

Managing effective boards: how personal motivation and work experience drive organizational knowledge

Rita Mura, Francesca Vicentini, Arnaldo Zelli and Luca Mallia

Abstract

Purpose – This study aims to investigate the interplay between motivation, experience and knowledge acquisition among board members of nonprofit organizations, and it pursued this goal by generally adopting knowledge-based views and key concepts from self-determination theory (SDT). Board members' capacity to acquire and interpret regulatory and procedural knowledge is critical for effective governance, especially in contexts undergoing institutional changes. The analysis focuses on boards of directors within Italian National Sport Federations which, following the 2018 reform of sports governance, were required to assimilate new institutional and organizational frameworks.

Design/methodology/approach – A survey was administered to 75 board members to examine whether SDT autonomous motivation is related to knowledge acquisition and whether work experience moderates this relation.

Findings – Results indicated that autonomous motivation was positively correlated with levels of knowledge acquisition, although the relation did not reach statistical significance. However, work experience moderated this association: autonomous motivation significantly enhanced knowledge acquisition among highly experienced members, but not among less experienced ones. These findings emphasize that work experience strengthens the motivational mechanisms underlying effective learning and knowledge assimilation.

Originality/value – This study extends existing research on nonprofit governance by integrating SDT with a knowledge-based view, offering novel insights into the ways motivational and experiential factors might shape regulatory learning within boards. The findings provide actionable implications for improving governance effectiveness and knowledge management in nonprofit organizations operating under evolving institutional conditions.

Keywords Knowledge acquisition, Boards of directors, Motivation, Self-determination theory, Nonprofit governance

Paper type Research paper

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Introduction

Knowledge is widely recognized as a fundamental resource for organizations (Nonaka, 1994; Grant, 1996; Davenport and Prusak, 1998), as it underpins competitiveness, innovation and long-term sustainability. From a knowledge-based perspective, organizations are conceived as systems for the acquisition, integration and deployment of knowledge, which becomes the cornerstone of effective governance and strategic decision-making (Grant, 1996). Within this general view, knowledge acquisition plays a pivotal role, as organizations are increasingly required not only to generate knowledge internally but also to access and integrate dispersed knowledge from multiple domains and actors (Nonaka, 1994; Argote and Ingram, 2000; Teece, 2007). Far from being limited to market and institutional sources such as suppliers, customers and universities, knowledge acquisition also encompasses intangible and less explored domains, including cultural values, organizational practices and interdisciplinary

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insights (Laursen and Salter, 2006; Dalkir, 2017). The breadth and diversity of acquisition processes are therefore critical, since they enable organizations to remain adaptive, to foster innovation and to sustain long-term development in an increasingly dynamic and globalized environment (Lichtenthaler and Lichtenthaler, 2009; Bresciani *et al.*, 2016).

Boards of directors make the difference in the organizational arena, where knowledge acquisition and utilization take place. Beyond their formal responsibilities of control, boards perform their advisory role and resource-acquisition functions that are inherently knowledge-intensive (Forbes and Milliken, 1999; Hillman and Dalziel, 2003). In these settings, knowledge exists both in explicit forms – codified and transferable – and in tacit forms, which are experiential and deeply embedded (Polanyi, 1966). Boards that succeed in mobilizing both explicit and tacit knowledge are better equipped to navigate uncertainty, resolve complex challenges and pursue organizational effectiveness (Erden *et al.*, 2008). Experienced directors contribute to tacit, experience-based knowledge accumulated over time, which enriches the board's decision-making capacity, whereas less experienced members are likely to rely more often on explicit and codified frameworks (Forbes and Milliken, 1999; Hillman and Dalziel, 2003; Zona, 2014).

Despite extensive research on board characteristics and governance mechanisms, an important knowledge gap remains concerning whether and how individual-level factors influence learning at the board level. Knowledge does not flow automatically within boards. Its acquisition and utilization depend on individual-level factors, such as expertise, commitment and, most importantly, motivation. Motivation influences whether directors actively seek new knowledge, share their expertise and engage in collaborative learning. Yet, there exists limited research that has examined whether motivation affects knowledge acquisition in board contexts, particularly in nonprofit organizations (NPOs). This gap is noteworthy because nonprofit boards often differ significantly from corporate ones: whereas corporate directors are typically selected for technical expertise and remunerated for their contributions, nonprofit boards – especially in smaller organizations – are often composed of volunteers driven by commitment to the mission and willingness to devote time and resources (Green *et al.*, 2001). As such, nonprofit boards function as dual-purpose entities: decision-making hubs on the one hand, and mechanisms for balancing diverse stakeholder interests on the other (Ntim and Soobaroyen, 2013).

The governance of NPOs has attracted increasing scholarly attention, particularly regarding its effects on organizational performance and effectiveness (Ostrower, 2007; Hodge and Piccolo, 2011; Herman and Renz, 2000; Jaskyte, 2018). Existing studies have examined board characteristics (e.g. tasks, tenure, committees) (Harris, 2014), structural attributes (e.g. gender, age, size) (Carter *et al.*, 2003; Guner *et al.*, 2008) and competence (e.g. sector-specific, financial, sustainability-related) (Saleem *et al.*, 2021). Motivation has also been identified as a relevant factor, with research emphasizing personal satisfaction and the sense of integration as drivers of engagement and retention among volunteers and board members (Preston and Brown, 2004). Although prior studies have examined board characteristics, volunteer motivation and governance effectiveness, none has investigated how autonomous motivation affects the acquisition of regulatory or domain-specific knowledge in board settings. Yet, little attention has been paid to how motivation shapes knowledge acquisition, leaving a critical gap in nonprofit governance research. At the same time, recent contributions in nonprofit governance underscore that board learning and decision-making processes are strongly shaped by institutional environments, network structures and cross-organizational linkages (Herman and Renz, 2000; Richardson *et al.*, 2023; Yoon, 2021). These views are particularly relevant because knowledge acquisition is a core component of board effectiveness, yet existing governance and SDT studies have not addressed how motivational drivers translate into concrete learning processes at the board level.

Motivation can be effectively analyzed through the lens of self-determination theory (SDT) (Deci and Ryan, 1985, 2000; Ryan and Deci, 2000a, 2000b), which provides a comprehensive framework for understanding the drivers of behavior. Furthermore, the adoption of SDT allows to overcome the simple distinction between intrinsic and extrinsic motivation (e.g. Kumi and Sabherwal, 2019; Nguyen, 2019; Nguyen and Malik, 2020), by considering other specific types of motivation derived from SDT (Göhler *et al.*, 2023 p. 545). The SDT framework, as articulated by Deci and Ryan (1985), shifts the focus to the quality and type of motivation, offering a nuanced framework that is especially relevant in contexts requiring high levels of autonomy and cognitive engagement, such as board governance. In a follow-up study, Deci and Ryan's SDT differentiates motivation according to their degree of autonomy into a spectrum from amotivation to extrinsic motivation to intrinsic motivation. Extrinsic motivation is further broken down into external, introjected, identified and integrated motivation (Deci and Ryan, 2000, 2008; Ryan and Deci, 2000b). A graded distinction between external and intrinsic motivational regulation mechanisms (Ryan and Deci, 2000a) thus allows a finely structured breakdown of motivation types.

Existing research on this topic has shown that intrinsically motivated board members are more likely to engage deeply with their roles, seek learning opportunities and persist in their commitments (Haivas *et al.*, 2013). Volunteers driven by autonomous forms of motivation, including intrinsic and identified regulation, display higher levels of engagement and performance (Bidee *et al.*, 2013). Conversely, members guided by controlled motivation, influenced by external contingencies or social pressures, tend to exhibit weaker persistence and stronger intentions to quit (Stukas *et al.*, 1999). These findings underscore the value of applying SDT to nonprofit governance, as it captures both altruistic and instrumental dimensions of motivation and explains how different motivational drivers affect board functioning.

To the best of our knowledge, in governance settings, few studies are based on SDT (Boive *et al.*, 2012a; Harrison *et al.*, 2018; Walther *et al.*, 2017), and these scholar contributions generally indicate that autonomous motivation contributes to greater well-being and effectiveness than does controlled motivation. More specifically, managerial studies showed that highly motivated non-executive directors contribute to more rigorous control (Hambrick *et al.*, 2015) and play a more proactive role in monitoring and advising managers (Guerrero and Seguin, 2012). It is worth noting that some researchers argue that autonomous motivation is less prevalent in professional contexts, as compared to other domains (such as sports) (Moran *et al.*, 2012), where activities are less influenced by external incentives like compensation or recognition (Sansone and Harackiewicz, 2000; Baard, 2002).

Given these premises, we agree with scholars (Boive *et al.*, 2012a) when they state that SDT is a valuable means for understanding the motivational dynamics of board service, exploring how directors balance various aspects of their roles. The interaction between motivation, experience and knowledge might further complicate board dynamics. Highly experienced members with strong intrinsic motivation may concentrate on refining tacit knowledge, while less experienced members may prioritize the acquisition of explicit knowledge to develop their competencies. Motivational drivers may therefore shape knowledge acquisition differently depending on a director's level of work experience. The understanding of these nuances is crucial for optimizing board composition and performance, especially in nonprofit organizations where resource constraints make it essential to leverage the full potential of volunteer board members.

In line with the above considerations, the present study focuses specifically on the mechanisms through which autonomous motivation and experience might shape board members' knowledge acquisition processes. Building on these arguments, this study aims to explore the interplay between motivation, knowledge and expertise that board members contribute to board processes. Drawing on SDT, it investigates whether and how

autonomous motivation (intrinsic and identified) shapes knowledge acquisition among board members, and how experience moderates these relations. By addressing these research questions, the paper aims to advance nonprofit governance research, bridging studies on volunteer motivation with the knowledge-based view of boards.

The empirical focus is on nonprofit organizations in the sports sector, which offers a particularly relevant context for this investigation. Since 2019, Italian sports governance has undergone major legislative reforms – a sport-related reform introduced by the 2018 Italian Law n. 145 of December 30, 2018 – that substantially reshaped the structures, roles and responsibilities of boards in federations. These reforms, by redefining governance requirements and organizational arrangements, have made the acquisition of regulatory knowledge a critical challenge for board members, highlighting the need to understand how motivation and expertise shape their capacity to engage with and apply such knowledge.

This paper is structured as follows. The next section provides a review of the literature on knowledge, motivation and expertise in board dynamics. The subsequent section outlines the research methods applied to a sample of nonprofit board members. The main results are then presented, followed by a discussion of the findings, limitations and concluding remarks.

Theoretical lens and framework

Knowledge acquisition as a foundation for functioning of the boards

Knowledge acquisition has long been considered a cornerstone of organizational learning and adaptation (Huber, 1991; Cohen and Dalkir, 2017). It is generally defined as the process through which individuals and organizations seek, absorb and internalize new information from the external environment, thereby expanding their knowledge base and strengthening their decision-making capacity (Zahra and George, 2002). This process is particularly critical in dynamic institutional settings, where regulatory, technological and organizational changes require actors to update their understanding and competencies to remain effective (Nonaka, 1994; Teece, 2007).

Within the literature on corporate governance, boards of directors are regarded as playing a central role in facilitating knowledge acquisition, as they are responsible for interpreting environmental signals and aligning organizational strategies with external demands (Forbes and Milliken, 1999). Effective boards must therefore not only oversee existing practices but also ensure that directors acquire the knowledge necessary to respond to changing institutional and regulatory frameworks.

The present study focuses specifically on the acquisition of explicit regulated knowledge. Unlike general organizational knowledge that may develop gradually through routines and experience, regulated knowledge requires conscious effort to be absorbed and applied correctly, since it is codified in formal rules and often entails structural or procedural adjustments. The 2018 reform of Italian sports governance above mentioned provides a paradigmatic case. By redefining governance structures, roles and responsibilities, the reform has forced nonprofit sports organizations to actively acquire new knowledge to adapt their operations. In this sense, the capacity of boards to assimilate explicit regulated knowledge represents a prerequisite for fulfilling their mission and exercising their strategic functions effectively.

Autonomous motivation and knowledge acquisition

Before developing the arguments leading to *H1*, it is useful to outline the core principles of SDT (Deci and Ryan, 1985; Ryan and Deci, 2000a, 2000b), which represents the key theoretical framework for the present study and its focus on how motivational drivers influence knowledge acquisition. Traditional approaches to work motivation often

conceptualize it as a singular continuum, varying in intensity or quantity (Moran *et al.*, 2012). However, SDT framework, as articulated by Deci and Ryan (2000), shifts the focus to the quality and type of motivation, offering a nuanced framework that is especially relevant in contexts requiring high levels of autonomy and cognitive engagement, such as board governance. SDT highlights and hypothesizes a continuum from *controlled motivation* (external and introjected) to *autonomous motivation* (identified, integrated and intrinsic) (Sheldon and Elliot, 1998; Mallia *et al.*, 2019). SDT overall proposes that the environment initially may influence one's motivation and behaviors. Over time, depending upon how social and personal experiences unfold, an individual may internally and increasingly assimilate environmental goals and motives with the net result of developing fully autonomous motivations (Koestner and Losier, 2002; Gagné and Deci, 2005). Research has demonstrated that volunteers driven by autonomous motivation are more likely to continue their volunteer work (Wu *et al.*, 2016), to exhibit higher levels of engagement (Haivas *et al.*, 2013) and to show greater dedication to their roles (Bidee *et al.*, 2013). On the other hand, volunteers who tend to show controlled motivation (or amotivation) tend to have stronger intentions to quit volunteering (Stukas *et al.*, 1999). Although not directly investigated in the context of volunteer work (De Clerck *et al.*, 2021), studies on, for example, sports teams have indicated that the quality or type of motivation plays a significant role in group-task cohesion (Halbrook *et al.*, 2012), which has been identified as a critical motive for volunteers to continue their service (Doherty and Carron, 2003).

In sum, autonomous motivation tends to reflect engagement stemming from genuine interest or personal endorsement of an activity, and studies have shown that it is consistently linked to higher levels of persistence, engagement and learning (Gagné and Deci, 2005). Autonomous forms of motivation also tend to stimulate individuals to seek out learning opportunities, process new information more deeply and persist in any effort required to acquire further knowledge (Haivas *et al.*, 2013; Bidee *et al.*, 2013).

In nonprofit board organizations, the voluntary nature of their roles may easily elicit, among directors, strong endorsements of their organization's missions. Similarly, they may also derive intrinsic satisfaction from contributing to the organization's goals (Ostrower and Stone, 2006). Unlike corporate directors who may be financially compensated, nonprofit board members are frequently driven by their identification with the mission of the organization and by the intrinsic satisfaction of contributing to its goals (Brown and Guo, 2010). These forms of autonomous motivation are expected to translate into stronger engagement with demanding tasks such as acquiring the explicit regulatory knowledge introduced by the 2018 reform of Italian sports governance. Motivated directors are more likely to dedicate the time and cognitive resources required to understand the reform's provisions and incorporate them into board decision-making. Accordingly, autonomous motivation is expected to positively influence the level of knowledge acquired by board members. This is consistent with SDT, which emphasizes that autonomous motivation enhances individuals' willingness to invest sustained cognitive effort in demanding tasks, thereby facilitating the acquisition of complex and codified forms of knowledge. Taken together, these elements suggest that directors who are autonomously motivated are more likely to engage in the deliberate cognitive effort required to acquire explicit regulatory knowledge, thus grounding *H1*:

H1. Board members' autonomous motivation has a positive relation with their level of knowledge.

Work experience and knowledge acquisition

Experience is a central factor influencing the ability of individuals to acquire new knowledge (Argote and Miron-Spektor, 2011). Prior research shows that individuals with greater

experience tend to process new information more efficiently, as repeated exposure helps them develop cognitive structures for interpreting external knowledge (Huber, 1991; Argote and Miron-Spektor, 2011). Through their careers, individuals develop cognitive frameworks and interpretive schemas that enable them to process new information more efficiently. This implies that work experience does not only represent a repository of prior knowledge but also enhances the ability to absorb additional knowledge from the environment (Vicentini and Boccardelli, 2016).

Other studies indicate that accumulated experience can facilitate the assimilation of codified information, making it easier for individuals to integrate new external knowledge (Cohen and Dalkir, 2017; Zahra and George, 2002). Board members with extensive work experience are therefore better positioned to understand, interpret and integrate new codified information (such as the explicit regulated knowledge). In contrast, less experienced members may lack the interpretive structures necessary to make sense of such information, which may hinder their ability to fully acquire and internalize it. Accordingly, we expect that board members with greater work experience will demonstrate higher levels of knowledge acquisition regarding the reform. In this sense, work experience provides not only a reservoir of prior understanding but also the interpretive structures that enable directors to decode and assimilate complex regulatory information more effectively:

H2. Board members' work experience positively influences their level of knowledge.

The moderating role of experience in the motivation–knowledge relation

While both autonomous motivation and work experience are independently linked to knowledge acquisition, their interaction warrants particular attention. Research on learning and expertise suggests that motivation alone is not always sufficient to ensure effective learning outcomes; rather, its impact is often contingent on the learner's prior experience (Ericsson, 2006; Sonnentag and Niessen, 2004). Experience provides individuals with schemas and interpretive structures that allow them to channel their motivation into targeted and efficient acquisition of new knowledge. Without such prior experience, even highly motivated individuals may struggle to contextualize and apply what they learn (Chi *et al.*, 1988).

In board contexts, this means that autonomous motivation is expected to exert a stronger effect on knowledge acquisition when directors also possess higher levels of professional or governance-related experience. Experienced board members who are autonomously motivated are likely to refine and expand their existing knowledge base, whereas less experienced but motivated directors may lack the cognitive structures needed to fully benefit from their motivational drive. While autonomous motivation can support knowledge acquisition at all levels of experience, its effect is amplified rather than diminished when directors possess higher levels of expertise. In other words, although less experienced members may benefit from being autonomously motivated, they do not have the interpretive resources that allow motivation to fully translate into knowledge acquisition. This interaction reflects the underlying mechanisms of *H1* and *H2*: autonomous motivation provides the willingness to invest sustained cognitive effort, while experience supplies the interpretive schemas that enable such effort to be transformed into meaningful regulatory learning. Therefore, we propose that the positive relation between autonomous motivation and knowledge acquisition is amplified at higher levels of work experience:

H3. The relation between autonomous motivation and knowledge is stronger at higher levels of board members' work experience.

Methods

Sample

The study was conducted on a sample of board members from Italian nonprofit sport organizations, specifically the National Sport Federations (NSFs). In Italy, they are responsible for overseeing and regulating specific sports at the national level. Their duties include organizing competitions, ensuring compliance with national and international sports regulations, promoting their sport and supporting the development of athletes, coaches and officials. They also play a key role in fostering grassroots participation, talent identification and managing the sport's overall governance. Additionally, NSFs collaborate with the Italian National Olympic Committee (CONI) and international federations to represent Italy in global sporting events and to ensure the alignment of national sports policies with international standards. As mentioned above, the choice of the sports sector and this category of organizations stem from the fact that, since 2019, they have undergone a significant reform in the sports sector, introducing substantial changes to their composition, structure and functions.

Between March and June 2022, along with the survey, we sent a cover letter describing the study and inviting all board members (including board members, presidents and CEOs) from the 44 Italian NSFs to participate. Seventy-five individuals (69.3% male), aged between 26 and 75 years (mean = 55.71; SD = 10.89), agreed to participate and completed the entire anonymous online questionnaire via the "SurveyMonkey" Web platform. Four participants (5.3%) were NSF presidents, 11 respondents (14.7%) were CEOs and 60 respondents (80%) were members of the NSFs' boards. See Table 1 for the descriptive statistics of the sample.

The survey was approved by the university's Internal Review Board prior to dissemination, ensuring compliance with ethical standards and the protection of participants' rights.

Measures

The participants filled out the online questionnaire including measures of the following key variables:

Table 1 Characteristics of the participating sport federations' board directors

Variables	n (%) or mean (SD)
<i>Gender</i>	
Male	52 (69.3%)
Female	21 (28%)
Not declared	2 (2.7%)
<i>Age</i>	55.71 (SD = 10.88)
<i>Role within the NSF</i>	
President	4 (5.3%)
CEO	11 (14.7%)
Member	60 (80%)
Number of mandates within the NSF	2.45 (SD = 1.67)
Years in the current mandate	5.15 (SD = 5.23)
Experience as athletes	57 (76%)
Years of experience as athlete	16.07 (SD = 10.13)
<i>Maximum competitive level reached as athlete</i>	
Regional	26 (45.6%)
National	19 (33.3%)
International	12 (21.1%)
Experience as coach	32 (42.7%)
Years of experience as coach	12.26 (SD = 8.99)
<i>Maximum competitive level reached as coach</i>	
Regional	12 (37.5%)
National	15 (46.9%)
International	5 (15.6%)

- Participants' socio-demographic characteristic, such as gender (i.e. *Male/Female/Prefer to not indicate*) and age (i.e. *Indicate the age in years*).
- Sport-related experience as an athlete, if applicable, using a question about the number of years of activity as athlete and one on the maximum competitive level (i.e. *Regional/National/International*).
- Sport-related experience as a coach if applicable, using a question about the number of years of activity as coach and one on the maximum competitive level (i.e. *Regional/National/International*).
- The experience as member of their NFS, using a question about the past activity (i.e. *Indicate how many mandates you had within your NFS*) and actual activity (i.e. *Indicate how many years have you been in your current mandate*).
- The participants' knowledge of the sport-related reform that was introduced by the 2018 Italian Law n. 145 of December 30, 2018 was assessed by a ten-item scale corresponding to ten distinct legislative acts and covering four distinct areas of NFSs' activities that could have been directly affected by the reform (see [Table 2](#) for all the items): (a) the Control (four items; e.g. *Increased scrutiny of 'Sport and Health' on how the Board of the NFS allocates funds to various initiatives/projects, verifying effective relevance to sports discipline*); (b) the Organization (three items; e.g. *Introducing a kind of side-by-side approach to NFS by 'Sport and Health' to optimize expenditures*); the Autonomy (two items; e.g. *Introduction of virtuous mechanisms for self-financing of sports*); and the Funding (one item, *Introducing a way of funding NFSs through a system that is separated for accounting and organizational purposes and provides for the allocation of resources*). Participants rated their personal knowledge of each area/item using a five-point scale ranging from 1 ("Very poor") to 5 ("Excellent").

The face and content validity of the ten items was ascertained within a qualitative phase of the study not included in the present manuscript involving 13 top-ranking officials within eight national federations that were interviewed also for other research aims. Using an explorative factor analysis (EFA) was ascertained that the ten items significantly loaded on a single factor (see the scree plot of the eigenvalues in [Appendix 1](#) and the factor loadings of

Table 2 Knowledge scale items and their first component's factor loadings (i.e. "knowledge" factor)

<i>What is your level of knowledge of the legislative acts described below?</i>	<i>Factor loadings</i>
1. Increased scrutiny of "sport and health" on how the Board of the NFS allocates funds to various initiatives/projects, verifying effective relevance to sports discipline	0.828
2. More checks by "sport and health" on how activities within the sport discipline are carried out	0.858
3. Increased monitoring by "sport and health" of non-sporting activities chosen and funded by the FSN (social activities and facilities)	0.810
4. Introduction by "sport and health" of the revocation of grants awarded in cases of serious irregularities in the financial management of the FSN	0.829
5. Introducing a kind of side-by-side approach to NFS by "sport and health" to optimize expenditures	0.795
6. Introduction of a form of support for FSNs by "sport and health" to raise funds	0.838
7. Introducing a way of funding NFSs through a system that is separated for accounting and organizational purposes and provides for the allocation of resource	0.773
8. Introduction of a mechanism that guarantees the sports system – and consequently the FSNs – greater and more secure resources over time, which, as far as possible, is automatic and independent of political willingness (minimum threshold of annual transfers established by law)	0.849
9. Introduction of virtuous mechanisms for self-financing of sports	0.799
10. Introduction of a change to the territorial governance of the FSN, leading to the centralization of the various needs of the territory under a single entity	0.714

Source(s): Authors' own work

each item in Table 2) and consequently showed a very good reliability (Cronbach's alpha = 0.95). According to this evidence, the score of the ten items were summed to have a single score of knowledge with a higher score indicating a higher level of knowledge of the legislative acts introduced by the sport law reform.

Finally, board member's autonomous motivation toward their activity/work within the NFS's board was assessed by four items developed according to the SDT framework (Mallia et al., 2019) and measuring autonomous motivation (e.g. "I like the work required by my assignment," "My work is an opportunity to acquire new skills") (see Table 3 for all the items). Board members rated each item using a five-point scale ranging from 1 ("It does not at all correspond to me") to 5 ("It completely corresponds to me"). Using an EFA was ascertained that the four items significantly loaded on a single factor (see the scree plot of the eigenvalues in Appendix 2 and the factor loadings of each item in Table 2) and consequently showed a good reliability (Cronbach's alpha = 0.79). According to this evidence, the score of the ten items were summed to have a single score of "Autonomous motivation." Higher scores corresponded to higher degree of autonomous motivation.

Data analyses

A first analysis examined the bivariate correlations among board members autonomous motivation, and their knowledge of the new sport-related legislative acts. A second analysis explored the potential effect of board members' experience within their NSF on their knowledge of the new sport-related legislative acts. Specifically, was carried out an ANCOVA treated, respectively, the total score of the knowledge scale as the dependent variable, the board members' number of mandates within their federation (1–2 mandates vs > 2 mandates) as the independent fixed factor and participants' age as the covariate. Finally, a moderation analysis was conducted to assess whether board members' experience moderated the potential impact of their autonomous motivation on their knowledge. More specifically using the "medmod" module of JAMOVI was carried out a moderation analysis using the knowledge score as dependent variable, the autonomous motivation score as predictor and the number of mandates within the NFSs' boards as moderator. The simple slopes were estimated using the bootstrap method (1,000 samples).

All three analyses were performed with JAMOVI (2022).

Results

With respect to H1 (Board members' autonomous motivation has a positive relation with their level of knowledge), the results indicate a positive correlation between autonomous motivation and knowledge levels, approaching statistical significance ($r = 0.22$; $p = 0.059$).

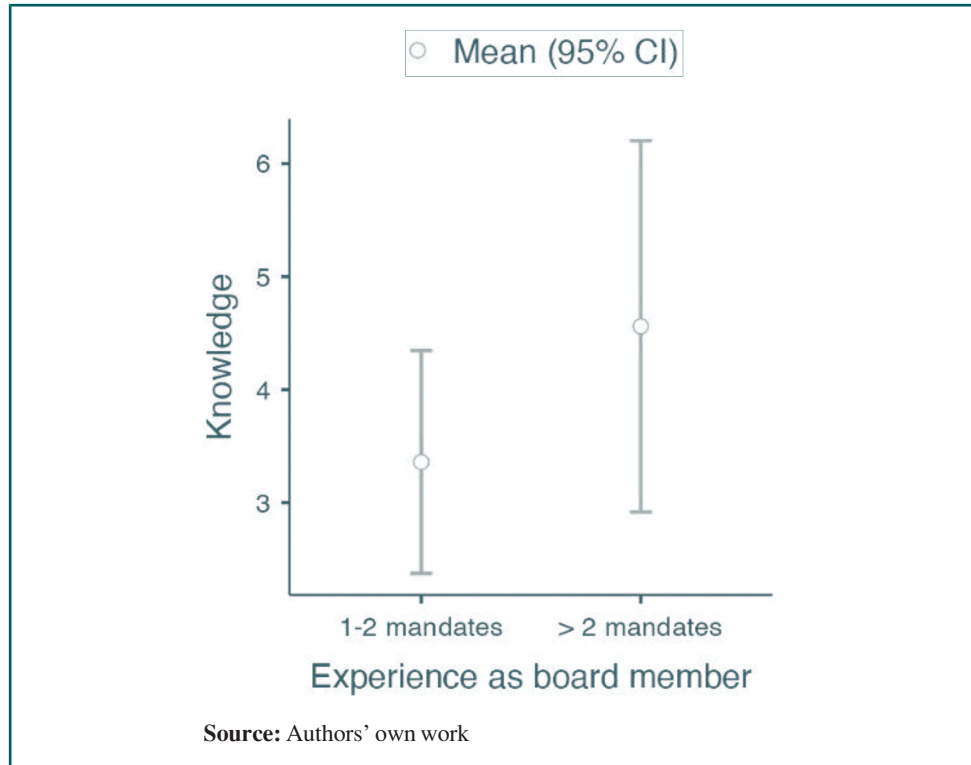
Regarding H2 (Board members' work experience positively influences their level of knowledge), the findings do not support the idea that work experience directly affects board members' knowledge. In fact, no significant effects of experience are detected on knowledge [$F_{(1,72)} = 0.65$; $p = 0.42$; $\eta^2 = 0.009$]. Descriptively (see Figure 1), participants with lower experience within NFS (i.e. one to two mandates) reported slightly lower levels of

Table 3 Autonomous motivation scale items and their factor loadings (i.e. "autonomous motivation" factor)

How much do the following statements correspond to you?	Factor loadings
1. I like the work required by my assignment	0.734
2. I feel good doing the work required by my job	0.793
3. My work is an opportunity to acquire new skills	0.695
4. My job allows me to appreciate and seek out the contributions of others	0.605

Source(s): Authors' own work

Figure 1 Means of participants' knowledge across their experience within NFSs' board



knowledge (mean=3.51; SE=0.51) compared to their more experienced counterparts (mean=4.25, SE=0.74).

Finally, concerning *H3* (*The relation between autonomous motivation and knowledge is stronger at higher levels of board members' work experience*), the results confirm the moderating effect of experience on the relation between autonomous motivation and knowledge. Specifically, as also reported in [Table 4](#) and in [Figure 2](#), for participants with higher work experience, the relation between autonomous motivation and knowledge was statistically significant and positive, whereas the relation was not statistically significant for those participants who showed average or low levels of work experience.

Discussion

This study examined how autonomous motivation and work experience interact in shaping board members' ability to acquire explicit regulatory knowledge, extending the SDT theory

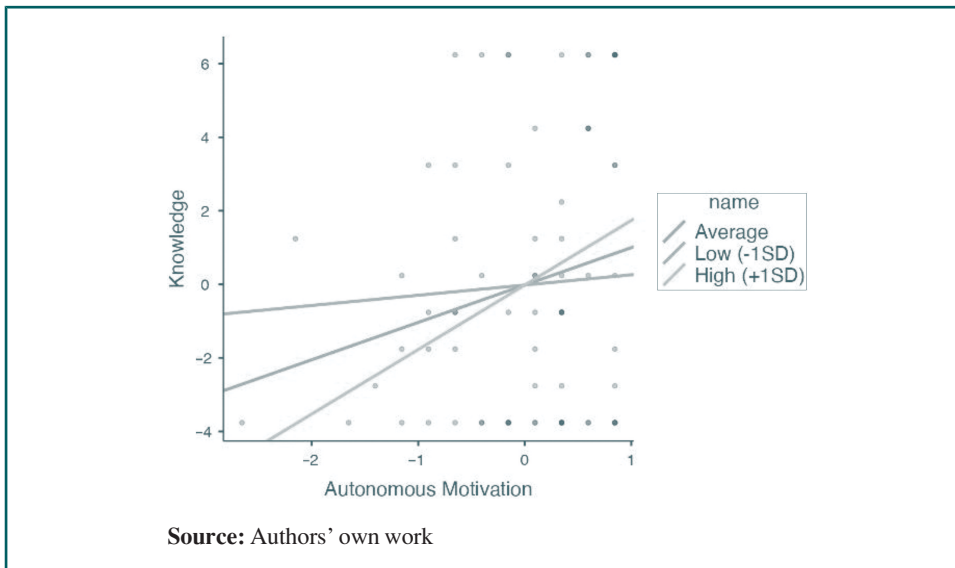
Table 4 The moderating effects of work experience in the relation between autonomous motivation and experience

Levels of experience	Estimate	SE	95% Confidence interval		Z	p
			Lower	Upper		
Average experience	1.016	0.521	0.00606	2.07	1.951	0.051
Low (-1SD) experience	0.278	0.828	-1.15429	2.16	0.336	0.737
High (+1SD) experience	1.754	0.693	0.31566	2.99	2.531	0.011

Note(s): [Table 4](#) shows the effect of board members' autonomous motivation on knowledge at different levels of their work experience (i.e. mandates within NFS)

Source(s): Authors' own work

Figure 2 Simple slope plot



(Deci and Ryan, 1985; Ryan and Deci, 2000a, 2000b) to the nonprofit governance domain. Focusing on the 2018 reform of Italian sports governance, which required nonprofit sports organizations to assimilate new institutional and procedural knowledge, the findings shed light on the psychological and experiential conditions that facilitate *knowledge acquisition* in dynamic regulatory environments.

Regarding *H1*, the results indicate a positive – though moderate – relation between autonomous motivation and board members' knowledge levels, aligning with SDT's proposition that autonomously motivated individuals display greater persistence and cognitive engagement in learning tasks (Gagné and Deci, 2005; Haivas *et al.*, 2013; Bidee *et al.*, 2013). Within the framework of organizational learning (Huber, 1991), motivation can be interpreted as the internal driver that activates the process of seeking, absorbing and internalizing knowledge (Zahra and George, 2002). In nonprofit boards, where formal incentives are scarce, autonomous motivation becomes a critical antecedent of learning-oriented behavior, as members are primarily driven by identification with the mission and intrinsic satisfaction derived from contributing to organizational goals. These findings are consistent with previous evidence suggesting that autonomy-supportive environments foster higher levels of engagement, self-regulation and learning (Wu *et al.*, 2016). Although the relation did not reach full statistical significance, its direction supports the idea that autonomous motivation provides the psychological energy necessary to acquire complex, codified and regulatory knowledge (Nonaka, 1994; Teece, 2007). The lack of a statistically significant relation might be due to other experiences of board members that may act as moderators. In other words, the relation between motivation and knowledge might have depended on the levels of another variable, such as the experience gained within the borders. This is the rationale that led us to carry out the moderation analysis to test *H3*.

Contrary to *H2*, work experience alone does not significantly predict knowledge acquisition. This result may be due to the limited number of participants and to the high variability in participants' knowledge. Upon an examination of the means reported in Figure 1, it seems that more experience is related to more knowledge. However, the variance of knowledge within each group was very high, and this might account for the lack of statistical significance. In any case, from a *knowledge-based* perspective, experience can provide a repository of prior understanding, but its value depends on the individual's active

involvement in learning processes (Huber, 1991). As Cohen and Dalkir (2017) argued, prior experience contributes to absorptive capacity, but it must be activated through exposure to new stimuli and willingness to adapt. The lack of a direct effect observed here suggests that experience, if not accompanied by motivational and cognitive engagement, may foster reliance on established routines, thereby limiting openness to new information. In other words, experience offers potential learning capacity but not learning *per se* – confirming that knowledge acquisition is a deliberate, effortful and dynamic process (Zahra and George, 2002). This nonsignificant direct effect may also indicate that accumulated experience can reinforce established routines or cognitive shortcuts, reducing openness to new institutional requirements; alternatively, in heterogeneous nonprofit boards, years of experience may not correspond directly to exposure to regulatory or administrative tasks, weakening its predictive value for explicit knowledge acquisition.

The results for *H3* confirm that experience moderates the relation between autonomous motivation and knowledge, amplifying its effect among highly experienced board members. This interaction is consistent with the theoretical expectation that prior experience enhances individuals' ability to interpret and assimilate new information (Cohen and Dalkir, 2017; Lane *et al.*, 2006). In this sense, experience operates as a cognitive and interpretive scaffold that allows motivation to translate into effective learning. Experienced board members, endowed with established knowledge structures and contextual understanding, can channel their autonomous motivation toward the acquisition of explicit regulatory knowledge introduced by the reform. Motivation fuels the willingness to learn, while experience provides the cognitive infrastructure for integrating new knowledge into existing schemas (Sonnentag and Niessen, 2004; Dragoni *et al.*, 2009). Conversely, less experienced members – though motivated – may lack the background needed to decode and internalize complex institutional content. It is important to highlight that the cross-sectional design of the study gave us the possibility to only explore the bidirectional nature of this relation, and only future longitudinal studies will be able to any causal characteristic of this relation.

Taken together, these results advance understanding of knowledge acquisition in governance contexts by demonstrating that it is not a function of structural variables (such as experience or position) alone, but of the interaction between motivational and experiential enablers, thereby confirming the patterns anticipated in *H1–H3*. The findings extend the knowledge-based view (Grant, 1996) by highlighting the role of individual-level drivers – motivation and experience – in facilitating regulatory learning, a critical yet underexplored dimension of board effectiveness (Forbes and Milliken, 1999). The context of the 2018 reform of Italian sports governance provides a vivid example of how institutional transitions can stimulate knowledge acquisition processes within nonprofit boards. When external reforms impose new regulatory and organizational requirements, directors' motivation and experience become decisive for how knowledge is sought, internalized and translated into effective governance practices. Overall, these findings contribute to a deeper understanding of how motivational and experiential mechanisms interact to support knowledge acquisition in nonprofit boards. In doing so, they lay the groundwork for identifying both theoretical and practical implications, which are discussed in the following section.

Theoretical implications

This study contributes to the application of SDT within governance research by illustrating how motivation, experience and knowledge interact within board settings. First, by demonstrating that *knowledge acquisition* – particularly in the form of explicit regulatory learning – is shaped not only by structural or informational conditions but also by individual-level motivational and experiential drivers, the findings align with *H1* and *H3*, reinforcing the role of motivation and experience in shaping learning outcomes. Specifically, the findings reinforce the critical role of autonomous motivation as a key antecedent of knowledge

acquisition while highlighting the moderating effect of board experience as a catalyst that amplifies this relation (Deci and Ryan, 2000; Zahra and George, 2002).

A contribution of this study lies in showing that board experience may operate as an active moderator rather than a static predictor of governance effectiveness. This interpretation builds on the assumption – made explicit in this study – that experience alone is insufficient to generate learning without corresponding motivational engagement. Contrary to traditional theories that posit a linear relation between tenure, experience and decision-making capability (Forbes and Milliken, 1999; Hillman and Dalziel, 2003), this study shows that experience interacts with motivation to determine the extent to which board members engage in regulatory learning. The cognitive benefits of work experience are not merely a result of accumulated exposure but depend on the individual's motivational orientation and willingness to assimilate new knowledge (Deci et al., 2001; Minichilli et al., 2012). This perspective enriches theoretical models of board learning by positioning motivation as a necessary condition for transforming experience into active knowledge acquisition (Minichilli et al., 2012).

Furthermore, the study contributes to knowledge management literature (Bollinger and Smith, 2001) by emphasizing that *knowledge acquisition* – a core dimension of the knowledge management process – depends on psychological enablers as much as on structural mechanisms. Previous studies have primarily focused on knowledge transfer and utilization within firms; however, these findings highlight that the motivation to acquire knowledge is a prerequisite for any subsequent knowledge sharing or application. In doing so, the research bridges SDT and knowledge-based perspectives, explicitly framing knowledge acquisition as a function of both autonomous motivation and experiential capacity.

Finally, this study offers new insights into nonprofit governance by situating motivational dynamics within a context of institutional transformation. The analysis of Italian sport federations, which underwent a major governance reform, illustrates that the motivation to acquire regulatory knowledge is influenced not only by internal governance features but also by external institutional shifts. Whereas prior studies have treated reforms primarily as structural compliance challenges, this research suggests that institutional change also acts as a motivational stimulus that can activate or inhibit learning behaviors at the board level. These insights expand existing theories of nonprofit governance by integrating the motivational and cognitive dimensions of board service – two areas often overlooked in governance and SDT research (Boivie et al., 2012b; Deci et al., 2001), thereby strengthening the theoretical coherence of the model proposed.

Overall, these insights refine the theoretical understanding of how motivational and experiential mechanisms jointly shape regulatory learning within nonprofit boards, clarifying the boundary conditions under which SDT processes operate in governance contexts.

Practical implications

The findings of this study offer several practical implications for nonprofit organizations, particularly in the context of board governance and knowledge management. Since board members' *knowledge acquisition* is shaped by their autonomous motivation and moderated by their work experience, nonprofit organizations should adopt strategies that support both motivational and experiential learning processes.

First, the results highlight the importance of addressing knowledge discontinuity caused by board turnover. Given that nonprofit boards typically operate under fixed-term mandates, the risk of losing critical knowledge at the end of a member's tenure is significant. To mitigate this, organizations should institutionalize structured mechanisms for knowledge retention and transfer, ensuring that learning does not remain embedded in individuals but becomes part of the organizational memory. Establishing digital repositories, codified

archives of board deliberations and accessible databases of regulatory updates can support continuity and help new members assimilate essential knowledge more rapidly (Bollinger and Smith, 2001).

Second, fostering an autonomy-supportive environment is essential for sustaining autonomous motivation among board members, which in turn promotes deeper learning (Gagné and Deci, 2005). Nonprofit organizations should design governance processes that reinforce a sense of purpose, competence and self-direction – key components of autonomous motivation under SDT. This may include involving members more actively in decision-making, clarifying how their contributions align with the organization's mission and providing targeted training sessions that enhance both regulatory knowledge and strategic governance capabilities. Such initiatives are particularly relevant for less experienced board members, who can benefit from guided learning opportunities to strengthen their engagement and competence early in their tenure. From a more applied standpoint, nonprofit organizations could formalize an onboarding pathway that includes structured briefings on past board decisions, guided walkthroughs of key regulatory updates and opportunities for newcomers to observe experienced members during early deliberation cycles. Such practices help new members develop competence and autonomy, not only through formal training but also through exposure to real governance routines. In addition, organizations may formalize a structured role for experienced board members by assigning them explicit mentoring or shadowing responsibilities during the first months of tenure. These interactions allow newcomers to acquire forms of tacit knowledge – such as interpretive norms, decision-making heuristics and informal governance practices – that are not captured by formal training or written documentation.

Third, because experience moderates the relation between motivation and knowledge acquisition, organizations should implement *knowledge assessment and integration systems* capable of capturing how board members internalize and apply new information over time. Periodic self-assessments, structured feedback mechanisms and board performance reviews can help monitor learning dynamics, revealing whether knowledge is effectively disseminated and used across different experience levels. These tools would also enable organizations to tailor training and engagement initiatives to the specific developmental needs of both experienced and novice board members.

Collectively, these practices underscore that nonprofit boards should treat knowledge as a *strategic governance asset*, not merely as information to be retained. By creating structures that encourage motivational engagement, ensure continuity of learning and leverage the experience of senior members as catalysts for knowledge acquisition, nonprofit organizations – especially those operating in reformed or evolving institutional environments – can enhance their adaptive capacity and long-term effectiveness.

Conclusions

In line with Deci and Ryan (2000) view that motivation is a complex and multifaceted construct encompassing both intrinsic and extrinsic elements, this study demonstrates how motivational and experiential factors jointly shape knowledge acquisition within nonprofit boards. Drawing on SDT theory, we examined how autonomous motivation interact with work experience to influence directors' ability to acquire explicit regulatory knowledge – a key requirement following the 2018 reform of Italian sports governance.

The findings suggest that autonomous motivation, which reflects an internalized and self-endorsed form of engagement, is positively associated with higher levels of knowledge acquisition. Although the effect is moderate, it underscores the critical role of autonomous motivations in sustaining cognitive effort and learning in volunteer-based governance contexts. Moreover, the moderating role of experience highlights that motivation is most effective when supported by prior exposure and contextual understanding: experienced

board members are better able to translate their motivational drive into concrete learning outcomes.

These findings reinforce the notion that effective governance relies not only on structural expertise or formal information flow but also on the psychological conditions that enable individuals to seek, absorb and internalize new knowledge (Huber, 1991; Zahra and George, 2002). In this sense, the interplay between motivation and experience represents a fundamental mechanism for enhancing boards' learning capacity and adaptive effectiveness. Members who perceive their roles as meaningful and aligned with their personal goals are more likely to remain engaged, pursue knowledge actively and contribute strategically to decision-making.

Ultimately, this study highlights that sustaining effective nonprofit governance requires nurturing both the *motivation to learn* and the *capacity to learn*. By integrating motivational and experiential perspectives within the broader knowledge-based view (Grant, 1996), the research contributes to a more comprehensive understanding of how boards evolve as learning systems capable of responding to institutional and regulatory change.

Limitations and future research

Several limitations of this study warrant consideration. First, the reliance on self-reported measures may introduce potential biases, particularly in assessing both knowledge levels and motivational orientations. As the level of knowledge about the reform was self-assessed by board members, two sources of distortion should be acknowledged. Primarily, it is a possible self-selection bias, as individuals who were already knowledgeable or interested in the reform may have been more inclined to participate in the survey, producing a positively skewed sample. Secondary, it is a social desirability bias, as respondents may have tended to overstate their actual knowledge to project competence or legitimacy in their governance roles. Future studies could address these limitations by combining self-reported measures with objective knowledge assessments, behavioral indicators or peer evaluations to validate responses and increase reliability.

Second, this study focuses exclusively on nonprofit sports organizations – specifically, National Sports Federations – operating within the Italian context. In addition, the relatively small sample – 75 Italian board members – further limits the generalizability of the findings, especially considering potential sample bias and the specificity of the national context. These factors suggest that the observed relation may partly reflect regional governance dynamics or contextual particularities, highlighting the need for comparative studies across broader and more diverse settings. While this setting provides a unique opportunity to examine knowledge acquisition following a major regulatory reform, it may still present contextual particularities that differ from other nonprofit or for-profit environments. Future research could extend this framework to different sectors and institutional contexts to assess whether the relation among motivation, experience and knowledge acquisition hold under varying governance and incentive structures. In addition, recent international studies show that board learning and knowledge development vary across nonprofit fields and national governance systems (Herman and Renz, 2000; Richardson *et al.*, 2023; Yoon, 2021), suggesting that the mechanisms tested in this study may unfold differently in organizational contexts shaped by alternative institutional logics or resource configurations.

Third, the limited sample size may have limited the validity of the analysis and the possibility to detect some significant effects. Related to this issue, we need to recognize also the low response rate that may introduced additional bias in the study's results due to a self-selection of the responders. Future studies including larger sample and strategies to engage a larger portion of the target population are recommended.

Fourth, while the study centered on autonomous motivation as the primary psychological driver of learning, future investigations could explore how other motivational dimensions –

such as controlled motivation or amotivation – affect board members' engagement and learning behaviors. Integrating SDT (Deci and Ryan, 2008) with complementary frameworks, such as motivation crowding theory (Frey and Jegen, 2001), may yield deeper insights into how external interventions – such as policy reforms, funding mechanisms or performance evaluations – can either enhance or undermine intrinsic engagement depending on how they are perceived.

Fifth, the present study focused exclusively upon the moderator effect of work experience duration within NSF. Future studies are recommended to explore the mediating and moderating role of other variables related to this experience, such as board members' perceived role clarity, the opportunity for participation or the perceived organizational support.

Finally, the cross-sectional design limited the possibility to establish any causal relation between the key variable included in the present study. Future research could adopt longitudinal designs to examine how motivation, experience and knowledge acquisition evolve over time and how each variable impact on the others over time. Such studies would provide a more dynamic view of learning processes within boards and clarify whether the motivational and experiential effects observed here are stable, cumulative or context-dependent. Qualitative studies, comparative case analyses or mixed-method designs could further illuminate the micro-processes through which board members acquire and apply regulatory knowledge.

By addressing these limitations and expanding theoretical perspectives, future research using longitudinal approaches, qualitative approaches and cases studies can advance a more comprehensive and deep understanding of how motivational and experiential factors shape knowledge-based governance in nonprofit and hybrid organizations.

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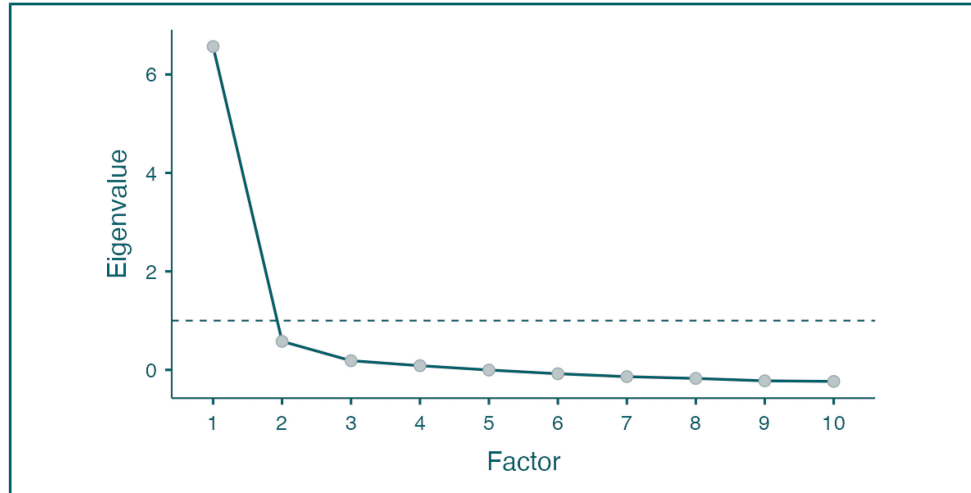
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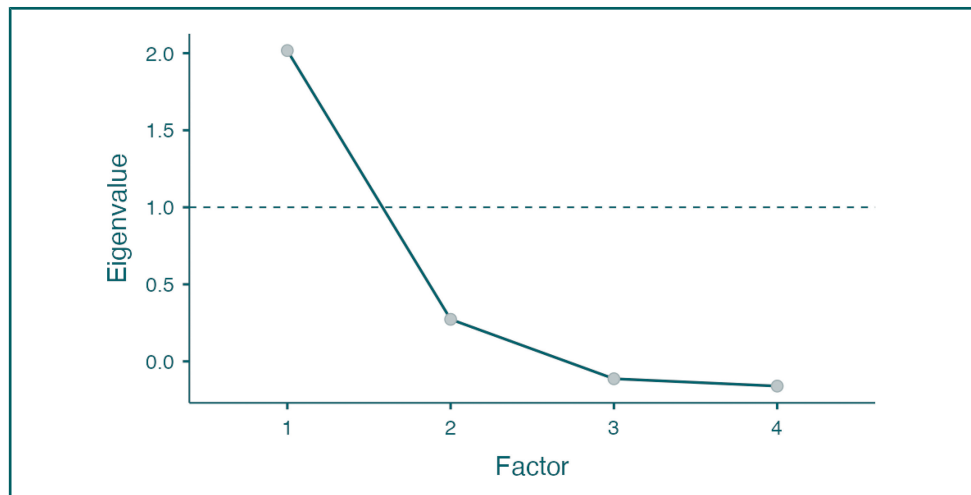
Appendix 1

Figure A1 Scree plot for the explorative factor analysis (EFA) of the knowledge scale



Appendix 2

Figure A2 Scree plot for the explorative factor analysis (EFA) of the autonomous motivation scale



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