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Changing Understandings of Online Privacy: Profiling Millennials

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Abstract: This study investigates Millennials' understanding of online privacy. As the first digitally native generation, a frequently heard assumption is that their attitudes towards online privacy have shifted compared to previous generations that have not grown up with the Internet and the ubiquitous presence of social media. However, previous studies found conflicting evidence to this claim. Our study aims to address these contradictions leading to a clearer picture of whether, and if so, in which way Millennials' understandings of privacy differ from earlier generations. With this our study offers a glimpse into changing privacy understandings, when being online and connected through social media are natural elements of everyday life. We used Q-methodology as quantitative exploratory approach in combination with semistructured interviews to profile Millennials' attitudes towards privacy. We included 20 Millennials (mean age: 23.3 years). Our analysis identified three disparate groups, each with a unique perspective on online privacy. According to their respective focus we refer to them as: authenticity-driven connectors, privacy-conscious strategists and unconcerned sharers. The three groups identified in our data represent disparate perspectives on online privacy by Millennials and their ideas of what should be shared or not shared online and for which reasons. Starting points are motivations for being online and with this the main addressees, the type of information as well as the degree of 'truthfulness' or 'completeness' of information individuals seem willing to share. Another dimension differentiating profiles are the extent of general privacy concerns. In addition, we also detail shared elements amongst perspectives. Our findings illustrate that the extent of privacy concerns (i.e., quantity) as well as the reasons for being concerned (i.e., quality) vary considerably within Millennials. Our observations also signal an important distinction between privacy concerns vs impression management as rationales for drawing privacy boundaries by Millennials. Further practical implications are discussed.

Keywords: Online privacy, privacy concerns, Millennials, privacy profiles, Q methodology, exploratory research

1. Introduction

Millennials, or Generation Y members, are considered different from older generations, primarily due to their unique relationship with technology (Hershatter and Epstein, 2010). As the first digitally native generation, Millennials have grown up with and spent their entire lives in a digital environment, shaping the way they behave, interact, work or form relationships (Bennett, Maton and Kervin, 2008). It is assumed that this intimate relationship with the online world has implications for their understanding of online privacy. However, it remains unclear in which way.

On the one hand, Millennials have been described as indifferent towards their privacy (Fleming and Adkins, 2016) or at least somewhat confused (Schwarz, 2015). On the other hand, Millennials have been found to be concerned with privacy much in the same way as other generations; although more conscious about the information they publish (Taylor and Keeter, 2010) as well as more attuned to the trade-off between privacy and security (Bryan, 2015). Obviously, online privacy in the Millennial generation is not yet well-understood.

Our paper aims to address these contradictions and to contribute to a clearer picture of whether, and if so, in which way Millennials' understandings of online privacy may differ from earlier generations. This also addresses the question, in how far traditional conceptualizations of privacy still hold or may have to be adjusted. Future generations will all be digitally natives. Understanding Millennials offers the possibility to gain a glimpse into changing privacy understandings, when being online is a natural element of everyday life.

1.1 Privacy Concepts

Privacy is traditionally understood as "an individual's ability to determine when, how and to what extent personal information is disseminated to others" (Westin, 1967) as well as an individual's "right to be alone" (Wang et al, 1998). In other words, traditionally privacy is an individual-level concept that describes individuals' decisions about access to their person and/or information.

These concepts have been revised to accommodate newer societal and technological developments, including the massive adoption of social media. The social aspect of technology use has been captured in the notions of social privacy (Raynes-Goldie, 2010) and networked privacy (Marwick and boyd, 2014), which pay tribute to the social relationships in which individuals are placed online. Privacy is seen here as co-determined by the people linked and connected to each other. Individual agency remains relevant as the level of one's privacy depends on how well he or she is able to use technology and navigate in the networked environment of social media. The individual view is, however, expanded to include a collective aspect.

Such re-conceptualizations demonstrate that privacy is not a fixed concept, but requires adaptations to social and technological developments and changes in our environments. One such development is the generational shift from digital immigrants to digital natives and its potential impact on attitudes towards online privacy and privacy related behaviors.

1.2 Generational differences in privacy understandings

Evidence of generational gaps regarding understandings of privacy and related elements has been found repeatedly. For instance, Bartel Sheehan (2002) investigated typologies of consumer privacy concerns across generations using a typology that classifies consumers into three groups: consumers that are not concerned with privacy, those that are very concerned with privacy and a third group, in which privacy concerns depend on the type of information and situation. The results of her study suggest that members of older generations typically belonged to the first two groups, while young adults belonged to the third, indicating a more situational and flexible approach to privacy. Madden et al. (2013) found similar patterns in that teenagers appeared to share more information online than in previous years, but were equally or even more concerned about their privacy and thus also more selective. Similarly, exploring the differences between young and older adults, Hoofnagle et al. (2010) discovered, that while young adults engage in sharing more (and also more compromising) pictures and status updates, they are paradoxically equally or more concerned with privacy than their elders. Additionally, young users seem more prone to 'unfriending' or deleting photos than older users (Madden, 2012) and are also known to more frequently delete cookies and browser histories and think more about posting photos online, despite being seemingly more careless in their posting behavior than older generations (Hoofnagle et al, 2010). This evidence of generational differences in privacy concerns and behaviors demonstrates that understandings of privacy are shifting.

1.3 Millennials and online privacy

Millennials are the first digitally native generation and their online presence is considerable. For instance, due to the active use of social media and the large size of the generation and its purchase potential, Millennials are said to be the "driving force behind online shopping" (Taken Smith, 2012). Due to the extent of their online presence, it is safe to assume that Millennials have come across situations in which they have questioned privacy and that their attitudes and decisions around online privacy will have considerable influence on networks and the online marketplace. However, quite strikingly, only a handful of research articles has aimed to learn about privacy attitudes in the Millennial generation. Available literature has, for instance, explored the behaviors of teenage Millennials on social networking sites and discovered that they do take their privacy very seriously (S-O'Brien et al, 2011). In the same regard, Millennials were shown not to avoid advertising or advertising-related irritations or location-based services despite privacy concerns (Fodor and Brem, 2015; Nyheim et al, 2015). While the available research has attempted to summarize the opinions of Millennials on online privacy and privacy concerns from various angles, it becomes clear that a general understanding of how Millennials perceive privacy is lacking. Also, given the at time paradoxical and contradictory nature of this evidence, it remains unclear what drives privacy management and decision making about online privacy by digitally natives.

In the following section, we describe our methodology to capture privacy perspectives in the Millennial generation. Subsequent sections provide our findings as well as a discussion of their theoretical and practical implications.

2. Methods

2.1 Approach

To identify privacy perspectives of Millennials, we employed the card-sorting technique Q-methodology. Q-methodology is an exploratory quantitative method in which participants are asked to sort a set of statements into a fixed distribution ranging from 'agree' to 'disagree' or 'most like me/least like me'. The analysis is based on by-person correlations followed by a factor analysis to identify groups of participants with similar sorting patterns (Watts and Stenner, 2012). Q-methodology finds application in a wide range of fields from psychology to healthcare to politics (Brown, 1996), as it facilitates the identification of participants' subjective opinions and viewpoints (Watts and Stenner, 2005, 2012).

To create a balanced set of statements (Q-set), we used a combination of literature review (top-down approach) and pilot interviews (bottom-up approach) with five members of the target group. This mixed approach ensured that our Q-set addressed online privacy concepts from existing research, but also allowed room for additional concepts relevant to our target group. This yielded a set of 50 statements addressing the questions of when, how, what, why and with whom to share content online. (For space reasons the full Q-set could not be included, but is available on request.) The Q-set was pilot tested with three additional individuals to ensure that statements were easy to understand and did not contain unnecessary duplications.

Next to the Q-set, we drafted an interview protocol to capture additional information on participants' general attitude towards online privacy, a description of their 'online persona', their understanding of personal/private space, how they determine what to share or not, the measures they take to protect their privacy online and participants' attitudes towards privacy in the context of online marketing as one of the most frequent reasons for data collection by third parties.

2.2 Participants

To select Millennials, we followed the classification of Doherty et al. (2015), which define Millennials as individuals born between 1981 and 1997. In addition to the age criterion, the participants needed to be active online (e.g., have a social media profile or regularly shop online) to ensure that they would be able to voice an informed opinion about online privacy. In total, we sampled 20 people. Given the age restrictions, most participants were students, which the second author recruited at our university. 60% were master students, followed by bachelor students (20%) and working participants (20%). The participants were aged between 21 and 31 years (m=23.25, sd=2.27). 80% participants were female and 75% Dutch; the remaining participants came from Czech Republic, India, Russia, Slovenia and USA.

2.3 Procedure and analysis

All Q-sessions were conducted as individual face-to-face sessions by the second author. Participants were asked to sort all 50 Q-statements into a forced distribution from completely disagree (-5) to completely agree (+5). Participants were encouraged to sort the cards according to their personal view and were informed that there were no right or wrong patterns. The session concluded with the follow-up interview. All sessions were recorded and transcribed verbatim prior to analysis. The interview information was analyzed by means of thematic analysis to better understand and potentially validate and/or extend the perspectives found in our data. The analysis of the Q-sorts was performed with the specialized software PQMethod (Schmolck, 2012) using principal component analysis with varimax rotation to create independent factors and thus allow for easier interpretation (Watts and Stenner, 2005, 2012). Based on the eigenvalue rule four factors with an eigenvalue above 1.0 emerged. However, following Brown's rule (Watts and Stenner, 2012) only factors with two or more significant loadings should be kept. This led to a three-factor solution, which explained 60% of total variance, which is considered high for Q-studies (Watts and Stenner, 2012).

To differentiate the three perspectives, factor arrays were calculated averaging responses into a stereotypical or 'ideal' Q-sort per factor (Watts and Stenner, 2012). Based on the stereotypical sorts, distinguishing statements (i.e., statements loading significantly differently across perspectives) and consensus statements (i.e., statements showing similar loadings across perspectives) were calculated. This information was summarized in a grid containing four categories for each factor: items ranked at +5, items ranked significantly higher on this factor than the other two, items ranked at -5, items ranked significantly lower on this factor than the other two (Watts and Stenner, 2012). These grids served as basis for the interpretations in the subsequent results section, enriched by information from the interviews.

3. Results

Our analysis identified three disparate groups with unique perspectives on online privacy. In the following we provide a description of the three perspectives focusing on two aspects: motivations for being and posting online and definitions of privacy boundaries and management strategies.

3.1 Perspective 1 – Authenticity-Driven Connectors

Six people loaded highly on this factor. All individuals except one were female. The majority were bachelor students, one was a master student and one worked full-time.

3.1.1 Motivations for being and posting online

As the name suggests, the main motivation for authenticity-driven connectors was their desire to connect to their online network (27: +5¹). Important in this context was that self-presentations should be 'authentic', i.e., that the shared content reflects the sharers' true self (25: +5; cp. box 1). Authenticity meant accepting the posting of a broad range of information including intimate moments and information about partners (50: -3; 4: -4). It further meant sharing information truthfully, even if sharing dishonest information would make participants look better or would help protect their privacy (31: -4; cp. box 1).

Box 1.

Statement 4: I would never share online about what I and my partner do in our free time.

Statement 25: I post things about myself online to show others who I am as a person.

Statement 27: I share things about myself online because I want to feel connected to people.

Statement 31: At times I post false information online to make myself look better.

Statement 50: Things/moments/experiences I hold dear do not belong online.

Interview quote 1: "I think it's very important that what you post online really represents you ... I have a YouTube channel, that's about me basically ... I don't want to give [my followers] like a false image of who I am." (P18, female 21 years)

Interview quote 2: "I think it's just unethical. Why would you want to pretend to be someone else?" (P2, female, 22 years)

3.1.2 Privacy boundaries and strategies

In line with their strong focus on connecting, this group completely disagreed to avoid posting to protect their privacy (15: -5). Yet, this group was still not entirely care-free. Instead, authenticity-driven connectors managed privacy boundaries in two ways. Firstly, they aimed to control closely who could see and access their information (11: +4) and thereby set privacy boundaries with respect to their addressees. Secondly, they avoided sharing certain information such as secrets (44: -5) or failures (46: +3). Additionally, sad and painful experiences as well as negative emotions or things that could leave them vulnerable to others were kept private (cp. box 2). The protection of negative feelings seems to contradict the claim of authenticity in this group. Yet, while this group agreed that their online image reflected their offline self, it was still not a complete replication (5: 0). Participant 10 (female, 25 years), for instance, characterized her online persona as "me without the mundane stuff". Thus, authenticity did not mean sharing everything about oneself, but it meant being truthful when sharing.

Box 2.

Statement 5: My online and offline me are exactly the same person.

Statement 12: I am not concerned about my online privacy because I have nothing to hide.

Statement 15: In protection of my privacy I avoid posting any information online.

Statement 44: I don't mind sharing even the deepest and darkest secrets online.

Statement 46: I always protect my failures from being shared online.

Interview quote 3: "I don't need people that I barely know, knowing everything about how I feel at any given moment, especially when it's something very, I don't know, dark or sad. Especially negative emotions." (P10, female, 25 years)

¹ The first number represents the statement in the Q-set; numbers after the statement present its rating in the prototypical sort for this perspective.

3.2 Perspective 2 – Privacy-Conscious Strategists

This factor is represented by three people with an average age of 26.3 years. Two of them were full-time working men, the other a female master student.

3.2.1 Motivations for being and posting online

The motivations of privacy-conscious strategists to be online contrasted strongly with those of authenticity-driven connectors: They disagreed with posting to feel connected to others (27: -3) or wanting to show who they were as persons (25: -2). Instead, they strategically employed online profiles primarily to improve their chances at work (45: +4). All three interviewees in this group discussed the professional aspect of sharing information (e.g., quote 4, box 3). This professional aspect of sharing information was unique to perspective 2 and led to careful deliberations about the content to be shared as well as a relatively low frequency of posting (cp. quote 5, box 3).

Box 3

Statement 45: I share some information that could help me score a job later.

Interview quote 4: "For me, social media and posting things online is very correlated with job and how people see me in my job, so if it gets me another assignment or another project, because I post things online, I would do it." (P6, male 6, 31 years). Interview quote 5: "One of the last things that I posted on Facebook was a few months ago and it was graduation ... I think that's an enviable thing and really, other than that, I don't post a lot." (P9, female, 22 years)

3.2.2 Privacy boundaries and strategies

In line with their strategic outlook, this group showed a desire to be in control over personal information and to protect their personal life, starting with a conscious selection of people they posted to (16: +4). Privacy-conscious strategists further had the highest awareness for privacy issues (18: -5), including social media (21: +3; also quote 6, box 4) and concerns about others' ability to post about them (19: +4). This differentiates privacy-conscious strategists from authenticity-driven connectors, who voiced a strong feeling of control. To counteract their concerns, privacy-conscious strategists employed a range of strategies; e.g., carefully checking locations of online stores or using multiple email addresses. They further claimed to use restrictive privacy settings on social media or to avoid some social media services all together. Members in this group also identified various information they would not share online such as personal stories (28: -5), secrets (44: -4), true feelings (49: +4), failures (46: +2) and dear or precious moments (50: +2; also quote 7, box 4). Also, details about romantic/family relationships were likely to be kept private (3: -2; 4: +1). Still, privacy-conscious strategists were not against all data collection; it was rather seen as the normal way of things (37: +5). Instead they worried about being personally identifiable and about negative consequence for themselves (cp. quote 8, box 4). If data collection, e.g., by marketers, was anonymous they did not object to it (35: +5).

Box 4.

my data and by whom.

Statement 3: I don't mind sharing things about my family.

Statement 4: I don't mind sharing things about what I and my partner do in our free time.

Statement 16: I carefully select whom my online posts reach (i.e. by keeping separate groups for friends, colleagues etc.). Statement 18: I ignore everything about online privacy issues, because it is difficult for me to imagine what is done with

Statement 19: My privacy is difficult to control because anyone can share anything about me without my approval.

Statement 21: I always worry about my privacy when it is regarding social media.

Statement 28: Sharing my personal story or experience is a way to get rid of frustrations.

Statement 35: I don't mind if marketers collect my data as long as nobody can identify me as a person.

Statement 37: Websites collecting data about users online is how things are done these days.

Statement 44: I don't mind sharing even the deepest and darkest secrets online.

Statement 46: I always protect my failures from being shared online.

Statement 49: I protect my true feelings from being shared online.

Statement 50: Things/moments/experiences I hold dear do not belong online.

Interview quote 6: "I want to control what is being done with my data and what ... is going on with regards to myself." (P6, male, 31 years)

Interview quote 7: "When you hold something dear ... or when you listen to a certain song, which reminds you of something, it's worthier to keep it to yourself than to share it with everybody else, because then it's not something that's special anymore." (P6, male 6, 31 years)

Interview quote 8: "I find [anonymity] important, because when it gets personal it can damage you." (P5, male, 25 years)

3.3 Perspective 3 – Unconcerned Sharers

Six people loaded highly on this factor. All members of this group were female with an average age of 23.5 years. One participant was working full time; the remaining participants were master students.

3.3.1 Motivations for being and posting online

Similar to group 1, unconcerned sharers enjoyed sharing information with others, although the purpose and motivations were more varied. They moderately agreed to sharing things to feel connected (27: +2), showing who they were (25: +3) or updating others about (positive) events in their lives (42: +3). Personal updates were also a reoccurring theme in the interviews (cp. quote 9, box 5). Unconcerned sharers felt no qualms sharing about partners (4: -4) or newsworthy moments (42: +3), but were neutral about successes (41: 0) and precious memories (50: 0). Unconscious sharers thus seemed less strict in guarding against the distribution of personal or intimate information, but also less strategic in presenting oneself (cp. quote 10, box 5). Their online presence seemed primarily about informing others, although with a less instrumental (work-related) emphasis than group 2 and without the strict focus on authenticity of group 1. Unconcerned sharers were also the only group, which saw more benefit than harm in personalized advertisements (36: +4) and were at least neutral towards sharing sensitive information with marketers (33: 0; compared to group 1: -2 and group 2: -4).

Box 5.

Statement 33: I don't mind sharing personal/sensitive information if I get something in return (i.e. discount). Statement 36: Personalized advertising is more useful than unsettling.

Interview quote 9: "If you're on holiday, you share your pictures, and that's also so the friends you don't often speak to and family that lives far away knows and sees what you're doing and vice versa." (P20, female, 23 years) Interview quote 10: "Usually what I post it is something that makes me happy, and that I either want to share that happiness with other people or I think that they can also derive happiness from that." (P12, female, 24 years)

3.3.2 Privacy boundaries and strategies

Similar to the previous groups, unconcerned sharers were aware of possibilities to protect their online privacy. However, this group seemed less concerned and thus feel less pressure to take control. As only group, unconcerned sharers agreed highly to statements 25 (+5) and 12 (+4) and were not worried about others sharing posts about them (14: -4; cp. also quote 11, box 6). This low concern with privacy may also explain why this group was neutral towards selecting whom their posts reached (16: 0).

Box 6.

Statement 12: I am not concerned about my online privacy because I have nothing to hide.

Statement 14: I never allow others to post things about me (put things on my wall, tag me in photos), because it threatens my decisions about what information I want out there.

Statement 25: I don't worry about my privacy because I make careful decisions about what I share.

Interview quote 11: "It's not like I am very impulsive and experience something and then right away put it on Facebook ... and because I always think about what I post, I don't worry about privacy" (P4, female, 23 years)

4. Comparing perspectives

The three groups identified in our data represent disparate perspectives by Millennials on online privacy and ideas of what should be shared or not shared online and for which reasons. In Table 2 we summarize the main differences and overlaps.

Table 2: Comparison of privacy perspectives (based on statements rated +3 and above and -3 and below)

Aspects	Authenticity-driven connectors	Privacy-conscious strategists	Unconcerned sharers
Why to be online	show who one is as a person; connecting; entertaining	increase career chances	updating others/share events; show who one is as a person
What to share	information about own partner; personal newsworthy things	something enviable	information about own partner; personal newsworthy things
What not to share		true feelings; personal newsworthy things Ill perspectives: deepest secrets Il perspectives: false information	
How to share	no avoidance of posting to protect privacy; control who has access	carefully select what to share; carefully select whom to share with ves: an online profile is not a priva	no avoidance of posting to protect privacy; allow others to post about one; carefully select what to share
Attitudes towards marketing	more worried about private network than marketers	shopping as privacy risk; no sharing of sensitive information for gains; prefer no personalized advertisement; sharing acceptable if the company is trusted	personalization seen as beneficial; sharing acceptable if the company is trusted
	all perspectives: acceptance of data collection as normal		
Privacy concerns	No – what others know cannot hurt me	Yes – difficult to control what others put online Yes – social media infringe on privacy	No – nothing to hide No – social media do not infringe on privacy

5. Discussion and implications

Our objective in this study was to create a differentiated understanding of Millennials' perspectives on online privacy. Three disparate perspectives emerged: *authenticity-driven connectors, privacy-conscious strategists* and *unconcerned sharers*. Reviewing Westin's classic definition of privacy as "an individual's ability to determine when, how, and to what extent personal information is disseminated to others" (Westin, 1967), it is clear that all three groups did engage in privacy protecting behaviors. At the same time, the three groups had different preferences in what they wanted to protect, how and against whom. Only the privacy-conscious strategists can be said to adhere to the stricter understanding of privacy as "the right to be alone ... related to solitude, secrecy, and autonomy" (Wang et al, 1998). Unconcerned sharers, in contrast, did not feel the need to protect themselves from others; and for authenticity-driven connectors the notion of 'solitude and secrecy' seems in fact anathema to their whole purpose of being online. Hence, while all participants were aware of the possibility of privacy infringements, their interpretations differed considerably as did the consequences drawn from this knowledge.

These differences in perspectives of online privacy may explain the conflicting findings across studies of Millennials' attitudes and online behaviors. If Millennials are not a homogenous group in their outlook on online privacy, treating Millennials as such ignores the differentiated perspectives and reactions to online environments in this generation and thus likely produces flawed results. This has important ramifications for future studies of online privacy management, in that underlying (qualitative) differences in Millennials' attitudes need to become an integral part of research endeavors.

Privacy perspectives were closely linked to ideas of who addressees of online presences are supposed to be. While authenticity-driven connectors and unconcerned sharers focused primarily on their personal network,

for the group of privacy-conscious strategists the relevant others were proximal or even hypothetical (e.g., potential future employers). The role of others for decisions of (not) sharing content supports the idea that the social environment is a vital aspect in the drawing of privacy boundaries and thus online privacy conceptualizations (Marwick and boyd, 2014; Raynes-Goldie, 2010). Who the main reference group is and how the relationships are defined, separates perspectives and consequently privacy management behaviors.

Still, the three perspectives also showed overlaps and similarities. Most notable are their acceptance of marketing-related data collection and their negative stance towards falsification of information. While the three profiles thus demonstrate the existence of disparate privacy perspectives, our observations suggest that Millennials do possess (some) common ground of what can be expected and accepted in terms of online privacy.

Our observations further signal an interesting distinction between *privacy concerns* versus *impression management* as main rationales for the drawing of privacy boundaries and thus for the concept of online privacy in Millennials. Privacy concerns refer to individuals' unease with sharing personal data (Westin, 2003) or their fear of losing control over their data and information (Metzger, 2007). Impression management is defined as "the goal-directed activity of influencing the impressions that audiences form of a person, group, object or event" (Schlenker and Britt, 1999). Privacy concerns can be understood as a defensive or prevention-focused motivation, whereas impression management can be seen as an active, self-promoting strategy to privacy management. Privacy-conscious strategists seem mostly driven by the former motivation; authenticity-driven connectors and unconcerned sharers primarily by the latter. Conceptualizations and discussions of online privacy tend to emphasize the protective/preventive aspect. Our study suggests that privacy behaviors may also have pro-active and self-promoting aspects. We think that this more pro-active component in the sense of privacy as self-promoting impression management deserves further attention.

5.1 Practical implications

Privacy perspectives help to better understand how to define and adjust privacy settings of applications and services. For instance, unconcerned sharers seem very willing to receive personalized offers for goods and services, privacy-conscious strategists less so. On the other hand, privacy-conscious strategists may be more willing to provide and obtain information that helps their job chances, which may be of less interest to authenticity-driven connectors. Our findings also illustrate that the extent of privacy concerns as well as the reasons for being concerned vary considerably across groups. These are important considerations for the design of social media applications and data collection practices.

5.2 Limitations and further studies

The mixed methodology of Q-sorts and accompanying interviews is a strong approach for the exploration of subjective perspectives on online privacy. However, our findings certainly need validation in subsequent studies. Also, our sample shows considerable homogeneity in terms of educational level and gender, which may restrict the diversity of views. Another aspect for consideration is the link between privacy perspectives and behaviors (privacy paradox; Norberg, Horne and Horne, 2007). While our three perspectives suggest distinct patterns in how each group shares and consumes online content and why, how this translates into actual behavior still needs to be studied.

Moreover, understandings of online privacy and the management of privacy boundaries are context dependent (Norberg et al, 2007; Xu et al, 2011). While we assume that the three perspectives represent 'chronic' (i.e., stable) perspectives that will shape individuals' behaviors across situations and long-term, fluctuations are still likely (e.g., due to experiences of severe privacy infringements, changes in life situations or as attitude changes over a life-span). The stability or malleability of privacy profiles thus remains an interesting topic. The issue of the stability or malleability of privacy perspectives also touches on the question of how they develop in the first place; i.e., why do some people develop into unconcerned sharers, while others become privacy-conscious strategists? While considerable research is conducted into the consequence of privacy attitudes, there is relatively little research that considers the origins of disparities. Given the potentially shifting nature of perspectives on online privacy, this seems an important knowledge gap.

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