ISO certificates as organizational degrees? Beyond the rational myths of the certification process

Olivier Boiral, Département de management, Faculté des sciences de l'administration, Pavillon Palasis-Prince, Université Laval, Québec, Canada

Abstract

This paper explores both the concrete and symbolic aspects of how ISO 9000 certification audits are prepared for and passed. Based on interviews with 60 respondents employed in certified organizations, this study analyzes the process of preparing for and passing an ISO certification audit through the lens of the degree-purchasing syndrome (DPS) in education, which refers to the disconnect between the acquisition of academic degrees and the learning process they should entail. This perspective makes it possible to go beyond the neo-institutional approach to shed light on the scholastic, ethical and contradictory aspects of the ISO certification process, which remain largely unexplored in the literature. The findings debunk the rhetoric of impartiality, objectivity and rigor surrounding the ISO certification process. They also reveal the tendency to acquire ISO certification as a sort of "organizational degree" after passing a quite predictable exam, with all the pitfalls that entails, such as rote preparation, procrastination, short-term focus and cheating.

Keywords: certification audits, commoditization, degree purchasing, education, ISO standards, rational myths

Introduction

The number of ISO 9000 certifications has grown exponentially in recent years, exceeding one million certified organizations worldwide in 2009 (International Organization for Standardization, 2009). Although more than 300,000 new ISO 9000 certifications audits are performed every year, surprisingly enough, the manner in which the certification process is perceived and understood within organizations remains largely unexplored. Notwithstanding the stress, strategic stakes and organizational changes inherent in the certification audit, the certification process is most often depicted as a rational, neutral and unequivocal process (Awan & Bhatti, 2003; International Organization for Standardization, 2002, 2006; Ni & Karapetrovic, 2003; Standards Council of Canada, 2000).

This image of rationality and rigor is shaped by both the institutional environment underlying ISO certification and the social functions of auditing in general. First, the image of a stringent auditing process is assumed to strengthen stakeholders' trust in organizations with regard to activities that must conform to specific standards (Gendron, Suddaby, & Lam, 2006; Power, 1996, 1997, 2003). Second, ISO certification can be used as an institutional tool of governance

and self-regulation (Christmann & Taylor, 2006; Prakash & Potoski, 2007). Third, auditing reinforces the social legitimacy of organizations through the verification of internal practices by presumably rigorous, independent and impartial external experts (Martin, 2007; Moore, Tetlock, Tanlu, & Bazerman, 2006; Power, 2003). This trust-providing process, with its appearance of rigor and strict requirements, seems quite similar to the acquisition of academic degrees. Academic diplomas confer social legitimacy; require the passage of exams intended to verify learning and competencies; foster the perception that degrees reduce uncertainty about skills that are hard to observe; and entail preparing for and passing exams in an often perfunctory and ceremonial fashion. From this perspective, ISO certification resembles a sort of "organizational degree" awarded after the final exam—i.e. the certification audit— administered by purportedly independent auditors playing the part of examiners or professors for a short period of time.

This idealized and quasi-scientific image of ISO auditing has been criticized by a few studies using a neo-institutional approach (Boiral, 2003; Walgenbach, 2001). Nevertheless, these critical studies have mostly focused on the ISO standard integration, not the auditing process itself nor how it is conducted or perceived within organizations. In addition, the neo-institutional approach remains too general and unfocused to effectively elucidate the nature of the symbolic aspects, main stages and perceptions of the certification process within organizations.

The objective of this paper is to explore the different stages, scholastic aspects and perceptions of ISO 9000 certification audits based on interviews with 60 individuals employed in certified organizations. More specifically, the results of this study clarify the symbolic aspects of the process of preparing for and acquiring ISO certificates by examining it from the perspective of the degree-purchasing syndrome (DPS) theory in education. The DPS refers to the pervasive effects—notably concerning the process of preparing for and passing exams—that result from the tendency of many students "to be more interested in acquiring a diploma than the learning that it represents" (Brotheridge & Lee, 2005, p. 71). The use of the DPS contributes to casting light on underexplored aspects of ISO certification, including the ambiguous relationships with auditors, relative predictability of audits and commoditization of ISO certificates. The paper also contributes to demystifying the secrecy and mystery surrounding ISO certification by shedding light on the meaning, symbolism and practical impacts of the auditing process. Finally, the paper develops a new theoretical perspective drawn from educational research and contrasting with the existing literature on ISO standards, including the neo-institutional approach and the analysis of certification as a rational myth.

ISO Certification and the Degree-Purchasing Syndrome

More often than not, ISO certification is implicitly seen as a monolithic and uniform reality shared by so-called certified organizations (Awan & Bhatti, 2003; Beckmerhagen, Berg, Karapetrovic, & Willborn, 2004; Ni & Karapetrovic, 2003; Standards Council of Canada, 2000). This dominant and instrumental vision of ISO auditing conceals the various ways in which organizations develop specific interpretations of the practice of auditing and the symbolic and commercial reasons for undergoing an audit. The perspective provided by the DPS helps shed light on these underlying reasons, to deconstruct the structure of rationality surrounding ISO

certification and to provide a more comprehensive, realistic and critical picture of the auditing process.

The rhetoric of the audit process

ISO certification audits are based on a voluntary, non-regulatory and private approach that is backed by both auditors working for accredited certification bodies and organizations adopting ISO management systems (Awan & Bhatti, 2003; Paterson, 2002). According to the ISO 19011 standard on quality and environmental management system audits, auditing is a "systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled" (International Organization for Standardization, 2002, p. 1). This standard applies to both ISO 9001 and ISO 14000 audits, which use the same approach. Although the systematic application of auditing principles and guidelines is intended to improve the efficiency, professionalism and ethical application of ISO certification audits, few empirical studies have actually examined the issue. Those few have mainly focused on the formal description of ISO audits and their importance and usefulness to organizations (Beckmerhagen et al., 2004; Ni & Karapetrovic, 2003).

This widely accepted functionalist and instrumental perspective tends to view the organization as a well-oiled machine in which ISO standards act as "managerial technology" (Mouritsen, Ernst, & Jorgensen, 2000) whose adoption leads to improvements in the management system. Just like the periodic checking and testing of a machine, the role of auditing is to ensure the maintenance of this "managerial technology" in order to limit and correct organizational non-conformities and malfunctions. This reassuring and mechanistic rhetoric adds prestige to the standards and legitimacy to the certification. It also offers an impersonal and uncritical vision of the social aspects of ISO audits and the way they are carried out.

Nevertheless, the image of rigor and rationality surrounding ISO standards and audits can be disconnected from real organizational learning and practices. Just as the scientific and academic aura surrounding diplomas tends to mask the uncertainties concerning students' real qualifications, the ISO certification process may present a reassuring façade that hides the uncertainties inherent in organizational practices and capabilities. This disconnect has been emphasized in the literature critical of financial audits and ISO certification. As shown by Power (1996, 1997, 2003), the quasi-scientific image surrounding financial audits has been greatly exaggerated. This image of rigor and objectivity, as well as the emphatic insistence on the professionalism and independence of auditors, are primarily intended to increase the perception of legitimacy in the minds of stakeholders. Financial auditing leads to the development of documentation, information and structures that are often only loosely linked to reality, but which facilitate the job of auditors and help legitimize the organization's accounting certification.

The analysis of the "audit society" and its rituals of verification developed by Power (1996, 1997, 2003) describes a global phenomenon of which the proliferation of ISO certification is one manifestation (Boiral & Gendron, 2011). Both Power's analysis and the few critical studies of the ISO 9000 certification process have essentially been based on neo-institutional theory (Boiral, 2003; Walgenbach, 2001). This theory holds that, when adopting new practices, organizations are motivated more by the social legitimacy and apparent rationality of the practice

than by its internal relevance (DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Townley, 2002). The widespread use of these practices is evident in the increasing homogenization of organizations, which are becoming progressively "isomorphic" by adopting similar management systems intended mainly to respond to institutional pressures. Nevertheless, as argued by Meyer and Rowan (1977), organizational conformity to societal expectations is often perfunctory, ritualized and disconnected from internal practices. The concept of "rational myth" refers to the disconnect between the true internal practices of organizations and the image of rationality conveyed by the often superficial adoption of structures or management systems in response to external pressure (Boiral, 2007; Meyer & Rowan, 1977; Townley, 2002). These myths can foster the emergence of a form of organizational hypocrisy (Brunsson, 1989) founded on a rational but baseless discourse that stresses the relevance of ISO certification. This neo-institutional perspective sheds light on the contradictions between the image of legitimacy, rigor and rationality of ISO certification and the true internal practices of organizations (Boiral, 2003, 2007; Christmann & Taylor, 2006; Heras-Saizarbitoria, 2011; Walgenbach, 2001). Thus, external pressures and the quest for social legitimacy can lead to the implementation of the standard in a superficial and ceremonial manner, intended primarily at obtaining certification at a minimal cost. The development of structured and detailed ISO documentation, mostly for the purpose of facilitating the certification process, reflects the rational myths of the audit society and its obsession with control (Boiral & Gendron, 2011; Power, 1996, 1997, 2003).

This type of criticism over the superficiality, ritual aspects and lack of trustworthiness of certification audits has also been raised by the International Organization for Standardization itself, which has been increasingly concerned about the many abuses in this area (Paterson, 2002; Business Improvement Network, 2002). In 2001, the Secretary of the International Organization for Standardization publicly expressed concern over the rising number of complaints about unscrupulous auditors and unreliable audit practices undermining the image of ISO standards (Eicher, 2001). These concerns appear to be rooted primarily in the commercial aspects of certification audits and the often perfunctory and procedure-oriented manner in which they are performed. Generally speaking, like academic degrees obtained from educational institutions after the completion of exams of varying difficulty, ISO certification is based on an exam, namely the certification audit. Passing the audit confers the right to an internationally recognized "organizational degree" which can act as an admission ticket to specific markets. A review of the DPS in education will help clarify the particularities of the certification audit process and the quest for a title (be it a degree or an ISO certificate) as an end in itself rather than as a means of self-improvement. Using the DPS as a frame of reference provides a new and more critical perspective for analyzing the ISO certification audit process and may also shed light on unexplored issues such as the commercial aspects of auditor–auditee relationships, possible conflicts of interests, commoditization of ISO certification, and cheating behaviors.

The degree-purchasing syndrome

Many students believe that the main reason for education, especially at university level, is the acquisition of a recognized degree, rather than the acquisition of new knowledge or skills (Brotheridge & Lee, 2005; McMillan & Cheney, 1996). This instrumental vision of education often leads to a lack of student motivation in learning activities and a more superficial integration of knowledge (Ryan & Deci, 2000). This vision also results in resistance or disengagement in

class, as well as procrastination in preparing for exams (Brotheridge & Lee, 2005). Fundamentally, students who only want a degree tend to be less motivated and to perform less well than other students. In order to facilitate academic success, they are also more likely to choose easier courses and cheat more on exams (Brotheridge & Lee, 2005; McMillan & Cheney, 1996; Murdock, Miller, & Kohlhardt, 2004). The customer–supplier relationship between students and universities, competition among universities and pressure to increase the number of graduates to secure greater financial resources can also fuel the DPS (Brotheridge & Lee, 2005; McMillan & Cheney, 1996). The DPS seems all the more likely to take hold when many teaching institutions tend to inflate grades in order to provide a signal of their students' high abilities, increase the number of graduates, or respond to pressure from students (Brotheridge & Lee, 2005; Chan, Hao, & Suen, 2007). Fueled by the DPS, the proliferation of programs awarding diplomas labeled, for example, MBA (Mazza, Sahlin-Andersson, & Pedersen, 2005) can devaluate academic credentials (credential inflation) and reinforce the trend toward the commoditization of education (Renke, 2000). This commoditization develops independently from the learning process itself and the real qualifications associated with specific degrees (Brotheridge & Lee, 2005).

The signaling theory may also partly explain this commoditization process. As highlighted by this theory (Chan et al., 2007; Spence 1973, 2002), the real, supposedly education-related qualifications of job candidates remain intangible, uncertain and difficult to assess for employers. Employers are thus placed in a situation of information asymmetry in relation to employees concerning the supposed qualifications and capabilities of new recruits. In this context of uncertainty, educational degrees act as a signal that helps to distinguish between potential employees. According to the signaling theory, academic degrees do not necessarily guarantee, in themselves, the learning of specific competencies, but rather serve primarily to send a positive signal concerning alleged capabilities that cannot be easily assessed or directly observed by recruiters (Rynes, Bretz, & Gerhart, 1991). In this context, students may be tempted to acquire an academic degree not necessarily to improve their personal skills and education, but essentially to send a signal to the labor market and improve their chances of finding a well-paid job. Although the DPS was not initially based on the signaling theory, both tend to view academic diplomas as tickets to the labor market rather than as reliable credentials certifying the acquisition of new skills. In contrast to the DPS, however, the signaling theory does not focus on the degree acquisition process—including preparing for and passing exams—and is based more on economic models than on educational research as such.

The DPS is used here to examine and explain the ISO certification process, which may be viewed as the acquisition of an organizational degree. Like many students, the managers and employees of an organization seeking certification may view it less as a means of improvement and more as a kind of organizational degree representing an objective in itself. From this standpoint, certification may essentially be a symbolic response to extrinsic motivations such as customer demand and the promotion of their organizational image. These institutional pressures have often been emphasized in the literature (Beck & Walgenbach, 2005; Brunsson & Jacobsson, 2000). Just as the DPS in education tends to encourage a superficial preparation for exams (Brotheridge & Lee, 2005; Murdock et al., 2004), many organizations tend to consider certification as an end in itself and pay lip service to the ISO standards (Boiral, 2003, 2007; Paterson, 2002; Walgenbach, 2001). From an organization's perspective, the certification audit

appears at first glance to be relatively similar to passing an exam: it is of short duration, the focus is limited to certain issues, there are notable ceremonial aspects, certain questions from auditors are easily anticipated, the position of auditors is comparable to that of professors during exams, and the reality is that—like unscrupulous students—some organizations are likely to cheat. Finally, like academic degrees, ISO certificates send a signal about supposed organizational activities or capabilities that are generally not directly observable by stakeholders because of the opacity of internal practices (Prakash & Potoski, 2007). Generally speaking, the concept of "syndrome" refers to "an undesirable condition that is characterized by a particular type of activity or behavior" (Collins Dictionary). Thus, the tendency to fall into a DPS in ISO certification does not mean that this syndrome applies to every possible situation.

Table 1 highlights the main pillars of the DPS theory and its implications for education and ISO certification.

Beyond the rational myths of certification

The critical literature on ISO certification and its analysis as a rational myth has clearly contributed to casting light on the superficiality and contradictions of ISO management standards: the search for certification as an end in itself, quest for social legitimacy, perfunctory implementation of ISO standards, lack of employee involvement, disconnect between ISO requirements and daily practices, etc. (Boiral, 2003; Boiral & Gendron, 2011; Christmann & Taylor, 2006; Walgenbach, 2001). Nevertheless, the concept of rational myth does not address certain pivotal facets of the ISO certification process and may even be misleading if used in isolation. In particular, the concept of rational myth cannot provide an insight into the heterogeneity of certified organizations, the main stages of the certification process, the nature of verification rituals, and auditors' lack of real independence. To address these issues, the DPS theory offers a more comprehensive and coherent view on the ISO certification process (see Table 1).

First, the results of previous research partially contradict the neo-institutional theory by showing that there are wide variations in how the standard is integrated by organizations, rather than the expected emergence of so-called isomorphic practices (DiMaggio & Powell, 1983). Contrary to what neo-institutional theory would predict, some organizations have also adopted ISO standards in the absence of strong external pressures and have efficiently used these management systems to improve internal practices (Boiral 2003, 2007; Walgenbach, 2001). The heterogeneity of certified organizations and the uncertain impacts of implementing the standard (Boiral, 2011; Heras-Saizarbitoria, 2011) can be better explained by the DPS. Indeed, obtaining a degree means that a course of learning has been completed successfully, not necessarily that recipients are isomorphic, share similar capabilities or have reacted superficially to institutional pressures. Thus, the tendency to be interested in diploma acquisition more than learning activities (Brotheridge & Lee, 2005) does not necessarily apply to all cases. Furthermore, acquiring an academic or organizational degree may lead to the development of new competencies and capabilities, regardless of the initial motivations.

Table 1. The DPS theory of ISO certification

	DPS Theory in Education	DPS Theory in ISO Certification
Principles and driving forces		
Main characteristics	Academic degree as an admission ticket to the labor market that is somewhat disconnected from learning concerns and real qualifications Commoditization of degrees (MBA, etc.) Possible conflicts of interest due to the economic issues surrounding graduation Relative predictability of exams and the process of acquiring a degree	ISO certification as an organizational degree providing access to certain markets that is somewhat disconnected from internal practices Commoditization of ISO certificates Possible conflicts of interest due to the commercial and financial aspects of certification Formalistic aspects and relative predictability of certification audits
Main motivations	Institutional and labor-market pressures for higher education Possible intrinsic motivations for learning new skills and knowledge Rational myths surrounding academic degrees: first and foremost an avenue for learning, rational and selective final exams ensure common qualifications, etc.	Institutional and market pressures for standardization and ISO certification Possible internal motivations for improving practices Rational myths surrounding ISO certificates: avenue for continual improvement, compliance with best practices, rigor of certification audits, etc.
Idiosyncratic aspects	The intensity of the DPS depends on many factors: student motivation and selectivity, quality of teaching, cultural aspects, etc. Not all students are at school for degree-purchasing reasons Not all teaching institutions can be seen as "degree providers": the most selective or prestigious raise the bar	The intensity of the DPS depends on many factors: motivation for certification, integration of the standard, leadership, difficulty of the audit, etc. Certification is not driven by marketing concerns alone Not all auditors and certification bodies can be seen as "certificate providers": the most serious raise the bar
Degree acquisition process		
Preparation for exams/audits	Tendency to procrastinate when preparing for exams Memorization of essential information just before the exam Focus on documentation (notes, textbooks, etc.) Anticipation of typical exam questions Students' fear, stress and anxiety about their ability to answer questions and pass the exam	Procrastination when preparing for the audit Memorization of ISO 9000 basics and additional activities just before the audit Superficial and procedure-oriented preparation Focus on documentation Anticipation of the types of verification performed Fear, stress and anxiety about being unable to answer auditors' questions or failing the audit

	DPS Theory in Education	DPS Theory in ISO Certification
Passing exams/ audits	Ceremonial character and predictability of many exams: duration, focus, types of questions, etc. The predictable aspects of certain exams reinforce the tendency toward procrastination, memorization, and superficial preparation Possibility of cheating in some exams	Ceremonial character and predictability of audits: duration, focus, conditions, checklists, types of questions, etc. The predictability of audits reinforces their superficial character, ease and procedure-oriented preparation Possibility of misleading the auditor
Degree/ certificate acquisition and its consequences	Celebrations after graduation Degree as an admission ticket to the labor market Sends a signal about students' supposed abilities that are not directly observable by employers	Celebrations after certification; Certification as an admission ticket to certain markets; Sends a signal about supposed organizational capabilities that are not directly observable by stakeholders
Implications		
Possible conflicts of interest	Students can choose among various teaching institutions that compete on price, quality, service, etc. Tuition is an important source of revenue and students tend to be viewed as customers who are likely to exert pressure on assignments, exams, duration of studies, requirements for graduation, etc. Grade inflation	Organizations can choose among various auditing firms competing on price, quality, service, etc. Certification fees are an important source of revenue for auditors. The customer-supplier relationship with certified organizations tends to call into question their independence and impartiality
Consequences of the DPS trend	Degree proliferation (MBA, etc.) Erosion of the value of certain degrees (credential inflation) and perception of unfairness among "good students"	Relative ease of obtaining certification ISO certification proliferation Erosion of the value of ISO certification detrimental to organizations that have integrated the standard

Second, neo-institutional theory and the concept of rational myth remain too general and unfocused to explain the main stages of the auditing and certification process. The certification process, which involves implementing the standard and preparing for and passing the audit (International Organization for Standardization, 2002, 2006), is relatively similar to the process of acquiring a degree, which involves preparing for and passing exams leading to graduation (see Table 1). Because it is focused on this acquisition process, the DPS can help explain the causes and consequences of ISO certification from a more critical and comprehensive perspective.

Third, although the concept of rational myth presupposes the existence of ceremonial behaviors designed to foster the social legitimacy of organizations (Meyer & Rowan, 1977; Townley, 2002), the nature and scope of these behaviors remain unspecified and do not explain auditing practices as such. Because it questions the instrumental vision of degree acquisition and thus the

reliability of final exams, the DPS can better explain and contextualize the ceremonial behaviors involved in auditing, including the tendency to procrastinate when preparing for the audit, the inclination to anticipate auditor questions, the possibility of cheating, and celebrations after certification (see Table 1).

Fourth, the neo-institutional perspective on ISO certification has remained essentially focused on the implementation of the standard, and not on certification audits and the relationship between organizations and auditors. Although the supposed independence and impartiality of auditors reinforce the legitimacy of certification (Moore et al., 2006; Power, 2003), the growing competition among auditing and consulting firms has fostered the prevalence of commercial rather than professional and institutional rationales for certification. This in turn increases the opportunities for organizations to select more permissive or unscrupulous auditors (Boiral & Gendron, 2011; Gendron et al., 2006). In addition, the rapid growth in the number of certified organizations has resulted in a proliferation of ISO consultants and certification bodies (Paterson 2002; Business Improvement Network 2002). This increased competition among ISO auditing firms is expected to strengthen the negotiating power of clients, especially regarding fees and the choice of auditors (see Table 1). In this respect, the proliferation of ISO certification is relatively similar to the commoditization of education and academic degrees, a trend clearly criticized by the DPS (Brotheridge & Lee, 2005; McMillan & Cheney, 1996). The same criticism can also apply to various pitfalls of ISO certification (see Table 1), such as erosion of the ISO logo's impact, the relative ease of obtaining certification, conflicts of interest, lack of trust among stakeholders, and superficial adoption of the standard (Boiral & Gendron, 2011; Paterson, 2002; Walgenbach, 2001).

Generally speaking, if a theory can be defined as a "formal idea or set of ideas that is intended to explain something" (Collins Dictionary), the DPS appears to be a promising theory for explaining how the ISO certification process works in practice, going beyond the main criticisms, which have thus far been based on a neo-institutional approach. Nevertheless, given the almost complete lack of specific studies focusing on ISO auditing, the applicability of the theoretical assumptions of the DPS to the ISO certification process (see Table 1) have yet to be empirically verified.

Methods

The empirical study focused on the way individuals within organizations interpret certification audits and perceive the preparation for and conduct of these audits. These key aspects of the ISO 9000 certification process were examined using the results of individual interviews conducted in the workplace.

Data collection

Semi-structured interviews with 60 managers, quality specialists and non-managerial employees were conducted in 60 different ISO 9000 certified organizations to collect a wide range of experiences with the certification process and mitigate any possible bias related to limited sample size. Given the wide range of experiences with certification and the limited number of

individuals who interact with external auditors, the use of interviews with key staff in various types of organization was deemed to be the best approach for providing a global picture of ISO 9000 auditing. Table 2 summarizes the main characteristics of the interview sample.

A total of 31 middle or senior managers, 18 quality specialists and 11 non-managerial employees were interviewed on the premises of certified organizations (Table 2). ISO 9000 certified firms located in Quebec were randomly selected from a Canadian industrial directory (WorldPreferred) providing information on quality-assured suppliers, including ISO 9000 certification. The selected organizations were contacted by phone to schedule an interview with a respondent who worked with the ISO 9000 standard on a daily basis. Interviewees had to have worked at the selected certified organization for at least six months and have first-hand experience of the standard. All respondents interviewed were directly involved in the implementation of ISO 9000 and the certification audit process.

Table 2. Main characteristics of interviewees (n = 60)

	Managers	Quality-assurance specialists	Non-managerial employees	Total
Total interviews	31	18	11	60
Activity sector				
Industry	19	9	8	36
Service	12	9	3	24
Organization size (employees)				
Small (< 50)	11	5	4	20
Medium (50–300)	10	9	6	25
Large (> 300)	10	4	1	15

The determination of the number of interviews to conduct for this study was based essentially on theoretical saturation (Glaser & Strauss, 1967), i.e. the point at which very little new information or issues concerning the ISO certification process emerged from continued data collection. Theoretical saturation became evident as we approached the final total of 60 interviews. In order to facilitate interviews in various regions of Quebec, a total of four interviewers contributed to the data collection using a semi-structured questionnaire. The questions focused primarily on preparation for the certification audit, the organization's relationship with the auditors, conduct of the certification process (duration, documents verified, employee interviews, etc.), employee attitudes during this process, and the renewal of certification. The interviews lasted an average of 1.5 hours and were recorded to facilitate transcription and analysis.

Data analysis

The interview data were analyzed using the qualitative and inductive approach proposed by grounded theory (Locke, 2001; Strauss & Corbin, 1990). According to this approach, data interpretation must be based both on a set of categories that emerge from a study's results and on hypotheses or concepts proposed by the researcher to explain these results. QSR N-Vivo qualitative analysis software facilitates this iterative process of data categorization and interpretation. To analyze the data qualitatively, transcripts of the 60 recorded interviews were

uploaded to QSR N-Vivo for analysis using a categorization process. Some 50 categories grounded in the data were thus established.

This categorization process of the 60 semi-structured interviews made it possible to identify passages reflecting the significance of certification audits within the organization and to illustrate the main ideas or concepts emerging from the category analysis. Although no formal frequency analysis was performed, grouping the passages into various categories makes it possible to identify recurring patterns and tendencies in the respondents' statements (Strauss & Corbin, 1990). According to grounded theory, constant comparison of these identified patterns with the collected data contributes to the emergence of new categories, concepts and theories (Locke, 2001; Strauss & Corbin, 1990).

The main categories identified through this analysis of the interview data revolved around the three main steps of the certification process and its implications (see Table 1):

- Preparation for the certification audit;
- Passing the certification audit;
- Certificate acquisition, relationships with auditors, and follow-up.

These steps cover the main issues of the certification process (International Organization for Standardization, 2002, 2006) and were thus used to structure the data analysis. These steps are also consistent with the steps involved in the exam and graduation process (see Table 1), which facilitated the interpretation of the ISO certification process through the lens of the DPS.

Preparing for the Exam: Procrastination and Paperwork

According to the DPS theory, exam preparation tends to be superficial, marked by procrastination, and is mostly aimed at obtaining the minimum passing grade, particularly for students with an instrumental view of education (see Table 1). Preparation for ISO certification appears to follow the same principles. A lack of integration of the standard and the pursuit of certification as an end in itself tended to reinforce procrastination and superficial preparation for the audit, as is the case for unmotivated or poor students before an exam.

Exam stress and procrastination

Regardless of the organization's real commitment to achieving ISO certification, preparing for the certification audit can be particularly stressful. Many respondents, especially employees, voiced concern regarding the audits, which were viewed as likely to identify non-conformities or employees' lack of knowledge of the ISO 9000 standard. The risk of losing certification because of inadequate preparation or incorrect responses to auditors' questions was also mentioned. Although these concerns appeared to be greater in organizations where the integration of ISO 9000 was fairly superficial, they were not limited to "bad students" of the standard. Just as most students feel anxious before a final exam, so most respondents admitted experiencing significant stress during the certification audit process:

> *"It's like a final exam. People are afraid of giving the auditor the wrong answer."* (Quality manager in a medium-sized organization)

> *We were all feeling a lot of stress a week before the audit. We were all afraid that we were doing something wrong and would be unable to answer the questions.* (Employee in a large industrial company)

Such apprehension before the certification audit was not necessarily unfounded, particularly when the standard had not been seriously integrated into organizational practices. In such cases, the managers and employees, like unprepared students, had to intensify their often last-minute efforts to prepare their organization for the audit. Consequently, the stress of preparing for the audit allowed organizations to strengthen employee mobilization and to remind them of the importance of meeting the ISO 9000 requirements, at least in appearance. Nevertheless, this mobilization was often late, precarious and disorganized. The majority of respondents admitted that their organization had procrastinated in preparing for the certification audit. For many organizations, this resulted in much more time being devoted to ISO 9000 than to production activities in the days or weeks preceding the audit. In general, the tendency to procrastinate and the problems caused by last-minute preparations revealed a lack of integration of the standard and the elastic or even ritual nature of ISO 9000 compliance, as the following comment illustrates:

> *Before an audit, there's always a lot of extra activity here. We start to look into the files, we check if we're doing things right. There are always files that are not up to date and we have to rush to sign forms. The problem is that we send employees the message that we are concerned about ISO 9000 just one month before the certification audit, when we should be thinking about it 12 months a year.* (Quality manager in a medium-sized industrial organization)

Paperwork and the scholastic approach

The stress of the audit and the last-minute preparations for it reinforced the scholastic and formalistic aspects of ISO 9000 certification. Indeed, several respondents spontaneously used scholastic metaphors in both pejorative and humorous ways. Like students who have not thoroughly learned or integrated their course material, many managers and employees simply memorized the basics of ISO 9000 before the audit. In general, the purpose of this last-minute cramming was not to improve practices, but rather to obtain the minimum passing grade on the audit "exam" and thus receive or renew the organization's ISO "diploma". Some respondents admitted having memorized information on quality policies or their organization's mission because they had to know it for the audit. Others had prepared for the audit based on their expectations of the questions the auditor usually asked. Nevertheless, this type of perfunctory preparation was far from sufficient to meet the certification requirements. Indeed, it was the ISO documentation that required the most attention and effort when preparing for the audit. Because this documentation was generally considered the most burdensome aspect of the standard, it was rarely subject to regular and rigorous monitoring. Consequently, preparations for audits were often very procedure-oriented, centering on updating and signing forms, writing procedures, organizing documents, and so on.

Documents were thus often prepared for the impending audit rather than to guide operational activities or meet organizational needs. This focus on the audit exam rather than the supposed purpose of ISO certification could be compared to students' overemphasis on passing exams rather than on genuinely learning the subject matter and developing personal skills. Although these two aspects of education are not mutually exclusive, an excessive focus on exams can lead to pervasive effects that are not significantly different from those that can be observed in preparations for ISO certification: superficial learning, short-term rather than long-term perspective, emphasis on predictable exam or audit questions, dissimulation of weaknesses or non-conformities, and the ceremonial aspects of preparation. Document preparation just before the audit was thus often largely ceremonial. The goal was to facilitate the audit and project a rational and compliant image of the organization rather than to improve organizational learning or the efficiency of internal practices. From this perspective, the paperwork required by the standard was intended primarily to satisfy auditor expectations rather than to meet organizational needs:

> *Documentation preparation is based on the audit because, for us, all this paperwork is unnecessary. For the auditor however, it makes things much easier when everything is written down.* (Manager in a service SME)

> *In my opinion, it's clear that the documentation isn't prepared to guide practices. It's prepared to show that our practices conform to the standard when an audit is conducted.* (Manager in a service SME)

Passing the Exam: The Predictability of Certification Audits

The DPS theory criticizes the proliferation of certain academic degrees, a trend fueled by grade inflation and final exams that do not provide a reliable indication of students' actual qualifications (see Table 1). Degree proliferation raises questions about the difficulty and ceremonial aspects of exams. Similarly, the proliferation of ISO certificates raises questions about the apparent predictability and leniency of many certification audits. In fact, despite the tenuous compliance of many organizations and their tentative integration of the standard, none of the 60 respondents indicated that the certification audit had gone badly. Organizational preparation alone cannot explain the ease with which certification audits were passed. According to the respondents, the ease of passing the audit was to a large extent attributable to its somewhat ceremonial and superficial character. Ultimately, the audits were likened to a rite of passage in the form of a fairly easy, academic exam. The ease and ceremonial character of the exam are largely explained by four interdependent elements that have been largely overlooked in the literature: the predictability, short duration, and procedure-oriented nature of audits, and the possibility of deceiving the auditor.

Audit predictability

Auditors' visits were anything but unexpected or improvised. Although some respondents compared the auditor to a police officer or government inspector, this was meant to express fear of, or opposition to, the audit process rather than to describe its intrinsic nature, which was predictable in a number of ways.

First, the questions posed by the auditors and the verifications they made were usually quite predictable. Questions focused mostly on fairly simple aspects of the ISO 9000 system such as the quality policy, understanding basic customer requirements, or the importance of implementing quality programs. In addition, audited organizations were often aware of auditors' expectations and working methods in advance. Several respondents admitted having asked in advance about issues usually raised by auditors. For example, one quality manager explained that he was able to successfully anticipate the type of questions asked during the audit based on information from a similar facility previously certified by the same auditor. This type of behavior is not uncommon among students, who may in some cases anticipate exam questions based on past exams given by the same professor.

Second, because the audit period was scheduled in advance, organizations could easily "play the audit game" during that time period, even if their conformity to the standard was tentative at best. More than one-third of interviewees spontaneously mentioned that, for their organization, the success of the certification process was directly related to the predictability of the date and conditions of the audit. In others words, if the auditors conducted a surprise visit, many organizations would not have met the standard's minimum requirements. For these organizations, unannounced audits would be quite similar to surprise exams for unprepared students. Just as in education, the predictability of audits or exams makes it possible to reduce the risk of failure:

> *This is a fairly predictable practice; people know what to expect. Auditors do not show up without warning. If they did, everyone here would panic.* (Manager in a medium-sized industrial organization)

> *To me, it was quite ridiculous, because we knew when the auditors were supposed to come. Everything was arranged in advance.* (Employee in a medium-sized industrial organization)

From this perspective, the repeat audits or internal audits required by ISO standards may be compared to a general rehearsal before the certification audit itself, just as certain preparatory exams are intended to prepare students for the final exam whose date and conditions are fixed in advance.

Short-duration verification

The ease and predictability of audits are also related to their very short duration. Audits usually last only two or three days, although this can vary depending on the size of the organization.

By condensing audits into just a few days, organizations were in a better position to superficially demonstrate compliance with the standard and to show that documentation was monitored and procedures were applied. In others words, organizations tended to conform to the standard during the short period of the audit. Short-term compliance echoes the situation of many students who appear to be relatively well prepared to answer exam questions for the few hours that final exams last. Beyond this limited time-frame, their ability to pass academic tests tends to be far more uncertain, particularly when the subject matter has been only superficially integrated. Moreover, the short exam period is not necessarily sufficient to provide an in-depth assessment of students'

learning and skills. Similarly, ISO 9000 compliance appeared to be more uncertain beyond the limited time-frame of the audit period. In most of the organizations visited, audits thus elicited a fairly ritual conformity, lasting for a short period of time and implemented to meet the requirements of a quite superficial verification of the quality system:

> *In my opinion, one day is not enough. Auditors can only see what we want them to see.* (Quality specialist in a large industrial organization)

> *I have been through two or three audits so far, and I must say that they are rather superficial. In a few days, auditors can verify a few things that we are generally well prepared for. But if there are deeper problems, it's really difficult for auditors to detect them.* (Quality specialist in a service SME)

Procedure-oriented exam

The ease and ceremonial aspects of audits are generally encouraged by the procedure-oriented nature of auditor verifications. A majority of respondents acknowledged that audits focused mainly on ISO 9000 paperwork. This procedure-oriented verification was partly due to the short duration of audits. Auditors lacked the time to conduct an exhaustive analysis of work practices, observe activities in detail or meet with many employees in order to verify their understanding and application of the standard. Checking documentation was faster and easier, in addition to being an area in which most auditors had real expertise.

A generally homogeneous and structured organization of documents clearly facilitates verification during audits through the use of checklists and fairly standardized questions. Just as many professors use multiple-choice questions on academic exams, auditors often use checklists to streamline the verification process. In fact, for auditors, documentation represents a stable, standardized, predictable and reassuring element reinforcing the procedural aspect of auditing. Their knowledge of these standard procedure-oriented aspects thus allows them to quickly and easily audit various types of organizations. The principle of "we say what we do and we do what we say" tends to reinforce and legitimize this procedure-oriented approach to audits. According to this principle, documentation is hypothetically a kind of copy or codified duplicate of reality. The compliance of documentation with the standard is thus implicitly considered evidence of the compliance of the organization. The same remark could certainly apply to exam answer sheets, which are implicitly assumed to "document" the students' true knowledge and qualifications. The accuracy of students' exam answers is used as evidence of their conformity with the qualifications required in order to pass a course or obtain an academic degree. For the interviewed respondents, the focus on compliance of documentation with the ISO standard reinforced the bureaucratic aspects of audit preparation and implementation as well as its somewhat ceremonial nature:

> *The auditor works with a questionnaire, a kind of checklist. He asks questions and looks for documents from this checklist. He looks mostly at the procedural side, to check if the paperwork is done correctly, if it is signed, if documents are completed, etc.* (Employee in a medium-sized service organization)

They were here for a day and a half. So, for them, it was difficult to verify anything other than written procedures we had prepared based on the system and records of what we had done. They also asked some questions, but they didn't go very far. (Director of a service SME)

Cheating on exams

The possibility of misleading auditors can also make it easier to pass the audit and contributes to its ceremonial character. The predictability and procedure-oriented nature of audits tends to weaken the power of auditors and limit their room to maneuver in their efforts to verify the conformity of organizational practices. For all intents and purposes, the audit is under organizational control, particularly through the selection of information provided to the auditors and the people with whom they come in contact. In addition, auditors do not necessarily have an in-depth knowledge of every organization they audit and may conduct audits in a wide variety of activity sectors. According to the respondents, this asymmetric balance of knowledge and information was to the organization's advantage and made it difficult for auditors to make detailed verifications. It also tended to restrict the audit to the more controlled and codified aspects of operations. Finally, the people who had the most contact with the auditor were generally well versed in their organization's policies and quality programs. Consequently, they were able to answer auditors' questions correctly and present a satisfactory and idealized image of the organization by concealing, if necessary, any non-conformities. While certification audits can be compared in many ways to academic exams, our findings indicate that these "exams" essentially focus on a few "good students" in each organization. This focus increased the likelihood of passing the audit and strengthened the appearance of ISO compliance.

Generally speaking, deceptive behavior intended to mislead auditors about organizational conformity cannot be considered frequent or widespread. Indeed, such behavior was rarely needed to pass the certification audit. Moreover, the audited organizations appeared to cultivate a relationship of collaboration and partnership with their auditors, rather than one of opposition and manipulation. Nevertheless, just as an unscrupulous minority of students may cheat on an academic exam, so some respondents pointed out how easy it would have been to mislead the auditor:

> *On the day of the audit, it's very easy to change some inappropriate practice to make the auditor believe that you always act according to the procedures and written rules. Audits scheduled way ahead of time don't always reflect reality.* (Employee in an industrial SME)

> *The technical details are very complex. So if we want to hide something from the auditor, we can do it easily. I think that it's simpler to work in partnership with the auditor, but clearly, if the audited company wanted to cheat, it would be quite easy to do. It mostly depends on the intentions of the people being audited.* (Manager in a large service organization)

Acquiring an Organizational Degree

According to the DPS theory, the development of a customer–supplier relationship in the education system has reinforced the commoditization of certain academic degrees (see Table 1). This relationship thus tends to subordinate the academic aspects of education to economic

considerations and to call into question the supposed independence of teaching institutions which, in some cases, may be perceived as degree providers. Similarly, in the ISO certification process, the relationship between audit consultants and audited companies is dominated by a customer–supplier type of partnership. This partnership raises questions about the supposed independence of auditors and their role in the acquisition of ISO organizational degrees.

Auditor independence and the commoditization of ISO certification

Auditor independence and impartiality, which are at the core of the ISO 19011 standard on auditing, seem all the more uncertain when auditing and related services represent a substantial market for certification bodies. Many respondents acknowledged being constantly bombarded with offers for auditing, certification, training and strategic advice services from consulting firms specializing to a greater or lesser degree in ISO 9000 certification. These marketing efforts have intensified with the growing number of certified organizations and the rapidly increasing number of ISO advisory and auditing firms. The increased competition among these firms, and differences in pricing and quality of service, were often raised during interviews. This competition and the commercial aspects of auditing also contributed to the DPS. Just as students can usually choose among competing teaching institutions offering the same type of degree, so the organizations visited by the interview team were able to choose among competing certification bodies. Although competition affords more choice and power to organizations, it has also led to some confusion about the relationships with consultants, services surrounding the audit and, ultimately, the value of ISO 9000 certification:

> *The number of ISO consultants has mushroomed. I was once a quality-assurance consultant myself, so I can say that there are too many people who pose as experts in quality assurance with little or no background in the field. In many cases, all they know about the standard is the theory. But practical experience in the field is also essential when auditing organizations to see how things are working and help the organization improve.* (Quality manager in a medium-sized organization)

Auditors as both learning facilitators and suppliers

The commercial rationale for certification and the proliferation of ISO 9000 certified organizations have undoubtedly eroded the prestige and credibility of the standard. These concurrent phenomena have also raised the specter of possible conflicts of interest among auditors, who tend to act as both judge and jury in the certification process. However, this criticism does not adequately address the complexity and ambiguity of the relationship between audited organizations and their auditors. Paradoxically, only a minority of respondents thought that auditor remuneration by the audited organization had undermined the objectivity and credibility of the certification process. Most respondents, especially quality specialists, did not view auditors as inspectors or external controllers, but as facilitators and advisers. For them, certification was not viewed simply as an internationally recognized organizational degree, but was also perceived as a process of organizational change and learning. In this view, the role of auditors and consultants in the certification process is not to monitor or punish organizations, but to help them learn how to use the standard appropriately.

Despite considerable criticism concerning the cost, conduct and internal ramifications of certification, the respondents appeared to be relatively satisfied with the professionalism of their auditors. As many respondents emphasized, the certification bodies that conduct audits are chosen by the audited organizations. This choice can be based on the reputation and experience of the firm, but also on the cost and relative rigor or leniency of audit requirements. Consequently, the audited organizations had some influence over the rigor of certification audits by selecting more lenient or more demanding verifications. This is similar to the variable difficulty of acquiring the same academic degree, depending on the teaching institution chosen by the student, the learning strategies employed, and so on. Generally speaking, auditors were expected to serve the needs of organizations and were perceived as partners in a customer–supplier relationship intended, in principle, to facilitate learning of the standard:

> *I don't see auditors as policemen or inspectors who can flunk me. They're just professionals who give us advice on improving. It's normal to pay them, but we must also know how to use them.* (Manager in a medium-sized service company)

> *If your goal for getting certification is to have a label, a kind of trademark, you can always get an easygoing auditor. But what we want is a partner. The auditor helps us uncover non-conformities and find opportunities for improvement.* (Quality manager in a large industrial organization)

Although the rationale of this partnership, which is to improve the integration of the ISO 9000 system, may appear legitimate, it can also reinforce the ritual aspects of the certification process or even lead to abuses. The supposed benefits of this partnership are based on the assumption that the primary objective for both the organization and the auditor is the compliance with and improvement of internal practices. However, if the main objective is to obtain an organizational degree at low cost, the implementation of ISO 9000 and the conduct of the audit can, to some extent, be organized accordingly. In this context, the fact that so few organizations fail to receive certification reflects the pressures that are exerted—to a greater or lesser degree—on auditors, who can hardly refuse to give organizations what they want:

> *They can't afford to be extremely strict and cause problems. They're not going to undermine the certification, because if an auditor is too strict and causes us problems, we can just drop him and look for someone else. So, from the very start, there's competition between them, and on top of that, they have to keep their customers.* (Manager of a service SME)

Finally, just as students celebrate graduation, so most of the organizations visited by the interview team also celebrated passing the certification exam and conspicuously highlighted their success to stakeholders. Nevertheless, the relatively easy acquisition of ISO certification raises questions about more than just the rigor and ethics of this organizational degree. In some organizations, the easy passage and formalistic aspects of certification audits also raises questions regarding whether even a semblance of the ISO 9000 system was maintained between audits.

Conclusion

General discussion

Analysis of the data through the lens of the DPS theory makes it possible to deconstruct the dominant basic assumptions concerning the rationality, rigor and trustworthiness of certification audits. The DPS also sheds light on a number of issues that have been overlooked in the literature. The DPS thus explains the often last-minute and procedure-oriented preparation for the certification audit, which can be compared to the procrastination exhibited by under-prepared students when facing an upcoming exam. Likewise, the stress of the audit, its limited duration, its often formalistic and scholastic character, and the celebrations that follow the certification process all have parallels in the behavior surrounding final exams in academic settings. The customer–supplier relationship, criticized by the DPS theory, can be found in both the educational sphere and in the sphere of ISO certification. It also casts doubt on the independence and impartiality of auditors in conducting ISO audits. The lack of auditor independence observed in this study calls into question the use of ISO certification as a self-regulatory mechanism and confirms the related criticism in the literature (Christmann & Taylor, 2006; Walgenbach, 2001).

The relevance of the DPS to ISO certification is not limited to the audit process, which was the main focus of this study. The theory could also be used to provide a more global and critical view of ISO certification in general. Ironically, the tendency of organizations to succumb to the DPS seems to generate more social pressure to address the distrust produced by standardization, auditing and certification—by carrying out still more standardization, auditing and certification. Thus, the introduction of ISO 19011 and ISO 17021 standards on auditing practices and auditor independence was intended to improve the rigor, reliability and significance of certification audits (International Organization for Standardization, 2002, 2006). Nevertheless, these additional standards are based on non-binding general statements and reassuring principles that tend to reproduce the propensity toward the DPS rather than fundamentally questioning it. The idealized image of auditing depicted by the ISO 9000, ISO 19011 and ISO 17021 standards (International Organization for Standardization, 2002, 2006) serves as a façade or positive signal sent to stakeholders, presenting an image of what auditing should be without really questioning practices as they are implemented. This lack of questioning may contribute to the "amoral seduction" (Moore et al., 2006) of auditors and organizations inclined to reassure themselves about the legitimacy of their practices through the rhetoric of success that dominates ISO certification discussions.

The same type of critical analysis could be applied to explore the implications of the increasing pressure for standardization and accreditation in the field of education. For example, business school accreditations such as those of the Association to Advance Collegiate Schools of Business (AACSB) or the European Quality Improvement System (EQUIS) are based on a rationale of standardization and auditing that is officially intended to improve the quality of management education. Even though it focuses on a different area, the rationale behind this type of accreditation has many points in common with ISO certification, such as extensive paperwork, the limited duration of the audit, and marketing and symbolic issues. The proliferation of MBA programs around the world (Mazza et al., 2005) has reinforced the need for some type of quality assurance demonstrating that the MBA label as used in a particular business school meets international standards (Durand & McGuire, 2005; Gioia & Corley, 2002). As hypothesized by signaling theory (Chan et al., 2007; Rynes et al., 1991; Spence, 1973, 2002), these accreditations send a positive signal intended to improve the image of the program, reassure stakeholders, and

reduce uncertainty concerning school quality. Although the principles of advanced education, elite distinction, and the rationale of certification that officially drive these accreditations seem perfectly legitimate, they may also contribute to replicating, to some extent, the same DPS that occurs in business schools. Thus, accredited institutions are often focused on image rather than substance and tend to develop a veneer of conformity often disconnected from the school's real activities (Gioia & Corley, 2002).

Contributions and avenues for future research

This study makes three important and complementary contributions that have implications for future research and practice: the analysis of underexplored aspects of ISO certification, demystification of auditing practices, and development of a new theoretical perspective contrasting with the existing literature.

First, the application of the DPS theory sheds light on underexplored aspects of ISO certification (formalistic aspects of preparing for and passing audits, relationships with ISO consultants, etc.) and helps to bridge the gap between research on organizations and on education. The DPS theory cannot be reduced to a mere metaphor imported from education in order to revisit the rituals surrounding ISO certification from a new perspective. In many ways, ISO certification can be considered, *stricto sensu*, as an organizational degree formally signaling to stakeholders the collective learning of a management system that is supposed to improve the organization's capabilities in the specific area covered by the standard. Since it is widely accepted that organizations must develop new competencies and capabilities in order to survive, it seems logical that they would also seek a well-established certificate or diploma in order to have their competencies recognized internationally. As with any other diploma, obtaining an ISO certificate is based on passing an exam, namely the certification audit. In this perspective, the many similarities between the DPS in education and ISO certification can hardly be reduced to metaphorical assertions; rather, the DPS reflects the intrinsic nature of ISO certificates as organizational degrees. The DPS theory thus raises unexplored questions about the quest for this organizational degree: To what extent can the value and difficulty of ISO certification vary depending on the certification bodies? Can the exponential growth of ISO certification in certain countries such as China be explained, in part, by regional differences in terms of certification requirements? One avenue for future research and practice—one which has been widely used and misused in education—would be to analyze how perceptions of the quality and value of ISO organizational degrees vary depending on factors such as the certification bodies involved and regional differences. The causes and consequences of these perceptions, and the possibility of providing a comparative rating of certification bodies, could also be explored.

Second, this study helps to demystify ISO auditing and certification practices, which are often shrouded in a veil of secrecy and mystery. The scarcity of empirical studies on this issue has indirectly contributed to reinforcing the prevailing myths about the rigor and objectivity of these practices. By shedding light on the formalistic and scholastic aspects as well as the ceremonial behavior involved, this study contests the dominant rhetoric surrounding ISO standards in both professional and academic reports. The few critical studies of ISO certification auditing are essentially based on neo-institutional approaches, focusing on the integration and usefulness of the standard (Boiral, 2003, 2007; Christmann & Taylor, 2006; Walgenbach, 2001, 2007). As a

result, the certification audit process itself has not been subject to theorization, and the ritualized aspects of verification are essentially reduced to a symbolic adaptation to institutional pressures. Application of the DPS theory to ISO certification makes it possible to elucidate the meaning, practical manifestations and organizational impacts of these ritual aspects. The DPS also highlights the importance and ambiguities of the auditor–auditee relationship, which cannot be reduced to a simple adaptation to institutional pressures and adoption of so-called isomorphic practices motivated by the quest for social legitimacy (Boiral & Gendron, 2011; DiMaggio & Powell, 1983). An interesting avenue for future research would be to interview auditors concerning the certification process, how organizations prepare for audits, and possible conflicts of interest, among other issues. The DPS theory could also be used as a starting point to better analyze business school accreditation processes, their impacts and their pervasive effects.

Thirdly, the DPS theory proposed in this paper represents a new and promising perspective for making sense of the dynamic of standardization in general, including ISO certifications. This new perspective questions the dominant functionalist and instrumental view of the standardization and certification process: standardization as an institutional tool of self-regulation and governance, certification as an avenue for continual improvement, the rigor, trustworthiness and social legitimacy of auditing, etc. (Beckmerhagen et al., 2004; International Organization for Standardization, 2002, 2006; Prakash & Potoski, 2007; Standards Council of Canada, 2000). At first glance, this dominant view appears to be a rational myth somewhat disconnected from real practices, as highlighted by the critical and neo-institutional approach on ISO certification (Boiral, 2003, 2007; Walgenbach, 2001, 2007). Although the DPS theory does not necessarily contradict this neo-institutional approach, it clearly goes beyond the limitations of the concept of rational myth, which fails to explain the heterogeneity of supposed isomorphic practices, main stages of certification process, specific nature of so-called ceremonial behaviors, and conflict of interest underlying the relationships with auditors. This paper contrasts with the existing literature by shedding light on these underexplored issues from a new theoretical perspective explaining both the symbolic aspects and the practical manifestations of the certification process. The relevance of the DPS theory for organization studies is not limited to ISO certification. Future research could explore the proliferation of organizational standards in various areas based on the DPS theory: eco-labeling, fair-trade certification systems, certificates on supply chain security, LEED green building certification, etc. The possible contradictions, scholastic aspects and specificities of certification audits related to these different types of standards could be studied. The proliferation of organizational standards supposed to demonstrate organizational capabilities and social responsiveness in various areas (quality assurance, environmental issues, health and security, sustainable development, risk management, etc.) could also be analyzed more globally. The effects of this proliferation could thus be compared to the effects of credential inflation in education: commoditization of degrees, increasing fees and costs, devaluation of certain certificates or diplomas, internal disengagement, confusion and erosion of public confidence in certain titles, etc.

Concluding remarks

Clearly, as is the case in education, it cannot be automatically assumed that the DPS applies in every case among organizations seeking certification. The results of this study show that the preparation for audits can also be a catalyst for internal mobilization, manager commitment and

focus on quality. Interestingly, these positive aspects and attitudes tend to lend more credence to the analysis of ISO certification as an organizational degree. Indeed, regardless of the rational myths surrounding academic degrees and evaluation methods, it is generally accepted that final exams remain necessary for learning, motivation and graduation purposes. As this study shows, this rationale of learning and motivation can and does coexist with ceremonial, symbolic and superficial aspects. Like the process of graduation, the practice of auditing is thus a polymorphic and complex reality with characteristics that are difficult to generalize. In light of this, and despite its standardized appearance, ISO 9000 certification can have different meanings and realities depending on the organizations and individuals involved. This observation tends to cast doubt on the monolithic view of the claim "ISO 9000-certified" as used most often by organizations and in studies of this issue.

No matter how certification is perceived or conducted, audit practices remain activities based on organizational behaviors that cannot entirely follow pre-established rules. ISO management standards and certification audits are ultimately what organizations want them to be: either tools for the improvement of practices or simply organizational degrees useful for marketing purposes … or both.

Acknowledgements

Funding

References

Awan, H. M., & Bhatti, M. I. (2003). An evaluation of ISO 9000 registration practices: A case study of sports goods industry. Managerial Finance, 29, 109–134.

Beck, N., & Walgenbach, P. (2005). Technical efficiency or adaptation to institutionalized expectations? The adoption of ISO 9000 standards in the German mechanical engineering industry. Organization Studies, 26, 841–866.

Beckmerhagen, I. A., Berg, H. P., Karapetrovic, S. V., & Willborn, W. O. (2004). On the effectiveness of quality management system audits. TQM Magazine, 16, 14–25.

Boiral, O. (2003). ISO 9000: Outside the iron cage. Organization Science, 14, 720–737.

Boiral, O. (2007). Corporate greening through ISO 14001: A rational myth? Organization Science, 18, 127–146.

Boiral, O. (2011). Managing with ISO systems: Lessons from practice. Long Range Planning, 44, 197–220.

Boiral, O., & Gendron, Y. (2011). Sustainable development and certification practices: Lessons learned and prospects. Business Strategy and the Environment, 20, 331–347.

Brotheridge, C. M., & Lee, R. T. (2005). Correlates and consequences of degree purchasing among Canadian university students. Canadian Journal of Higher Education, 35, 71–97.

Brunsson, N. (1989). The organization of hypocrisy: Talks, decisions and actions in organizations. New York: Wiley.

Brunsson, N., & Jacobsson, B. (2000). A world of standards. Oxford: Oxford University Press.

Business Improvement Network (2002). Reactions to ISO Secretary-General's 'police yourselves' call to ISO 9000 community. ISO Management Systems, March–April, 55–61.

Chan, W., Hao, L., & Suen, W. (2007). A signaling theory of grade inflation. International Economic Review, 48, 1065–1090.

Christmann, P., & Taylor, G. (2006). Firm self-regulation through international certifiable standards: Determinants of symbolic versus substantive implementation. Journal of International Business Studies, 37, 863–878.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48, 147–160.

Durand, R., & McGuire, J. (2005) Legitimating agencies in the face of selection: The case of AACSB. Organization Studies, 26, 165–196.

Eicher, L. D. (2001). Opening speech of the 17th Meeting. International Organization for Standardization Council Committee on Conformity Assessment (ISO/CASCO), Geneva.

Gendron, Y., Suddaby, R., & Lam, H. (2006). An examination of the ethical commitment of professional accountants to auditor independence. Journal of Business Ethics, 64, 169–193.

Gioia, D. A., & Corley, K. G. (2002). Being good versus looking good: Business school rankings in the Circean transformation from substance to image. Academy of Management Learning & Education, 1, 107–120.

Glaser, B. G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine Publishing Company.

Heras-Saizarbitoria, I. (2011). Internalization of ISO 9000: An exploratory study. Industrial Management & Data Systems, 111, 1214–1237.

International Organization for Standardization (2002). Guidelines for quality and/or environmental management systems auditing. Geneva: ISO Central Secretariat.

International Organization for Standardization (2006). 17021:2006 Conformity assessment: Requirements for bodies providing audit and certification of management systems. Geneva: ISO Central Secretariat.

International Organization for Standardization (2009). The ISO Survey 2009. Geneva: ISO Central Secretariat.

Locke, K. (2001). Grounded theory in management research. Thousand Oaks, CA: Sage.

Martin, R. D. (2007). Through the ethics looking glass: Another view of the world of auditors and ethics. Journal of Business Ethics, 70, 5–14.

Mazza, C., Sahlin-Andersson, K., & Pedersen, J. S. (2005). European constructions of an American model. Management Learning, 36, 471–491.

McMillan, J. J., & Cheney, G. (1996). The student as consumer: Implications and limitations of a metaphor. Communication Education, 45, 1–15.

Meyer, J. W., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. American Journal of Sociology, 83, 340–363.

Moore, D. A., Tetlock, P. E., Tanlu, L., & Bazerman, M. H. (2006). Conflicts of interest and the case of auditor independence: Moral seduction and strategic issue cycling. Academy of Management Review, 31, 1–20.

Mouritsen, J., Ernst, J., & Jorgensen, A. M. (2000). Green certification as a managerial technology. Scandinavian Journal of Management, 16, 167–187.

Murdock, T. B., Miller, A., & Kohlhardt, J. (2004). Effects of classroom context variables on high school students' judgments of the acceptability and likelihood of cheating. Journal of Educational Psychology, 96, 765–777.

Ni, Z., & Karapetrovic, S. (2003). Perennial self-audit: Model and applications. Managerial Auditing Journal, 18, 363–373.

Paterson, F. (2002). The auditor's tale: Conformity assessment as seen by a practitioner. ISO Management Systems, July–August, 47–52.

Power, M. (1996). Making things auditable. Accounting, Organizations and Society, 21, 289–315.

Power, M. (1997). The audit society: Rituals of verification. Oxford: Oxford University Press.

Power, M. (2003). Auditing and the production of legitimacy. Accounting, Organizations and Society, 28, 379–394.

Prakash, A., & Potoski, M. (2007). Collective action through voluntary environmental programs: A club theory perspective. Policy Studies Journal, 35, 773–792.

Renke, W. N. (2000). Commercialization and resistance: Commercial takeover of secondary education. In Turk, J. L. (Ed.), The corporate campus: Commercialization and the dangers to Canada's colleges and universities (pp. 31–50). Toronto: James Lorimer & Co.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25, 54–67.

Rynes, S. L., Bretz, R. D., Jr., & Gerhart, B. A. (1991). The importance of recruitment in job choice: A different way of looking. Personnel Psychology, 44, 487–521.

Spence, M. (1973). Job market signalling. Quarterly Journal of Economics, 87, 355–374.

Spence, M. (2002). Signaling in retrospect and the informational structure of markets. American Economic Review, 92, 434–459.

Standards Council of Canada (2000). Management systems standards: The story so far. Ottawa: Standards Council of Canada.

Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research: Grounded theory procedures and techniques. London: Sage.

Townley, B. (2002). The role of competing rationalities in institutional change. Academy of Management Journal, 45, 163–179.

Walgenbach, P. (2001). The production of distrust by means of producing trust. Organization Studies, 22, 693–714.

Walgenbach, P. (2007). Façade and means of control: The use of ISO 9000 standards. In L. Theuvsen, A. Spiller, M. Peupert, & G. Jahn (Eds), Quality management in food chains (pp. 29–43). Wageningen: Wageningen Academic Publishers.