

Beyond the News Media Logic? Analyzing the Social Media Orientation of University Leadership

Silke Fürst*, Mike S. Schäfer*, Daniel Vogler*, and Isabel Sörensen*

Abstract: Building on scholarship on the mediatization of organizations, we propose a conception of the social media orientation of organizational leaders and apply it to higher education. Based on an online survey of 276 leaders of Swiss higher education institutions, we show that social media platforms have made their way into university management and communication but are still not as important as news media. The study discusses differences between university types and uses the literature on new public management to derive influencing factors.

Keywords: Social media, public communication, new public management, higher education institutions, mediatization of science

Jenseits der Medienlogik? Analyse der Social Media-Orientierung von Hochschulleitungen

Zusammenfassung: Anknüpfend an die Forschung zur Medialisierung von Organisationen entwickeln wir ein Konzept, um die Social Media-Orientierung von Führungskräften zu erfassen und wenden dieses auf den Hochschulbereich an. Auf Basis einer Online-Befragung von 276 Mitgliedern von Schweizer Hochschulleitungen zeigen wir, dass soziale Medien Einzug in das Management und die Kommunikation von Hochschulen gehalten haben, journalistische Medien aber nach wie vor wichtiger sind. Die Studie diskutiert Unterschiede zwischen Hochschultypen und zieht die Forschung zu New Public Management heran, um Einflussfaktoren zu identifizieren.

Schlüsselwörter: Soziale Medien, öffentliche Kommunikation, New Public Management, Hochschulen, Medialisierung der Wissenschaft

Au-delà de la logique des médias ? Une analyse de l'orientation de la direction des universités vers les réseaux sociaux

Résumé : Nous appuyant sur la recherche sur la médiatisation des organisations, nous proposons un concept permettant de saisir de l'orientation des cadres vis-à-vis des réseaux sociaux et l'appliquons au domaine des hautes écoles. Sur la base d'un sondage en ligne auprès de 276 membres de la direction de hautes écoles en Suisse, nous montrons que les réseaux sociaux ont marqué leur entrée dans la gestion et la communication des universités, mais restent moins importants que les médias d'information. L'étude examine les différences entre les types de hautes écoles et utilise la littérature sur la nouvelle gestion publique pour déduire les facteurs d'influence.

Mots-clés : Médias sociaux, communication publique, nouvelle gestion publique, hautes écoles, médiatisation de la science

* University of Zurich, Department of Communication and Media Research – IKMZ, CH-8050 Zurich, s.fuerst@ikmz.uzh.ch, m.schaefer@ikmz.uzh.ch, daniel.vogler@foeg.uzh.ch, i.sorensen@ikmz.uzh.ch.

1 Introduction

Higher education institutions (HEIs) have changed considerably in recent decades. Two crucial elements of this change play a role in this study: First, HEIs are increasingly incentivized to communicate with external stakeholders and publics to legitimize themselves and position themselves well in competition with other universities (Peters et al. 2008; Friedrichsmeier and Fürst 2012; Krücken 2021).¹ While news media still play an important role in HEI communication (Lo et al. 2019; Vogler and Schäfer 2020), the rise of digital media has created additional possibilities for and increased the importance of public communication. Social media platforms, such as Facebook, are increasingly used by HEIs to enhance their public visibility and connect with stakeholders (Linvill et al. 2012; Metag and Schäfer 2017; Atakan-Duman et al. 2019; Metag and Schäfer 2019; Sörensen et al. 2023). Second, universities have moved from being collegiate to more strongly managed institutions, manifested in a move toward new public management (NPM) reforms and, with it, a strengthening of internal leadership, growing competition and goal orientation, and increased expectations addressed to the university as a whole (de Boer et al. 2007; Friedrichsmeier and Fürst 2012; Kiener 2013; Krücken 2014; Marcinkowski et al. 2014; Blümel 2016; Krücken 2021; Fürst et al. 2022a). This “transformation of universities into organizational actors, which are able to act strategically and position themselves with regard to their competitors” (Krücken and Meier 2006, 242) also impacts HEI communication efforts. University management has increasingly interpreted external communication as an important leadership issue and has centralized and strongly influenced the objectives, strategies, and resources of this communication (Friedrichsmeier and Fürst 2012; Marcinkowski et al. 2013; Elken et al. 2018; Schwetje et al. 2020; Ferris and Waldron 2021).

This study contributes to the emerging scholarship on digitalization in higher education (Scott 2015, 71; Tratschin 2021) in several ways: While a few studies have examined the perspective of university leadership on communication in general (Engwall 2008; Friedrichsmeier and Fürst 2012; Marcinkowski et al. 2013; Scheu and Olesk 2018; Ferris and Waldron 2021), there is a lack of analyses on university leadership’s views on social media. Drawing on mediatization studies, this paper develops a concept of the social media orientation of university leaders and relates it to their orientation toward news media. Furthermore, as little is known about the role of social media in higher education systems outside Anglo-American countries or about potential differences between types of HEIs, this study analyzes Swiss universities, compares different HEI types, and analyzes the factors influencing the social media orientations of HEI leaders.

1 In this article, the terms higher education institutions (HEIs) and universities are used as synonyms.

2 Theoretical Background: Mediatization, New Public Management, and Organizational Actorhood

Drawing on mediatization studies in communication research and sociology (Donges 2008; Peters et al. 2008; Raupp 2009; Weingart 2012; Marcinkowski et al. 2013; Pallas et al. 2016; Scheu and Olesk 2018; Scheu 2019), this paper develops a concept of the social media orientation of HEI leadership. Mediatization research, firstly, considers media as instruments used by organizational actors to observe their environment, including competitors, in terms of what is expected from organizations within their field and others' perception of their organization. Organizations, secondly, are also conceptualized as using media as a means of communicating with their organizational environment and of influencing relevant stakeholders. They monitor the media to identify what topics resonate with different publics and could be useful to attract public attention. It is furthermore assumed that organizational actors have an idea of good, successful communication for their organization and anticipate and adapt to media logic(s) to achieve it. Thirdly, according to mediatization theory, both the monitoring and the use of media for public communication lead to repercussions for and changes in the respective organizations. The specific rules or logics of media influence how organizations are represented, how organizational actors perceive changes in and expectations of their organizational environment, and how organizational actors adapt to these rules and expectations.

So far, the mediatization of organizations has been analyzed mainly with respect to news media and the logic of journalistic news selection and presentation (see, e.g., Donges 2008; Raupp 2009; Marcinkowski et al. 2013; Esser and Strömbäck 2014; Pallas et al. 2016; Scheu and Olesk 2018; Scheu 2019). However, social media also come with specific logics of content creation, distribution, and usage. This includes norms of what forms of representation and interaction are considered successful and good. "When social media platforms emerged in the early 2000s, their primary pursuit seemed to be *connectedness*" (van Dijck and Poell 2013, 8, emphasis in original). Since then, engaging in dialogue with other users (Linville et al. 2012; D'heer 2018) is an often-emphasized form of successful social media use. Moreover, social media logic is characterized by so-called *popularity* or engagement metrics, such as the number of likes or shares (van Dijck and Poell 2013; Klinger and Svensson 2015; Mau 2019). "Quantified measurements institutionalize certain 'orders of worth'" (Mau 2019, 11), with high engagement metrics on social media typically used as benchmarks for successful and good communication.

We therefore propose a concept of an organization's (and its leaders') social media orientation that takes all three above-mentioned aspects into account: observing the external perception of the organization via social media, understanding good and successful organizational communication in terms of social media logic,

and adapting the working practices and routines of organizational actors to social media (for more information, see Sections 3 and 4).

To understand the social media orientation of university leaders, we must account for the fundamental transformations of higher education systems over the past three decades. NPM reforms in Switzerland, as in many other countries (Braun 1999; de Boer et al. 2007; Kiener 2013; Altrichter 2015), have led to an increased importance of public communication and reputation building for HEIs (Friedrichsmeier and Fürst 2012; Marcinkowski et al. 2014; Vogler 2020b; Adam 2023). Many HEIs feel the need to emphasize their performance and impact in research and teaching, and also engage in third mission activities or knowledge transfer (Kiener 2013; Krücken 2014; Lepori et al. 2014). Due to an “increasing dependence of external and competitive funding sources” (Morphew et al. 2018, 1077), HEIs also increasingly compete for student enrollments (Engwall 2008; Altrichter 2015; Lafuente-Ruiz-de-Sabando et al. 2018; Meier 2019; Krücken 2021). Overall, HEIs must deal with a multiplication of their organizational objectives and increased expectations from society and various stakeholders (Friedrichsmeier and Fürst 2012; Meier 2019; Morphew et al. 2018). Objectives are an essential characteristic of organizations. Through the definition of goals, organizations can specifically direct the deployment of personnel, resources, and measures – and thus reduce complexity (Schimank 2002; Kühl 2020, 44–47). Organizational objectives that have become more important in recent decades due to NPM reforms, such as engaging in knowledge transfer or attracting more students, may also influence the social media orientation of university leadership.

Another feature of NPM reforms is that the number and importance of HEIs’ external stakeholders have increased (de Boer et al. 2007; Leder 2022). Until the 1980s, state authorities and political actors were the main stakeholders of HEIs and largely responsible for ensuring their legitimation (Krücken and Meier 2006; de Boer et al. 2007; Marcinkowski et al. 2013). In contrast to this strong state regulation, NPM reforms have brought about increasing autonomy for HEIs and, with it, the need to legitimize themselves in the eyes of “diverse, proliferating, and often demanding stakeholders” (Freed 2018, 1). Such legitimation pressures have led to a stronger orientation toward stakeholders and a growing importance of public communication (Marcinkowski et al. 2013; Marcinkowski et al. 2014; Lafuente-Ruiz-de-Sabando et al. 2018). Research in this area argued that news media in particular have gained importance. As HEIs strive to connect with various stakeholders, it has become more important for them to monitor media coverage to assess societal expectations and gain visibility in news media to reach different groups simultaneously (Marcinkowski et al. 2013; Lo et al. 2019; Scheu 2019). However, whether the diversification of stakeholders might also lead to a stronger social media orientation has not been examined.

NPM reforms have also brought about increased competition between HEIs. Krücken (2021) speaks of “multiple competitions” here, for example, for research funding, student enrollments, ranking positions, or media visibility (Friedrichsmeier and Fürst 2012; Meier 2019; Leder 2022; Adam 2023). These competitions are fueled by higher education policy but are also reinforced by HEIs’ “permanent mutual observation” (Friedrichsmeier and Fürst 2012, 58, see also: 52–53). As Krücken (2021, 164) puts it, the competitors are “observed by the competitors themselves,” meaning that HEIs monitor what other HEIs in their country, as well as in other countries, are doing and accomplishing. This monitoring is often driven by metrics, which allow actors – although in a simplified and abstract way – “to see themselves and others as in a mirror” (Krücken 2021, 169; see also Mau 2019). As social media provide metrics-based platforms for monitoring, communicating, and promoting, university leadership’s observation of other HEIs might stimulate their social media orientation.

In the wake of NPM reforms, university leaders have also become more powerful and important for managing and representing their organizations (de Boer et al. 2007; Blümel 2016; Meier 2019). Traditionally, universities were characterized by “strong state authority and an equally strong academic oligarchy” (Hasse and Krücken 2013, 189), with professors dominating decision making, departments and schools being highly influential, and centralized management having very limited power (Clark 1983). This governance has been transformed since the 1990s with NPM reforms, albeit to varying degrees across regions and countries (Braun 1999; de Boer et al. 2007; Fumasoli and Lepori 2011; Blümel 2016; Meier 2019). Overall, the above-mentioned features and consequences of NPM – a strengthened university leadership; increased competition between HEIs; greater accountability for the actions, decisions, and performances of the university as a whole; the multiplication of organizational objectives and societal expectations; and the growing importance of public communication and reputation building – can be conceptualized as a “transformation of universities into organizational actors” (Krücken and Meier 2006, 242). The concept of organizational actorhood has been widely adopted in higher education research (Bloch 2021) and highlights the changes brought about by new governance, with a university now understood as an “integrated, goal-oriented entity that is deliberately choosing its own actions and that can thus be held responsible for what it does” (Krücken and Meier 2006, 241).

Accordingly, the identity of a university is now “part of an ongoing construction process” (Hasse and Krücken 2013, 188–189) that includes the development of missions, objectives, and strategic means (Fumasoli and Lepori 2011), such as reputation management and the use of diverse communication channels to represent the university as an integrated entity and promote its diverse activities, decisions, and achievements. As part of the increased centralization of decision-making power, university leaders have gained more influence on their organizations’ public com-

munication. They increasingly see public communication as a leadership issue and strongly influence the objectives, strategies, and resources of their organization's communication teams (Bühler et al. 2007, 82; Friedrichsmeier and Fürst 2012; Marcinkowski et al. 2013; Elken et al. 2018; Schwetje et al. 2020; Ferris and Waldron 2021). University leadership and central communication departments not only have a large impact on how the university as a whole is represented in public but also often stimulate researchers to engage in public communication and contribute to the university's societal impact (Marcinkowski et al. 2014; De Jong and Balaban 2022; Fürst et al. 2022a).

In the following section, we show that the existing research has revealed that university leadership has a strong orientation toward news media and the university's coverage in the media but that little is known about leadership's social media orientation.

3 Literature Review: The Role of Social Media in HEI Communication

Higher education institutions (HEIs) are increasingly incentivized to communicate with external stakeholders and publics. Media relations are of particular importance, as many studies have shown (e.g., Friedrichsmeier and Fürst 2012; Borchelt and Nielsen 2014; Scheu and Olesk 2018; Lo et al. 2019). HEIs strive to gain visibility in news media coverage, and often measure and evaluate this visibility in terms of the number of news reports (Engwall 2008; Peters et al. 2008; Friedrichsmeier and Fürst 2012). News media are also considered to be HEI stakeholders and to have influence on the decision-making processes of university leaders, as well as on their assessment of how their organizations are perceived by others (Marcinkowski et al. 2013; Scheu and Olesk 2018).

In the last decade, however, the role of digital and social media for the public communication of scientists and universities has increased. More and more researchers use social media to disseminate their research results to diverse publics, connect with other researchers, share and discuss ideas, and enhance their visibility and reputation within and beyond the scientific community (Yeo and Brossard 2017; König 2020; Thiele and Luethje 2021). However, this use of social media differs between countries and disciplines, with many researchers remaining reluctant to use social media due to a lack of time or incentives (König 2020; Koivumäki and Wilkinson 2022). Overall, the decentralized use of social media includes posts not only by individual researchers but also by research institutes. However, compared to news media, social media tend to play only a marginal role in the public communication activities of research institutes (Entradas et al. 2020).

At the central level of HEI communication, social media are used to enhance the public visibility of the university as a whole and to directly connect with di-

verse stakeholders, in particular students, alumni, journalists, and businesses (Lo et al. 2019; Metag and Schäfer 2019; Vogler 2020a). A recent Swiss study of social media communication (Sörensen et al. 2023) showed that HEIs use their central social media accounts mainly to communicate with their own staff and students, while societal stakeholders (actors from politics, media, culture, business, etc.) are secondary targets of HEIs' social media posts. Regarding topics of communication, universities of applied sciences (UAS) and universities of teacher education (UTE) in Switzerland address mainly organizational matters (e.g., financing, governance) and teaching (e.g., courses, student projects), while research universities (RU) focus on organizational matters and research (e.g., scientific results, collaborations). These findings indicate that the central communication departments of Swiss HEIs use social media communication mostly complementary to other channels, reaching specific audiences and addressing topics that are less suited to attract visibility in news media (Fürst et al. 2021).

Early studies showed that many HEIs across the world did not use social media platforms and that if they did, they typically did not allow user feedback or tended to abstain from dialogue with users (Linville et al. 2012; McAllister 2012; Davis III et al. 2015). Studies from recent years have revealed that most HEIs, including Swiss ones (Sörensen et al. 2023), now use social media platforms such as Facebook, Instagram, and Twitter (now called X, but henceforth referred to as Twitter) (Atakan-Duman et al. 2019; Lund 2019; Fähnrich et al. 2020). Since 2020, more than 70 % of all Swiss HEIs have been active on Twitter and Instagram, and more than 80 % have a Facebook account. RU use Twitter the most, with an average of more than 1100 posts per organization in 2020, while UAS use both Twitter and Facebook to a similar extent (around 600 tweets and 650 Facebook posts on average in 2020). UTE use Facebook the most (around 130 Facebook posts, 110 tweets, and 80 Instagram posts on average in 2020). When considering all three platforms, UAS and RU show a large output (with 1602 and 1551 social media posts, respectively), while UTE post significantly less (319 social media posts) (Sörensen et al. 2023).

Despite this widespread use, and although user dialogue is considered a core feature of social media, scholarship suggests that HEIs often use social media to disseminate information without fully utilizing its interactive potential (Metag and Schäfer 2017; for an overview, see Metag and Schäfer 2019; VanDyke and Lee 2020). There is some evidence that HEIs evaluate their social media activity in terms of engagement metrics, such as the number of likes and shares (Kaplow 2019; Raupp and Osterheider 2019). Moreover, PR practitioners in communication departments use social media "to monitor public opinions of certain groups," for instance, to "get an idea of how students view their university and which topics interest them" (Lo et al. 2019, 565).

Very few studies have shed light on university leaders' views on social media. Leaders of US colleges, universities (Ferris and Waldron 2021), and community

colleges (Davis III et al. 2015) seem to see social media as important tools for communication, mostly to disseminate organizational information and less for dialogue (Davis III et al. 2015) – but scholarship on these matters is scarce.

Overall, scholarship in the field has several limitations (Metag and Schäfer 2019). First, many studies date back to the early 2010s, when the use and diffusion of social media were only beginning. Second, many studies on the social media use of HEIs focus on Anglo-American countries, with little research on the Swiss case (Metag and Schäfer 2017; Sörensen et al. 2023). Third, analyses comparing different types of HEIs are scarce, both with regards to social media use (Sörensen et al. 2023) and in general (Lueg and Graf 2022, 24). Fourth, social media use is rarely analyzed in the context of HEIs' larger communication efforts, such as media relations. Fifth, findings on the role of social media are based mostly on content analyses and surveys or in-depth interviews with communication professionals and researchers (Metag and Schäfer 2019; Fähnrich et al. 2020; Koivumäki et al. 2021; Sörensen et al. 2023). In contrast, little is known about the perspective of university leaders, despite their increased decision-making power within the organization and strong influence on the work of central communication departments (see Section 2).

The social media orientation of university leaders – comprising the observation of external perceptions via social media, an understanding of good communication in terms of social media logic, and the influence of social media on managerial work – is therefore a crucial indicator of the role and importance of social media for the management and central communication of the organization. Therefore, this study asks:

RQ1: How strong is the social media orientation of Swiss university leaders compared to their news media orientation?

RQ2: Does the social media orientation of Swiss university leaders differ between HEI types?

RQ3: Which factors influence the social media orientation of university leaders?

Existing findings indicate that large HEIs, as indicated by the number of students, and HEIs with more financial resources are more active on social media (Metag and Schäfer 2017). We use structural information about HEIs to test whether this also influences the social media orientation of university leaders. Moreover, we build on the findings and conceptions regarding new public management (see Section 2) and test whether the social media orientation of university leaders is influenced by HEI objectives, HEI stakeholders, perceived competitors, and the observation of other HEIs.

4 Method and Data

The analysis is based on a study conducted between September 1 and November 1, 2020, and part of a larger research project investigating HEI communication in Switzerland (<https://c3h.ch/en>).² We surveyed all members of the executive management at all 42 Swiss HEIs, including 14 RU, 10 UAS, and 18 UTE (sometimes also called colleges of education).³ While the former typically have a long history and cover a broad spectrum of disciplines, UAS and UTE were founded in the 1990s and 2000s and specialize in applied research and teacher education, respectively (Lepori 2008; Kiener 2013; Altrichter 2015; Leutwyler et al. 2017; Truniger 2017).

Based on publicly available information from the 42 HEIs, we compiled a database of the contact details of all members at the highest level of university management. Due to the heterogeneity of organizational structures in the Swiss higher education system, two selection criteria were used: The management unit should a) have a mandate for the entire organization and b) be at the highest level in the executive decision-making chain (for more information, see Fürst et al. 2022a). The positions of these university leaders are typically called rector / president, vice-rector / vice-president, and prorector / director.

A pretest with 14 participants was conducted to assess the comprehensibility of the questionnaire and enhance its quality (see Fürst et al. 2022a, 521). Then, 508 contacts were invited via email to participate in the online survey (319 UAS leaders, 101 RU leaders, and 88 UTE leaders). The questionnaire was available in German, French, and Italian because the HEIs are located in three linguistic regions of Switzerland. Twenty-seven leaders on our contact list could not be reached or did not work in their positions anymore. Of the 481 leaders successfully contacted, we received 276 responses from 39 Swiss HEIs (response rate: 57.4%). This response rate is slightly higher than in a previous survey of German university leaders (Marcinkowski et al., 2013) and very satisfactory in light of general response rates to online surveys (Hooker and Gil de Zúñiga 2017).

The following analyses are based on 35 variables, including two variables with structural information about HEIs and 33 survey items.⁴ The *social media orientation* of university leaders was operationalized as an index consisting of four items with a seven-point scale from 0 = “not at all” to 6 = “very much” (Cronbachs alpha = 0.80), measuring the observation of external perceptions via social media, conceptions of good social media communication, and the influence of social media on managerial work (see Table 1). To put social media orientation in context, we also measured the

2 The project was funded by the Swiss National Science Foundation (SNSF) under Grant Agreement No. 184992.

3 For more information on the sample, see the online appendix (<https://doi.org/10.5167/uzh-234478>, pp. 6–7).

4 See the online appendix with the original wording of the questions in German and an English translation: <https://doi.org/10.5167/uzh-234478>.

news media orientation of executive board members (six items with a seven-point scale from 0 = “not at all” / “not at all important” to 6 = “very much” / “very important,” Cronbachs alpha = 0.74, see Table 2). In accordance with previous studies on the mediatization of HEIs, we conceived a high amount of media visibility as the dominant understanding of good communication (Peters et al. 2008) and added questions about news media as potential HEI stakeholders (Marcinkowski et al. 2013).

The independent variables used in the regression analyses to address RQ3 were informed by studies on the social media use and public communication of HEIs (Section 3) and new public management in the higher education sector (e. g., Marcinkowski et al. 2013; Krücken 2021; see Section 2). In addition to data on HEI structures (see Table 3 based on BfS 2020), with the *number of students* as an indicator of HEI size and the *total revenue* of an HEI as a measurement of its financial resources (Metag and Schäfer 2017; Schwetje et al. 2020), we used survey data on HEI objectives, the importance of HEI stakeholders, perceived competitors, and the observation of other HEIs to test for factors influencing leaders’ social media orientation (Table 4).⁵ Regarding *HEI objectives*, we included five items that measure goals related to mediatization and NPM reforms: University leaders were asked to what extent their organization has focused on the goals of generating a good image and public reputation, recruiting more students, acquiring research funds, achieving knowledge transfer and impact on society, and performing well in rankings in the past five years (on a seven-point scale from 0 = “not at all” to 6 = “very much”). With respect to *HEI stakeholders*, university leaders rated the importance of the following 11 stakeholders: university staff, students and prospective students, alumni, the general population, politicians and public administration at the cantonal level, politicians and public administration at the national level, small- and medium-sized corporations, large corporations, local and regional news media, national news media, and international news media (on a seven-point scale from 0 = “not at all important” to 6 = “very important”). For the regression analyses (Table 4), we used an aggregated measurement of political actors (aggregating two items), corporations (aggregating two items), and news media (aggregating three items), thereby including one variable for each stakeholder group. *Perceived competitors* were measured with three items asking university leaders with which universities they compete: other Swiss HEIs of the same type (e. g., UAS), all HEIs in Switzerland, or HEIs in other countries (on a seven-point scale from 0 = “not at all” to 6 = “very much”). *Observation of other HEIs* was also measured with three items, asking university leaders how much they remain up to date with changes and developments at other organizations in the HEI landscape. Using a seven-point scale (from 0 = “not at all” to 6 = “very much”), we asked how closely university leaders monitor other Swiss HEIs of the same type, all

5 Descriptive data on the independent variables can be found in the online appendix, Table 5–Table 8: <https://doi.org/10.5167/uzh-234478>.

HEIs in Switzerland, or HEIs in other countries. Regression analyses were performed separately for all HEI types, comprising RU, UAS, and UTE.

The respondents were also asked about the *HEI type* for which they worked, revealing that the sample of this study comprised 172 UAS leaders, 54 RU leaders, and 47 UTE leaders (three respondents did not indicate the HEI type). These numbers reflect that the size of university leadership differs significantly between types of HEIs in Switzerland (see Fürst et al. 2022a, 523).

5 Results

Our data regarding RQ1 show that university leaders across all types of Swiss HEIs consider social media to be important for their organizations’ communication and for monitoring their environment (Table 1). The most important feature of social media for them is the potential to engage in dialogue with social media users (M = 3.8 on a scale from 0 = “not at all” to 6 = “very much”), which is valued by leaders of all HEI types. University leaders also indicate to use social media to inform themselves of how others talk about their organization (M = 3.5). In comparison, university leaders consider it less important for their organization to gain many likes and shares

Table 1 Descriptive Data for *Social Media Orientation* of University Leaders, Compared Across HEI Types

Items	All respondents (n = 266–270)	UAS (n = 168–169)	UTE (n = 45–47)	RU (n = 52)
	M (SD)	M (SD)	M (SD)	M (SD)
Monitoring how others talk about my HEI on social media	3.5 (1.8)	3.8* (1.7)	3.1 (2.0)	3.0* (1.9)
Many likes and shares as good communication practice	3.1 (1.6)	3.3* (1.5)	2.6* (1.6)	2.8 (1.6)
Dialogue with social media users as good communication practice	3.8 (1.3)	3.9 (1.2)	3.7 (1.2)	3.4 (1.6)
Topics discussed on social media influence my own work	2.9 (1.4)	3.1* (1.4)	2.7 (1.5)	2.5* (1.4)
Index of social media orientation (Cronbachs $\alpha = .80$)	3.3 (1.2)	3.5* (1.1)	3.0* (1.3)	2.9* (1.5)

Note: M = arithmetic mean; SD = standard deviation. UAS = universities of applied sciences; UTE = universities of teacher education; RU = research universities. The surveyed university leaders replied on a seven-point scale from 0 = “not at all” to 6 = “very much.” Significant differences calculated by Kruskal-Wallis nonparametric test (*p ≤ .05, **p ≤ .01, ***p ≤ .001).

on social media ($M = 3.1$). They ascribe a medium level of influence on their own managerial work to topics discussed on social media ($M = 2.9$).

However, the results on the news media orientation of university leaders reveal that social media are not the most important communication channels (Table 2). News media are considered to be more important, still, especially with respect to the monitoring of external perceptions; university leaders use news media to inform themselves of how their organization is represented in public ($M = 4.9$). They also consider it important to attract much attention from news media ($M = 4.5$) and perceive the topics discussed in news media to have a rather large influence on their own managerial work ($M = 3.9$). University leaders understand news media as important stakeholders, with local, regional, and national news media ($M = 3.8$) being more important than international news media ($M = 2.7$). The orientation toward news media is strongest for RU leaders and lowest for UTE leaders. In sum, the news media orientation of leaders across all HEI types is more pronounced than their social media orientation.

This also holds true when we shed light on different types of HEIs and address RQ2 (Table 1). The social media orientation of UAS leaders is the strongest and

Table 2 Descriptive Data for *News Media Orientation* of University Leaders, Compared Across HEI Types

Items	All respondents (n = 268–271) M (SD)	UAS (n = 167–169) M (SD)	UTE (n = 46–47) M (SD)	RU (n = 52–54) M (SD)
Monitoring how news media report about my HEI	4.9 (1.2)	4.8 (1.2)	5.0 (1.2)	5.0 (1.0)
Attracting a lot of attention from news media as good communication practice	4.5 (1.2)	4.6* (1.2)	4.2* (1.1)	4.5 (1.3)
Topics discussed in news media influence my own work	3.9 (1.1)	3.9 (1.1)	3.9 (1.0)	3.9 (1.1)
Local and regional news media as HEI stakeholders	3.8 (1.3)	4.2 (1.1)	4.0 (1.3)	4.3 (1.1)
National news media as HEI stakeholder	3.8 (1.4)	3.8 (1.3)	3.2* (1.7)	4.2** (1.1)
International news media as HEI stakeholder	2.7 (1.8)	2.9*** (1.8)	1.7*** (1.4)	3.2*** (1.6)
Index of news media orientation (Cronbachs $\alpha = .74$)	4.0 (0.9)	4.1* (0.9)	3.7* (0.9)	4.2* (0.8)

Note: M = arithmetic mean; SD = standard deviation; UAS = universities of applied sciences; UTE = universities of teacher education; RU = research universities. The surveyed university leaders replied on a seven-point scale from 0 = “not at all” / “not at all important” to 6 = “very much” / “very important.” Significant differences calculated by Kruskal-Wallis nonparametric test (* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$).

differs significantly from the orientations of UTE and RU leaders. Across all questions, UAS leaders show the highest level of agreement, with social media’s potential for dialogues being the most important feature ($M=3.9$). In contrast, RU leaders consider the influence of social media on their own managerial work to be rather low ($M=2.5$). Overall, however, differences between HEI types are relatively small. The social media orientation of leaders at UTE and RU is very similar.

To explore which factors influence the social media orientation of university leaders (RQ3), we conducted two multiple linear regression analyses using structural information about the HEIs as well as survey-based measures. We found that, on the one hand, structural characteristics (Table 3) are weak predictors of social media orientation ($F=3.214$, $p=.042$, adjusted $R^2=.02$). Both the size of the organization (indicated by the number of students) and the total revenues of an HEI explain little variance (together: nearly 2 %). Leaders at larger HEIs and with comparatively lower total budgets tend to have a higher social media orientation.

Table 3 Multiple Linear Regression Analysis of Social Media Orientation: Structural Characteristics (n = 252, all HEI Types)

Independent variables	β	p
Number of students	.330	.013*
Total revenue	-.262	.049*
Adjusted R ²	.017	

Note: * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, β = standardized regression coefficient. Missing values were handled through listwise deletion.

On the other hand, using survey measurements resulted in good regression models (Table 4) for UAS ($F=4.139$, $p=.001$, adjusted $R^2=.28$) and UTE ($F=3.189$, $p=.006$, adjusted $R^2=.50$) but not for RU ($F=.980$, $p=.505$, adjusted $R^2=-.01$, $n=49$). Regarding the latter, no predictor was significant. Regarding UAS leaders, the objectives of performing well in rankings ($\beta=.245$, $p=.003$) and attracting more students ($\beta=.219$, $p=.010$) were strong predictors of social media orientation. Other nearly significant predictors are the importance of corporations ($\beta=.182$, $p=.054$), as well as students and prospective students as HEI stakeholders ($\beta=.190$, $p=.055$). For UTE leadership, observing HEIs abroad stood out as a predictor of social media orientation ($\beta=.593$, $p=.006$), in addition to the objective of achieving knowledge transfer and impact in society ($\beta=-.339$, $p=.015$). The latter, however, is a negative predictor. In the case of UTE, the objective of knowledge transfer is associated with a weaker social media orientation.

Table 4 Multiple Linear Regression Analyses of Social Media Orientation: Survey Data on the Organization in its Environment, Compared Across HEI Types

Independent variables	Model 1: UAS (n = 146)		Model 2: UTE (n = 40)	
	β	p	β	p
<i>HEI objectives</i>				
Good image and public reputation	.073	.384	−.105	.495
Recruitment of more students	.219	.010**	−.103	.475
Acquisition of research funds	−.090	.276	.211	.172
Knowledge transfer and social impact	−.044	.615	−.339	.015*
Good performance in rankings	.245	.003**	.126	.506
<i>HEI stakeholders</i>				
Own employees	.039	.678	−.011	.950
(Prospective) Students	.190	.055	.033	.855
Alumni	.016	.871	.218	.294
Swiss population	.087	.350	−.063	.791
Political actors	−.117	.192	.147	.533
Corporations	.182	.054	.086	.681
News media	.063	.517	.101	.767
<i>Perceived competitors</i>				
Swiss HEIs of the same type	.017	.857	−.115	.513
Swiss HEIs in general	.060	.516	.306	.124
HEIs abroad	.091	.395	−.056	.762
<i>Observation of other HEIs</i>				
Swiss HEIs of the same type	.105	.317	.003	.989
Swiss HEIs in general	−.079	.440	−.113	.598
HEIs abroad	.110	.351	.593	.006**
Adjusted R ²	.280		.503	

Note: *p ≤ .05, **p ≤ .01, ***p ≤ .001, β = standardized regression coefficient, UAS = universities of applied sciences, UTE = universities of teacher education. Missing values were handled through listwise deletion.

6 Discussion and Conclusion

Building on the literature on the mediatization of organizations in general (e.g., Donges 2008) and HEIs in particular (e.g., Marcinkowski et al. 2013), this study conceptualized the social media orientation of organizational leaders and used survey data to test it for the Swiss higher education sector. Our study reveals that

social media have made their way into university management and communication (Table 1, addressing RQ1). University leaders generally value the use of social media, particularly for dialogic communication, and use social media to monitor how others talk about their organization. Only to a lesser degree do university leaders think that gaining many likes and shares is important for their organization. This shows that university leaders, in the words of van Dijck and Poell (2013), value connectedness over popularity. This is also interesting in light of assessments by communication practitioners in communication departments at Swiss HEIs, who value connectedness and popularity equally and see popularity metrics such as likes and shares as important benchmarks for HEI communication (Fürst et al. 2022b). If Swiss university leaders aim to give priority to the dialogic potential of social media, they would therefore need to set clearer communication goals and allocate resources for communication accordingly.

The lowest agreement among university leaders was found for the question about the influence of social media topics on their managerial work. However, in light of people's tendency to assume that others are more influenced by media than themselves (Davison 1983; Andsager and White 2007), the medium level of agreement with this item was still higher than expected.

The analysis also showed, however, that social media are still seen as less important than news media by university leaders (Table 2, addressing RQ1). News media coverage is strongly used to monitor external perceptions of the organization. University leaders consider it important that their organization attracts much news media attention, and they acknowledge that news media have a rather large influence on their own work. Local, regional, and national news media are seen as important university stakeholders. Leaders of RU show the strongest news media orientation while having a lower social media orientation than UAS and UTE. This aligns with the media coverage of HEIs, with RU being considerably more visible in the news than UAS and UTE (Fürst et al. 2021). Due to the (often substantial) amount of media attention that RU attract, their leaders might consider it less important to stand out on other communication channels, such as social media.

Overall, the social media orientation of Swiss university leaders is at a moderate level, with some differences between HEI types (Table 1, addressing RQ2). RU leaders show the lowest level of social media orientation, closely followed by UTE leaders. UAS leadership reveals a significantly stronger social media orientation, with the strongest agreement across all items. This fits well with a recent social media analysis of the official accounts of Swiss HEIs (Sörensen et al. 2023), which showed that UAS are most active on Facebook and Instagram, with only Twitter being dominated by RU.

Regarding the factors driving social media orientations of university leaders, we found that structural characteristics of HEIs explain little. Both the size and the budget of an organization have a low effect on the social media orientation of its

leaders (Table 3, addressing RQ3). In contrast, HEI objectives, stakeholders, perceived competitors, and the observation of other HEIs – factors derived from the literature on NPM and measured with survey data – proved influential (Table 4, addressing RQ3). The social media orientation of UAS leaders is strongly influenced by the objectives of performing well in rankings and recruiting more students. This influence of rankings (which, in the case of UAS, are often based on students' assessments), student relationship management, and student marketing speaks to the developments and characteristics of UAS in Switzerland. Founded in the 1990s and 2000s, Swiss UAS have experienced tremendous growth in student enrollments over the past 20 years (Lepori 2008; Truniger 2017; Leder 2022, 12). Because their funding is based largely on student numbers, they feel a stronger pressure to attract students than RU do (Lepori et al. 2014; Baumann 2022). In addition, the orientation toward corporations as HEI stakeholders has an almost significant effect on the social media orientation of UAS leaders, which is in accordance with their links to business and industry (Kiener 2013; Lepori et al. 2014; Truniger 2017). Overall, these findings are aligned with studies showing that social media in particular allow for connections between HEIs, students, and businesses (Metag and Schäfer 2019; Vogler 2020a).

Regarding the leadership of UTE, the strongest effect was found for leaders' observations of HEIs in other countries. This might reflect UTE's efforts to find their position within the Swiss higher education system (Altrichter 2015). Founded in the 2000s with a focus on a "very specific segment of tertiary education" (Lepori et al. 2014, 203), UTE feel "urged to legitimate their status as higher education institutions and use internationalization efforts for this purpose" (Leutwyler et al. 2017, 70), such as participation "in many international research networks and projects" (Leutwyler et al. 2017, 72). The analysis also shows that the social media orientation of UTE leaders is negatively influenced by the objective of achieving knowledge transfer and impact in society, meaning that a stronger strive for knowledge transfer is associated with a weaker social media orientation. This is likely connected to "the specific function teacher education institutions fulfil for a field of practice and for a segment of the labour market" (Altrichter 2015, 25). As teacher education is at the core of their knowledge transfer and societal impact, UTE might see less need to invest resources in their public communication (Fürst et al. 2022a, 527) and to communicate on social media (Sörensen et al., 2023).

Regarding RU, the independent variables included in the regression analyses did not significantly contribute to explaining the (lower) social media orientation of this HEI type. However, Swiss RU have the longest history within the higher education system. Many Swiss RU are regularly at the top of international rankings, have good reputations, and gain high visibility in news media due to their research strength (Vogler 2020a, 434; Fürst et al. 2021). This could explain why RU leaders attach a somewhat lower importance to social media. Moreover, as mentioned

above, RU typically perceive a lower competition for students than UAS do and, therefore, likely perceive a lesser need to invest resources in connecting with parents and prospective students via social media.

The strength of this study – its focus on Switzerland as an under-researched yet specific case – is also a partial limitation: The results cannot easily be generalized beyond Switzerland. Although the Swiss higher education system has undergone transformations similar to those in many other Western countries, it is also a particular case due to the rather young history of its UAS and UTE and very well-resourced HEIs in general (Braun 1999; Fumasoli and Lepori 2011; Altrichter 2015; Truniger 2017; Swiss Academies of Arts and Sciences 2021).

The comparison of HEI types was rendered somewhat difficult by differing response numbers; however, these numbers reflected actual differences between the HEI types regarding the size of leadership. Studies in other countries, as well as cross-country comparisons, could expand our findings regarding similarities and differences between HEI types, which would enrich the scarce body of knowledge regarding HEI leaders' social media orientation. Moreover, the concept developed here could be used in research beyond higher education, for instance, regarding the social media orientation of leaders in the corporate sector or of non-governmental organizations.

Another limitation of this study lies in its standardized research design. With its inclusion of all Swiss HEIs and its focus on social media orientation in general, it is beyond the scope of this quantitative online survey to shed light on specific organizational processes or the role of (and differences between) specific social media platforms. Future studies could apply a qualitative research design to learn more about the conditions and processes by which social media gain particular importance, the ways in which the managerial work of university leaders is influenced by social media, and whether university leaders are satisfied with their organizations' use of social media. It would also be important to differentiate between individual social media platforms. In the Swiss case, for instance, Twitter, Facebook, and Instagram are crucial social media platforms, but their importance differs across different HEI types (Sörensen et al. 2023).

Future studies should alleviate these limitations to further improve our understanding of the role of social media for universities. This paper is a step in this direction. It applied the existing scholarship on the mediatization of science and moved it beyond the previous focus on news media by developing a concept of leaders' social media orientation, thereby adding to the growing body of research on digitalization in higher education.

7 References

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