

The Scope of Social Responsibility in the University Research Environment

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ABSTRACT

The scope of social responsibility for university research administration has grown since the first grants were first allotted to universities. We have become more organized. We have expanded our boundaries. We have become less of a single-standing organization and more of a node in a larger network of universities and research organizations. The synthesis that follows connects this notion to the literature in higher education and organizational behavior and to society at large. A research administrator should think about the impact of his or her decisions on this system. In the end, this article's contents only scratch the surface of discovering the complexities within this vast system and encourage us to continue to define it.

UNIVERSITIES AS ORGANIZATIONS

Research administrators are concerned with both internal and external publics, and they belong to a complex organizational environment. Contributing to the complexities of this environment is the university organization itself. The university is often characterized in the literature as dysfunctional and fragmented (Duryea, 1973/2000), ambiguous and anarchical (Birnbaum, 1988; Cohen & March, 1986, 2000), loosely coupled (Birnbaum, 1988; Weick, 1976) and loosely coordinated (Mintzberg, 1979). What, then, is the scope of a research administrator's responsibility in this kind of environment?

Duryea (1973/2000), in an historical analysis of the history of higher education, noted decreases in the power of central governing boards, such as a board of trustees or board of directors. The direct powers or influence of the board's control over daily university activities lessened as the

board delegated its authority to executives and staff, so the university gradually lost one of its local but formal normalizing bodies. The increase in external controlling bodies like the federal government, on the other hand, increased the demand for some “law and order” within the university organization (Duryea, 2000, p. 14). The university operates in a research arena in which practically all productive research takes place with funding tied to the wishes of a grantor (Barber, 1952; Kalas, 1987). Taking on the coercive requirements of the federal government, such as enacting federal cost controls in state-run institutions in exchange for research dollars, can affect the operating structure of an organizational system.

Cohen and March (1974/2000) conducted a large case study of universities and university presidents and contended that choice and rationality in the university system involves a clash of many cultures. From this point of view, university leadership often finds the organization hard to manage because the organization itself is fraught with ambiguities of purpose, power, experience, and success. Cohen and March called for consistent modes of behavior, such as spending more time with complex problems and persisting through to better understanding and better solutions. Consistency is considered a prerequisite for normative behavior.

Consistency, however, is often rare in universities and depends largely on the organizational models. Birnbaum (1988) and Cohen and March (1974) characterized research universities as “anarchical” and loosely coupled, having “problematic goals,” “unclear technology,” and “fluid participation.” These characteristics require thinking about universities outside the closed, rational, bureaucratic models. Birnbaum noted that “fluid participation” is characterized by formal and informal groups at all levels, all interacting at various levels of the organization, all increasing various levels of complexity. He also noted that loose coupling increases uncertainty about just how good or bad a particular problem is, with these levels often only understood in retrospect or in hindsight.

Weick (1976) is perhaps the foremost scholar in studying organizational behavior in terms of the retrospective or hindsight nature of individual understanding, noting a number of dysfunctions associated with loosely coupled educational systems. Weick contended that loose coupling allows the isolation of problems within an organization so that the most pressing problems sometimes do not affect other subgroups in the university. Autonomy seems to fuel isolation of subgroups overall (Weick, 1976), and it is here that scientists are blamed for most of what happens in the research environment. Vaughn (1990, 1998) and Kurtz (2003) supported these findings, noting that federal agencies that have to work together often do not communicate across professional lines, leading to lower levels of cooperation and underachievement of goals. Within the university structure, the separation of faculty, administrators, staff, and board, departments, colleges and schools serves to promote the professional development of these subgroups independently of the rest of the organization (Mintzberg, 1979/2000). Professional groups often do not communicate in the same language (Vaughn, 1990, 1998), leading to further separation and fragmentation within the broader post-secondary context. These groups then become almost solely responsible for the actions and reactions in their particular realm. These conditions also increase the need for a normative model of behavior. Weick contended that organizational researchers must study the hidden worlds of these subgroups in terms of how the actors make sense of their world, leading to better understanding of how the rest of the complex organization will respond and adapt to changes. It is the loose coupling of organizations that make outcomes unpredictable and difficult to study.

Mintzberg (1979/2000) noted the difficulties of a loosely coordinated organization as well. In the professional bureaucracy, such as the university, the professionals within the organization “seek control of their own work, but seek control of the administrative decisions that affect them” (p. 56). For example, university faculty members successfully bypass the bureaucratic human resource system established by the organization in order to offer a more collegial recruitment system to their colleagues.

Mintzberg further outlined the complexities of the university organization by noting that university organizations operate under a system of “parallel hierarchies”, meaning that the faculty often carry out both administrative functions and collegial functions at the same time. Chairpersons, for instance, are members of both systems. These differing administrative perspectives are a paradox because the perspectives often clash, rarely inform one another, and often fail altogether. Mintzberg called for mutual adjustment and coordination of both hierarchies through the acts of the professional administrator, and did not have much tolerance for deviation. The professional administrator, according to Mintzberg, seems to be a bureaucratically necessary means of policing deviance, or better yet, infusing some semblance of normalcy into conflict and confusion.

After much deliberation about the existing literature in the latter part of the century, Dill (1984/2000) confirmed that ambiguity in the higher education organization was unchanged, and emphasized the importance of studying behavior in universities. Dill asserted that the study of human behavior from sociological and psychological standpoints was valuable in understanding how organizations may respond to change and uncertainty, and this notion seems to hold true because many of the individuals within academia stake claims to the professional attributes of autonomy and creativity. More recently, Fincher (1998) believed that ambiguities and confusion in higher education were due to a lack of “norms, standards and criteria” (p. 5). The research function, however, does not operate in isolation from other organizations. It is often found as a node in a more complex system of organizations with indefinable or confusing boundaries.

THE COMPLEX AMERICAN RESEARCH SYSTEM

Several scholars have characterized the research system in the United States as a complex organizational system (e.g., Birnbaum, 1988; Boulding, 1973; Kalas, 1987; Martinson et al., 2005; IOM, 2002). Kalas (1987) cited Kenneth Boulding’s (1973) model of economic transaction, and argued that the grant is a complicated mechanism of economic exchange due to the difficulties in determining reciprocity in the exchange of goods and services between actors or organizations. Science is a process of discovery that may not result in tangibles and deliverables with a direct monetary value. The result of research is new knowledge that has value for the common good in the long run. By receiving a grant or money in exchange for this information, the grantee takes on a high level of fiduciary responsibility (Kalas, 1987).

The National Academies of Science, Institute on Medicine (IOM), a prestigious independent policy think tank for the federal government, considered research in the U.S. to be part of a complex system as well. The problem with complex environmental systems, as Montgomery (2005) noted, is that these environments are continually changing due to organizational actors shifting in and out of the environment, creating difficulties for vertical, horizontal, formal and informal norm diffusion.

Pfeffer and Salancik (1978/2003) noted that the organizational environment affects organizational structure by creating limitations and increasing the ambiguity of decision making. Ambiguity in decision making gives some bureaucratic units, such as research administration, greater decision-making power than others, which has been demonstrated to result in inconsistencies in interpretation or over-interpretation of rules and regulations that could stifle research productivity (IRB Advisor, 2004a, 2004b, 2005).

The IOM's Committee on Assessing Integrity in Research Environments (2002) encountered difficulty in determining how the "research environment" functions. The IOM study group had a limited amount of data on the components that comprise the research environment and system, and little or no data were presented concerning the research administrator. As discussed, the university organization is a loosely coupled entity that does not have much tolerance for grouping. Administrative units can be as loosely coupled as faculty units are loosely coupled.

Buckley (1967) noted that an organizational environment cannot be understood by breaking down its component parts, because each part will carry with it another set of complex variables. To resolve this issue, it is necessary to consider the influence of the system and professionalization as an approach to analyzing an organizational field within a complex research environment (DiMaggio & Powell, 1983; Scott, 2003).

The grant and funding system of the United States has grown so extensively that it depends on the university and the research administrator to carry out these functions in an efficient manner (Kalas, 1987). Barber (1952) asserted that science is primarily conducted in universities due to the funding system. Some experts believe that the breakdown in consistency in the grant system could cause economic repercussions that extend beyond the university and local scholarly activity (Hensley, 1992; Kalas, 1987). General systems theory supports this notion (Buckley, 1967; Scott, 2003). History has illustrated that scholarly productivity is the linchpin of the academic enterprise, and removal of this pin would be devastating. University research administrators exist in most universities to monitor the business of research both internally and externally because the university has become the cradle of scholarly activity in the United States (Barber, 1952; Kalas, 1987). These forms of organization are due in part to the large appropriation of funds both from the federal government and private industry to the university (Barber, 1952; Kalas, 1987). As federal and private funding increases, the administrative burden increases, the connectivity with external organizations increases, and the complexities extend beyond the walls of the university (Mitroff, 1983).

Establishing these external relationships is often referred to as boundary spanning (Meyer & Rowan, 1977). Boundaries are distorted when organizations interact with each other through contracts and agreements. The boundaries are extended, as is the client base both within and outside the university. An increased client base, or increased stakeholder realm, increases the probability of both individual and corporate harm. Understanding the self-regulatory aspects of research administrators is an important facet to understanding administrative life in the research university.

CRITICAL SUMMARY OF UNIVERSITIES AND THE RESEARCH ENVIRONMENT

University research administrative functions are integral to the scholarly processes at most research-related universities, yet these units remain understudied empirically. There are many

calls for the study of social control and ethics in university units, but these studies are lacking in specific institutional focus, particularly in regard to the institutional pillar on which these studies should be placed (Scott, 2003). The university literature barely touches institutional theory-based explanations of behavior, balancing micro and macro organizational behavior for a somewhat myopic view of the university. New studies should begin to help fill this void and demonstrate how the organizational *system* is responsible for shaping behavior. For instance, as demonstrated in this review of universities, as components of a university-industry-government system that fuels the U.S. research economy, the overall economy and society (Barber, 1952; Kalas, 1987), university research administrators must make clear and ethical decisions concerning each transaction *in the environment*, not just in the university. The micro-analytical focus of the existing literature appears to be one-sided when viewed through the systems lens. From a systems perspective, organizational deviance from the normative professional behavior of university research administration could have ramifications that extend into the larger organizational environment or system (Kalas, 1987). Studies of research support personnel are also scarce (Hensley, 1986), but due to increased accountability measures enforced by the public (Altbach, 1994), research in this area continues to increase in importance at a national level (IOM, 2002). Accountability is a subset of a broader organizational and sociological concept called the norm. In order to study accountability and its mechanisms, it would be necessary to consider how norms function in complex social systems.

Many university units may need further study, but given the interconnectivity of universities to other organizational units within the system, an institutional perspective aids in this understanding (DiMaggio & Powell, 1991). Universities and the research environment are vast systems with many components, each contributing some element to overall operations, behaviors, and organizational norms. Not all of these components have been studied from a social control perspective. Studying research administrators would provide an excellent understanding of how a university unit involved in one of the major aims of the research university mission operates from a normative perspective, addressing social control, appropriateness, and normativity.

CONCLUSION

Higher education institutions are the stewards of billions of dollars in research grants. Public trust, therefore, is associated not only with scientists, but also with the scientists' institutions. The United States is considered the leader in scientific knowledge and training, but if problems of integrity continue at the individual and systemic levels, higher education runs the risk of tainting its reputation as a leader and a trustworthy steward of taxpayer funds. Lack of control in this environment could have devastating financial and political implications. As Congress decides to disseminate funds to the higher education sector, and as states decide how to fund their higher education institutions, matters of integrity and reputation almost surely will be scrutinized. In addition, the world scientific community could begin to shun U.S. scientists, claiming that U.S. research institutions are unstable and untrustworthy, and lack the capacity to produce quality research results. The scope of responsibility, therefore, extends beyond the walls of a single institution and into the world.

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AUTHORS' STATEMENT

This literature critique and synthesis were taken directly from the author's dissertation, entitled, "The Institutional Construction of Professional and Corporate Norms in the United States University Research System." Dr. Atkinson felt that this particular synthesis stood alone as a scholarly article in defining the scope of research on research administration and shining some insight into how much work can be done to advance the research administration profession.

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