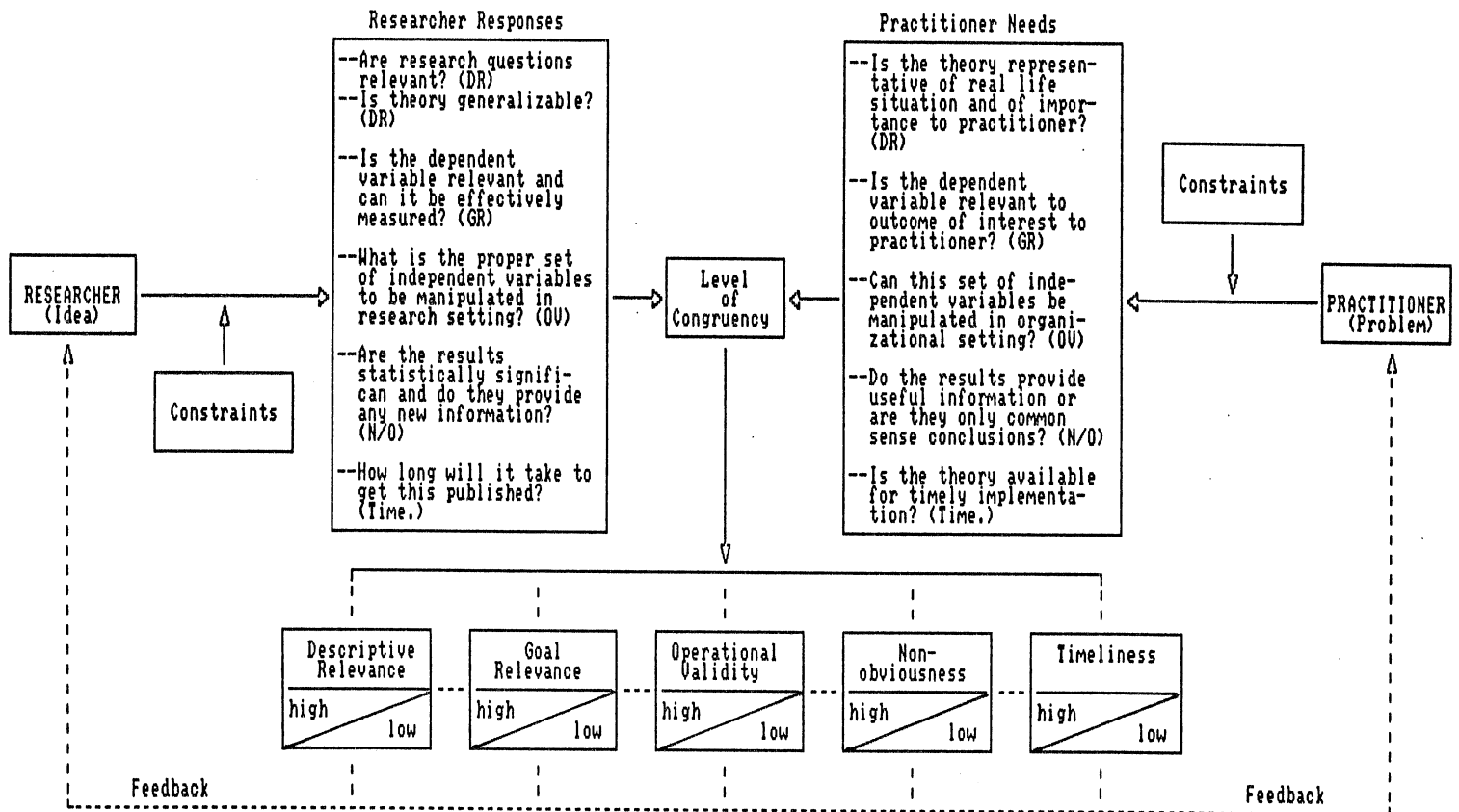
The academic environment, as a whole, is facing severe budget cutbacks. Over the past decade, programs have undergone intense evaluation for possible retrenchment, support staff have been cut, positions have been left vacant, and faculty have been asked to take on increased teaching loads and class sizes (Finkelstein, 1984). This has left the academician with less time and support with which to perform research. While some faculty have been successful in securing consulting contracts that provide them with exposure to "real world" problems, these opportunities are becoming increasingly hard to come by.

At the same time, the philosophy of academic institutions has changed, whereby increased importance has been placed on research productivity as a measure of institutional status. This is echoed by university deans and presidents in their public addresses and strategic plans for the future. Research productivity influences funding by prestigious foundations and government agencies, and has inspired intense competition among academic institutions. In addition, most academic programs are faced with pressure from various accrediting bodies to increase their research output.

This focus on research productivity has had a "trickle down" effect on the individual faculty member's career. The success of one's career, in terms of promotion and tenure, now depends on the quantity of research publications (Helmreich, Spence, Beane, Luckner, & Matthews, 1980; Persell, 1983; Lawrence & Blackburn, 1985; Landino & Owen, 1988). Although the quality of research is still valued, the system tends to reward researchers for the number of articles they are able to get published. This places incredible pressure on researchers to generate articles, whether or not the topic is of any value or use to the "real world" (Daft, 1983).

Finally, the training and orientation of most social science researchers impedes the manner in which they approach relevant research. Attempting to solve the problems of organizations proves to be difficult for many of these individuals, since most of the social science disciplines lean more towards theory development rather than the application of knowledge (Kilmann, Slevin, & Thomas, 1983). Ph.D. programs which train and socialize these scholars seldom place high priority on

Figure 1
Congruency Model of Relevant Research Criteria



direct contact with organizations (Daft, 1983).

All these factors in the academic environment combine to create both pressures and constraints which impact the ability of the researcher to perform research that will be useful to the practitioner.

Practitioner's Environment and Constraints

The practitioner operates in an environment which has different rewards and operating structure than that of the academician. Given a problem situation, the practitioner attempts to make the best possible decision within the time frame and resources available. In doing so, however, organizational constraints often impede this process.

When using the term "practitioner", we generally think of this individual in a business setting. In business and industry, the practitioner is faced with the ever-important "bottom-line" and is under constant pressure to make sure that the organization is operating as efficiently as possible. This has been of particular concern during the past decade as U.S. companies have undergone intense foreign competition (Mathias, 1983). When faced with complex problems, the issue is usually a performance problem that is costing the organization both time and money. The practitioner needs a quality solution, but also one that is practical and timely (Kilmann, Slevin, & Thomas, 1983).

However, in the pressure for short-term results and quick decision-making, the practitioner runs the risk that careful analysis of the problem, search procedures, and experimentation may be overlooked. Often the practitioner has limited expertise and does not have the time to devote to conceptual analysis of the problem. To obtain such "knowledge", most practitioners contact consulting firms that are known for their track record in solving organizational problems (Kilmann, Slevin, & Thomas, 1983) rather than academicians who are perceived to be "out-of-touch" with the language, problems, and concerns of the business world. The result may be a "quick-fix" solution to the problem that can have negative implications for the organization in the long-run.

At the same time, there may be organizational politics operating which prevent the examination of a wide range of possible solutions to a problem. For example, if the boss has a "pet project", individuals may feel compelled to support it, regardless of research findings which may indicate the contrary. This scenario opens the door on a host of interpersonal factors that promote knowledge disavowal in organizations (Zaltman, 1983).

Examples of this include "group-think" (Janis, 1972) and "half-knowledge" (Lazarsfeld, Sewell, & Wilensky, 1967).

Since not all practitioners operate within a business setting, some research attention has been devoted to the issue of relevant research within non-business settings. For example, Corwin and Louis (1982) argue that in the design and management of federal educational programs, the structure, climate, and procedures of the sponsoring federal agency impeded the utility of the research projects that were commissioned. The key reason, they found, was that research is often conducted in a policy vacuum where there is a lack of an organized constituency of policy makers, identifiable policy issues and research questions, consistent policies and clear policy options, coordination among the independent agencies responsible for a policy area, and an on-going operational program that can make use of the findings.

From this discussion, we can see how forces within the practitioner's world limit the manner in which he/she can assess problems and formulate solutions. Overall, the environments of both the academic researcher and the practitioner indicate how the rift between the two parties has developed over time. However, by applying the Thomas and Tymon (1982) criteria, one can see how a more congruent relationship might be developed. This congruency relationship will be discussed with respect to Figure 1.

Practitioner Needs/Researcher Responses

Although research endeavors should be in response to practitioner needs, the reality is that the needs or problems of practitioners may or may not be served by academics. How does an academician determine whether a problem has practical significance to the practitioner? By the same token, how does a practitioner determine whether or not a piece of research has relevance to his/her organizational environment? The Thomas and Tymon (1982) criteria provide an excellent assessment tool for each of these parties. The following section of this paper will address the five "necessary properties" of relevant research as they pertain to the researcher and the practitioner by posing the criteria into a series of questions.

Descriptive Relevance

Descriptive relevance concerns the accuracy of research findings in capturing phenomena encountered by the practitioner in his or her organizational setting. As indicated by Thomas and Tymon (1982), this criterion involves the question of external validity and use of research methods that distort aspects of organizational

reality. Most frequently, the ideas developed by academicians are the result of "armchair" theorizing, with little input from contact with an actual organization (Daft, 1983). In some cases, these ideas might stem from efforts to cut up or rework data in an effort to get a higher quantity of publications. Researchers generally respond to these ideas or "problems" in as scientific a manner as possible using the positivist model.

While this approach has great value for the physical and biological sciences, questions have been raised as to whether it is the most appropriate model in generating knowledge about organizational problems (Susman & Evered, 1978; Tichy & Friedman, 1983). In attempting to address this criterion, the researcher should be asking the following questions: Are my research questions relevant? Can the theory be applied in this specific situation and also be generalized to other settings?

Descriptive relevance is also an issue for the practitioner. When evaluating academic research, the practitioner needs to determine if the basis of the research is representative of the issues he or she must deal with in the organization. While generalizability is important, much of the academic research lacks specificity (Cheng & McKinley, 1983). The practitioner is seeking to understand and improve his or her particular situation and might have difficulty in applying abstract concepts generated in academic research. Therefore, the following question should be posed: Is the theory representative of a real world situation and of importance to me as a practitioner?

Goal Relevance

Goal relevance concerns correspondence of outcome (or dependent) variables in a theory to the factors the practitioner wishes to influence. Many researchers have selected variables such as structure and process as dependent variables (Cheng & McKinley, 1983). These variables do not represent the interests of most practitioners. In addition, effective measurement of these factors is difficult and any implemented change would take a long time to show results. Therefore, in an effort to meet this criterion, the academic researcher should be asking the question: Is the dependent variable relevant and can it be effectively measured?

The practitioner, on the other hand, is primarily concerned with performance--whether it be to improve productivity, quality, sales volume, or to reduce costs (Cheng & McKinley, 1983). These factors are critical to organizational survival and are the foundation of most decisions. Consequently, the following question should be posed: Is the dependent variable relevant to an

outcome of interest to me as a practitioner?

Operational Validity

This criterion deals with the ability of the practitioner to implement action implications of a theory by manipulating its causal (or independent) variables. As pointed out by a number of researchers (Katz, Kahn, & Adams, 1980; Cheng & McKinley, 1983), most organizational research emphasizes the reliability and validity of measurement, with little consideration to the manipulability of variables. In order to be of use to practitioners, scientific research must use variables that are both scientifically acceptable and easily manipulable. Therefore, the following question should be posed: What is the proper set of independent variables to be manipulated in the research setting?

To be of use to practitioners, research must involve independent variables which can be manipulated in the organizational setting. For example, if academic research uses organizational culture as an independent variable, this research may be of little use to the practitioner if he or she is unable to easily manipulate culture. To address this issue, the practitioner should pose the question: Can this set of independent variables be manipulated in my organizational setting?

Non-obviousness

Non-obviousness is the degree to which a theory meets or exceeds the complexity of common sense theory already used by a practitioner. Academic research tends to emphasize hypothesis testing over the generation of theory (Lundberg, 1976). Researchers may be testing hypotheses which are common sense, adding little to the body of knowledge in terms of theory. Contributing to this problem is the fact that researchers often use laboratory settings to test their hypotheses (Kilmann, 1979). While this method maximizes internal validity, external validity becomes an issue and causes practitioners to question the significance of findings. Therefore, the researcher should address the following question: Are the results statistically significant and do they provide new information?

The practitioner assumes that the academic researcher is pursuing avenues of research which are new and different from what has already been done. When researchers dwell on issues that are either common sense or have been "researched to death", the practitioner begins to question the practical significance of such pursuits and their findings. Therefore, the practitioner should ask: Do the results provide useful information or are they only common sense conclusions?

Timeliness

In order for research to be useful to practitioners, it must be available for use in time to deal with the problems it addresses. Timeliness focuses on this requirement. Scientific research has been criticized for its lack of concern for time (Cummings, 1978; Mitroff & Pondy, 1978) and its tendency to be conservative about drawing prescriptive implications. However, with the pressure in academe on generating research publications, timeliness is becoming less of a problem in academic research endeavors.

Academicians are now interested in pursuing research which will have a relatively quick pay-off for them in terms of publication since tenure and promotion are based on such accomplishments. A major problem remains, however, in the backlog of articles waiting to be reviewed and published. It is commonplace for a piece of research to take a year or longer to go through the review and publication process. In order to satisfy their own career objectives, as well as provide practitioners with the results and conclusions of their studies, the researcher poses the question: How long will it take to get this research published?

Practitioners, on the other hand, are evaluated based on their responses to organizational problems. Timely solutions to problems and answers to questions are of extreme importance to the practitioner. However, both the researcher and practitioner need to recognize that some organizational issues are best studied over an extended time period, and therefore, a timely "article" or "solution" may not be imminent. For the most part, practitioners are interested in improving their present situation in as timely a manner as possible and should be asking: Is the theory available for timely implementation?

Determination of Congruency

As indicated in the preceding sections of this paper, when researchers' responses are congruent with the needs of practitioners, there is a much higher likelihood that the product will be "relevant" academic research. As depicted in Figure 1, congruency between researcher and practitioner may exist on certain standards of relevance and not on others. As the level of congruency on each criteria increases, the likelihood that the research will rank "high" on each of the five standards of relevant research increases. If congruency exists on some of the criteria and not on others, the question arises: Is it more important for a piece of research to rank higher on some criteria than on others? To answer this question, it may be beneficial to take the scientific

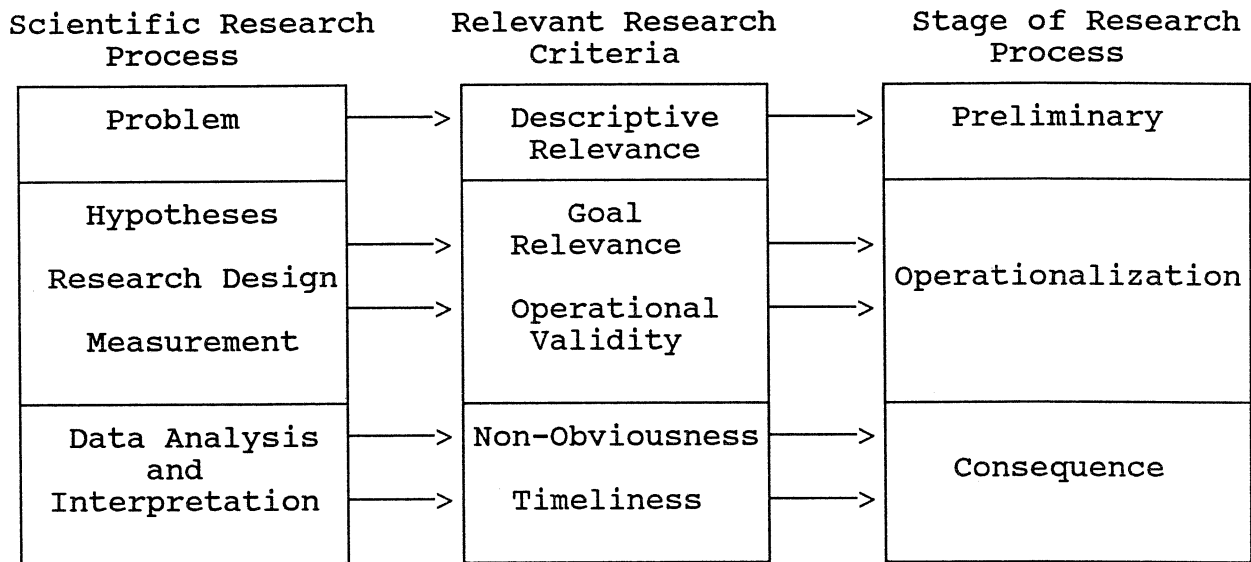
research process as interpreted by numerous researchers (Kerlinger, 1973; Sekaran, 1984; Schermerhorn, Hunt, & Osborn, 1988) and categorize the major phases by the criteria for relevant research (Thomas & Tymon, 1982). Figure 2 attempts to bridge the "scientific" and "relevant" aspects of the research process.

In the preliminary stage of the research process, a practitioner observes his present situation, gathers preliminary data, and determines whether an organization problem exists. The academician must also formulate a research problem. Ideally, the two parties will interact and come to the same conclusion regarding an appropriate organizational problem to be investigated. As described earlier in this paper, a "high" rating on descriptive relevance tells the practitioner that the basis of the research is representative of a "real world" problem that is of particular interest to his or her organization.

After a thorough review of literature and preliminary data collection, hypotheses or educated conjectures can be drawn concerning the relation of certain variables to the organizational problem. The operationalization stage of the research process continues as a research design is chosen and decisions are made concerning appropriate measures for variables. Of particular importance during this stage of the research process are the concepts of goal relevance and operational validity. High ratings on these criteria assure the practitioner that variables isolated by the researcher are indeed relevant to his or her organizational problem. While goal relevance refers to the appropriateness of outcome (or dependent) variables, operational validity concerns the appropriateness and manipulability of causal (or independent) variables.

The last stage of the research process deals with the consequence of the research endeavor. Through appropriate analysis of data, the researcher tests his hypotheses to determine if sufficient empirical support can be found. Based on his interpretation of the data, the researcher arrives at conclusions concerning the problem under investigation. The process culminates as the researcher gives the practitioner recommendations for improving his specific situation. The primary criteria of relevance during this stage of the research process are that the findings be non-obvious and timely. High ratings on these criteria convey to the practitioner that the research offers more than common sense findings and is available for timely implementation. As established earlier, not only should the researcher be concerned with statistical significance of findings, but also with the degree to which the findings generate new information. In addition, if the findings cannot be

Figure 2
The "Scientific" and "Relevant" Components of Research



generated and conveyed to the practitioner in a timely manner, the usefulness of the research becomes questionable.

While this discussion has not ranked the five criteria of relevant research by importance, it has tied each of the criterion to the various phases of the scientific research process, and in so doing, has posited that relevance should be an issue of on-going importance throughout the research process. The point stressed in this paper is that the level of congruence that exists between practitioner needs and researcher responses determines the degree of relevance that exists in a piece of research. To achieve a congruent relationship, on-going interaction or feedback between researcher and practitioner is necessary. By opening up communication channels, the researcher becomes more aware of the needs of the practitioner, and hopefully, responds to these needs more appropriately.

Conclusions And Recommendations

The model presented in this paper poses that congruency between practitioner needs and the researcher's response to these needs enhances the likelihood that the research process will produce useful and relevant results. Thomas and Tymon's five criteria for research relevance--descriptive relevance, goal relevance, operational validity, non-obviousness, and timeliness--can be used by both the academician and practitioner in assessing the

relevance of a piece of research. However, since each party is confronted with different constraints within his or her respective environment, the questions posed to address the five criteria of relevance may be somewhat different. The model in Figure 1 posits that research relevance is improved as the academician and practitioner move toward a more congruent relationship.

Various means of improving the utility of academic research have been proposed in the literature (Kilmann, Thomas, Slevin, Nath, & Jerrell, 1983). These include revamping the reward structure within academic institutions so that research studies of practical or theoretical significance, as compared to empirical significance, are awarded value. Another means of improving the usefulness of academic research is to expand the training of doctoral students to include theory construction as well as theory application. Perhaps the most resourceful means to improve the usefulness of academic research is to open communication lines between practitioners and academicians and examine ways to encourage interaction between the two parties. As stated by Martin (1983, p.576), "the interaction process encourages research with organizations instead of merely on organizations."

The model presented in this paper stresses an interactive relationship between researcher and practitioner at the front-end of the research process when the research problem is formulated, as well as the conclu-

sion of the process when interpretations are made. As the five criteria of relevant research are responded to, feedback between the two parties enhances the likelihood that future cooperative endeavors will yield more relevant and useful research.

Suggestions For Future Research

Although based primarily on Thomas and Tymon's (1982) five relevant research criteria, the congruency model presented in this paper was an effort to examine the needs and constraints of both the practitioner and the researcher. Since these parties operate in different environments and realities, it is important that researchers continue to study factors which impact on this relationship. One way to do this is to expand and refine the congruency model to include additional needs or constraints that affect either party. There may also be other criteria for assessing the usefulness of research which could be incorporated in the model to expand its application.

In developing this model, the authors have attempted to show that both the researcher and practitioner play a critical role in determining the utility of academic research. It is hoped that this model serves as a creative "springboard" for others in the continued examination of the relationship between these two parties and their quest for relevant research. Only through continued examination and interest in this topic will any definitive conclusions be reached.

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