



# Cultural Differences in Social Media Use, Privacy, and Self-Disclosure

---

*Research report on a multicultural survey study*

## **Authors:**

Sabine Trepte

Philipp K. Masur

## **Young Scholars Network on Privacy and the Web 2.0:**

The study was collaboratively developed and conducted by the members of the Young Scholars' Network on Privacy and the Web 2.0: Ellison, N., Haferkamp, N., Hartmann, M., Hasebrink, U., Jers, C., Joinson, A., Krämer, N., Lewis, K., Loosen, W., Maas, W., Peter, J., Quiring, O., Reinecke, L., Schmidt, J.-H., Taddicken, M., Trepte, S., Walther, J. B., Yao, M., Ziegele, M.

The Network was founded by Sabine Trepte and Leonard Reinecke.

25.05.2016

**Recommended citation:**

Trepte, S. & Masur, P. K. (2016). *Cultural differences in media use, privacy, and self-disclosure. Research report on a multicultural survey study*. Germany: University of Hohenheim.

**Note:**

This research was funded by German Research Foundation grant TR 498/11 awarded to Sabine Trepte.

**Author Correspondence:**

Prof. Dr. Sabine Trepte  
University of Hohenheim  
Department of Media Psychology (540F)  
70599 Stuttgart (Germany)  
Tel. +49 (0) 711 459 22654  
sabine.trepte@uni-hohenheim.de  
<https://medienpsychologie.uni-hohenheim.de/>

# Table of Contents

<b>1</b>	<b>SUMMARY OF FINDINGS</b>	<b>5</b>
<b>2</b>	<b>INTRODUCTION</b>	<b>6</b>
<b>3</b>	<b>LITERATURE REVIEW</b>	<b>7</b>
<b>4</b>	<b>PROCEDURE AND SAMPLE</b>	<b>9</b>
4.1	Research Design	9
4.2	Age and Gender Distributions	9
4.3	Educational level	10
4.4	Active and Passive Social Media Use	11
<b>5</b>	<b>MAIN FINDINGS</b>	<b>13</b>
<b>5.1</b>	<b>Social Network Sites</b>	<b>13</b>
5.1.1	Socio-demographics of SNS users	13
5.1.2	Use of specific SNS platforms	14
5.1.3	Frequency of SNS use	14
5.1.4	Start of SNS use	16
5.1.5	Mobile SNS usage	16
5.1.6	SNS characteristics	17
5.1.7	Feedback on status updates	23
5.1.8	Motivation to use SNSs	24
5.1.9	Privacy-Related Measures	27
5.1.10	Specific privacy behavior	37
5.1.11	Subjective importance of preventing negative privacy outcomes	44
<b>5.2</b>	<b>Microblogs</b>	<b>45</b>
5.2.1	Socio-demographics of microblogs users	45
5.2.2	Use of specific microblog platforms	46
5.2.3	Frequency of microblog use	46
5.2.4	Beginning of use	47
5.2.5	Mobile usage	48
5.2.6	Audience	49
5.2.7	Privacy-Related Measures	55
5.2.8	Disclosure of profile information	57
<b>5.3</b>	<b>General Measures</b>	<b>59</b>
5.3.1	General trust of other people	59

5.3.2	Previous experiences with privacy violations	60
5.3.3	Self-disclosure online and offline	60
5.3.4	Subjective privacy level of privacy-related behaviors	61
5.3.5	Sensitivity of information	62
5.3.6	Sharing of different types of information	65
<b>6</b>	<b>CONCLUSION</b>	<b>70</b>
6.1	Limitations	71
6.2	Future Perspectives	71
	<b>REFERENCES</b>	<b>72</b>
	<b>APPENDIX</b>	<b>74</b>
A 1	Description of statistical procedures	74
A 2	Correlations between SNS variables	75
A 3	Correlations between microblog variables	81
A 4	Further publications on privacy by the Department of Media Psychology	87

# 1 Summary of Findings

This research report presents comparative results from five nations (United States of America, United Kingdom, Germany, Netherlands, and China) with regard to social media use, self-disclosure, privacy perceptions and attitudes, and privacy behavior in online environments. The data stemmed from an online survey that was conducted from November, 2011, to December, 2011. Across all nations,  $N = 1,800$  participants completed the survey. Based on these data, the following key findings were observed:

1. SNS users from all five countries did not differ in their **frequency of social network site (SNS) use**. They used **SNSs around 60 to 90 min** on an average day.
2. There were significant differences in **network size**: Whereas US Americans had much larger networks on SNSs, German users had the smallest networks. US American SNS users also had **more diverse SNS networks that included people from different social contexts**.
3. People from all countries indicated having a **high privacy literacy**. Participants from Germany and the US perceived themselves as slightly more literate than participants from other countries.
4. **German SNS users reported generally applying more privacy settings** to safeguard their data and privacy when using SNSs. In particular, they **restricted the visibility of profile information** more than SNS user from other countries. However, sophisticated settings such as using friends lists were applied equally often by users from different countries.
5. All SNS users reported finding it **important to prevent risks that might arise from privacy-related behavior** such as having an open profile or uploading pictures. However, there were significant differences in the implementation of such behaviors: **More Chinese SNS user had an open profile, and more Dutch users uploaded pictures onto their SNSs**.
6. US American and Chinese users reported spending more time per day on microblogs than users from the other three countries.
7. **The number of followers on microblogs** did not differ between countries. The audience generally consisted of diverse contexts, including strangers and people the user had never met before.
8. US American microblog users often used a **recognizable profile picture but used a pseudonym**, whereas many Chinese users reported a preference for being **visually anonymous by using an avatar or an unrecognizable picture, but they used their real name**.
9. Most microblog users **made their tweets accessible to everybody**. However, compared with the other four countries, US Americans generally restricted their tweets to their followers.
10. Overall, **people reported that they had not yet experienced many privacy violations**. Most users had not even encountered a single privacy threat during their previous usage.
11. Europeans and in particular **Germans reported perceiving information as more sensitive** and reported believing that privacy-related behaviors such as posting one's relationship status affect their privacy.
12. **Self-disclosure** happened less frequently in online environments than offline. **US American and Chinese social media users generally posted more sensitive information** online than Europeans.

## 2 Introduction

The social web requires people to disclose and share personal information in order to sustain its functionality. With the rise of social network sites (SNSs) and microblogging services, users are increasingly sharing intimate information about themselves with other users, companies, online providers, and unidentified third parties. Accordingly, handling personal data in online environments is associated with many risks for the individual user. Effective data handling thus becomes a challenge. Due to the rapid development of new media as well as the global expansion of the Internet, privacy management now applies beyond national boundaries. Social media users act on a worldwide stage where information easily traverses cultural boundaries and contexts.

Even though privacy and the need for privacy have been conceptualized as universal and transcultural phenomena, it has been documented that privacy is perceived and enacted differently across different cultural and societal backgrounds (Altman, 1975, 1977; Laufer & Wolfe, 1977). According to Laufer and Wolfe (1977), the boundaries of consciousness about privacy are transmitted through language, tradition, and values within a specific culture. They further argued that “even in highly complex societies [...] the dominant perspectives of the community play a decisive role in the way an individual defines privacy situations” (Laufer & Wolfe, 1977, p. 28). Likewise, the social psychologist Irwin Altman reasoned that “while the capability for privacy regulations may be culturally universal, the specific behaviors and techniques used to control interactions may be quite different from culture to culture” (Altman, 1977, p. 69).

In the social web, users are part of a virtual network that consists of people from different cultural backgrounds with different norms, values, and perceptions of privacy. Research on privacy in the social web thus requires the researcher to take a multicultural perspective. The “Young Scholars Network on Privacy and Web 2.0” conducted a multinational survey that was aimed at investigating cultural differences in social media use, self-disclosure, privacy behavior, and privacy perceptions. The following research report presents descriptive results from this study. In chapter 3, we will look at previous research that used culture-comparative designs to review previous findings on cultural differences in self-disclosure or privacy perceptions and behavior. We found that previous studies have shown somewhat mixed results with regard to privacy management on the social web. In chapter 4, the methodology of the study will be described in detail. In chapter 5, the main findings will be presented. Cultural differences with regard to SNS use will be presented first, then with regard to microblog use, and finally with regard to general measures of social media use. In the last chapter, we will draw a brief conclusion that emphasizes the need for more cultural-comparative studies to provide a better understanding of cultural influences on online behaviors.

### 3 Literature review

Most scholars who have done research on privacy acknowledge that it is a universal phenomenon and is regarded as a basic human need that enables people to manage both personal activities and social interactions (Pedersen, 1997). Losing privacy when it is needed is thus perceived as a threatening experience (Trepte & Reinecke, 2011). Privacy involves “the selective control of access to the self” (Altman, 1975, p. 24). According to Altman, it encompasses a dynamic process of interpersonal boundary control and is thus a nonmonotonic function. If a person’s desired level of privacy corresponds with his or her actual level of privacy, the person experiences an optimal level of privacy. But there can be states of too much or too little privacy, too. Depending on their situational experience with privacy levels, people will engage in different behavioral mechanisms in order to regulate their privacy to reach the optimal level. Although this process seems to be universal across cultures, it does not imply that all human beings have the same privacy preferences or use the same regulations in order to obtain their preferred optimal level of privacy.

In one of the first studies dealing with differences in privacy perceptions and evaluations, Pedersen and Frances (1990) found significant differences in privacy preferences between people residing in different geographical regions in the United States. Their findings suggested that people living in areas with a higher population density showed a greater desire for isolation, solitude, and anonymity.

Many researchers have highlighted the impact of culture on privacy perceptions and behavior (Altman, 1977; Laufer & Wolfe, 1977). However, multicultural studies in this field remain scarce and present a somewhat mixed picture. A number of scholars have investigated the extent to which typical cultural values – as defined by Geert Hofstede (1980; 1990) – influence privacy-related attitudes and behaviors. Bellman and colleagues (2004), for example, examined whether differences in privacy concerns are related to or reflect differences in these cultural values. By sampling Internet users from 39 countries, they found that cultural values did not have an influence on people’s overall concerns about the privacy of their information. However, national regulation had an influence on privacy concerns, thus suggesting that the influence of cultural values on privacy concerns might be mediated by regulatory differences (p. 321). Another study by Marshall and colleagues (2008) confirmed these findings as their results did not show any difference between American and Indian students. In 2009 however, Cho, Rivera-Sánchez, and Lim surveyed 1,261 Internet users from five different countries with regard to privacy concerns. In contrast to the previous studies, their findings suggested that users from individualistic countries (e.g., US and Australia) were more likely to be concerned about online privacy than users from collectivistic cultures (e.g., Korea and India). However, other cultural values had no significant effect on privacy concerns (Cho, Rivera-Sanchez, & Lim, 2009). A report by the European Union revealed that privacy concerns also differed between countries of the European Union. For example, 50 percent of the German, French, and Italian population were concerned that their behavior was recorded on the Internet, whereas only less than 20 percent of the Swedish, Bulgarian, and Romanian population expressed such concerns (European Commission, 2011).

Scholars have also looked at the influence of cultural differences on self-disclosure and behavior related to regulating privacy. Researchers from the University of Alabama found that Latin Americans self-disclosed more to a person around their age than North Americans did (Diaz-Peralta Horenstein & Downey, 2010).

With regard to behaviors in online environments, multicultural studies have primarily compared Asian and North American countries, thus contrasting “Western” and “Eastern” cultures, or in other words, countries that were on opposite ends of the Hofstede scale “individualism” and “collectivism” (for an overview, see Gallagher & Savage, 2013). But even *within* western cultures, differences have been found in self-disclosure: For example, whereas half of the Swedish and Austrian populations disclosed their home address on an SNS, more than three quarters of the Italian population did not (European Commission, 2011). Furthermore, only 34% of German SNS users were found to share their list of friends, whereas more than half of the Danish population did not mind sharing their friends list (European Commission, 2011).

Findings from previous research on the influence of culture on privacy perceptions and behavior at times complement each other and at other times contradict each other: Culture, indeed, seems to have an influence on privacy-related attitudes and behaviors, but these differences are not always consistent with cultural values. The research presented here aims to complement this prior research by comparing the social media use, privacy attitudes, and privacy behaviors of US American, British, German, Dutch, and Chinese users.

## 4 Procedure and Sample

### 4.1 Research Design

The data used in this research report stemmed from an online survey that was conducted in the United States, the United Kingdom, Germany, the Netherlands, and China. In the following, these countries are referred to by the following abbreviations:

**Table 1: Abbreviations**

United States of America	United Kingdom	Germany	Netherlands	China
USA	GBR	GER	NED	CHN
				

To ensure comprehensiveness for the participants from all five countries, the survey was translated into each respective national language (English, German, Dutch, and Chinese). Each member of the “Young Scholar Network on Privacy and Web 2.0” distributed the link individually to a pool of initial informants who, in turn, posted the link on their social network sites. It has to be noted that due to this nonprobability sampling technique (snowball sampling), the resulting national samples were not equal in size and were not representative of the corresponding national populations. The survey was conducted from the 15<sup>th</sup> of November, 2011, until the 20<sup>th</sup> of December, 2011. No personally identifying information was stored with the individual responses. In total,  $N = 1,800$  people took part in the survey. The following sample sizes were achieved in each country:

**Table 2: Sample sizes in each country**

Country	USA 	GBR 	GER 	NED 	CHN 
$n$	555	81	884	95	185

### 4.2 Age and Gender Distributions

Although different in size, all national samples resembled each other with regard to the distribution of age (see Figure 1). In all five samples, most participants were between 19 and 25 years old. Only a few people were older than 36 (0.7% - 8.6%). On average, American participants were 20 years old, with a standard deviation (SD) of 5.16 years. British participants were slightly older with a mean age of 23 years ( $SD = 7.37$  years). German participants were the oldest with an average age of 24 years ( $SD = 5.92$  years). Dutch participants were on average 22 years old ( $SD = 6.01$  years), and Chinese participants were 22 years of age on average ( $SD = 3.52$  years).

With regard to gender, the samples had quite different distributions (see Figure 2). In the American sample, 44.9% of the participants were male, and 55.1% were female. 79.0% of the British participants were

male, and 21.0% were female. In the German sample, 27.6% were male, and 72.4% were female. In the Dutch sample, 22.1% of the participants were male, and 77.9% were female. Finally, 26.5% of the participants in the Chinese sample were male, and 73.5% were female.

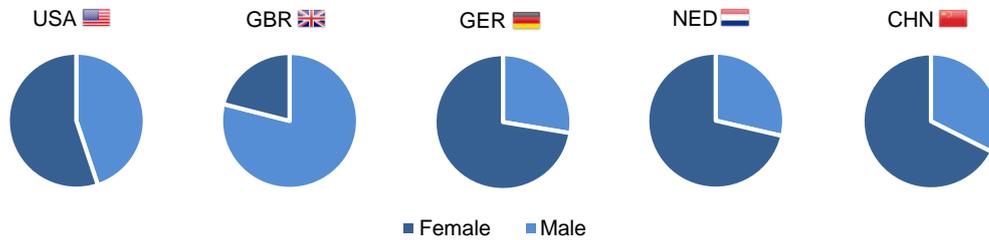


Figure 1: Gender distributions

### 4.3 Educational level

Figures 2 to 6 present the differences in the educational levels of the participants. In general, all participants had a high level of education.

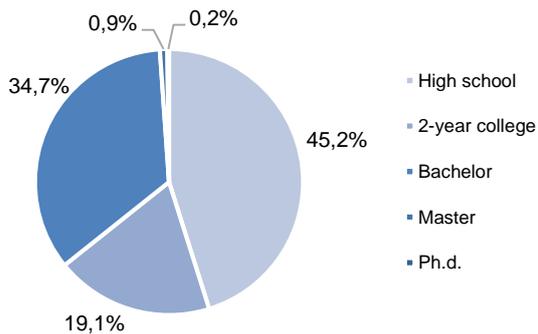


Figure 2: Educational levels in the USA

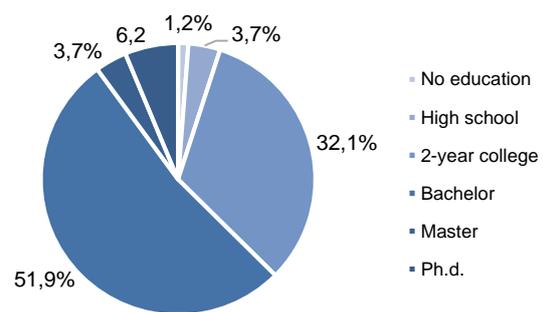


Figure 3: Educational levels in Great Britain

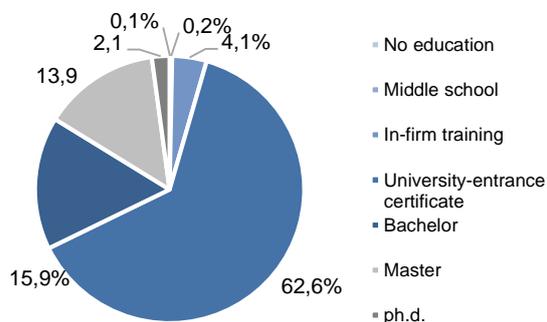


Figure 4: Educational levels in Germany

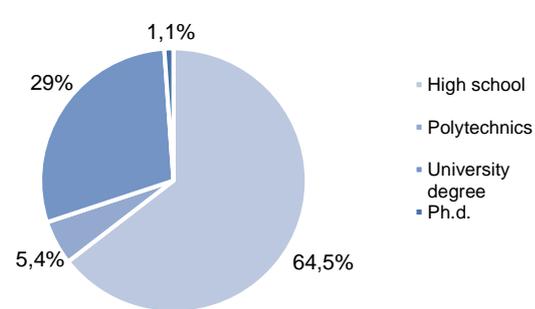


Figure 5: Educational levels in the Netherlands

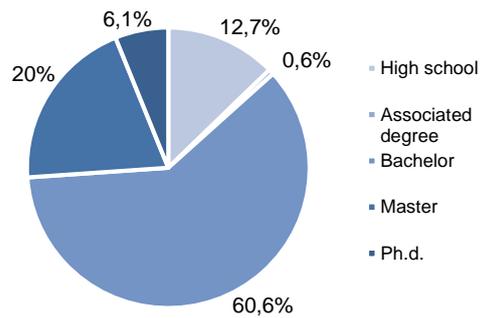


Figure 6: Educational levels in China

#### 4.4 Active and Passive Social Media Use

In the first part of the survey, we asked all participants which of the following activities (using a social network site, microblogging actively, reading microblogs, watching videos on a video platform, etc...) they engaged in regularly. The results are presented in Table 3.

Table 3: Active and passive social media usage

		USA 🇺🇸		GBR 🇬🇧		GER 🇩🇪		NED 🇳🇱		CHN 🇨🇳	
		N	%	N	%	N	%	N	%	N	%
Using a Social Network Site	yes	521	93.9	73	90.1	799	90.4	93	97.9	175	94.6
	no	34	6.1	8	9.9	85	9.6	2	2.1	10	5.4
Microblogging actively	yes	214	38.6	17	21	64	7.2	20	7.2	128	69.2
	no	341	61.4	64	79	820	92.8	75	92.8	57	30.8
Reading microblogs	yes	218	39.3	21	25.9	119	13.5	32	33.7	151	81.6
	no	337	60.7	60	74.1	765	86.5	63	66.3	34	18.4
Watching videos on a video platform	yes	417	75.1	63	77.8	747	84.5	87	91.6	156	84.3
	no	138	24.9	18	22.2	137	15.5	8	8.4	29	15.7
Uploading videos to a video platform	yes	57	10.3	2	2.5	36	4.1	9	9.5	32	17.3
	no	498	89.7	79	97.5	848	95.9	86	90.5	153	82.7
Writing blogs	yes	25	4.5	6	7.4	50	5.7	6	6.3	72	38.9
	no	530	95.5	75	92.6	834	94.3	89	93.7	113	61.1
Reading blogs	yes	133	24	18	22.2	263	29.8	27	28.4	96	51.9
	no	422	76	63	77.8	621	70.2	68	71.6	89	48.1
Contributing actively to a Wiki	yes	4	0.7	0	0	24	2.7	0	0	13	7
	no	551	99.3	85	100	860	97.3	95	100	172	93
Reading a Wiki	yes	161	29.0	23	28.4	624	70.6	48	50.5	144	77.8
	no	394	71.0	58	71.6	260	29.4	47	49.5	41	22.2
Sum		555	100	85	100	884	100	95	100	185	100

In sum, we observed that people prefer to consume content instead of producing it themselves. For example, more than two thirds of each national sample reported watching videos on platforms such as Youtube or Vimeo, but only a few actually uploaded videos to these platforms. The same pattern could be seen with regard to wiki platforms (e.g., Wikipedia). Although one third of the American and British samples, half of the Dutch sample, and more than 70% of the German and Chinese samples read wikis, less than 7% actually contributed content to these platforms.

## 5 Main Findings

In the following, we will compare the results across the five different nations. Chapter 5.1 focuses on SNSs and how users behave on these platforms. Chapter 5.2 additionally presents how users use microblogging services (e.g., Twitter). Across these different forms of social media use, we focused on cultural differences with regard to a variety of different measures such as usage patterns and frequency of use, network size and composition, attitudes and behaviors, privacy-related measures such as privacy literacy, use of privacy settings, and willingness to engage in privacy behavior. In the subsequent chapter 5.3, we report the results of an investigation of cultural differences with regard to general measures of social media use. The measures consisted of, for example, self-disclosure online and offline, reasons for self-disclosure, and effects of self-disclosure.

In the Appendix, we present selected correlations within each national sample (Appendix: Tables I-V). In order to be able to detect differences in the correlations between the national samples, we also calculated the standard deviations (*SD*) of the correlations. Larger values in these tables indicate greater variation in the correlations between the national samples (Appendix: Tables VI and XII). In part, correlations varied substantially between the countries.

### 5.1 Social Network Sites

SNSs can be defined as “networked communication platforms in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users and/or system-level data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site” (Ellison & boyd, 2013, p. 158). SNSs furthermore provide different communication channels that can be differentiated into one-to-one and one-to-many, synchronous and asynchronous, and textual-based and media-based communications (Ellison & boyd, 2013). The following analyses focused only on participants who indicated that they use at least one SNS regularly. We thus drew subsamples of SNS users from each national sample. First, the socio-demographics of these subsamples will be described.

#### 5.1.1 Socio-demographics of SNS users

As almost all participants had a profile on some kind of SNS (more than 90% in each subsample), the socio-demographics of SNS users differed only slightly from the full samples: SNS users in the American sample ( $n = 521$ ) were 20 years old on average ( $SD = 2.41$  years), and 55% of them were female. In the British sample ( $n = 73$ ), the average age of an SNS user was 22 years ( $SD = 6.86$  years), and most of them were male (79.5%). German SNS users ( $n = 799$ ) had a mean age of 24 years ( $SD = 5.78$  years). The majority of users were female (73.7%). The Dutch SNS users ( $n = 93$ ) had an average age of 22 years ( $SD = 6.07$  years), and 77.4% were female. Finally, Chinese SNS users ( $n = 175$ ) were 22 years old ( $SD = 3.33$  years), and 73.7% were female. The following analyses were thus based on these five subsamples.

### 5.1.2 Use of specific SNS platforms

In 2011, Facebook was already popular in each of the surveyed countries. As can be seen in Figure 8, Facebook was used in all of the surveyed countries. In the American SNS subsample, 98.5% said that they used Facebook more than any other SNS. Only a small percentage said that they used LinkedIn (1.3%), MySpace (0.2%), or Interpals (0.2%). British SNS usage was distributed in a similar way: 97.3% used Facebook, 1.4% indicated that they used Google+, and another 1.4% said that they mostly used bebo. In Germany, the majority used Facebook (89.6%), whereas 6.6% used studiVZ, and 3.8% used either XING, Wer-kennt-wen, Google+, or meinVZ. In the Dutch subsample, 94.5% used Facebook, and 5.5% used LinkedIn. A very different distribution was observed in the Chinese subsample: Most participants used Renren (67.4%) instead of Facebook (24.8%). Until recently, the Chinese government had blocked the Facebook website. In order to use it, Chinese citizens had to use professional software (e.g., virtual private networks). This might explain why less than one third of the Chinese subsample used Facebook at the time. Apart from Renren and Facebook, a small part (7.7%) used Chinese SNSs such as douban or kaixin.

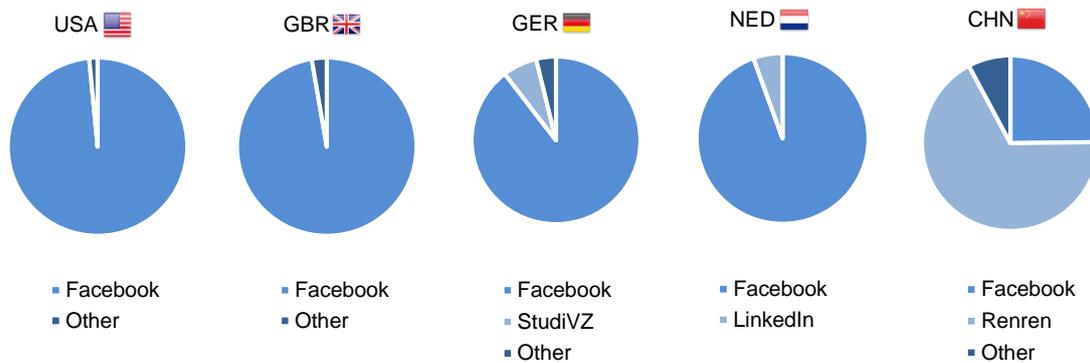
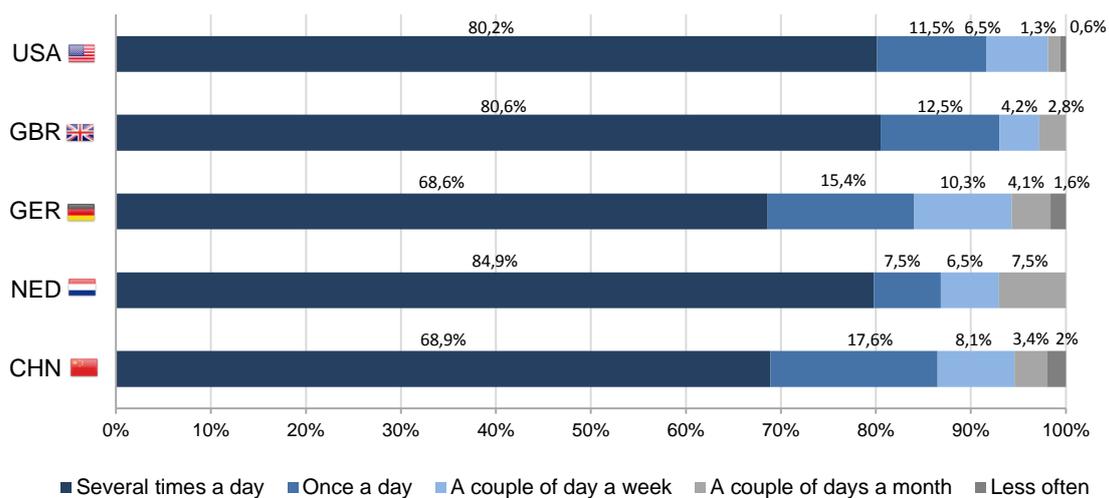


Figure 1: Usage of specific SNS platforms

### 5.1.3 Frequency of SNS use

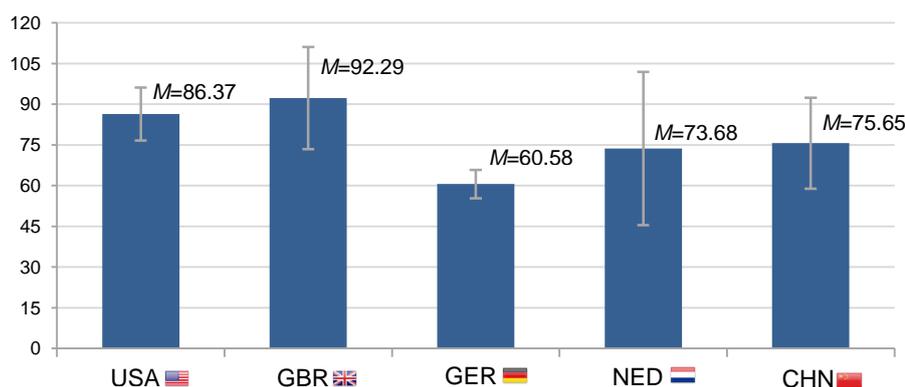
Two variables were used to measure how often people used SNSs and how much time they spent on SNSs. First, we were interested in how often users engaged with their preferred SNS. Thus, we asked: “How often do you use [Name of the preferred SNS]?” Possible answer options ranged from 1 (*several times a day*) to 5 (*less often*). The results are presented in Figure 9.



**Figure 2: Frequency of SNS use in each subsample**

The findings revealed that most SNS users reported actively engaging with their favorite SNS several times a day no matter what country they were from. 90% of all users reported logging in to their preferred SNS at least once a day. The frequency of use thus differed only slightly between countries. In Germany and in China, however, people seemed to use SNSs a bit less often compared with the other countries. This influence of nationality on frequency of SNS use turned out to be significant,  $H(4) = 32.68, p < .001, \eta^2 = .02$ . Looking at the pairwise comparisons, it could be seen that German participants used SNSs significantly less often than American ( $p < .01$ ) and Dutch ( $p < .01$ ) users. Although these differences turned out to be significant, the effect size was rather small. In sum, it can be said that most SNS users (about two thirds in each country) engaged in SNS use several times a day.

Further, we asked: “In the past week, on average, approximately how much time per day have you spent actively using [name of the preferred SNS]?” Participants consequently had to estimate the exact number of minutes per day they actively spent on their favorite SNS. The results are presented in Figure 10.



**Figure 3: Time spent on SNSs on an average day (in minutes)**

In every country, participants spent more than one hour per day on their favorite SNS. British users, however, spent the longest time per day on SNSs: 92 minutes on average ( $SD = 80.08$  minutes). German users, on the

other handy, spent about only 61 minutes on SNSs ( $SD = 74.66$  minutes). The overall effect of nationality on time spent on SNSs per day was significant,  $Welch's F(4, 262.75) = 7.18; p < .001$ , however, it was very small,  $est. \omega^2 = .02$ . Pairwise comparisons revealed that German SNS users spent significantly less time on SNSs than American ( $p < .01$ ) or British SNS ( $p < .05$ ) users. Age was generally negatively correlated with SNS usage frequency ( $r = -.16$  in the United Kingdom to  $r = -.08$  in Germany). Only in the Chinese subsample did older SNS users not spend less time on SNSs than younger users ( $r = .01$ ).

### 5.1.4 Start of SNS use

To investigate when the participants started to use their preferred SNS, the following question was posed: “For how long have you been using [name of the preferred SNS]?” Answer options ranged from 1 (*more than four years*) to 5 (*less than one year*). Participants could also indicate *I don't know* if they did not remember when they started using their preferred SNS. The results are presented in Figure 11.

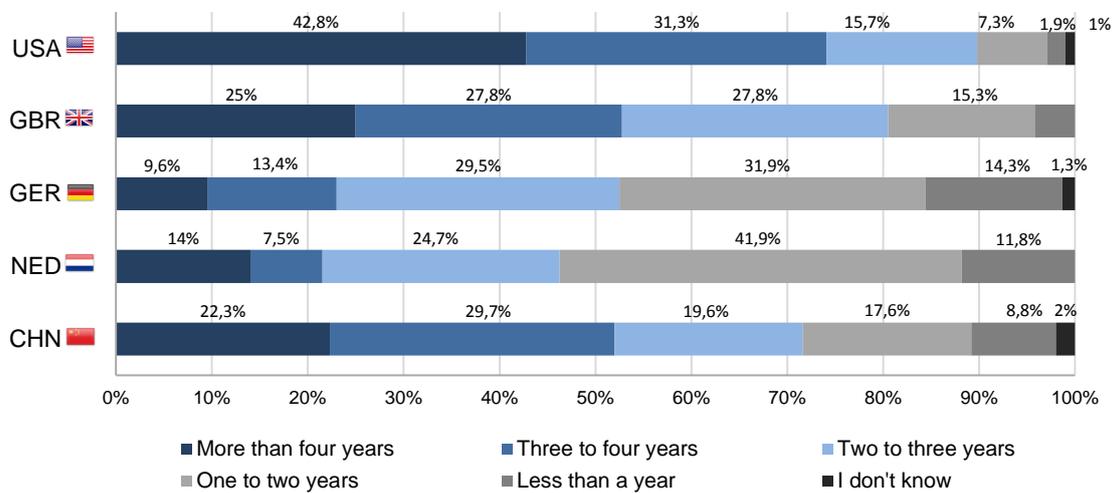
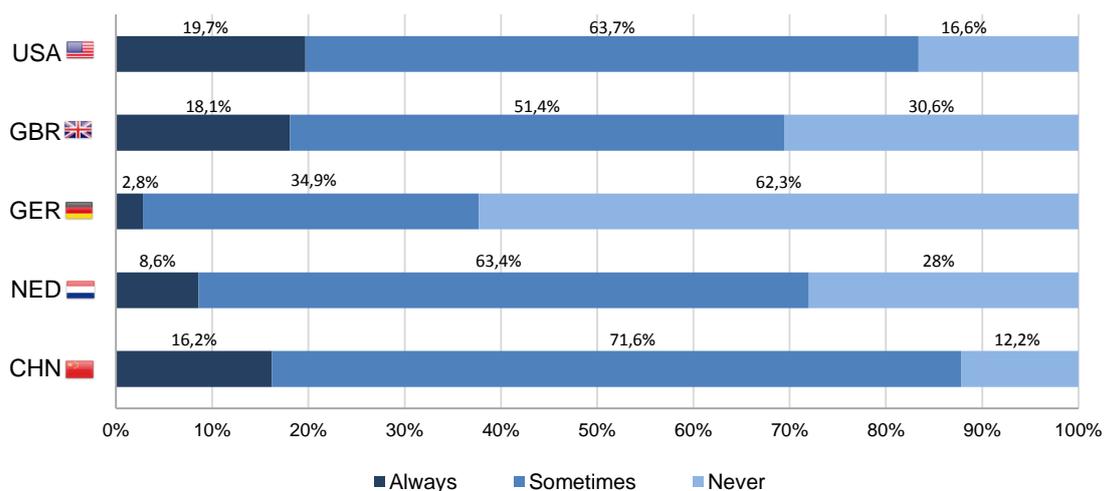


Figure 4: Start of SNS use

The overall effect of nationality on when SNS use began was significant,  $H(4) = 354.03, p < .001, \eta^2 = .23$ . It can be seen that Americans started to use SNSs earlier than users from other countries. 31.3% of the Americans surveyed had begun to use SNSs three to four years ago, and another 42.8% had even begun to use SNSs more than 4 years ago. Post-hoc tests revealed that American users began using SNSs earlier than participants from all other countries ( $p < .01$ ).

### 5.1.5 Mobile SNS usage

Since the introduction of smartphones, mobile usage has become an integral part of general SNS usage. Participants were asked: “How often do you publish something on [Name of the preferred SNS] from a smartphone or any other mobile device?” The answer options were 1 (*always*), 2 (*sometimes*), and 3 (*never*). The results can be found in Figure 12.



**Figure 5: Frequency of use of microblogging services on a mobile device**

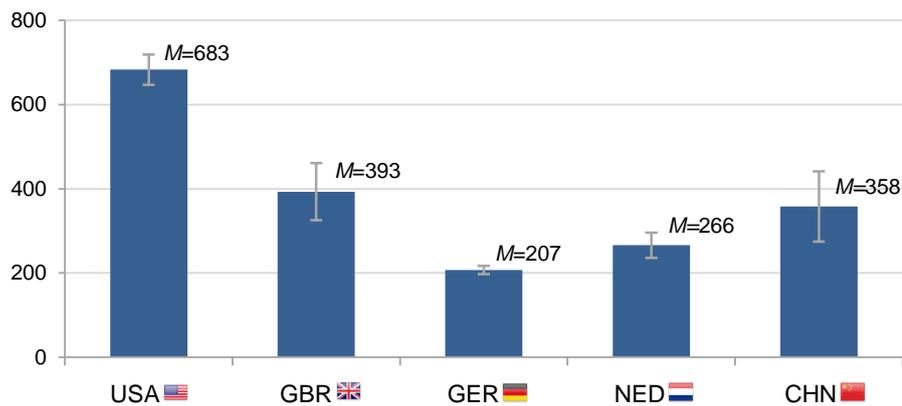
Almost 70% of all SNS users reported posting content from a smartphone from time to time. Nationality had a significant effect on mobile usage,  $H(4) = 351.59, p < .001, \eta^2 = .22$ . Specifically in Germany, SNS users made less use of smartphones to post something on their preferred SNS (all pairwise comparisons:  $p < .001$ ). 62.3% of the Germans even indicated that they never used a smartphone to publish content on an SNS.

### 5.1.6 SNS characteristics

Social media is about interacting with other people. It is thus crucial to understand with whom people are communicating on these platforms. In order to grasp both size and diversity, we used a number of different variables to measure the audience of SNS users.

#### 5.1.6.1 Network size

The first variable referred to the size of an individual's network by measuring the participant's number of friends. Participants were asked to guess how many contacts they had on their SNS. The exact question was "About how many contacts do you have on [Name of the preferred SNS]?" Although this measure was based on self-report, it nonetheless presents a fairly accurate estimate of the actual audience size. Figure 13 shows the average number of friends in each national subsample.

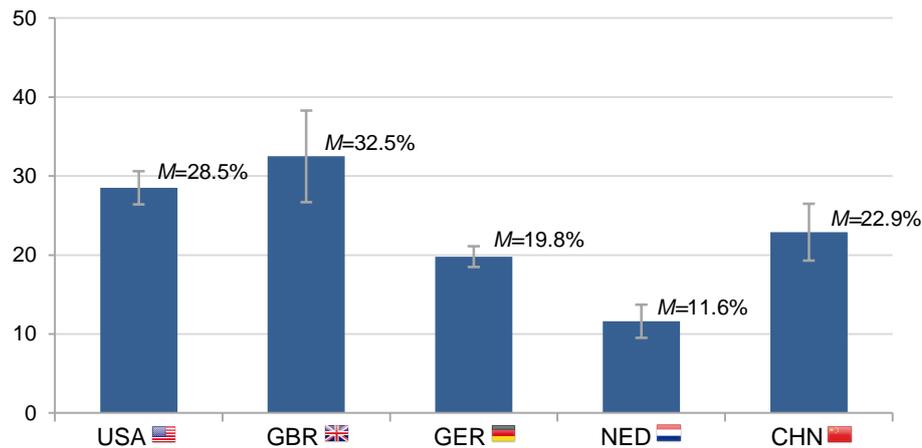


**Figure 6: Network size (number of contacts)**

An analysis of variance revealed significant and large differences between the national subsamples, *Welch's F*(4, 159.87) = 257.26,  $p < .001$ , *est.  $\omega^2$*  = .29. American SNS users reported having the largest network ( $M = 683$  contacts,  $SD = 400$  contacts). On the other hand, German users had only 207 contacts ( $SD = 144$  contacts) on average. Post-hoc tests showed that American SNS users had significantly more contacts than SNS users from all other countries (all pairwise comparisons:  $p < .01$ ). On the other hand, German SNS users had significantly fewer contacts than SNS users from the USA, the United Kingdom, and China (all pairwise comparisons:  $p < .01$ ). In all national subsamples, women had generally larger audiences than men. Only in Germany did gender have no significant effect on audience size. Likewise, in all countries except for China, younger SNS user had more friends on their SNS ( $r = -.08$  in the USA to  $r = -.27$  in Great Britain). Larger variations could be found with regard to the relationship between usage frequency and audience size. There was a positive correlation in Great Britain ( $r = .43$ ) and in Germany ( $r = .20$ ). In the other three countries, the correlation was very small.

#### 5.1.6.2 Proportion of real friends

Although contacts are labeled “friends” on most SNSs, studies have shown that users do not add just their “real friends” but also co-workers, acquaintances, family members, or even strangers they have never met before. Accordingly, we wanted to know how many of the people on participants’ SNSs were actually considered real friends. The following question was asked: “Approximately how many of your contacts do you consider actual friends?” The proportion of real friends (in percent) was then computed by dividing this number by the total audience size. The analysis of variance, however, was conducted with the original variable (number of friends).

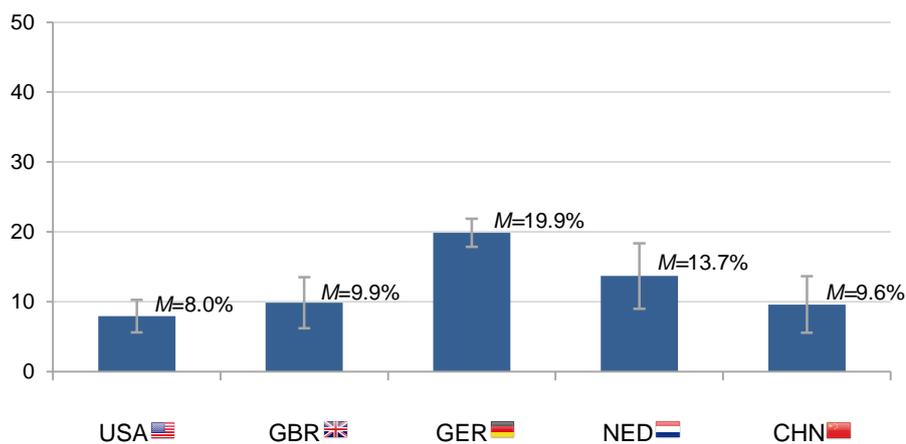


**Figure 7: Proportion of real friends (in percent)**

Figure 14 already indicated that the average proportion of real friends differed a lot between the national subsamples. The overall effect was significant, *Welch's*  $F(4, 292.19) = 90.47$ ;  $p < .001$ , *est.*  $\omega^2 = .18$ . SNS users from the Dutch subsample indicated that they would consider only 11.6% of their SNS contacts to be actual friends, a proportion that was significantly lower than any proportion of real friends in all other countries (all pairwise comparisons:  $p < .01$ ). British SNS users had the highest proportion of real friends on SNSs at 32.5%. The mean score was significantly higher than the scores of German, Dutch, and Chinese SNS users (all pairwise comparisons:  $p < .01$ ). Generally speaking, users considered less than one third of their contacts on SNSs to be real friends. As indicated by the correlations in the Appendix, the proportion of real friends declined in larger networks.

#### 5.1.6.3 *Proportion of international contacts*

As SNSs are used all over the world, and users' connections may be international, it was also important to measure the internationality of someone's SNS network. Users were asked: "About how many of your SNS contacts do not live in the country you live in?" The proportion of international contacts (in percent) was computed in the same way as the proportion of real friends. Again, the analysis of variance was computed on the original variable (number of international contacts). Figure 15 shows the comparative results.



**Figure 8: Proportion of international contacts (in percent)**

Generally speaking, most SNS users do not have a lot of international contacts in their SNS network. The proportion of international contacts is rarely higher than 10%. The overall effect of nationality was not significant, *Welch's*  $F(4, 233.02) = 1.97$ ;  $p < .10$ , *est.*  $\omega^2 = .00$ . However, in examining the confidence intervals of the proportion of international friends, we observed that German users had a slightly higher percentage of international contacts in their SNS audience than American, British, or Chinese users.

#### 5.1.6.4 *Network composition*

Apart from real friends and international contacts, most SNS users' networks also included people from various social contexts. It has been argued that one of the key characteristics of SNSs is that they collapse multiple audiences into one (Marwick & boyd, 2011). Previous studies have often relied on single measures (e.g., audience size as measured in this study), which do not take into consideration the different contexts that SNS contacts might fall into. Binder and colleagues (2009) and Vitak (2012) used a different and more sophisticated approach in their studies. Both presented their participants with 14 to 16 different categories of social contexts (e.g., friends, family, co-workers, school relations, neighbors, childhood friends, and strangers) and asked if individuals falling into these categories were represented in their SNS networks. An estimate of the diversity of the total audience was then obtained by summing up all of the answers such that a higher estimate indicated a more diverse network. In this study, we used a similar approach to grasp the composition of the SNS audience and its diversity.

The following question was posed: "Are the following people among your SNS contacts?" Participants were then presented with 12 categories representing different people who are typically in an SNS user's audience (friends, co-workers, bosses or teachers, parents, children or grandchildren, other members of the family, partner, ex-partners, strangers, people the participants know but have never met personally, people the participant is interested in, and celebrities). Figure 16 presents an overview of the composition of SNS users' audiences from each country.

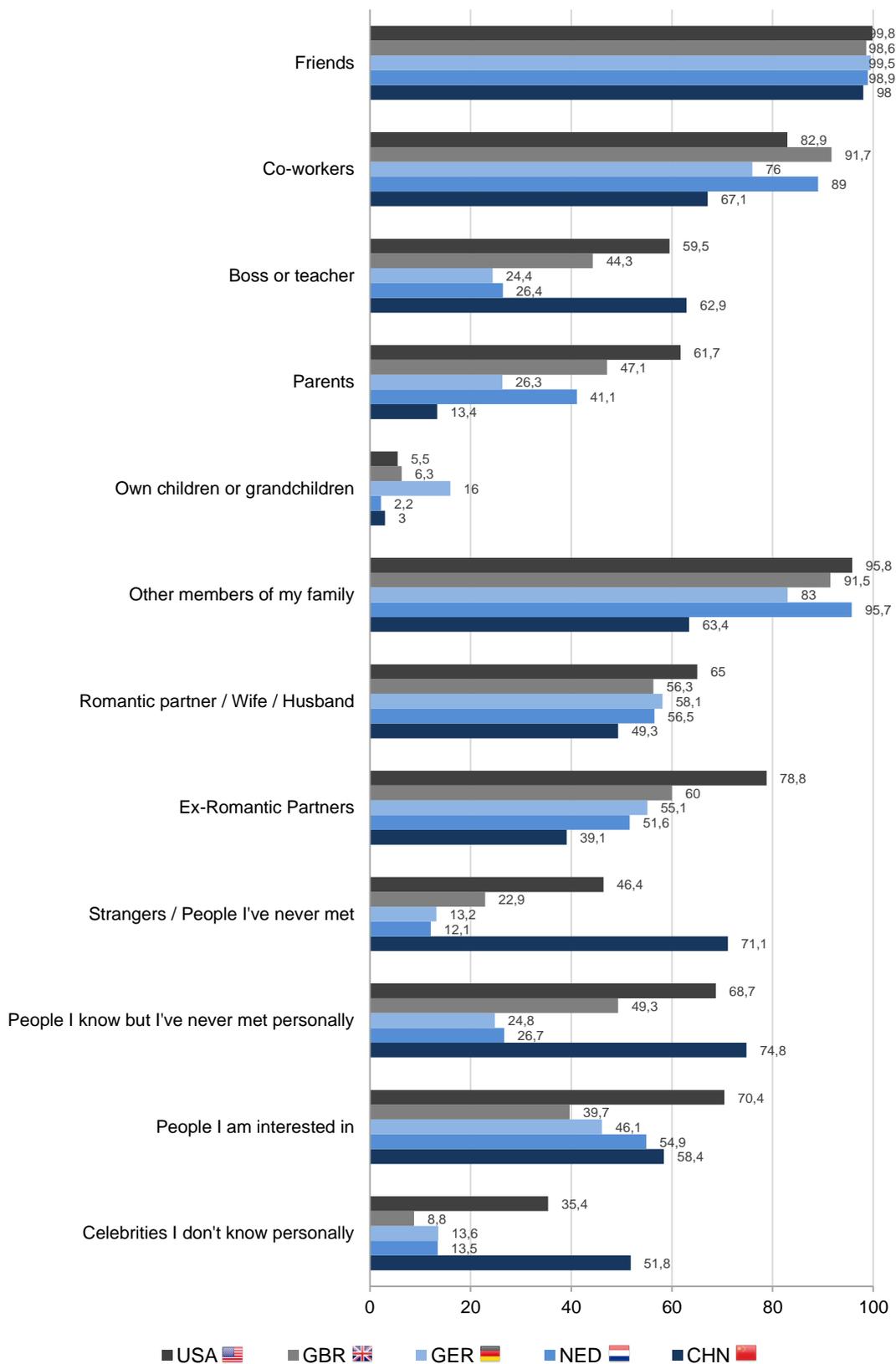


Figure 9: Network composition (Proportion of participants who indicated that their network includes the respective group of people)

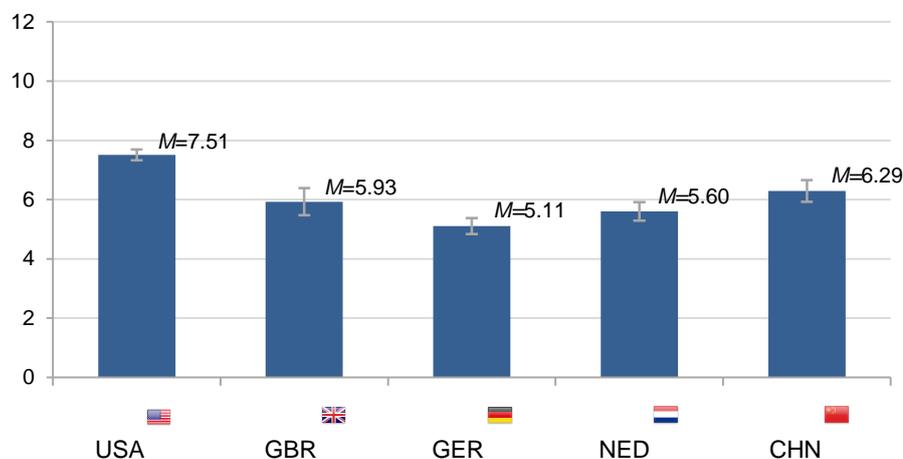
**Table 4: Differences in network composition**

	$\chi^2$	<i>df</i>	<i>p</i>	$\eta^2$
Friends	4.05	4	.400	.00
Co-workers	24.31	4	<.001	.02
Boss or teacher	192.04	4	<.001	.13
Parents	194.15	4	<.001	.13
Own Children or grandchildren	15.81	4	<.010	.01
Other members of family	108.46	4	<.001	.07
Romantic partner / wife / husband	11.08	4	<.050	.01
Ex-romantic partners	99.14	4	<.001	.07
Strangers / people I've never met	302.47	4	<.001	.20
People I know but never met personally	303.12	4	<.001	.20
People I am interested in	79.40	4	<.001	.06
Celebrities I don't know personally	157.06	4	<.001	.11

In the following, we will focus on the most relevant differences. First, almost every SNS user, no matter what country he or she was from, listed friends in his or her SNS network. Accordingly, the results of the  $\chi^2$ -test were not significant for friends (see Table 4). In the work context, however, cultural differences were significant: Fewer German and Chinese SNS users added co-workers to their SNS network, and fewer German and Dutch SNS users added a boss or teacher. With regard to family members, some differences were visible: for example, fewer German users accepted their parents as SNS contacts. Chinese users were generally more open to befriending strangers and people they had not met in person as SNS contacts and also added more celebrities. In general, cultural differences were significant within each category (cf. Table 4).

#### 5.1.6.5 Network diversity

As noted before, we also computed a network diversity index by summing across all of the categories. The resulting estimate thus ranged from 0 to 12. A higher value represents more diversity as the audience of that SNS user included more people from different social contexts. The results can be seen in Figure 17.



**Figure 10: Audience diversity (Summative index of all categories)**

The differences between the countries were significant,  $Welch's F(4, 268.41) = 124.51, p < .001, est. \omega^2 = .23$ . American users reported the most diverse friend networks on SNSs ( $M = 7.51; SD = 2.01$ ). Post-hoc tests revealed that American users reported significantly more different social contexts in their friends networks than users from any other country (all pairwise comparisons:  $p < .01$ ). By contrast, German users reported rather homogeneous networks ( $M = 5.11; SD = 1.61$ ; all pairwise comparisons:  $p < .05$ ). British, Dutch, and Chinese users did not differ significantly from each other. In line with our expectations, we found a moderate positive relationship between audience size and audience diversity ( $r = .28$  in the Netherlands to  $r = .37$  in Germany). It is interesting, however, there was almost no such effect in the Chinese subsample ( $r = .05$ ).

### 5.1.7 Feedback on status updates

Previous research has shown that people receive social support through the use of SNSs (Ellison, Steinfield, & Lampe, 2012; Trepte, Dienlin, & Reinecke, 2014). This social support may be received through feedback on status updates in the form of comments, likes, or personal replies. In the following, we analyzed two different measures with regard to the quantity and quality of various kinds of feedback on status updates.

#### 5.1.7.1 Feedback frequency

First, we wanted to investigate how frequently SNS users received feedback on their status updates. Accordingly, participants were asked: “How often do you receive feedback on your status updates?” Possible answers ranged from 1 (*always*) to 5 (*never*). Results are presented in Figure 18.

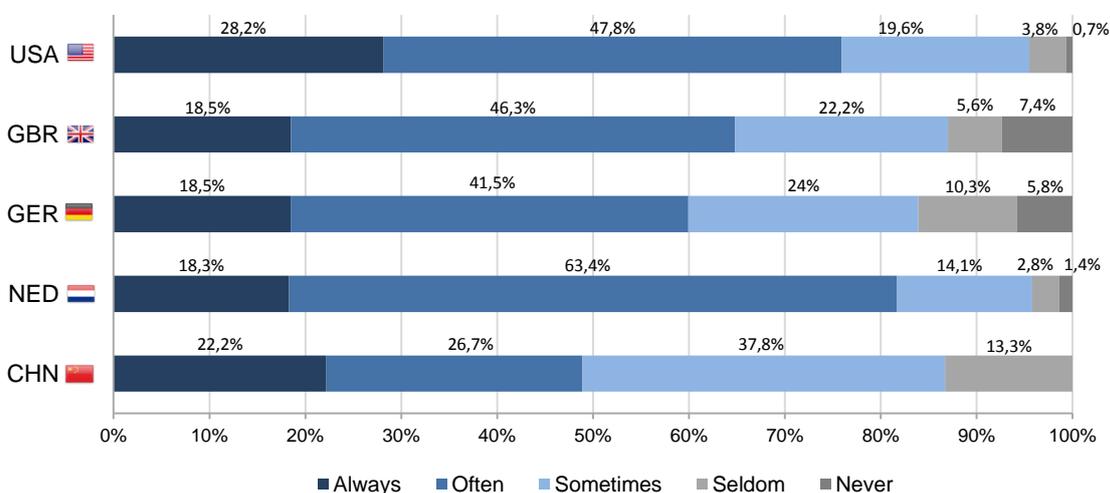


Figure 11: Frequency of feedback on status updates

Overall, more than half of the participants reported that they often received feedback on their status updates. However, there were some small but significant differences between the national subsamples,  $H(4) = 32.23, p < .001, \eta^2 = .03$ . US Americans generally received more feedback than participants from other countries. 28.2% of them indicated that they always received feedback on their status updates. US American users showed significant differences when compared with German ( $p < .001$ ) and Chinese SNS users ( $p < .05$ ).

### 5.1.7.2 Feedback tone

The second measure focused on the quality of the feedback. We asked: “What is the general tone of the feedback?” Answer options ranged from 1 (*all positive*) to 5 (*all negative*). Results are presented in Figure 19.

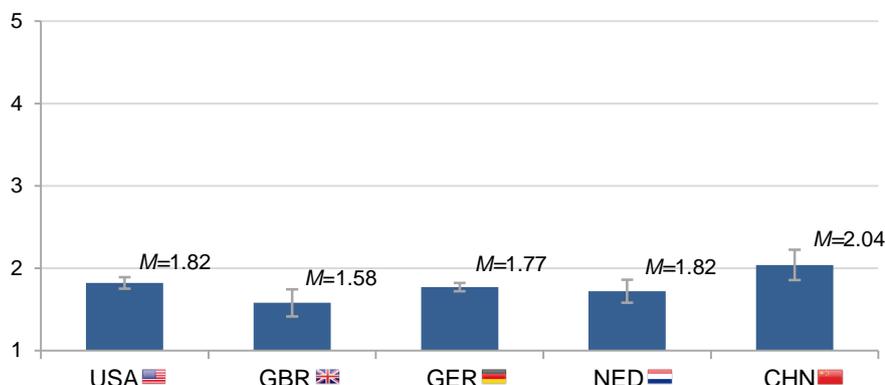


Figure 12: Feedback tone in comments on status updates (1 = all positive to 5 = all negative)

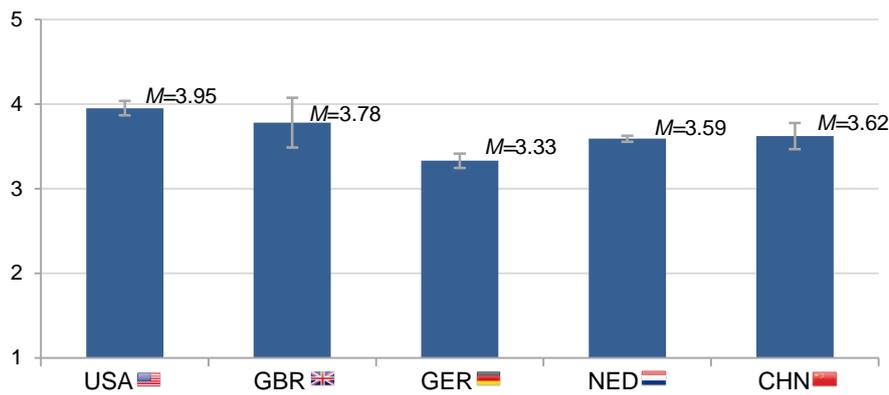
Participants indicated that the tone of answers and feedback on status updates was positive. In all countries, the mean was below  $M = 2.00$ . Nevertheless, there were small but significant differences between the nationalities, *Welch's*  $F(4, 152.01) = 4.07, p < .01, est. \omega^2 = .01$ . Chinese users, for example, perceived the tone of feedback as slightly more negative ( $M = 2.04, SD = 0.60$ ). The feedback tone for Chinese users differed significantly from the Chinese and British ( $p < .01$ ), German ( $p < .05$ ), and Dutch ( $p < .05$ ) users.

## 5.1.8 Motivation to use SNSs

Apart from usage patterns and the composition of the network of friends, we wanted to know whether cultural differences existed in how people perceive social networking in general and what motivates them to use SNSs. We asked participants to indicate their agreement with a number of specific statements with regard to usage motives. We used Likert-type scales ranging from 1 (*disagree completely*) to 5 (*agree completely*).

### 5.1.8.1 Motivation 1: Opportunity to interact with other people

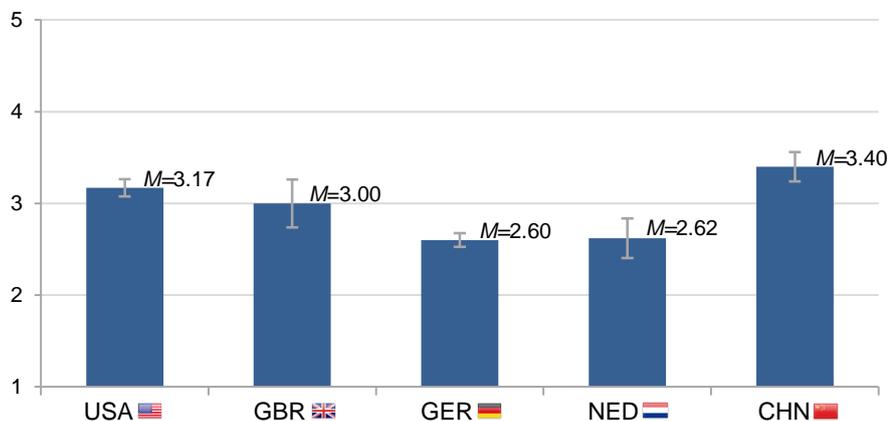
Previous research has shown that interacting and communicating with other users is one of the main driving forces behind SNS use (e.g., Papacharissi & Mendelsohn, 2011; Smock, Ellison, Lampe, & Wohn, 2011). SNSs enable users to communicate in a variety of different channels. People can reach many users with both private messaging (one-to-one communication) and status updates (one-to-many communication) thus creating manifold opportunities to interact with others. The following statement referred to this motivation by asking if the participants liked having the opportunity to reach many people through their interactions on SNSs. The results are presented in Figure 20.



**Figure 13: Agreement with the statement “On SNSs, I like that I can reach a lot of people with my messages” (1 = disagree completely to 5 = agree completely)**

Participants from all subsamples generally agreed with this statement. However, small differences between the national subsamples were identifiable, *Welch’s F* (4, 274.067) = 26.15,  $p < .001$ , *est. ω*<sup>2</sup> = .06. US American SNS users showed the highest agreement with this statement ( $M = 3.95$ ,  $SD = 0.94$ ) and differed significantly from the German ( $p < .01$ ), Chinese ( $p < .01$ ), and Dutch ( $p < .05$ ) users. Compared with participants from other countries, German SNS users agreed only moderately with this statement ( $M = 3.33$ ,  $SD = 1.23$ ). There were significant differences between German and British users ( $p < .05$ ) and German and Chinese users ( $p < .05$ ).

The next statement refers to the idea that one of the functions of SNSs is to help initiate conversations and discussions (cf. Figure 21). This might be particularly helpful for people who feel uncomfortable getting in touch with other people in offline environments.

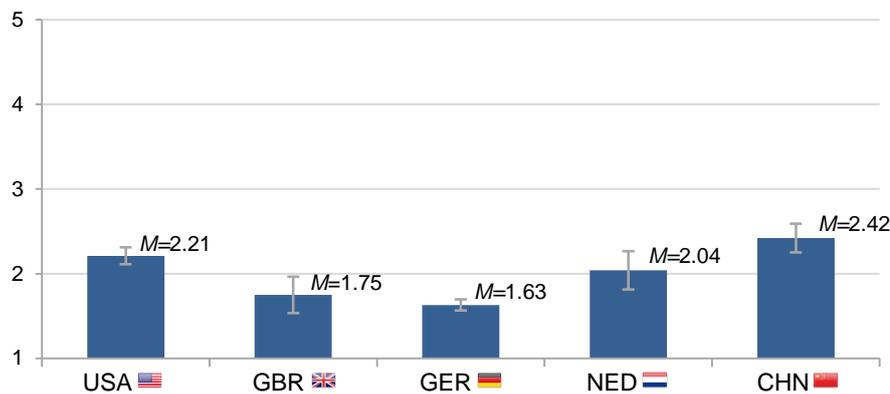


**Figure 14: Agreement with the statement “The best thing about SNSs is that it sparks conversation” (1 = disagree completely to 5 = agree completely)**

Participants from all countries did not agree or disagree with this statement ( $M = 2.87$ ,  $SD = 1.12$ ). However, there were significant differences between participants from different countries, *Welch’s F*(4, 274.834) = 32.77,  $p < .001$ , *est. ω*<sup>2</sup> = .07. Differences between German/Dutch users on the one hand and US American/Chinese

users on the other hand were significant (all pairwise comparisons:  $p < .01$ ). On average, British participants did not agree or disagree.

In order to benefit fully from such opportunities to interact with others, SNS users have to build up and maintain a large network of contacts. Specifically, younger users have larger networks on SNSs than older users (cf. Appendix: Tables I to V). With the next question, we wanted to know if people generally wanted to add friends to make their networks larger and more diverse. The results are presented in Figure 22.



**Figure 15: Agreement with the statement “The more contacts I have on my SNS, the better” (1 = disagree completely to 5 = agree completely)**

In general, participants from all countries tended to disagree with the statement. Having as many contacts as possible seemed to be less important to most users. Yet, there were small but significant differences between the national subsamples, *Welch’s*  $F(4, 267.701) = 35.42, p < .001, est. \omega^2 = .08$ . German participants, for example, disagreed the most ( $M = 1.36$ ), followed by British participants ( $M = 1.75$ ). The German subsample was significantly different from the US ( $p < .01$ ) and Chinese ( $p < .01$ ) subsamples, and the British subsample was significantly different from the US ( $p < .01$ ) and Chinese ( $p < .01$ ) subsamples.

#### 5.1.8.2 Motivation 2: Keeping up-to-date with trends and other people

Not only do SNSs enable people to communicate with each other, but they also allow users to share information about themselves, about others, and about things they like or are interested in. The following questions were asked to measure whether users feel they miss out on relevant information when they are not on their preferred SNS.

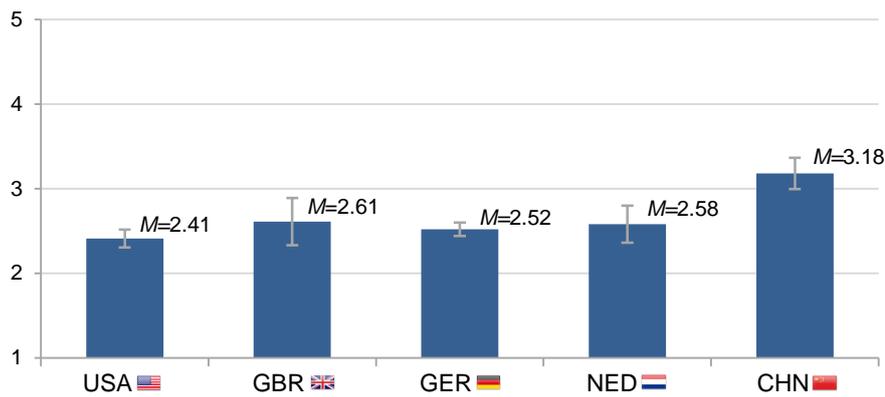


Figure 16: Agreement with the statement “If I am not on my SNS, I am missing out on important information” (1 = disagree completely to 5 = agree completely)

In western cultures, participants tended to disagree with this statement. In the Chinese subsample, however, participants agreed with it slightly. Accordingly, nationality had a small but significant influence,  $F(4, 1572) = 12.55, p < .001, \omega^2 = .03$ . Pairwise comparisons revealed that differences between the Chinese subsample and all other countries were significant (all pairwise comparisons:  $p < .01$ ).

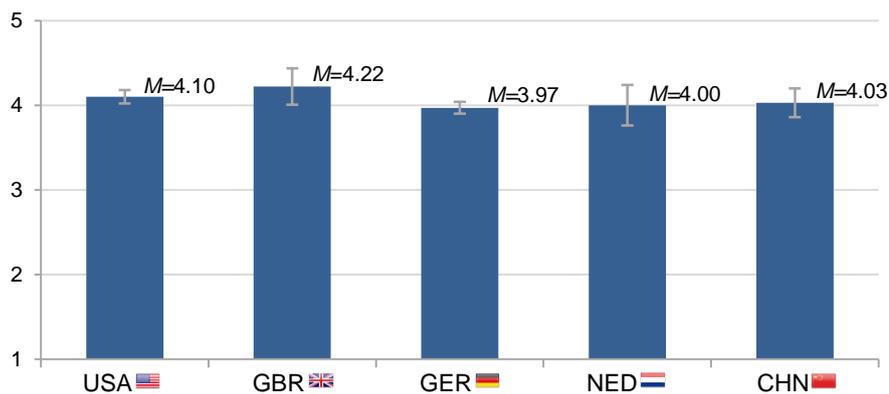


Figure 17: Agreement with the statement “I like that I can stay up to date with a lot of people on my SNS” (1 = disagree completely to 5 = agree completely)

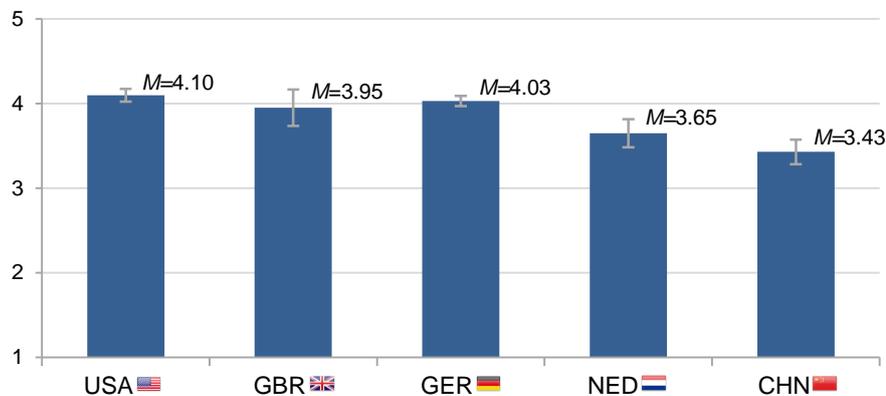
Participants from all countries strongly agreed with this statement (Overall mean:  $M = 4.03, SD = 0.99$ ). To stay in touch with the network was thus perceived as a strong benefit of SNS use by users from all five countries. No significant differences between the subsamples were found,  $F(4, 1569) = 1.96, p = .099, \omega^2 = .00$ .

## 5.1.9 Privacy-Related Measures

### 5.1.9.1 Subjective privacy literacy

To assess participants’ subjective privacy literacy, we asked them to indicate their level of knowledge with regard to the ability to use a number of specific privacy settings on their preferred SNS (e.g., “I know how to delete

or deactivate my account”; “I know how to restrict access to profile information such as hobbies, interests”; or “I know how to restrict the access to my profile from a Google search”). Answer options ranged from 1 (*no good knowledge*) to 5 (*very good knowledge*). The internal consistency of the scale was  $\alpha = .83$ .

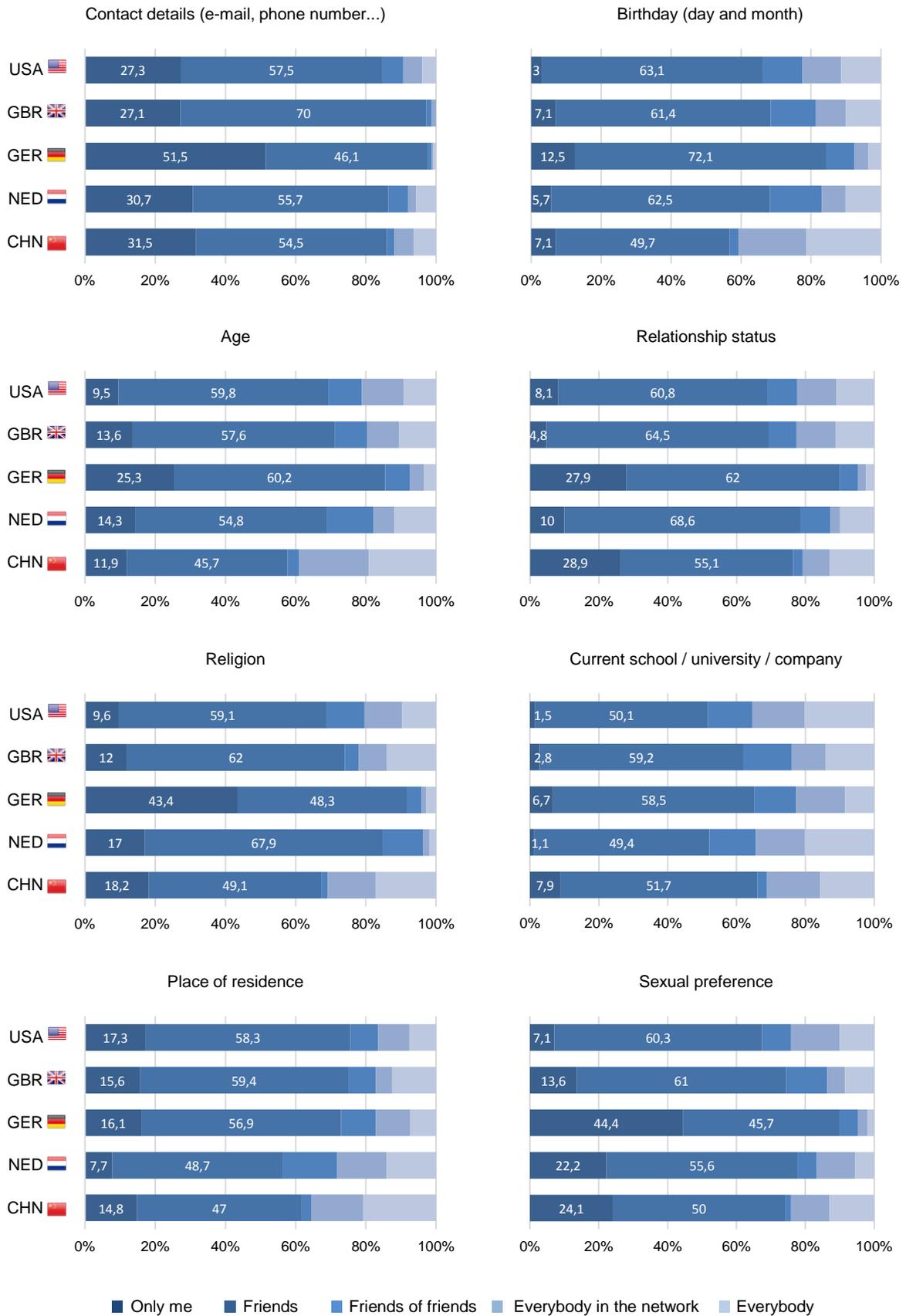


**Figure 18: Privacy literacy (1 = no good knowledge to 5 = very good knowledge)**

In general, participants from all surveyed countries indicated that they had quite good knowledge about the privacy settings on their SNS (Overall mean:  $M = 3.84$ ). However, an analysis of variance showed small but significant differences, *Welch's F*(4, 280.846) = 20.70,  $p < .001$ , *est.  $\omega^2$*  = .05. US Americans rated their knowledge about privacy settings higher than participants from other countries. Their knowledge was significantly higher than that of Dutch ( $p < .001$ ) and Chinese ( $p < .001$ ) users. The Chinese participants rated their knowledge the lowest. The Chinese subsample was significantly different from the British ( $p < .01$ ) and German ( $p < .001$ ) subsamples.

#### 5.1.9.2 *Visibility of profile information*

SNS users can limit other users' access to specific profile information in order to protect their privacy. We wanted to know if SNS users from different parts of the world made use of these visibility features. We asked: “Please answer the following questions for [your most used Social Network Site]. Who can see the following parts of your profile?” Twelve items were given (e.g., contact details, birthday, relationship status, religion...). Answer options ranged from 1 (*only me*) to 5 (*everybody*). The results are presented in Figure 26.



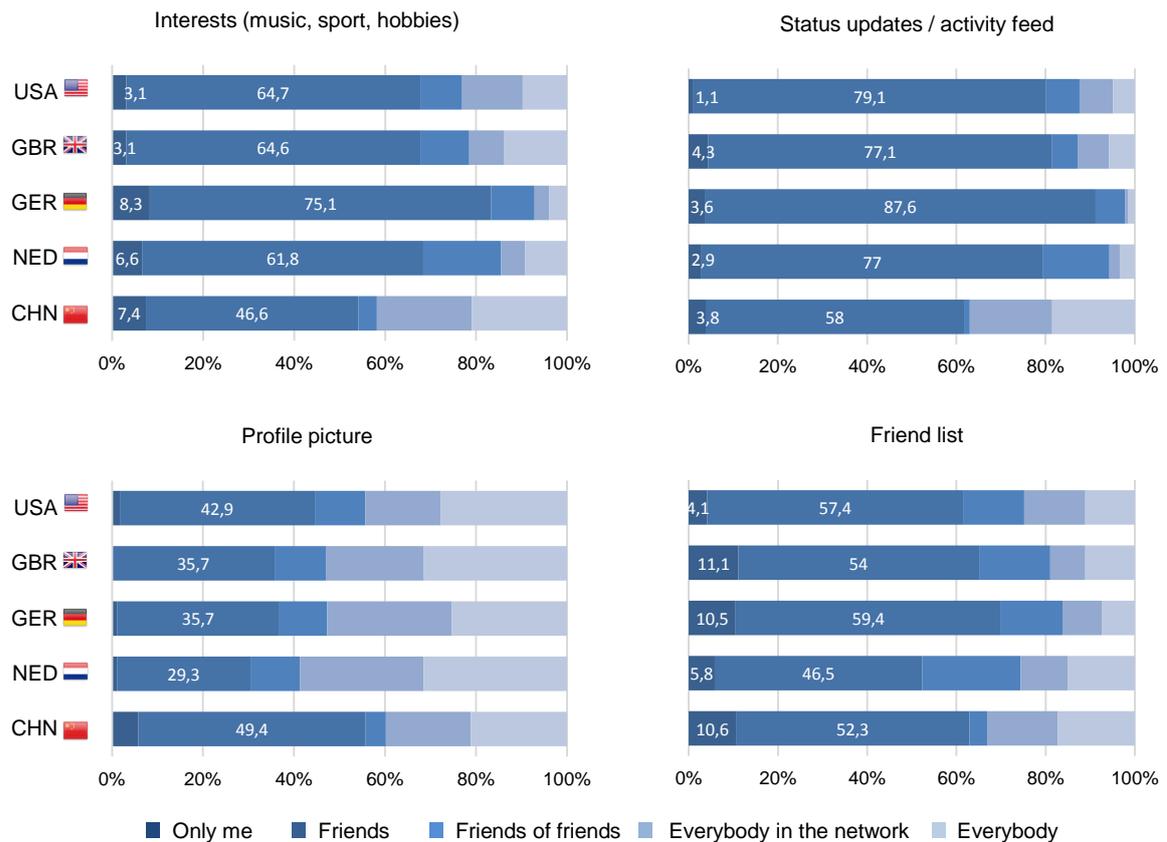


Figure 19: Visibility of profile information

Most SNS users restricted access to their profile information for people they were not friends with. Nonetheless, there was a small but significant influence of nationality on the visibility of profile information: For all 12 items, the *Kruskal-Wallis* test was significant (see Table 5). The German subsample, in particular, restricted access to their profile information. The visibility of contact details, birthday, age, relationship status, religion, and sexual preferences in the German subsample differed from all other users (all pairwise comparisons:  $p < .05$ ). The German subsample differed significantly from the other subsamples with regard to the visibility of interests (pairwise comparisons with the US American, British, and Chinese subsamples:  $p < .05$ ), friends list (pairwise comparisons with the US American and Dutch subsamples:  $p < .05$ ), current school (pairwise comparisons with the US American and Dutch subsamples:  $p < .05$ ), place of residence (pairwise comparison with the Dutch subsample:  $p < .05$ ), and status updates (pairwise comparison with the US American subsample:  $p < .001$ ).

Profile pictures were usually visible to the public. However, more Chinese users than German ( $p < .01$ ) and Dutch ( $p < .01$ ) users restricted access to their profile picture. This is particularly interesting because Chinese users did not restrict the visibility of most other profile information. For example, Chinese users restricted the visibility of their place of residence (pairwise comparisons with the US and German subsamples:  $p < .05$ ) and their status updates (all pairwise comparisons: min.  $p < .01$ ) less than users from other countries. Generally, the strongest effects of nationality were found for the visibility of one's religion and sexual preference ( $\omega^2 = .16$ ).

**Table 5: Differences in the visibility of profile information**

	<i>H</i>	<i>df</i>	<i>p</i>	$\eta^2$
Contact details	109.70	4	< .001	.08
Birthday	110.22	4	< .001	.07
Age	107.73	4	< .001	.07
Relationship status	123.19	4	< .001	.10
Religion	162.63	4	< .001	.16
Current school / work	39.97	4	< .001	.03
Residence	22.03	4	< .001	.02
Sexual preference	169.73	4	< .001	.16
Interests	83.05	4	< .001	.06
Status updates	92.54	4	< .001	.06
Profile picture	17.72	4	< .001	.01
Friends list	24.86	4	< .001	.02

We additionally found significant correlations between the visibility of profile information and privacy literacy in all countries (cf. Appendix: Tables I to V). More literate users were more likely to restrict the visibility of their profile. The correlation coefficients ranged from  $r = -.14$  in the USA to  $r = -.38$  in the Netherlands.

### 5.1.9.3 *Use of privacy settings*

Besides offering the ability to limit the visibility of personal information, SNSs also offer other privacy settings such as indicating who is allowed to send friend requests or who is allowed to tag him or herself in pictures. These privacy settings are important options for securing one’s privacy while using SNSs. We wanted to know if users made use of these features and asked four questions that referred to the use of privacy settings.

First, we asked “Who is allowed to contact you?” Answer options ranged from 1 (*selected friends*) to 5 (*everybody*). The results are presented in Figure 27.

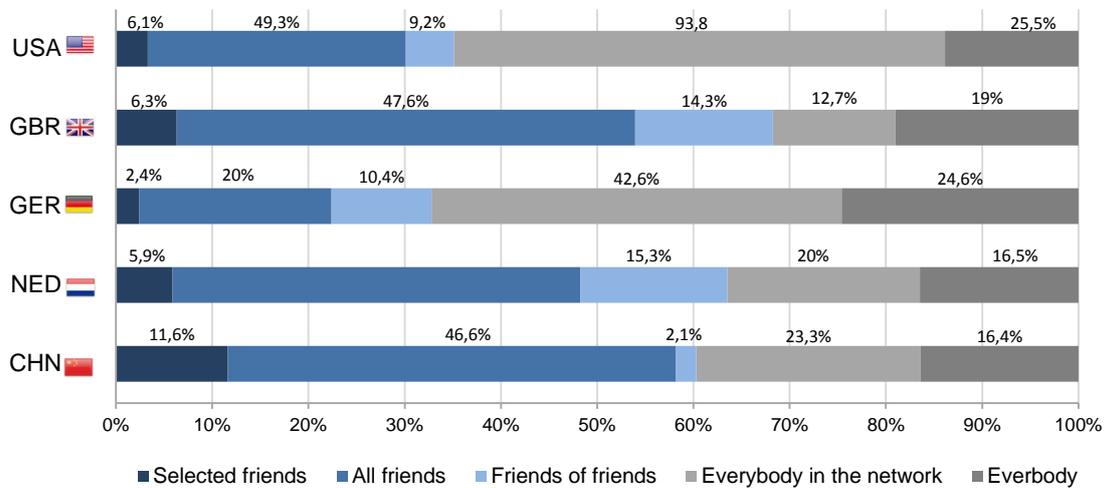


Figure 20: Who is allowed to contact you?

As can be seen in Figure 27, nationality had a significant influence,  $H(4) = 104.04, p < .001, \eta^2 = .07$ . German SNS users, in general, allowed more people to contact them (all pairwise comparisons:  $p < .001$ ).

On SNSs, an important part of social interaction is sharing pictures. As this might present a privacy threat to many users, we wanted to know if people tried to avoid being tagged without their knowledge. As most SNSs allow users to regulate who is allowed to tag him or herself, we asked the following question: “Who is allowed to tag pictures of you?” Answer options remained the same. The results are presented in Figure 28.

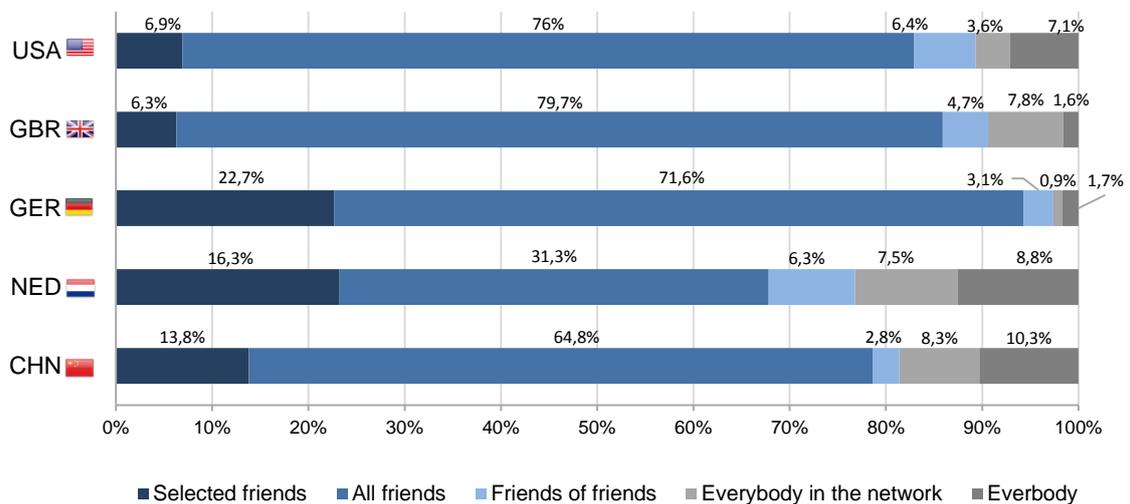


Figure 21: Who is allowed to tag pictures of you?

Again, nationality had a significant influence,  $H(4) = 84.79, p < .001, \eta^2 = .06$ . In contrast to the previous question, almost all German SNS users allowed only friends to tag them in a picture. This privacy behavior was significantly more pronounced in Germany compared with all other countries (all pairwise comparisons:  $p < .001$ ).

.05). However, as can be seen in Figure 28, most SNS users allowed only friends or selected friends to tag them in pictures.

Not only do privacy threats arise from other users, but they also arise from the infrastructure of the Internet itself. Information provided online becomes easy to search for, copy, and access by invisible audiences (boyd, 2007). We wanted to know about the steps users take to prevent unintended audiences from accessing their data. Specifically, searchability might present a growing threat. Many SNSs allow users to adjust their privacy settings in order to render their profiles unsearchable by search engines. We therefore wanted to know if users made use of this setting. Participants had to indicate whether they endorsed the following statement: “My profile can be found by search engines.” Answer options were *yes*, *no*, and *I don’t know*. Results are presented in Figure 29.

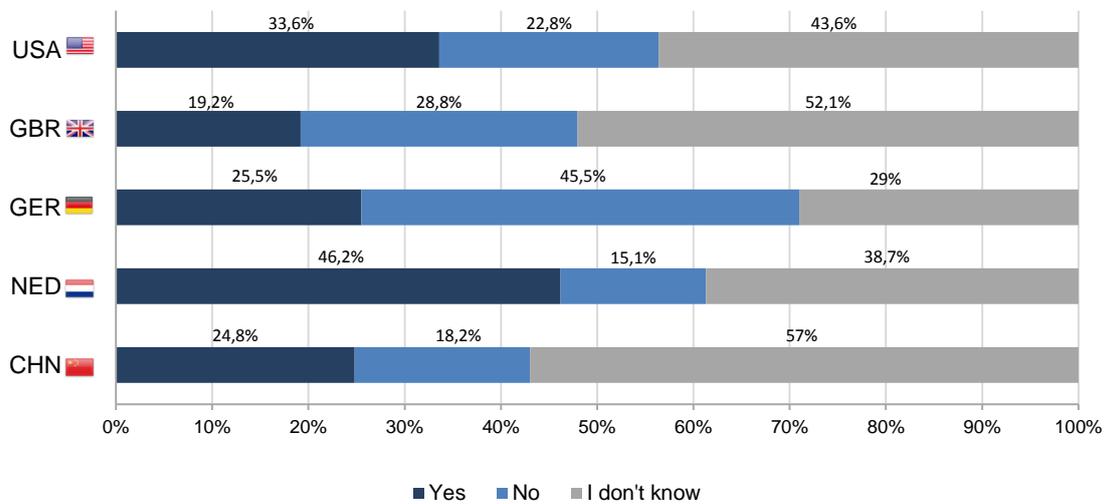


Figure 22: Can your profile be found on search engines?

Overall, there was a significant effect of nationality,  $\chi^2(8) = 132.32, p < .001, \eta^2 = .02$ . It is interesting that more than one third of all participants did not know if their profile could be found by search engines. Almost half of the German subsample reported using the privacy setting to restrict their profile and render it unsearchable by search engines.

Most SNSs also allow users to adjust their privacy settings with regard to the sharing of information with third parties. We asked “Is your SNS (or parts, e.g., certain apps) allowed to share personal information with third parties?” Participants could choose between the answer options *yes, upon request*, *no, not applicable*, and *I don’t know*. The results are presented in Figure 30.

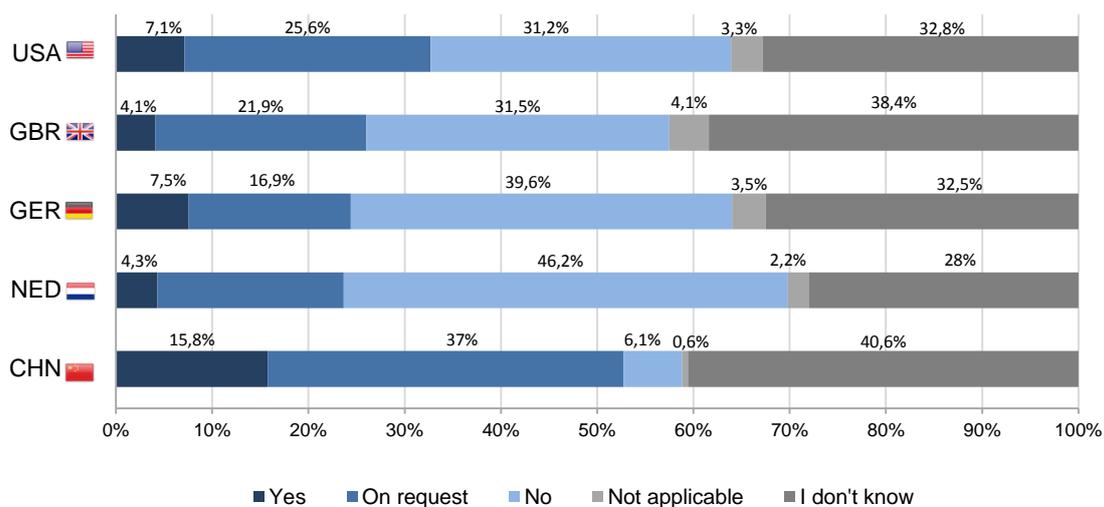


Figure 23: Is your SNS allowed to share personal information with third parties?

Nationality had a small but significant influence,  $H(4) = 9.62, p < .05, \eta^2 = .01$ . Chinese SNS users tended to allow their SNS provider to share personal information upon request, whereas all other subsamples tended to indicate that they did not allow their provider to share personal information with third parties. This difference was significant in comparison with the German subsample ( $p < .05$ ).

#### 5.1.9.4 Use of friends lists

As shown in section 5.1.6., most SNS users' networks included people from various social contexts. In order to enable their users to communicate with selected audiences, SNSs provide a specific feature called friends lists. Users can create multiple sub-audiences for different social contexts (e.g., for family members, friends, co-workers...). We wanted to know if SNS users made use of this feature. Participants were thus asked to indicate their usage with the item "I use friends lists on Facebook to control who can see my status updates." Answer options ranged from 1 (*always*) to 5 (*never*).

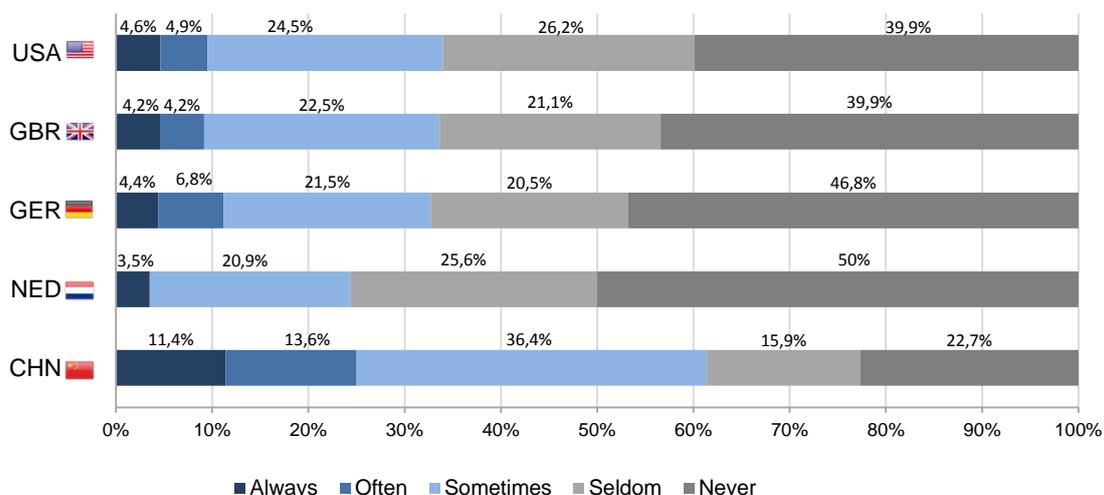
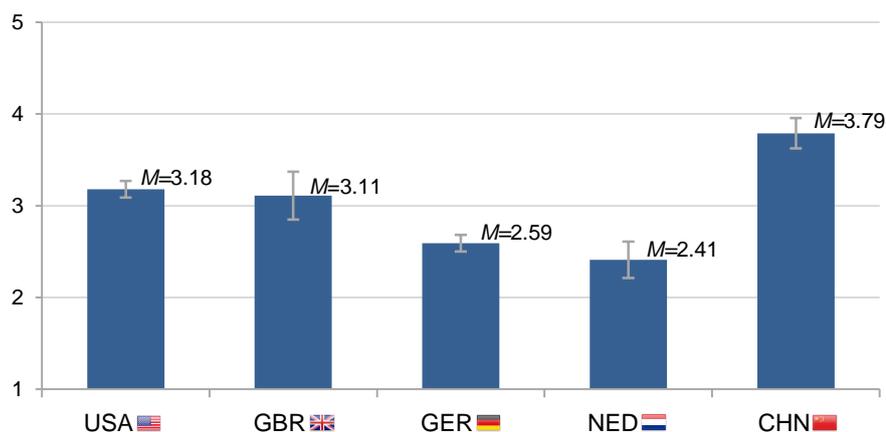


Figure 24: Use of friends lists

Nationality significantly influenced the use of friends lists,  $H(4) = 20.61, p < .001, \eta^2 = .01$ . In the US American, British, German, and Dutch subsamples, one third indicated that they used friends lists at least sometimes. By contrast, 61% of Chinese users made use of this feature sometimes or more often (all pairwise comparisons with China:  $p < .01$ ).

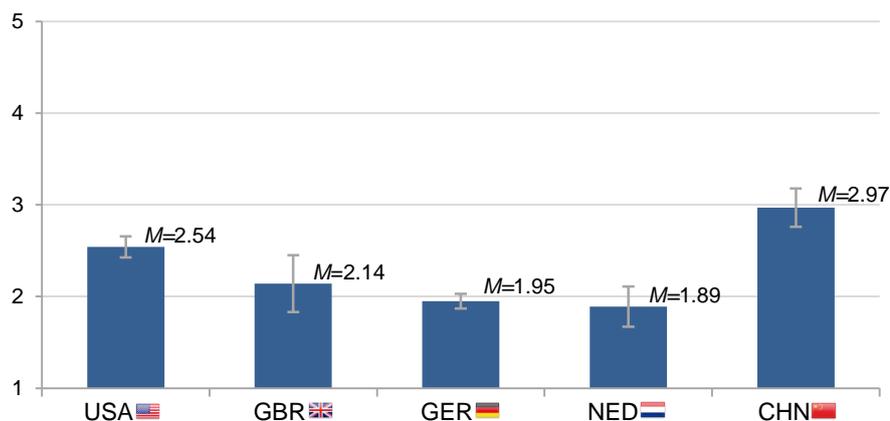
Although only slightly more than 50% of all participants reported using friends lists, we nonetheless wanted to know whether participants thought that there were not enough options to limit the exposure of status updates to certain audiences. The following statement was measured on a scale ranging from 1 (*disagree completely*) to 5 (*agree completely*).



**Figure 25: Agreement with the statement “I would like to have more options to address specific groups on SNSs” (1 = disagree completely to 5 = agree completely)**

No clear tendency in agreement across the surveyed countries could be found with regard to the statement “I would like to have more options to address only specific groups on SNSs.” Nationality, however, had a significant influence, *Welch's F* (4, 278.956) = 55.01,  $p < .001, est. \omega^2 = .12$ . Chinese participants agreed the most with the statement. Differences between the Chinese subsample and all other subsamples were significant (all pairwise comparisons:  $p < .001$ ). Dutch participants, on the other hand, disagreed with this statement on average. The Dutch subsample differed significantly from the US American ( $p < .001$ ) and British ( $p < .001$ ) subsamples. Significant differences were also found between the German and US American subsamples ( $p < .001$ ) and the German and British subsamples ( $p < .01$ ). In summary, it can be said that many participants would like to have more options to address only specific audiences with their status updates.

### 5.1.9.5 *Friending behavior*



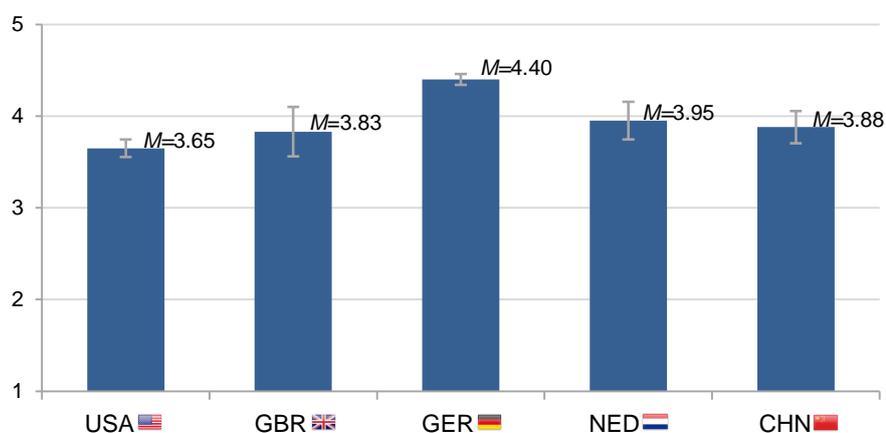
**Figure 26: Agreement with the statement “I sometimes accept invitations or contact requests from people I’d rather not be friends with” (1 = disagree completely to 5 = agree completely)**

The next statement refers to the generally perceived phenomenon that people seem to accept friend requests from almost any person no matter if these people are close to them or not.

In general, SNS users disagreed with the statement. However, nationality had a small but significant influence, *Welch’s*  $F(4, 270.442) = 32.95, p < .001, est. \omega^2 = .02$ . Chinese SNS users indicated that they sometimes accepted contact requests from people they would rather not be friends with (all pairwise comparisons:  $p < .01$ ). Also, US American SNS users seemed to accept unwanted contact requests more often than German ( $p < .01$ ) or Dutch ( $p < .01$ ) SNS users.

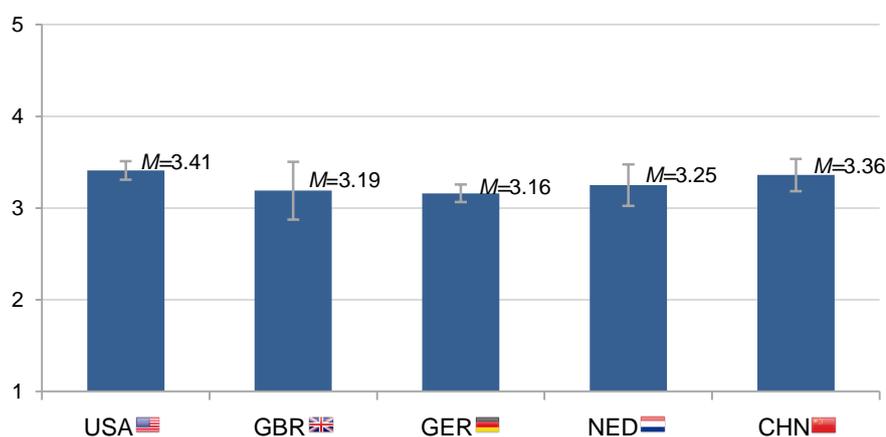
### 5.1.9.6 *Posting behavior*

The media often say that people post intimate and private details of their lives on SNSs. We wanted to know if empirical data would support this common perception. With the next two questions, we thus wanted to know how much thought people put into deciding what to post on SNSs.



**Figure 27: Agreement with the statement “I’m very deliberate about what I post on SNSs” (1 = disagree completely to 5 = agree completely)**

Overall, participants from all surveyed countries reported being rather deliberate about what they post. Nationality consequently had only a small but significant influence, *Welch's*  $F(4, 263.807) = 46.57, p < .001, est. \omega^2 = .02$ . German participants, in particular, reported being very thoughtful about their posting behavior. They differed significantly from the US American ( $p < .001$ ), Chinese ( $p < .001$ ), British ( $p < .01$ ), and Dutch ( $p < .01$ ) participants.



**Figure 28: Agreement with the statement “I often want to post something on an SNS, but then on second thought, I stop myself” (1 = disagree completely to 5 = agree completely)**

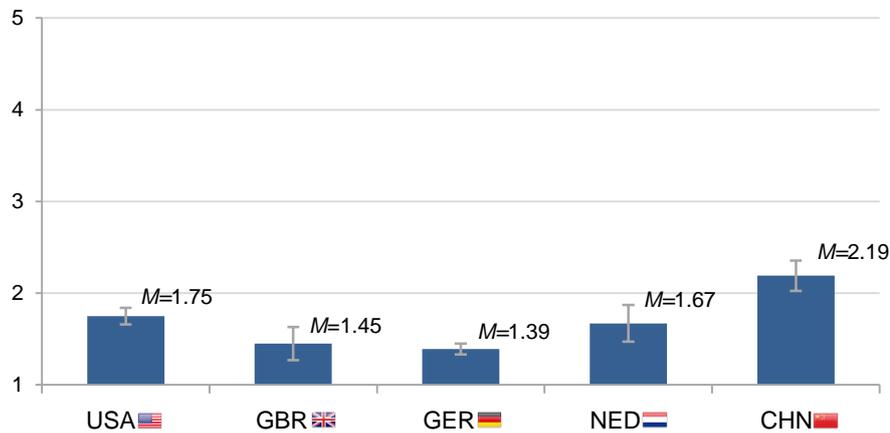
In general, participants from all surveyed countries agreed slightly with the statement “I often want to post something on an SNS, but then on second thought, I stop myself.” Although levels of agreement differed only slightly, nationality nonetheless had a significant influence, *Welch's*  $F(4, 275.391) = 3.30, p < .05, est. \omega^2 = .01$ . A pairwise comparison between the German and US American subsamples revealed significant differences ( $p < .01$ ), with US Americans agreeing the most with this statement and Germans agreeing the least.

### 5.1.10 Specific privacy behavior

Besides the general use of privacy settings and the level of agreement with statements about friending and posting behavior, we also focused more specifically on two distinct privacy-related behaviors: (1) having an open profile that can be searched for via Google and accessed by anyone (even non-members of the SNS) and (2) uploading pictures and thus disclosing the visual content of one’s own life. To examine these two different behaviors more closely, we asked several associated questions. The first questions referred to the willingness to engage in these behaviors, whereas the second asked whether people actually do engage in these behaviors. Afterwards, we also investigated whether people think that negative privacy outcomes might arise from these behaviors. On the other hand, we also wanted to know whether participants thought that they might get social rewards by engaging in these behaviors and how important these social rewards were to them.

#### 5.1.10.1 Willingness to have an open profile and share pictures on SNSs

The first question referred to the willingness to engage in privacy-related behavior. We wanted to know how many of the participants actually had an open profile. We thus asked “How high is your willingness to have an open profile that can be found via Google and that contains information that can be read by Internet users who do not belong to your network of friends.” Answer options ranged from 1 (*very low*) to 5 (*very high*).



**Figure 29: Willingness to have an open SNS profile (1 = very low to 5 = very high)**

Overall, the willingness to have an open profile was rather low, ranging from  $M = 1.39$  in Germany ( $SD = .83$ ) to  $M = 2.19$  in China ( $SD = 1.11$ ). However, nationality had a significant influence,  $Welch's F(4, 281.80) = 27.62$ ,  $p < .001$ ,  $est. \omega^2 = .06$ . Differences between the Chinese and all other subsamples were significant (all pairwise comparisons:  $p < .01$ ), and the US American subsample also differed significantly from the German ( $p < .01$ ) and British ( $p < .05$ ) subsamples. We further found that higher privacy literacy was negatively correlated with the willingness to have an open SNS profile. The correlation coefficients ranged from  $r = -.07$  in Great Britain to  $r = -.19$  in the Netherlands. Again, this correlational pattern was not found in the Chinese subsample.

The second question regarding the willingness to engage in privacy behavior was: “How high is your willingness to upload pictures that may be accessed by all of your network friends?” Again, answer options ranged from 1 (*very low*) to 5 (*very high*).

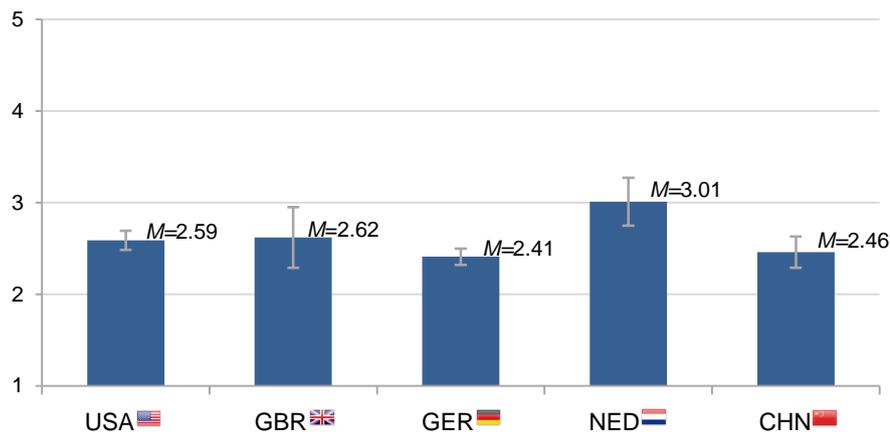


Figure 30: Willingness to upload pictures onto SNSs (1 = very low to 5 = very high)

The willingness to upload and share pictures on SNSs was generally higher than the willingness to have an open profile. There were only small differences between the countries, *Welch's*  $F(4, 279.05) = 5.73, p < .001, est. \omega^2 = .01$ . Overall, means ranged from  $M = 2.41$  in Germany ( $SD = 1.29$ ) to  $M = 3.01$  in the Netherlands ( $SD = 1.28$ ). The Dutch differed significantly from the German ( $p < .001$ ), Chinese ( $p < .01$ ), and US American ( $p < .01$ ) subsamples. It is interesting that we did not find noteworthy (negative) effects of privacy literacy on the willingness to upload pictures.

#### 5.1.10.2 Having an open profile and sharing pictures on SNSs

To compare merely being willing with actual behavior, we further asked: “Do you have an open profile that can be found via Google and that contains information that may be read by Internet users who do not belong to your network of friends?”

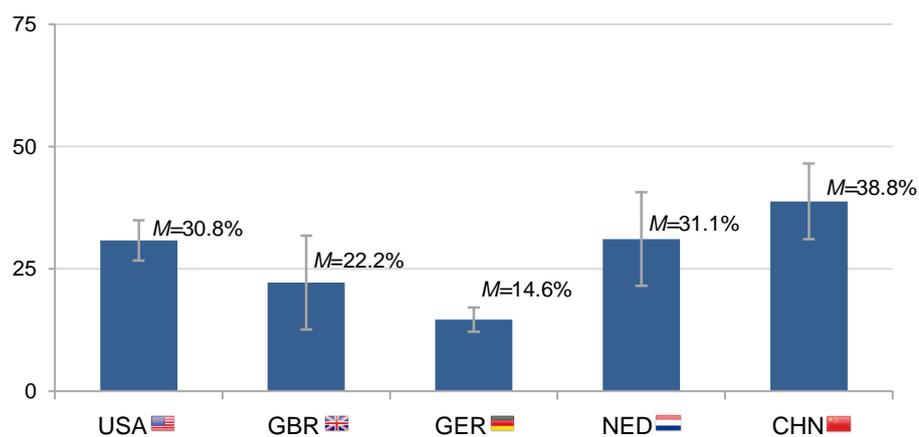
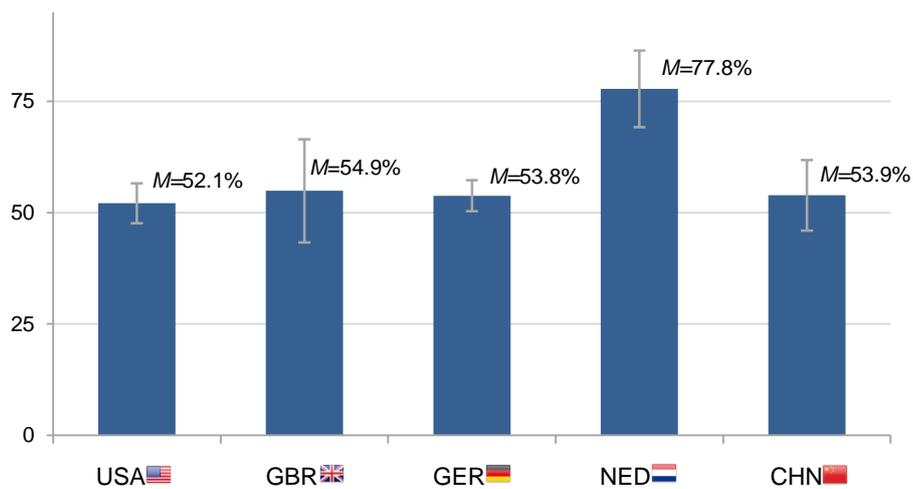


Figure 31: Having an open profile (percentage of subsamples indicating that they engage in the behavior)

Despite the lack of willingness to have an open profile, many participants actually had an open profile. There were some differences between the countries,  $\chi^2(4) = 71.57, p < .001, \eta^2 = .05$ . In line with their lower willingness to have such a profile, only 14.6% of German users had an open profile. Likewise, in line with their higher willingness to have an open profile, 38.8% of the Chinese users actually stated that they had an open profile. The German subsample differed significantly from the Chinese, US American, and Dutch subsamples.

Second, we asked “Do you upload pictures that may be accessed by all of your friends in your network?” More than half of the participants indicated that they do upload such pictures. Nonetheless, nationality had a small but significant influence,  $\chi^2(4) = 20.99, p < .001, \eta^2 = .01$ . However, this difference was significant only because more Dutch users (77.8%) uploaded pictures that could be accessed by their SNS network. As can be seen in Figure 39, all other countries did not differ significantly from each other.



**Figure 32: Uploading pictures (percentage of subsamples indicating that they engage in the behavior)**

### 5.1.10.3 Perceived risks of having an open profile and sharing pictures on SNSs

Perceived risks of negative privacy outcomes of privacy-related behavior were measured with items adapted from Debatin, Lovejoy, Horn, and Hughes (2009). We asked participants to rate how likely they thought having an open profile would lead to various negative consequences (e.g., increasing the chances of data abuse, increasing the chances of unwanted advances, increasing the chances of being damaged by gossip). Answers ranged from 1 (*not likely at all*) to 5 (*very likely*). The internal consistency of the scale was  $\alpha = .85$ .

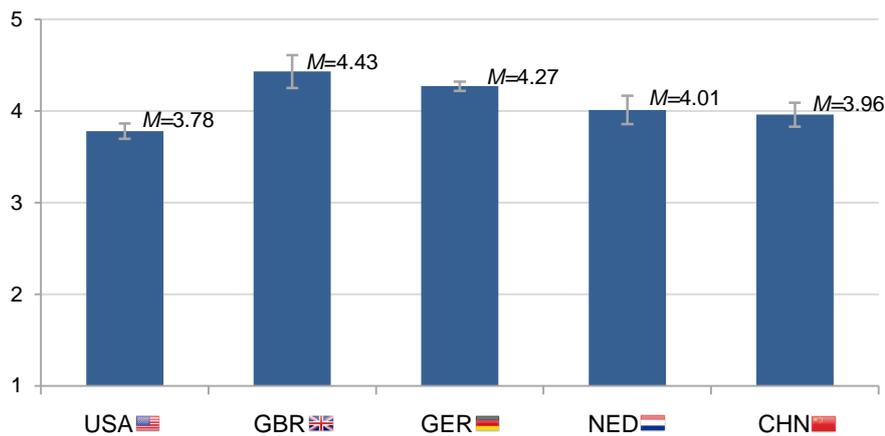


Figure 33: Perceived risks of having an open profile (1 = not very likely to 5 = very likely)

Overall, participants thought that these behaviors were rather risky. Means ranged from  $M = 3.78$  ( $SD = 0.97$ ) in the US American subsample to  $M = 4.43$  ( $SD = 0.77$ ) in the British subsample. Nationality had a small but significant influence, *Welch's*  $F(4, 274.87) = 26.65$ ,  $p < .001$ , *est.*  $\omega^2 = .06$ . British and German SNS users perceived these risks as significantly higher than US American ( $p < .001$ ), Chinese ( $p < .001$ ), and Dutch ( $p < .05$ ) users. We further found that women in the USA, Great Britain, and the Netherlands generally perceived the risks of having an open profile as higher than the men in these subsamples did. In Germany, however, men found it more risky to have an open profile than women ( $r = .22$ ). In the Chinese subsample, by contrast, there was no significant relationship between gender and risk perception.

Next, we asked participants the same question with regard to uploading pictures that could be accessed by all of their network friends. They thus rated how likely they thought it would be that uploading pictures would lead to the same negative consequences. Answers ranged from 1 (*not likely at all*) to 5 (*very likely*). The scale's internal consistency was  $\alpha = .87$ .

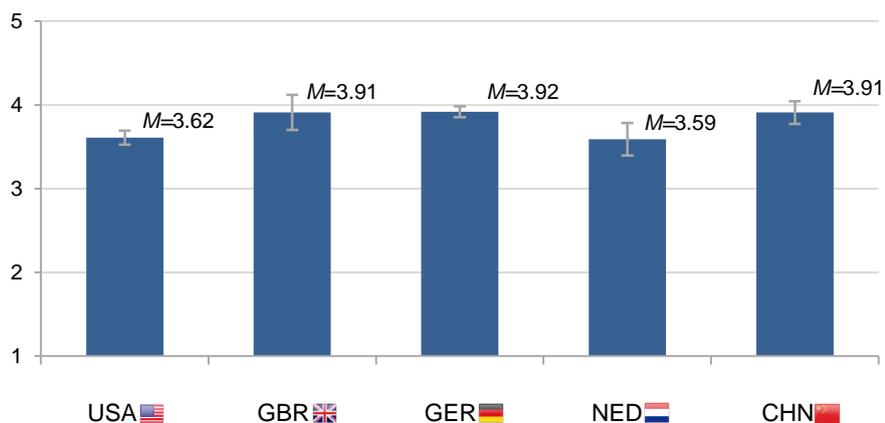
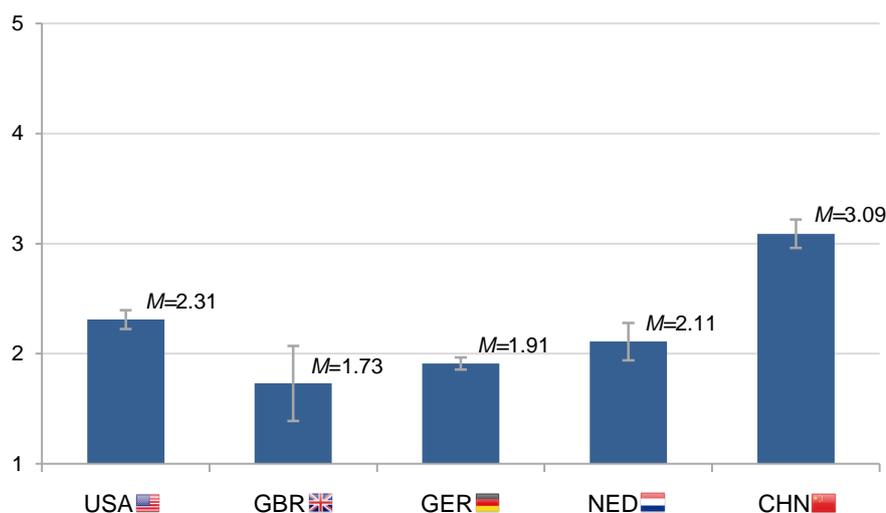


Figure 34: Perceived risks of uploading pictures (1 = not very likely to 5 = very likely)

Participants believed that the potential negative outcomes of uploading pictures were less likely than those of having an open profile. Means ranged from  $M = 3.59$  in the Dutch subsample ( $SD = 0.92$ ) to  $M = 3.92$  in the German subsample ( $SD = 0.95$ ). Nationality had only a small but significant influence,  $F(4, 1582) = 9.51, p < .001, \omega^2 = .02$ . The German subsample differed significantly from the US American ( $p < .001$ ) and Dutch ( $p < .05$ ) subsamples. Also, differences between US American and Chinese users were significant ( $p < .01$ ). In all subsamples, the perceived risks of having an open profile and the perceived risks of uploading pictures were strongly correlated. Correlation coefficients ranged from  $r = .31$  in the Netherlands to  $r = .80$  in China.

#### 5.1.10.4 Likelihood of receiving social rewards through having an open profile and sharing pictures on SNSs

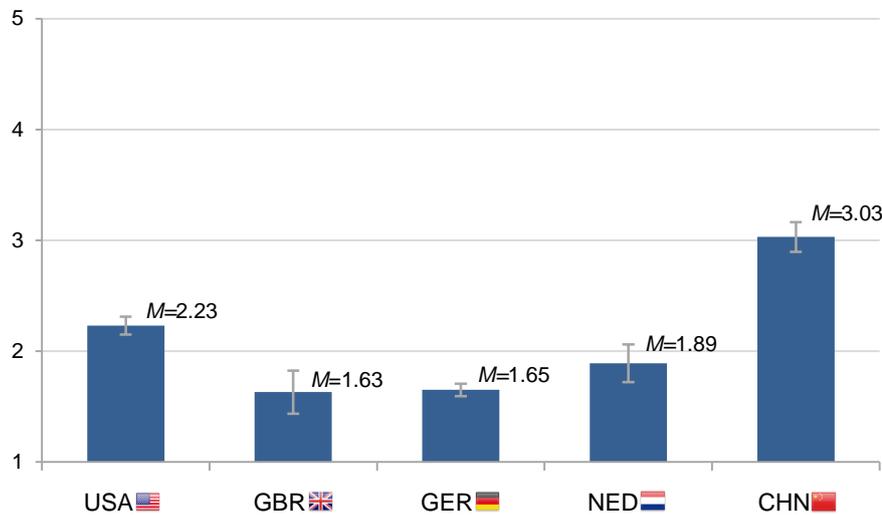
To measure the perceived likelihood of receiving social rewards from having an open profile or uploading pictures, we adapted items from Williams (2006). We asked participants how likely they thought it would be that having an open profile would help them find different types of friendships and social contacts (e.g., help to find people that one trusts to help solve problems, help to find people that one can turn to for advice about making very important decisions) on their preferred SNS. The scale consisted of six items. The answer options ranged from 1 (*not likely at all*) to 5 (*very likely*). The internal consistency of the scale was  $\alpha = .88$ .



**Figure 35: Social rewards from having an open profile (1 = not very likely to 5 = very likely)**

In general, participants did not feel that having an open profile would help them receive social rewards. Nonetheless, there were significant differences with regard to nationality,  $Welch's F(4, 280.37) = 78.01, p < .001, \text{est. } \omega^2 = .16$ . Chinese users rated the chance that having an open profile would help them receive more social rewards as significantly higher than any other subsample (all pairwise comparisons:  $p < .001$ ). Also, the US subsample differed significantly from the British and German subsamples (all pairwise comparisons:  $p < .001$ ).

Again, we adapted the question about uploading pictures and asked, for example: “How likely do you think uploading pictures on SNSs will help you find people whom you trust to help solve your problems?” The internal consistency of the scale was  $\alpha = .92$ .

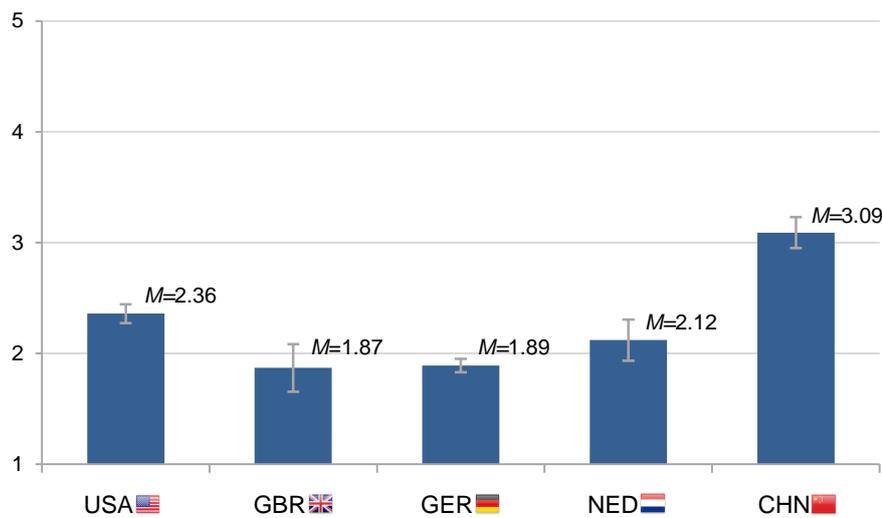


**Figure 36: Social rewards from uploading pictures (1 = not very likely to 5 = very likely)**

The pattern across the national subsamples was similar to the pattern observed with regard to having an open profile. Nationality had a significant influence, *Welch's F* (4, 278.15) = 106.56,  $p < .001$ , est.  $\omega^2 = .21$ . Again, the Chinese subsample scored higher than any other subsample ( $M = 3.03$ ,  $SD = .89$ ). Differences with the Chinese subsample were significant (all pairwise comparisons:  $p < .001$ ). Also, the US subsample differed significantly from the British ( $p < .001$ ), German ( $p < .001$ ), and Dutch ( $p > .05$ ) subsamples.

#### 5.1.10.5 *Subjective importance of social rewards from having an open profile and sharing pictures on SNSs*

To measure the subjective importance of social rewards, we used the same items again (Williams, 2006) but asked how important it was for participants to receive these social rewards. The answer options ranged from 1 (*not important at all*) to 5 (*very important*). The scale had an internal consistency of  $\alpha = .91$ .

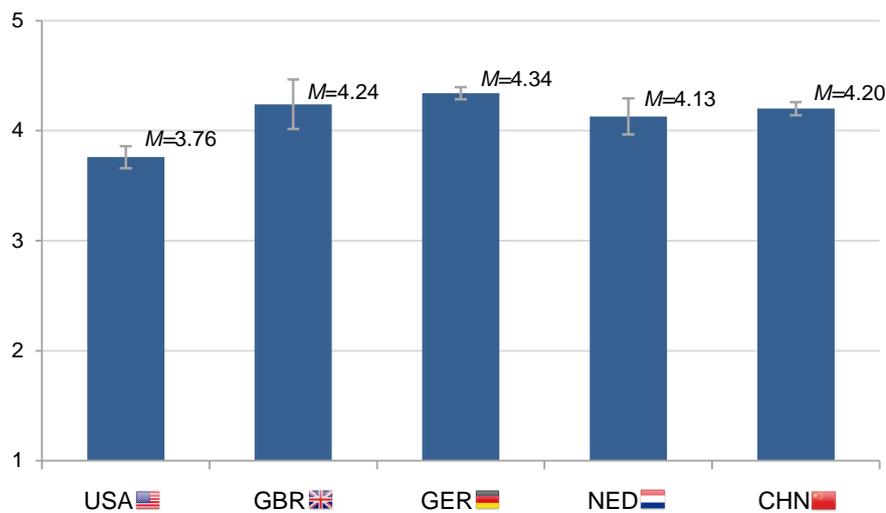


**Figure 37: Subjective importance of social rewards (1 = not important at all to 5 = very important)**

It is interesting that we observed almost the same pattern across the national subsamples as depicted in Figure 43. People who thought they were more likely to get social rewards rated these social rewards as more important. Accordingly, nationality also had a significant influence, *Welch's F* (4, 280.47) = 68.04,  $p < .001$ , est.  $\omega^2 = .14$ . The importance of these social rewards was rated highest by Chinese SNS users ( $M = 3.09$ ,  $SD = 0.94$ ). Differences from all other subsamples were significant (all pairwise comparisons:  $p < .001$ ). Also, comparisons between the US subsample and the German ( $p < .001$ ) and British ( $p < .001$ ) subsamples revealed significant differences.

### 5.1.11 Subjective importance of preventing negative privacy outcomes

Finally, we wanted to measure how important it was for SNS user to prevent privacy violations that could be associated with the use of SNSs. We adapted items from Debatin et al. (2009). The scale included three items (e.g., “How important is it for you to prevent data abuse on SNSs?”) and ranged from 1 (*not important at all*) to 5 (*very important*). The internal consistency was  $\alpha = .88$ . Results are presented in Figure 45.



**Figure 38: Subjective importance of preventing negative privacy outcomes**  
(1 = not important at all to 5 = very important)

As expected, all participants indicated that it was important to them to prevent these privacy violations. Means ranged from  $M = 3.76$  ( $SD = 1.18$ ) in the US American subsample to  $M = 4.34$  ( $SD = 0.79$ ) in the German subsample. Although the differences were quite small, nationality had a significant influence, *Welch's F* (4, 279.10) = 24.13,  $p < .001$ , est.  $\omega^2 = .05$ . American SNS users differed significantly from all other subsamples (all pairwise comparisons:  $p < .01$ ). In all subsamples, we found positive correlations between the perceived importance of preventing negative privacy outcomes and the perceived risks of having an open profile ( $r = .47$  in the Netherlands to  $r = .54$  in the US) and the perceived risks of uploading pictures ( $r = .11$  in the Netherlands to  $r = .51$  in China). It is interesting that people who thought that preventing negative outcomes was important also rated different information types as more sensitive (cf. 5.3.5).

## 5.2 Microblogs

In comparison with SNSs, microblogging services can be regarded as smaller platforms that allow users to publish short text messages either publicly or to a restricted base of followers. The most prominent service is Twitter with 302 million users worldwide (statista, 2015). A microblogging platform has typical characteristics such as limiting posts to a small number of characters (e.g., 140 characters on Twitter), the opportunity to post in certain channels by using hashtags, the opportunity to comment and repost (“retweet”) postings from other users, and a general focus on the latest news and daily events (Ebersbach, Glaser, & Heigl, 2011, p. 84f). Due to its specific characteristics, microblogging has become particularly popular in certain areas such as journalism, art, politics, and the media.

### 5.2.1 Socio-demographics of microblogs users

US American microblog users ( $n = 214$ ) were on average 20.23 years old ( $SD = 2.38$  years). About half of them were male (55.1%). British microblog users ( $n = 17$ ) were on average 22.94 years old ( $SD = 6.03$  years). The

majority of them were female (79.0%). German microblog users ( $n = 64$ ) were on average 26.73 years old ( $SD = 7.84$  years), and 72.4% of them were male. Dutch microblog users ( $n = 20$ ) were on average 23.10 years old ( $SD = 7.54$  years). The majority of them were male (77.9 %). Chinese microblog users ( $n = 128$ ) were on average 22.67 years old ( $SD = 3.68$  years). Again, the majority of them were male (73.5 %).

### 5.2.2 Use of specific microblog platforms

Twitter and Tumblr are the most commonly used microblog platforms in all Western countries. Among the US users, the vast majority (94.7%) used Twitter and only 4.9% used Tumblr. Only one person claimed to use another microblog platform. A very similar pattern could be found among British users of which 93.3% used Twitter and 6.7% used Tumblr. In Germany, 80.0% of the microbloggers used Twitter and 18.3% used Tumblr. Only one person, again, claimed to use another microblog platform. In the Dutch sample, 100% reported using Twitter. Chinese microbloggers used mainly Chinese microblogging platforms such as Weibo. Only one person claimed to use Twitter in China.

### 5.2.3 Frequency of microblog use

To measure the frequency of microblog use, we again included two different questions (cf. section 5.1.3). The first question read as follows: “How often do you use microblogs?” Possible answer options ranged from 1 (*several times a day*) to 5 (*less often*). The results are presented in Figure 46.

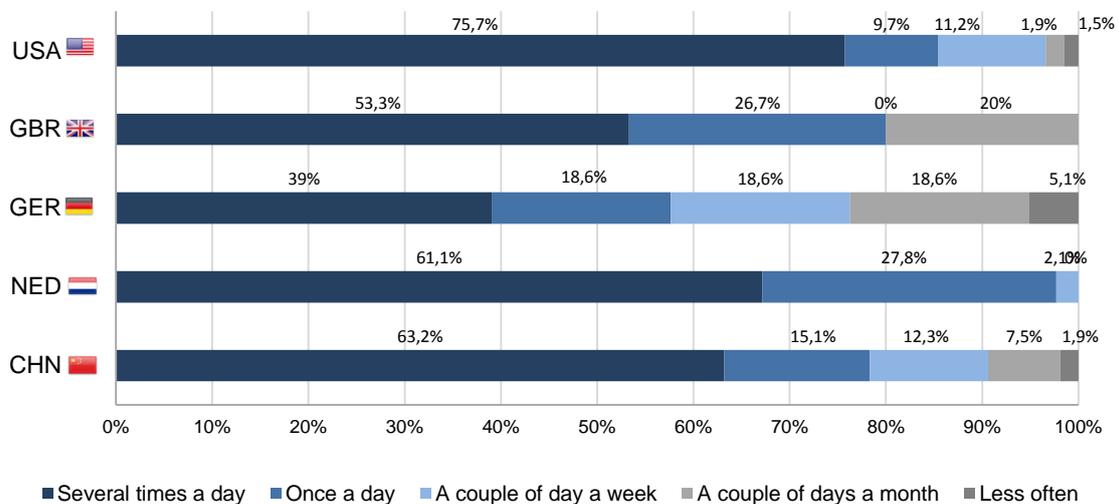


Figure 39: Frequency of microblog use

Over 50% of the participants used microblogs at least once a day. Nonetheless, nationality significantly influenced the frequency of use,  $H(4) = 32.95, p < .001, \eta^2 = .08$ . The German microblogging subsample used microblogs less often than the other subsamples. This difference was significant in comparison with the US ( $p < .01$ ) and Chinese ( $p < .01$ ) subsamples.

To measure the actual time people spent on microblogs on an average day, we asked: “In the past week, on average, approximately how much time per day have you spent actively using microblogs?” Participants thus estimated how many minutes per day they actively spent on microblogs. The results are presented in Figure 47.

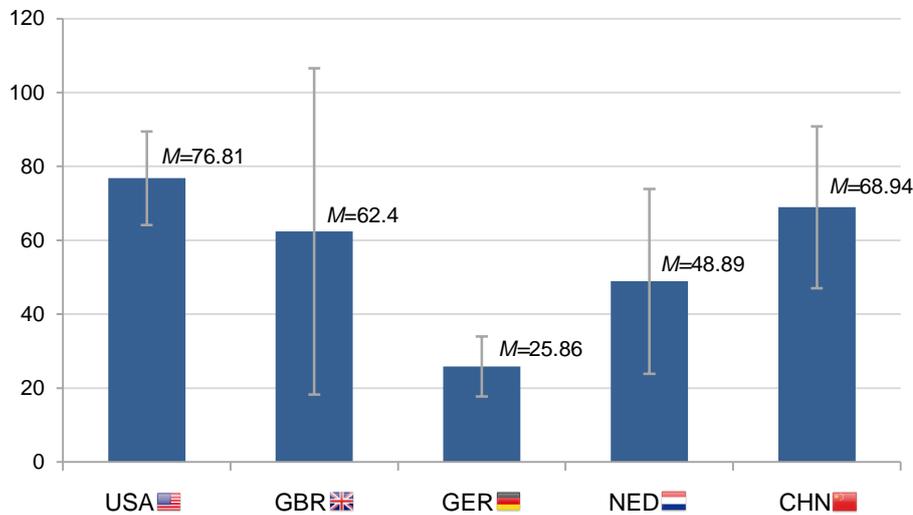


Figure 40: Time spent on microblogs per day (in minutes)

On an average day, German users spent the shortest amount of time on microblogs ( $M = 26$  minutes a day,  $SD = 31.18$ ). By contrast, US American users spent the longest amount of time on microblogs at 77 minutes per day ( $SD = 91.74$ ). Consequently, nationality significantly influenced daily time spent using microblogs, *Welch's F* (4, 55.34) = 10.02,  $p < .001$ , *est.  $\omega^2$*  = .10. Pairwise comparisons revealed that German users spent significantly less time using microblogs than US American ( $p < .01$ ) and Chinese ( $p < .01$ ) users. Age was negatively correlated with frequency of microblog use in the USA, Great Britain, and the Netherlands. By contrast, there was a positive relationship between age and frequency of use in Germany and China.

#### 5.2.4 Beginning of use

To examine when people started using microblogs, we asked: “For how long have you been using the microblog?” Answer options ranged from 1 (*more than four years*) to 5 (*less than one year*) and also included *I don't know*. The results are presented in Figure 51.

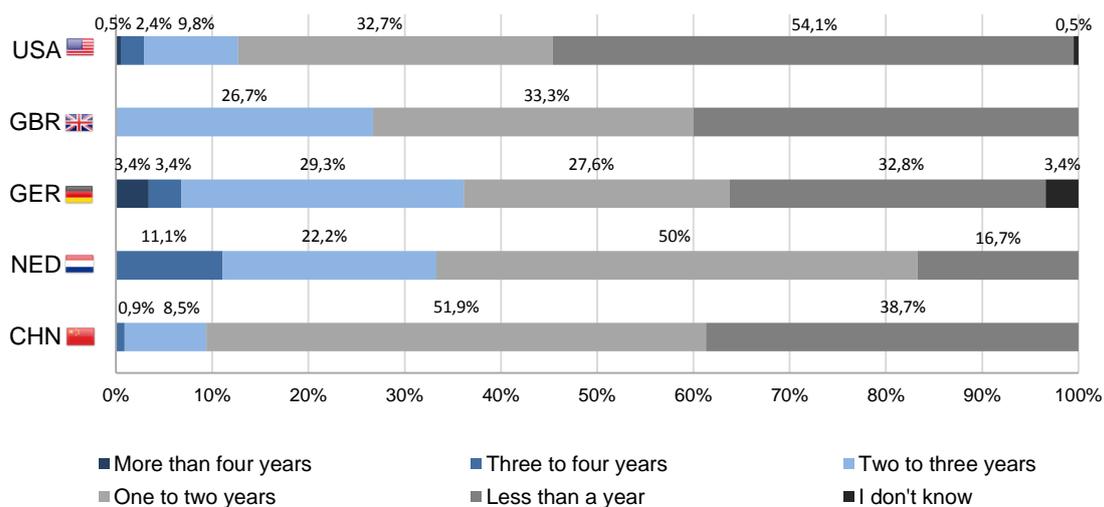


Figure 41: Beginning of microblog use

Overall, only a minority had started using microblogs more before 2011 when the data were collected. Nationality did have a small but significant effect on when people began using microblogs,  $H(4) = 23.01, p < .001, \eta^2 = .06$ . Specifically in Germany and the Netherlands, over 30% of microblog users had already started using microblogs two or more years ago. Thus, they started using microblogs earlier than participants from other countries. Pairwise comparisons, however, revealed that only US American participants had started using microblogs significantly later than the German ( $p < .01$ ) and Dutch ( $p < .01$ ) participants.

### 5.2.5 Mobile usage

To examine how often participants used a mobile device for microblogging, the following question was asked: “How often do you post something on [preferred microblog] from a smartphone or other mobile device?” The answer options ranged from 1 (*always*) to 3 (*never*).

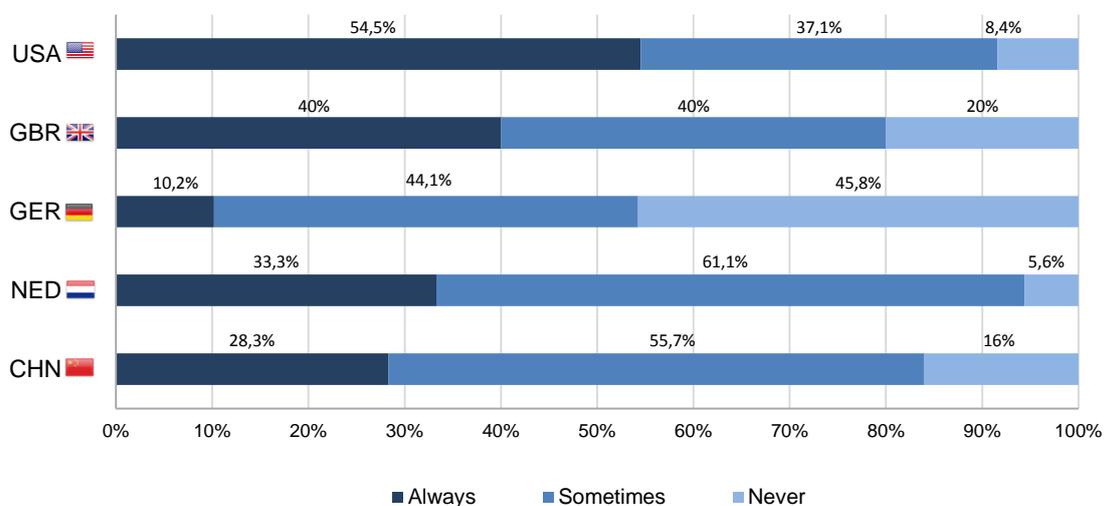


Figure 42: Mobile usage

In the US American microblogging subsample, 54.5% of the participants stated that they always used a mobile device for microblogging. On the other hand, only 10.2% of German microbloggers always used a mobile device for microblogging. Nationality thus significantly influenced mobile usage,  $H(4) = 61.98, p < .001, \eta^2 = .16$ . Pairwise comparisons showed that Germans reported using a mobile device less often than the US ( $p < .01$ ), Dutch ( $p < .05$ ), and Chinese ( $p < .01$ ) subsamples. Also, the difference between the US and Chinese users was significant ( $p < .01$ ).

## 5.2.6 Audience

### 5.2.6.1 Number of users followed

In contrast to SNSs, microblogs do not consist of networks of “friends.” Instead, users can follow other users. A network thus consists of people that a user follows and of people that, in turn, follow the user. Depending on a user’s specific settings, one can simply follow this user or has to wait for his or her approval. In order to examine complex networks on microblogs, we first wanted to analyze the number of users that the participants in our study followed: “About how many people do you follow on your microblog?”

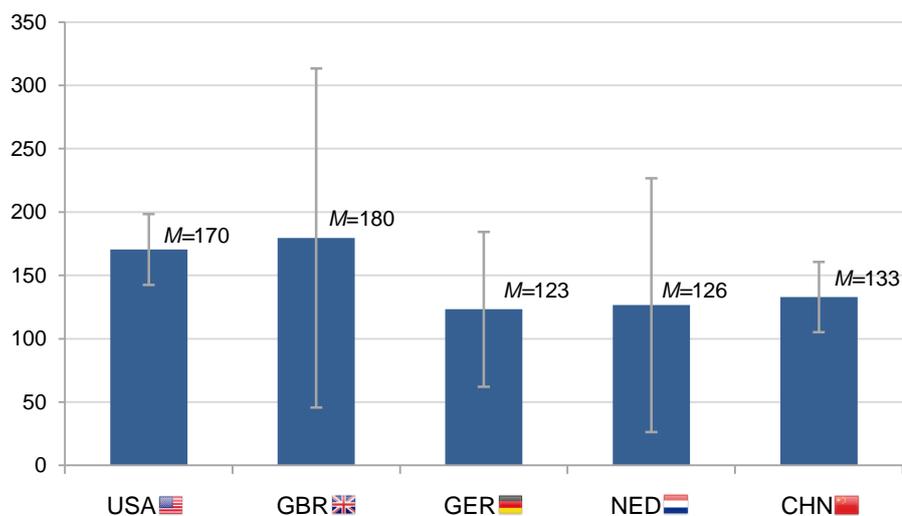


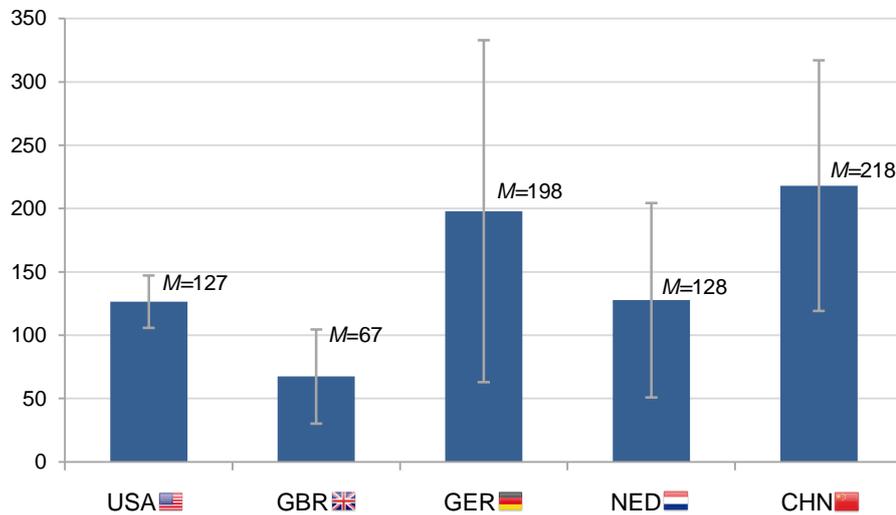
Figure 43: Number of microblog users that I follow

Participants generally followed between 123 (Germany) and 180 (Great Britain) other users. Due to the small subsample sizes, no significant differences between the national subsamples were detected,  $F(4, 397) = 1.17, p = .325$ .

### 5.2.6.2 Number of followers

In order to measure the actual audience size on microblogs, we next asked “About how many followers do you have on [Name of preferred microblog]?” It has to be noted, however, that depending on the privacy settings,

postings on microblogs might be visible to a much broader audience. By the use of hashtags, certain postings might be seen by many more microblog users than just the follower base. The results are presented in Figure 51.



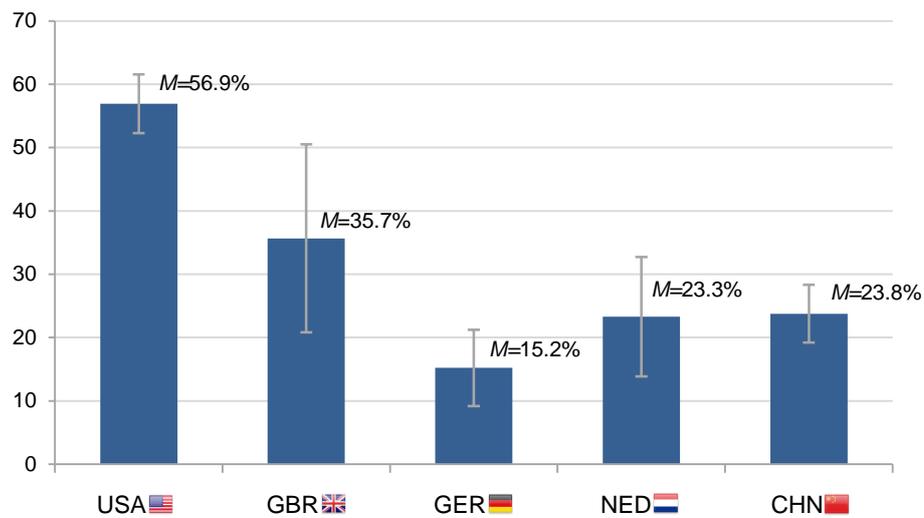
**Figure 44: Number of Followers**

Participants in our study had between 67 and 218 followers. British users had the lowest number ( $M = 67$ ,  $SD = 64$ ) and Chinese microbloggers had the highest number ( $M = 218$ ,  $SD = 506$ ) of followers. Nationality had a small but significant influence, *Welch's*  $F(4, 64.60) = 3.58$ ,  $p < .05$ , est.  $\omega^2 = .03$ . Pairwise comparisons showed that the difference between the Chinese and the British subsamples was significant ( $p < .05$ ).

In summary, the number of users followed and the number of followers were strongly and positively correlated ( $r = .20$  in China to  $r = .82$  in the Netherlands).

#### 5.2.6.3 Proportion of real friends

Although followers can be real friends, microblogging is also about interacting with other people such as celebrities, journalists, but also co-workers, people who share the same interests or jobs, or even strangers the user has never met before. First, we wanted to know how many of their followers participants considered to be real friends. The following question was asked: "Approximately how many of your followers do you consider actual friends?" Participants thus estimated the actual number of people they considered to be friends. Figure 55 shows the average percentage of real friends per country.



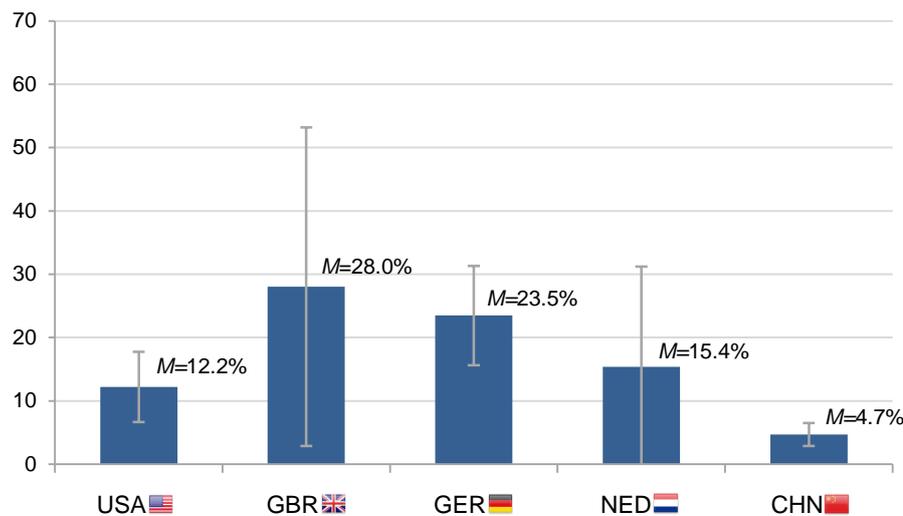
**Figure 45: Percentages of real friends within the followers**

US American microbloggers had by far the highest percentage of real friends within their followers (56.9%). German microbloggers had the lowest proportion of real friends as they considered only 15.2% of their followers to be real friends. Differences between the national subsamples were therefore significant, *Welch's*  $F(4, 71.39) = 35.75, p < .001, est. \omega^2 = .25$ . US American microblog users had significantly more friends in their follower base than users from Germany, the Netherlands, and China (all pairwise comparisons:  $p < .01$ ).

In contrast to the context of SNS use, the proportion of real friends within the followers was positively correlated with audience size. The correlation coefficients ranged from  $r = .35$  in Germany to  $r = .50$  in China.

#### 5.2.6.4 *Proportion of international followers*

Similar to the analysis of the size of the friends network of SNS users, we also measured the proportion of international followers of microblogs. We asked: “About how many of your followers are not living in the country you live in?” The proportion of international followers (in percent) was computed in the same way as the proportion of real friends.



**Figure 46: Percentage of international followers**

In general, the microbloggers' audiences were more international than the friends network of SNS users. Furthermore, there were small but significant differences between the national subsamples, *Welch's F* (5, 19.12) = 2.75,  $p < .05$ , *est.*  $\omega^2 = .10$ . British users had the highest percentage of international followers (28.0%). On the other hand, Chinese microbloggers had only 4.7% international followers. The percentage of international followers was significantly higher for German than for Chinese users ( $p < .05$ ).

#### 5.2.6.5 Audience composition

To measure the audience composition in more detail, we asked again: "Are the following people among your followers?" Similar to the SNS measure (cf. 5.1.6.4), participants were again presented with 12 categories representing different people who could be in the audience on microblogs: friends, co-workers, bosses or teachers, parents, children or grandchildren, other members of the family, partner, ex-partners, strangers, people the participants know but have never met personally, people the participant is interested in, and celebrities. Figure 54 presents an overview of the composition of the audience in each country.

The composition of the audience of microblog users differed quite a lot from the composition of the audience of SNS users. Although SNS audiences consisted of many different social contexts, the majority were known to the user (e.g., friends, co-workers, family members, and partners). On microblogs, the audience also included close acquaintances and friends, but a large number also consisted of people that the users had not met personally or were interested in. More than half of the participants indicated that their follower base included people they did not know personally. Apart from the US American participants, two thirds of the participants said that their audience also consisted of strangers. Overall, there were significant effects of

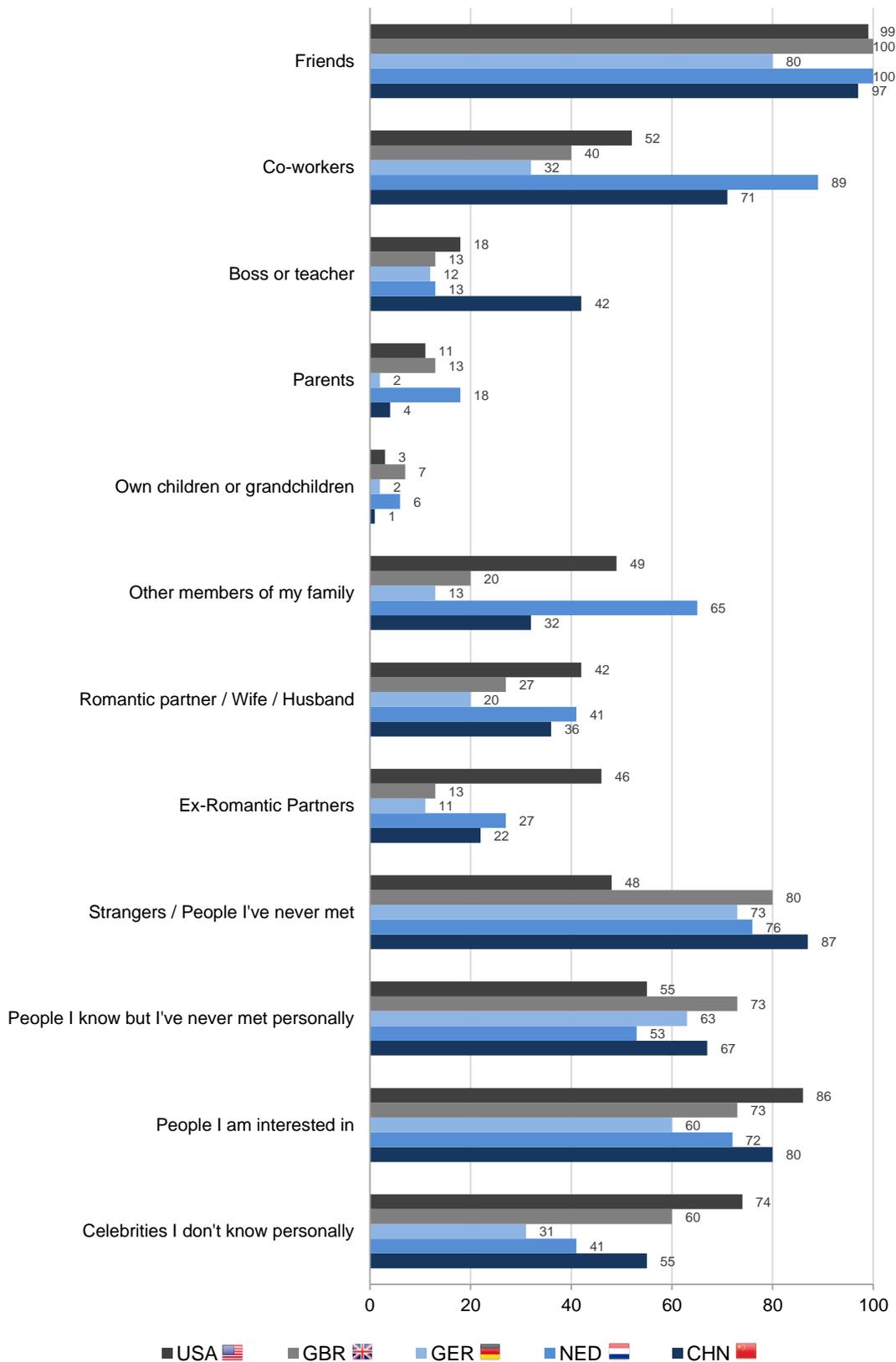


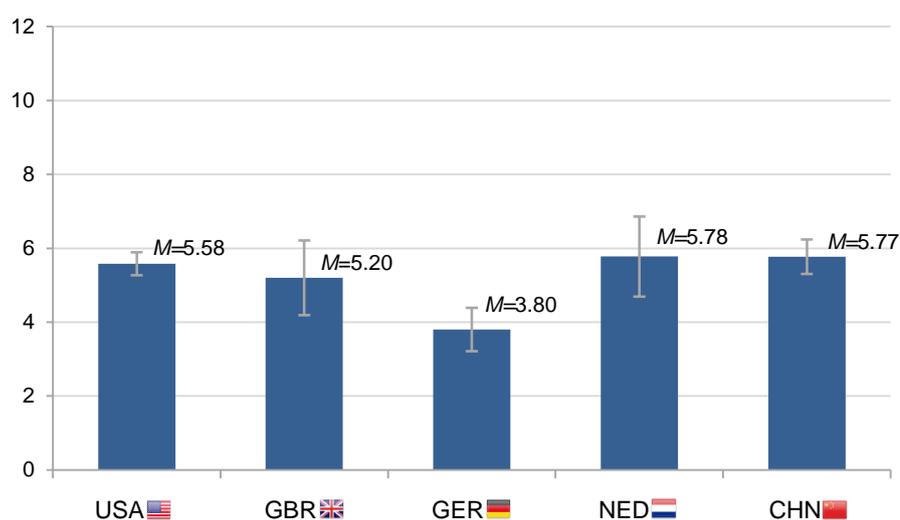
Figure 47: Audience composition (Percentage of participants who have the relative group within their followers)

**Table 6: Differences in audience composition**

	$\chi^2$	<i>df</i>	<i>p</i>	$\eta^2$
Friends	45.391	4	<.001	.11
Co-workers	33.74	4	<.001	.08
Boss or teacher	30.26	4	<.001	.08
Parents	10.07	4	<.050	.03
Own children or grandchildren	3.30	4	.509	.01
Other members of family	34.09	4	<.001	.09
Romantic partner / wife / husband	10.54	4	<.050	.03
Ex-romantic partners	36.80	4	<.001	.09
Strangers / people I've never met	52.79	4	<.001	.13
People I know but have never met personally	6.06	4	.194	.02
People I am interested in	7.62	4	.107	.02
Celebrities I don't know personally	37.97	4	<.001	.10

nationality on the probability of having a member of a specific social context in the audience (cf. Table 6). There were no differences between the national subsamples with regard to children and grandchildren, people I know but have never met personally, and people I am interested in.

Again, we also computed an audience diversity index by summing up all categories. The resulting estimate thus ranged from 0 to 12. A higher value again represented more diversity as the audience of a microblogger with a higher number included people from more social contexts. The results can be seen in Figure 55.



**Figure 48: Audience composition (summativ index of all categories)**

German microbloggers' audiences included only approximately four social contexts ( $M = 3.80$ ,  $SD = 2.26$ ). Dutch microblog users' audience, by contrast, was more diverse ( $M = 5.78$ ,  $SD = 2.18$ ). There were significant

differences between the national subsamples,  $F(4, 399) = 8.40, p < .001, \omega^2 = .07$ . Pairwise comparisons showed that German microbloggers had less diverse audiences than microbloggers from the US ( $p < .01$ ), the Netherlands ( $p < .05$ ), or China ( $p < .01$ ).

In all subsamples, frequency of use was related to audience diversity ( $r = .15$  in China to  $r = .51$  in the Netherlands). Thus, people who use microblogs more frequently and for longer periods per day have more diverse followers.

## 5.2.7 Privacy-Related Measures

### 5.2.7.1 Visual anonymity

Microblogs provide different settings that allow users to control their privacy. We asked three questions concerning privacy settings as well as privacy strategies. First, we wanted to know: “What kind of profile picture do you use?” Answer options ranged from 1 (*Me, recognizable*) to 4 (*none*). Results can be seen in Figure 56.

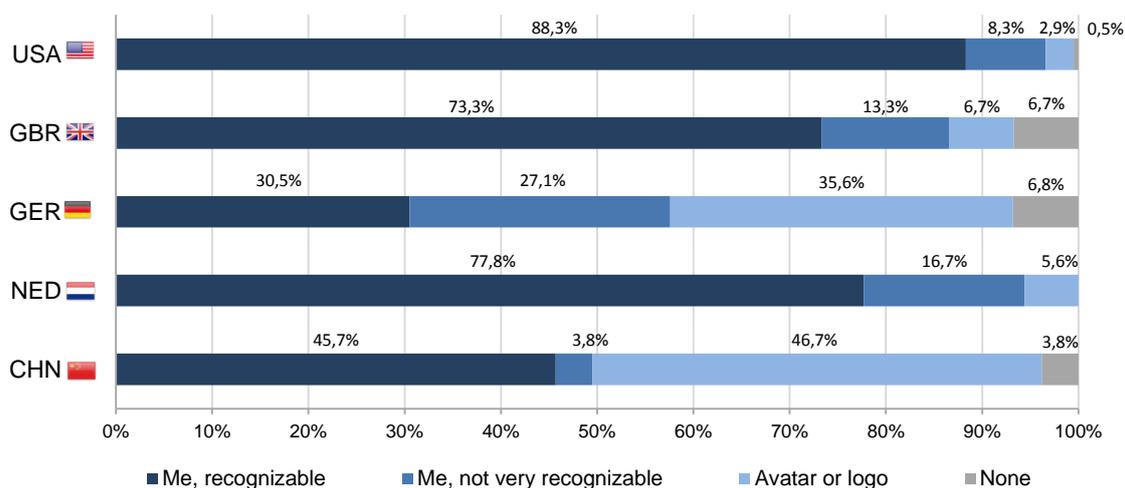


Figure 49: Type of profile picture used on Microblogs

The vast majority of all microbloggers had some kind of profile picture. However, nationality had a significant influence on the type of picture that was used,  $H(4, 402) = 110.24, p < .001, \eta^2 = .27$ . Except for German microbloggers, users from all nations usually used a profile picture of themselves in which they were recognizable. This was most common in the United States: 88.3% of US American microblog users stated that they had a recognizable profile picture. In China, however, avatars (46.7%) and pictures of the microbloggers in which they were recognizable (45.7%) were equally popular. In Germany, the majority (35.6%) claimed to have an avatar or logo. Differences between the German microbloggers and US American, Dutch, and British microbloggers were significant (all pairwise comparisons:  $p < .05$ ).

### 5.2.7.2 Pseudonymization of profile information

We further wanted to know if microbloggers used pseudonyms to protect their privacy. We thus asked: “What name do you use?” Answer options were 1 (*Full real name*), 2 (*Parts of my real name*), and 3 (*Pseudonym*). The results are presented in Figure 57.

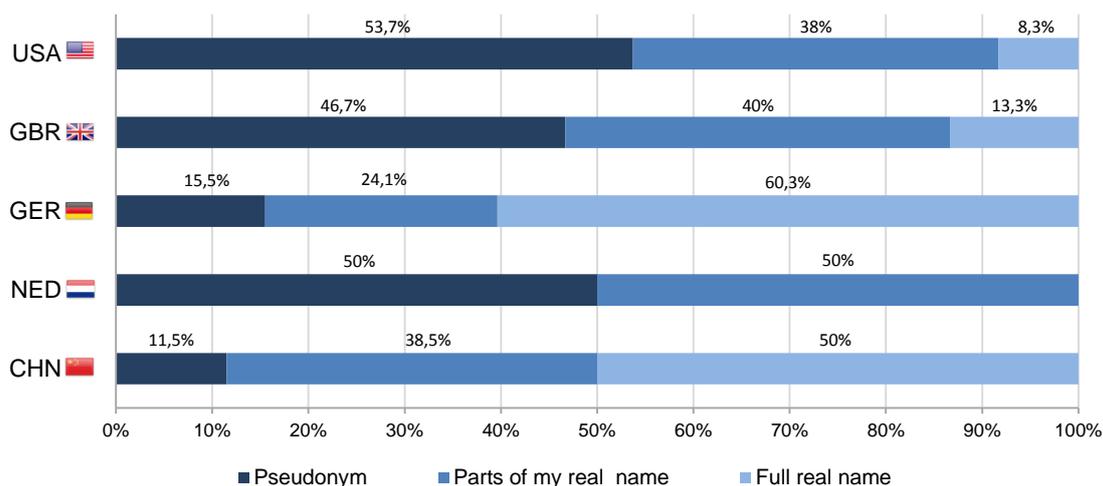


Figure 50: Types of names used on Microblogs

In the United States (53.4%) and Great Britain (46.7%), most microbloggers used pseudonyms. In China (49.1%) and Germany (59.3%), it was more common to use one’s real name. In the Netherlands, using parts of one’s real name (50%) and using a pseudonym (50%) were equally common. Nationality thus significantly influenced what kind of name was used,  $H(4) = 113.00$   $p < .001$ ,  $\eta^2 = .28$ . Pairwise comparisons showed significant differences between German and Chinese microbloggers, and both differed significantly from all other participants (pairwise comparisons:  $p < .01$ ).

It is interesting that in the nations in which microbloggers did not engage in visual anonymization strategies, pseudonyms were more common than in the nations in which microbloggers used avatars or logos as profile pictures. It seems that microbloggers generally rely on one single anonymization strategy and hide either their face or their real name.

### 5.2.7.3 Visibility of tweets

The last question was for Twitter users only. Twitter generally offers only a few privacy options. The most important one is the restriction of the visibility of tweets. Users can decide whether they want to share their tweets with everybody (even Internet users outside of the Twitter network) or limit visibility to their followers. We thus asked: “Who is able to see your tweets?” The answer options were *everybody* and *my followers*. The results are presented in Figure 58.

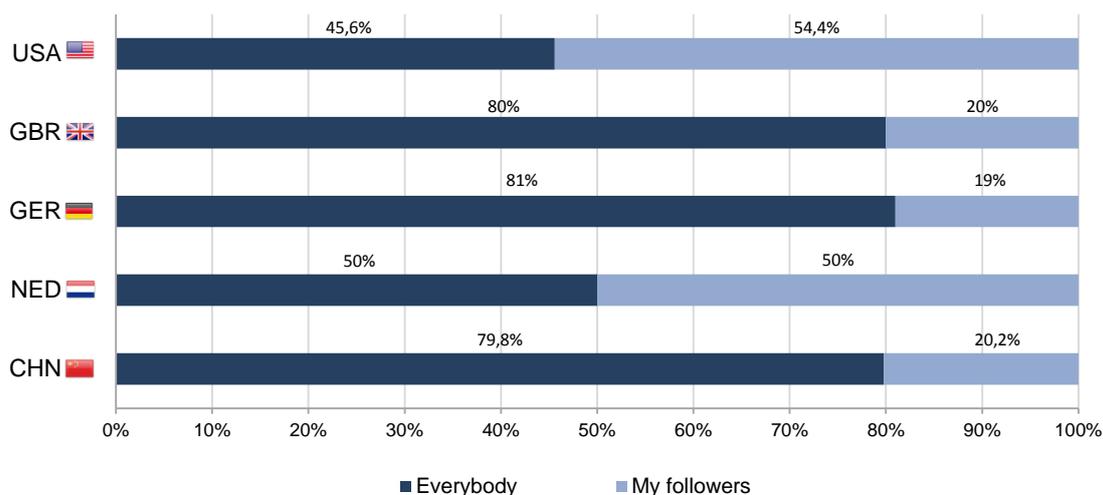


Figure 51: Who is able to see your tweets?

More than half of the participants allowed everybody to see their tweets. This is not surprising because most of the benefits of using Twitter can be obtained only if one’s own tweets become part of larger discussions. In Great Britain, Germany, and China, more than 70% of all microbloggers allowed everybody to see their tweets. In the USA, half of the participants limited the visibility of their tweets to their followers. This might be explained by the differences in audience composition. US American microbloggers generally have more close acquaintances in their audience. Their communication on Twitter might thus be more private, and their need to protect these conversations might therefore be higher. Also in the Netherlands, both answer options were chosen equally often. Consequently, nationality had a small but significant effect on whom a microblogger allowed to read his or her tweets,  $\chi^2(4) = 45.15, p < .001, \eta^2 = .11$ .

### 5.2.8 Disclosure of profile information

Next, we asked whether there were cultural differences with regard to the disclosure of profile information. We wanted to know if people disclosed their gender, age, occupation, or location. Figure 59 shows the results.

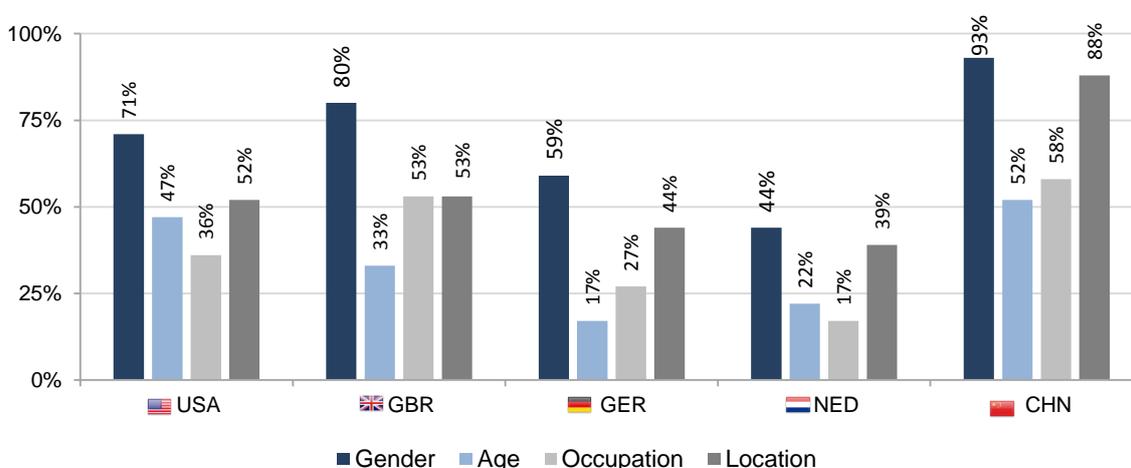


Figure 52: Disclosure of profile information

As can be seen in Figure 59, all countries showed a similar pattern. Whereas more than half of the users disclosed their gender and their location, fewer users disclosed their age or occupation. Nationality had a significant influence on the disclosure of all information types (see Table 7). Most Chinese microblog users disclosed profile information such as gender and location. By contrast, only 40% of the Dutch users disclosed their gender and location.

**Table 7: Differences in the disclosure of profile information**

	$\chi^2$	<i>df</i>	<i>p</i>	$\eta^2$
Gender	36.87	4	<.001	.09
Age	24.58	4	<.001	.06
Occupation	23.89	4	<.001	.06
Location	48.72	4	<.001	.12

### 5.3 General Measures

Apart from platform-specific measures, we also looked at more general measures and in particular at measures with regard to general social media use. In order to identify more general differences between the five countries, we investigated complex phenomena such as self-disclosure, sharing of information, and negative privacy experiences from a broader perspective.

#### 5.3.1 General trust of other people

Trust has generally been identified as a positive predictor of self-disclosure (e.g., Steel, 1991; Wheelless & Grotz, 1977) and privacy protection behavior. To measure people’s overall trust of other people, we adopted items from the measures of personality and social psychological attitudes by Robinson, Shaver, and Wrightsman (1991). Participants were presented with a list of statements (e.g., “Most people are good”) and asked to indicate how much they agreed with these statements. Answer options ranged from 1 (*disagree completely*) to 5 (*agree completely*). The internal consistency of the scale was  $\alpha = .86$ . The results are presented in Figure 60.

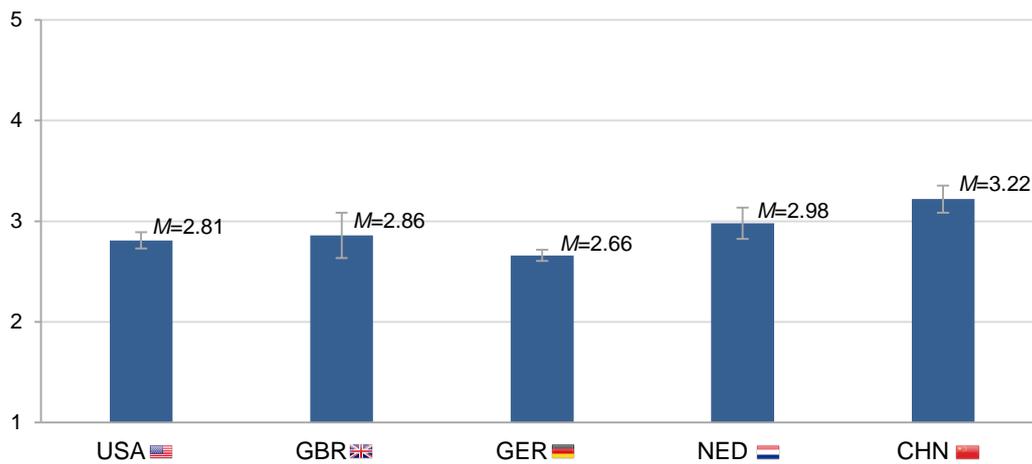


Figure 53: Trust of other people (1 = disagree completely to 5 = agree completely)

As can be seen from the barplot, the means in each country were slightly below or slightly above 3 on the 5-point scale. There was thus no clear tendency in whether people judged other people as trustworthy or not. Nationality had a small but significant influence, *Welch's F* (4, 299.83) = 16.38,  $p < .001$ , *est.*  $\omega^2 = .03$ . Chinese participants rated other people as slightly more trustworthy than participants from other countries. Pairwise comparisons revealed that the Chinese sample differed significantly from the German and the US American samples ( $ps < .01$ ). German participants rated other people as slightly less trustworthy than participants from other countries (compared with US American, Dutch, and Chinese users:  $p < .05$ ).

### 5.3.2 Previous experiences with privacy violations

Since there were differences between the nationalities with regard to privacy attitudes and behaviors, we wanted to know if there were also differences in experiences with privacy violations. The questions read as follows: “In the past year, how often has personal information from your profile on a social network site been shared with others against your will? This may involve people telling others about what you posted on your profile or people forwarding your personal information to others although you did not want them to.” Possible answer options ranged from 1 (*never*) to 6 (*more than four times*). The results are presented in Figure 61.

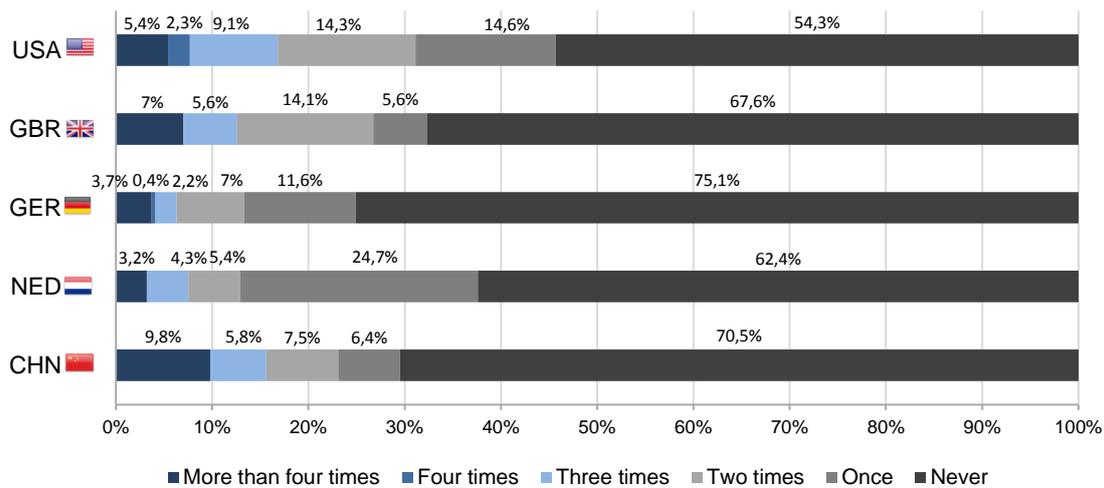
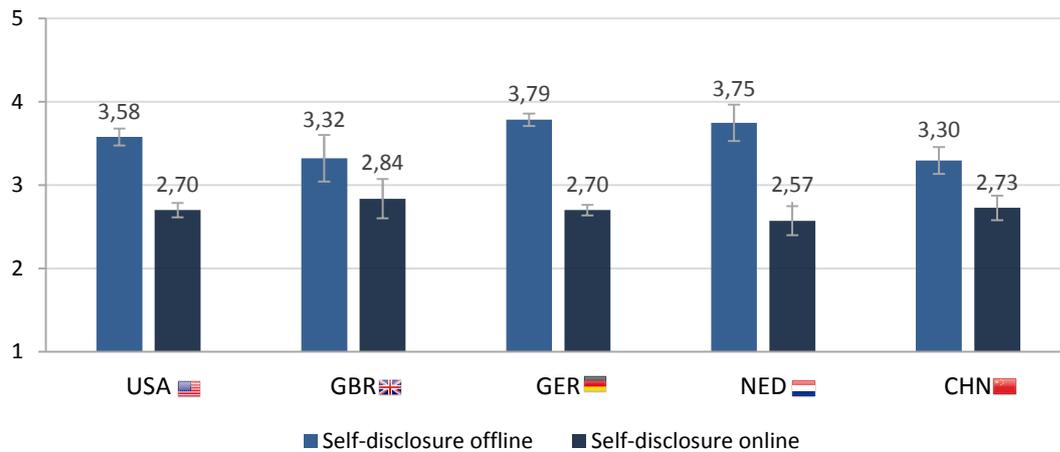


Figure 54: Previous experiences with privacy violations

Surprisingly, the majority of the participants has never experienced any privacy violations. More than 60% of the people surveyed indicated that no person had ever shared information from their profile against their will. Nonetheless, there were smaller differences between the national samples,  $H(4) = 67.08, p < .001, \eta^2 = .04$ . With 45.7% who had experienced privacy violations at least once, the US American sample differed significantly from the German and Chinese samples (both comparisons:  $p < .01$ ). We also found small but significant negative correlations between privacy literacy and the number of negative experiences (cf. Appendix: Tables I to V), indicating that more literate users tended to protect their privacy better, which resulted in fewer negative outcomes.

### 5.3.3 Self-disclosure online and offline

To measure self-disclosure both online and offline, items were adapted from Miller, Berg, and Archer (1983). Participants were presented a list of four different topics (Things I have done that I feel guilty about; Things I wouldn't do in public; My deepest feelings; My close relationships with other people) and asked: “We would like to know how willing you would be to discuss each of these topics with a friend (a) offline and (b) online.” Answer options ranged from 1 (*not discuss at all*) to 5 (*discuss fully and completely*). The internal consistency for the offline scale was  $\alpha = .90$  and for the online scale,  $\alpha = .72$ . Means for self-disclosure online and self-disclosure offline are presented in Figure 62.

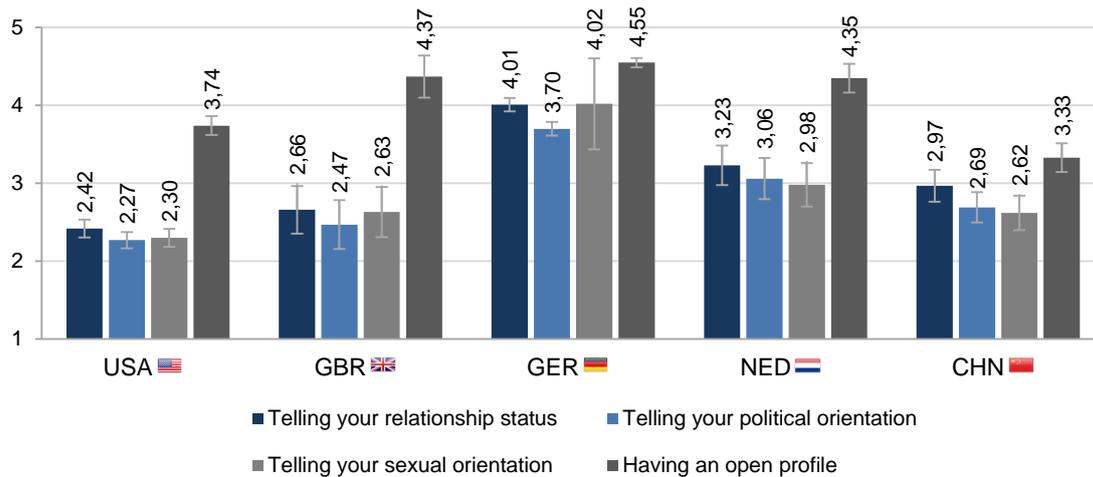


**Figure 55: Self-disclosure indices offline and online (1 = not discuss at all to 5 = discuss fully and completely)**

As can be seen in the figure, within each national sample, no confidence intervals overlapped between online and offline disclosure. In other words, participants disclosed themselves significantly more in offline contexts than in online realms. Comparing the levels of self-disclosure between the national samples, it became evident that there was a small but nonetheless significant effect of nationality on self-disclosure offline, *Welch's*  $F(4, 297.57) = 9.81, p < .001, est. \omega^2 = .02$ . Pairwise comparisons showed that German users disclosed themselves significantly more in offline contexts than US American, British, and Chinese participants (all pairwise comparisons:  $p < .05$ ). In online environments, however, nationality had no significant effect,  $F(4, 1775) = 0.82, p = .514$ .

### 5.3.4 Subjective privacy level of privacy-related behaviors

People might perceive different types of information as differing in the extent to which they affect privacy levels. In this study, we wanted to know the extent to which participants considered different kinds of information to have the potential to affect their privacy. We presented them with different behaviors (e.g., telling your relationship status, telling your political orientation, telling your sexual orientation, and having an open profile), and participants had to indicate the extent to which this kind of information affected their privacy. Possible answers options ranged from 1 (*does not affect my privacy at all*) to 5 (*affects my privacy very much*). The results are presented in Figure 63.



**Figure 56: Subjective privacy levels of different types of information and behaviors (1 = does not affect my privacy at all to 5 = affects my privacy very much)**

From Figure 62, it can be seen that the three types of information (excluding having an open profile) were not rated differently within any country. However, larger differences occurred between the countries (relationship status: *Welch's*  $F(4, 281.25) = 130.97, p < .001, est. \omega^2 = .24$ ; political orientation:  $F(4, 1646) = 108.33, p < .001, \omega^2 = .21$ ; sexual orientation: *Welch's*  $F(4, 280.52) = 147.54, p < .001, est. \omega^2 = .26$ ). German participants generally considered disclosing any of these types of information to have more of an effect on privacy. By contrast, US America participants generally indicated that disclosing these kinds of information did not affect privacy. Their ratings were significantly lower than the ratings by German, Dutch, and Chinese users ( $ps < .01$ ). Having an open profile was generally considered to affect privacy. Means ranged from  $M = 3.33 (SD = 1.25)$  for the Chinese sample to  $M = 4.55 (SD = 0.87)$  for the German sample. Nationality again had a significant influence, *Welch's*  $F(4, 278.52) = 62.66, p < .001, est. \omega^2 = .13$ . Chinese and US participants rated this behavior as having less of an effect on privacy. Both samples differed significantly from all other countries (all pairwise comparisons:  $p < .01$ ).

### 5.3.5 Sensitivity of information

To measure differences in the sensitivity of specific pieces of information, we used the scale by Jourard and Lasakow (1958). Participants were presented a list of 14 topics (e.g., Whether or not I have savings and the amount; My feelings about my adequacy as a sexual partner; My past record of illness and treatment) with the request: "Please rate the sensitivity of each piece of information with respect to being shared in Social Media." Answer options ranged from 1 (*not at all sensitive*) to 7 (*very sensitive*). The results are presented in Figure 64.

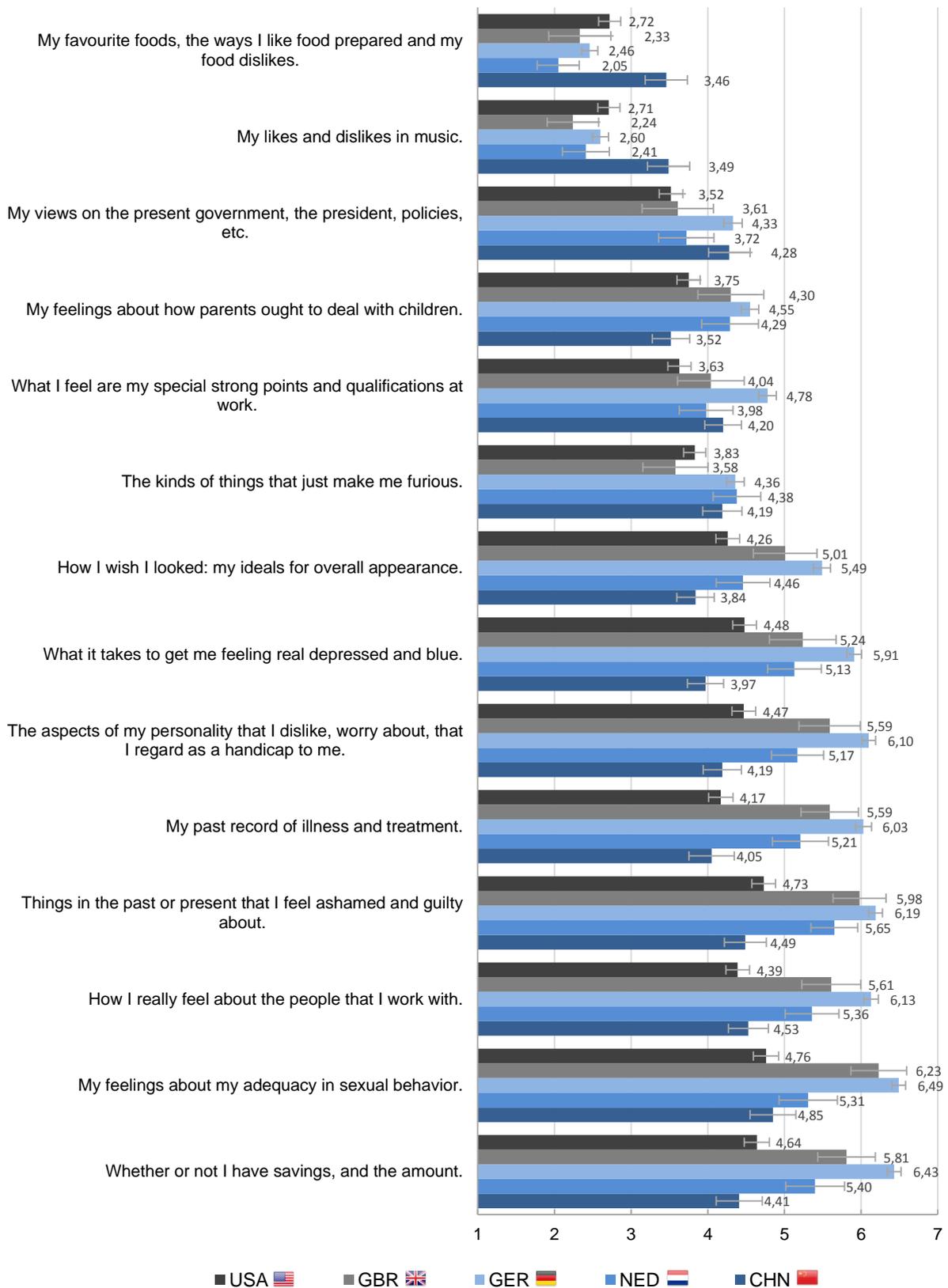


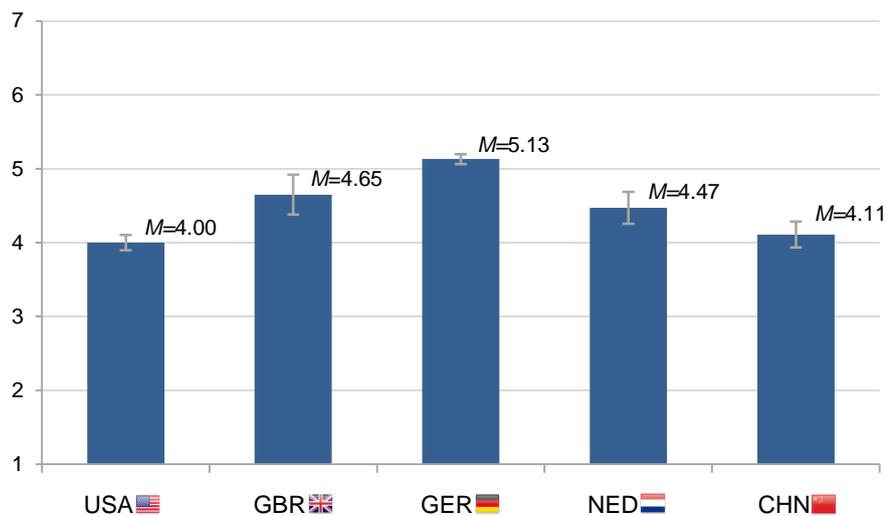
Figure 57: Perceived sensitivity of information (1 = not at all sensitive to 7 = very sensitive)

**Table 8: Differences in information sensitivity**

	<i>Welch's F</i>	<i>F</i>	<i>df</i>	<i>p</i>	<i>est. ω<sup>2</sup> / ω<sup>2</sup></i>
whether or not I have savings, and the amount	112.88		4, 287.78	< .001	.20
sexual behavior	100.49		4, 285.90	< .001	.19
how I feel about the people I work with	104.106		4, 290.02	< .001	.19
things I feel ashamed about	88.73		4, 293.90	< .001	.17
my past record of illness and treatment	111.39		4, 294.11	< .001	.20
aspects of my personality that I dislike	111.37		4, 290.27	< .001	.20
What it takes to get me feeling depressed	95.71		4, 296.35	< .001	.18
ideals for overall appearance	63.36		4, 138.96	< .001	.13
things that make me furious		10.57	4, 1746	< .001	.02
my qualifications for my work		38.04	4, 1745	< .001	.08
how parents ought to deal with children		24.09	4, 1740	< .001	.05
views on the present government		18.70	4, 1748	< .001	.04
likes and dislikes in music	11.20		4, 301.37	< .001	.03
favorite foods	16.15		4, 300.25	< .001	.04

In general, different pieces of information were indeed rated as having different levels of sensitivity within each country. Information about savings, sexual behavior, feelings toward co-workers, and things that one might feel guilty about were generally perceived as rather sensitive information. On the other hand, information about one's favorite food or music was not considered very sensitive. Comparing the national samples, we could also see larger differences between the different countries (cf. Table 8). Again, German participants rated all information as significantly more sensitive than all other participants from other countries (all pairwise comparisons:  $p < .05$ ). Also, British users rated most pieces of information as more sensitive than participants from China, the USA, and the Netherlands did. Chinese participants rated most pieces of information as less sensitive than participants from the other countries did. However, information about their views and opinions about the government was considered significantly more sensitive in China than in the USA, and the Netherlands (all pairwise comparisons:  $p < .05$ ). It is interesting that, although Chinese participants generally rated most kinds of information as less sensitive than participants from the other countries did, the Chinese rated their food and music tastes as significantly more sensitive than all other countries did ( $p < .01$ ).

The general difference in the national perception of the sensitivity of information became even more visible when we computed a mean index that included all topics. The internal consistency was  $\alpha = .91$ . The results are presented in Figure 65.



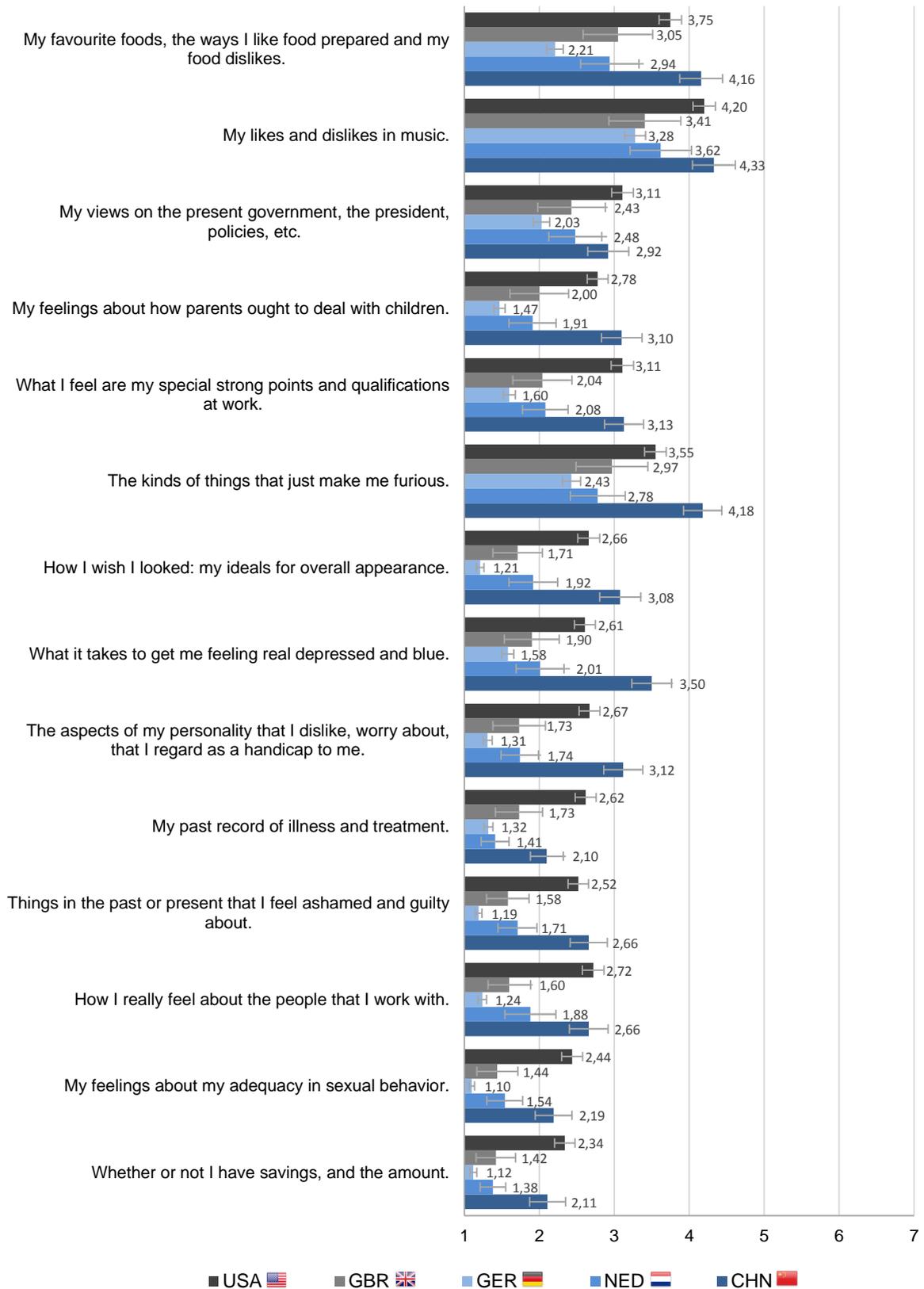
**Figure 58: Perceived sensitivity of information index (1 = not at all sensitive to 7 = very sensitive)**

German participants generally rated all information as more sensitive than all other participants. Nationality thus had a significant influence, *Welch's F* (4, 295.70) = 90.29,  $p < .001$ , *est.*  $\omega^2 = .17$ . Pairwise comparisons revealed significant differences between German participants and participants from all other countries (all pairwise comparisons:  $p < .01$ ). US American participants generally viewed all information as less sensitive. The ratings in the US sample differed significantly from those in both the British and Dutch samples (both comparisons:  $p < .01$ ).

### 5.3.6 Sharing of different types of information

Next, we wanted to know how often people shared this kind of information (a) with other users in general and (b) with their friends. Thus, participants were presented with the same list of 14 topics that had already been used in the sensitivity evaluation. But now we asked: "Please think of your own behavior now. How often do you share this information on Social Media Sites with (a) other users in general? (b) your online friends or a limited group of users?" Possible answer options ranged from 1 (*never*) to 7 (*very often*). The results for sharing sensitive information with other users in general are presented in Figure 69, and the results for sharing sensitive information specifically with friends are presented in Figure 66.

A comparison of Figures 64 and 65 shows that information that was considered sensitive was shared less often *with other users in general* than information that was not considered sensitive. There was a significant effect of nationality for each item (cf. Table 8). Generally, US American and Chinese participants shared information more often. Yet, both the US and Chinese samples generally considered information to be less sensitive than the other samples did. By examining the pairwise comparisons, we found that US American and Chinese participants shared information significantly more frequently than German participants (pairwise comparisons for all items:  $p < .01$ ). Also, US Americans shared most kinds of information significantly more often than people from the Netherlands ( $p < .01$ ).



**Figure 59: Sharing of sensitive information with other users (1 = never to 7 = very often)**  
**Table 8: Differences in sharing sensitive information with other users**

	<i>Welch's F</i>	<i>df</i>	<i>p</i>	<i>est. ω<sup>2</sup></i>
whether or not I have savings, and the amount	84.12	4, 265.53	< .001	.17
sexual behavior	102.61	4, 254.02	< .001	.20
how I feel about the people that I work with	112.36	4, 261.49	< .001	.21
things I feel ashamed about	112.03	4, 259.59	< .001	.21
my past record of illness and treatment	79.65	4, 274.02	< .001	.16
aspects of my personality that I dislike	114.70	4, 266.40	< .001	.22
what it takes to get me feeling depressed	76.58	4, 271.72	< .001	.16
ideals for overall appearance	127.92	4, 257.65	< .001	.24
things that make me furious	56.45	4, 281.32	< .001	.12
my qualifications for my work	95.50	4, 273.85	< .001	.19
how parents ought to deal with children	88.49	4, 269.34	< .001	.18
views on the present government	36.52	4, 276.74	< .001	.08
likes and dislikes in music	23.10	4, 283.44	< .001	.05
favorite food	86.03	4, 277.14	< .001	.17

In comparing Figures 64 and 66, we can see that again, people shared information that they considered less sensitive more frequently *with their friends*. But looking at Figures 65 and 66 in comparison, we can also see that participants generally shared information more often with friends than with users in general and thus restricted the audience that was able to view their postings or communications. Nonetheless, both measures were strongly correlated in all countries (cf. Appendix: Tables I to V). Again, we found a significant effect of nationality on all items (cf. Table 9). Similar to the distribution in Figure 65, Chinese and US Americans disclosed information to friends more frequently than participants from European countries did. But in contrast to the results on sharing sensitive information in general, there were also significant differences between the Chinese and US samples: Chinese people shared all kinds of information more frequently with their friends than the US Americans did (all pairwise comparisons:  $p < .01$ ).

Sharing information with other users was also negatively correlated with the perceived risks of having an open profile. If SNS users perceived that negative outcomes of having an open profile were likely, they were very deliberate about what they posted (cf. Appendix: Tables I to IV). The correlation coefficients ranged from  $r = -.12$  in the German sample to  $r = -.32$  in the US American sample. Only the correlation in the Dutch sample was not significant.

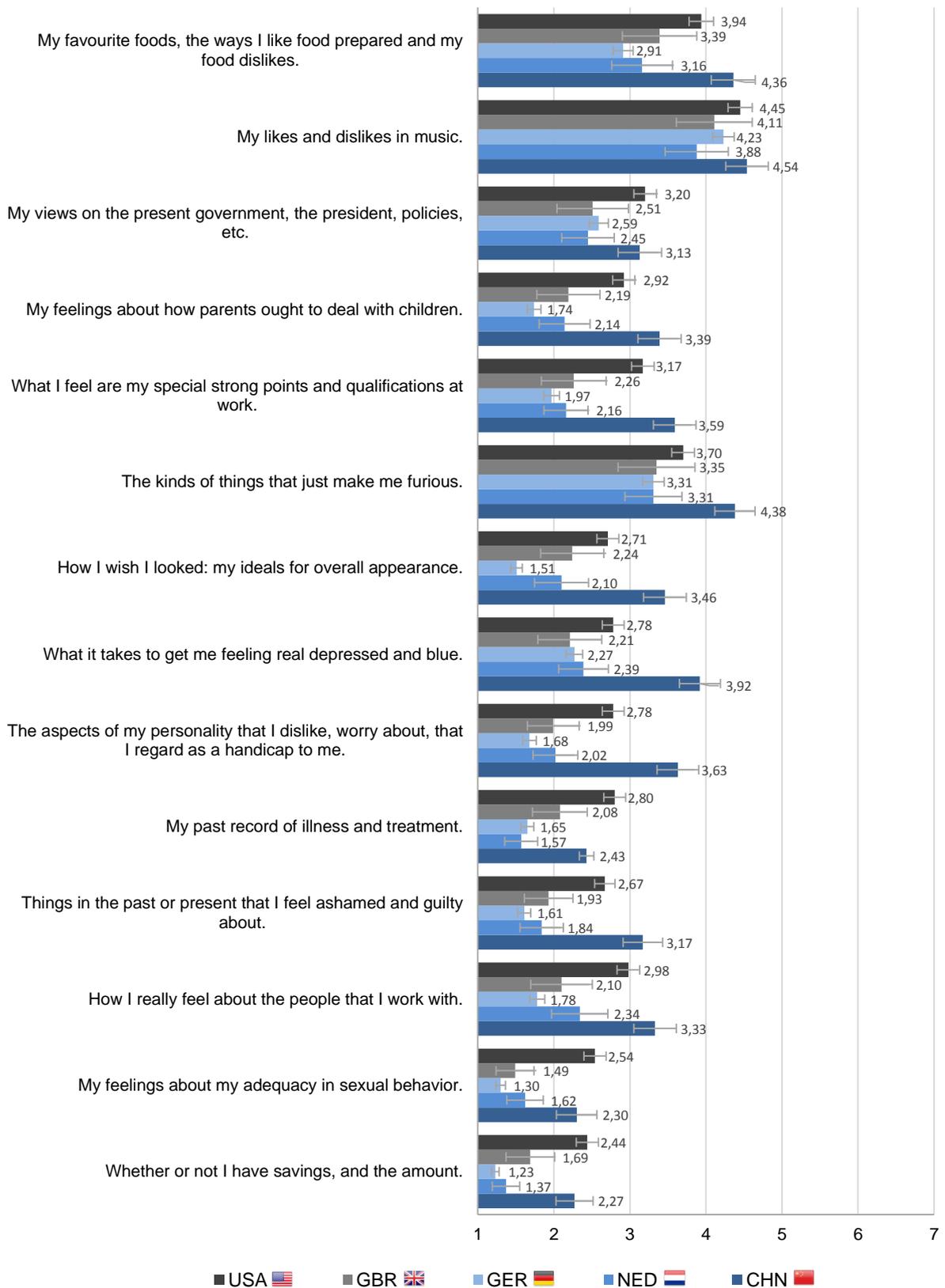
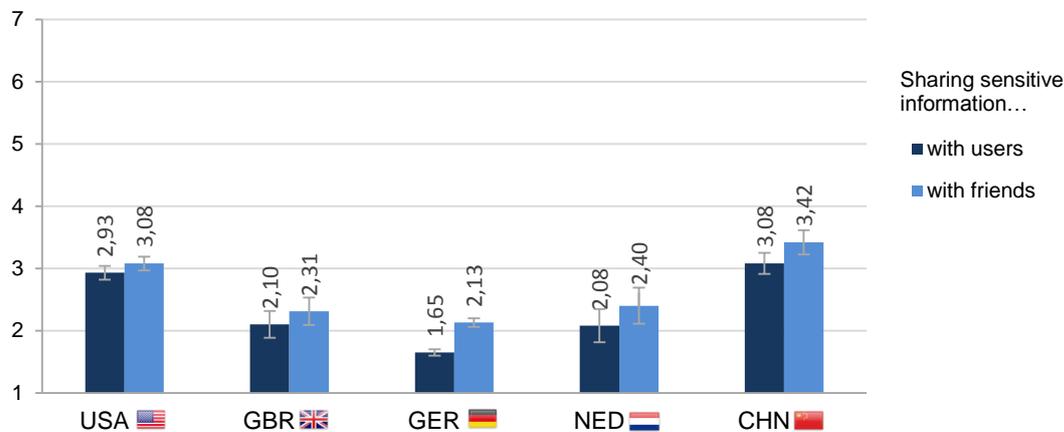


Figure 60: Sharing sensitive information with friends (1 = never to 7 = very often)

**Table 9: Differences in sharing sensitive information with friends**

	<i>Welch's F</i>	<i>df</i>	<i>p</i>	<i>est. ω<sup>2</sup></i>
whether or not I have savings, and the amount	75.94	4, 265.81	< .001	.16
sexual behavior	67.35	4, 271.56	< .001	.14
how I feel about the people I work with	59.59	4, 271.45	< .001	.13
things I feel ashamed about	62.62	4, 274.24	< .001	.13
my past record of illness and treatment	50.51	4, 280.84	< .001	.11
aspects of my personality that I dislike	72.54	4, 275.42	< .001	.15
what it takes to get me feeling depressed	34.25	4, 280.49	< .001	.08
ideals for overall appearance	88.49	4, 265.79	< .001	.18
things that make me furious	14.18	4, 282.07	< .001	.03
my qualifications for my work	60.01	4, 278.79	< .001	.13
how parents ought to deal with children	64.00	4, 272.54	< .001	.13
views on the present government	11.77	4, 278.83	< .001	.03
likes and dislikes in music	2.84	4, 281.01	< .050	.01
favorite foods	35.64	4, 279.85	< .001	.08

We also computed the mean for sharing information with users in general on the one hand and with friends on the other. The internal consistency for both indices was  $\alpha = .94$ . The results are presented in Figure 68.



**Figure 61: Sharing sensitive information with users and friends (1 = never to 7 = very often)**

In looking at the indices, it is even more apparent that people generally do not disclose these pieces of information very often. Almost all means were below or slightly above 3, meaning that on average, people reported sharing information with other users or friends only from time to time. Nonetheless, we found that people share information with their friends more often than with users in general (all *t*-tests:  $p < .05$ ). Nationality furthermore had a significant effect on sharing information with users in general and with friends (Sharing with users in general:  $Welch's F(4, 271.65) = 147.16, p < .001, est. \omega^2 = .26$ ; Sharing with friends:  $Welch's F(4, 276.72) = 76.31, p < .001, est. \omega^2 = .16$ ).

## 6 Conclusion

In this research report, we argued that research on online privacy and the social web requires a multicultural perspective. This comparative study revealed that there are indeed cultural differences with regard to social media use, privacy-related behavior, and self-disclosure. In the following, we will present some key observations.

### Media Use

With regard to the frequency of use of different online services, we found smaller differences than expected. In all five countries, over 90% of all participants reported using SNSs (mostly Facebook), more than 75% reported using video platforms (e.g., Youtube), and around one third reported reading blogs. More Chinese and US American users, however, used microblogging platforms (e.g., Twitter). On the other hand, European users engaged more in the use of wiki platforms (e.g., Wikipedia). The frequency of SNS use was nonetheless quite similar in all countries. Participants spent about one to one and a half hours on SNSs. Microblogging use was quite different between the countries with about half an hour in Germany and 76 minutes in the USA.

### Privacy protection behavior

With regard to privacy-related measures, we found that the broad differentiation between Western and Eastern cultures (as suggested by previous studies) only partly accounted for differences in social media use and privacy behavior. Rather, our findings revealed that European countries (United Kingdom, Germany, and the Netherlands) share a common culture that is distinguishable from non-European cultures (in this case, the USA and China). Participants from European countries had generally smaller audiences on SNSs and Microblogging platforms, tended to limit the visibility of their postings and profile information more, and used more privacy settings. In particular, German social media users seemed to be guarded, protective, and rather reluctant to participate in online communication. For example, whereas more than 50% of the German SNS users limited the visibility of their profile information such as contact details, birthday, religion, sexual preferences so that no other users were allowed to see such information, the portion of users who limited their profiles in such a way was substantially lower in other countries. On the other hand, users from the USA rated privacy-related behavior such as having an open profile or uploading pictures as less risky and thus engaged in these behaviors more frequently. Both Chinese and US American users used fewer privacy settings on SNSs.

### Self-Disclosure

Similarly, German users were more deliberate about what they posted on SNSs. They generally reported perceiving information as more sensitive and were less likely to share this information with other users. Chinese users generally differed from European and US American users in their perceptions of what kinds of information they considered private. For example, they rated financial information or feelings about work colleagues as significantly less sensitive. However, they rated information about their food, likes and dislikes in

music, and their views on politics as much more sensitive than users from other countries did. In general, however, Chinese and US American participants shared private information more frequently.

## **6.1 Limitations**

The findings provide the first insights into cultural differences, but the subsamples were highly problematic with respect to how they were recruited. Due to the different sample sizes, the power to detect statistically significant differences between the countries was limited. The findings on microblog use, in particular, might be less reliable because of this limitation.

## **6.2 Future Perspectives**

When viewing all of the current findings from a broader perspective, this study also shows that there are more commonalities than differences. People all over the world think it is very important to protect their privacy in order to prevent privacy violations. Everybody consciously decides what to share and what not to share. As the findings show and in contrast to a common belief in many western societies, people do not always share intimate and detailed information about their lives. Instead, they deliberately decide which pieces of information are harmless enough to be shared and which are too sensitive, and the latter are consequently withheld.

At this point in time, it is unclear whether the current picture painted with this research is already a consequence of ongoing globalization or whether it represents a new globalized online culture. Different cultural values are put to the test as social media continue to blur and diffuse boundaries, traditions, and rules. Nonetheless, we believe that culture has a significant influence on the perception, evaluation, and handling of privacy. Looking at cultural dynamics and understanding how new media transform our traditional beliefs about privacy thus seems to be of utmost importance. With this report, we hope to add to this on-going task.

## References

- Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, crowding*. Monterey, CA: Brooks/Cole Publishing Company.
- Altman, I. (1977). Privacy regulation: Culturally universal or culturally specific. *Journal of Social Issues*, 33(3), 67-83.
- Bellman, S., Johnson, E. J., Kobrin, S. J., & Lohse, G. L. (2004). International differences in information privacy concerns: A global survey of consumers. *The Information Society*, 20, 313-324.
- Binder, J., Howes, A., & Sutcliffe, A. (2009). *The problem of conflicting social spheres: Effects of network structure on experienced tension in social network sites*. Paper presented at the CHI 2009, Boston, MA.
- boyd, d. (2007). Why youth (heart) social network sites: The role of networked publics in teenage social life. In D. Buckingham (Ed.), *Youth, identity, and digital media* (pp. 119–142). Cambridge, MA: MIT Press.
- Cho, H., Rivera-Sanchez, M., & Lim, S. S. (2009). A multinational study on online privacy: Global concerns and local responses. *New Media & Society*, 11(3), 395-416.
- Debatin, B., Lovejoy, J. P., Horn, A.-K., & Hughes, B. N. (2009). Facebook and online privacy: Attitudes, behaviors, and unintended consequences. *Journal of Computer-Mediated Communication*, 15(1), 83-108.
- Diaz-Peralta Horenstein, V., & Downey, J. L. (2010). A cross-cultural investigation of self-disclosure. *North American Journal of Psychology*, 5(3), 373-386.
- Ebersbach, A., Glaser, M., & Heigl, R. (2011). *Social Web*. UVK.
- Ellison, N. B., & boyd, d. (2013). Sociality through social network sites. In W. H. Dutton (Ed.), *The Oxford Handbook of Internet Studies*. Oxford: Oxford University Press.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2012). Connection strategies: Social capital implications of facebook-enabled communication practices. *New Media & Society*, 14, 3-6.
- European Commission. (2011). *Special Eurobarometer 359: Attitudes on data protection and electronic identity in the European Union*. Retrieved from [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_359\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_359_en.pdf).
- Gallagher, S. E., & Savage, T. S. (2013). Cross-cultural analysis in online community research: A literature review. *Computers in Human Behavior*, 29, 1028-1038.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35(2), 286-316.
- Jourard, S. M., & Lasakow, P. (1958). Some factors in self-disclosure. *Journal of Abnormal and Social Psychology*, 56(1), 91-98.
- Laufer, R. S., & Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. *Journal of Social Issues*, 33(3), 22-42.
- Marshall, B. A., Cardon, P. W., Norris, D. T., Goreva, N., & D'Souza, R. (2008). Social networking websites in India and the United States: A cross-national comparison of online privacy and communication. *Issues in Information Systems*, 9(2), 87-94.
- Marshall, N. J. (1974). Dimensions of privacy preferences. *Multivariate Behavioral Research*, 9(3), 255-271.
- Marwick, A. E., & boyd, d. (2011). I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience. *New Media & Society*, 13, 114-133.
- Miller, L. C., Berg, J. H., & Archer, R. L. (1983). Openers: Individuals who elicit intimate self-disclosure. *Journal of Personality and Social Psychology*, 44(6), 1234-1244.

- Papacharissi, Z., & Mendelsohn, A. (2011). Toward a new(er) sociability: Uses, gratifications, and social capital on Facebook. In S. Papathanassopoulos (Ed.), *Communication and Society. Media perspectives for the 21st century. Concepts, topics and issues* (pp. 212-230). New York: Routledge.
- Pedersen, D. M. (1997). Psychological functions of privacy. *Journal of Environmental Psychology, 17*, 147-156.
- Pedersen, D. M., & Frances, S. (1990). Regional differences in privacy preferences. *Psychological Reports, 66*, 731-736.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). *Measures of personality and social psychological attitudes*. San Diego: Academic Press.
- Smock, A. D., Ellison, N. B., Lampe, C., & Wohn, D. Y. (2011). Facebook as toolkit: A uses and gratifications approach to unbundling feature use. *Computers in Human Behavior, 27*, 2322-2329.
- statista (2015) Number of monthly active Twitter users worldwide from 1st quarter 2010 to 1st quarter 2015. Retrieved from <http://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/>
- Vitak, J. (2012). The impact of context collapse and privacy on social network site disclosures. *Journal of Broadcasting & Electronic Media, 56*(4), 451-470.
- Williams, D. (2006). On and off the 'net: Scales for social capital in an online era. *Journal of Computer-Mediated Communication, 11*, 593-628.

## Appendix

### A 1 Description of statistical procedures

For metric variables, we produced bar charts including 95% confidence intervals in order to visually represent significant differences between the national samples. Non-overlapping confidence intervals can be interpreted as significant differences. For ordinal scaled variables, we produced stacked bar charts. We also reported the results of the statistical analyses. For metric variables, we computed analyses of variance (ANOVAs). If *Levene's* test for homogeneity of variances was significant, we reported *Welch's F* instead of the normal *F*-ratio as *Welch's F* is more robust when the variances are not equal across groups. We also reported post-hoc tests for pairwise comparisons between the countries. We used *Hochberg's GT2* if the variances were homogeneous and the *Games-Howell* procedure when the variances were significantly different. Both tests are specifically designed to cope with different sample sizes. If the variables involved ranked data, we computed the *Kruskal-Wallis* test, a non-parametric alternative to the ANOVA. If the data were binary, we computed  $\chi^2$ -tests. We also reported different effect sizes depending on the analysis: For general analyses of variance, we reported  $\omega^2$ , which is less biased than  $\eta^2$ . If the group variances of the dependent variable were significantly different, we reported the adjusted  $\omega^2$ . For ranked data or categorical data, we reported  $\eta^2$ .













### A 3 Correlations between microblog variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Gender (0 = Female, 1 = Male)	1																								
Age	2	.00																							
Time spent on microblog	3	-.11	-.18																						
Number of people I follow	4	-.16	.01	.34																					
Number of followers	5	-.06	-.03	.28	.64																				
Proportion of real friends	6	-.02	-.06	.11	.36	.53																			
Proportion of international friends	7	.06	.11	-.01	.03	.04	-.03																		
Audience diversity	8	-.05	.03	.23	.35	.35	.13	.08																	
Visual anonymity	9	-.17	.00	.14	.08	.12	.12	-.15	.05																
Pseudonymization	10	.01	.04	-.15	-.04	-.09	.09	-.15	-.01	.13															
Visibility of tweets	11	.01	.02	.24	.11	.11	-.06	.24	.05	.11	-.13														
Disclosure of gender	12	.11	.00	-.16	-.02	-.02	.15	-.05	-.04	.04	.19	-.08													
Disclosure of occupation	13	.15	.11	-.11	.05	.03	.06	-.11	.15	.12	.16	-.17	.20												
Disclosure of location	14	.18	.07	-.03	.04	.01	.03	-.05	.00	.04	.19	.01	.16	.38											
Disclosure of age	15	.23	.03	-.01	.00	.01	.00	-.02	.03	.13	.11	-.05	.41	.32	.29										
Privacy literacy	16	-.02	.01	.01	.05	.08	.07	.06	.09	.09	.04	-.12	.00	.07	.05	.01									
Self-disclosure online	17	.01	.02	.03	.03	-.02	-.09	-.25	.10	-.10	-.01	.12	.07	.08	.09	.02	.01								
Self-disclosure offline	18	-.11	.05	.00	.08	.02	-.01	.09	.02	-.03	.00	.06	.03	.02	.02	.03	.02	.35							
Negative experiences	19	.03	.05	.05	.07	.04	-.05	.11	.13	-.11	-.08	-.02	-.05	-.03	-.06	-.04	-.08	.17	.06						
Sensitivity of Information	20	-.18	.01	-.02	.02	.03	.03	-.08	.04	.00	.00	-.03	-.03	.01	-.06	.08	-.01	-.03	.07	.00					
Sharing sensitive information with other users	21	.13	-.02	.16	.08	.06	-.05	-.06	.09	-.06	-.10	.11	-.09	.01	-.08	-.03	.08	.18	.02	.18	-.03				
Sharing sensitive information with friends	22	.09	-.08	.20	.12	.08	-.06	.00	.14	-.03	-.06	.10	-.04	.00	-.02	.03	.05	.20	.04	.17	-.02	.58			
General trust	23	.07	.06	-.05	-.05	-.02	.05	-.05	-.03	.04	.13	.00	-.07	-.05	.02	.03	.03	.01	.04	-.07	.06	.06	.01		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
<i>M (Md)</i>		.55	2.37	76.81	17.46	126.56	63.22	.12	5.58	4.00	3.00	0.00	4.00	.36	.52	.47	4.10	2.70	3.58	2.07	4.00	2.94	3.08	2.81	
<i>SD</i>		.50	2.37	91.74	203.71	146.87	61.11	.29	2.27	.47	.67	.50	.45	.48	.50	.50	.91	1.01	1.20	1.46	1.28	1.27	1.30	0.92	

**Table VII: Zero-Order Correlations for Microblog variables in the US American sample.**

Note: Non-parametric correlation coefficients (Kendall’s  $\tau$ ) were calculated as some variables involved ordinal scales. Blue coloring indicates positive correlations and red coloring indicates negative correlations (the darker the color, the stronger the correlation).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Gender (0 = Female, 1 = Male)	1																							
Age	2	.23																						
Time spent on microblog	3	.09	-.18																					
Number of people I follow	4	-.09	-.25	.10																				
Number of followers	5	-.12	-.19	.14	.30																			
Proportion of real friends	6	.06	-.43	.27	.33	.50																		
Proportion of international friends	7	.20	-.40	.42	-.08	.38	.23																	
Audience diversity	8	.06	-.02	.17	.10	.50	.42	.20																
Visual anonymity	9	-.10	-.57	-.09	.13	-.05	.11	.17	-.13															
Pseudonymization	10	.23	-.19	-.01	.05	-.37	.00	.12	.06	.47														
Visibility of tweets	11	.41	.26	.36	-.41	-.19	-.09	.08	.07	.02	.04													
Disclosure of gender	13	.07	-.09	.17	-.34	-.07	.00	.08	-.21	.33	-.22	.58												
Disclosure of occupation	14	.49	-.01	.32	.00	.44	.35	.46	.42	.06	-.15	.53	.20											
Disclosure of location	15	.22	-.04	.41	.13	.27	.44	.15	.00	-.29	-.49	.20	.20	.46										
Disclosure of age	16	.00	-.33	.25	.06	.42	.27	.38	.12	.40	-.21	.35	.35	.66	.38									
Privacy literacy	17	.04	-.09	-.05	-.02	.22	.24	.69	.02	.10	-.05	-.29	.05	.12	.05	.04								
Self-disclosure online	18	-.10	.08	.06	.15	.20	.17	.31	.14	-.03	-.02	.10	.00	.50	.19	.08	.13							
Self-disclosure offline	19	-.01	.09	-.02	-.03	.15	-.07	.35	-.01	.10	.06	.05	-.10	.33	.05	.04	.02	.38						
Negative experiences	20	-.17	-.16	.04	.09	-.24	-.08	.15	-.25	.38	.21	-.02	-.02	-.16	-.16	.11	-.15	-.22	.05					
Sensitivity of Information	21	-.30	-.08	.02	-.07	.01	-.37	.19	-.08	-.22	-.30	-.07	-.16	-.08	-.03	.06	-.04	-.09	.08	.16				
Sharing sensitive information with other users	22	-.07	.04	.18	.06	.06	.49	.04	.06	.10	-.07	.20	.48	.18	.42	.11	-.03	.06	-.05	.11	-.09			
Sharing sensitive information with friends	23	-.13	-.18	.08	.05	.03	.45	-.04	.00	.21	-.07	.13	.52	.10	.30	.11	-.04	.25	.07	.08	-.15	.45		
General trust	9	.20	.06	-.08	.01	-.01	.20	.35	.30	-.06	.49	-.14	-.40	.10	-.21	-.28	.15	.05	.01	-.17	-.11	-.05	.04	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<i>M (Md)</i>		.21	22.69	62.40	179.53	67.36	15.13	.28	5.20	4.00	2.00	1.00	.80	.53	.53	.33	3.95	2.84	3.32	1.86	4.65	2.08	2.40	2.86
<i>SD</i>		.41	7.37	79.72	241.62	64.45	16.98	.30	1.82	.92	.72	.41	.41	.52	.52	.49	.93	1.06	1.25	1.48	1.21	1.15	1.23	1.02

**Table VIII: Zero-Order Correlations for Microblog variables in the British sample.**

Note: Non-parametric correlation coefficients (Kendall's  $\tau$ ) were calculated as some variables involved ordinal scales. Blue coloring indicates positive correlations and red coloring indicates negative correlations (the darker the color, the stronger the correlation).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Gender (0 = Female, 1 = Male)	1																								
Age	2	-0.11																							
Time spent on microblog	3	-0.19	0.13																						
Number of people I follow	4	-0.22	0.28	0.37																					
Number of followers	5	-0.20	0.29	0.35	0.66																				
Proportion of real friends	6	-0.01	0.11	0.15	0.25	0.35																			
Proportion of international friends	7	-0.08	0.04	-0.07	0.24	0.23	0.09																		
Audience diversity	8	-0.19	0.23	0.20	0.52	0.51	0.53	0.29																	
Visual anonymity	9	-0.09	0.13	0.16	0.33	0.36	0.32	0.14	0.41																
Pseudonymization	10	-0.01	0.20	0.20	0.07	0.14	0.08	0.02	0.12	0.26															
Visibility of tweets	11	-0.30	0.22	0.31	0.22	0.25	0.00	0.05	0.28	0.06	-0.01														
Disclosure of gender	12	-0.07	0.20	0.15	0.20	0.15	0.20	-0.06	0.13	0.33	0.25	-0.08													
Disclosure of occupation	13	-0.24	0.14	0.21	0.29	0.32	0.25	0.09	0.30	0.33	0.19	0.12	0.19												
Disclosure of location	14	-0.23	0.36	0.19	0.33	0.39	0.37	0.17	0.46	0.47	0.31	0.19	0.25	0.46											
Disclosure of age	15	-0.16	0.06	0.07	-0.04	-0.04	0.10	0.19	0.05	0.09	0.24	-0.11	0.28	0.23	0.14										
Privacy literacy	16	-0.04	0.01	0.01	0.05	0.11	0.10	-0.04	0.01	0.08	0.01	-0.14	-0.15	-0.05	0.11	-0.10									
Self-disclosure online	17	-0.01	-0.07	-0.05	-0.07	-0.17	0.04	-0.17	-0.04	0.08	-0.06	-0.01	-0.01	-0.03	-0.06	-0.17	0.02								
Self-disclosure offline	18	-0.01	0.06	-0.12	-0.01	-0.04	0.05	-0.01	0.07	0.05	0.00	0.00	-0.13	-0.12	0.13	-0.07	0.10	0.32							
Negative experiences	19	-0.02	-0.04	-0.01	-0.16	-0.09	-0.07	-0.06	-0.06	0.04	0.04	-0.02	0.04	-0.17	-0.20	0.02	-0.02	0.07	0.05						
Sensitivity of Information	20	-0.10	0.04	-0.26	-0.09	-0.10	-0.17	0.21	-0.10	-0.25	0.02	0.02	-0.26	0.05	-0.10	0.09	0.02	-0.12	0.02	0.01					
Sharing sensitive information with other users	21	-0.11	0.02	0.27	0.23	0.16	0.20	0.04	0.16	0.12	-0.01	-0.03	0.03	-0.02	0.00	0.08	0.03	0.10	0.04	0.12	-0.19				
Sharing sensitive information with friends	22	-0.06	-0.02	0.16	0.16	0.08	0.20	-0.07	0.08	0.08	-0.03	-0.10	0.00	-0.05	-0.08	0.06	0.04	0.23	0.07	0.12	-0.27	-0.46			
General trust	23	-0.02	0.07	0.17	0.25	0.26	0.19	0.08	0.21	0.24	0.11	0.07	0.19	0.29	0.27	-0.09	-0.08	0.02	0.02	-0.08	0.00	-0.04	-0.06		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
<i>M (Md)</i>		.72	24.49	25.86	123.24	197.88	7.56	.23	3.80	3.00	1.00	1.00	.59	.27	.44	.17	4.03	2.70	3.79	1.52	5.13	1.65	2.13	2.66	
<i>SD</i>		.45	5.92	31.18	234.73	508.85	14.36	.24	2.26	.96	.77	.41	.50	.45	.50	.38	.82	.96	1.13	1.14	1.01	.75	.96	.86	

**Table IX: Zero-Order Correlations for Microblog variables in the German sample.**

Note: Non-parametric correlation coefficients (Kendall's  $\tau$ ) were calculated as some variables involved ordinal scales. Blue coloring indicates positive correlations and red coloring indicates negative correlations (the darker the color, the stronger the correlation).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Gender (0 = Female, 1 = Male)	1																							
Age	2	-.06																						
Time spent on microblog	3	-.22	-.06																					
Number of people I follow	4	-.09	.05	.22																				
Number of followers	5	-.13	.07	.36	.82																			
Proportion of real friends	6	-.27	-.19	.41	.22	.34																		
Proportion of international friends	7	-.18	.17	.37	.11	.16	.26																	
Audience diversity	8	.21	.15	.51	.32	.42	.18	.56																
Visual anonymity	9	-.18	-.03	.04	-.39	-.27	-.01	.31	-.04															
Pseudonymization	10	.00	-.09	.21	-.02	-.04	.06	-.20	.22	.27														
Visibility of tweets	11	-.35	.23	.29	-.07	-.03	.09	.33	.31	-.03	-.11													
Disclosure of gender	12	-.04	.06	.14	.20	.24	.19	-.05	.27	-.03	.45	-.22												
Disclosure of occupation	13	-.32	-.03	-.16	-.16	-.13	-.24	-.15	-.22	.23	.15	-.45	.50											
Disclosure of location	15	-.08	-.09	-.09	-.05	.01	.00	-.09	-.17	.42	.11	-.11	.20	.56										
Disclosure of age	15	-.24	-.07	.09	.03	.03	.19	-.08	.06	-.02	.27	-.27	.60	.48	.40									
Privacy literacy	16	-.06	.02	.12	.31	.34	.09	.25	.32	-.23	-.22	-.05	.33	-.04	.02	.05								
Self-disclosure online	17	-.08	.03	.08	-.02	-.02	.29	-.08	-.24	-.09	-.14	-.25	-.06	-.01	-.28	-.13	-.02							
Self-disclosure offline	18	.04	.08	.06	-.39	-.31	-.06	.19	-.09	.13	-.08	-.14	-.20	.11	-.09	.08	-.19	.10						
Negative experiences	19	.06	-.15	.38	-.03	.06	.17	.06	.18	.18	.64	.00	.54	.40	.29	.42	.03	.06	-.10					
Sensitivity of Information	20	.13	.15	-.39	-.23	-.32	-.52	-.09	-.23	-.03	-.09	-.25	-.17	.21	-.20	.01	-.13	-.11	.21	-.04				
Sharing sensitive information with other users	21	-.15	-.07	.41	.20	.28	.59	.14	.09	-.16	.02	.10	.10	-.20	-.12	.06	.13	.17	-.05	.19	-.28			
Sharing sensitive information with friends	22	-.10	-.12	.54	.20	.28	.52	.17	.22	-.01	.23	.19	.44	.13	.18	.35	.13	.20	-.04	.23	-.28	.57		
General trust	23	.03	.16	-.22	-.06	-.08	-.12	-.49	-.24	-.09	.06	-.19	.13	.17	-.01	.20	-.09	.06	.10	-.25	.13	-.19	-.18	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
<i>M (Md)</i>		.78	21.80	48.89	126.50	127.67	15.78	.15	5.78	4.00	2.50	.50	.44	.17	.39	.22	3.65	2.57	3.75	1.65	4.47	2.10	2.31	2.98
<i>SD</i>		.42	6.01	50.25	201.57	154.42	13.82	.28	2.18	.57	.51	.51	.51	.38	.50	.43	.81	.85	1.08	1.12	1.06	1.05	1.08	.74

**Table X: Zero-Order Correlations for Microblog variables in the Dutch sample.**

Note: Non-parametric correlation coefficients (Kendall's  $\tau$ ) were calculated as some variables involved ordinal scales. Blue coloring indicates positive correlations and red coloring indicates negative correlations (the darker the color, the stronger the correlation).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23		
Gender (0 = Female, 1 = Male)	1																								
Age	2	-0.27																							
Time spent on microblog	3	-0.12	.24																						
Number of people I follow	4	-0.18	.18	.20																					
Number of followers	5	-0.20	.23	.32	.49																				
Proportion of real friends	6	-0.24	.25	.22	.34	.50																			
Proportion of international friends	7	.09	.06	.24	.30	.23	.27																		
Audience diversity	8	-0.19	.20	.15	.32	.47	.28	.17																	
Visual anonymity	9	-0.01	.10	.10	.19	.21	.23	.28	.23																
Pseudonymization	10	-0.02	.04	.06	-0.04	-0.09	-0.11	.08	.00	.15															
Visibility of tweets	11	-0.11	.05	.09	.02	.13	-0.01	-0.05	.16	-0.11	-0.09														
Disclosure of gender	12	-0.16	.11	.10	.04	.09	-0.03	.03	.20	.06	.18	.32													
Disclosure of occupation	13	-0.04	-0.05	-0.11	-0.05	.02	-0.07	.12	.13	.11	.12	.06	.31												
Disclosure of location	14	-0.09	.07	.13	-0.06	.10	-0.02	.05	.18	.00	.05	.22	.48	.44											
Disclosure of age	15	-0.06	-0.13	-0.02	-0.28	-0.13	-0.19	.07	-0.01	-0.01	.21	.00	.28	.47	.33										
Privacy literacy	16	-0.10	-0.08	.16	.12	.21	.16	.20	.12	.24	.03	-0.01	-0.06	-0.05	-0.03	.02									
Self-disclosure online	17	-0.02	.01	.01	.08	.13	.17	.03	.08	.09	.00	-0.10	.07	-0.09	-0.11	-0.06	.13								
Self-disclosure offline	18	.02	-0.02	.13	.07	.16	.23	.13	.09	.16	-0.03	-0.04	-0.02	-0.14	-0.09	-0.03	.09	.30							
Negative experiences	19	-0.21	-0.03	.13	.12	.07	.14	.18	.10	.06	-0.10	.05	.07	-0.02	.02	.06	.10	.14	.02						
Sensitivity of Information	20	-0.04	.01	.11	.11	.01	.01	.10	.02	.00	.14	.08	.14	.00	.05	.09	.04	-0.03	-0.01	-0.02					
Sharing sensitive information with other users	21	-0.15	.00	.14	.08	.09	.18	.02	.14	.16	.08	-0.13	.06	-0.01	-0.03	.04	.21	.27	.08	.21	.17				
Sharing sensitive information with friends	22	-0.08	-0.01	.08	.20	.11	.26	.24	.09	.06	.03	-0.10	.04	-0.04	-0.05	.08	.16	.21	.10	.19	.22	.54			
General trust	23	-0.07	.07	.08	.07	.13	.04	-0.03	.10	-0.01	.04	.13	-0.05	-0.01	-0.03	-0.15	.01	-0.04	.01	-0.07	.08	-0.04	-0.08		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
<i>M (Md)</i>		.74	22.14	68.94	132.90	218.07	37.61	.05	5.77	2.00	1.00	1.00	.93	.58	.88	.52	3.43	2.73	3.30	1.88	4.11	3.08	3.42	3.22	
<i>SD</i>		.44	3.52	113.75	141.88	506.20	64.64	.07	2.41	1.04	.72	.41	.25	.50	.33	.50	.97	1.02	1.09	1.61	1.18	1.26	1.34	.92	

**Table XI: Zero-Order Correlations for Microblog variables in the Chinese sample.**

Note: Non-parametric correlation coefficients (Kendall's  $\tau$ ) were calculated as some variables involved ordinal scales. Blue coloring indicates positive correlations and red coloring indicates negative correlations (the darker the color, the stronger the correlation).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Gender (0 = Female, 1 = Male)	1																						
Age	2	.18																					
Time spent on microblog	3	.12	.19																				
Number of people I follow	4	.06	.20	.11																			
Number of followers	5	.06	.19	.09	.20																		
Proportion of real friends	6	.15	.26	.12	.06	.09																	
Proportion of international friends	7	.15	.23	.22	.15	.12	.13																
Audience diversity	8	.17	.11	.15	.15	.07	.17	.18															
Visual anonymity	9	.07	.28	.10	.27	.24	.13	.18	.22														
Pseudonymization	10	.11	.15	.15	.05	.19	.08	.14	.10	.13													
Visibility of tweets	11	.30	.11	.10	.24	.17	.07	.15	.12	.08	.07												
Disclosure of gender	12	.11	.11	.13	.22	.13	.11	.06	.19	.17	.24	.34											
Disclosure of occupation	13	.33	.09	.22	.17	.24	.24	.24	.24	.11	.14	.36	.13										
Disclosure of location	14	.19	.17	.20	.16	.17	.22	.12	.24	.31	.31	.15	.13	.07									
Disclosure of age	15	.18	.16	.11	.14	.21	.18	.18	.05	.17	.19	.23	.13	.16	.10								
Privacy literacy	16	.05	.05	.09	.13	.10	.07	.28	.12	.17	.11	.16	.18	.08	.05	.06							
Self-disclosure online	17	.06	.05	.05	.09	.15	.14	.21	.15	.09	.06	.15	.06	.24	.18	.12	.07						
Self-disclosure offline	18	.06	.04	.09	.19	.19	.12	.13	.07	.08	.05	.08	.09	.19	.10	.06	.12	.11					
Negative experiences	19	.12	.09	.15	.11	.13	.12	.09	.18	.18	.30	.03	.24	.23	.20	.18	.10	.15	.07				
Sensitivity of Information	20	.18	.08	.21	.12	.15	.24	.14	.11	.12	.16	.12	.15	.11	.09	.03	.06	.04	.09	.08			
Sharing sensitive information with other users	21	.12	.04	.11	.08	.09	.26	.07	.04	.14	.07	.13	.21	.14	.22	.05	.09	.08	.06	.05	.17		
Sharing sensitive information with friends	22	.08	.07	.19	.06	.09	.23	.13	.08	.10	.13	.14	.27	.08	.17	.13	.08	.02	.06	.06	.21	.06	
General trust	23	.10	.04	.15	.13	.14	.13	.30	.21	.13	.18	.14	.23	.14	.17	.18	.10	.04	.04	.08	.09	.09	.08

**Table XII: Variation of correlations between the national samples**

Note: The table displays the standard deviations of the five national correlation coefficients. Green coloring indicates greater variation between the national samples.

## A 4 Further publications on privacy by the Department of Media Psychology

- Bartsch, M. & Dienlin, T. (2016). Control your Facebook: An analysis of online privacy literacy. *Computers in Human Behavior*, 56, 147-154. doi:10.1016/j.chb.2015.11.022
- Dienlin, T. (2014). The privacy process model. In S. Garnett, S. Half, M. Herz, & J.-M. Mönig (Eds.), *Medien und Privatheit* (pp. 105-122). Passau, Germany: Stutz
- Dienlin, T. (2015). Ist die politische Meinung privat oder öffentlich? Der Blick der Medienpsychologie [Are political opinions private or public? An analysis from a media psychology perspective]. In P. Richter (Ed.), *Privatheit, Öffentlichkeit und demokratische Willensbildung in Zeiten von Big Data* (pp. 111-126). Baden-Baden: Nomos.
- Dienlin, T., & Trepte, S. (2014). Is the privacy paradox a relic of the past? An in-depth analysis of privacy attitudes and privacy behaviors. *European Journal of Social Psychology*, 45(3), 285-297 doi: 10.1002/ejsp.2049
- Masur, P. K & Scharnow, M. (2016). Disclosure Management on Social Network Sites: Individual Privacy Perceptions and User-Directed Privacy Strategies. *Social Media + Society*, 2(1), 1-13. doi: 10.1177/2056305116634368
- Matzner, T., Masur, P. K., Ochs, C. & von Pape, T. (2015). Self-Data-Protection - Empowerment or burden? In: S. Gutwirth, R. Leenes & P. de Hert (Eds.), *Data Protection on the Move*. (pp. 277-305). Springer: Netherlands. doi: 10.1007/978-94-017-7376-8\_11
- Reinecke, L. & Trepte, S. (2014). Authenticity and well-being on social network sites: A two-wave longitudinal study on the effects of online-authenticity and the positivity bias in SNS communication. *Computers in Human Behavior*, 30, 95-102 doi: 10.1016/j.chb.2013.07.030
- Teutsch, D. & Niemann, J. (2015). Social network sites as a threat to users' self-determination and security: A framing analysis of German newspapers. *The Journal of International Communication*. doi: 10.1080/13216597.2015.1111841
- Trepte, S. (2012). Privatsphäre aus psychologischer Sicht. In J. Schmidt & T. Weichert (Hrsg.), *Datenschutz: Grundlagen, Entwicklungen, Kontroversen* (S. 59-66). Schriftenreihe der Bundeszentrale für politische Bildung. Bonn.
- Trepte, S., & Dienlin, T. (2014). Privatsphäre im Internet. In T. Porsch & S. Pieschl (Eds.), *Neue Medien und deren Schatten*. Göttingen: Hogrefe.
- Trepte, S., Dienlin, T., & Reinecke, L. (2014). Risky behaviors: How online experiences influence privacy behaviors. In B. Stark, O. Quiring, & N. Jakob (Eds.), *Von der Gutenberg-Galaxis zur Google-Galaxis* (pp. 225-244). Wiesbaden, Germany: UVK
- Trepte, S., Dienlin, T., Reinecke, L. (2014). The influence of social support received in online and offline contexts on satisfaction with social support and satisfaction with life: A longitudinal study. *Media Psychology*, 18(1), 74-105. doi: 10.1080/15213269.2013.838904
- Trepte, S. & Masur, P. K. (2015). *Privatheit im Wandel. Eine repräsentative Umfrage zur Wahrnehmung und Beurteilung von Privatheit* (Bericht vom 18. Juni 2015). Stuttgart: Universität Hohenheim. Available at: [https://www.uni-hohenheim.de/fileadmin/einrichtungen/psych/Team\\_MP/Berichte/Bericht\\_-\\_Privatheit\\_im\\_Wandel\\_2014-06-18.pdf](https://www.uni-hohenheim.de/fileadmin/einrichtungen/psych/Team_MP/Berichte/Bericht_-_Privatheit_im_Wandel_2014-06-18.pdf)

- Trepte, S. & Masur, P. K. (2015). *Privatheitskompetenz in Deutschland. Ergebnisse von zwei repräsentativen Studien* (Bericht vom 18. November 2015). Stuttgart: Universität Hohenheim. Available at: [https://www.uni-hohenheim.de/fileadmin/einrichtungen/psych/Team\\_MP/Berichte/Privatheitskompetenz\\_2015-11-04.pdf](https://www.uni-hohenheim.de/fileadmin/einrichtungen/psych/Team_MP/Berichte/Privatheitskompetenz_2015-11-04.pdf)
- Trepte, S., Masur, P. K., Scharkow, M. & Dienlin, T. (2015). Privatheitsbedürfnisse verschiedener Kommunikationstypen on- und offline: Ergebnisse einer repräsentativen Studie zum Umgang mit persönlichen Inhalten. *Media Perspektiven*, 5, 250-257.
- Trepte, S., & Reinecke, L. (Eds.). (2011). *Privacy online: Perspectives on privacy and self-disclosure in the social web*. Berlin, Germany: Springer.
- Trepte, S. & Reinecke, L. (2011). The social web as a shelter for privacy and authentic living. In S. Trepte & L. Reinecke (Eds.), *Privacy online. Perspectives on privacy and self-disclosure in the social web* (p. 61-74). Springer: Heidelberg, New York.
- Trepte, S., & Reinecke, L. (2013). The reciprocal effects of social network site use and the disposition for self-disclosure: A longitudinal study. *Computers in Human Behavior*, 29(3), 1102–1112.
- Trepte, S., Teutsch, D., Masur, P. K., Eicher, C., Fischer, M., Hennhöfer, A., Lind, F. (2015). Do people know about privacy and data protection strategies? Towards the "Online Privacy Literacy Scale" (OPLIS). In S. Gutwirth, R. Leenes & P. de Hert (Eds.), *Reforming European Data Protection Law* (pp. 333-365). Springer: Netherlands. doi: 10.1007/978-94-017-9385-8