

The Role of Influencers for Young People and its Consequences for the Development of Teaching Competence in Nutrition and Consumer Education

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Abstract. In our digital multi-option society, material, social and emotional needs are satisfied to a significant extent through offers from the profit-oriented and highly digitized market system. Social media emerges as a relatively new meta-level between market and consumer regarding the complex factors influencing individual consumption routines. Social media influencers are a central factor in these dynamics as they serve as points of orientation for young people, who are regularly exposed to influencer content on social media platforms and the values and ideologies they reflect and reproduce. Young people's consumption choices regarding nutrition, too, are significantly influenced by their socialization on social media. For nutrition and consumer education, this means that educators need a deeper understanding of the impact of influencers' media content on the nutritional and consumer behavior of children and adolescents in order to grasp their key role as reference points and symbolic power. The EKo-K.I.S.S. project, supported by the 'Zukunftsfonds Steiermark', addresses this issue by developing media-didactic concepts for nutrition and consumer education at schools and universities based on social science studies. This paper contributes to this project by addressing the role of influencers and its implications for the development of teaching competence in nutrition and consumer education. Based on results of a quantitative survey amongst Styrian pupils and educators, it shows the importance of this topic in education and points out ways of integrating it in educational practice.

1 Introduction

The use of digital media and devices has strongly risen in recent years (see Bertsche/Como-Zipfel 2016) as digital media have become omnipresent in practically all areas of our lives. Therefore, the sociologist Simon Lindgren (2017: 5f.) assumes that we should speak of a digital society. According to Oliver Bertsche and Frank Como-Zipfel (2016: 238f.), the current changes brought about as a result of digitalization are based on two factors: technical progress on the one hand and frequency of use on the other. Above all, the development of new hardware and intelligent software for smartphones has significantly contributed to this

(Beranek/Hammerschmidt/Hill/Sagebiel 2018: 11). Friedrich Krotz (2018: 30) emphasizes that these changes are based on people's needs and wants, which are due to processes of individualization in the context of economization and globalization.

We experience rapidly changing media (technologies) and, thus, communicative practices: new media (e.g., smartphones, tablets, etc.) and media services (such as messenger services like WhatsApp, social media platforms) are constantly emerging, old media are replaced by newer ones (e.g., music streaming instead of CDs), traded forms of communication such as letter mail are becoming increasingly insignificant or even obsolete, and new technologies seeking to facilitate our daily lives are gaining importance (an example are voice assistance systems such as Siri, Alexa, etc.). Media are no longer used for information only, but also for other purposes (e.g., to collect data). People change in their communicative and media-related actions and shape their social relationships in an altered way (Krotz 2018: 27). "In this respect, people experience this change not only as an increasing presence and growing importance of the media, of which there are also more and more, but also as their increasing penetration into all social spheres and human fields of action, which are simultaneously reshaped in a media-related way" (Krotz 2018: 28, translated).

1.1 Mediatization

In German-speaking countries, the term 'Mediatisierung' (see Kutscher/Ley/Seelmeier 2015; Krotz 2008) describes this phenomenon of digitalized transformation (see Klinger/Mayr 2021). In communication sciences and media education, 'digitalization' is understood as the latest form of 'mediatization' (Beranek et al. 2018: 10), following the introduction of printing press, radio, and television (Tillmann 2017: 7).

Mediatization implies a change in social communication through the development and incorporation of technologies and new (digitally coded) media. This is accompanied by the transformation of realities that are constructed through communication (Krotz 2008: 53). Mediatization considers two sides of communication – technical and social changes. It refers to the transformation of human beings and their everyday lives, as well as their social relations. Therefore, digital media influence how we learn and work, how we organize our family life, how we establish and maintain different kinds of relationships etc. (Krotz 2008: 53; see Klinger/Mayr 2021). For Krotz, consequences of mediatization processes are not only shaped by technology but are part of people's appropriation of media and technology and their integration into their everyday lives (Krotz 2007: 12). Mediatization has always determined people's communicative practice since societies have always been shaped by the media available at a given time. Book printing, for example, radically changed the dissemination of knowledge. Its mass availability had an impact on literacy, the

emergence of institutional education and, thus, on the socialization of further generations. The digital forms of media lead to an upheaval in a similarly strong dimension, the consequences of which are not foreseeable (Krotz 2018: 14). This process is neither linear nor unidirectional, but “unfolds via a complex web of individual, social, economic, political, technological, and cultural developments and interactions” (Krotz 2018: 15, translated). This is not caused by the transformation of media itself, but by changing living conditions leading to changing needs and requirements, which are reflected in new media (Krotz 2018: 15).

A distinctive feature of the current transformation of media systems is the transition into a single, interconnected, digital, computer-based infrastructure organized by large corporations, which has become the center of all symbolic operations in society. In it, people’s modes of action, such as shaping relationships and seeking information, are taken up by corporations to organize and make them economically useful (Krotz 2018: 35). Overall, this leads to more fields of action and social worlds. In these worlds, relevant forms of social practices and meaning making have become inextricably intertwined with media (Roth-Ebner/Krotz/Rath/Kalina 2018: 16) and have simultaneously been economized.

1.2 Social Media Influencers

Orientation-giving social media influencers are a central factor in all these dynamics, especially for young people, as they already command more influence than classic media formats (see IMAS International 2017; Kilian 2016).

“Influencers are people who, due to their digital network, their personality strength, a certain topic expertise and communicative activity, have an attributed credibility for certain topics and can make these accessible to a broad group of people via digital channels. [...] Influencers [usually] use multiple channels to communicate their topics” (Schach 2018: 31, translated).

Influencers are therefore an important and attractive component of corporate marketing and communication strategies such as branding, image, sales and product launches (Zerres 2020: 14). Thereby, the influencer-framework is built upon three cornerstones (Solis/Webber 2012: 10): *qualitative and quantitative outreach* (follower count, credibility, and image), *relevance* (follower trust, degree of authority), and *resonance* (influencer engagement, intensity and frequency of interaction with followers). Despite their lower outreach the group of so-called micro- and nano-influencers has particular relevance for marketing companies, due to their high authenticity levels as well as increased interaction and sharing of interests with their followers (Kirchmeier 2018: 311).

The significant economic factor can be seen via net revenue statistics of influencers, and COVID-19-related circumstances seem to have accelerated this trend via the rise

of e- and social-commerce businesses through the growth of online shopping. According to the “Influencer Brands Monitor” by Buzzbird, Splendid Research and Pilot (see Buzzbird 2021), investments in influencer marketing continue to rise: In 2020, 18 % more budget was spent on influencer marketing. Globally, the growth of influencer marketing increases from 9.7 billion in 2020 to 13.8 billion in 2021.

As young people spend a considerable part of their daily lives on social media (see Waldner/Mittiscek 2020), they are regularly and specifically confronted with the lifestyles of influencers (Hirschfelder 2018: 287) and their advertisements through suggestions placed on social media platforms. According to the Upper Austrian Youth Media Study (Education Group GmbH 2019), the data of which can be used as a benchmark for Austria, “just under two-thirds of young people [...] follow at least one influencer” (ibid: 7, translated) with most of them following several. This finding is supported by data from the EKo-K.I.S.S. study (see chapter 2), where almost 70 % of pupils in fifth grade and above follow influencers on social media sites (Waldner/Mittiscek 2020: 171). For 10 % of young people, opinions of YouTube- and Instagram-stars play an important role in their knowledge of the latest trends, according to their own statements (Education Group GmbH 2019: 86f.). In the EKo-K.I.S.S. study, a significant part of the pupils questioned attributed a relevant impact to influencers on their own health and personal environmental behavior (Waldner/Mittiscek 2020: 176f.).

Along with the massive number of fans, the career aspiration of ‘influencer’ has become omnipresent among young people and is understood as a “normal profession in today’s digital world” (Bitkom Research 2018: para. 5). This is evidenced by numerous training courses and tutorials for this occupational field, offered by training institutions and through (semi-)academic courses. In addition, institutions such as professional associations for influencer marketing and various influencer agencies bear witness to the increasing professionalization of this field of activity (Altendorfer 2019: 76).

1.3. Media Socialization of Young People

It becomes apparent that especially today, young people experience a very specific kind of media socialization, which is completely new when compared to earlier generations of ‘digital immigrants’. In this process, they outsource certain parts of their everyday lives and social relationships to the internet and thus ‘live partly online’, “which on the one hand exposes them to increasing influence, but on the other also enables diverse new forms of expression, encounters and experiences – with all of this applying, albeit more slowly and sometimes not as extensively, just as much to adults and their lifelong socialization processes” (Krotz 2017a: 31, translated). Adults, due to lacking their own experiences, cannot comprehend these processes in the same way,

as they have undergone completely different media socialization than children and adolescents growing up in today's media society (De Witt/Czerwionka 2013: 10).

1.3.1. Educational accompaniment in the process of media socialization

The EU-Kids Online survey in Germany (Hasebrink/Lambert/Thiel 2019) showed that about half of the parents in question worried about their child seeing inappropriate content or being contacted by strangers on the Internet (ibid.: 36). Even if 44 % of the parents regularly talked to their children about their online activities, only 17 % conducted joint online activities (ibid.: 8). Furthermore, only every seventh parent was connected with their child's social media profile, and active accompaniment was shown to decrease with increasing age (ibid.: 39). These statistics are surprisingly low when compared to the number of people who were concerned. It is also interesting to note that parents seemed to have massively underestimated the amount of negative online experiences their children had been subjected to from receiving sexual content and messages (according to their own account) (ibid.: 38).

It becomes clear that digital socialization often takes place with little connection to or even no support by the parental home. Young people are exposed to a high degree of personal responsibility, in many cases due to their guardians' lack of digital skills. Nevertheless, it is currently in question which amount of this unaccompanied personal responsibility is explicitly desired by young people and how much of parents' rather low level of accompaniment is built upon young people's emancipation and differentiation from their parents. As Krotz (2017a: 36, translated) says, young people "have also learned to appreciate the possibilities of digital media as a means of demarcation against adults and outdated structures. They use their practical abilities to handle them intuitively, in part also to immunize themselves against learning processes and the social demands expressed in them, because the 'digital world' seems more relevant to them and is also more easily accessible."

Currently, schools also provide inadequate support for young people. In the EU-Kids Online study, around one quarter of young people surveyed stated that they were told at school why certain things on the Internet are good or bad, and almost a fifth stated that they were shown at school how to use the Internet safely (Hasebrink et al. 2019: 42). This lack of guidance, reflection, and knowledge transfer in social media by parents and teachers alike leads to neoliberal, capitalist forces having free play in the digital space, with children and young people being given little to no guidance in their digital socialization and being ill-prepared overall for the dangers of digital reality.

Exploratively recorded pedagogical viewpoints of educators in nutrition and consumer education (see Waldner 2018) pointed out educators' need for more knowledge and didactic, strategic assistance for future media education teaching strategies regarding influencers and the significance of the transported content (ibid.:

113f). This observation marked the starting point of the project EKo-K.I.S.S. that aims to make visible how this digital reality and the accompanying impact of influencers affect young people in terms of nutrition, health, consumption, and gender equality, and why these topics must be reflected upon in contemporary education.

2 Project Overview

The EKo-K.I.S.S. project is a cooperation of the University College of Teacher Education Styria (Institute for Secondary Teacher Education), the University of Graz (Institute for Educational Studies) and the Styrian Nutrition Center (STERZ). This cooperation project addresses questions on the topic of 'influencers in nutrition and consumer education' since the beginning of 2020 and connects the topics of social media, influencers, the reality of students' lives, as well as teaching practices towards consumerism, nutrition, and health. The overarching aim is to derive gender-sensitive pedagogical concepts and recommendations of action for nutrition and consumer education from the results of quantitative surveys combined with an approach of qualitative research to strengthen teachers' competencies regarding social media aspects (cf. Waldner/Mittischek 2020).

2.1 Key Questions at Various Levels

On the basis of initial sighting of influencer content and influence assessment in literature and social media, key questions were framed at the following levels:

Subject level 'Pupils' (schoolchildren from fifth grade onwards): This level is aimed at gathering information about nutrition- and consumption-related attitudes as well as related information about the receptive behavior of adolescents towards social media influencers, including gender roles and stereotypes. Therein, we pursue questions as to whether and how such an online reality is judged by children or implemented/acted out offline. The key question here is whether and what pupils need to know about these topics at school.

Subject level 'Educators' (schoolteachers, university lecturers and students of teacher education): At this level, questions are explored on how prospective or active educators evaluate the topic of influencers and related content, and whether or how teachers already transport, reflect upon and analyze influencer content in the context of teaching. What do educators demand as support (e.g., in terms of media literacy, methodical-didactical recommendations) to implement the topics in school together with their students?

Meta-level 'Experts' (media education in youth work): We want to shed light on how the topics are seen by experts from the field of open and institutional youth work.

Therefore, we raise the question of which measures are considered suitable for pedagogically dealing with the phenomenon in context of experience with the lifeworld of the youth. However, due to space limitations, we cannot address this issue in this article and focus is given to the first and second level.

2.2 Derivation from the Results and Project Aims

The aim of the project is to derive impulses and approaches for future gender-sensitive pedagogical means that correspond to the diverse realities of young people's lives and that make the topic of 'social media/influencers' in the context of sustainable nutrition, health and consumption a subject of discussion at different levels. Derived recommendations are intended to serve as elements for strengthening teaching competence in the thematic fields examined. By this, teaching staff should be enabled to apply innovative and critique-promoting methods, which are suitable for pedagogically dealing with the phenomenon at school, particularly in relation to subject didactics in nutrition, health, and consumer education.

In this article, parts of the results are presented, and specific attention is given to the role of influencers and the resulting consequences for the development of teaching competence in nutrition and consumer education.

2.3 Methodical Approach

For the EKo-K.I.S.S. project, a multidimensional, cyclically organized research approach was chosen, which is characterized by interdisciplinarity and triangulation of data, methods, and theories. Through the strategy of a hermeneutic approach as an integrative element, the quantitative analysis is expanded by qualitative perspectives, in which social facts and processes are made comprehensible through individual references. All parts of the research design are processed and evaluated in a gender- and diversity-sensitive manner. The open and adaptable multistage research design includes the following steps (Fig. 1):



Fig. 1. Research design (own illustration)

The research incorporates perspectives of schoolteachers, university lecturers and students of teacher education ('educators'), as well as children and adolescents at school ('pupils'). Quantitative data was collected via online questionnaires (created with the online survey tool 'LimeSurvey'¹) and analyzed with IBM SPSS Statistics². The qualitative research approach complemented our quantitative research with a social-constructivist perspective (cf. Scholl 2016: 18). To evaluate the qualitative research areas, we worked with grounded theory (cf. Breuer 2009).

In this article we specifically focus on the results from the following research steps (Tab. 1):

Table 1: Research steps for article data.

Research step	Method	Time of survey	Sample
Quantitative research	Online questionnaire survey with Styrian pupils from fifth grade onwards	June/July 2020	n = 827 (CI*: 99 % +/-4)
	Online questionnaire survey with Styrian educators (schoolteachers, university lecturers and students of teacher education)		n = 385 (CI*: 95 % +/-5)
Qualitative research	Group discussion with eighth grade Styrian pupils; duration 1.5 h	March 2021	n = 6

(*CI: confidence interval)

¹ LimeSurvey Community Edition, Vs. 3.27.0+210525

² IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

The two online questionnaire surveys were accomplished with support of the Styrian Department of Education and the University College of Teacher Education Styria. The quantitative results have a high data quality due to the representative participation rate in proportion to the total population size. The educators' questionnaire was completed by $n = 385$ people, resulting in a confidence level of 95 % with a margin of error of ± 5 % for a population size of $N = 14,146$ individuals³. The school principals and class heads attempted to reach a population of $N = 75,170$ Styrian pupils from fifth grade onwards⁴ of the secondary level schools administered by the Styrian Department of Education. This online questionnaire was completed by $n = 827$ pupils, resulting in a confidence level of 99 % with ± 4 % margin of error.

Results from a group discussion with eighth-grade schoolchildren ($n = 6$) were used to complement and substantiate data from the quantitative pupils' questionnaire.

3 Addressing the Influencer Issue at School – Consequences for the Development of Teaching Competence

Project findings so far show that young people need reinforcement for their self-reflective decision-making processes in this thematic context. A bridge for young people between subject expertise, as well as media-, consumer- and economic literacy regarding influencer content and impact can be built by educators. Accordingly, the question is how to bridge existing gaps between young people's perceptions, opinions, and actions via pedagogical interventions in nutrition and consumer education (see Waldner/Mittischek 2020).

For this purpose, it is necessary to first map out pupils' demands, because it is essential to consider and include the reality of young people's lives in pedagogical activities to fulfil the educational requirement in terms of lifeworld and future-oriented content. Based on this, we secondly look at whether and how educators assess the situation or already transport, reflect on or analyze influencer content in class. The aim is to discuss further approaches, which will serve as elements for strengthening teaching competence in relation to nutrition, health, and consumer education.

³ The educator's online questionnaire was sent to all secondary level schools administered by the Styrian Department of Education, with request to distribute it among the teachers. Additionally, it was distributed amongst the university lecturers and university students of teacher education at the University College of Teacher Education Styria.

⁴ The sample includes pupils from the age of 10 years old up until the end of school (≥ 18 years).

3.1 Results: Perspective of Pupils

In the following, results relating to social media and influencers in the context of ‘school and teaching’ from the comprehensive, quantitative study amongst Styrian pupils are presented. To provide evidence from the group discussion with eighth-grade pupils, these are supplemented in some parts with quotes from the group discussion.⁵

3.1.1 Social media competences of pupils

Today’s young people spend much of their time online, experiencing digital content, opportunities, and limitations as a natural part of their reality. The young people surveyed in the EKo-K.I.S.S. pupils’ questionnaire have been shown to spend an average of 3.25 hours (std 1.33) online every day, around 2.5 hours (std 1.38) of which are spent on social media. Online time has been shown to increase with age (Waldner/Mittiscek 2020: 169, tab.1).

Our data show that on average, female respondents spend significantly more time per day on social media (2.6 h/d; std 1.34) compared to male respondents (2.0 h/d; std 1.38) (Fig. 1a). At the same time, more female respondents follow influencers on social media sites than male respondents, respectively (Fig. 1b), while there are no significant differences in online time in general.

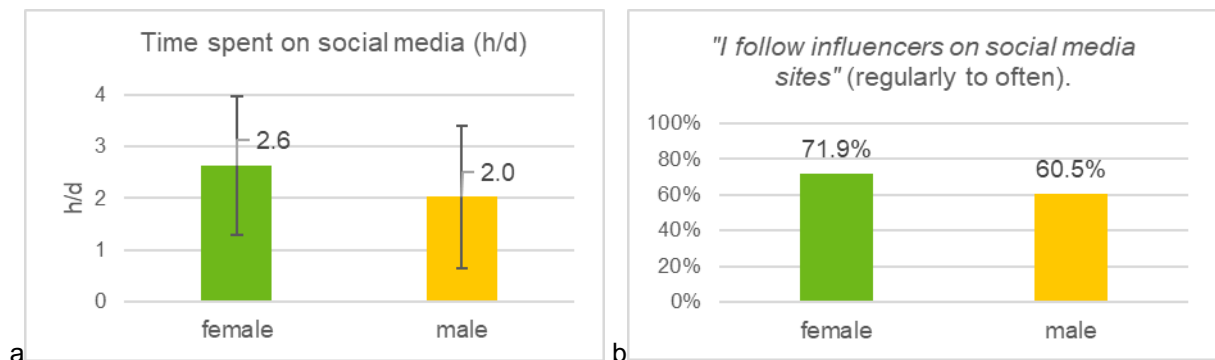


Fig. 2a. Time spent on social media per day according to gender. Fig. 2b. Percentage of group of female vs. group of male respondents following influencers on social media sites (female respondents: n = 585; male respondents: n = 233; total respondents: n = 827)⁶

⁵ Quotes were translated into English from the German transcript, with any stylistic inaccuracies occurring due to the direct translation of colloquial expressions.

⁶ Due to the small number of respondents defining themselves as *diverse* (n = 9), the results of this group cannot be considered as representative and therefore cannot be directly compared with the female and male respondents, respectively. Therefore, they were not considered separately in the evaluation.

Pupils' responses to questions on how they rate their own knowledge of social media and influencers compared to their teachers (shown in Fig. 13 in comparison with teacher statements) revealed that the vast majority considered themselves more adept at social media than their teachers (~73 %). Surveyed pupils did not seem to have an overly high opinion of their teachers' social media skills in general. Furthermore, only 13.1 % felt that many of their teachers were now more comfortable with social media than they had been before the COVID-19 pandemic (and the ensuing distance learning; see Fig. 13).

This result was also confirmed in the group discussion conducted with eighth-grade schoolchildren during the pandemic in spring 2021. Here the moderator asked the pupils: "Do you feel that you know more about social media and the Internet than your teachers?" The pupils stated the following: G1: "Yes? (nods several times) Much more.", G3: "Yes." (someone laughs).

3.1.2 Importance of the topic 'social media and influencers' in the context of schools

Pupils' responses to questions about whether they want to learn more about social media and influencers in school and whether it is already part of current lessons are shown in Fig. 3. Here it can be noted through the answers of more than half of the respondents that social media and influencers are part of their current educational plan.

Furthermore, our data shows that with increasing age, there is a simultaneous increase in the number of statements affirming that 'social media' and 'influencers' are part of current lessons at school ($r = -0.254$, $p = 0.000$; Fig. 4).

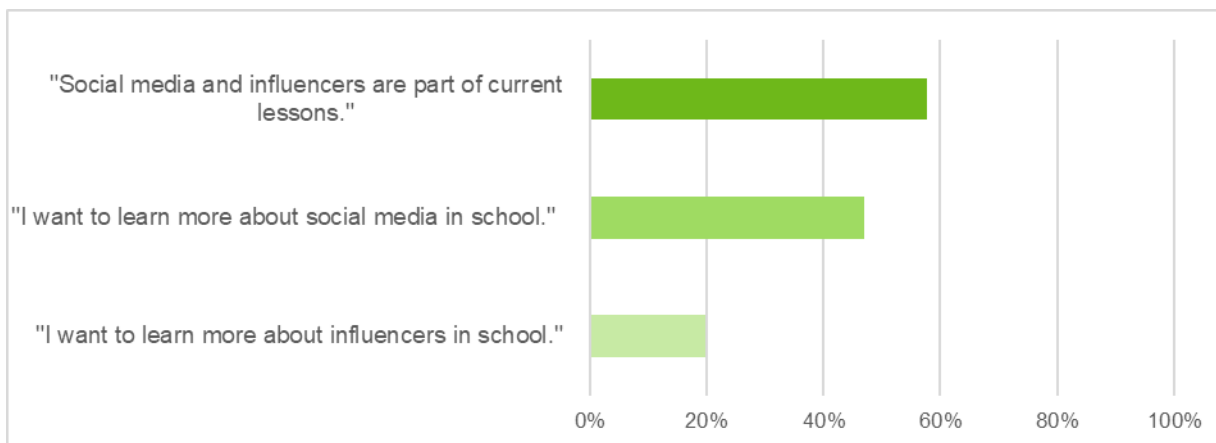


Fig. 3. Answer frequency to various questions about *social media at school* ('fully to rather applies'; n = 827)

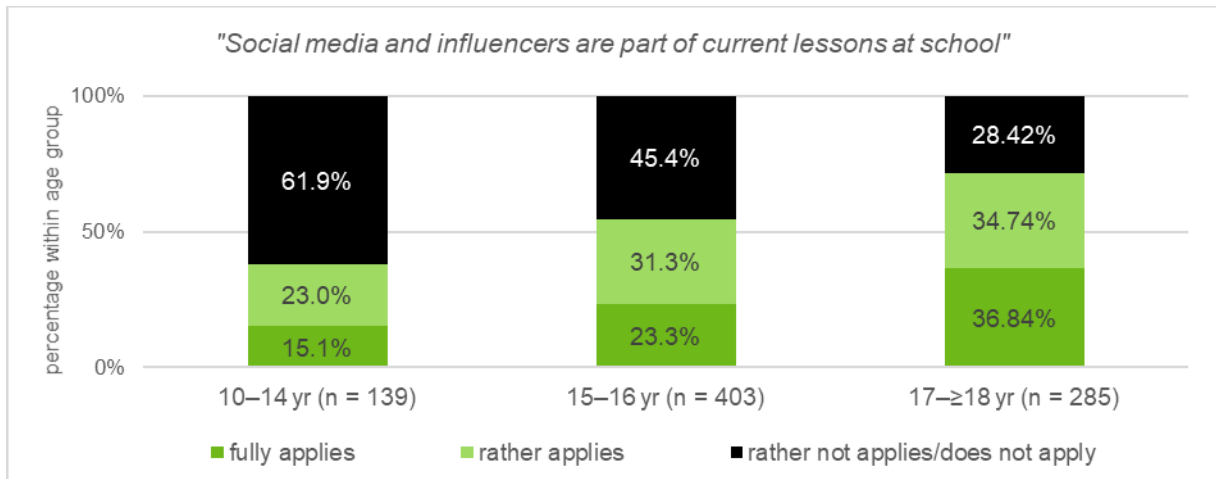


Fig. 4. Answer frequency to the question about ‘social media being part of school lessons’ according to age groups

However, it is not possible to draw conclusions about the type/method as well as quantity or quality of the integration of these topics regarding school lessons. Statements of the group discussion on this were rather uncertain and reflected selective talks of a few hours (not necessarily in every school level). The pupils mainly mentioned topics about online bullying and safety on the Internet:

G3: *“Well, I think in the second [grade] there was something against bullying and online and so, we learned that already, but it was, I think, only one hour or so.”* G1: *“About Mobbing. Yes!”* G3: *“But otherwise not at all.”* [...] G1: *“A two-hour (lecture)... Well, there was some man, and he told us, so...um, watch out for bullying, and security and hackers and things like that.”* [...] D1: *“Well, I changed schools first, [...] um, [...] so we had individual project days, and every time [every year] we had at least two project days about that.”*

In addition, the pupils stated opportunities for elective subject groups to practice creating videos or websites, whereby the underlying focus had also been on rules on the Internet:

G3: *“Well, we also have elective subjects at school, and... well, I'm in [note: attend] an elective course where we also work a lot on the topic of the Internet. We've already made videos about internet safety rules and safety measures.”*

3.1.3 How should the topic ‘social media and influencers’ be addressed at school?

The pupils were asked which social media topics they would like to learn more about at school (Fig. 5): Here, legal topics (more than half of the respondents) lead ahead of content reflection (almost 50 % of total respondents), followed by technical aspects

and general introduction to social media handling (both approx. 35 % of total respondents). It is noticeable that personal information on influencers or information on 'how to become an influencer' tended to be left out of school, which also fits in with the information that around 80 % of the questioned pupils did not (necessarily) want to learn more about influencers at school (see Fig. 3).

For various items, there are differences in relation to gender (Fig. 5). For example, the topic 'technical knowledge' was selected significantly more often by male respondents (48.5 % vs. 30.3 % of total female respondents). Conversely, significantly more female respondents (54 % vs. 39.9 % of total female respondents) picked the topic 'discussing and questioning content (reflection and criticism)'. Both findings point to a classic division of roles into 'social' (girls) and 'technical' (boys) and clearly show the importance of a gender-sensitive learning setting.

If you look at the selected topics by age group (Fig. 6), the oldest group (17 to ≥ 18 years) wanted to learn much more about legal topics and wished for far more discussion about and reflection on social media at school than the younger pupils. The youngest group (10 to 14 years) preferred technical topics and social media introduction over the other two groups. It is the same with personal topics about influencers and how to become an influencer. These two topics were of little interest to the oldest group, as was the meaning of being an influencer.

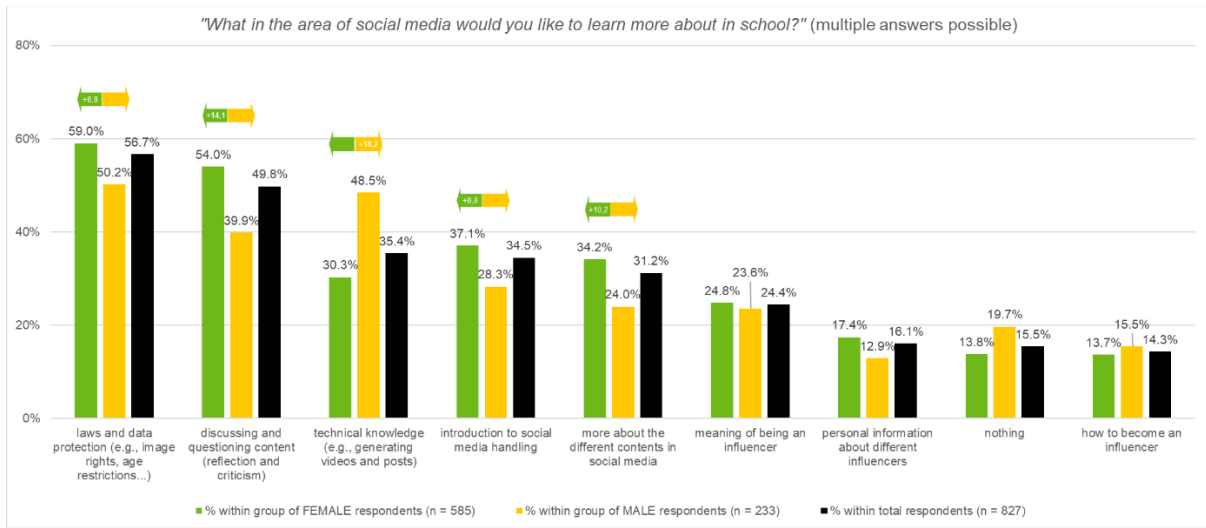


Fig. 5. Social media topics the questioned pupils wanted to learn more about in school (multiple answers possible), shown according to total number (n = 827) and gender distribution⁷

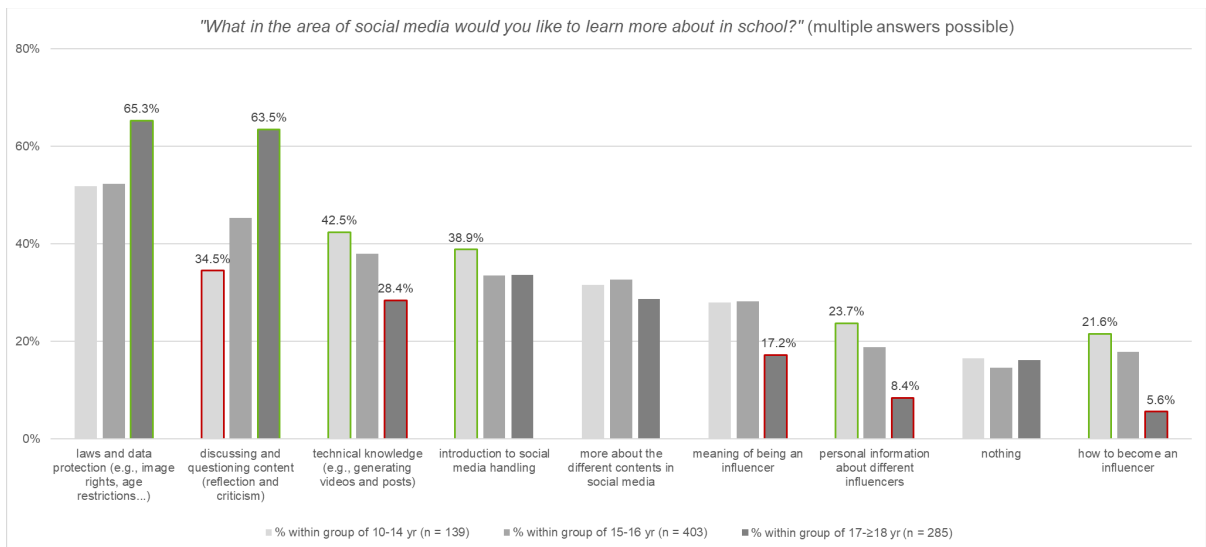


Fig. 6. Social media topics the questioned pupils wanted to learn more about in school (multiple answers possible), shown according to age groups (green frame: significant higher percentage within age group compared to other age groups)

⁷ Due to the small number of respondents defining themselves as *diverse* (n = 9), the results of this group cannot be considered as representative and therefore cannot be directly compared with the girls and boys, respectively. Therefore, they are not considered separately in the evaluation.

groups; red frame: significant higher percentage within age group compared to other age groups; n = 827)

In the group discussion, the pupils also discussed how they would imagine social media in the classroom. A non-compulsory course form was considered conceivable, but they expressed doubt that everyone would take it seriously enough (especially younger kids are assumed to be more disrespectful), where only grading would be a solution.

G3: “[...] So if you incorporate something like that into school – more about social media – but for voluntary students who really want to, but are not required to [...].”

When it came to the question of who could teach these subjects, they tended to speak in favor of external experts, whom they attributed more expertise to than their teachers and would also take more seriously. Nevertheless, in some cases they also expressed a certain lack of trust in a “complete stranger”: *G3: “[...] Yes, from people who are well-versed, yes... but somehow with teachers, who are not versed – rather not.” [...] “Exactly, people are taken more seriously. It’s the same with me, I take teachers seriously too, but when other people come to school, somehow experts, then I know they know their stuff and can somehow teach something, so yes.”*

The pupils certainly considered themselves to be well-versed enough in social media topics, even though they did not necessarily trust themselves to convey it in class as experts (without a teacher), because they thought that their peers were not likely to listen to them or that younger people were not respectful enough.

B1: “But whether you listen to your peers...” (M3 shakes his head) “...If some fourteen-, fifteen-year-old joins our class (M2 shakes his head negatively) and then teaches like this, then, uh, it’s probably even less effective.” [...] G3: “Well, I would say that the students in the first and second classes are nowadays kind of much more...” B1: “Disrespectful.”

In general, the tendency among the panelists suggests that they wanted to learn less ‘about’ social media and more about ‘using social media as a tool’ to address a variety of topics. This should form a cross-section in all subjects and there should be more active implementation rather than being given selective talks (the contents of which are also quickly forgotten again, in their opinion). They also emphasized the importance of seriousness and that they really wanted to learn something, preferring a hands-on approach: *M1: “[...] You learn much more when you do something.”* (e.g., video and website production).

3.2 Perspective of Educators

In the following, we present an extraction of the results from the comprehensive, quantitative study among Styrian educators (schoolteachers, university students and

lecturers of teacher education). Even though more comprehensive data was collected, in this article we focus on the main findings according to the article's perspective.

3.2.1 Description of questioned educators in terms of activity fields

Most of the respondents (n = 385; see Fig. 7) are either university students of teacher education and/or are working as teachers at secondary or pre-vocational schools⁸ ('Mittelschule', MS & 'Polytechnische Schule', PTS). Since multiple answers regarding this were possible, individual participants may have been working in several different fields. There is broad age diversity among the participants, resulting in the representation of thoughts of different age groups. Nevertheless, it should be noted that the largest response group was that consisting of university students of teacher education (n = 130). This group is also the largest within the youngest age group. In all other age groups, secondary school teachers ('MS/PTS') form the small majority. 49.1 % of the respondents stated that topics around nutrition, health and consumption are part of their curriculum. For 31.2 % this was not the case and they would not address it in class, while 19.7 % had addressed the topic although it is not part of the curriculum (Fig. 8).

⁸ The designations of the school types are taken from the English-translated website of the Austrian Federal Ministry of Education, Science and Research:
https://www.bmbwf.gv.at/en/Topics/school/school_syst/st.html [04-21-2021]

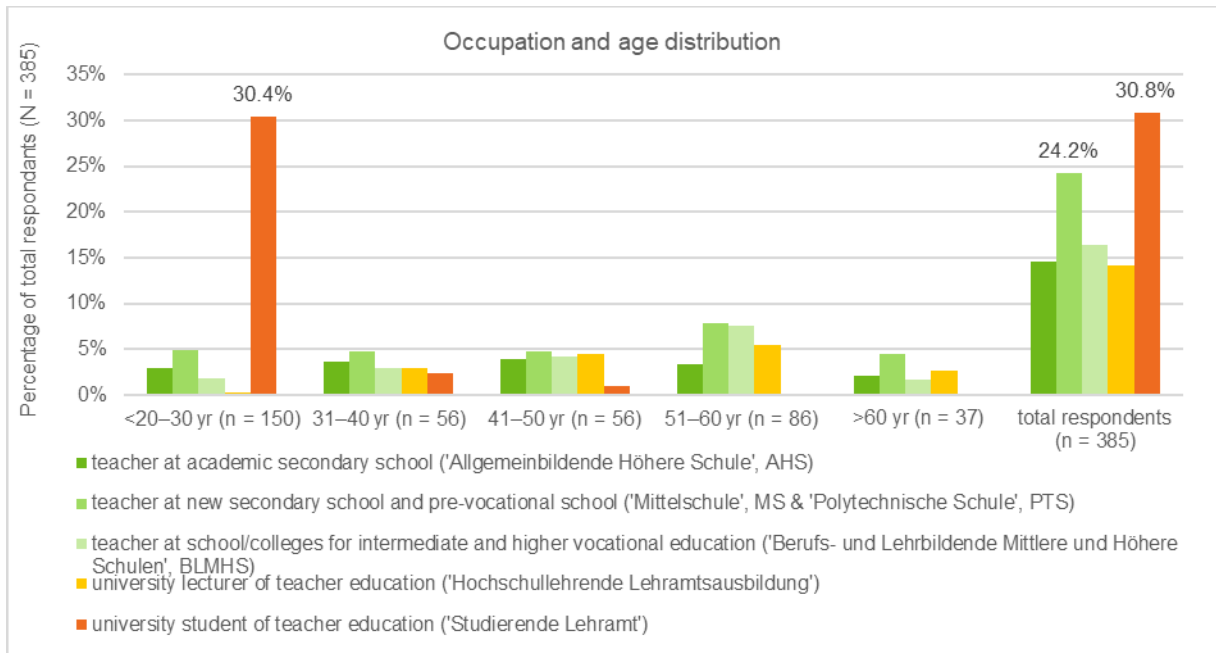


Fig. 7. Occupation of respondents (multiple answers possible) according to age groups⁹; frequencies shown are percentages of total respondents (n = 385)

⁹ Note: Due to the small sample size, the age group of those under 20 (n = 12) was integrated into the group of '20 to 30 yr' for evaluation. According to profession, '<20' is not younger than 18 years old since in Austria tertiary education does not start before the age of 18.

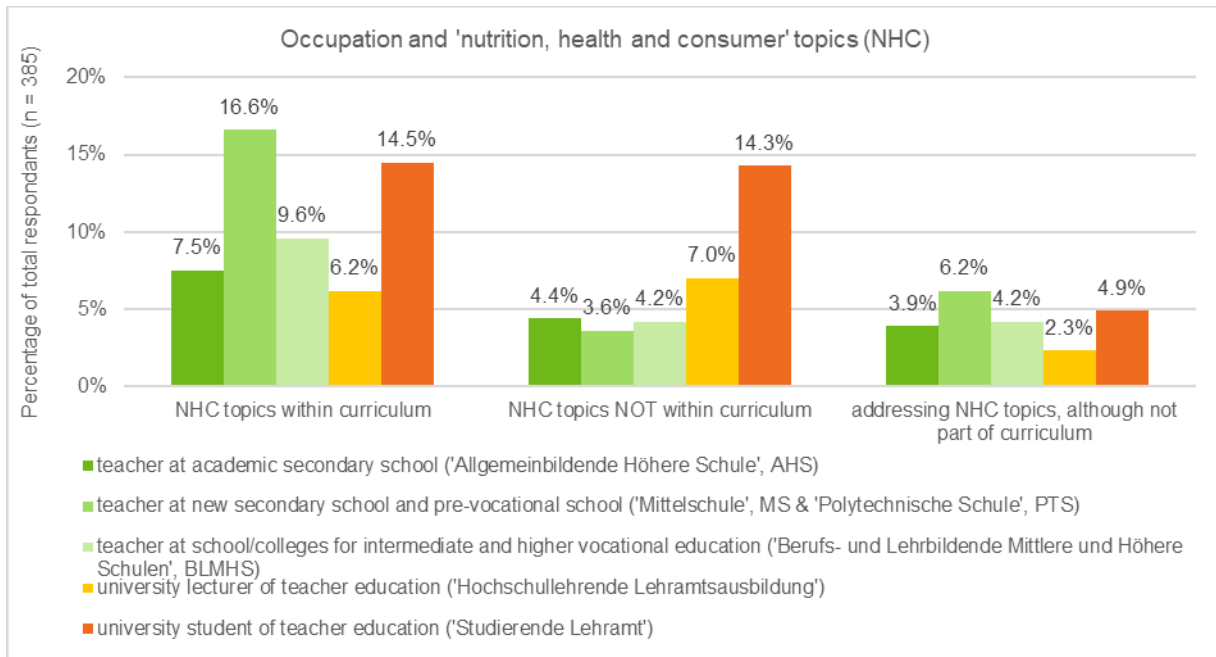


Fig. 8. Occupation of respondents in relation to curriculum-anchored nutrition, health, and consumer topics; frequencies shown are percentages of total respondents (n = 385)

Here it is shown that almost 50 % of the respondents dealt with the topic of nutrition and consumer education and that it was part of their everyday work.

3.2.2 Social media habits of educators

Educator respondents are shown to have spent significantly less time on social media than pupils (those who used social media were included in the analysis here). Among educators, just under 4 % reported spending 'no time on social media' (Fig. 9).

As expected, adults used social media platforms to a different extent than the younger people, or other platforms altogether: Surveyed educators, for example, used Facebook more frequently than the questioned pupils, but Instagram, Snapchat and TikTok much less. Pinterest was also used less than among the schoolchildren (and, interestingly, Twitter as well). On the other hand, LinkedIn and Vimeo were used more frequently by the questioned adults when compared with the younger people (Fig. 10).

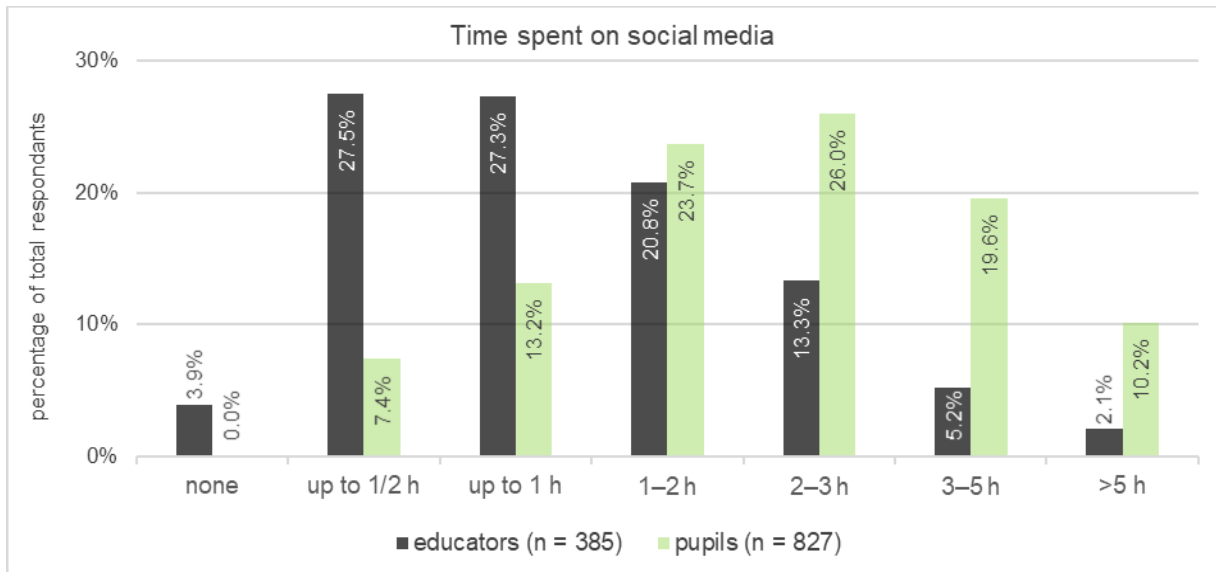


Fig. 9. Comparison of time spent on social media by educators and pupils at the time of the survey

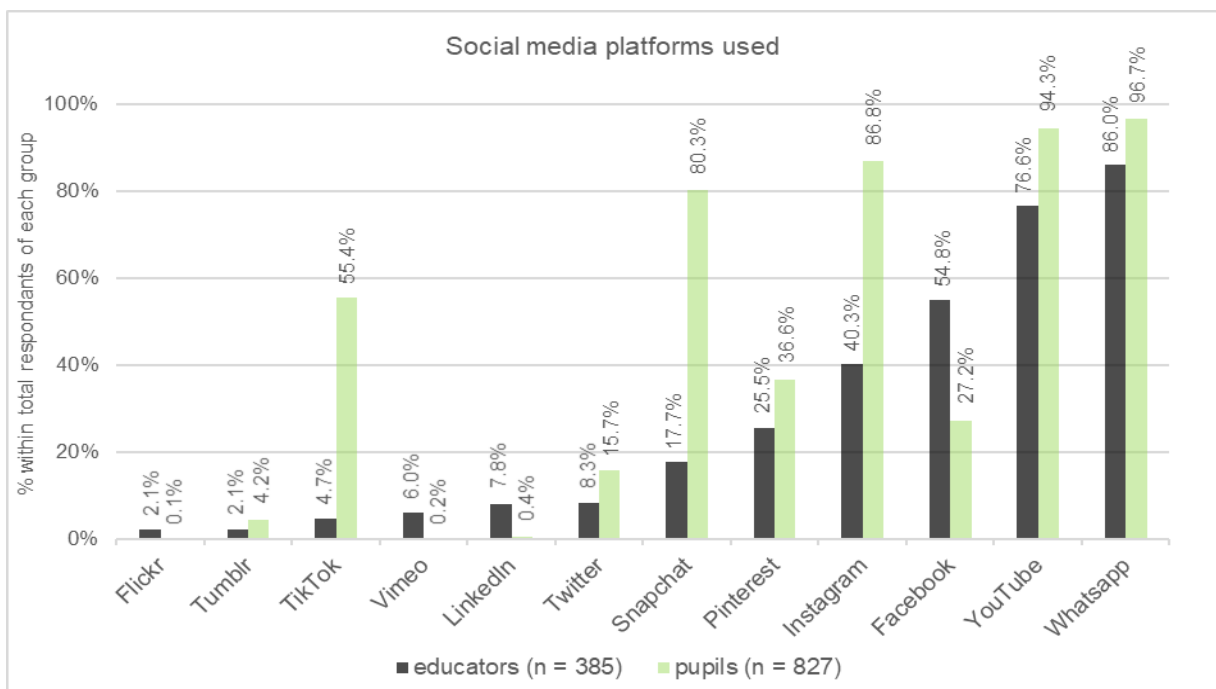


Fig. 10. Social media platforms used – comparison of educators (n = 385; in grey) vs. pupils (n = 827; in green)

It was concluded that educators also followed influencers to a much lesser extent than the questioned pupils. The age of the respondents seems to play an important role here. Regarding adults' social media habits towards influencers, a significant positive correlation ($r = 0.477$, $p = 0.000$) between age and 'following influencers' can be detected. Of those up to 30 years, almost 40 % stated to be following influencers,

while only 7 % of those between 31 and 50 years and almost none of the age group 51 to ≥60 years say they do (Fig. 11).

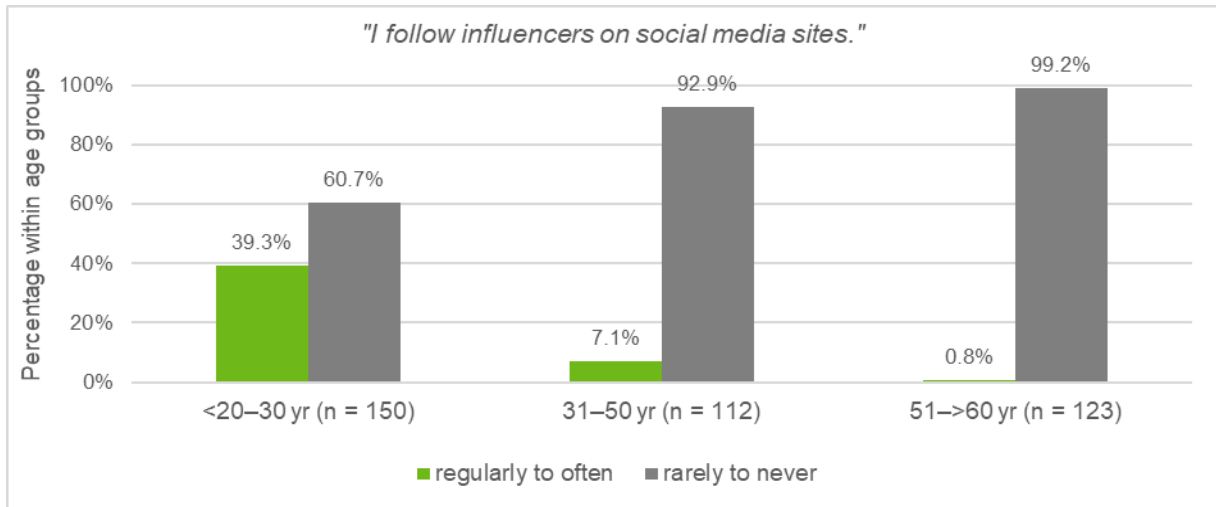


Fig. 11. Following influencers on social media sites according to age groups (comparison of ‘regularly to often’ and ‘rarely to never’)

Although it seems that influencers do not play an important role in the questioned educators’ lives, almost 80 % of all respondents stated their belief that influencers are important in young people’s lives. Even more (~86 %) stated their belief that influencers change young people’s reality/perception of life. These opinions are similarly distributed across all age groups (Fig. 12a), with the group of under 20 to 30 years giving the strongest endorsements in this regard.

It can be argued that the values here also represent the opinion of the professional group, if we consider that in the age group of under 20 to 30 years, mainly university students of teacher education are to be found (78 %); schoolteachers, however, form the majority in the groups from 31 to 50 years and from 50 to over 60 years (over 80 %) – in these two groups, university lecturers are also found, making up about 25 % of each one.

When this is plotted by curricular affiliation (Fig. 12b), it becomes apparent that those educators without the topics of nutrition, health, and consumption (NHC) in their curricula provide the least support for the opinion that influencers are changing the reality of children’s lives.

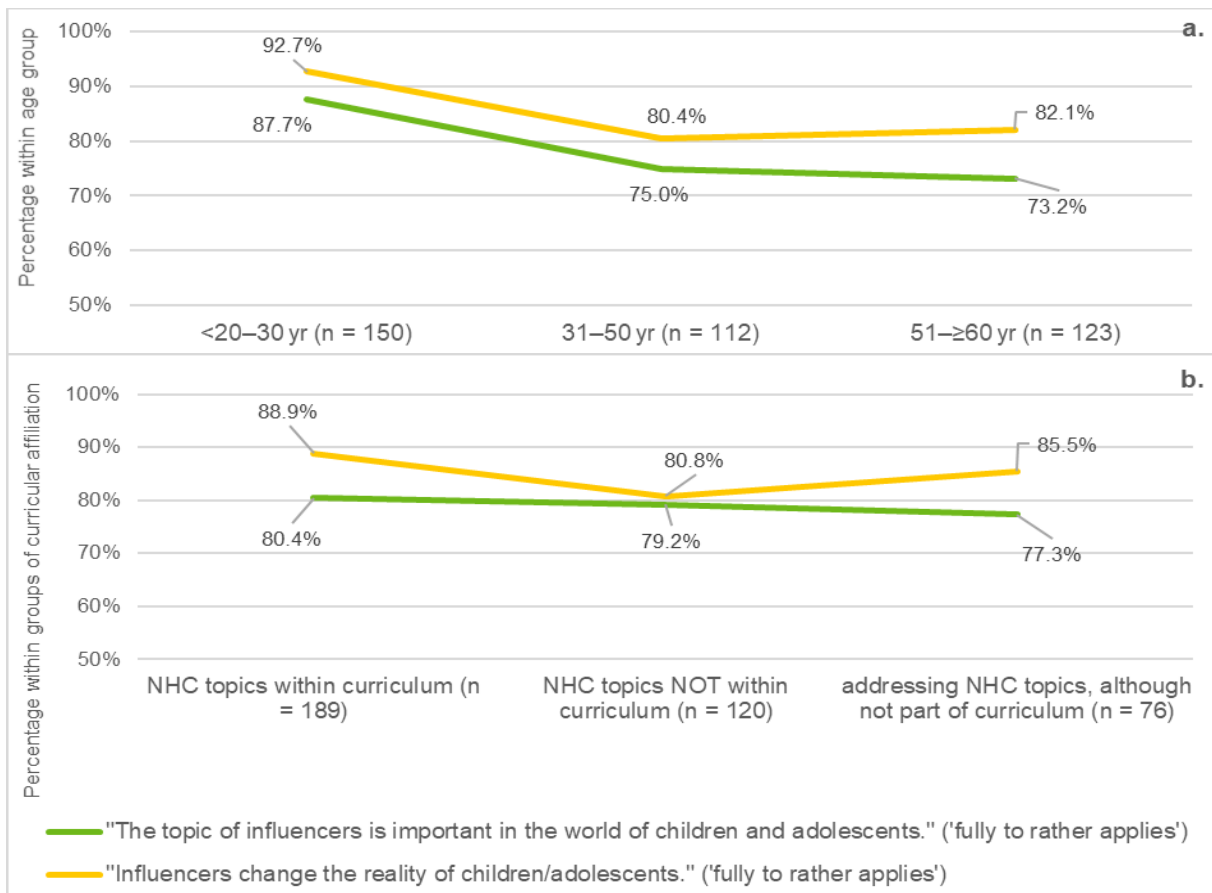


Fig. 12a. Opinion of educators on influencers effecting young people's lives according to age group. Fig. 12b. Opinion of educators on influencers effecting young people's lives according to curricular affiliation

Regarding how educators interpret their knowledge of social media over children and adolescents, their assessments agree well with the pupils' (Fig. 13, first two columns): The pupils largely considered themselves to be more competent (~73 %), and the educators agreed to a similarly high degree (albeit even slightly higher at ~80 %). However, if we compare this with the influence of the COVID-19 pandemic¹⁰, due to this situation pupils rated the increase in their teacher's knowledge much lower than educators did (Fig. 13, right 2 columns).

A clear age discrepancy can be seen regarding the opinions of adolescents having more knowledge about social media than themselves as well as themselves having gained more knowledge about social media through Corona (Fig. 14): Both show an increase according to rising age groups ($r = -0.177$ / $r = -0.208$, $p = 0.000$). Whereas

¹⁰ At the time of the survey, the pandemic had already existed for a whole semester of study, so it is reasonable to assume that the COVID-related 'digital emergency measures' at school and in the tertiary education sector may also have had an impact on social media skills.

the majority of those between under 20 and 30 years (~65 %) thought that they had gained no or hardly any new knowledge about social media through Corona-related situations, more than half of the respondents in the age group from 50 and over believed to have more knowledge about social media due to the pandemic. Whether younger adult participants assumed that Corona-related situations had less of an effect on their social media knowledge because they already felt well-informed cannot be answered precisely at this point.

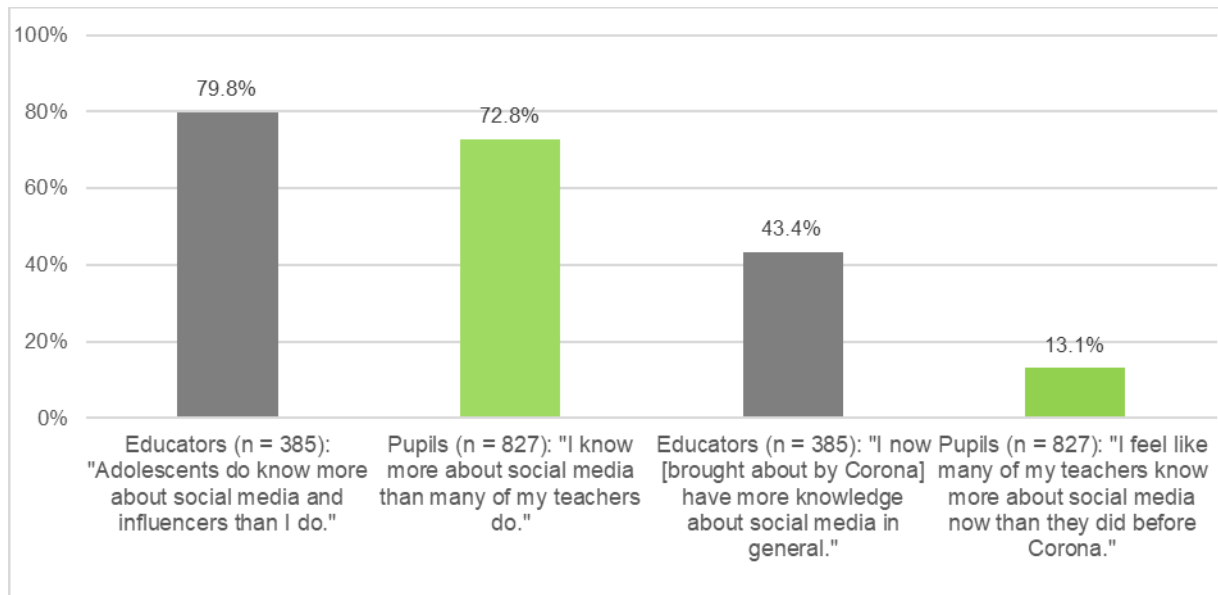


Fig. 13. Assessment of 'social media knowledge' of educators (n = 385) compared to pupils (n = 827), ('fully to rather applies')

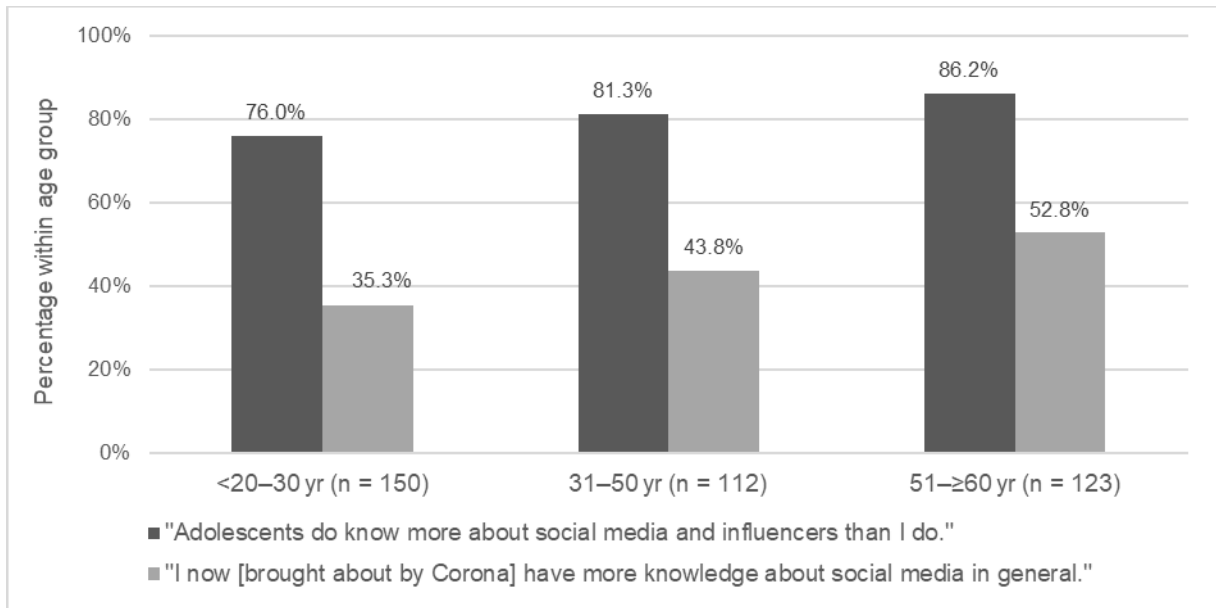


Fig. 14. Educators’ opinions regarding adolescents’ and their own knowledge about social media, according to age groups (‘fully to rather applies’)

3.2.3 Current state of social media and influencers in the context of schools

35.4 % of all educators surveyed said (‘fully to rather applies’) that they had already addressed the topics of ‘social media use’ and ‘influencers’ in the classroom prior to Corona (that is, prior to digital upheavals due to Corona-related situations; Fig. 15).

The correlation ($r = 0.247$, $p = 0.000$) shows that the group which had already addressed the topic in class (‘fully to rather applies’) also wanted to know more about influencers to a significantly higher degree (57.4 %) than the group which had not addressed it yet (rather not or not, 37.4 %). However, the opinion to address the topic of ‘influencers’ generally more at school is high in both groups, although slightly less in the group that did not or rather not address it yet (70.3 % vs. 83.8 %).

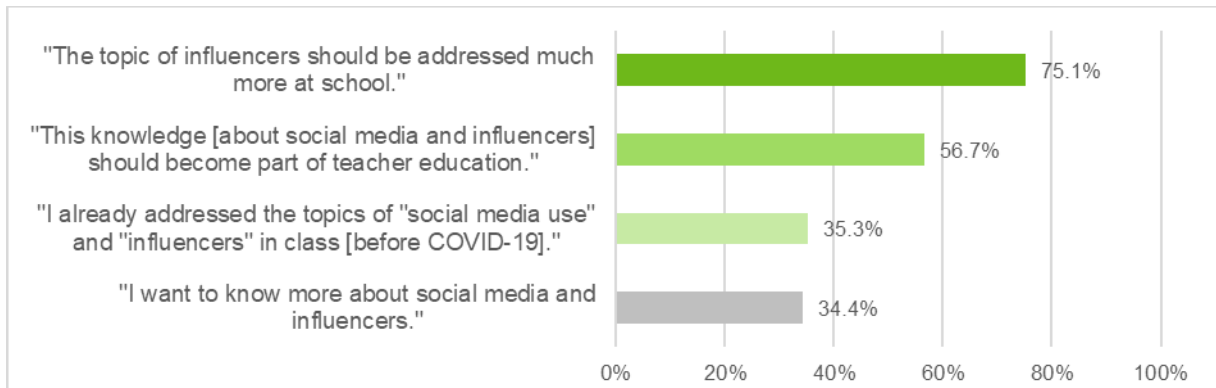


Fig. 15. Opinions of educators (n = 385) about the topics ‘social media’ and ‘influencers’ being addressed at school and in terms of personal interest (‘fully to rather applies’)

About 72 % of all respondents would use advanced professional training [on social media and influencers], which demonstrates a vast general interest in terms of professionalization. The reasons given by those who would not take up a training course (28 %) are mainly disinterest (46 people indicated this) and that it has no relevance to their own teaching (42 people selected this). Furthermore, 27 people saw no benefit in it and 20 said they would soon be retired.

When asked about the conceivable scientific/educational areas in which more professional training on the topic of social media and influencers should be implemented (Fig. 16), the area of ‘nutrition and consumer education’ was chosen the most (by 66 % of the participants), followed by informatics. 55 % considered such training in the educational sciences and pedagogical areas as useful. Natural science fields were mentioned by 38 %. If we look at the distribution by groups with and without nutrition, health and consumption (NHC) topics in the curriculum, the percentage ranking of the mentioned training areas remains almost identical, with one exception: The group without NHC within the curriculum preferred the implementation of professional training in computer science (informatics) before nutrition and consumer education.

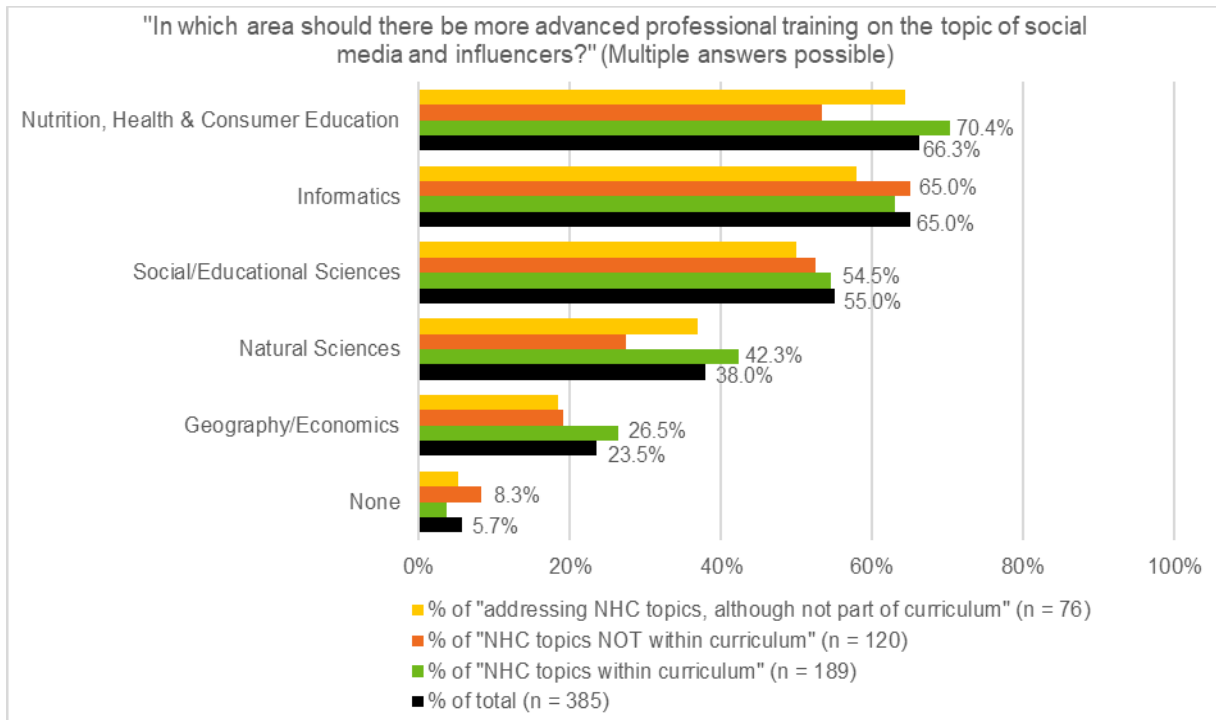


Fig. 16. Scientific/educational areas educators see advanced professional training about 'social media and influencers' to be anchored (multiple answers possible; percentage of hits by total respondents n = 385 and according to different groups of curricular affiliation, respectively)

3.2.4 How should the topic 'social media and influencers' be addressed at school?

Regarding the focus on 'social media' and 'influencer' topics at school (Fig. 17), the educators surveyed put their main emphasis on 'reflection of content', 'introduction to social media use' and 'legal basics', similar to the pupils (cf. Fig. 5 & 6). This was immediately followed by 'consumption topics' and 'nutrition topics'.

The majority (~70 %) of responses advocated for external experts to teach the topic in schools. More than half would see pupils themselves involved in teaching the topic, indicating that they are seen as experts on the topic. Broken down by age groups (Fig. 18), it is evident that the youngest group (representing the profession of future teachers) particularly values the participation of pupils.

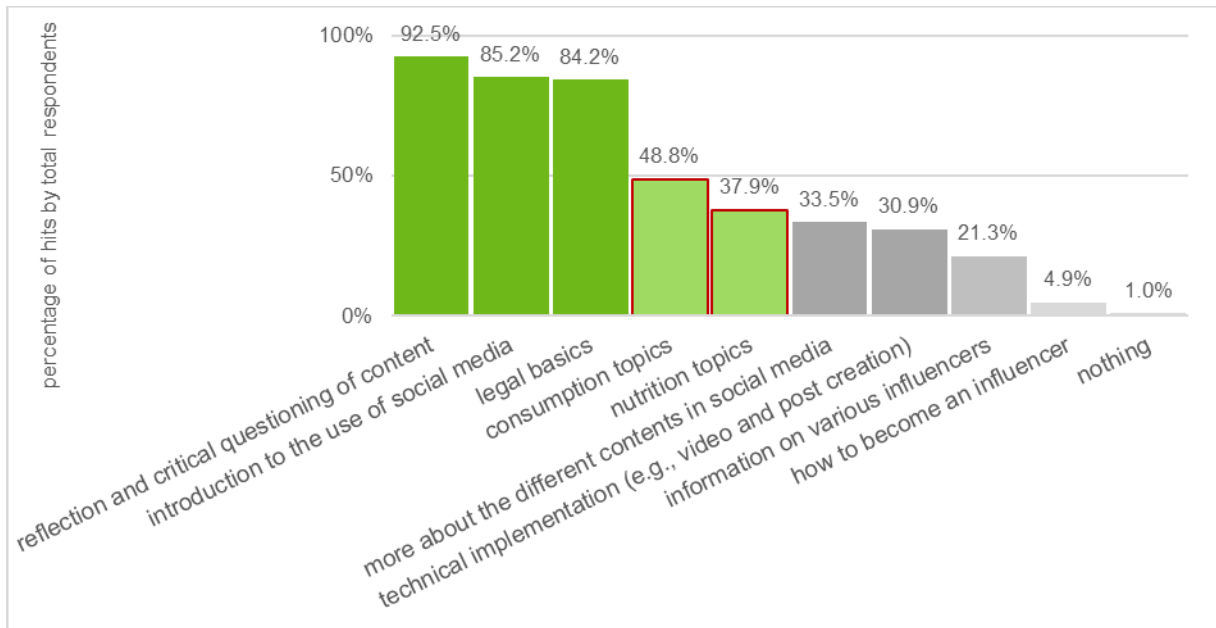


Fig. 17. Topics the respondents suggested being taught [at school] on the issue of 'social media and influencers' (percentage of hits by total respondents, n = 385; multiple answers possible; consumption and nutrition topics are color framed)

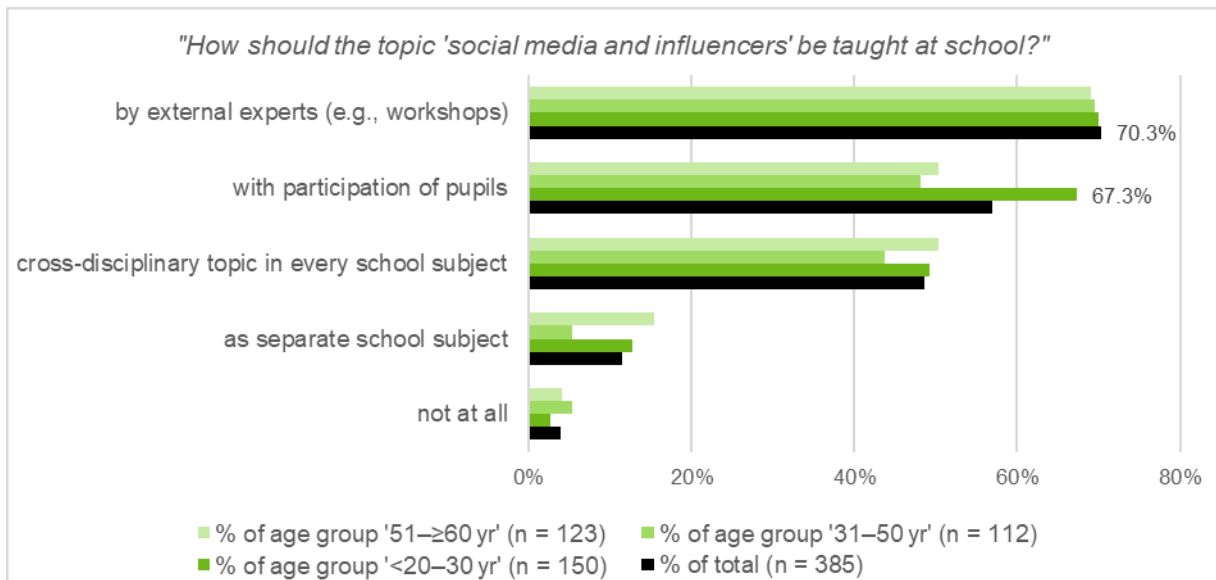


Fig. 18. Answers of educators on how the topic of 'social media and influencers' should be taught at school (multiple answers possible; percentage of hits by total respondents, n = 385, and according to age groups, respectively)

4 Discussion of Central Findings

In this chapter, we connect the results and discuss central findings. The aim is to establish starting points for subject-related professional concepts that are essential for pedagogical handling of the topics of 'social media' and 'influencers'.

4.1 Generational Gap between Pupils and Educators

It can be observed that the two target groups (pupils and educators) differ on various levels, leading to specific challenges for settings of teaching and learning.

Pupils are online for significantly longer amounts of time when compared to their educators, whereby the intensity of their online activities also differs significantly with gender. Schoolchildren also use social media platforms to varying degrees compared to their educators (Fig. 2a, 9, 10, q.v.). Another gap can be seen in the way to deal with influencers, who are part of everyday reality for most of the surveyed schoolchildren, while it has less relevance for the group of educators (decreasing with increasing age; Fig. 11, q.v.). Both groups, pupils and educators, predominantly admit that teachers do not have sufficient knowledge about social media issues. But apparently, there is a discrepancy in the interpretation of 'social media knowledge' according to pupils rating the increase in knowledge of their teachers due to the current pandemic situation much lower than the educators themselves (Fig. 13, q.v.). The question arises of what both groups understand by 'social media knowledge' – obviously, it does not seem to be the same, indicating a certain gap in terms of the perception of social media as either 'tool' or 'lifeworld'. All of this has an impact on different competencies and experiences, of which both target groups are aware.

A key factor in the divergent media socialization of young people vs. 'digital immigrants' (see Krotz 2017b; De Witt/Czerwionka 2013; see chapter 1.3) is that within this social change, older generations have acquired little to no digital knowledge in adolescence that they could pass on to the youth, because their life reality of childhood and youth in the area of digitalization has no relevance for the new generations, with conditions having changed enormously. Hence, it can be assumed that the difference in knowledge leads to insecurities in the handling within the classroom and to certain reservations about new media on the part of the older generation. This "constant criticism of the new medium", which Rath (2019: 21, translated) calls "moral media apocalypse", is not a new phenomenon. It has been around since Plato's critique of the new medium 'writing' and has continued ever since, with a key characteristic being the narrative of the threat posed by new media to the next generation and the associated moralization. In this process, the state of development is misunderstood as the initial state and seen as a normal form whose change has negative moral

connotations. Such processes can be found in the criticism of newspapers in the 16th and 17th centuries, as well as in the criticism of cinema, television, or, later, computers. The new forms of social media are no exception (ibid: 21).

Under these preconditions, it is not surprising that older generations often have less knowledge and tend to have a negative moral attitude towards social networks. This can minimize the motivation of the youth to share their reality of digital lives – or to experience it from the perspective of their elders.

For educators, this means that being sensitive for the needs and desires of young people without negative moral assessments of the online behavior of the younger generation is instrumental for constructive and open-minded dialogue.

4.2 ‘Readiness’ of Educators is a Matter of Age

Most educators are aware of how important social media topics are for young people and how strongly they can influence their lives. Fittingly, about three quarters of those surveyed wanted the topic ‘influencers’ to be addressed more at school (Fig. 15, q.v.). Social media is in fact already a topic at school, but quantitative data do not show what content is processed regarding this term. However, results from the group discussion point to a rather one-sided spectrum related to various aspects of safe use of social media, with content- and commercial-related reflective activities not occurring at all. This is manifested by the topic preferences pupils demanded to learn more about at school, with ‘content reflection and criticism’ being considered as the second highest priority following legal issues (Fig. 5, q.v.)

Although both groups, pupils and educators, attest that teachers wield too little social media knowledge, there is only a relatively weak tendency among all educators surveyed to want to know more about social media and influencers themselves. However, compared to the relevance that teachers attribute to the topic for school, a personal interest in more knowledge about social media and influencers does not seem to be related to the aspiration of addressing the topic in school.

When it comes to the question of who can teach these subjects, all target groups tended to speak in favor of external experts, whom young people attribute more expertise and seriousness to than to their teachers, yet depended on their trust and credibility – a motif that also recalls the relationship between influencers and followers (see Waldner/Mittischek 2020: 172ff.). As most educators’ responses advocated for external experts (Fig. 18, q.v.), apparently most of these educators did not yet feel competent enough to take these topics on themselves. Still, about 72 % were willing to attend suitable training courses, although only about 34 % wanted to know more about social media and influencers. This first discrepancy is resolved when we look at ‘wanting to know more about’ on a personal interest level and ‘advanced professional

training' on a professionalization level, which do not necessarily have to be in conflict with each other.

The approach of involving experts seems promising from our perspective in any case, as it meets with a high level of approval from all sides. Schulz-Zander (2005) argues that collaborative learning with external partners is part of the didactic principle of self-active-constructive and cooperative teaching and learning with media. In this type of teaching, competencies are partially bundled, and the teachers can hand over their expert role while partially becoming learners themselves. Through active exchange with other teachers, they can expand their pedagogical and professional competence (Schulz-Zander 2005a; 2005b: 14). With the involvement of externals, new motivational settings for all learners can be created regardless of age.

However, it would be short-sighted to assume that brief sessions with experts are sufficient to acquire the necessary skills to adequately prepare young people for the challenges of a constantly changing, mediatized, digital society. The results show that particularly young teachers and students of teacher education are aware of this: Alongside the use of experts, they placed great emphasis on participatory learning formats in which young people themselves become active (peer-to-peer settings, inverted/flipped classroom etc.) and that around half of all teachers were aware that this is an interdisciplinary topic which should be dealt with repeatedly at various levels across all subjects (Fig. 18, q.v.).

Nevertheless, the finding that younger educators, compared to older ones, see little impact of the COVID-19-related upheavals on their social media skills in teaching with and about digital media (Fig. 14, q.v.) indicates that mediatization processes related to social media are not due to recent events but must be assumed to be fundamental. Even if the pandemic has certainly moved up the digital education revolution and accelerated discussions concerning this, a sustainable attitude towards digital mediatization is needed in educational processes that do not only map or evaluate 'emergency measures': "If one takes the COVID-19-related emergency distance learning of spring 2020 as a starting point for discussions on a contemporary school in a culture of digitality, one does not do justice to the scope of the necessary discussion in various respects and runs the risk of giving too much weight to unimportant aspects and neglecting relevant aspects in the long term" (Döbeli Honegger 2020: 4; translated).

4.3 Different Requirements for Pupils in Different Age Groups and of Different Gender

Looking at the age-related, differing preferences of social media topics, which the pupils would like to have addressed at school (Fig. 6, q.v.) these results are hardly surprising, as the youngest target group between the age of 10 and 12 can be

described as ‘explorers’ who are establishing their first contacts with social networks and still have little idea of their practices, wording and content. Accordingly, highly specific wishes for knowledge in the area of social media and influencers are at play in the background. It cannot be assumed that children of this age have already developed a stable online identity, corresponding knowledge, and the associated reflective skills. Older adolescents have already acquired these abilities through prolonged use of social networks, meaning that detailed technical knowledge and reflection are more in the foreground. These different knowledge requirements and life situations should be covered accordingly in school in any case. Younger students need an adequate introduction to and preparation for social networks in order to find their way around more easily and competently. Older pupils, on the other hand, have their own stable identities in social networks, which they do not necessarily want to share with teachers (cf. Krotz 2017a: 36), but instead seek to discuss the topic on a more abstract level and equip themselves with advanced technical know-how.

Considering the different preferences of subjects (girls want to discuss and reflect more on social media content than boys, who in return prefer technical issues) which confirm a classic division of roles into social (girls) and technical (boys), it would be important to pay gender-sensitive attention to encouraging girls in their motivation and acquisition of technical content and, conversely, encouraging boys to participate in the important reflective work (Fig. 5, q.v.). The contents can also be used to take a critical gender perspective, with the goal of opening up role models for young people beyond classic gender stereotypes, and thus contributing to more equal opportunities. Further reflective practice itself offers a great opportunity to discuss topics from different perspectives and to provide young people with essential content concerning nutrition and consumer education without the classic educational setting of instruction. Helge Bonholt, Gerhard Rupp and Regina Schulte already argued in 2004 that aspects of communication and information transfer should be emphasized more strongly to specifically address and reflect upon gender differences. Therefore, they suggested a deeper consideration of cooperative and collective forms of learning (Bonholt/Rupp/Schulte 2004: 153). In this context, tutorial programs, explorative learning structures and instructive elements in open learning formats can promote self-regulated and cooperative learning, as already pointed out by Schulz-Zander (2005b: 13f.).

4.4 Criticism and Reflection – Importance of Nutrition and Consumer Education

Results from the EKo-K.I.S.S. study so far show that topics related to nutrition and consumption in social media are highly relevant for young people (see Waldner/Mittischek 2020): Answers related to nutrition, health, consumption and sustainability revealed a high level of personal interest among the pupils, especially

the girls, in healthy eating, cooking, shopping, health and fitness, some of which was reinforced by the crisis caused by the COVID-19-pandemic. Interest in these topics is also reflected in the data related to influencers, as well as following food or fitness influencers. Still, seriousness or scientific significance of influencer-messages regarding food trends, eating habits or nutrition details is often not given as in many cases, they do not exhibit specific training or knowledge on a topic and might therefore promote unreflective and unsubstantiated claims and lifestyles. Media and health literacy of adolescents in this regard must be strengthened vastly because critical assessment of influencer content decreases with increasing trust, which can lead to discrepancies between attitude, knowledge, awareness and actual dietary and consumer behavior (Waldner/Mittischeck 2020: 183).

Reflection on consumption and countering commercial influence is enormously important, since everything in the digital space is subject to economic, capitalist conditions, including the appearance of influencers. In the online world, everything can be bought at any time (with hurdles such as physical presence or opening hours no longer existing), there are many more and stronger consumption incentives than previously, and advertising is largely personalized. "In the context of digitalization, a computer-controlled digital infrastructure is emerging, organized by large companies, that initially swallows up all the old media and reconstructs them in a new way under the old name [...], because these reconstructions function in quite different technical, social, economic ways and terms of content and use. In addition, there is a multitude of new computer-based media, which [...] try to pick up on specific ways people act, such as forming relationships or seeking information, organize them, and then exploit that." (Krotz 2018: 35, translated).

Leaning on our results, it is obvious that young people want to learn more about social media issues at school and are showing a willingness to reflect about content in class as is explicitly stated (Fig. 3, 5 & 6, q.v.). This demonstrates their need for support in this regard, which cannot be ignored by the educational system. Still, the topic of 'influencers' itself tends to be left out of current educational programs (Fig. 3, q.v.), which indicates that pupils either believe they already know enough about the topic or that they want to keep such topics explicitly private or separate from typical school contents as a means of differentiation from adults and traditional structures (cf. Krotz 2017b), respectively. Since a critical examination of influencers in a commercial context appears to be indispensable in consumer education, as we have noted above, sensitive ways must be found to address this topic in such a way that pupils do not perceive it as intrusion into their privacy.

It has been shown that teachers also see a need to strengthen pupils' reflective competence in this regard and attribute an important position to nutrition and consumer education for dealing with the topic 'social media and influencers' at school (Fig. 16,

q.v.). Coupled with high interest by pupils, this could be well-anchored in class in terms of motivation. However, considering the knowledge gap between adults and young people, teachers need more help in gathering information on the background processes concerning influencers and their commercial and market entanglements. Additionally, it is important to pay attention to the gender gap and to motivate boys by, for example, making them aware that nutrition and consumption are also highly relevant to them.

Considering all of the above, 'subject orientation' as a didactic principle is to be preferred for school subjects with particular relevance to everyday life (Bartsch 2012: 54ff.): When using this approach, learners' everyday actions and their wealth of experience are used as a baseline for teaching considerations, while at the same time they help define the object of learning. Aiming at a change of perspective, the pupils' interests and questions guide the general view on the subject matter, considered them as experts regarding their experiences and wishes. Teachers act as experts in their subjects and as coaches for learning processes, without being obliged to be 'omniscient'. These cooperative forms of learning promote subjective discussion among participants.

5 Conclusion

Clearly, the educational system's attention is required in dealing with issues of 'social media' and 'influencers' because the importance of the digital world as part of the adolescent reality of life has become ubiquitous. Most teachers are aware of this, and pupils also desire support to a certain extent. In this context, web literacy plays an essential role in dealing with social media. This includes the competencies of reading (content evaluation and synthesis), writing (creating content and meaning), and online participation (building online communities, networking and content sharing) (cf. Klinger/Mayr 2021: 175).

When it comes to social media, teachers today face the challenge of having to change their role. This means that rather teaching oriented towards traditions based on their own beliefs and experiences, they have to offer settings in which younger generations have the possibility to develop contemporary media practices and digital literacy themselves (cf. Marci-Boehncke, 2019: 143).

By reason of differing levels of expertise in the area of social media and apparent gaps regarding its perception between youth and adults, conventional learning settings are not useful or hardly feasible. This is one of the most important aspects to be considered regarding the implementation of the ideas presented here. Obviously, there must be interlacing on many different levels, whereby it is not a matter of teaching only

'facts', but a question of integrating the reality of young people's lives into the lessons in a motivating way.

For this purpose, teachers themselves do not have to be constantly active on social media to stay up-to-date, as social networks are too ephemeral anyway. Insecurities due to pupils' multi-faceted knowledge are not necessary in this context since teachers can acknowledge and use the current life reality of young people as a resource.

Thereby, the point is not to instruct and grade in the sense of negative moral evaluation, but to accompany digital socialization adequately and competently by providing basic knowledge during lower school levels and later by supporting with the means of sufficient reflective competence and technical know-how. Due to numerous gender-stereotypical findings, which are obviously reinforced in the area of life-related topics such as nutrition and consumption through social media, it is particularly important to consciously counteract this through gender-sensitive teaching.

To achieve all of this, clearly defined further training opportunities are necessary, since personal interest on the topic and, thus, informal knowledge-expansion of teachers is only partially present and generation-dependent, and must therefore not be assumed as a prerequisite. As the questioned educators were generally highly motivated to attend training courses and assumed the subject matter of being a fundamental part of nutrition and consumer education, further training possibilities must be structurally anchored more firmly in this area. This is important because in Austria, nutrition and consumer education is represented in a dedicated school subject at the secondary level of general education. Teaching qualifications for these subjects are acquired through programs of bachelor's and master's degrees at Austria's University Colleges of Teacher Education. In addition, consumer education permeates most other subjects (yet not every subject must or is even able to accomplish everything).

At any rate, interdisciplinary work and the increased involvement of external experts as well as subject-oriented and peer-to-peer settings should be given preference in dealing with this topic at school.

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