Transnational Organizational Considerations for Sociocultural Differences in Ethics and Virtual Team Functioning in Laboratory Animal Science

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Business models for transnational organizations include linking different geographies through common codes of conduct, policies, and virtual teams. Global companies with laboratory animal science activities (whether outsourced or performed inhouse) often see the need for these business activities in relation to animal-based research and benefit from them. Global biomedical research organizations can learn how to better foster worldwide cooperation and teamwork by understanding and working with sociocultural differences in ethics and by knowing how to facilitate appropriate virtual team actions. Associated practices include implementing codes and policies transcend cultural, ethnic, or other boundaries and equipping virtual teams with the needed technology, support, and rewards to ensure timely and productive work that ultimately promotes good science and patient safety in drug development.

Transnational organizations integrate domestic and international components of their businesses throughout all levels of the organization. Such organizations are characterized by "highly specialized yet closely linked groups of global business managers, country or regional managers, and worldwide functional managers."³ High levels of communication flow, environmental adaptation, and interdependence between locations and operations are hallmarks of transnational organizations.¹³ To enable successful outcomes of these high-level processes on a global scale, transnational organizations find themselves managing virtual teams (namely, those separated by time and distance and that communicate mainly by electronic means) and sociocultural differences in ethics over wide geographic distances.

Increasingly, many organizations with biomedical research programs, and therefore laboratory animal programs, are moving toward transnational business models.¹⁸ For the laboratory animal manager, this transition may mean communicating and working with, or possibly even leading, persons or departments in countries other than the United States. Most notably, several transnational pharmaceutical companies and contract research organizations use managers (vice presidents, directors, managers, and others) to start or manage facilities abroad and to develop global policies for animal use and related matters. These types of interactions generally are not part of a typical laboratory animal facility manager's background in the United States, nor have they been included in nontechnical competency and skill development programs for facility managers until the need arises (if then).

A trend toward the formation of global policies has arisen to address the need for pharmaceutical companies and other organizations to monitor animal welfare during the conduct of studies outsourced to contract research organizations across the globe.^{17,26} An organization's desire to see their animal research policies enacted at a contract research organization or other facility performing outsourced work is not unusual.²⁰ Mechanisms to put such policies in place or respond to them often incorporate an understanding of the differences in sociocultural ethics in various geographies and virtual teams. Transnational organizations can accommodate and prepare for sociocultural differences in ethics and virtual teams in laboratory animal science. The ability for a transnational organization to support the transfer of knowledge about sociocultural differences and facilitate the work of virtual teams could be of particular benefit to the field of biomedical research.

Many transnational or global laboratory animal science programs start with the formation of virtual teams and an awareness of sociocultural differences with regard to ethics including animal care and use (including regulatory differences). Without provision for these 2 fixtures of the transnational organization in relation to laboratory animal programs, efforts for global harmonization may be hampered or fail.

Sociocultural Differences in Ethics

Sociocultural differences are perhaps the most important factors to consider when looking at increasing communication flow, policy adaptation, and interdependence in transnational organizations. Building on the observations of a management expert, understanding value and attitude differences among groups of employees is critical for the "effectiveness of multinational and transnational corporations."¹⁹ Differences in the ethical reasoning processes of employees from different countries become challenging to work with in transnational organizations. Business ethics, in particular, have received intense scrutiny over the past few decades, and that level of scrutiny is increasing.¹

Ethical behaviors are considered crucial for good business and improve organizational behavior and the long-term success of the firm.¹ In addition, a strong sense of ethics is needed when it comes to appropriate animal care and use and conducting all types of research in a compliant manner. However, defining

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ethics can be difficult, and what is considered ethical differs from country to country as well as culture to culture.¹ Many transnational organizations naturally seek to have unified and ethical core values that run throughout the organization,²³ and this need is particularly true for the conduct of research and the use of laboratory animals. Therefore, it stands to reason that transnational organizations will face challenges in this area.

Values, norms, and general organizational procedures constitute the core of ethics for an organization. Standardizing these values, norms, and organizational procedures becomes a mechanism for how a firm approaches its transnational organizational design.²³ Workers with different cultural backgrounds will approach these values, norms, and procedures differently, when it comes to ethical reasoning, decision-making, and behavior.^{18,23} For example, ethical dilemmas are situations where the welfare of others may be affected.²³ Employees from different countries or cultures will universally deliberate on such dilemmas, but the actions taken will differ because culture affects the reasoning the employees use.²³ In another example, employees from some cultures, particularly in East Asia, will offer vague responses for answers rather than the firm decisions needed an attempt to avoid responsibility in case something goes awry.¹⁸ Specific examples of sociocultural differences related to animal research encompass variable interpretations of the same standard operating procedures for animal and veterinary care, disparate uses of equipment (for example, some cultures value cost-savings over quality for cleaning despite the presence of and requirement to use state-of-the-art cleaning equipment in a facility), and assumptions that all parties involved are following applicable regulations and guidelines (some cultures do not make such assumptions). In addition, the identification of ethical dilemmas, views of norms and structures, decision-making processes and outcomes, willingness to take on responsibility for actions, and consistency of ethical actions varies from culture to culture.4,15,18,23-25

Transnational organizations can handle these ethical differences by incorporating the influence of culture into the development, communication, and implementation of global corporate values and standards,²³ including animal care and use. Transnational organizations can "develop global codes of ethics that would transcend the bounds of any singular cultural reference point" and request agreement to the moral principles of such codes.²³ To apply the codes globally and make them transcultural, strong educational, communication, and compliance programs are needed at the outset.²³ In particular, the need for and ability to obtain appropriately translated country- or regionspecific animal welfare laws and regulations can be daunting but critical to understanding sociocultural differences and applying global codes of ethics and conduct.¹⁸ Many transnational organizations establish global veterinary or animal welfare groups to incorporate sociocultural differences when creating global codes of ethics and conduct for animal-based research.

Efforts toward establishing codes of ethics and codes of conduct help create a "shared identity" of the workers throughout a transnational organization.² Experience has demonstrated that organizational management at the highest levels need to understand and promote animal welfare, codes of ethics, and codes of conduct throughout the organization for such efforts to be longstanding and effective. Employees need to be energized around a common purpose and common benefit for the company.² 'Boundaryless' interactions, collaborations, and a "cooperative mindset" are fostered when employees have a shared identity and purpose.¹² Such ideas need to be incorporated into efforts to globally harmonize and create standards for laboratory animals and their use within transnational organizations. Examples of areas for harmonized or global standards include 1) the need for an ethical review of the use of animals before study initiation; 2) the need for veterinary involvement in study design and oversight; 3) requirements for facility AAALAC accreditation; 4) guidelines for study endpoints; 5) procedures for animal vendor selection; 6) requirements for training, licensure, and certification of investigators, veterinarians, animal care or research technicians, and others; 7) procedures for reporting animal care and use concerns; 8) requirements for caging, environmental enrichment, animal observations, and sanitation practices; 9) procedures for postapproval study monitoring; 10) requirements to follow Good Laboratory Practice or other agency regulations depending on where study data is to be submitted for drug development; and 11) procedures for anesthesia and analgesia use and selection, which can be highly variable depending on availability and local safety regulations.

Virtual Teams

The movement toward performing work in teams as a primary mode of operations revolutionized the workplace in the 1980s. Many organizations have adopted the team model for task performance, with positive results. Transnational organizations, by their very nature, face the obstacle of pulling together employees from various areas of the globe into teams when a teamwork approach is desired. Virtual teams therefore have become a "natural way" for transnational organizations to address the needs of their "global reach," and their presence is "briskly increasing" within such organizations.²⁷ Mergers, acquisitions, and the increased globalization of the market place all point toward the increasing use of virtual teams in transnational organizations.²⁷ In laboratory animal science, often the first interactions that workers in the United States will have with employees from other countries will be through virtual teams.

Virtual teams are a mechanism used to coordinate work throughout different functions, operational divisions, physical locations, and time zones.²⁷ They usually perform all work exclusively by using electronic communication avenues.^{9,21,27} Videoconferencing, teleconferencing, Internet and intranet postings and communication, facsimile, instant messaging, telephones, and electronic mail are all technologies used by such teams.^{9,21,27}

The benefits of using virtual teams include potential cost savings, promotion of an environment that fosters knowledge transfer and innovation, and the provision of mechanisms by which expertise can be concentrated, regardless of the geographic location of that expertise.^{16,21,27} Transnational pharmaceutical companies and contract research organizations are using such teams to develop global standards, policies, and training programs as well as create training materials and deliver such training. Disadvantages of virtual teams include the loss of close interpersonal experiences and the inability to decipher body language.

Cultural differences come into play with transnational virtual teams. These differences are manifested by how team members organize their work, lead, make decisions, communicate, coordinate, determine accountability, and monitor work.^{7,9,14,16,27} When exclusively using technology for communication, modeling other team members' behaviors and monitoring work progress becomes even more difficult.^{8,10,27,28} As previously described, appropriately translated documents, including research animal laws and regulations, are needed.¹⁸ To help facilitate virtual teams in a laboratory animal science setting, staff members are

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encouraged to come to meetings with questions and information on hand that are targeted at the cultures represented on the team. Planning meetings to establish baseline standards and operations at different sites may be beneficial before virtual teams attempt to tackle assigned tasks.

A strong emphasis on institutional norms, as described earlier, helps to mitigate potential issues in transnational teams.²⁷ Therefore, organizational design efforts that stress the importance of organizational norms will help support the efforts of transnational virtual teams. Ambiguity is a natural part of virtual teams, and providing for a structure for them helps garner success.²⁷ Specifically, supportive organizational design efforts including a centralized administrate support group, periodic updates to management, metrics on team effectiveness and ability to reach benchmarks, and presentations of recommendations to management can help virtual teams to "reduce ambiguity."^{5,27} It is also recommended that members of transnational teams be given cultural training prior to the outset of group work.⁹

The concept of a "professional culture" is another means by which personnel from different locales and cultures can be grouped effectively in a transnational organization.²² Research demonstrates that when an organization brings employees of similar or like professions together, the similar professional interests of the employees transcend cultural, political, or geographical differences.²² The same could be true of veterinarians and animal facility managers. Transnational organizations could use this knowledge in the design of their virtual teams.

Research also indicates that virtual teams require management of their activities to produce optimal outcomes.²⁷ This management typically comes in the form of organizational policies, procedures, and processes that the teams follow.²⁷ Policies, procedures, and processes help define authority and decision-making within virtual teams. Formalized structures along with shared authority and control in virtual teams and team agreement on outcomes and goals with a timeline for deliverables are positively associated with better results.²⁷ The team leader, or perhaps another facilitator, keeps the virtual team on track for ensuring timeline adherence.

An important component of employee performance development and management is how employees are rewarded.¹² To promote the work of teams in a transnational organization, team-based rather than individual-based rewards and incentives are needed.^{12,22} Although this concept seems simplistic, it is often overlooked by organizations that traditionally have rewarded employees by customary, individual rewards systems.^{12,22}

From a practical viewpoint, organizations must be designed to support the technology required for transnational virtual teamwork. Offices must be outfitted and maintained at a level to facilitate continuing electronic communications both with the appropriate equipment and personnel in support-services roles.²¹ Employees responsible for information systems in transnational organizations must be cognizant of differences in privacy laws, data protection, and security between countries.⁶ Virtual teams can become burdensome and ineffective without appropriate technologic support.⁹

Conclusions

For the development of the understanding of sociocultural differences and support of virtual teams in laboratory animal science, a high-level recommendation is to have key personnel visit other business locales. Laboratory animal veterinarians, who play a pivotal role in animal research worldwide, might visit laboratory animal facility in a transnational organization's home country. The home country likely will have the most influence in the establishment of codes of ethics and conduct and operational standards. What is learned from home country visits, done first in the learning process, can then be taken to other locations to prepare them for virtual team work and future visits from the home country veterinarians and other personnel. In addition, key personnel interacting with employees from multiple cultures might consider taking formal courses on those cultures.

To survive, transnational organizations are naturally looking outwards and continuously trying to adapt to their environment.¹¹ For biomedical research, this adaptation many times means the standardization of laboratory animal operations and the implementation of global policies for animal care and use. Virtual teams often are used to help the organization meet such goals. However, before virtual teams can be successful, an understanding of sociocultural differences in ethics is needed. Lack of effective organizational support for dealing with sociocultural differences in ethics and virtual team operations typically leads to unproductive and undirected teamwork.

Globalization of the marketplace has driven many pharmaceutical companies and contract research organizations to design for international activities. Factors outside of any organizational chart, described herein, must also be addressed effectively to ensure success for the laboratory animal programs that also become transnational.

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