

## ESS Round 8

### Question Design Template – New Core Items

**Concept: Internet use**

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#### **Aim**

To develop a new item for the ESS core questionnaire to measure internet use. The new item is intended to allow ESS data users to explore the nature and consequences of the “digital divide” both between and within European countries.

An item on internet use ([A7](#)) was included in the ESS core questionnaire in Rounds 1-5 but dropped after Round 5 as part of series of cuts to the questionnaire intended to reduce questionnaire length.

Internet use was considered an important concept for the ESS to measure. However, the original item was no longer considered fit for purpose or capable of fully capturing the digital divide as internet use has become more prevalent.

#### **SECTION A. Theoretical rationale**

##### **Why is the topic important? How will including items on this topic in the ESS enhance our understanding of public attitudes and behaviours across Europe?**

Many studies point to the emergence of a new form of social inequality that occurs as a consequence of an unequal distribution of internet resources (Di Maggio & Hargittai, 2001; Warschauer, 2004). Differences in how effectively people use the internet result in unequal opportunities to satisfy particular needs and extract benefits, both individual and collective, from the medium. Skilled internet users are more able to find different types of information online and enhance their cultural capital, they can reach out to larger networks of people and develop their social capital, and they can exploit online opportunities to engage and participate in public life.

Today the digital divide literature is no longer concentrated on the analysis of the classic binary distinction between those who have access to the internet and those who do not (Norris, 2001). A large and growing body of research now focuses on the differences in the skills and usages of the internet by citizens and on the political and social consequences of this new form of digital inequality (van Deursen & van Dijk, 2011). Online skills (also mentioned in the literature as ‘internet skills’, ‘digital skills’ or ‘technology skills’) refer to the ability a user has to perform tasks on the internet that enhance access to valuable resources and opportunities. According to van Dijk (2006) the opportunities emerging in the online environment can have important social, political and cultural effects on those who have the competence to access them. The measurement of the digital divide at the individual level through survey data has evolved accordingly. Indicators of online skills have been developed in the form of indexes measuring the number of tasks that the respondent claims to be able to perform on the internet (Krueger, 2002; Hargittai, 2005 & 2009).

Other work focuses on active use of the internet and looks at the extent to which use (as opposed to simply access) varies across different population sub-groups, for example men and women (Bimber, 2000), and may affect outcomes such as health and wellbeing (Kraut et al, 2002). Usage is positively correlated with technological acceptance which in turn depends on people's perceptions of the usefulness and ease of use of technology, in this case the internet (Porter and Donthu, 2006). Internet use may therefore be seen as a proxy indicator of access to and familiarity with internet resources.

## **SECTION B. Relationship with other variables in ESS questionnaire**

### **Are the items intended to be used primarily as explanatory/background variables or is the topic primarily of interest as a dependent variable?**

The addition of a new internet use variable to the ESS core questionnaire would constitute an update of section F to include a new relevant dimension of the concept of socio-economic status. There is a prominent line of research which investigates new forms of digital inequality, its dimensions and its predictors. It also discusses the wider policy implications of unequal distributions of internet resources and the need for achieving an empowered citizenry also on the internet (Hargittai, 2002; van Deursen & van Dijk, 2011 & 2014; Ferro et al, 2011).

Access to online resources may also be a valuable explanatory variable in the analysis of political behaviour. For example, online skills have been shown to be fundamental explanatory factors of online political participation (Krueger, 2002; Mossberger et al, 2008; Anduiza et al, 2010). An update of the ESS questionnaire to include indicators of new forms of engagement that take place online (e.g. e-expressive participation) would be fully comprehensive if complemented with the inclusion of new relevant predictors of this type of behaviour such as online skills.

Finally, there may be associations between familiarity with the internet and respondent's social networks (items C2-C4 in the core questionnaire), physical health (C7-C8) and psychological wellbeing (C1) (Kraut et al, 2002; Kim et al, 2009).

## **SECTION C. Potential methodological or practical difficulties**

### **Provide brief details of any potential methodological or practical difficulties associated with asking about this topic on a face to face cross-national survey**

Introducing items designed to capture use of new and evolving technologies into a long running time series such as the ESS core questionnaire raises concerns about whether such items are sufficiently "future proof" so as to remain applicable in future rounds of the ESS. The risk of items becoming outdated should be minimised by avoiding reference, where possible, to specific technology, software, social media platforms etc.

Ideally, we would aim to capture the digital divide and potential digital inequalities with a measure of online skills which captures the extent to which people are comfortable exploiting the internet for different purposes. We might wish, for example, to relate differences in political engagement to differences in the extent to which people are familiar with/have used the internet to retrieve political information. However, this would require a battery of items. The ESS is a multi-topic survey and there is limited space available within the core questionnaire (1-2 items) to measure the digital divide.

With this in mind, the focus will be on developing a general purpose item on internet use which can be used as a proxy indicator of familiarity with internet resources.

A lot of previous research points to the fact that offering fixed response categories to questions asking about frequency behaviour (e.g. how many hours they watch TV) can influence respondents and bias their answers i.e. their response varies depending on the answer categories offered (Schwarz et al, 1985; Gaskell et al, 1994). This is a particular problem in cross-national surveys where scale effects and, for example, respondents' tendency to gravitate to the mid-point may vary across countries. The recommendation is generally therefore to use open questions for such frequency items to try and minimise measurement error and maximise equivalence across countries.

**SECTION D. Concept definition and measurement**

**Frequency of internet use**

This item is intended to provide a measure of how frequently respondents' use the internet, if at all. Frequency of use can be viewed as a proxy for an individual's level of familiarity with internet resources. Based on research demonstrating that greater use of technology is positively correlated with an acceptance of its utility and then it would seem reasonable to expect a correlation between frequency of internet use and awareness of what the internet can offer.

It should be understood that frequency of use is not necessarily a reliable measure of effective use or individual skill in using the internet. Indeed arguably the more skilled a user is, the less time they would require to exploit the internet's resources to achieve a specific purpose.

A detailed frequency measure (rather than simple binary use vs. not) is required to capture variation in levels of internet use in countries where internet penetration is high. The item aims to identify respondents who are always online (e.g. through their smartphones) and to distinguish this group from those who might use the internet every day but not all the time (e.g. just for work). At the other end of the distribution, we also find it relevant to distinguish between different types of non-use: some people may have access at home (e.g. because their kids or partner use it) but they may not use it themselves.

Respondents should include all internet use whether at home, work or on mobile devices.

**Question wording**

**A2 CARD 1** People can use the internet on different devices such as computers, tablets and smartphones. How often do you use the internet on these or any other devices, whether for work or personal use?

Never	1	<b>GO TO A4</b>
Only occasionally	2	
A few times a week	3	
Most days	4	<b>ASK A3</b>
Every day	5	
(Refusal)	7	<b>GO TO A4</b>
(Don't know)	8	

**ASK IF MOST DAYS OR EVERY DAY AT A2 (code 4 or 5)**

**A3** On a typical day, about how much time do you spend using the internet on a computer, tablet, smartphone or other device, whether for work or personal use? Please give your answer in hours and minutes.

**WRITE IN DURATION:**

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**hours**

**minutes**

(Refusal)

7777

(Don't know)

8888

## SECTION E. References

**Please provide full references for any studies mentioned in the template below**

- Bimber, B.. (2000). Measuring the Gender Gap on the Internet. *Social Science Quarterly*, 81(3), 868–876
- Blank, G., & Groselj, D. (2014). Dimensions of Internet use: amount, variety, and types. *Information, Communication & Society*, 17(4), 417-435.
- Di Maggio, P., & Hargittai, E. (2001). "Social implications of the Internet." *Annual Review of Sociology*, 27: 307–336.
- Ferro, E., Helbig, N. C., & Gil-Garcia, J. R. (2011). The role of IT literacy in defining digital divide policy needs. *Government Information Quarterly*, 28(1), 3-10.
- Gaskell, G. D., O'Muircheartaigh, C. A., & Wright, D. B. (1994). Survey questions about the frequency of vaguely defined events: The effects of response alternatives. *Public Opinion Quarterly*, 58(2), 241-254.
- Hargittai, E. (2002). Second-level digital divide: Differences in people's online skills. *First monday*, 7(4).
- Hargittai, E. (2005). "Survey Measures of Web-Oriented Digital Literacy." *Social Science Computer Review*, 23(3): 371–379.
- Hargittai, E. (2009). "An Update on Survey Measures of Web-Oriented Digital Literacy." *Social Science Computer Review*, 27(1): 130–137.
- Kim, J., LaRose, R. and Peng, W. (2009) "Loneliness as the cause and the effect of problematic Internet use: The relationship between Internet use and psychological well-being." *CyberPsychology & Behavior* 12 (4): 451-455
- Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T. and Scherlis, W., 1998. Internet paradox: A social technology that reduces social involvement and psychological well-being?. *American psychologist*, 53(9)
- Krueger, B. S. (2002). 'Assessing the potential of Internet political participation in the United States: A resource approach. *American Politics Research* 30(5): 476-98.
- Mossberger, K., Tolbert, C. & McNeal, R. (2008). *Digital citizenship. The internet, society, and participation*. Cambridge, MA: the MIT Press.
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge University Press.
- Porter, C.E. and Donthu, N., 2006. Using the technology acceptance model to explain how attitudes determine Internet usage: The role of perceived access barriers and demographics. *Journal of business research*, 59(9): 999-1007.
- Schwarz, N., Hippler, H. J., Deutsch, B., & Strack, F. (1985). Response scales: Effects of category range on reported behavior and comparative judgments. *Public Opinion Quarterly*, 49(3), 388-395.

- van Deursen, A., & Van Dijk, J. (2011). Internet skills and the digital divide. *New Media & Society*, 13(6), 893-911.
- van Dijk, J. (2006). "Digital divide research, achievements and shortcomings." *Poetics* 34(4-5): 221–235.
- van Dijk, J. A., & van Deursen, A. J. (2014). *Digital skills: unlocking the information society*. Palgrave Macmillan.
- Warschauer, M. (2004). *Technology and social inclusion: Rethinking the digital divide*. Cambridge, MA: MIT Press.