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Are we stepping into the future? Exploring the representativeness of web-only surveys of the general population

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1. Introduction

The expansion of internet use has changed how we conduct surveys. The introduction of web mode was encouraged by the potential for reduced interviewer effort and, as a result, lower survey costs (Callegaro, Manfreda, and Vehovar 2015; de Leeuw 2008). Given cost pressures, over the past decade, numerous social surveys have transitioned from a single-mode, interviewer-administered approach to a web-first mixed-mode design, in which web has become the primary mode of data collection (e.g., Biemer et al. 2022; Jäckle, Lynn, and Burton 2015). However, a second, follow-up mode, either interviewer-administered or paper self-completion, is often administered to increase response rates and reduce the coverage and non-response bias associated with web mode. Web-first designs, compared to single-mode surveys, entail some additional challenges, such as differences in mode measurement effects, where the mode in which a question is asked can affect how it is answered, and higher fixed costs (de Leeuw 2018; Vannieuwenhuyze 2013). Meanwhile, internet access and literacy have expanded to cover nearly the entire population in many developed countries (OECD 2024). This raises the question of whether web-only surveys can be representative of the general population, i.e., to what extent the set of respondents reflects the study population with regard to a set of characteristics. This paper explores this question in the context of the United Kingdom. We examine the evolution of the digital divide and assess the representativeness of web-only surveys of the general population. The analysis addresses the following three research questions:

- **RQ1**: How have internet exclusion and intensity of internet use changed over time?
- **RQ2**: What are the characteristics of different types of internet users and non-users? How representative are these groups? How has this changed over time?
- **RQ3**: How does the representativeness of web respondents compare to the representativeness of different groups of internet users? How has this changed over time?

We draw on data from Understanding Society: The United Kingdom Household Longitudinal Study (UKHLS) main survey and the Innovation Panel (IP). These probability-based samples allow us to analyse the evolution of the digital divide over the last decade and use coefficients of variation to examine the representativeness of internet users over time. Furthermore, we benefit from an experimental design where a random subsample of households was issued to a web-first mixed-mode protocol since 2012, to analyse the change in the representativeness of web respondents over time.

This study makes a new contribution to the literature at the intersection of digital inequalities and survey methodology. Unlike most previous research, which has typically relied on cross-sectional surveys or experimental designs at a particular time point (e.g., Christmann et al. 2024; Cornesse et

al. 2022), we use over a decade of data from the United Kingdom Household Longitudinal Study. These data allow us to understand how the relationship between the digital divide and the representativeness of web survey respondents has changed over time. Another relevant aspect of this study is that we focus on representativeness, an outcome that has not been used to analyse the digital divide. Previous studies have mainly analysed the differences between internet users and non-users (e.g., Blank, Dutton, and Lefkowitz 2020; Yates et al. 2020). Our results provide important empirical evidence about the past and present quality of web-only surveys, which will help survey practitioners understand the opportunities and risks of conducting web-only surveys nowadays and in the near future.

2. Background

The digital divide, the gap between individuals with access to the internet and those without, has been a reality since digital technologies started expanding in the 1990s (van Dijk and Hacker 2003). However, as digital society has evolved, the concept of the digital divide has broadened from a simple separation between those with material access to technology and those without, to a more complex definition that encompasses other aspects such as types of usage, skills, and attitudes (van Deursen and van Dijk 2014; Scheerder, van Deursen, and van Dijk 2017). An example of this broader definition is the theoretical model developed by van Deursen and van Dijk (2015) including four dimensions: material access, internet skills, motivational access—individuals who prefer not to use the internet, and usage types. Some studies using a multidimensional definition have found that, while internet access—the material access dimension—has increased substantially in some developed countries, the gap has broadened regarding how people use the internet (Blank et al. 2020; Ragnedda 2017).

The evolution of the concept of digital divide has led to different operationalisations in empirical studies. Most studies have used the frequency of internet use to differentiate between internet users and non-users (Eynon 2009; Gilleard and Higgs 2008; Serafino 2019). Some studies have differentiated among types of non-users, such as those without internet access and those with access but who never use it (Helsper and Reisdorf 2013, 2017). Other more recent studies have combined information from the frequency of use and the type of internet use to produce a measure of the digital divide that aligns with the more complex definitions developed in the last decade (Blank and Groselj 2014; Herzing and Blom 2019; Reisdorf and Groselj 2017; Yates et al. 2020). For example, Blank and Groselj (2014) identified three main dimensions of internet use in their study about the digital divide in the United Kingdom (UK): frequency, variety and type of internet use. In another recent study, Herzing and Blom (2019) employed the concept of digital affinity to explore whether it could explain web survey non-

response in the German Internet Panel (GIP). The definition of digital affinity includes aspects such as internet access, the device or devices used for internet access, the nature of usage, and attitudes towards technology.

Several studies have examined the factors that contribute to the digital divide. In a recent review of the literature, Lythreatis et al. (2022) identified sociodemographic, socioeconomic, and motivational factors as key determinants of the adoption and use of the internet in a variety of contexts. Among these, age, education, and income are the three variables that have received the most attention and are most frequently linked to the digital divide. Older people, those with lower levels of education, and those on lower incomes are less likely to have access to or use the internet (e.g., Antoun 2015; van Deursen and van Dijk 2014; Dutton and Reisdorf 2016). In addition, other factors, such as gender, ethnicity, the urban-rural divide, or employment-related variables, have also emerged as relevant factors that help explain the digital divide in different national and cultural contexts. Females, those with an ethnic minority background, those living in rural areas, and those non-employed are some of the groups that have been identified as having a lower internet access and use rate (e.g., Eynon 2009; Joiner, Stewart, and Beaney 2015; Lythreatis et al. 2022; Serafino 2019). Other studies have found cultural and attitudinal differences between internet users and non-users (see Norris 2001; Robinson and Martin 2009; Wei and Hindman 2011), or differences in health-related variables (Dever, Rafferty, and Valliant 2008). Focusing on the United Kingdom, studies have identified similar patterns: older adults (Blank et al. 2020; Bunyan and Collins 2013; Helsper 2017; Morris and Brading 2007; Ueno, Dennis, and Dafoulas 2023), those with lower education (Blank et al. 2020; Eynon 2009; Helsper and Reisdorf 2017), and on lower incomes or with lower socio-economic status (Blank et al. 2020; Bunyan and Collins 2013; Eynon 2009; Ueno et al. 2023; Yates et al. 2020) are less likely to use the internet regularly or at all. Also, some studies have identified people with disabilities and long-term illnesses as less likely to use the internet (Helsper and Reisdorf 2017; Ueno et al. 2023; Yates et al. 2020).

At the same time, the evolution of the digital divide has paralleled the rise in popularity of web mode for survey data collection. Web mode has been the predominant mode in market research for several years now (Baker et al. 2010; ESOMAR 2018). In the last decade, some high-quality social surveys have implemented a design that combines web as the primary mode of data collection along with an offline mode to follow up non-respondents (e.g., Biemer et al. 2022; Calderwood and Sanchez 2016; Jäckle et al. 2015; O'Muircheartaigh, Hanson, and Fitzgerald 2023; Sastry and McGonagle 2022). Web mode has several characteristics that fostered its adoption. As a self-administered method, web surveys minimise measurement errors caused by interviewer effects and decrease social desirability bias in respondents' answers (Kreuter, Presser, and Tourangeau 2008; Sakshaug, Yan, and Tourangeau 2010).

Furthermore, using the web mode offers a more cost-effective and faster way to gather data than interviewer-administered methods (Kaplowitz, Hadlock, and Levine 2004; Olson et al. 2024).

However, the expansion of web surveys has encountered two main obstacles to representing the general population: a part of the population that remains offline and web non-response among internet users. In the context of the total survey error framework, these two sources of error refer to coverage and non-response errors (Groves and Lyberg 2010). These errors affecting sample representativeness raise concerns for those, such as policy makers, who rely on survey data to infer from the sample to the general population (Lynn 2024; Olsen and Orr 2016). Those members of the population without internet access and those who do not use the internet are, by definition, excluded from solely online data collection. This systematic exclusion can affect the representativeness of the sample and the quality of survey estimates (e.g., Antoun 2015; Cornesse and Bosnjak 2018; Dever et al. 2008; Dutwin and Buskirk 2023). A meta-analysis conducted by Cornesse and Bosnjak (2018) to identify survey characteristics related to representativeness found that web surveys resulted in lower levels of representativeness compared to other single-mode surveys. Other studies conducted in the context of web probability panels have shown that providing internet non-users with alternative modes enhances the representativeness of the sample (Blom et al. 2017; Eckman 2016; Revilla et al. 2016; Rookey, Hanway, and Dillman 2008).

Web surveys have also shown a consistently lower response rate compared to other modes (Daikeler, Bošnjak, and Lozar Manfreda 2020). Some internet users might refuse to respond online, but would participate in another mode (Pforr and Dannwolf 2017; Rembser and Gummer 2025). Distrust of technology or concerns about sharing personal data can lead to web non-response among those with internet access (Dutwin and Buskirk 2023; Wenz, Jäckle, and Couper 2019). The differences between those who respond online and those who do not respond constitute another source of error that can lead to samples that are not representative of the general population.

To optimise the advantages of web data collection and reduce associated risks, several social surveys have adopted a mixed-mode approach, using web as the primary mode of data collection while including an offline option to minimise coverage bias and increase response rates (Brown and Calderwood 2020; de Leeuw 2018). Nevertheless, mixed-mode designs are not exempt from challenges. Mode effects and higher fixed costs can affect the quality and cost of mixed-mode designs. Mode effects refer to measurement differences where the mode in which a question is asked can affect how it is answered (Burton and Jäckle 2019; Jäckle, Roberts, and Lynn 2010; Vannieuwenhuyze, Loosveldt, and Molenberghs 2014). In mixed-mode surveys, the modes used for data collection can produce distinct effects that are combined. Also, since data collection needs to be set up in different

modes, the fixed costs of the survey are higher in a mixed-mode design than when employing a single mode (Vannieuwenhuyze 2013).

In this context, some countries, including the United Kingdom, have seen a continuous growth of internet access and use over the last years (e.g., OECD 2024; Ofcom 2019). This ongoing narrowing of the digital divide presents an opportunity to examine the viability of using web-only surveys to represent the general population. Some recent studies have addressed this question. Some studies used web-first designs to evaluate the contribution of the follow-up offline mode to the representativeness of the sample of respondents (e.g., Moore et al. 2024, 2025; Rembser and Gummer 2025). Meanwhile, others relied on experimental designs and simulations that compare a web-only condition with other mixed-mode designs (e.g., Christmann et al. 2024; Cornesse et al. 2022).

Some of these studies found that web-only surveys underrepresent certain subgroups. Moore et al. (2024) and Moore and Durrant (2025) examined the contribution of telephone follow-ups to web to enhance representativeness in the context of the *Understanding Society* COVID-19 study. Adults participating in the previous waves of *Understanding Society*, a longitudinal study that covers the UK household population, were invited to nine surveys between April 2020 and September 2021. The authors found that the CATI (Computer Assisted Telephone Interview) follow-up improved the representativeness of the sample of respondents. Rembser and Gummer (2025) used the GESIS Panel, a population register-based sample of residents in Germany that offers a web mode to internet users and paper self-completion to non-internet users, to analyse the bias of a set of 210 substantive variables among internet users, web respondents, and the entire sample of respondents. They found substantive differences when comparing the sample of web respondents to the full mixed-mode sample. Also, they found evidence that some internet users did not respond to web surveys, but might participate in other modes. The Swiss Electoral Study in 2015 was a general population survey of Swiss citizens aged 18 or older that used a sequential mixed-mode design combining web, CATI and paper self-completion. Lipps and Pekari (2021) compared the profile of the sample frame to that of respondents after web, web and telephone, and at the end of the fieldwork. They found that adding CATI improved the representativeness of the sample regarding demographics, whilst the addition of a paper self-completion questionnaire was effective in improving the accuracy of voting estimates.

In contrast, other studies, mainly experiments, found little or no differences between the sample profiles of the web-only and mixed-mode conditions. Most of these, however, excluded the oldest age group. The recruitment of a refreshment sample for the German Internet Panel in 2018 experimented with different mode designs, including a web-only condition and other groups that were offered web

and a paper self-completion questionnaire (Cornesse et al. 2022). The web-only and the mixed-mode designs exhibited similar demographic profiles, although the target population only covered those aged between 16 and 75. Christmann et al. (2024) did not find major differences in the demographic profile and a set of substantive variables between a simulated web-only condition and other mixed-mode designs combining web and paper self-completion in the recruitment of a sample for the German population, restricted to those aged between 18 and 49. Moore et al. (2025) compared the representativeness of the set of respondents to web and web plus a CAPI (Computer Assisted Personal Interview) follow-up between 2012 and 2022 using the Understanding Society Innovation Panel, a longitudinal household survey of the household population of Great Britain. They found a decreasing contribution of the CAPI interviews to improving the representativeness of the sample, which had disappeared in the last two years.

3. Data and methods

This section describes the data and methods used in the analysis. Table 1 presents a summary of the analytical design, indicating which analysis methods, datasets, and variables were used to answer each of the research questions.

Table 1. Summary of the analytical design: datasets, analysis methods and variables used to answer each research question.

Research question	Datasets (Target pop. and scope)	Analysis	Variables
RQ1: How have internet exclusion and intensity of internet use changed over time?	UKHLS main survey (2009-22; waves 1 to 14) Adults (16+) residing in the UK	Graphical analysis	Internet access and frequency of use
RQ2: What are the characteristics of different types of internet users and non-users? How representative are these groups? How has this changed over time?	(a) Respondents to the individual questionnaire (all modes)	Crosstabulations Coefficients of variation (CVs): • Overall CVs • Conditional and unconditional partial CVs (variable level) • Conditional and unconditional partial CVs (category level)	**Groups**: All internet users and daily internet users **Auxiliary variables[2]**: Gender, age (7 groups), ethnicity, education, employment status, region, urban, household income (quintiles), being behind with bills, household type, household tenure
RQ3: How does the representativeness of web respondents compare to the representativeness of different groups of internet users? How has this changed over time?	UKHLS Innovation Panel (2012-23; waves 5-16)[1] Adults (16+) residing in GB (a) **For web respondents**: All sample members issued to web (b) **For internet users**: Respondents to the individual questionnaire (all modes) UKHLS main survey (April-December 2020; waves 11-12) Adults (16+) residing in the UK (a) **For web respondents**: All sample members issued to web (b) **For internet users**: Respondents to the individual questionnaire (all modes)	Coefficients of variation (CVs): • Overall CVs • Conditional and unconditional partial CVs (variable level) • Conditional and unconditional partial CVs (category level)	**Groups**: All internet users, daily internet users and web respondents **Auxiliary variables[2]**: Gender, age (4 groups), employment status, region, household income (quintiles), being behind with bills, household type, household tenure (UKLHS main survey includes ethnicity).

Note – [1]For web respondents, we excluded wave 12 from the analysis as it involved nurses visiting households and required reassigning households to other mode designs. [2]The categories of these variables are shown in Table 2.

Data

This research relies on two sources of data: the United Kingdom Household Longitudinal Study (UKHLS) main survey and the Innovation Panel (IP). The UKHLS Innovation Panel and main survey data used for the analysis are publicly available through the UK Data Service (University of Essex and Institute for Social 2024; University of Essex and Institute for Social and Economic Research 2023).

UKHLS main survey

The UKHLS main survey is a random probability sample of the UK household population. The main sample was selected in 2009 (wave 1) and, at wave 2 (2010-12), it incorporated the former British Household Panel Survey (BHPS) which had started in 1991. The survey aims to collect data from all adults aged 16 and over living in the household annually.

The UKHLS main survey has several sample components. The General Population Sample (GPS) is a clustered and stratified probability sample of over 24,000 households selected in Great Britain during 2009-10, along with a random sample of approximately 2,000 households drawn in Northern Ireland (Lynn 2009). The British Household Panel (BHPS) began in 1991 as a stratified and clustered probability sample of more than 5,000 households. Boost samples for Wales and Scotland were added in 1999, and in 2001, a simple random sample of households from Northern Ireland was included. At wave 14 (2022-24), a boost of the general population sample was selected in Great Britain and Northern Ireland, adding over 5,700 households to the sample. Furthermore, Understanding Society encompasses two boost samples: the Ethnic Minority Boost (EMB) sample, which was selected in 2009-10 from areas characterised by a high density of individuals belonging to ethnic minority groups (Berthoud et al. 2009), and the Immigrant and Ethnic Minority Boost (IEMB), selected at wave 6 (2014-15) (Lynn et al. 2018).

The UKHLS main survey has shifted from a predominantly CAPI design to a web-first and CAPI sequential mixed-mode design. Up to, and including, wave six (2014-16), almost all households were assigned to CAPI, with only a few contacted by phone during a mop-up period at the end of the fieldwork. The web mode was introduced in wave seven (2015-17), but only for those households who did not respond in wave six. From wave eight (2016-18), an increasing number of panel members have been invited to complete the survey online, with those who do not respond online followed-up in

CAPI. Before COVID-19, three fieldwork protocols coexisted: a random ring-fenced subsample of households (20% of the total) issued to CAPI-only, whilst the rest were divided into a subsample of households predicted to have the highest web response propensities allocated to a sequential mixed-mode combining web and CAPI (70% of the total), and the remaining households allocated to a CAPI-first protocol (10% of the total). Due to the COVID-19 pandemic, starting in April 2020, all households in the sample were assigned to a sequential design combining web and telephone (Burton, Lynn, and Benzeval 2020). This change in fieldwork protocols affected waves 11 (2019-21) to 13 (2021-23). At wave 14 (2022-24), once the COVID-19 restrictions were lifted, the entire sample was shifted to web-first, with a CAPI follow-up of non-respondents. This excluded the 10% of households least likely to respond online, which were offered CAPI first, with an online invitation follow-up (Verian 2024).

To explore the digital divide in the United Kingdom, the first and second research questions (RQ1 and RQ2), we use data about internet use from the individual responses to the UKHLS main survey (2009-22; waves 1-14, all modes). To compare the representativeness of internet users and web respondents in 2020 (RQ3), we use the random subsample that transitioned from CAPI-only to a web-first design due to the COVID-19 crisis (April-December 2020; waves 11-12). The use of the UKHLS main survey in a single year allows us to extend the analysis to the United Kingdom, including Northern Ireland, and its larger sample size which includes the ethnic minority boosts enables us to explore whether the sample is representative regarding ethnic background. The sample of respondents to the individual questionnaire (all modes) was used to estimate the representativeness of internet users. To estimate the representativeness of web respondents, we used the sample of adults issued to web-first. .

UKHLS Innovation Panel

The UKHLS Innovation Panel is a national probability sample that covers the household population of Great Britain. This panel is primarily used for developing and testing methodological innovations. The IP began in 2008 with a clustered and stratified sample of 2,760 addresses, which was refreshed at waves 4, 7, 10, 11, and 14. As with the main survey, panel members and other household residents aged 16 or older are invited to complete the adult questionnaire each year.

The analysis presented in this paper utilises data from waves 5 to 16 (2012-23). At wave 5 (2012), a mixed-mode experiment began, where a random sample of 66% of households was allocated to a web-first and CAPI mixed-mode design, while the remaining 33% was allocated to a CAPI-first and web mixed-mode design. The allocation of households to the experimental conditions remained consistent throughout the study, except for wave 12 (2019), which involved nurses visiting households and required reassigning households to other mode designs. The web-only fieldwork period for waves 5

and 6 was 2 weeks, and was expanded to 5 weeks in later waves. The web questionnaire remained open during the CAPI follow-up fieldwork.

The UKHLS Innovation Panel is used to address the third research question (RQ3). The Innovation Panel allow us to compare the representativeness of internet users and web respondents over time (2012-23) for Great Britain. We benefit from the random subsample issued to a web-first design (2012-18 and 2020-23; waves 5-12 and 13-16), to estimate the representativeness of web respondents. The sample of adults responding to the individual questionnaire (2012-23; waves 5-16) in all modes is used to estimate the representativeness of internet users.

Methods

The analysis of the first research question (RQ1) involves a graphical examination of the evolution of the prevalence of internet users and non-users (see Table 1). For the second research question (RQ2), we use crosstabulations to explore the level of internet access and use across groups, and coefficients of variation of the estimated internet use propensities to evaluate the representativeness of internet users. The third research question (RQ3) relies on the coefficients of variation to compare the representativeness of internet users and web respondents.

Across our analysis, weights were employed to adjust for unequal selection probabilities, non-response and attrition. For the analysis of the group of internet users (RQ1, RQ2 and RQ3), the samples of survey respondents were weighted using the standard cross-sectional weights developed by the UKHLS. For the analysis of web respondents (RQ3), we used the sample of all panel members issued to the web. UKHLS does not provide weights to adjust the sample issued to the field in each wave, so a set of tailored sample inclusion weights was developed to adjust for unequal selection probabilities, non-response at the recruitment wave, and attrition. For more details on how the tailored weights were produced and some performance indicators, see appendices A1 and A2 in Moore et al. (2025).

Coefficients of variation

We evaluate the representativeness of internet users and web respondents at different points in time. Two main approaches have been used to operationalise and evaluate representativeness in survey methodology: 1) comparing the sample of respondents to the target population, such as to a census or other benchmarks, and 2) comparing the respondents to the full sample, including respondents and non-respondents (Cornesse and Bosnjak 2018). The second approach permits the use of a broader set of variables, as long as they are available for both respondents and non-respondents (or internet users

and non-users). This is the approach we employ in this paper, given the richness of our datasets that contain information from wave respondents and non-respondents collected in previous waves.

The R-indicators or coefficients of variation (CVs) are examples of measures developed to assess the level of representativeness of respondents compared to the full sample (Bethlehem, Cobben, and Schouten 2009; Schouten, Shlomo, and Skinner 2011). These measures of representativeness are restricted to the set of variables observed for both respondents and non-respondents, which may or may not be correlated with the survey target variables. Previous research has shown that higher levels of representativeness can reduce bias (Schouten et al. 2016), although this depends on the correlation between the auxiliary and survey target variables (Nishimura, Wagner, and Elliott 2016). We use coefficients of variation, which have been shown to outperform the R-indicators in scenarios where the average response propensity is either very low or very high, and are better suited for comparing samples with different response rates (Moore, Durrant, and Smith 2018; Schouten, Cobben, and Bethlehem 2009).

Coefficients of variation of response propensities can be used to evaluate the level of representativeness of a subgroup (e.g., survey respondents or internet users) compared to the (weighted) entire sample with regard to a set of auxiliary variables. The CVs reflect the extent of variation in individuals' response propensities, which are estimated using a logistic regression model with a set of auxiliary variables (Heij, Schouten, and Sholmo 2015). The CV is given as

$$CV = \frac{\sqrt{\frac{1}{n-1}\sum_{i=1}^{n}(\hat{p}_i - \hat{\bar{p}})^2}}{\hat{\bar{p}}}, \quad (1)$$

where $\hat{p}_i$ represents the estimated individual response propensity of the individual i and $\hat{\bar{p}}$ is the average response propensity.

The CV takes values between 0 and 1, where values closer to zero indicate a lower level of variation of the response propensities and, therefore, a higher level of representativeness with respect to the set of auxiliary variables. CVs are not directly related to non-response bias in survey estimates, but they approximate maximal standardised non-response bias if survey variables are fully correlated with auxiliary variables (Moore et al. 2018; Schouten et al. 2011). Hence, if the survey target variables are correlated with the response propensities, higher values of the CVs indicate a higher risk of non-response bias.

The overall CV assesses the representativeness of the respondent sample, but it does not provide any details about the variables and groups that contribute most to the lack of representativeness. For this purpose, partial CVs can be computed at the variable and category levels. These can be unconditional

(CV_us) and conditional (CV_cs). The unconditional CVs measure the variation of the response probabilities between the categories of a variable. The conditional CVs measure the impact of a variable or category conditional on the other variables included in the estimation of the response propensities (Heij et al. 2015). Sometimes, the unconditional partial coefficient of variation (CV_us) is different from zero, while the conditional (CV_cs) is non-significant. In these cases, the groups defined by the variable can be explained by combinations of the other auxiliary variables included in the propensity models. For more details about the computation of unconditional and conditional partial CVs at the variable and category levels, see Heij et al. (2015). The overall and partial CVs standard errors can also be estimated to enable statistical inference (Shlomo, Skinner, and Schouten 2012).

To estimate the CVs, we used the R code developed by de Heij et al. (2015). The auxiliary variables used to estimate the response propensities are listed in the next section. We use the cross-sectional and sample inclusion weights to fit the logistic regression models that estimated the response propensities of being an internet user and web respondent, respectively.

Group indicators and auxiliary variables

We use three variables in the analysis to identify the groups of internet users and web respondents: all internet users, daily internet users, and web respondents. The two operationalisations of internet use stem from a question in the individual questionnaire of the survey that asks how often they use the internet for personal use. This measure combines internet access from home or somewhere else and frequency of use[1]. The first operationalisation, all internet users, differentiates between those who use the internet and those who do not, including those without internet access. This operationalisation is the most frequently used to study the digital divide (e.g., Eynon 2009; Reisdorf and Groselj 2017; Serafino 2019).

The second operationalisation, daily internet users, distinguishes those who use the internet on a daily basis from the rest of the population. Unlike the measure of all internet users, it captures those more likely to have the skills and motivation to perform some online activities, such as taking part in web surveys (van Deursen and van Dijk 2015). We recognise this measure is not exempt from limitations.

[1] The measure of internet access and frequency of use changed over time. In the UKHLS main survey individual questionnaire, from waves 1 (2009) to 11 (2019-21), the variable had seven valid response categories: (1) Every day; (2) Several times a week; (3) Several times a month; (4) Once a month; (5) Less than once a month; (6) Never use; (7) no access at home, at work or elsewhere. From wave 12 (2020-22), the every day category was broken down into (1) Almost all of the time; (2) Several times a day; (3) Once or twice a day.

Some occasional internet users may be willing and able to complete web surveys, while some daily users may still refuse to participate in web surveys or perform other online activities. Yet, considering both all internet users and daily internet users, we aim to gauge the representativeness of the group with the resources and skills to perform activities online, such as completing surveys. Regarding web response, we classified those who completed the individual questionnaire online as web respondents and those who responded on CAPI, CATI or did not respond as web non-respondents.

The auxiliary variables used to calculate the coefficients of variation vary across research questions and datasets used in the analysis (see Table 1 for an overview). For the second research question (RQ2), regarding the representativeness of internet users, we used a set of variables from the individual questionnaire present in all waves that had been identified in the literature as explanatory factors. These variables include gender, age, ethnic background, health status, region, whether the person lives in an urban or rural area, education, household income, employment status, household tenure status, household type (i.e., household composition), and whether the person is behind with bills (see Table 2 for details of the categories of the variables).

For the third research question (RQ3), which compares the representativeness of web respondents and internet users, we use a more restricted set of auxiliary variables, as they need to be available for both respondents and non-respondents. Given this restriction, we use the following variables: sex, age, employment status, region, whether behind on bills, household income, housing tenure, and household type. The analysis using the 2020 UKHLS main survey dataset includes ethnicity as an additional auxiliary variable. Because some of these measures contained missing values, we developed an imputation strategy leveraging information from the previous and next two waves. Information about the imputation and the variables used in the propensity models can be found in Appendix A.

4. Results

RQ1: How have internet exclusion and intensity of internet use changed over time?

Figure 1 shows that almost the entire United Kingdom adult population (99.3%) had internet access by 2022, although a small group (4.8%) had access but never used the internet. This picture shows a significant change compared to 2009, the beginning of the series. The proportion of adults without internet access has fallen from 13.2% in 2009 to 0.7% in 2022. The share of those who have internet but never use it has also declined, though more slowly—from 12.9% in 2009 to 4.8% in 2022. Meanwhile, the percentage of adults who use the internet daily has doubled, rising from 42.4% to 86.8% during the same period.

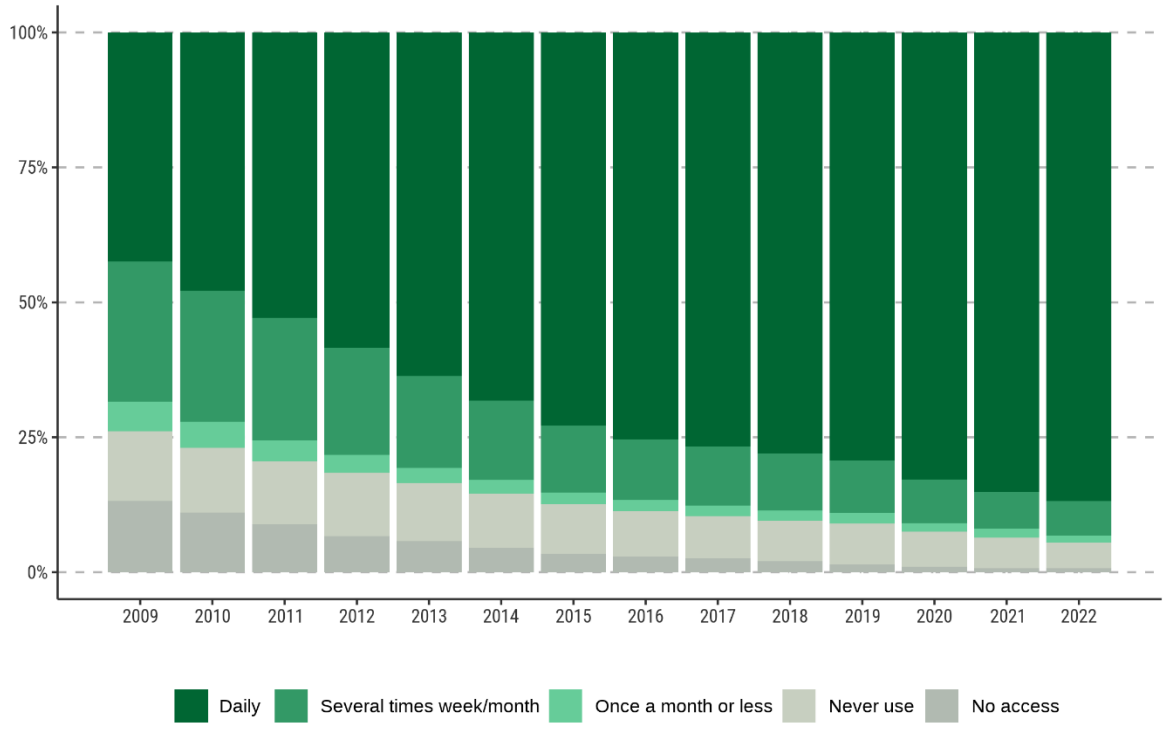

Figure 1. Prevalence of internet access and frequency of use in the United Kingdom between 2009 and 2022.
Source: UKHLS main survey–adults (aged 16 and over) resident in the United Kingdom.

RQ2: What are the characteristics of different types of internet users and non-users? How representative are these groups? How has this changed over time?

Table 2 shows internet access and usage frequency across different sociodemographic groups in 2009 and 2022. Internet use has increased over time, and it has become a universal technology for certain groups. In 2022, some groups showed a high level of internet use, with at least 95% of them using the internet daily. These groups include younger adults (16-44 years old), individuals with a university degree, those in paid employment, people living with children, households that own a home with a mortgage, or those belonging to the top household income quintile. In contrast, other groups present a higher than average proportion of individuals who never use or do not have internet access compared to the average. The following groups exhibit a proportion of non-internet access over 2% (versus 0.7% on average) and a proportion of those who never use internet over 8% (versus 4.7% on average) in 2022: individuals aged 75 and over (3.7% and 24.5%), those with no qualifications (4.6% and 26.6%), the bottom income quintile (2.5% and 12.9%) and those living on their own (2.5% and 12.2%). Other groups show a higher proportion than average of individuals who never use the internet, although they have access to it: those with other qualifications (10.9%), residents in Northern Ireland (10.8%), people with an illness or disability (8.4%), and those not in employment (9.8%).

Table 2. Internet access and frequency of use by sociodemographic characteristics in 2009 and 2022.

	2009					2022				
	Daily	Several times week/month	Once a month or less	Never use	No access	Daily	Several times week/month	Once a month or less	Never use	No access
Gender										
Male	48.7	24.7	4.6	11.2	10.8	87.9	6.2	1.1	4.3	0.6
Female	36.5	27.1	6.4	14.5	15.5	85.7	6.7	1.5	5.2	0.8
Age										
16-24	65.5	25.1	3.0	2.5	3.8	98.2	1.4	0.1	0.3	0.0
25-34	58.8	28.9	3.8	4.1	4.4	97.5	1.6	0.2	0.7	0.0
35-44	49.5	32.2	6.5	7.5	4.4	97.6	1.8	0.4	0.3	0.0
45-54	41.1	30.9	8.1	13.3	6.7	94.2	4.1	0.5	0.9	0.2
55-64	31.1	27.0	7.1	19.4	15.4	87.6	8.1	1.3	2.7	0.2
65-74	19.7	17.8	6.1	28	28.3	76.3	12.4	2.7	7.4	1.2
75+	6.7	8.1	3.4	28.4	53.4	52.3	15.4	4.0	24.5	3.7
Ethnicity										
White	41.7	26.1	5.5	12.9	13.7	86.1	6.8	1.3	5	0.8
Asian	49.8	22.2	6.0	15.0	7.0	90.5	3.8	1.2	4.5	0.0
Black	44.2	29.6	7.0	9.1	10.1	89.2	5.0	2.1	3.0	0.7
Mixed and other	59.0	20.2	4.4	8.8	7.7	94.4	4.0	0.8	0.9	0.0
Education										
ISCED level 6+ (University degree)	65.9	26.6	3.1	2.5	1.8	96.0	3.0	0.3	0.6	0.1
ISCED level 5 (Short-cycle degree)	47.7	33.1	5.6	6.9	6.6	88.7	7.4	1.2	2.3	0.4
ISCED level 3 (Upper secondary)	50.3	29.2	5.2	8.1	7.2	91.1	5.2	1.0	2.5	0.2
ISCED level 2/3 (Lower secondary)	42.9	31.4	7.3	11.0	7.4	86.0	8.3	1.5	3.8	0.5

	2009					2022				
	Daily	Several times week/month	Once a month or less	Never use	No access	Daily	Several times week/month	Once a month or less	Never use	No access
ISCED level 0/1 (Entry level)	12.5	11.5	5.1	30.8	40.0	53.3	11.4	4.0	26.7	4.6
Other qualifications	24.4	23.2	8.1	22.6	21.8	71.9	12.7	3.1	10.9	1.4
Health										
Illness or disability	32.0	22.9	5.8	18.9	20.4	79.4	8.9	2.0	8.4	1.3
Healthy	48.3	27.6	5.4	9.5	9.2	90.8	5.1	0.9	2.8	0.3
Employment status										
Non-employed	32.3	18.1	5.3	19.4	24.8	76.0	10.2	2.5	9.8	1.5
Employed	50.2	31.9	5.7	7.9	4.3	95.3	3.5	0.4	0.8	0.0
Region										
North East	35.0	27.1	6.4	12.2	19.3	86.1	6.4	1.0	5.7	0.9
North West	38.9	26.2	5.4	15.4	14.1	86.6	7.1	1.1	4.5	0.7
Yorkshire and the Humber	38.6	27.8	5.8	15	12.8	84.4	7.1	1.2	6.5	0.8
East Midlands	43.8	25.8	4.7	11.5	14.1	87.4	6.5	1.5	3.7	0.9
West Midlands	41.1	23.2	5.9	13.9	15.8	85.3	7.1	2.0	5.2	0.4
East of England	45.6	25.4	5.0	11.6	12.5	88.1	6.4	1.1	3.9	0.5
London	52.3	22.7	6.0	9.7	9.4	90.7	4.3	1.0	3.2	0.9
South East	49.2	26.5	5.0	9.7	9.6	88.3	6.7	1.1	3.1	0.8
South West	42.1	26.3	5.2	12.7	13.7	86.0	6.9	1.7	4.7	0.7
Wales	35.8	23.6	5.6	15.3	19.7	84.7	6.4	2.3	6.2	0.4
Scotland	38.4	28.9	5.9	15.1	11.8	84.8	6.5	1.3	7.2	0.3
Northern Ireland	29.7	29.1	6.9	17.4	16.9	80.8	6.3	0.7	10.8	1.4
Urban										
Urban	43.1	25.9	5.5	12.5	13.0	87.2	6.1	1.4	4.6	0.8

	2009					2022				
	Daily	Several times week/month	Once a month or less	Never use	No access	Daily	Several times week/month	Once a month or less	Never use	No access
Rural	40.3	26.1	5.6	13.9	14.0	85.5	7.7	1.2	5.3	0.4
Household tenure										
Owned	30.1	23.6	6.0	19.1	21.2	79.9	10.1	2.0	7.2	0.8
Owned mortgage	52.7	31.2	5.5	7.3	3.4	96.1	2.9	0.3	0.6	0.1
Rented and others	41.4	21.3	5.2	14.0	18.1	84.3	6.3	1.7	6.5	1.2
Behind with bills										
All paid	42.7	25.9	5.4	12.8	13.2	86.5	6.4	1.3	5.1	0.7
Unpaid bills	37.7	26.4	7.6	14.6	13.8	88.5	7.1	2.0	2.1	0.3
Household income										
Q1 (Bottom)	22.9	16.5	5.0	19.7	35.8	71.5	10.7	2.5	12.9	2.5
Q2	33.4	22.5	6.5	18.2	19.4	82.1	9.0	2.1	6.2	0.6
Q3	44.5	29.6	7.1	12.5	6.3	90.4	5.9	0.9	2.7	0.2
Q4	51.5	32.6	4.8	8.1	2.9	94.9	3.5	0.6	0.9	0.0
Q5 (Top)	59.8	28.4	4.3	5.8	1.6	96.2	2.7	0.4	0.8	0.0
Household type										
1 adult, no children	25.4	18.0	4.7	15.5	36.3	73.6	9.8	1.8	12.2	2.5
1 adult, children	44.1	29.5	6.6	10.3	9.6	95.4	3.2	0.8	0.5	0.0
Couple, no children	35.6	24.7	6.0	16.8	17	83.5	9.2	2.1	4.8	0.4
Couple with children	53.3	32.4	5.5	5.6	3.2	97.4	1.9	0.3	0.4	0.0
Other household	48.9	25.4	5.5	13.9	6.4	91.4	4.6	0.9	2.8	0.2
Base (n)	10,215	6,593	1,511	3,920	4,424	26,857	1,955	416	1361	150

Note – UKHLS main survey–adults (aged 16 and over) resident in the United Kingdom

Figure 2 presents the overall coefficients of variation and the 95% confidence intervals to assess the representativeness of all internet users and daily internet users. Note that for most estimates, the confidence intervals are so narrow that they are not visible on the graph. Regardless of the definition, internet users remain distinct from the general population throughout the entire period. The group of internet users has, however, become more representative of the general population between 2009 and 2022, with the values of the CVs being progressively closer to zero (i.e., more representative). Daily internet users have consistently shown higher coefficients of variation, i.e. are less representative, compared to all internet users. This was expected since daily users form a more selective group within the population. However, the improvement in the level of representativeness has been more accelerated among daily internet users, and the gap between them and all internet users has halved over this period. This indicates that the profiles of all internet users and daily internet users were more similar in 2022 than in 2009.

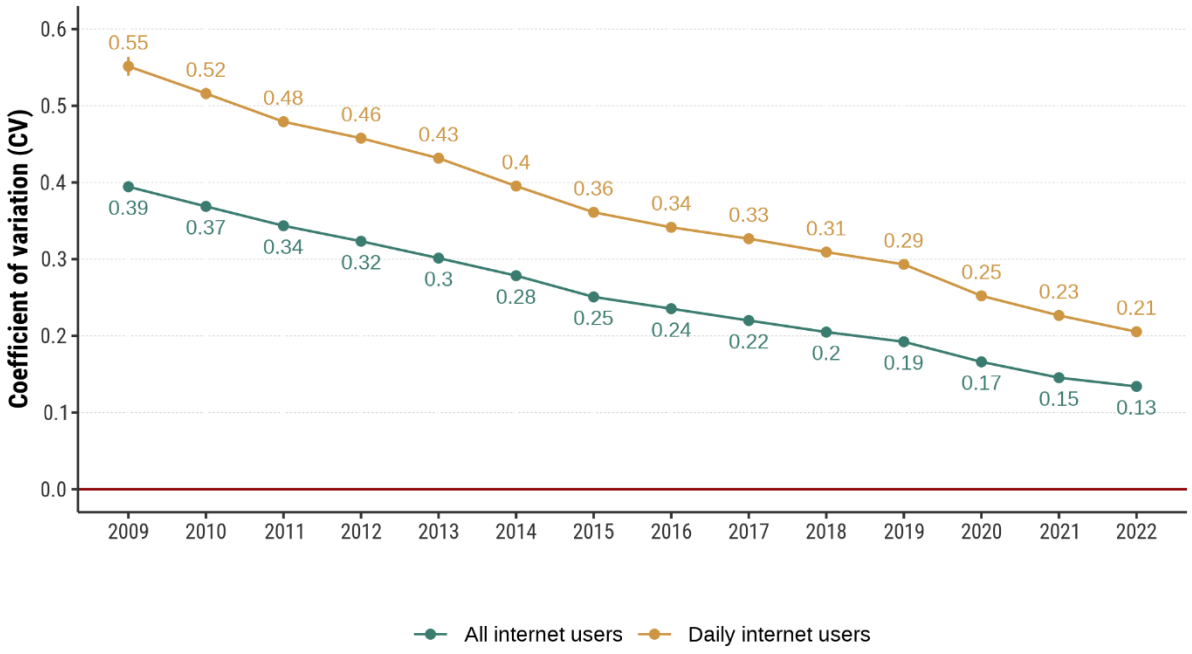

Figure 2. Coefficients of variation and 95% confidence intervals for all and daily internet users between 2009 and 2022.
Source: UKHLS main survey–adults (aged 16 and over) resident in the United Kingdom.
Note: The confidence intervals are narrow and might not be visible for some estimates.

The variable-level unconditional and conditional partial coefficients of variation (Figure 3 and Tables B1 and B2 in Appendix B) show that education and age have the largest impact on the lack of representativeness across the two definitions of internet users, even when the influence of these factors accounts for the other variables (see panel b) in Figure 3). It is worth noting that the magnitude

of the partial unconditional (CV_us) and conditional (CV_cs) CVs for these and other factors has decreased substantially between 2009 and 2022. Other factors exhibit partial unconditional and conditional coefficients different from zero across the definitions of internet use in 2009 and 2022, including household income, region and ethnicity. For all internet users, household type and tenure status were also relevant factors in 2009 and 2022.

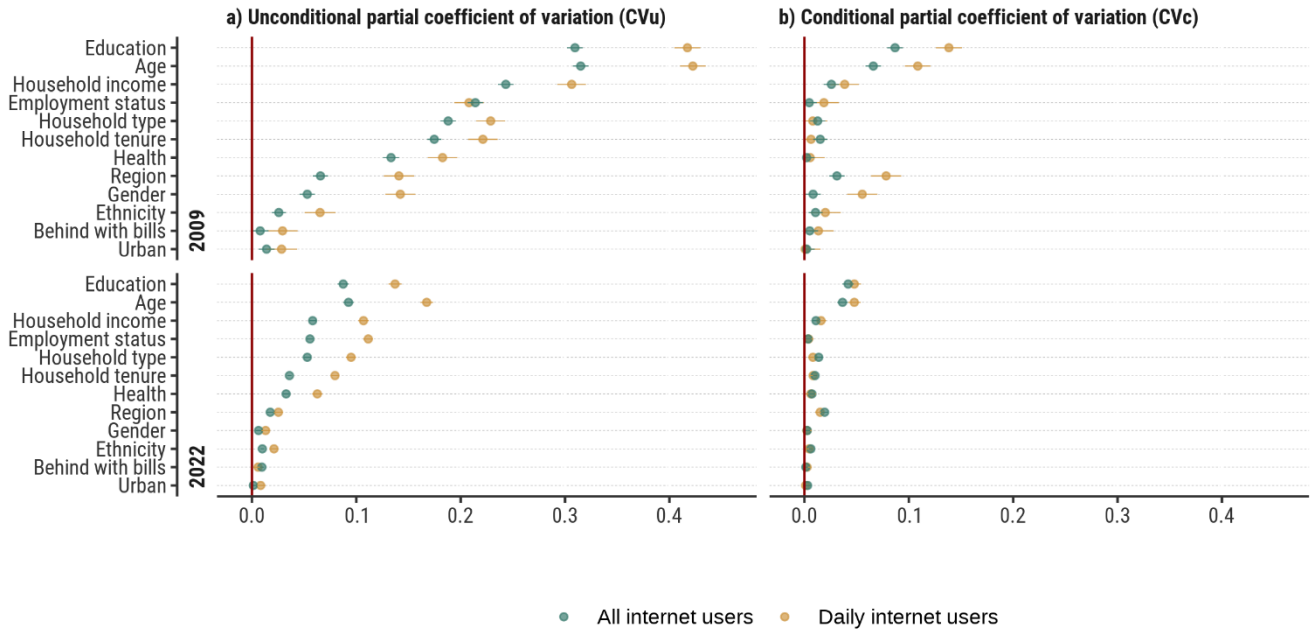

Figure 3. Variable level unconditional and conditional partial CVs and 95% confidence intervals for all internet users and daily internet users.
Source: UKHLS main survey–adults (aged 16 and over) resident in the United Kingdom.

The category level analysis shows similar trends for age and education. The disparities observed in 2009 between the younger and older age groups, or between those more and less educated, have narrowed substantially in the last decade but persist. Figure 4 presents the unconditional and conditional partial coefficients of variation for age groups over time. In 2009, younger adults, aged between 16 and 34, were more likely to use the internet and were heavily overrepresented among internet users. By 2022, this overrepresentation had largely disappeared. Conversely, the oldest groups, those aged 65 and over, were heavily underrepresented among internet users in 2009. Although the level of representation has improved substantially, this group, especially those aged 75 and over, remained underrepresented among internet users in 2022. The differences between the education groups are also narrowing. Figure 5 shows that those with university degrees were substantially overrepresented in 2009, especially among daily internet users. However, the level of overrepresentation has decreased since then, and by 2022, it reached its lowest point. Meanwhile, those with the entry level (ISCED level 0/1) and those with other qualifications remained

underrepresented among all internet users and daily internet users in 2022, although their representation has improved since 2009.

Regarding the rest of the groups (Tables B3 and B4 in Appendix B), considering unconditional (CV_us) and conditional (CV_cs) partial indicators, the following categories were underrepresented among all internet users and daily internet users in 2022: individuals with lower incomes (Q1, bottom quintile), those who own their homes outright or rent their accommodation, individuals with long-term illnesses or disabilities, residents in Northern Ireland, people living alone, and those not in employment. For daily internet users, beyond the groups already mentioned, those with a white background, living with their partner without children, and in the second quintile of household income were also underrepresented.

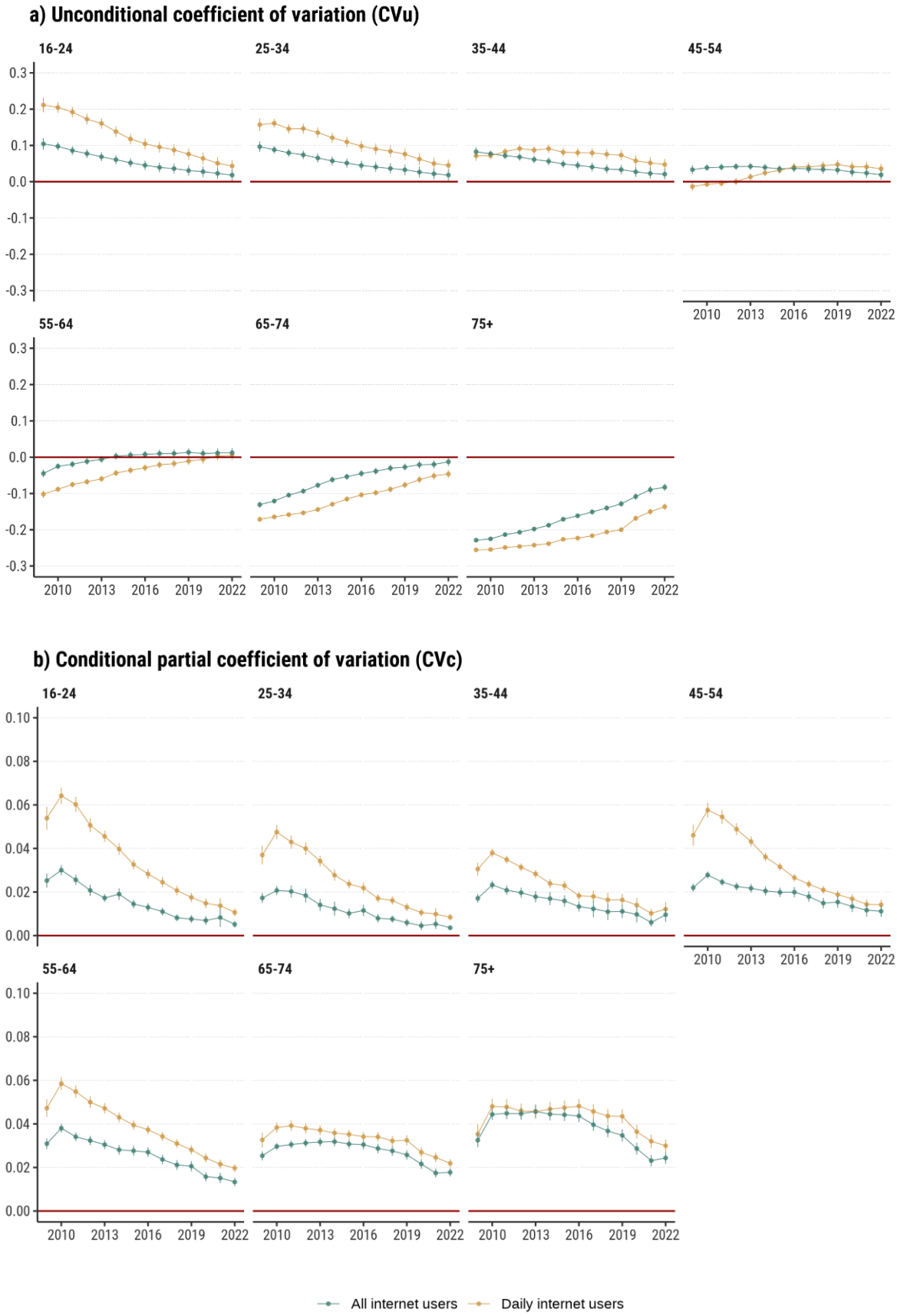

Figure 4. Category level unconditional and conditional partial coefficients of variation and 95% confidence intervals by age groups over time.
Source: UKHLS main survey–adults (aged 16 and over) residents in the United Kingdom.

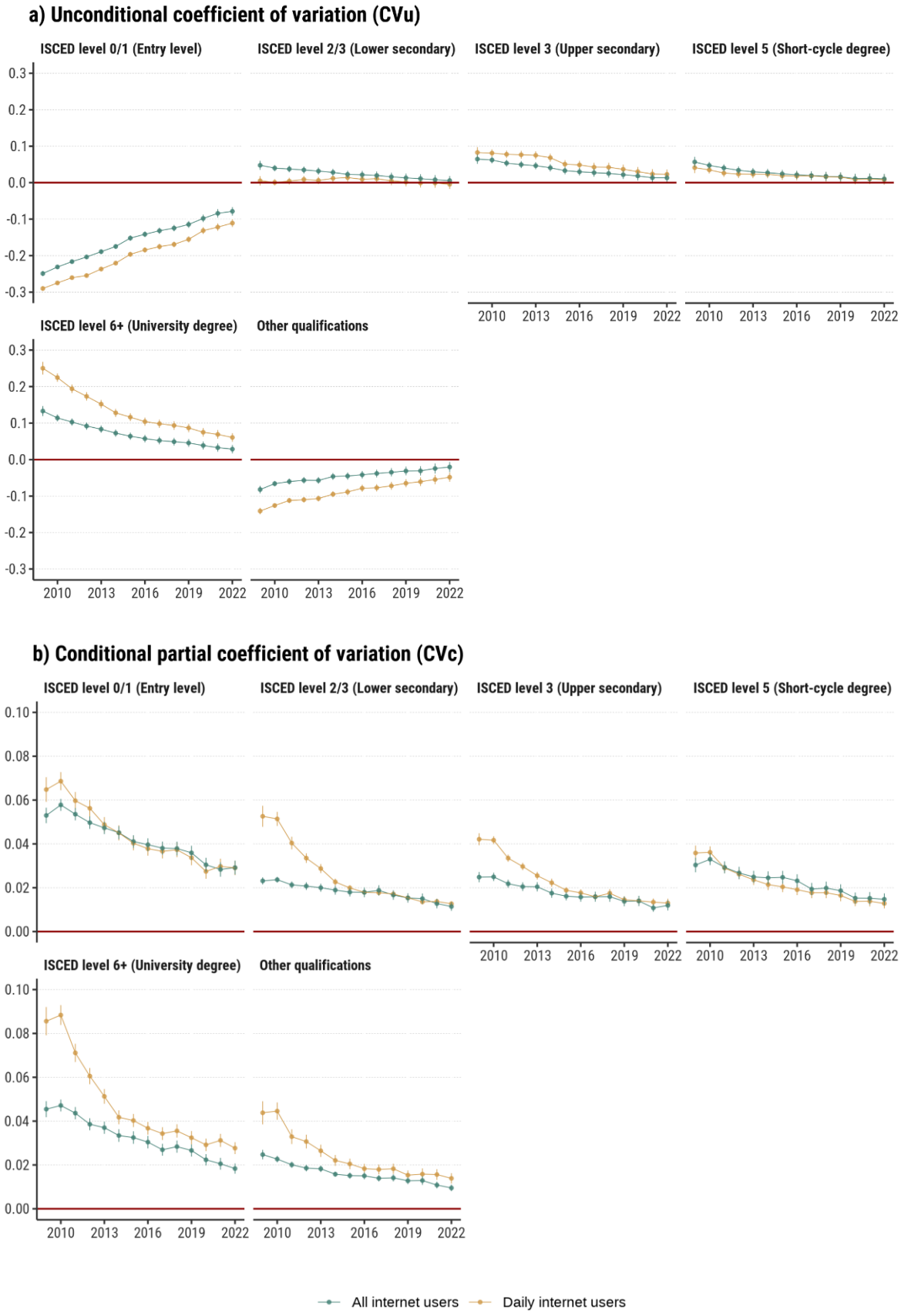

Figure 5. Category level unconditional and conditional partial coefficients of variation and 95% confidence intervals by education over time.

Source: UKHLS main survey–adults (aged 16 and over) resident in the United Kingdom.

RQ3: How does the representativeness of web respondents compare to the representativeness of different groups of internet users? How has this changed over time?

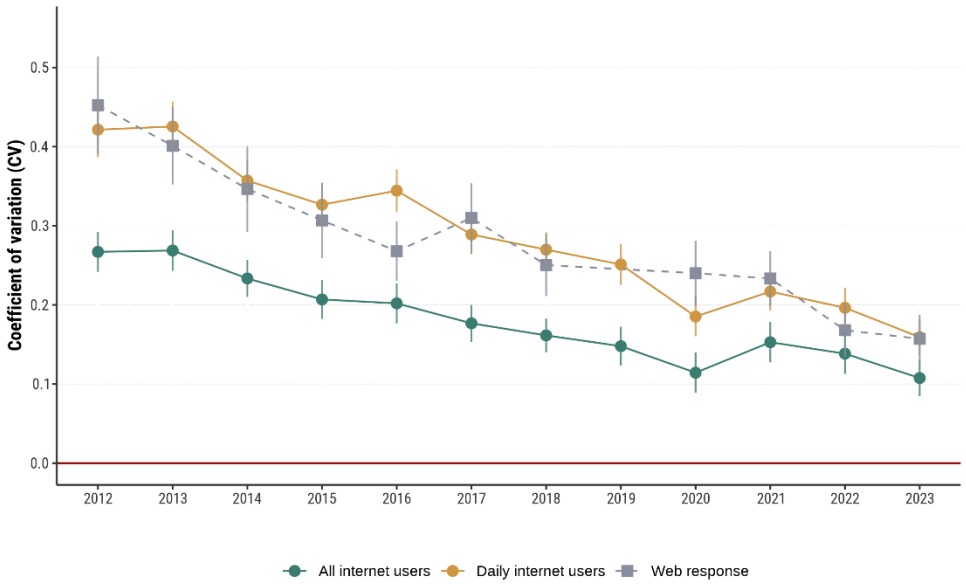

Figure 6. Coefficients of variation and 95% confidence intervals for web respondents and internet users in Great Britain over time.
Source: UKHLS Innovation Panel–adults (aged 16 and over) resident in Great Britain.

The analyses for RQ3 largely replicate those for RQ2, with two key differences: web respondents are included in the analyses and compared to internet users, and the analyses mainly focus on Great Britain, excluding Northern Ireland, using data from the UKHLS Innovation Panel. Furthermore, we provide a snapshot for the United Kingdom in 2020 using data from the UKHLS main survey that includes ethnic background among the variables used to assess the representativeness of web respondents and internet users. The overall CVs for Great Britain, shown in Figure 6, indicate that the representativeness of web respondents has increased steadily between 2012 and 2023, in parallel with the narrowing of the digital divide. The sample of web respondents exhibits similar levels of representativeness to daily internet users, but is always less representative than the group of all internet users. However, this gap has narrowed between 2012 and 2023, and the differences have become negligible (i.e. 95% confidence intervals overlap) in the last two years. The analysis for the United Kingdom in 2020 is not directly comparable to the results from Great Britain, as the propensity model for the UK has a slightly different specification. However, the UK results align with those observed for Great Britain in 2020. The overall CV of web respondents in the UK, .29, 95% CI [.27, .31],

is slightly higher than that of daily internet users, .26, 95% CI [.24, .28], whereas all internet users, .18, 95% CI [.16, .20], exhibit the lowest coefficient of variation.

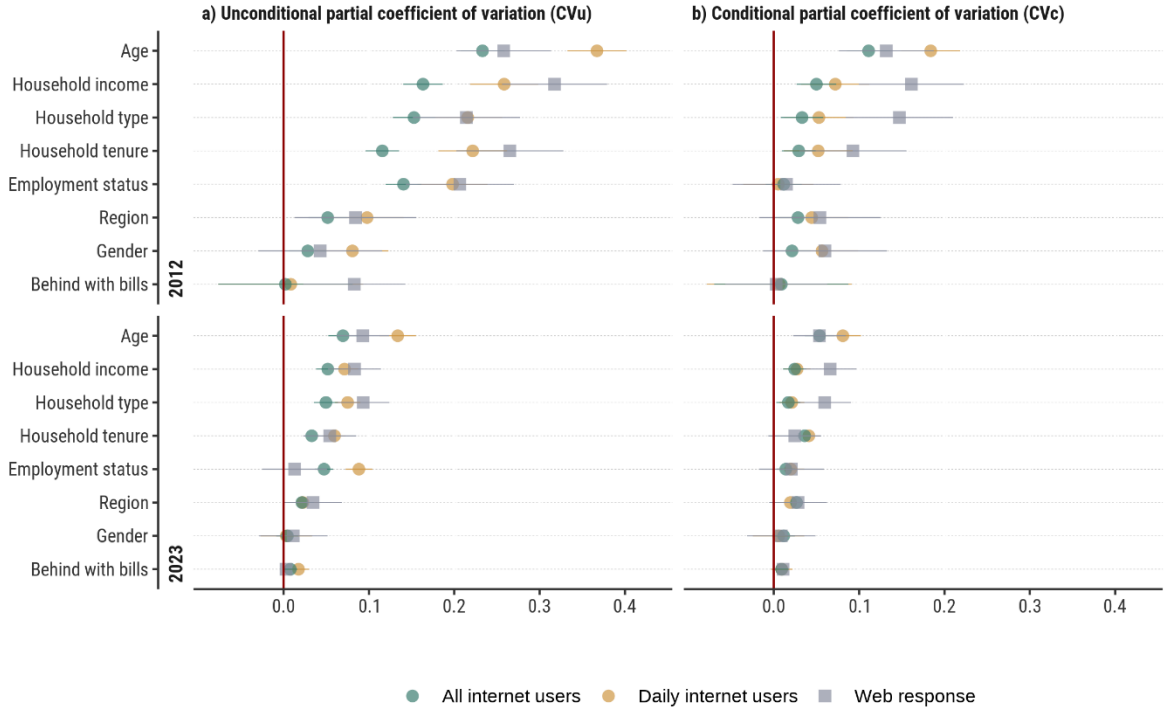

Figure 7. Variable level unconditional and conditional partial coefficients of variation and 95% confidence intervals for 2012 and 2023.
Source: UKHLS Innovation Panel–adults (aged 16 and over) resident in Great Britain.

Figure 7 shows the unconditional and conditional partial coefficients of variation at the variable level for web respondents, daily and all internet users in 2012 and 2023 for Great Britain (Tables B5 and B6 in Appendix B). Considering both unconditional and conditional partial indicators, we observe that for web respondents in 2012, age, household income, tenure, and household type exhibited a similar magnitude. As observed in the analysis of RQ2, age was again the most relevant factor for all internet users and daily users. In 2023, age remains the most relevant factor for internet users, while for web respondents, age, household income, and household type exhibit a similar level of ability to explain the lack of representativeness. The variable-level results of the analysis for the UK in 2020 are presented in Figure 8. The results partly align with those observed in Great Britain. For web respondents, age, household type, and tenure were the most relevant variables in explaining the lack

of representativeness, followed by gender, ethnicity, and household income. Age was the most important factor for internet users, followed by household type and income.

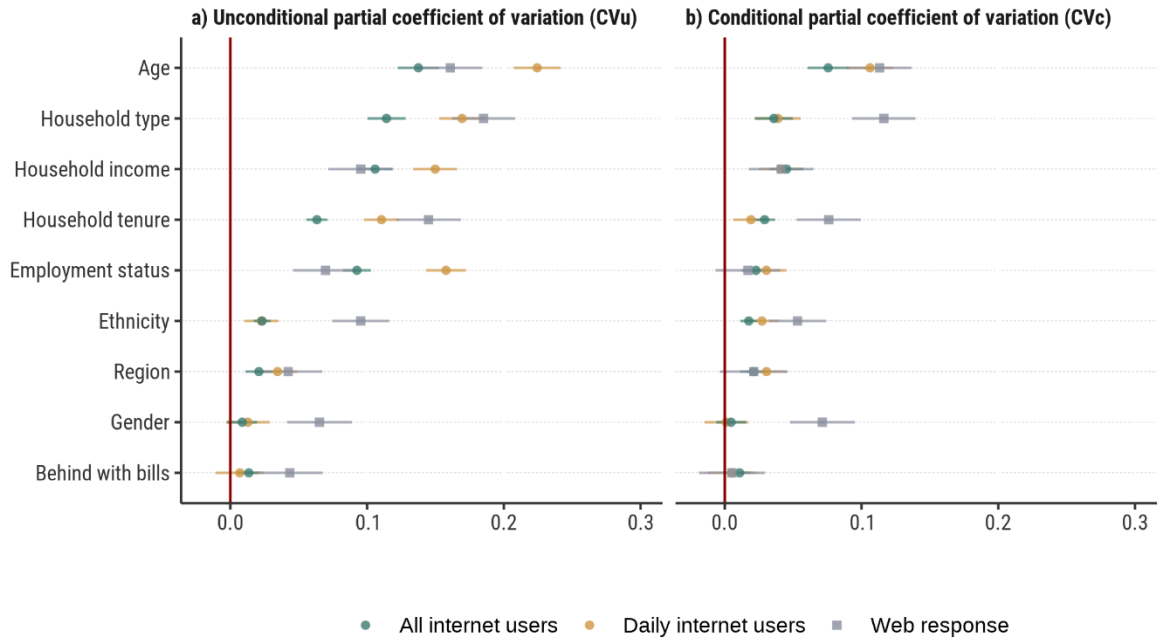

Figure 8. Variable level unconditional and conditional partial coefficients of variation and 95% confidence intervals.
Source: UKHLS main survey 2020–adults (aged 16 and over) resident in the United Kingdom.

The category-level unconditional and conditional partial coefficients of variation provide insight into whether the lack of representativeness of web respondents is mainly due to the lack of coverage of non-internet users or due to non-response. If the lack of coverage is the main issue, we would expect the level of representativeness of web respondents to be similar to or better than that of internet users. Conversely, if non-response is the main problem, we would expect the level of representativeness of web respondents to be lower compared to that of all internet users.

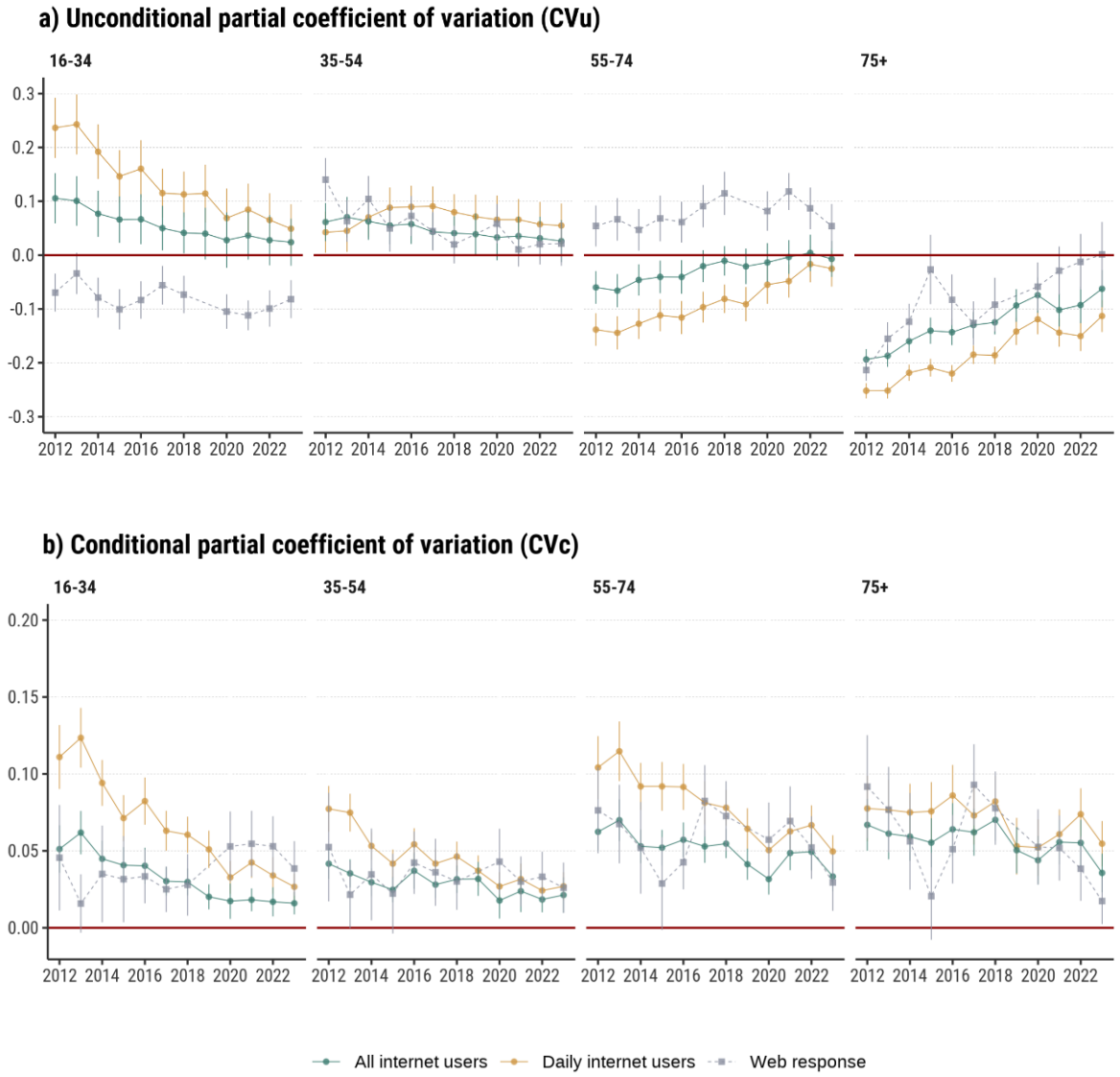

Figure 9. Category level unconditional and conditional partial coefficients of variation and 95% confidence intervals by age groups over time.
Source: UKHLS Innovation Panel–adults (aged 16 and over) resident in Great Britain.

Figure 9 presents the category level unconditional and conditional partial coefficients of variation for internet users and web respondents by age group. Despite being early internet adopters, the youngest age group (16-34) has been consistently underrepresented among web survey respondents. Although their overrepresentation among internet users has declined over time as internet access became more widespread, low web survey response rates have generated a persistent underrepresentation of this group. This suggests that in this group, the low representativeness of web respondents is due to non-response. Those aged between 55 and 74 were underrepresented among all internet users between 2012 and 2016, but have been overrepresented among web respondents in all years. This indicates they have a higher average propensity of response compared to the full sample, which helps balance out the underrepresentation among internet users. The underrepresentation of the eldest age

group—75 and over—observed in most years among internet users and web respondents mainly results from limited coverage. The values of the partial unconditional indicators are consistent across internet users and web respondents, although in 2015, 2021, 2022, and 2023, this age group was accurately represented among web respondents. The 2020 UK analysis presents similar results regarding the representation of age groups (see Figure 10).

The remaining category level partial coefficients of variation for Great Britain are available in Tables B7 and B8 in Appendix B. Here, we summarise the subgroups that are underrepresented in 2023 and discuss the likely origin of the lack of representativeness. Some groups are underrepresented among web respondents but accurately represented among internet users, indicating that differential non-response to the web survey is the main issue. These groups are males, individuals in the third quintile of household income, and those who rent their accommodation or live in "other" types of households. In contrast, some groups exhibit a higher degree of non-coverage, such as those who were non-employed or in the first quintile of household income. The results for the UK in 2020 are shown in Figure 10. The results are consistent with those observed for Great Britain, and include those with a Black ethnic origin and lone parents as groups underrepresented due to non-response to the web survey.

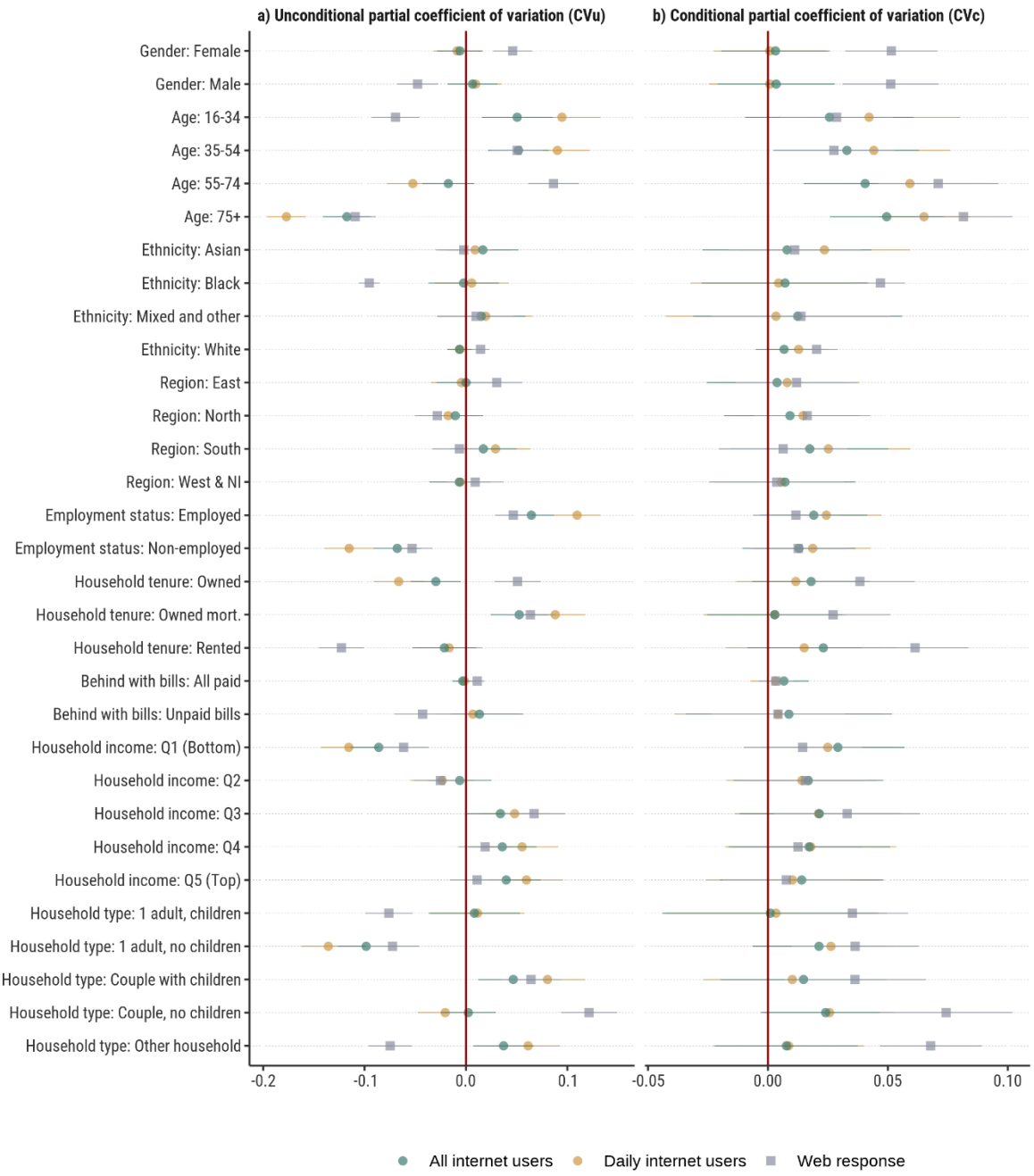

Figure 10. Category level unconditional and conditional partial coefficients of variation and 95% confidence intervals.

Source: UKHLS main survey 2020–adults (aged 16 and over) resident in the United Kingdom.

5. Discussion

The internet has become a nearly universal technology in many countries. Our results show that only 0.7% of the adult population in the United Kingdom lacked internet access in 2022. Similar trends are observed in other developed countries, where the material barriers are no longer the most important ones to explain the digital divide (van Deursen and van Dijk 2015; OECD 2024). This scenario, where virtually the entire adult population has internet access, suggests that it may be feasible to use web-only surveys to represent the general population. This change could potentially shift the current trade-off between data quality and survey costs, moving away from more expensive mixed-mode designs. In this paper, we examined the relationship between the digital divide and the representativeness of web-only surveys in the United Kingdom, and how these have changed over time.

The first research question addressed the evolution of internet access and use in the UK. We found that the digital divide is closing, but not disappearing. Internet use has surged since 2009, with 86.7% of the adult population using the internet daily in 2022, a 44.3 percentage point increase. However, in addition to the 0.7% who do not have internet access, there is a group (4.8%) that, despite having internet access, never uses it.

The second question examined the representativeness and characteristics of internet users over time. According to the results, internet users—regardless of whether we define them as all internet users or daily internet users—are becoming increasingly similar to the general population. This improvement reflects both the expansion of internet adoption and the diversification of user demographics, particularly among groups that were not early adopters of technology. However, in 2022, the group of all internet users was still not representative of the general population, meaning that the digital divide is still relevant to explain the differences between internet users and non-users. Two main groups of factors explain the digital divide: one relates to ageing and the other to social stratification. Individuals aged 75 and over are underrepresented to a greater extent, which aligns with the findings in previous studies on the digital divide (e.g., Blank et al. 2020; Helsper 2017). The results also show how the digital divide has been narrowing as older cohorts are replaced by younger ones who are more familiar with the technology. Although this trend is likely to continue, some issues related to ageing, such as a greater risk of disability or long-term illness, will still pose a barrier to internet use (Helsper and Reisdorf 2017; Ueno et al. 2023). The other main factor to explain the digital divide is education. Individuals with no qualifications have been systematically underrepresented among internet users. This finding relates to a broader set of characteristics associated with a lower socio-economic level that were underrepresented among internet users, including individuals on lower incomes, those who are non-employed, or those renting their accommodation. This suggests

that some internet non-users are not only digitally excluded, but also excluded from other social domains (Dutwin and Buskirk 2023; Scheerder et al. 2017).

The third research question compared the level of representativeness of internet users to that of web respondents to understand the relationship between the two groups. The comparison between internet users and web survey respondents reveals a more complex picture than simple coverage considerations might suggest. Our analysis of Great Britain (2012-23) found that while web respondent representativeness has improved alongside internet adoption, important divergences emerge between who uses the internet and who participates in web surveys. Some groups are mainly underrepresented among internet users, including those aged 75 and over, the non-employed, and those on lower incomes. Conversely, we found other groups to be underrepresented, mainly due to web non-response, including males, the age group between 16 and 34, those in the third quintile of household income, renters, and individuals living in households of other types. Individuals with a black ethnic background and lone parents were also identified as underrepresented groups in the 2020 UKHLS main survey analysis.

Our results suggest that web-only surveys may become viable for general population research in the United Kingdom, with conditions. The representativeness of internet users has improved significantly since 2009, and web respondents show similar patterns. However, in 2022, there is a group of internet non-users—5.5 % of the adult population, where motivational and skill barriers, rather than material barriers, explain the digital exclusion (van Deursen and van Dijk 2015). This group will be systematically excluded from any web-only survey, jeopardising sample representativeness and inclusiveness (Dutwin and Buskirk 2023). In addition, several reasons suggest that a further increase in the representativeness of internet users might not lead to an improvement in the representativeness of web respondents. This and previous studies have demonstrated the relationship between the digital divide and social exclusion, which is also an important explanatory factor in understanding survey non-response. The group of non-internet users shares some characteristics—lower level of education or lower incomes—with survey non-respondents (Dutwin and Buskirk 2023; Herzing and Blom 2019). It is likely that even if they become internet users, they might not respond to web surveys. Recent work by Moore et al. (2025) using the same UKHLS data supports this interpretation. They found that adding face-to-face follow-ups to web surveys did not improve sample representativeness in the two most recent years examined, 2021 and 2022. This suggests that social stratification and exclusion may be the primary factors contributing to the lack of representativeness in web surveys today.

A final thought concerns the representativeness and inclusiveness of a web-only sample. The concept of representativeness we used in this research is tied to a set of auxiliary variables available for

respondents and non-respondents (and internet users and non-users) (Schouten et al. 2011). Our analysis suggests that web-only surveys may achieve statistical representativeness—meaning the subsample of web respondents mirrors the full sample on a set of measured characteristics—while failing to include certain groups and their voices. The ability to include these groups is fundamental for policy making and the study of certain groups of the population (Lynn 2024; Olsen and Orr 2016).

This study has several limitations. First, the assessment of representativeness relies on a restricted set of auxiliary variables available for respondents and non-respondents (or internet users and non-users). Although these variables capture key sociodemographic and economic characteristics, they may not fully account for unobserved factors that also influence internet use and survey response, such as attitudes toward technology, privacy concerns, personality traits, lifestyle or cultural factors (Herzing and Blom 2019). Second, the operationalisation of internet use through frequency of use provides only a partial picture of digital engagement, as it does not distinguish between types of online activities that may be more or less relevant to survey participation (van Deursen and van Dijk 2015). Third, the analysis is limited to the United Kingdom; therefore, the findings may not be directly generalizable to contexts where internet adoption and digital inequalities follow different trajectories. Finally, the estimates of representativeness are based on a sample of a longitudinal study. We used a set of weights to mitigate the impact of differential attrition, but this should be considered when interpreting the results.

Acknowledgements

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Appendix A. Missing data and descriptives

This appendix contains a detailed explanation of the imputation and descriptives of the paper “Are we stepping into the future? Exploring the representativeness of web-only surveys of the general population”

Missing data

The variables used for the analysis had missing values. Table A1 (column Obs.) shows the percentage of missing values for the variables for each wave of the main survey individual respondents involved in the analysis. Table A2 (column Obs.) presents the same information for the datasets of the Innovation Panel.

We benefited from the longitudinal design of *Understanding Society* to minimise the impact of missingness and enable a complete case analysis. To mitigate the impact of missing data we imputed missing values using information from the previous and following waves (IPFW). However, this technique assumes that the state of sample members has not changed between the observation and the wave with a missing value, which might introduce some bias in the estimates (Kenward & Molenberghs, 2009; Saha & Jones, 2009). We limited the number of previous and following waves used in the imputation to enhance the use of the panel information while minimising the risks associated with this method. We limited the range of values used for the imputation to the previous and following two waves. Table A1 and Table A2 (columns IPFW) present the remaining missing values if the information is imputed using the previous and following waves for the datasets of the main survey and the innovation panel, respectively. The tables show that the level of missingness decreases substantially when information from the previous and following waves is considered.

For the datasets of sample members issued to the web fieldwork (IP and main survey) an imputation of missing values was carried out before computing the tailored weight. More details about the imputation and the tailored weight are available in appendices A1 and A2 in Moore et al. (2025).

Table A1.UKHLS main survey, individual respondents: Percentage of missing values for each variable as observed (Obs.) and after the imputation from previous and following waves (IPFW) by wave

	Wave 1 (2009-11)		Wave 2 (2010-12)		Wave 3 (2011-13)		Wave 4 (2012-14)		Wave 5 (2013-15)		Wave 6 (2014-16)		Wave 7 (2015-17)	
	Obs.	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**
All variables missing	1.2	0.6	2.1	1.0	8.8	1.8	9.9	2.0	10.5	3.5	10.4	4.1	10.7	3.1
Internet use	0.4	0.2	0.0	0.0	7.7	1.3	8.4	1.6	8.6	3.1	7.5	3.0	6.8	2.6
Health status	0.3	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.2	0.1	0.2	0.0
Tenure status	0.3	0.1	0.2	0.0	0.3	0.0	0.9	0.0	1.4	0.0	2.2	0.6	1.3	0.1
Education	0.2	0.1	1.2	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.6	0.5	2.6	0.4
Ethnic background	0.1	0.1	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Employment status	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gender	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Region	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Urban	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Household income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.7	0.0
Household type	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.4	0.7	0.0
Behind bills	0.4	0.2	0.2	0.0	0.4	0.0	0.3	0.0	0.7	0.0	2.3	0.5	1.1	0.1
Base (n)		50,994		54,568		49,692		47,074		44,837		45,192		42,170
	Wave 8 (2016-18)		**Wave 9 (2017-19)**		**Wave 10 (2018-20)**		**Wave 11 (2019-21)**		**Wave 12 (2020-22)**		**Wave 13 (2021-23)**		**Wave 14 (2022-24)**	
	Obs.	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**
All variables missing	8.8	2.4	8.2	2.9	6.9	2.7	8.7	2.1	5.7	1.7	6.1	2.1	7.0	3.6
Internet use	4.4	2.0	3.1	1.4	2.4	1.0	1.6	0.6	0.8	0.2	0.6	0.2	0.6	0.4
Health status	0.2	0.0	0.2	0.0	0.3	0.0	0.4	0.0	0.4	0.0	0.5	0.0	0.6	0.2
Tenure status	2.0	0.1	3.1	0.1	2.5	0.2	3.3	0.2	3.2	0.3	3.2	0.5	4.3	1.8
Education	2.2	0.4	1.8	1.4	1.7	1.4	1.5	1.2	1.3	1.1	1.5	1.3	1.4	1.3
Ethnic background	0.5	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.4	0.4
Employment status	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0
Gender	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Region	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Urban	0.0	0.0	0.1	0.0	0.1	0.0	2.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Household income	1.3	0.1	2.5	0.1	2.1	0.1	2.2	0.2	2.5	0.3	2.8	0.4	3.8	1.5
Household type	1.3	0.1	2.5	0.1	2.1	0.1	2.2	0.2	2.5	0.3	2.8	0.4	3.8	1.5
Behind bills	1.6	0.1	2.9	0.1	2.5	0.2	2.6	0.2	3.0	0.3	3.4	0.5	4.3	1.7
Base (n)		39,294		36,058		34,319		32,008		29,271		27,998		35,471

Table A2. UKHLS Innovation Panel, individual respondents: Percentage of missing values for each variable as observed (Obs.) and after the imputation from previous and following waves (IPFW) by wave

	Wave 5 (2012)		Wave 6 (2013)		Wave 7 (2014)		Wave 8 (2015)		Wave 9 (2016)		Wave 10 (2017)	
	Obs.	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**
All variables missing	10.1	4.0	28.2	3.4	23.7	2.4	7.7	2.6	6.5	2.2	10.5	5.0
Internet use	7.0	2.9	5.9	2.6	3.2	1.5	4.7	1.6	4.2	1.5	3.5	1.8
Health status	0.2	0.0	20.3	0.0	16.2	0.0	0.3	0.0	1.5	0.0	0.2	0.0
Tenure status	1.6	0.1	1.3	0.0	3.9	0.3	1.4	0.0	2.5	0.0	4.7	1.2
Employment status	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.1	0.0
Gender	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
Age	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	1.2	0.0	0.4	0.2
Education	1.0	1.0	0.8	0.8	0.5	0.5	0.7	0.7	1.9	0.7	2.1	2.1
Region	0.0	0.0	0.3	0.0	0.4	0.0	0.4	0.1	1.2	0.1	0.1	0.1
Urban	0.0	0.0	0.3	0.0	0.4	0.0	0.4	0.1	1.2	0.1	0.1	0.1
Behind with bills	2.1	0.0	1.1	0.0	4.1	0.3	1.5	0.0	2.5	0.0	2.1	0.0
Household income	1.4	0.0	0.1	0.0	3.6	0.2	1.1	0.0	2.3	0.0	1.9	0.0
Household type	1.4	0.0	0.1	0.0	3.6	0.2	1.1	0.0	2.3	0.0	1.9	0.0
Base (n)		2,142		2,149		2,413		2,378		2,263		2,570
	Wave 11 (2018)		**Wave 12 (2018)**		**Wave 13 (2020)**		**Wave 14 (2021)**		**Wave 15 (2022)**		**Wave 16 (2023)**	
	Obs.	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**	**Obs.**	**IPFW**
All variables missing	8.3	4.8	8.5	3.0	5.8	2.3	8.1	4.9	8.9	4.6	8.5	5.5
Internet use	3.2	1.9	2.8	0.8	0.7	0.2	0.3	0.1	1.3	0.3	0.9	0.4
Health status	0.4	0.1	0.6	0.0	0.1	0.0	0.4	0.1	0.3	0.0	0.4	0.0
Tenure status	1.9	0.4	3.0	0.0	3.2	0.2	3.5	0.7	3.1	0.3	2.5	0.5
Employment status	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gender	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Age	0.3	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Education	2.4	2.4	2.1	2.1	1.8	1.8	4.1	4.1	4.0	4.0	4.6	4.6
Region	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Urban	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Behind with bills	2.1	0.4	3.7	0.0	3.0	0.3	3.6	0.6	3.5	0.3	2.5	0.5
Household income	1.7	0.3	2.7	0.0	2.5	0.2	3.0	0.6	2.9	0.3	2.1	0.5
Household type	1.7	0.3	2.7	0.0	2.5	0.2	3.0	0.6	2.9	0.3	2.1	0.5
Base (n)		2,990		2,213		2,267		3,061		2,720		2,847

Descriptives

The following tables present the frequencies and percentages for the different variables used in the analysis for each study—main survey and Innovation Panel—and sample—individual respondents and all sample members issued to the web.

Table A3. UKHLS main survey, individual respondents: frequencies of the variables used in the analysis by year

	2009 (Wave 1)	2010 (Waves 1-2)	2011 (Waves 2-3)	2012 (Waves 3-4)	2013 (Waves 4-5)	2014 (Waves 5-6)	2015 (Waves 6-7)	2016 (Waves 7-8)	2017 (Waves 8-9)	2018 (Waves 9-10)	2019 (Waves 10-11)	2020 (Waves 11-12)	2021 (Waves 12-13)	2022 (Waves 13-14)
Internet use														
Daily	10,215 (38%)	24,990 (43%)	24,924 (49%)	26,420 (56%)	27,733 (62%)	27,789 (67%)	30,927 (72%)	29,830 (75%)	28,457 (77%)	26,897 (78%)	26,439 (80%)	25,774 (84%)	24,421 (86%)	26,863 (87%)
Several times week/month	6,593 (25%)	13,435 (23%)	11,431 (22%)	9,476 (20%)	7,856 (18%)	6,309 (15%)	5,516 (13%)	4,709 (12%)	4,237 (11%)	3,793 (11%)	3,404 (10%)	2,425 (7.9%)	1,915 (6.8%)	1,955 (6.4%)
Once a month or less	1,511 (5.7%)	2,775 (4.8%)	2,034 (4.0%)	1,624 (3.4%)	1,325 (3.0%)	1,084 (2.6%)	977 (2.3%)	873 (2.2%)	761 (2.0%)	649 (1.9%)	637 (1.9%)	475 (1.6%)	422 (1.5%)	416 (1.4%)
Never use	3,920 (15%)	7,945 (14%)	6,648 (13%)	6,020 (13%)	5,138 (11%)	4,431 (11%)	4,117 (9.6%)	3,509 (8.8%)	2,869 (7.7%)	2,543 (7.4%)	2,296 (6.9%)	1,697 (5.5%)	1,343 (4.8%)	1,361 (4.4%)
No access	4,424 (17%)	8,548 (15%)	6,093 (12%)	3,788 (8.0%)	2,727 (6.1%)	1,703 (4.1%)	1,292 (3.0%)	997 (2.5%)	817 (2.2%)	577 (1.7%)	392 (1.2%)	211 (0.7%)	140 (0.5%)	150 (0.5%)
Missing	59 (0.2%)	47 (<0.1%)	389 (0.8%)	692 (1.4%)	1,090 (2.4%)	1,292 (3.0%)	1,323 (3.0%)	887 (2.2%)	605 (1.6%)	399 (1.1%)	312 (0.9%)	80 (0.3%)	41 (0.1%)	92 (0.3%)
Gender														
Male	12,076 (45%)	26,406 (46%)	23,609 (46%)	22,118 (46%)	21,241 (46%)	19,774 (46%)	20,449 (46%)	18,668 (46%)	17,093 (45%)	15,669 (45%)	14,989 (45%)	13,578 (44%)	12,487 (44%)	13,624 (44%)
Female	14,646 (55%)	31,334 (54%)	27,910 (54%)	25,902 (54%)	24,628 (54%)	22,834 (54%)	23,703 (54%)	22,137 (54%)	20,653 (55%)	19,189 (55%)	18,491 (55%)	17,083 (56%)	15,794 (56%)	17,210 (56%)
Missing	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)	3 (<0.1%)
Age														
16-24	3,772 (14%)	8,045 (14%)	7,137 (14%)	6,655 (14%)	6,439 (14%)	5,845 (14%)	6,083 (14%)	5,377 (13%)	4,845 (13%)	4,237 (12%)	4,000 (12%)	3,587 (12%)	3,052 (11%)	3,200 (10%)
25-34	4,567 (17%)	9,259 (16%)	7,769 (15%)	6,982 (15%)	6,476 (14%)	5,730 (13%)	6,259 (14%)	5,355 (13%)	4,805 (13%)	4,321 (12%)	4,057 (12%)	3,747 (12%)	3,450 (12%)	3,927 (13%)
35-44	5,196 (19%)	10,907 (19%)	9,470 (18%)	8,619 (18%)	7,853 (17%)	7,001 (16%)	7,515 (17%)	6,805 (17%)	6,066 (16%)	5,416 (16%)	5,019 (15%)	4,436 (14%)	4,015 (14%)	4,345 (14%)
45-54	4,496 (17%)	10,046 (17%)	9,129 (18%)	8,684 (18%)	8,421 (18%)	7,915 (19%)	8,112 (18%)	7,557 (19%)	6,948 (18%)	6,345 (18%)	6,115 (18%)	5,538 (18%)	5,042 (18%)	5,270 (17%)
55-64	3,905 (15%)	8,573 (15%)	7,847 (15%)	7,169 (15%)	6,884 (15%)	6,524 (15%)	6,694 (15%)	6,475 (16%)	6,217 (16%)	5,927 (17%)	5,712 (17%)	5,486 (18%)	5,222 (18%)	5,657 (18%)
65-74	2,824 (11%)	6,401 (11%)	6,030 (12%)	5,942 (12%)	5,872 (13%)	5,725 (13%)	5,593 (13%)	5,457 (13%)	5,272 (14%)	5,128 (15%)	5,050 (15%)	4,704 (15%)	4,490 (16%)	4,822 (16%)
75+	1,962 (7.3%)	4,509 (7.8%)	4,136 (8.0%)	3,969 (8.3%)	3,924 (8.6%)	3,868 (9.1%)	3,870 (8.8%)	3,777 (9.3%)	3,593 (9.5%)	3,484 (10.0%)	3,526 (11%)	3,163 (10%)	3,011 (11%)	3,604 (12%)
Missing	0 (0%)	0 (0%)	1 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	26 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)	0 (0%)	12 (<0.1%)
Ethnic background														
White	21,906 (82%)	48,042 (84%)	43,231 (84%)	40,363 (85%)	38,473 (84%)	35,816 (85%)	34,718 (79%)	32,540 (80%)	30,272 (80%)	28,369 (82%)	27,357 (82%)	25,248 (82%)	23,600 (84%)	25,889 (84%)
Asian	2,673 (10%)	5,585 (9.7%)	4,715 (9.2%)	4,354 (9.1%)	4,239 (9.3%)	3,936 (9.3%)	5,506 (13%)	4,968 (12%)	4,634 (12%)	4,092 (12%)	3,932 (12%)	3,486 (11%)	2,998 (11%)	3,150 (10%)
Black	1,379 (5.2%)	2,477 (4.3%)	2,114 (4.1%)	1,882 (3.9%)	1,734 (3.8%)	1,571 (3.7%)	2,376 (5.4%)	1,978 (4.9%)	1,684 (4.5%)	1,417 (4.1%)	1,275 (3.8%)	1,113 (3.6%)	943 (3.3%)	952 (3.1%)
Mixed and other	719 (2.7%)	1,418 (2.5%)	1,213 (2.4%)	1,113 (2.3%)	1,097 (2.4%)	1,007 (2.4%)	1,266 (2.9%)	1,117 (2.8%)	1,035 (2.8%)	886 (2.5%)	841 (2.5%)	793 (2.6%)	721 (2.6%)	780 (2.5%)

	2009 (Wave 1)	2010 (Waves 1-2)	2011 (Waves 2-3)	2012 (Waves 3-4)	2013 (Waves 4-5)	2014 (Waves 5-6)	2015 (Waves 6-7)	2016 (Waves 7-8)	2017 (Waves 8-9)	2018 (Waves 9-10)	2019 (Waves 10-11)	2020 (Waves 11-12)	2021 (Waves 12-13)	2022 (Waves 13-14)
Missing	45 (0.2%)	218 (0.4%)	246 (0.5%)	308 (0.6%)	326 (0.7%)	278 (0.7%)	286 (0.6%)	202 (0.5%)	121 (0.3%)	94 (0.3%)	75 (0.2%)	22 (<0.1%)	20 (<0.1%)	66 (0.2%)
Education														
Degree	5,586 (21%)	12,022 (21%)	11,100 (22%)	10,753 (22%)	10,638 (23%)	10,143 (24%)	11,190 (25%)	10,605 (26%)	10,077 (27%)	9,487 (28%)	9,406 (29%)	9,212 (30%)	8,750 (31%)	9,819 (32%)
A level etc	4,990 (19%)	11,646 (20%)	10,716 (21%)	10,181 (21%)	9,814 (21%)	9,263 (22%)	9,497 (22%)	8,787 (22%)	8,035 (21%)	7,337 (21%)	7,034 (21%)	6,470 (21%)	5,949 (21%)	6,321 (21%)
GCSE etc	5,526 (21%)	12,194 (21%)	10,909 (21%)	10,123 (21%)	9,654 (21%)	8,772 (21%)	9,128 (21%)	8,211 (20%)	7,597 (20%)	6,878 (20%)	6,550 (20%)	5,930 (20%)	5,398 (19%)	5,909 (19%)
Other qual	2,875 (11%)	5,788 (10%)	5,035 (9.8%)	4,575 (9.6%)	4,253 (9.3%)	3,877 (9.1%)	3,907 (8.9%)	3,609 (8.9%)	3,308 (8.8%)	2,959 (8.6%)	2,779 (8.4%)	2,379 (7.9%)	2,149 (7.7%)	2,297 (7.5%)
No qual	4,801 (18%)	9,667 (17%)	7,813 (15%)	6,802 (14%)	6,189 (14%)	5,533 (13%)	5,182 (12%)	4,623 (11%)	4,115 (11%)	3,511 (10%)	3,169 (9.6%)	2,431 (8.0%)	2,139 (7.7%)	2,336 (7.7%)
Other higher	2,909 (11%)	6,189 (11%)	5,704 (11%)	5,409 (11%)	5,167 (11%)	4,895 (12%)	5,023 (11%)	4,794 (12%)	4,467 (12%)	4,184 (12%)	4,050 (12%)	3,855 (13%)	3,555 (13%)	3,749 (12%)
Missing	35 (0.1%)	234 (0.4%)	242 (0.5%)	177 (0.4%)	154 (0.3%)	125 (0.3%)	225 (0.5%)	176 (0.4%)	147 (0.4%)	502 (1.4%)	492 (1.5%)	385 (1.3%)	342 (1.2%)	406 (1.3%)
Long standing illness or disability														
Illness or disability	9,352 (35%)	20,083 (35%)	17,729 (34%)	16,322 (34%)	15,608 (34%)	14,681 (34%)	14,473 (33%)	13,878 (34%)	13,321 (35%)	12,493 (36%)	12,396 (37%)	10,553 (34%)	9,063 (32%)	10,497 (34%)
Healthy	17,335 (65%)	37,618 (65%)	33,781 (66%)	31,693 (66%)	30,258 (66%)	27,924 (66%)	29,655 (67%)	26,918 (66%)	24,421 (65%)	22,362 (64%)	21,081 (63%)	20,108 (66%)	19,216 (68%)	20,307 (66%)
Missing	35 (0.1%)	39 (<0.1%)	9 (<0.1%)	5 (<0.1%)	3 (<0.1%)	3 (<0.1%)	24 (<0.1%)	9 (<0.1%)	4 (<0.1%)	3 (<0.1%)	3 (<0.1%)	1 (<0.1%)	3 (<0.1%)	33 (0.1%)
Employment status														
Non-employed	12,025 (45%)	25,889 (45%)	22,952 (45%)	21,390 (45%)	20,138 (44%)	18,442 (43%)	19,139 (43%)	17,687 (43%)	16,437 (44%)	15,201 (44%)	14,650 (44%)	13,533 (44%)	12,551 (44%)	13,560 (44%)
Employed	14,697 (55%)	31,849 (55%)	28,565 (55%)	26,630 (55%)	25,731 (56%)	24,166 (57%)	25,008 (57%)	23,116 (57%)	21,308 (56%)	19,655 (56%)	18,828 (56%)	17,129 (56%)	15,730 (56%)	17,275 (56%)
Missing	0 (0%)	2 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	5 (<0.1%)	2 (<0.1%)	1 (<0.1%)	2 (<0.1%)	2 (<0.1%)	0 (0%)	1 (<0.1%)	2 (<0.1%)
Employment status														
Self-employed	1,879 (7.0%)	4,258 (7.4%)	3,769 (7.3%)	3,576 (7.4%)	3,539 (7.7%)	3,361 (7.9%)	3,599 (8.2%)	3,333 (8.2%)	3,057 (8.1%)	2,773 (8.0%)	2,640 (7.9%)	2,290 (7.5%)	2,038 (7.2%)	2,107 (6.8%)
Employed	12,690 (47%)	27,197 (47%)	24,337 (47%)	22,680 (47%)	21,858 (48%)	20,423 (48%)	21,097 (48%)	19,445 (48%)	17,999 (48%)	16,640 (48%)	15,961 (48%)	14,577 (48%)	13,437 (48%)	15,148 (49%)
Unemployed	1,751 (6.6%)	3,380 (5.9%)	2,891 (5.6%)	2,622 (5.5%)	2,258 (4.9%)	1,917 (4.5%)	2,102 (4.8%)	1,719 (4.2%)	1,493 (4.0%)	1,308 (3.8%)	1,299 (3.9%)	1,398 (4.6%)	1,317 (4.7%)	1,200 (3.9%)
Student	1,922 (7.2%)	4,215 (7.3%)	3,681 (7.1%)	3,402 (7.1%)	3,317 (7.2%)	2,917 (6.8%)	3,163 (7.2%)	2,749 (6.7%)	2,505 (6.6%)	2,218 (6.4%)	2,025 (6.0%)	1,717 (5.6%)	1,460 (5.2%)	1,535 (5.0%)
Retired	5,378 (20%)	12,283 (21%)	11,433 (22%)	10,893 (23%)	10,540 (23%)	10,199 (24%)	10,144 (23%)	9,844 (24%)	9,345 (25%)	8,933 (26%)	8,727 (26%)	7,994 (26%)	7,634 (27%)	8,574 (28%)
Sick or disabled	1,099 (4.1%)	2,258 (3.9%)	1,949 (3.8%)	1,780 (3.7%)	1,635 (3.6%)	1,427 (3.3%)	1,447 (3.3%)	1,389 (3.4%)	1,298 (3.4%)	1,215 (3.5%)	1,206 (3.6%)	962 (3.1%)	869 (3.1%)	1,067 (3.5%)
Family care or other	2,001 (7.5%)	4,144 (7.2%)	3,457 (6.7%)	3,067 (6.4%)	2,722 (5.9%)	2,362 (5.5%)	2,579 (5.8%)	2,320 (5.7%)	2,044 (5.4%)	1,767 (5.1%)	1,620 (4.8%)	1,722 (5.6%)	1,521 (5.4%)	1,183 (3.8%)
Missing	2 (<0.1%)	5 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)	2 (<0.1%)	21 (<0.1%)	6 (<0.1%)	5 (<0.1%)	4 (<0.1%)	2 (<0.1%)	2 (<0.1%)	6 (<0.1%)	23 (<0.1%)
Region														

	2009 (Wave 1)	2010 (Waves 1-2)	2011 (Waves 2-3)	2012 (Waves 3-4)	2013 (Waves 4-5)	2014 (Waves 5-6)	2015 (Waves 6-7)	2016 (Waves 7-8)	2017 (Waves 8-9)	2018 (Waves 9-10)	2019 (Waves 10-11)	2020 (Waves 11-12)	2021 (Waves 12-13)	2022 (Waves 13-14)
North East	1,066	2,151	1,900	1,769	1,704	1,608	1,519	1,396	1,325	1,178	1,191	1,107	1,040	1,120
	(4.0%)	(3.7%)	(3.7%)	(3.7%)	(3.7%)	(3.8%)	(3.4%)	(3.4%)	(3.5%)	(3.4%)	(3.6%)	(3.6%)	(3.7%)	(3.6%)
North West	2,747	5,698	5,084	4,705	4,457	4,102	4,407	4,195	3,867	3,592	3,504	3,042	2,748	3,214
	(10%)	(9.9%)	(9.9%)	(9.8%)	(9.7%)	(9.6%)	(10.0%)	(10%)	(10%)	(10%)	(10%)	(9.9%)	(9.7%)	(10%)
Yorkshire and the Humber	2,118	4,462	4,049	3,796	3,742	3,497	3,788	3,599	3,307	3,130	2,981	2,660	2,418	2,730
	(7.9%)	(7.7%)	(7.9%)	(7.9%)	(8.2%)	(8.2%)	(8.6%)	(8.8%)	(8.8%)	(9.0%)	(8.9%)	(8.7%)	(8.5%)	(8.9%)
East Midlands	1,948	4,140	3,784	3,653	3,556	3,253	3,062	2,828	2,600	2,487	2,385	2,246	2,048	2,156
	(7.3%)	(7.2%)	(7.3%)	(7.6%)	(7.8%)	(7.6%)	(6.9%)	(6.9%)	(6.9%)	(7.1%)	(7.1%)	(7.3%)	(7.2%)	(7.0%)
West Midlands	2,299	4,637	4,047	3,744	3,688	3,419	3,694	3,490	3,288	2,946	2,896	2,630	2,396	2,662
	(8.6%)	(8.0%)	(7.9%)	(7.8%)	(8.0%)	(8.0%)	(8.4%)	(8.6%)	(8.7%)	(8.5%)	(8.6%)	(8.6%)	(8.5%)	(8.6%)
East of England	2,266	4,707	4,302	4,035	3,937	3,616	3,541	3,330	3,091	2,936	2,894	2,703	2,478	2,705
	(8.5%)	(8.2%)	(8.4%)	(8.4%)	(8.6%)	(8.5%)	(8.0%)	(8.2%)	(8.2%)	(8.4%)	(8.6%)	(8.8%)	(8.8%)	(8.8%)
London	3,844	7,613	6,461	5,876	5,466	5,198	6,842	5,736	5,195	4,453	4,137	3,803	3,283	3,261
	(14%)	(13%)	(13%)	(12%)	(12%)	(12%)	(15%)	(14%)	(14%)	(13%)	(12%)	(12%)	(12%)	(11%)
South East	3,179	6,656	6,028	5,626	5,409	5,022	5,006	4,744	4,379	4,066	3,903	3,753	3,464	3,818
	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)	(11%)	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)	(12%)
South West	2,057	4,276	3,927	3,745	3,645	3,414	3,325	3,096	2,907	2,762	2,663	2,458	2,374	2,573
	(7.7%)	(7.4%)	(7.6%)	(7.8%)	(7.9%)	(8.0%)	(7.5%)	(7.6%)	(7.7%)	(7.9%)	(8.0%)	(8.0%)	(8.4%)	(8.3%)
Wales	1,210	4,262	3,882	3,709	3,433	3,068	2,807	2,560	2,395	2,197	2,090	1,923	1,807	1,850
	(4.5%)	(7.4%)	(7.5%)	(7.7%)	(7.5%)	(7.2%)	(6.4%)	(6.3%)	(6.3%)	(6.3%)	(6.2%)	(6.3%)	(6.4%)	(6.0%)
Scotland	1,900	5,221	4,561	4,214	3,997	3,691	3,466	3,282	3,010	2,869	2,760	2,511	2,391	2,729
	(7.1%)	(9.0%)	(8.9%)	(8.8%)	(8.7%)	(8.7%)	(7.9%)	(8.0%)	(8.0%)	(8.2%)	(8.2%)	(8.2%)	(8.5%)	(8.8%)
Northern Ireland	2,088	3,914	3,490	3,145	2,834	2,717	2,692	2,548	2,379	2,240	2,076	1,826	1,835	2,019
	(7.8%)	(6.8%)	(6.8%)	(6.5%)	(6.2%)	(6.4%)	(6.1%)	(6.2%)	(6.3%)	(6.4%)	(6.2%)	(6.0%)	(6.5%)	(6.5%)
Missing	0 (0%)	3 (<0.1%)	4 (<0.1%)	3 (<0.1%)	1 (<0.1%)	3 (<0.1%)	3 (<0.1%)	1 (<0.1%)	3 (<0.1%)	2 (<0.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Urban														
Urban	20,840	43,903	39,012	36,276	34,561	32,068	34,185	31,409	28,812	26,400	25,026	23,032	21,047	22,841
	(78%)	(76%)	(76%)	(76%)	(75%)	(75%)	(77%)	(77%)	(76%)	(76%)	(75%)	(75%)	(74%)	(74%)
Rural	5,882	13,834	12,503	11,741	11,307	10,537	9,964	9,395	8,931	8,456	8,451	7,630	7,235	7,996
	(22%)	(24%)	(24%)	(24%)	(25%)	(25%)	(23%)	(23%)	(24%)	(24%)	(25%)	(25%)	(26%)	(26%)
Missing	0 (0%)	3 (<0.1%)	4 (<0.1%)	3 (<0.1%)	1 (<0.1%)	3 (<0.1%)	3 (<0.1%)	1 (<0.1%)	3 (<0.1%)	2 (<0.1%)	3 (<0.1%)	0 (0%)	0 (0%)	0 (0%)
Tenure status														
Owned	7,715	17,264	15,864	15,058	14,766	14,282	14,391	13,918	13,196	12,563	12,655	11,878	11,030	11,874
	(29%)	(30%)	(31%)	(31%)	(32%)	(34%)	(33%)	(34%)	(35%)	(36%)	(38%)	(39%)	(39%)	(39%)
Owned mort.	10,309	22,279	20,209	18,875	17,942	16,241	15,894	14,862	13,885	12,899	12,061	11,277	10,472	11,206
	(39%)	(39%)	(39%)	(39%)	(39%)	(38%)	(36%)	(36%)	(37%)	(37%)	(36%)	(37%)	(37%)	(37%)
Rented	8,667	18,172	15,437	14,079	13,152	12,074	13,601	11,969	10,616	9,346	8,688	7,428	6,678	7,425
	(32%)	(31%)	(30%)	(29%)	(29%)	(28%)	(31%)	(29%)	(28%)	(27%)	(26%)	(24%)	(24%)	(24%)
Missing	31 (0.1%)	25 (<0.1%)	9 (<0.1%)	8 (<0.1%)	9 (<0.1%)	11 (<0.1%)	266 (0.6%)	56 (0.1%)	49 (0.1%)	50 (0.1%)	76 (0.2%)	79 (0.3%)	102 (0.4%)	332 (1.1%)
Behind with bills														
All paid	24,615	53,893	48,436	45,318	43,448	40,393	41,784	38,790	35,744	32,818	31,504	28,898	26,629	28,434
	(92%)	(93%)	(94%)	(94%)	(95%)	(95%)	(95%)	(95%)	(95%)	(94%)	(94%)	(94%)	(94%)	(93%)
Unpaid bills	2,064	3,794	3,071	2,692	2,406	2,209	2,138	1,991	1,968	1,998	1,905	1,689	1,557	2,073
	(7.7%)	(6.6%)	(6.0%)	(5.6%)	(5.2%)	(5.2%)	(4.9%)	(4.9%)	(5.2%)	(5.7%)	(5.7%)	(5.5%)	(5.5%)	(6.8%)
Missing	43 (0.2%)	53 (<0.1%)	12 (<0.1%)	10 (<0.1%)	15 (<0.1%)	6 (<0.1%)	230 (0.5%)	24 (<0.1%)	34 (<0.1%)	42 (0.1%)	71 (0.2%)	75 (0.2%)	96 (0.3%)	330 (1.1%)
Income (quintiles)														

	2009 (Wave 1)	2010 (Waves 1-2)	2011 (Waves 2-3)	2012 (Waves 3-4)	2013 (Waves 4-5)	2014 (Waves 5-6)	2015 (Waves 6-7)	2016 (Waves 7-8)	2017 (Waves 8-9)	2018 (Waves 9-10)	2019 (Waves 10-11)	2020 (Waves 11-12)	2021 (Waves 12-13)	2022 (Waves 13-14)
Q1 (Bottom)	5,716	11,645	10,017	9,074	8,681	7,784	8,448	7,735	7,076	6,413	6,138	5,451	4,995	5,696
	(21%)	(20%)	(19%)	(19%)	(19%)	(18%)	(19%)	(19%)	(19%)	(18%)	(18%)	(18%)	(18%)	(19%)
Q2	5,601	11,858	10,546	9,821	9,245	8,685	8,851	8,120	7,611	7,116	6,688	6,067	5,486	6,023
	(21%)	(21%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(20%)	(19%)	(20%)
Q3	5,372	11,814	10,813	9,974	9,447	8,865	9,192	8,537	8,029	7,402	7,103	6,460	5,982	6,378
	(20%)	(20%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)	(21%)
Q4	5,143	11,704	10,350	9,940	9,551	9,021	9,152	8,565	8,186	7,636	7,114	6,560	6,154	6,719
	(19%)	(20%)	(20%)	(21%)	(21%)	(21%)	(21%)	(21%)	(22%)	(22%)	(21%)	(21%)	(22%)	(22%)
Q5 (Top)	4,890	10,719	9,791	9,211	8,945	8,252	8,335	7,831	6,818	6,255	6,376	6,058	5,581	5,731
	(18%)	(19%)	(19%)	(19%)	(20%)	(19%)	(19%)	(19%)	(18%)	(18%)	(19%)	(20%)	(20%)	(19%)
Missing	0 (0%)	0 (0%)	2 (<0.1%)	0 (0%)	0 (0%)	1 (<0.1%)	174 (0.4%)	17 (<0.1%)	26 (<0.1%)	36 (0.1%)	61 (0.2%)	66 (0.2%)	84 (0.3%)	290 (0.9%)
Household type														
1 adult, no children	4,005	8,340	7,190	6,636	6,391	6,017	6,193	5,905	5,625	5,349	5,170	4,802	4,533	5,222
	(15%)	(14%)	(14%)	(14%)	(14%)	(14%)	(14%)	(14%)	(15%)	(15%)	(15%)	(16%)	(16%)	(17%)
1 adult, children	1,509	3,047	2,435	2,130	1,887	1,616	1,670	1,477	1,219	1,040	940 (2.8%)	790 (2.6%)	716 (2.5%)	770 (2.5%)
	(5.6%)	(5.3%)	(4.7%)	(4.4%)	(4.1%)	(3.8%)	(3.8%)	(3.6%)	(3.2%)	(3.0%)				
Couple, no children	7,451	16,033	14,225	13,149	12,440	11,856	11,798	11,131	10,406	9,758	9,513	8,784	8,430	9,201
	(28%)	(28%)	(28%)	(27%)	(27%)	(28%)	(27%)	(27%)	(28%)	(28%)	(28%)	(29%)	(30%)	(30%)
Couple with children	6,495	14,191	12,704	11,632	10,863	9,563	10,023	9,029	8,005	7,201	6,725	5,922	5,252	5,609
	(24%)	(25%)	(25%)	(24%)	(24%)	(22%)	(23%)	(22%)	(21%)	(21%)	(20%)	(19%)	(19%)	(18%)
Other household	7,262	16,129	14,963	14,473	14,288	13,555	14,294	13,246	12,465	11,474	11,071	10,298	9,267	9,745
	(27%)	(28%)	(29%)	(30%)	(31%)	(32%)	(33%)	(32%)	(33%)	(33%)	(33%)	(34%)	(33%)	(32%)
Missing	0 (0%)	0 (0%)	2 (<0.1%)	0 (0%)	0 (0%)	1 (<0.1%)	174 (0.4%)	17 (<0.1%)	26 (<0.1%)	36 (0.1%)	61 (0.2%)	66 (0.2%)	84 (0.3%)	290 (0.9%)
Base (n)	26,722	57,740	51,519	48,020	45,869	42,608	44,152	40,805	37,746	34,858	33,480	30,662	28,282	30,837

Table A4. UKHLS Innovation Panel, individual respondents: frequencies of the variables used in the analysis by year

	2012 (Wave 5)	2013 (Wave 6)	2014 (Wave 7)	2015 (Wave 8)	2016 (Wave 9)	2017 (Wave 10)	2018 (Wave 11)	2019 (Wave 12)	2020 (Wave 13)	2021 (Wave 14)	2022 (Wave 15)	2023 (Wave 16)
Internet use												
Daily	1,105 (53%)	1,253 (60%)	1,580 (66%)	1,631 (70%)	1,619 (73%)	1,907 (76%)	2,302 (78%)	1,734 (79%)	1,944 (86%)	2,736 (89%)	2,426 (89%)	2,583 (91%)
Several times	519 (25%)	437 (21%)	405 (17%)	378 (16%)	326 (15%)	325 (13%)	342 (12%)	264 (12%)	154 (6.8%)	172 (5.6%)	166 (6.1%)	147 (5.2%)
week/month												
Once a month or less	99 (4.8%)	82 (3.9%)	75 (3.2%)	70 (3.0%)	63 (2.8%)	72 (2.9%)	74 (2.5%)	49 (2.2%)	43 (1.9%)	45 (1.5%)	27 (1.0%)	17 (0.6%)
Never use	237 (11%)	227 (11%)	252 (11%)	193 (8.3%)	174 (7.8%)	173 (6.9%)	183 (6.2%)	130 (5.9%)	115 (5.1%)	91 (3.0%)	74 (2.7%)	77 (2.7%)
No access	119 (5.7%)	94 (4.5%)	64 (2.7%)	67 (2.9%)	48 (2.2%)	47 (1.9%)	33 (1.1%)	18 (0.8%)	6 (0.3%)	15 (0.5%)	19 (0.7%)	11 (0.4%)
Missing	63 (2.9%)	56 (2.6%)	37 (1.5%)	39 (1.6%)	33 (1.5%)	46 (1.8%)	56 (1.9%)	18 (0.8%)	5 (0.2%)	2 (<0.1%)	8 (0.3%)	12 (0.4%)
Gender												
Male	997 (47%)	1,000 (47%)	1,099 (46%)	1,114 (47%)	1,041 (46%)	1,196 (47%)	1,354 (45%)	1,008 (46%)	1,018 (45%)	1,392 (45%)	1,229 (45%)	1,278 (45%)
Female	1,145 (53%)	1,149 (53%)	1,314 (54%)	1,264 (53%)	1,222 (54%)	1,374 (53%)	1,636 (55%)	1,205 (54%)	1,249 (55%)	1,669 (55%)	1,491 (55%)	1,569 (55%)
Age												
16-34	500 (23%)	539 (25%)	551 (23%)	577 (24%)	515 (23%)	599 (23%)	650 (22%)	438 (20%)	462 (20%)	762 (25%)	621 (23%)	670 (24%)
35-54	755 (35%)	734 (34%)	807 (33%)	789 (33%)	780 (34%)	855 (33%)	968 (32%)	680 (31%)	698 (31%)	936 (31%)	793 (29%)	836 (29%)
55-74	690 (32%)	683 (32%)	826 (34%)	801 (34%)	777 (34%)	898 (35%)	1,076 (36%)	841 (38%)	854 (38%)	1,061 (35%)	1,005 (37%)	1,015 (36%)
75+	197 (9.2%)	193 (9.0%)	229 (9.5%)	208 (8.8%)	191 (8.4%)	212 (8.3%)	290 (9.7%)	254 (11%)	253 (11%)	298 (9.7%)	301 (11%)	326 (11%)
Missing	0 (0%)	0 (0%)	0 (0%)	3 (0.1%)	0 (0%)	6 (0.2%)	6 (0.2%)	0 (0%)	0 (0%)	4 (0.1%)	0 (0%)	0 (0%)
Education												
Degree	422 (20%)	502 (24%)	589 (25%)	591 (25%)	561 (25%)	656 (26%)	780 (27%)	627 (29%)	688 (31%)	1,006 (34%)	881 (34%)	923 (34%)
Other higher	229 (11%)	275 (13%)	328 (14%)	325 (14%)	300 (13%)	339 (13%)	393 (13%)	295 (14%)	314 (14%)	366 (12%)	340 (13%)	351 (13%)
A level etc	439 (21%)	480 (23%)	523 (22%)	523 (22%)	498 (22%)	540 (21%)	611 (21%)	437 (20%)	449 (20%)	593 (20%)	528 (20%)	544 (20%)
GCSE etc	510 (24%)	526 (25%)	586 (24%)	573 (24%)	561 (25%)	580 (23%)	687 (24%)	492 (23%)	491 (22%)	632 (22%)	555 (21%)	582 (21%)
Other qualification	258 (12%)	154 (7.2%)	170 (7.1%)	150 (6.4%)	137 (6.1%)	169 (6.7%)	174 (6.0%)	147 (6.8%)	127 (5.7%)	166 (5.7%)	146 (5.6%)	150 (5.5%)
No qualification	263 (12%)	194 (9.1%)	204 (8.5%)	200 (8.5%)	190 (8.5%)	233 (9.3%)	273 (9.4%)	168 (7.8%)	158 (7.1%)	174 (5.9%)	161 (6.2%)	167 (6.1%)
Missing	21 (1.0%)	18 (0.8%)	13 (0.5%)	16 (0.7%)	16 (0.7%)	53 (2.1%)	72 (2.4%)	47 (2.1%)	40 (1.8%)	124 (4.1%)	109 (4.0%)	130 (4.6%)
Health status												

	2012 (Wave 5)	2013 (Wave 6)	2014 (Wave 7)	2015 (Wave 8)	2016 (Wave 9)	2017 (Wave 10)	2018 (Wave 11)	2019 (Wave 12)	2020 (Wave 13)	2021 (Wave 14)	2022 (Wave 15)	2023 (Wave 16)
Illness or disability	702 (33%)	755 (35%)	786 (33%)	887 (37%)	826 (37%)	943 (37%)	1,075 (36%)	824 (37%)	670 (30%)	1,020 (33%)	1,107 (41%)	1,071 (38%)
Healthy	1,440 (67%)	1,394 (65%)	1,626 (67%)	1,490 (63%)	1,437 (63%)	1,627 (63%)	1,913 (64%)	1,388 (63%)	1,597 (70%)	2,038 (67%)	1,613 (59%)	1,775 (62%)
Missing	0 (0%)	0 (0%)	1 (<0.1%)	1 (<0.1%)	0 (0%)	0 (0%)	2 (<0.1%)	1 (<0.1%)	0 (0%)	3 (<0.1%)	0 (0%)	1 (<0.1%)
Employment status												
Non-employed	948 (44%)	934 (43%)	1,084 (45%)	1,060 (45%)	965 (43%)	1,129 (44%)	1,346 (45%)	1,030 (47%)	1,070 (47%)	1,345 (44%)	1,219 (45%)	1,255 (44%)
Employed	1,194 (56%)	1,215 (57%)	1,329 (55%)	1,318 (55%)	1,298 (57%)	1,441 (56%)	1,644 (55%)	1,183 (53%)	1,197 (53%)	1,716 (56%)	1,501 (55%)	1,592 (56%)
Region												
North	769 (36%)	791 (37%)	894 (37%)	890 (37%)	843 (37%)	931 (36%)	1,016 (34%)	749 (34%)	766 (34%)	1,023 (33%)	949 (35%)	999 (35%)
East	574 (27%)	580 (27%)	634 (26%)	626 (26%)	601 (27%)	671 (26%)	835 (28%)	619 (28%)	632 (28%)	840 (27%)	722 (27%)	781 (27%)
South	456 (21%)	452 (21%)	548 (23%)	563 (24%)	507 (22%)	608 (24%)	685 (23%)	505 (23%)	504 (22%)	759 (25%)	652 (24%)	684 (24%)
West	343 (16%)	326 (15%)	337 (14%)	296 (12%)	310 (14%)	358 (14%)	452 (15%)	338 (15%)	363 (16%)	437 (14%)	395 (15%)	381 (13%)
Missing	0 (0%)	0 (0%)	0 (0%)	3 (0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)
Urban												
Urban	1,617 (75%)	1,623 (76%)	1,859 (77%)	1,829 (77%)	1,739 (77%)	1,962 (76%)	2,260 (76%)	1,671 (76%)	1,680 (74%)	2,412 (79%)	2,111 (78%)	2,243 (79%)
Rural	525 (25%)	526 (24%)	554 (23%)	546 (23%)	522 (23%)	606 (24%)	728 (24%)	540 (24%)	585 (26%)	647 (21%)	607 (22%)	602 (21%)
Missing	0 (0%)	0 (0%)	0 (0%)	3 (0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)	2 (<0.1%)
Tenure status												
Owned	749 (35%)	750 (35%)	883 (37%)	843 (35%)	797 (35%)	936 (37%)	1,159 (39%)	910 (41%)	919 (41%)	1,137 (37%)	1,079 (40%)	1,123 (40%)
Owned mort.	855 (40%)	831 (39%)	927 (39%)	934 (39%)	918 (41%)	943 (37%)	1,067 (36%)	770 (35%)	819 (36%)	1,149 (38%)	1,007 (37%)	1,056 (37%)
Rented	536 (25%)	567 (26%)	595 (25%)	601 (25%)	547 (24%)	661 (26%)	752 (25%)	532 (24%)	524 (23%)	753 (25%)	625 (23%)	653 (23%)
Missing	2 (<0.1%)	1 (<0.1%)	8 (0.3%)	0 (0%)	1 (<0.1%)	30 (1.2%)	12 (0.4%)	1 (<0.1%)	5 (0.2%)	22 (0.7%)	9 (0.3%)	15 (0.5%)
Behind with bills												
All paid	2,014 (94%)	1,986 (92%)	2,233 (93%)	2,243 (94%)	2,127 (94%)	2,423 (94%)	2,806 (94%)	2,116 (96%)	2,121 (94%)	2,853 (94%)	2,548 (94%)	2,634 (93%)
Unpaid bills	127 (5.9%)	162 (7.5%)	172 (7.2%)	134 (5.6%)	135 (6.0%)	147 (5.7%)	173 (5.8%)	96 (4.3%)	139 (6.2%)	189 (6.2%)	163 (6.0%)	198 (7.0%)
Missing	1 (<0.1%)	1 (<0.1%)	8 (0.3%)	1 (<0.1%)	1 (<0.1%)	0 (0%)	11 (0.4%)	1 (<0.1%)	7 (0.3%)	19 (0.6%)	9 (0.3%)	15 (0.5%)
Household income (quintiles)												
Q1 (Bottom)	416 (19%)	458 (21%)	446 (21%)	517 (21%)	481 (20%)	458 (20%)	526 (20%)	629 (21%)	394 (18%)	444 (20%)	654 (21%)	610 (22%)

	2012 (Wave 5)	2013 (Wave 6)	2014 (Wave 7)	2015 (Wave 8)	2016 (Wave 9)	2017 (Wave 10)	2018 (Wave 11)	2019 (Wave 12)	2020 (Wave 13)	2021 (Wave 14)	2022 (Wave 15)	2023 (Wave 16)
Q2	467 (22%)	441 (21%)	410 (19%)	483 (20%)	484 (20%)	455 (20%)	526 (20%)	608 (20%)	442 (20%)	466 (21%)	660 (22%)	565 (21%)
Q3	431 (20%)	407 (19%)	409 (19%)	470 (20%)	448 (19%)	456 (20%)	508 (20%)	611 (20%)	473 (21%)	456 (20%)	611 (20%)	530 (20%)
Q4	423 (20%)	418 (20%)	458 (21%)	508 (21%)	489 (21%)	448 (20%)	528 (21%)	584 (20%)	491 (22%)	430 (19%)	595 (20%)	529 (20%)
Q5 (Top)	405 (19%)	418 (20%)	426 (20%)	429 (18%)	476 (20%)	446 (20%)	482 (19%)	550 (18%)	412 (19%)	466 (21%)	523 (17%)	478 (18%)
Missing	0 (0%)	0 (0%)	0 (0%)	6 (0.2%)	0 (0%)	0 (0%)	0 (0%)	8 (0.3%)	1 (<0.1%)	5 (0.2%)	18 (0.6%)	8 (0.3%)
Household type												
1 adult, no children	304 (14%)	307 (14%)	356 (15%)	341 (14%)	331 (15%)	405 (16%)	535 (18%)	385 (17%)	352 (16%)	535 (18%)	448 (17%)	463 (16%)
1 adult, children	86 (4.0%)	72 (3.4%)	91 (3.8%)	94 (4.0%)	72 (3.2%)	67 (2.6%)	88 (3.0%)	57 (2.6%)	70 (3.1%)	102 (3.4%)	98 (3.6%)	88 (3.1%)
Couple, no children	686 (32%)	625 (29%)	782 (32%)	731 (31%)	672 (30%)	763 (30%)	934 (31%)	734 (33%)	749 (33%)	1,044 (34%)	983 (36%)	993 (35%)
Couple with children	423 (20%)	422 (20%)	456 (19%)	456 (19%)	401 (18%)	445 (17%)	526 (18%)	355 (16%)	365 (16%)	504 (17%)	424 (16%)	448 (16%)
Other household	643 (30%)	723 (34%)	722 (30%)	756 (32%)	787 (35%)	890 (35%)	899 (30%)	681 (31%)	726 (32%)	858 (28%)	759 (28%)	842 (30%)
Missing	0 (0%)	0 (0%)	6 (0.2%)	0 (0%)	0 (0%)	0 (0%)	8 (0.3%)	1 (<0.1%)	5 (0.2%)	18 (0.6%)	8 (0.3%)	13 (0.5%)
Base (n)	2,142	2,149	2,413	2,378	2,263	2,570	2,990	2,213	2,267	3,061	2,720	2,847

Table A5. UKHLS main survey (April-December 2020) former CAPI-only sample issued to web: frequencies of the variables used in the analysis

	2020 (Waves 11-12)
Web response	3,111 (51%)
Gender	
Male	2,834 (47%)
Female	3,214 (53%)
Age	
16-34	1,668 (28%)
35-54	1,954 (32%)
55-74	1,804 (30%)
75+	622 (10%)
Ethnicity	
White	4,587 (78%)
Asian	840 (14%)
Black	311 (5.3%)
Mixed and other	163 (2.8%)
Missing	147 (2.4%)
Employment status	
Non-employed	2,704 (45%)
Employed	3,344 (55%)
Region	
North	1,843 (30%)
East	1,531 (25%)
South	1,488 (25%)
West & NI	1,186 (20%)
Tenure status	
Owned	2,213 (37%)
Owned mort.	2,182 (36%)
Rented	1,653 (27%)
Behind with bills	
All paid	5,622 (93%)
Unpaid bills	426 (7.0%)
Household income (quintiles)	
Q1 (Bottom)	1,241 (21%)
Q2	1,276 (21%)
Q3	1,083 (18%)
Q4	1,212 (20%)
Q5 (Top)	1,236 (20%)
Household type	
1 adult, no children	806 (13%)
1 adult, children	149 (2.5%)
Couple, no children	1,546 (26%)
Couple with children	1,211 (20%)
Other household	2,336 (39%)

	2020 (Waves 11-12)
Base (n)	6,048

Table A6. UKHLS main survey (April-December 2020) former CAPI-only respondents: frequencies of the variables used in the analysis

	2020 (Waves 11-12)
Internet use	
Daily	3,462 (83%)
Several times week/month	313 (7.5%)
Once a month or less	70 (1.7%)
Never use	277 (6.7%)
No access	33 (0.8%)
Missing	6 (0.1%)
Gender	
Male	1,778 (43%)
Female	2,383 (57%)
Age	
16-34	914 (22%)
35-54	1,361 (33%)
55-74	1,423 (34%)
75+	463 (11%)
Ethnicity	
White	3,403 (82%)
Asian	518 (12%)
Black	139 (3.3%)
Mixed and other	99 (2.4%)
Missing	2 (<0.1%)
Employment status	
Non-employed	1,911 (46%)
Employed	2,250 (54%)
Region	
North	1,264 (30%)
East	1,033 (25%)
South	999 (24%)
West & NI	865 (21%)
Tenure status	
Owned	1,684 (40%)
Owned mort.	1,473 (35%)
Rented	1,002 (24%)
Missing	2 (<0.1%)
Behind with bills	
All paid	3,931 (95%)
Unpaid bills	228 (5.5%)
Missing	2 (<0.1%)
Household income (quintiles)	
Q1 (Bottom)	950 (23%)
Q2	829 (20%)
Q3	797 (19%)
Q4	821 (20%)
Q5 (Top)	763 (18%)
Missing	1 (<0.1%)
Household type	
1 adult, no children	664 (16%)
1 adult, children	88 (2.1%)
Couple, no children	1,217 (29%)
Couple with children	841 (20%)
Other household	1,350 (32%)
Missing	1 (<0.1%)
Base (n)	4,161

Table A7. UKHLS Innovation Panel sample issued to web: frequencies of the variables used in the analysis by year

	2012 (Wave 5)	2013 (Wave 6)	2014 (Wave 7)	2015 (Wave 8)	2016 (Wave 9)	2017 (Wave 10)	2018 (Wave 11)	2020 (Wave 13)	2021 (Wave 14)	2022 (Wave 15)	2023 (Wave 16)
Web response	643 (32%)	809 (44%)	727 (43%)	758 (51%)	1,077 (60%)	978 (52%)	1,156 (52%)	1,159 (51%)	1,452 (51%)	1,654 (54%)	1,735 (59%)
Gender											
Male	955 (47%)	861 (47%)	804 (47%)	710 (47%)	868 (48%)	920 (49%)	1,079 (49%)	1,094 (48%)	1,363 (48%)	1,460 (48%)	1,397 (48%)
Female	1,063 (53%)	964 (53%)	895 (53%)	786 (53%)	922 (52%)	969 (51%)	1,128 (51%)	1,169 (52%)	1,483 (52%)	1,604 (52%)	1,541 (52%)
Age											
16-34	584 (29%)	545 (30%)	492 (29%)	461 (31%)	531 (30%)	548 (29%)	625 (28%)	640 (28%)	816 (29%)	935 (31%)	889 (30%)
35-54	685 (34%)	616 (34%)	538 (32%)	492 (33%)	604 (34%)	649 (34%)	738 (33%)	703 (31%)	857 (30%)	903 (29%)	852 (29%)
55-74	551 (27%)	501 (27%)	494 (29%)	443 (30%)	537 (30%)	568 (30%)	690 (31%)	720 (32%)	923 (32%)	953 (31%)	917 (31%)
75+	198 (9.8%)	163 (8.9%)	175 (10%)	100 (6.7%)	118 (6.6%)	124 (6.6%)	154 (7.0%)	200 (8.8%)	250 (8.8%)	273 (8.9%)	280 (9.5%)
Employment status											
Non-employed	908 (45%)	796 (44%)	757 (45%)	619 (41%)	775 (43%)	798 (42%)	943 (43%)	998 (44%)	1,277 (45%)	1,302 (42%)	1,217 (41%)
Employed	1,110 (55%)	1,029 (56%)	942 (55%)	877 (59%)	1,015 (57%)	1,091 (58%)	1,264 (57%)	1,265 (56%)	1,569 (55%)	1,762 (58%)	1,721 (59%)
Region											
North	741 (37%)	667 (37%)	625 (37%)	567 (38%)	645 (36%)	690 (37%)	772 (35%)	789 (35%)	1,011 (36%)	1,056 (34%)	1,002 (34%)
East	525 (26%)	475 (26%)	438 (26%)	394 (26%)	481 (27%)	496 (26%)	585 (27%)	603 (27%)	764 (27%)	816 (27%)	824 (28%)
South	458 (23%)	418 (23%)	378 (22%)	336 (22%)	418 (23%)	451 (24%)	539 (24%)	542 (24%)	696 (24%)	791 (26%)	723 (25%)
West	294 (15%)	265 (15%)	258 (15%)	199 (13%)	246 (14%)	252 (13%)	311 (14%)	329 (15%)	375 (13%)	401 (13%)	389 (13%)
Tenure status											
Owned	616 (31%)	570 (31%)	540 (32%)	452 (30%)	551 (31%)	585 (31%)	731 (33%)	813 (36%)	1,014 (36%)	1,040 (34%)	982 (33%)
Owned mort.	844 (42%)	738 (40%)	690 (41%)	630 (42%)	795 (44%)	807 (43%)	896 (41%)	843 (37%)	1,096 (39%)	1,182 (39%)	1,169 (40%)
Rented	558 (28%)	517 (28%)	469 (28%)	414 (28%)	444 (25%)	497 (26%)	580 (26%)	607 (27%)	736 (26%)	842 (27%)	787 (27%)
Behind with bills											
All paid	1,868 (93%)	1,663 (91%)	1,532 (90%)	1,356 (91%)	1,646 (92%)	1,721 (91%)	2,019 (91%)	2,090 (92%)	2,640 (93%)	2,793 (91%)	2,663 (91%)
Unpaid bills	150 (7.4%)	162 (8.9%)	167 (9.8%)	140 (9.4%)	144 (8.0%)	168 (8.9%)	188 (8.5%)	173 (7.6%)	206 (7.2%)	271 (8.8%)	275 (9.4%)
Household income (quintiles)											
Q1 (Bottom)	439 (22%)	389 (21%)	336 (20%)	229 (15%)	327 (18%)	345 (18%)	430 (19%)	424 (19%)	576 (20%)	649 (21%)	566 (19%)
Q2	393 (19%)	329 (18%)	329 (19%)	306 (20%)	369 (21%)	394 (21%)	445 (20%)	488 (22%)	563 (20%)	638 (21%)	593 (20%)
Q3	349 (17%)	332 (18%)	314 (18%)	290 (19%)	346 (19%)	355 (19%)	398 (18%)	445 (20%)	562 (20%)	611 (20%)	609 (21%)
Q4	408 (20%)	406 (22%)	388 (23%)	331 (22%)	371 (21%)	406 (21%)	433 (20%)	421 (19%)	537 (19%)	565 (18%)	572 (19%)
Q5 (Top)	429 (21%)	369 (20%)	332 (20%)	340 (23%)	377 (21%)	389 (21%)	501 (23%)	485 (21%)	608 (21%)	601 (20%)	598 (20%)
Household type											
1 adult, no children	287 (14%)	236 (13%)	221 (13%)	162 (11%)	192 (11%)	212 (11%)	276 (13%)	280 (12%)	371 (13%)	415 (14%)	389 (13%)
1 adult, children	75 (3.7%)	72 (3.9%)	56 (3.3%)	46 (3.1%)	60 (3.4%)	60 (3.2%)	68 (3.1%)	68 (3.0%)	115 (4.0%)	123 (4.0%)	95 (3.2%)
Couple, no children	568 (28%)	487 (27%)	468 (28%)	408 (27%)	486 (27%)	504 (27%)	586 (27%)	645 (29%)	809 (28%)	986 (32%)	949 (32%)
Couple with children	390 (19%)	339 (19%)	293 (17%)	258 (17%)	362 (20%)	360 (19%)	410 (19%)	381 (17%)	434 (15%)	527 (17%)	471 (16%)
Other household	698 (35%)	691 (38%)	661 (39%)	622 (42%)	690 (39%)	753 (40%)	867 (39%)	889 (39%)	1,117 (39%)	1,013 (33%)	1,034 (35%)
Base (n)	2,018	1,825	1,699	1,496	1,790	1,889	2,207	2,263	2,846	3,064	2,938

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Appendix B. Results tables

This appendix contains the results tables of the paper "Are we stepping into the future? Exploring the representativeness of web-only surveys of the general population."

Table B1. Unconditional partial coefficients of variation (CV_u) and standard errors at the variable level for internet users in the United Kingdom

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Age	All internet users	0.315*	0.301*	0.278*	0.263*	0.244*	0.225*	0.203*	0.188*	0.174*	0.160*	0.147*	0.123*	0.103*	0.093*
		(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
	Daily internet users	0.422*	0.415*	0.396*	0.384*	0.367*	0.343*	0.315*	0.299*	0.286*	0.270*	0.255*	0.212*	0.186*	0.167*
		(0.006)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Behind with bills	All internet users	0.008	0.003	0.003	0.007*	0.003	0.004	0.005*	0.008*	0.006*	0.009*	0.010*	0.013*	0.012*	0.010*
		(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.029*	0.004	0.011*	0.001	0.005	0.003	0.005	0.008*	0.013*	0.016*	0.014*	0.012*	0.013*	0.006*
		(0.007)	(0.006)	(0.005)	(0.010)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Education	All internet users	0.310*	0.280*	0.258*	0.240*	0.223*	0.203*	0.177*	0.164*	0.152*	0.142*	0.130*	0.112*	0.095*	0.087*
		(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
	Daily internet users	0.417*	0.386*	0.353*	0.336*	0.311*	0.281*	0.251*	0.232*	0.220*	0.211*	0.193*	0.166*	0.152*	0.137*
		(0.006)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Employment status	All internet users	0.214*	0.204*	0.189*	0.174*	0.160*	0.149*	0.129*	0.119*	0.110*	0.100*	0.094*	0.076*	0.064*	0.056*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.208*	0.214*	0.215*	0.211*	0.212*	0.205*	0.187*	0.188*	0.180*	0.170*	0.168*	0.138*	0.122*	0.111*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Ethnicity	All internet users	0.026*	0.021*	0.020*	0.024*	0.022*	0.015*	0.018*	0.015*	0.014*	0.012*	0.011*	0.013*	0.010*	0.010*
		(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.065*	0.041*	0.037*	0.040*	0.032*	0.025*	0.031*	0.027*	0.028*	0.026*	0.020*	0.025*	0.021*	0.021*
		(0.008)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Gender	All internet users	0.053*	0.044*	0.034*	0.031*	0.027*	0.024*	0.019*	0.014*	0.012*	0.011*	0.011*	0.010*	0.007*	0.006*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
	Daily internet users	0.142*	0.112*	0.084*	0.073*	0.060*	0.047*	0.031*	0.030*	0.023*	0.020*	0.018*	0.013*	0.009*	0.013*
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Health	All internet users	0.133*	0.129*	0.117*	0.110*	0.106*	0.099*	0.090*	0.083*	0.074*	0.068*	0.059*	0.049*	0.041*	0.033*
		(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.183*	0.180*	0.170*	0.160*	0.157*	0.150*	0.136*	0.130*	0.124*	0.108*	0.099*	0.084*	0.066*	0.063*

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Household income	All internet users	0.243*	0.220*	0.202*	0.188*	0.172*	0.161*	0.135*	0.124*	0.116*	0.102*	0.095*	0.082*	0.067*	0.058*
		(0.004)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.306*	0.297*	0.281*	0.270*	0.255*	0.236*	0.206*	0.193*	0.186*	0.169*	0.164*	0.144*	0.121*	0.107*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Household tenure	All internet users	0.175*	0.162*	0.143*	0.133*	0.119*	0.106*	0.089*	0.079*	0.073*	0.065*	0.060*	0.050*	0.042*	0.036*
		(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.221*	0.209*	0.201*	0.202*	0.190*	0.177*	0.158*	0.148*	0.143*	0.136*	0.128*	0.104*	0.090*	0.080*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Household type	All internet users	0.188*	0.177*	0.164*	0.157*	0.144*	0.133*	0.118*	0.107*	0.099*	0.093*	0.089*	0.075*	0.064*	0.053*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.229*	0.223*	0.219*	0.225*	0.216*	0.205*	0.189*	0.180*	0.172*	0.165*	0.159*	0.130*	0.110*	0.095*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Region	All internet users	0.066*	0.048*	0.046*	0.044*	0.037*	0.033*	0.030*	0.025*	0.023*	0.021*	0.020*	0.018*	0.019*	0.018*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.141*	0.099*	0.087*	0.079*	0.067*	0.057*	0.053*	0.047*	0.037*	0.039*	0.031*	0.034*	0.030*	0.025*
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Urban	All internet users	0.014*	0.010*	0.008*	0.012*	0.007*	0.004	0.005*	0.002	0.001	0.001	0.004*	0.002	0.002	0.001
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.028*	0.032*	0.028*	0.028*	0.020*	0.020*	0.016*	0.012*	0.007*	0.012*	0.007*	0.008*	0.005	0.008*
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)

Sig. * p < .05

Table B2. Conditional partial coefficients of variation (CV_c) and standard errors at the variable level for internet users in the United Kingdom over time

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Age	All internet users	0.066*	0.083*	0.079*	0.075*	0.073*	0.071*	0.068*	0.067*	0.060*	0.055*	0.052*	0.043*	0.036*	0.036*
		(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
	Daily internet users	0.109*	0.135*	0.128*	0.116*	0.108*	0.098*	0.090*	0.085*	0.079*	0.073*	0.069*	0.059*	0.052*	0.048*
		(0.006)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Behind with bills	All internet users	0.005	0.004	0.003	0.003	0.003	0.003	0.003	0.001	0.002	0.001	0.000	0.004*	0.002	0.001
		(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.013	0.007	0.007	0.005	0.004	0.003	0.004	0.003	0.000	0.001	0.001	0.000	0.001	0.002
		(0.007)	(0.006)	(0.005)	(0.010)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Education	All internet users	0.087*	0.091*	0.083*	0.077*	0.073*	0.068*	0.065*	0.062*	0.058*	0.058*	0.054*	0.047*	0.043*	0.042*
		(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
	Daily internet users	0.138*	0.142*	0.115*	0.102*	0.088*	0.076*	0.069*	0.064*	0.061*	0.062*	0.056*	0.049*	0.051*	0.048*
		(0.006)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Employment status	All internet users	0.005	0.009*	0.010*	0.008*	0.007*	0.008*	0.007*	0.005*	0.006*	0.006*	0.007*	0.006*	0.004*	0.003*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.019*	0.015*	0.006	0.005	0.002	0.001	0.001	0.004	0.004	0.005	0.007*	0.006*	0.005	0.004
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Ethnicity	All internet users	0.011*	0.013*	0.012*	0.010*	0.011*	0.011*	0.009*	0.010*	0.007*	0.007*	0.006*	0.005*	0.006*	0.006*
		(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.020*	0.021*	0.019*	0.016*	0.017*	0.013*	0.011*	0.011*	0.008*	0.008*	0.007*	0.006*	0.006*	0.004*
		(0.008)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Gender	All internet users	0.008*	0.010*	0.008*	0.007*	0.005*	0.003	0.001	0.003	0.003	0.004*	0.001	0.002	0.004*	0.003
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
	Daily internet users	0.055*	0.049*	0.034*	0.027*	0.020*	0.014*	0.007*	0.006*	0.004	0.002	0.002	0.001	0.002	0.002
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Health	All internet users	0.002	0.003	0.002	0.004	0.007*	0.007*	0.008*	0.012*	0.010*	0.010*	0.009*	0.010*	0.011*	0.007*
		(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.005	0.006	0.003	0.002	0.003	0.005	0.003	0.006*	0.008*	0.003	0.004	0.009*	0.006*	0.006*

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Household income	All internet users	0.026*	0.027*	0.028*	0.027*	0.025*	0.024*	0.019*	0.020*	0.019*	0.014*	0.015*	0.015*	0.010*	0.011*
		(0.004)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.039*	0.045*	0.038*	0.036*	0.035*	0.031*	0.025*	0.022*	0.022*	0.018*	0.021*	0.023*	0.017*	0.016*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Household tenure	All internet users	0.015*	0.023*	0.022*	0.020*	0.019*	0.018*	0.017*	0.018*	0.014*	0.014*	0.016*	0.013*	0.011*	0.010*
		(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.006	0.007	0.012*	0.011*	0.011*	0.009*	0.010*	0.008*	0.008*	0.009*	0.008*	0.007*	0.009*	0.008*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)
Household type	All internet users	0.013*	0.014*	0.014*	0.013*	0.012*	0.014*	0.013*	0.013*	0.014*	0.016*	0.016*	0.014*	0.015*	0.014*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.008	0.013*	0.014*	0.016*	0.014*	0.015*	0.015*	0.013*	0.013*	0.014*	0.013*	0.011*	0.013*	0.008*
		(0.007)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Region	All internet users	0.031*	0.028*	0.027*	0.027*	0.024*	0.025*	0.024*	0.020*	0.021*	0.019*	0.020*	0.016*	0.020*	0.019*
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.078*	0.052*	0.041*	0.039*	0.034*	0.030*	0.028*	0.025*	0.017*	0.018*	0.018*	0.021*	0.021*	0.015*
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)
Urban	All internet users	0.002	0.000	0.000	0.001	0.002	0.002	0.001	0.003	0.003	0.002	0.001	0.001	0.001	0.003
		(0.004)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)
	Daily internet users	0.001	0.002	0.001	0.002	0.001	0.001	0.000	0.002	0.004	0.002	0.003	0.002	0.002	0.001
		(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)

Sig. * p < .05

Table B3. Unconditional partial coefficients of variation (CV_u) and standard errors at the group level for internet users in the United Kingdom over time

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Age	16-24	All internet users	0.104*	0.097*	0.086*	0.077*	0.069*	0.061*	0.052*	0.045*	0.039*	0.036*	0.031*	0.028*	0.023*	0.018*
			(0.008)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
		Daily internet users	0.211*	0.204*	0.192*	0.172*	0.161*	0.138*	0.118*	0.104*	0.095*	0.087*	0.076*	0.064*	0.051*	0.043*
			(0.010)	(0.007)	(0.007)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)
	25-34	All internet users	0.097*	0.088*	0.080*	0.074*	0.065*	0.057*	0.051*	0.045*	0.041*	0.036*	0.033*	0.027*	0.022*	0.018*
			(0.007)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
		Daily internet users	0.157*	0.161*	0.146*	0.146*	0.135*	0.121*	0.110*	0.098*	0.090*	0.084*	0.076*	0.062*	0.050*	0.045*
			(0.009)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
	35-44	All internet users	0.083*	0.077*	0.072*	0.068*	0.061*	0.056*	0.049*	0.045*	0.041*	0.035*	0.033*	0.027*	0.023*	0.021*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
		Daily internet users	0.071*	0.072*	0.083*	0.091*	0.087*	0.091*	0.081*	0.080*	0.079*	0.075*	0.073*	0.058*	0.052*	0.047*
			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
	45-54	All internet users	0.033*	0.039*	0.040*	0.042*	0.042*	0.039*	0.035*	0.037*	0.035*	0.034*	0.032*	0.027*	0.024*	0.019*
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
		Daily internet users	-0.013*	-0.007	-0.004	0.000	0.013*	0.024*	0.031*	0.040*	0.041*	0.044*	0.048*	0.041*	0.041*	0.036*
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
	55-64	All internet users	-0.045*	-0.025*	-0.019*	-0.012*	-0.006	0.003	0.006	0.008	0.010	0.010	0.013*	0.010	0.012	0.012
			(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
		Daily internet users	-0.102*	-0.088*	-0.075*	-0.068*	-0.060*	-0.044*	-0.036*	-0.029*	-0.021*	-0.018*	-0.011	-0.006	0.003	0.005
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
	65-74	All internet users	-0.131*	-0.121*	-0.105*	-0.094*	-0.077*	-0.062*	-0.054*	-0.045*	-0.039*	-0.030*	-0.027*	-0.021*	-0.020*	-0.013*
			(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)
		Daily internet users	-0.171*	-0.164*	-0.158*	-0.153*	-0.144*	-0.130*	-0.115*	-0.104*	-0.098*	-0.088*	-0.076*	-0.062*	-0.052*	-0.046*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
	75+	All internet users	-0.229*	-0.225*	-0.213*	-0.207*	-0.198*	-0.187*	-0.171*	-0.162*	-0.151*	-0.140*	-0.129*	-0.108*	-0.090*	-0.083*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		Daily internet users	-0.255*	-0.254*	-0.249*	-0.246*	-0.242*	-0.238*	-0.226*	-0.223*	-0.217*	-0.206*	-0.200*	-0.168*	-0.150*	-0.136*
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)
Behind with bills	All paid	All internet users	0.002	-0.001	-0.001	-0.002	-0.001	-0.001	-0.001	-0.002	-0.001	-0.002	-0.002	-0.003	-0.003	-0.003
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
		Daily internet users	0.008*	0.001	0.003*	-0.000	0.001	-0.001	-0.001	-0.002	-0.003	-0.004	-0.004	-0.003	-0.003	-0.002
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
	Unpaid bills	All internet users	-0.008	0.003	0.003	0.007	0.003	0.003	0.005	0.007	0.006	0.009	0.010	0.013	0.011	0.009
			(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)
		Daily internet users	-0.028*	-0.004	-0.011*	0.001	-0.005	0.003	0.005	0.008	0.013	0.015	0.014	0.012	0.012	0.006
			(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)
Education	ISCED level 0/1 (Entry level)	All internet users	-0.249*	-0.231*	-0.216*	-0.204*	-0.189*	-0.175*	-0.152*	-0.141*	-0.132*	-0.125*	-0.114*	-0.098*	-0.084*	-0.079*
			(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.006)	(0.006)
		Daily internet users	-0.290*	-0.275*	-0.260*	-0.254*	-0.237*	-0.220*	-0.196*	-0.184*	-0.175*	-0.169*	-0.155*	-0.131*	-0.122*	-0.111*
			(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
	ISCED level 2/3 (Lower secondary)	All internet users	0.048*	0.040*	0.037*	0.035*	0.032*	0.028*	0.023*	0.022*	0.020*	0.016*	0.013*	0.011	0.008	0.006
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.005	0.001	0.004	0.009	0.006	0.012*	0.014*	0.009	0.011	0.005	0.002	-0.001	-0.001	-0.004
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
	ISCED level 3 (Upper secondary)	All internet users	0.065*	0.062*	0.053*	0.050*	0.046*	0.041*	0.033*	0.030*	0.027*	0.025*	0.022*	0.018*	0.013*	0.013*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
		Daily internet users	0.083*	0.081*	0.078*	0.076*	0.075*	0.068*	0.051*	0.049*	0.042*	0.042*	0.037*	0.030*	0.024*	0.023*
			(0.008)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
	ISCED level 5 (Short-cycle degree)	All internet users	0.057*	0.047*	0.040*	0.034*	0.030*	0.027*	0.024*	0.022*	0.019*	0.017*	0.016*	0.011	0.012	0.010
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
		Daily internet users	0.041*	0.035*	0.026*	0.024*	0.023*	0.023*	0.019*	0.018*	0.018*	0.016*	0.015*	0.009	0.010	0.008
			(0.008)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
	ISCED level 6+ (University degree)	All internet users	0.133*	0.114*	0.103*	0.092*	0.083*	0.072*	0.064*	0.057*	0.052*	0.049*	0.046*	0.039*	0.033*	0.029*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.250*	0.225*	0.194*	0.173*	0.152*	0.128*	0.116*	0.104*	0.098*	0.093*	0.087*	0.075*	0.069*	0.061*

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(0.009)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
	Other qualifications	All internet users	-0.082*	-0.066*	-0.060*	-0.057*	-0.057*	-0.046*	-0.045*	-0.042*	-0.038*	-0.035*	-0.031*	-0.031*	-0.024*	-0.020*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
		Daily internet users	-0.141*	-0.126*	-0.112*	-0.110*	-0.107*	-0.095*	-0.089*	-0.079*	-0.077*	-0.072*	-0.065*	-0.061*	-0.055*	-0.048*
			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Employment status	Employed	All internet users	0.141*	0.135*	0.125*	0.116*	0.106*	0.098*	0.085*	0.078*	0.073*	0.066*	0.063*	0.051*	0.044*	0.037*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
		Daily internet users	0.137*	0.142*	0.143*	0.140*	0.140*	0.135*	0.123*	0.124*	0.119*	0.113*	0.112*	0.093*	0.083*	0.074*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
	Non-employed	All internet users	-0.161*	-0.153*	-0.142*	-0.130*	-0.121*	-0.112*	-0.097*	-0.090*	-0.083*	-0.075*	-0.070*	-0.056*	-0.047*	-0.042*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
		Daily internet users	-0.157*	-0.161*	-0.162*	-0.158*	-0.160*	-0.155*	-0.141*	-0.142*	-0.135*	-0.128*	-0.125*	-0.102*	-0.090*	-0.083*
			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Ethnicity	Asian	All internet users	0.012*	0.008	0.008	0.009	0.007	0.005	0.009	0.008	0.008	0.009	0.007	0.008	0.006	0.003
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
		Daily internet users	0.038*	0.028*	0.021*	0.020*	0.012*	0.011*	0.018*	0.017*	0.018*	0.017*	0.015*	0.018*	0.011	0.012
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)
	Black	All internet users	0.014*	0.011*	0.009*	0.011*	0.010*	0.006	0.009	0.008	0.007	0.005	0.006	0.003	0.004	0.004
			(0.005)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.008)	(0.008)
		Daily internet users	0.007	0.005	0.006	0.007	0.004	0.006	0.009	0.007	0.006	0.007	0.005	-0.000	0.008	0.006
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.009)
	Mixed and other	All internet users	0.017*	0.016*	0.016*	0.019*	0.017*	0.012*	0.011	0.009	0.008	0.005	0.004	0.009	0.007	0.008
			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.009)
		Daily internet users	0.050*	0.028*	0.028*	0.033*	0.028*	0.021*	0.021*	0.019*	0.019*	0.017*	0.010	0.016	0.014	0.014
			(0.010)	(0.006)	(0.006)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)
	White	All internet users	-0.007*	-0.005*	-0.005*	-0.006*	-0.006*	-0.004*	-0.005*	-0.004*	-0.004*	-0.004	-0.003	-0.004	-0.003	-0.003
			(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)
		Daily internet users	-0.017*	-0.011*	-0.009*	-0.010*	-0.007*	-0.006*	-0.009*	-0.008*	-0.008*	-0.008*	-0.006*	-0.007*	-0.007*	-0.007*
			(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Gender	Female	All internet users	-0.037*	-0.030*	-0.024*	-0.021*	-0.019*	-0.017*	-0.013*	-0.010*	-0.008*	-0.008	-0.008	-0.007	-0.005	-0.004
			(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)
		Daily internet users	-0.100*	-0.078*	-0.059*	-0.051*	-0.042*	-0.032*	-0.022*	-0.021*	-0.016*	-0.014*	-0.013*	-0.009	-0.006	-0.009
			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
	Male	All internet users	0.038*	0.031*	0.024*	0.022*	0.019*	0.017*	0.013*	0.010*	0.009*	0.008	0.008	0.007	0.005	0.005
			(0.004)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
		Daily internet users	0.102*	0.080*	0.061*	0.053*	0.043*	0.033*	0.023*	0.021*	0.016*	0.015*	0.013*	0.009	0.007	0.009
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Health	Healthy	All internet users	0.080*	0.077*	0.070*	0.065*	0.063*	0.059*	0.054*	0.050*	0.045*	0.042*	0.037*	0.030*	0.024*	0.020*
			(0.003)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
		Daily internet users	0.110*	0.108*	0.101*	0.095*	0.094*	0.090*	0.081*	0.078*	0.076*	0.067*	0.062*	0.051*	0.039*	0.037*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
	Illness or disability	All internet users	-0.107*	-0.103*	-0.094*	-0.089*	-0.085*	-0.079*	-0.073*	-0.066*	-0.059*	-0.054*	-0.046*	-0.039*	-0.033*	-0.026*
			(0.005)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
		Daily internet users	-0.147*	-0.145*	-0.137*	-0.129*	-0.127*	-0.121*	-0.110*	-0.104*	-0.098*	-0.086*	-0.077*	-0.067*	-0.054*	-0.050*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
Household income	Q1 (Bottom)	All internet users	-0.178*	-0.165*	-0.152*	-0.146*	-0.136*	-0.129*	-0.106*	-0.099*	-0.096*	-0.082*	-0.076*	-0.066*	-0.055*	-0.048*
			(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
		Daily internet users	-0.205*	-0.198*	-0.192*	-0.194*	-0.184*	-0.176*	-0.150*	-0.143*	-0.141*	-0.123*	-0.121*	-0.109*	-0.091*	-0.081*
			(0.005)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
	Q2	All internet users	-0.070*	-0.055*	-0.051*	-0.038*	-0.032*	-0.027*	-0.026*	-0.020*	-0.013*	-0.015*	-0.015*	-0.014*	-0.009	-0.006
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	-0.095*	-0.096*	-0.084*	-0.068*	-0.068*	-0.057*	-0.055*	-0.048*	-0.040*	-0.043*	-0.041*	-0.036*	-0.028*	-0.024*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
	Q3	All internet users	0.044*	0.039*	0.039*	0.032*	0.034*	0.035*	0.030*	0.026*	0.026*	0.022*	0.019*	0.021*	0.014*	0.013
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
		Daily internet users	0.021*	0.025*	0.021*	0.023*	0.031*	0.035*	0.034*	0.030*	0.030*	0.024*	0.022*	0.033*	0.019*	0.019*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)
	Q4	All internet users	0.091*	0.075*	0.071*	0.068*	0.061*	0.055*	0.049*	0.043*	0.040*	0.036*	0.037*	0.029*	0.025*	0.022*

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.095*	0.090*	0.094*	0.093*	0.086*	0.083*	0.072*	0.071*	0.067*	0.065*	0.066*	0.052*	0.046*	0.043*
			(0.008)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
	Q5 (Top)	All internet users	0.113*	0.105*	0.093*	0.084*	0.073*	0.066*	0.055*	0.051*	0.044*	0.040*	0.036*	0.030*	0.027*	0.021*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
		Daily internet users	0.184*	0.178*	0.161*	0.147*	0.135*	0.116*	0.102*	0.092*	0.088*	0.082*	0.077*	0.062*	0.057*	0.046*
			(0.009)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Household	Owned	All internet users	-0.107*	-0.098*	-0.084*	-0.079*	-0.069*	-0.059*	-0.052*	-0.044*	-0.040*	-0.032*	-0.027*	-0.024*	-0.019*	-0.016*
tenure			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
		Daily internet users	-0.161*	-0.148*	-0.136*	-0.137*	-0.126*	-0.118*	-0.107*	-0.100*	-0.095*	-0.086*	-0.079*	-0.063*	-0.052*	-0.046*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
	Owned mort.	All internet users	0.132*	0.123*	0.110*	0.102*	0.092*	0.083*	0.069*	0.063*	0.058*	0.052*	0.049*	0.041*	0.035*	0.029*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
		Daily internet users	0.152*	0.147*	0.146*	0.147*	0.140*	0.131*	0.116*	0.110*	0.107*	0.104*	0.100*	0.081*	0.072*	0.063*
			(0.006)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
	Rented	All internet users	-0.044*	-0.039*	-0.038*	-0.033*	-0.031*	-0.029*	-0.019*	-0.021*	-0.020*	-0.021*	-0.022*	-0.016*	-0.015*	-0.013*
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	-0.012	-0.015*	-0.025*	-0.024*	-0.026*	-0.020*	-0.011*	-0.011*	-0.014*	-0.018*	-0.019*	-0.016*	-0.018*	-0.016*
			(0.006)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Household	1 adult, children	All internet users	0.018*	0.026*	0.027*	0.028*	0.023*	0.019*	0.022*	0.018*	0.018*	0.017*	0.016*	0.011	0.010	0.009
type			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.009)	(0.009)	(0.008)
		Daily internet users	0.008	0.017*	0.019*	0.027*	0.030*	0.036*	0.036*	0.032*	0.035*	0.037*	0.032*	0.022*	0.020*	0.017
			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.009)	(0.009)	(0.009)	(0.010)	(0.009)
	1 adult, no children	All internet users	-0.133*	-0.125*	-0.118*	-0.114*	-0.107*	-0.100*	-0.089*	-0.082*	-0.079*	-0.075*	-0.073*	-0.062*	-0.054*	-0.045*
			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
		Daily internet users	-0.152*	-0.148*	-0.146*	-0.152*	-0.144*	-0.135*	-0.125*	-0.120*	-0.117*	-0.112*	-0.111*	-0.094*	-0.081*	-0.069*
			(0.005)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
	Couple with children	All internet users	0.113*	0.102*	0.093*	0.087*	0.079*	0.071*	0.061*	0.055*	0.049*	0.043*	0.040*	0.032*	0.027*	0.023*
			(0.006)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		Daily internet users	0.124*	0.121*	0.123*	0.129*	0.124*	0.120*	0.109*	0.104*	0.094*	0.088*	0.085*	0.066*	0.057*	0.052*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
	Couple, no children	All internet users	-0.056*	-0.052*	-0.046*	-0.043*	-0.036*	-0.029*	-0.026*	-0.021*	-0.015*	-0.011*	-0.007	-0.005	-0.001	0.002
			(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
		Daily internet users	-0.087*	-0.085*	-0.080*	-0.078*	-0.077*	-0.072*	-0.066*	-0.060*	-0.054*	-0.052*	-0.045*	-0.032*	-0.022*	-0.020*
			(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
	Other household	All internet users	0.042*	0.042*	0.039*	0.040*	0.037*	0.036*	0.033*	0.030*	0.029*	0.029*	0.027*	0.025*	0.021*	0.015*
			(0.006)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.081*	0.077*	0.070*	0.065*	0.063*	0.056*	0.053*	0.052*	0.053*	0.054*	0.051*	0.045*	0.037*	0.031*
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Region	East Midlands	All internet users	0.002	-0.002	0.001	-0.001	-0.002	0.000	-0.000	-0.001	-0.001	0.000	0.001	0.000	-0.000	0.002
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
		Daily internet users	0.010	-0.003	-0.008	-0.010	-0.008	-0.003	-0.003	-0.005	-0.006	-0.006	0.001	-0.000	0.000	0.002
			(0.008)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)
	East of England	All internet users	0.008	0.012*	0.010*	0.011	0.008	0.010	0.006	0.005	0.005	0.004	0.004	0.004	0.006	0.004
			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
		Daily internet users	0.023*	0.009	0.018*	0.020*	0.018*	0.013*	0.010	0.007	0.004	0.006	0.006	0.004	0.009	0.005
			(0.008)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
	London	All internet users	0.033*	0.018*	0.017*	0.019*	0.015*	0.012	0.014*	0.011	0.008	0.008	0.004	0.008	0.009	0.006
			(0.008)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)
		Daily internet users	0.080*	0.059*	0.049*	0.043*	0.035*	0.030*	0.032*	0.027*	0.023*	0.027*	0.012	0.018*	0.015	0.016*
			(0.009)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
	North Wast	All internet users	-0.015*	-0.017*	-0.019*	-0.015*	-0.012*	-0.012*	-0.009	-0.006	-0.004	-0.008	-0.005	-0.005	-0.006	-0.002
			(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)
		Daily internet users	-0.036*	-0.025*	-0.025*	-0.022*	-0.015*	-0.016*	-0.016*	-0.015*	-0.006	-0.008	-0.007	-0.010	-0.006	-0.001
			(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)
	North West	All internet users	-0.015*	-0.007	-0.008	-0.007	-0.004	-0.004	-0.005	-0.005	-0.003	-0.001	0.004	0.001	0.002	0.001
			(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)
		Daily internet users	-0.027*	-0.008	-0.011*	-0.011*	-0.012*	-0.007	-0.009	-0.006	-0.007	-0.002	0.002	-0.001	0.001	0.000

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Northern Ireland	All internet users	-0.026*	-0.017*	-0.017*	-0.017*	-0.016*	-0.014*	-0.014*	-0.013*	-0.012*	-0.012*	-0.013*	-0.010*	-0.011*	-0.012*
		(0.005)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
	Daily internet users	-0.070*	-0.036*	-0.027*	-0.024*	-0.021*	-0.018*	-0.016*	-0.016*	-0.012*	-0.013*	-0.015*	-0.014*	-0.015*	-0.011*
		(0.005)	(0.002)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)
Scotland	All internet users	-0.003	-0.006	-0.004	-0.006	-0.003	-0.003	-0.004	-0.004	-0.004	-0.002	-0.004	-0.005	-0.003	-0.006
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
	Daily internet users	-0.028*	-0.021*	-0.015*	-0.014*	-0.012*	-0.007	-0.009	-0.008	-0.004	-0.009	-0.010	-0.009	-0.007	-0.007
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
South Wast	All internet users	0.034*	0.026*	0.024*	0.023*	0.019*	0.017*	0.016*	0.013*	0.012	0.010	0.008	0.008	0.005	0.006
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)
	Daily internet users	0.059*	0.048*	0.042*	0.038*	0.032*	0.029*	0.024*	0.022*	0.016*	0.012	0.016*	0.015*	0.010	0.006
		(0.008)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
South West	All internet users	-0.001	0.003	0.003	-0.002	-0.000	-0.002	-0.001	0.000	0.001	-0.001	-0.002	0.000	0.001	0.000
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
	Daily internet users	-0.003	-0.007	-0.012*	-0.006	-0.003	-0.010	-0.006	-0.001	0.001	-0.004	-0.006	0.003	0.001	-0.003
		(0.008)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
Wales	All internet users	-0.026*	-0.020*	-0.016*	-0.014*	-0.014*	-0.009*	-0.006	-0.004	-0.007	-0.005	-0.005	-0.004	-0.001	-0.003
		(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
	Daily internet users	-0.034*	-0.023*	-0.023*	-0.022*	-0.020*	-0.011*	-0.008	-0.010*	-0.010	-0.009	-0.008	-0.008	-0.002	-0.005
		(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
West Midlands	All internet users	-0.014*	-0.010*	-0.011*	-0.009	-0.008	-0.007	-0.006	-0.004	-0.003	-0.001	0.000	-0.002	-0.003	-0.001
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
	Daily internet users	-0.009	-0.024*	-0.020*	-0.014*	-0.014*	-0.011	-0.015*	-0.006	-0.004	-0.004	-0.002	-0.005	-0.008	-0.005
		(0.007)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Yorkshire and the Humber	All internet users	-0.006	-0.007	-0.006	-0.007	-0.005	-0.007	-0.008	-0.006	-0.006	-0.007	-0.005	-0.005	-0.007	-0.006
		(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)
	Daily internet users	-0.025*	-0.018*	-0.014*	-0.019*	-0.012*	-0.016*	-0.008	-0.012*	-0.012	-0.010	-0.007	-0.011	-0.012	-0.009
		(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Urban	Rural	All internet users	-0.012*	-0.008*	-0.007	-0.010*	-0.006	-0.004	-0.005	-0.002	-0.001	-0.001	-0.003	-0.002	-0.001	-0.001
			(0.006)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)
		Daily internet users	-0.025*	-0.028*	-0.024*	-0.025*	-0.018*	-0.017*	-0.014*	-0.011*	-0.006	-0.011*	-0.006	-0.007	-0.004	-0.007
			(0.006)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)
	Urban	All internet users	0.007*	0.005*	0.004	0.006*	0.003	0.002	0.003	0.001	0.001	0.001	0.002	0.001	0.001	0.001
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
		Daily internet users	0.014*	0.016*	0.013*	0.014*	0.010*	0.010*	0.008*	0.006*	0.004	0.006*	0.004	0.004	0.002	0.004
			(0.004)	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)

Sig. * $p < .05$

Table B4. Conditional partial coefficients of variation (CV_c) and standard errors at the group level for internet users in the United Kingdom over time

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Age	16-24	All internet users	0.025*	0.030*	0.026*	0.021*	0.017*	0.019*	0.014*	0.013*	0.011*	0.008*	0.008*	0.007*	0.008*	0.005*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
		Daily internet users	0.054*	0.064*	0.060*	0.051*	0.046*	0.040*	0.033*	0.028*	0.024*	0.021*	0.018*	0.015*	0.014*	0.011*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
	25-34	All internet users	0.017*	0.021*	0.020*	0.018*	0.014*	0.012*	0.010*	0.012*	0.008*	0.008*	0.006*	0.005*	0.005*	0.004*
			(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.037*	0.048*	0.043*	0.040*	0.034*	0.028*	0.024*	0.022*	0.017*	0.016*	0.013*	0.011*	0.010*	0.008*
			(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	35-44	All internet users	0.017*	0.023*	0.021*	0.020*	0.018*	0.017*	0.016*	0.013*	0.012*	0.011*	0.011*	0.010*	0.006*	0.010*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
		Daily internet users	0.031*	0.038*	0.035*	0.031*	0.028*	0.024*	0.023*	0.018*	0.018*	0.016*	0.016*	0.014*	0.010*	0.012*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)
	45-54	All internet users	0.022*	0.028*	0.025*	0.023*	0.022*	0.020*	0.020*	0.020*	0.018*	0.015*	0.015*	0.013*	0.012*	0.011*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
		Daily internet users	0.046*	0.058*	0.055*	0.049*	0.043*	0.036*	0.032*	0.027*	0.024*	0.021*	0.019*	0.017*	0.014*	0.014*
			(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	55-64	All internet users	0.031*	0.038*	0.034*	0.032*	0.030*	0.028*	0.028*	0.027*	0.024*	0.021*	0.021*	0.016*	0.015*	0.013*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.047*	0.059*	0.055*	0.050*	0.047*	0.043*	0.039*	0.037*	0.034*	0.031*	0.028*	0.024*	0.022*	0.020*
			(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	65-74	All internet users	0.025*	0.030*	0.031*	0.031*	0.032*	0.032*	0.031*	0.030*	0.029*	0.028*	0.026*	0.022*	0.017*	0.018*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.033*	0.038*	0.039*	0.038*	0.037*	0.036*	0.035*	0.034*	0.034*	0.032*	0.032*	0.027*	0.025*	0.022*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	75+	All internet users	0.033*	0.044*	0.045*	0.045*	0.046*	0.044*	0.044*	0.044*	0.040*	0.037*	0.035*	0.029*	0.023*	0.024*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.035*	0.048*	0.048*	0.046*	0.046*	0.047*	0.047*	0.048*	0.046*	0.044*	0.043*	0.036*	0.032*	0.030*

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
Behind with	All paid	All internet users	0.003*	0.003*	0.002*	0.002*	0.002*	0.002*	0.002*	0.001	0.001*	0.001	0.000	0.003*	0.001*	0.001
bills			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.007)	(0.001)	(0.001)	(0.000)
		Daily internet users	0.009*	0.004*	0.005*	0.003*	0.003*	0.002*	0.002*	0.002*	0.000	0.001	0.001	0.000	0.000	0.001*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.013)	(0.001)	(0.000)
	Unpaid bills	All internet users	0.004*	0.003*	0.002*	0.003*	0.002*	0.002*	0.002*	0.001	0.001*	0.001	0.000	0.003*	0.001*	0.001
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.007)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.010*	0.005*	0.006*	0.003*	0.003*	0.002*	0.003*	0.002*	0.000	0.001	0.001	0.000	0.000	0.002*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.013)	(0.001)	(0.001)
Education	ISCED level 0/1 (Entry level)	All internet users	0.053*	0.058*	0.054*	0.050*	0.047*	0.045*	0.041*	0.040*	0.038*	0.038*	0.036*	0.030*	0.028*	0.029*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.065*	0.069*	0.060*	0.056*	0.049*	0.045*	0.040*	0.038*	0.037*	0.037*	0.034*	0.027*	0.030*	0.029*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	ISCED level 2/3 (Lower secondary)	All internet users	0.023*	0.024*	0.021*	0.021*	0.020*	0.019*	0.018*	0.018*	0.019*	0.017*	0.015*	0.015*	0.013*	0.011*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.053*	0.051*	0.040*	0.034*	0.029*	0.023*	0.020*	0.018*	0.018*	0.017*	0.015*	0.014*	0.014*	0.013*
			(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	ISCED level 3 (Upper secondary)	All internet users	0.025*	0.025*	0.022*	0.021*	0.020*	0.018*	0.016*	0.016*	0.016*	0.016*	0.014*	0.014*	0.011*	0.012*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.042*	0.042*	0.033*	0.030*	0.026*	0.022*	0.019*	0.018*	0.016*	0.017*	0.015*	0.014*	0.013*	0.013*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	ISCED level 5 (Short-cycle degree)	All internet users	0.030*	0.033*	0.029*	0.027*	0.025*	0.025*	0.025*	0.023*	0.019*	0.020*	0.019*	0.015*	0.015*	0.015*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.036*	0.036*	0.029*	0.026*	0.024*	0.021*	0.020*	0.019*	0.018*	0.018*	0.016*	0.014*	0.014*	0.013*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	ISCED level 6+ (University degree)	All internet users	0.045*	0.047*	0.044*	0.039*	0.037*	0.033*	0.032*	0.030*	0.027*	0.028*	0.027*	0.022*	0.021*	0.018*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.086*	0.088*	0.071*	0.061*	0.051*	0.042*	0.040*	0.037*	0.034*	0.036*	0.032*	0.029*	0.031*	0.028*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Other qualifications	All internet users	0.025*	0.023*	0.020*	0.019*	0.018*	0.016*	0.015*	0.015*	0.014*	0.014*	0.013*	0.013*	0.011*	0.010*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.044*	0.045*	0.033*	0.031*	0.026*	0.022*	0.020*	0.018*	0.018*	0.018*	0.015*	0.016*	0.016*	0.014*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Employment	Employed	All internet users	0.003*	0.007*	0.008*	0.006*	0.005*	0.006*	0.005*	0.004*	0.005*	0.005*	0.005*	0.005*	0.003*	0.003*
status			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)
		Daily internet users	0.013*	0.010*	0.004*	0.004*	0.001	0.000	0.001	0.003*	0.003*	0.003*	0.005*	0.005*	0.003*	0.003*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Non-employed	All internet users	0.003*	0.006*	0.007*	0.005*	0.004*	0.005*	0.004*	0.003*	0.004*	0.004*	0.004*	0.004*	0.003*	0.002*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
		Daily internet users	0.014*	0.011*	0.004*	0.004*	0.001	0.000	0.001	0.003*	0.003*	0.003*	0.004*	0.004*	0.003*	0.003*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Ethnicity	Asian	All internet users	0.009*	0.011*	0.010*	0.009*	0.009*	0.009*	0.008*	0.008*	0.006*	0.005*	0.005*	0.003*	0.005*	0.005*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.012*	0.015*	0.014*	0.012*	0.013*	0.010*	0.009*	0.008*	0.006*	0.006*	0.005*	0.003*	0.005*	0.003*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Black	All internet users	0.002*	0.003*	0.003*	0.002*	0.002*	0.002*	0.002*	0.002*	0.002*	0.001	0.002	0.002*	0.002*	0.001*
			(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
		Daily internet users	0.010*	0.010*	0.007*	0.006*	0.006*	0.004*	0.004*	0.004*	0.003*	0.003*	0.002*	0.004*	0.001*	0.001*
			(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Mixed and other	All internet users	0.001*	0.002*	0.002*	0.002*	0.002*	0.001	0.001*	0.003*	0.001*	0.003*	0.002*	0.001	0.000	0.002*
			(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.007*	0.003*	0.003*	0.003*	0.003*	0.002*	0.002*	0.002*	0.001*	0.002*	0.003*	0.001	0.001	0.001
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	White	All internet users	0.005*	0.007*	0.006*	0.005*	0.005*	0.005*	0.004*	0.005*	0.003*	0.004*	0.003*	0.003*	0.004*	0.004*
			(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.010*	0.011*	0.010*	0.009*	0.009*	0.007*	0.006*	0.006*	0.004*	0.004*	0.004*	0.003*	0.003*	0.003*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Gender	Female	All internet users	0.006*	0.007*	0.006*	0.005*	0.004*	0.002*	0.001	0.002	0.002	0.002*	0.001	0.001	0.003*	0.002

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.041*	0.036*	0.025*	0.020*	0.015*	0.010*	0.005*	0.004*	0.003*	0.002	0.002	0.001	0.002	0.002
			(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Male	All internet users	0.006*	0.007*	0.006*	0.005*	0.004*	0.002*	0.001	0.002	0.002	0.003*	0.001	0.001	0.003*	0.002
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.038*	0.034*	0.024*	0.019*	0.014*	0.010*	0.005*	0.004*	0.003*	0.002	0.002	0.001	0.002	0.002
			(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Health	Healthy	All internet users	0.002	0.002*	0.001	0.003*	0.005*	0.005*	0.006*	0.009*	0.007*	0.007*	0.007*	0.008*	0.008*	0.005*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.004	0.004*	0.002	0.002	0.002	0.003*	0.002	0.004*	0.006*	0.003*	0.003*	0.006*	0.004*	0.004*
			(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Illness or disability	All internet users	0.001	0.002*	0.001	0.003*	0.005*	0.005*	0.005*	0.008*	0.006*	0.007*	0.006*	0.007*	0.008*	0.005*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.004	0.004*	0.003	0.002	0.002	0.003*	0.002	0.004*	0.006*	0.002*	0.002*	0.006*	0.004*	0.004*
			(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Household	Q1 (Bottom)	All internet users	0.014*	0.016*	0.015*	0.017*	0.016*	0.015*	0.010*	0.012*	0.012*	0.008*	0.008*	0.008*	0.006*	0.007*
income			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.022*	0.023*	0.019*	0.022*	0.020*	0.019*	0.013*	0.013*	0.013*	0.009*	0.012*	0.014*	0.009*	0.010*
			(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Q2	All internet users	0.012*	0.011*	0.012*	0.011*	0.010*	0.010*	0.008*	0.008*	0.009*	0.006*	0.006*	0.006*	0.004*	0.006*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.015*	0.020*	0.017*	0.014*	0.015*	0.014*	0.012*	0.010*	0.009*	0.008*	0.009*	0.010*	0.007*	0.007*
			(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Q3	All internet users	0.011*	0.012*	0.013*	0.010*	0.012*	0.011*	0.009*	0.008*	0.008*	0.006*	0.007*	0.008*	0.004*	0.004*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.015*	0.017*	0.015*	0.013*	0.014*	0.013*	0.010*	0.009*	0.009*	0.007*	0.008*	0.012*	0.007*	0.006*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Q4	All internet users	0.009*	0.009*	0.011*	0.011*	0.009*	0.009*	0.008*	0.007*	0.006*	0.006*	0.007*	0.005*	0.004*	0.004*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		Daily internet users	0.013*	0.016*	0.014*	0.013*	0.013*	0.012*	0.009*	0.009*	0.009*	0.009*	0.009*	0.007*	0.007*	0.007*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Q5 (Top)	All internet users	0.011*	0.012*	0.012*	0.011*	0.008*	0.007*	0.007*	0.007*	0.005*	0.004*	0.003*	0.003*	0.004*	0.003*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.020*	0.024*	0.020*	0.017*	0.016*	0.011*	0.012*	0.009*	0.009*	0.007*	0.008*	0.006*	0.006*	0.004*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Household	Owned	All internet users	0.008*	0.011*	0.013*	0.012*	0.011*	0.011*	0.010*	0.012*	0.009*	0.009*	0.011*	0.008*	0.007*	0.007*
tenure			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.004	0.003*	0.006*	0.004*	0.005*	0.004*	0.005*	0.004*	0.004*	0.005*	0.005*	0.004*	0.005*	0.005*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Owned mort.	All internet users	0.007*	0.010*	0.008*	0.007*	0.006*	0.006*	0.005*	0.005*	0.004*	0.003*	0.005*	0.003*	0.005*	0.004*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.004	0.004*	0.006*	0.006*	0.006*	0.004*	0.004*	0.003*	0.004*	0.005*	0.005*	0.004*	0.005*	0.004*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Rented	All internet users	0.011*	0.017*	0.016*	0.015*	0.014*	0.013*	0.012*	0.013*	0.010*	0.010*	0.011*	0.009*	0.007*	0.007*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.003	0.006*	0.009*	0.008*	0.008*	0.006*	0.007*	0.006*	0.005*	0.006*	0.005*	0.005*	0.005*	0.005*
			(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Household	1 adult, children	All internet users	0.003*	0.003*	0.003*	0.003*	0.001*	0.001*	0.002*	0.001*	0.001	0.002*	0.003*	0.000	0.001	0.002
type			(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.003	0.004*	0.003	0.003*	0.003*	0.004*	0.003*	0.002*	0.003*	0.004*	0.003*	0.001*	0.001*	0.001
			(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
	1 adult, no children	All internet users	0.004*	0.005*	0.005*	0.004*	0.005*	0.006*	0.007*	0.006*	0.007*	0.009*	0.009*	0.008*	0.009*	0.008*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.003	0.004*	0.004*	0.005*	0.005*	0.004*	0.006*	0.006*	0.006*	0.008*	0.007*	0.005*	0.007*	0.004*
			(0.003)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Couple with children	All internet users	0.006*	0.004*	0.004*	0.003*	0.003*	0.003*	0.003*	0.003*	0.002*	0.002*	0.002*	0.001*	0.001*	0.001
			(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
		Daily internet users	0.003	0.005*	0.004*	0.004*	0.004*	0.004*	0.004*	0.004*	0.003*	0.003*	0.003*	0.001*	0.001*	0.001*

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
	Couple, no children	All internet users	0.006*	0.008*	0.008*	0.007*	0.008*	0.008*	0.009*	0.008*	0.010*	0.011*	0.011*	0.010*	0.011*	0.010*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.003	0.009*	0.010*	0.011*	0.009*	0.009*	0.009*	0.008*	0.008*	0.009*	0.008*	0.008*	0.009*	0.006*
			(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Other household	All internet users	0.008*	0.009*	0.009*	0.008*	0.007*	0.008*	0.006*	0.007*	0.007*	0.006*	0.006*	0.005*	0.004*	0.004*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.005	0.006*	0.008*	0.009*	0.008*	0.010*	0.008*	0.008*	0.007*	0.006*	0.006*	0.006*	0.005*	0.004*
			(0.003)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Region	East Midlands	All internet users	0.005*	0.003*	0.004*	0.004*	0.003*	0.003*	0.003*	0.003*	0.002	0.002	0.003	0.002	0.002	0.005*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)
		Daily internet users	0.016*	0.008*	0.006*	0.007*	0.006*	0.004*	0.004*	0.005*	0.004*	0.004*	0.002	0.003*	0.003*	0.003*
			(0.003)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)
	East of England	All internet users	0.008*	0.010*	0.010*	0.011*	0.009*	0.011*	0.010*	0.008*	0.008*	0.007*	0.007*	0.005*	0.008*	0.005*
			(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.021*	0.011*	0.016*	0.015*	0.015*	0.011*	0.012*	0.008*	0.005*	0.007*	0.006*	0.004*	0.008*	0.005*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)
	London	All internet users	0.009*	0.005*	0.004*	0.005*	0.002*	0.003*	0.003*	0.002*	0.003*	0.003	0.006*	0.003	0.005*	0.002
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
		Daily internet users	0.022*	0.018*	0.012*	0.010*	0.008*	0.007*	0.007*	0.007*	0.004*	0.007*	0.003*	0.006*	0.004*	0.005*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)
	North Wast	All internet users	0.006*	0.010*	0.011*	0.009*	0.007*	0.009*	0.007*	0.006*	0.004*	0.006*	0.003	0.004*	0.006*	0.002
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.019*	0.014*	0.011*	0.011*	0.007*	0.009*	0.010*	0.010*	0.003	0.003	0.002	0.005*	0.004*	0.002
			(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	North West	All internet users	0.009*	0.006*	0.006*	0.005*	0.003*	0.003*	0.003*	0.003*	0.003*	0.002	0.007*	0.002	0.004*	0.003*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)
		Daily internet users	0.017*	0.008*	0.008*	0.008*	0.009*	0.006*	0.006*	0.004*	0.003*	0.003*	0.003*	0.003*	0.003*	0.002*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

			2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	Northern Ireland	All internet users	0.015*	0.012*	0.011*	0.011*	0.011*	0.012*	0.013*	0.012*	0.012*	0.011*	0.013*	0.009*	0.012*	0.013*
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.045*	0.025*	0.016*	0.013*	0.012*	0.011*	0.010*	0.011*	0.008*	0.009*	0.010*	0.011*	0.012*	0.009*
			(0.004)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	Scotland	All internet users	0.005*	0.006*	0.006*	0.007*	0.004*	0.005*	0.005*	0.005*	0.004*	0.003*	0.004*	0.003	0.004*	0.008*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.021*	0.017*	0.013*	0.011*	0.010*	0.007*	0.007*	0.006*	0.003*	0.006*	0.005*	0.005*	0.006*	0.006*
			(0.004)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	South Wast	All internet users	0.016*	0.013*	0.013*	0.015*	0.013*	0.012*	0.012*	0.010*	0.010*	0.008*	0.006*	0.007*	0.005*	0.007*
			(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.034*	0.025*	0.021*	0.020*	0.017*	0.016*	0.014*	0.013*	0.008*	0.005*	0.009*	0.010*	0.007*	0.004*
			(0.004)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
	South West	All internet users	0.005*	0.005*	0.005*	0.004*	0.004*	0.004*	0.003*	0.002*	0.003*	0.002*	0.003*	0.002	0.003*	0.003*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.012*	0.007*	0.007*	0.006*	0.006*	0.005*	0.005*	0.004*	0.004*	0.003*	0.003*	0.006*	0.004*	0.002
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
	Wales	All internet users	0.009*	0.009*	0.009*	0.008*	0.008*	0.006*	0.004*	0.003	0.006*	0.003	0.004*	0.002	0.003	0.003*
			(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)
		Daily internet users	0.012*	0.007*	0.008*	0.009*	0.008*	0.004*	0.004*	0.005*	0.004*	0.004	0.004*	0.003	0.003*	0.002
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)
	West Midlands	All internet users	0.007*	0.004*	0.005*	0.004*	0.005*	0.004*	0.004*	0.002*	0.003	0.003	0.002*	0.002	0.002*	0.003*
			(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
		Daily internet users	0.011*	0.012*	0.010*	0.006*	0.007*	0.005*	0.008*	0.003*	0.002*	0.002*	0.002	0.003*	0.004*	0.002
			(0.001)	(0.003)	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)
	Yorkshire and the Humber	All internet users	0.005*	0.004*	0.004*	0.004*	0.004*	0.004*	0.004*	0.003*	0.005*	0.006*	0.005*	0.005*	0.007*	0.005*
			(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
		Daily internet users	0.017*	0.010*	0.007*	0.010*	0.007*	0.008*	0.004*	0.006*	0.006*	0.005*	0.003*	0.007*	0.008*	0.004*
			(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Urban	Rural	All internet users	0.002	0.000	0.000	0.001	0.001	0.001	0.001	0.002	0.003*	0.002	0.001	0.001	0.001	0.002*

		2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
		(0.001)	(0.003)	(0.003)	(0.002)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.001	0.001	0.001	0.002	0.000	0.001	0.000	0.001	0.003*	0.001	0.003*	0.002	0.002	0.001
		(0.008)	(0.003)	(0.002)	(0.002)	(0.003)	(0.002)	(0.006)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Urban	All internet users	0.001	0.000	0.000	0.000	0.001	0.001	0.000	0.002	0.002*	0.002	0.000	0.001	0.001	0.002*
		(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)
	Daily internet users	0.000	0.001	0.001	0.001	0.000	0.001	0.000	0.001	0.003*	0.001	0.002*	0.001	0.001	0.001
		(0.007)	(0.002)	(0.002)	(0.002)	(0.003)	(0.001)	(0.005)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

Sig. * p < .05

Table B5. Unconditional partial coefficients of variation (CV_u) and standard errors at the variable level for internet users and web respondents in Great Britain over time

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Age	All internet users	0.233*	0.230*	0.191*	0.166*	0.169*	0.144*	0.136*	0.108*	0.083*	0.111*	0.099*	0.070*
		(0.013)	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.010)	(0.011)	(0.010)	(0.011)	(0.011)	(0.009)
	Daily internet users	0.367*	0.375*	0.321*	0.287*	0.305*	0.251*	0.242*	0.212*	0.158*	0.182*	0.171*	0.134*
		(0.018)	(0.016)	(0.013)	(0.014)	(0.014)	(0.013)	(0.011)	(0.012)	(0.012)	(0.011)	(0.013)	(0.011)
	Web response	0.258*	0.177*	0.175*	0.126*	0.144*	0.163*	0.156*		0.146*	0.157*	0.098*	0.106*
		(0.028)	(0.025)	(0.028)	(0.026)	(0.020)	(0.023)	(0.020)		(0.021)	(0.018)	(0.017)	(0.016)
Behind with bills	All internet users	0.002	0.024*	0.006	0.026*	0.002	0.000	0.012*	0.018*	0.009	0.005	0.007	0.008
		(0.040)	(0.009)	(0.013)	(0.011)	(0.025)	(0.138)	(0.004)	(0.002)	(0.005)	(0.006)	(0.005)	(0.004)
	Daily internet users	0.008	0.004	0.000	0.015	0.020	0.016	0.002	0.019	0.008	0.003	0.012	0.018*
		(0.043)	(0.068)	(0.748)	(0.019)	(0.015)	(0.013)	(0.036)	(0.011)	(0.012)	(0.022)	(0.009)	(0.006)
	Web response	0.083*	0.031	0.095*	0.088*	0.092*	0.100*	0.046*		0.072*	0.041*	0.022	0.036*
		(0.030)	(0.031)	(0.028)	(0.025)	(0.020)	(0.023)	(0.021)		(0.021)	(0.019)	(0.019)	(0.016)
Employment status	All internet users	0.140*	0.146*	0.134*	0.115*	0.096*	0.091*	0.075*	0.070*	0.054*	0.067*	0.054*	0.047*
		(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.005)
	Daily internet users	0.198*	0.194*	0.180*	0.181*	0.182*	0.171*	0.158*	0.154*	0.113*	0.123*	0.104*	0.088*
		(0.021)	(0.019)	(0.015)	(0.015)	(0.015)	(0.013)	(0.010)	(0.012)	(0.010)	(0.009)	(0.009)	(0.008)
	Web response	0.207*	0.113*	0.161*	0.058*	0.098*	0.064*	0.069*		0.039	0.013	0.006	0.000
		(0.032)	(0.027)	(0.029)	(0.027)	(0.020)	(0.024)	(0.021)		(0.023)	(0.025)	(0.035)	(0.683)
Gender	All internet users	0.028*	0.020	0.018	0.021*	0.014	0.003	0.002	0.003	0.004	0.006	0.004	0.004
		(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.013)	(0.012)	(0.011)	(0.009)	(0.007)	(0.008)	(0.007)
	Daily internet users	0.081*	0.054*	0.042*	0.048*	0.027	0.010	0.010	0.002	0.004	0.016	0.001	0.003
		(0.022)	(0.020)	(0.016)	(0.015)	(0.016)	(0.017)	(0.013)	(0.063)	(0.021)	(0.010)	(0.085)	(0.015)
	Web response	0.043	0.012	0.046	0.026	0.057*	0.043	0.024		0.022	0.041*	0.042*	0.030
		(0.037)	(0.050)	(0.031)	(0.031)	(0.021)	(0.025)	(0.023)		(0.026)	(0.019)	(0.017)	(0.016)
Household income	All internet users	0.163*	0.129*	0.131*	0.114*	0.091*	0.088*	0.072*	0.081*	0.052*	0.074*	0.070*	0.052*
		(0.012)	(0.012)	(0.010)	(0.010)	(0.009)	(0.009)	(0.007)	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)
	Daily internet users	0.258*	0.232*	0.196*	0.179*	0.181*	0.156*	0.143*	0.157*	0.093*	0.117*	0.105*	0.071*

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		(0.020)	(0.019)	(0.014)	(0.015)	(0.014)	(0.013)	(0.010)	(0.014)	(0.010)	(0.010)	(0.010)	(0.008)
	Web response	0.317*	0.286*	0.166*	0.161*	0.120*	0.110*	0.075*		0.068*	0.094*	0.064*	0.078*
		(0.031)	(0.027)	(0.029)	(0.026)	(0.020)	(0.024)	(0.022)		(0.023)	(0.019)	(0.018)	(0.016)
Household tenure	All internet users	0.116*	0.113*	0.094*	0.079*	0.076*	0.063*	0.051*	0.040*	0.031*	0.047*	0.043*	0.033*
		(0.010)	(0.009)	(0.007)	(0.007)	(0.007)	(0.006)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)
	Daily internet users	0.222*	0.205*	0.167*	0.144*	0.168*	0.146*	0.130*	0.109*	0.072*	0.094*	0.085*	0.060*
		(0.021)	(0.019)	(0.014)	(0.014)	(0.013)	(0.011)	(0.009)	(0.010)	(0.009)	(0.008)	(0.009)	(0.007)
	Web response	0.265*	0.256*	0.250*	0.195*	0.174*	0.180*	0.127*		0.120*	0.087*	0.049*	0.073*
		(0.032)	(0.026)	(0.028)	(0.025)	(0.020)	(0.023)	(0.021)		(0.021)	(0.019)	(0.018)	(0.016)
Household type	All internet users	0.153*	0.148*	0.130*	0.103*	0.098*	0.086*	0.078*	0.068*	0.055*	0.076*	0.058*	0.050*
		(0.013)	(0.012)	(0.010)	(0.010)	(0.010)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)	(0.007)
	Daily internet users	0.216*	0.220*	0.208*	0.178*	0.183*	0.148*	0.139*	0.125*	0.094*	0.116*	0.083*	0.075*
		(0.021)	(0.019)	(0.014)	(0.014)	(0.014)	(0.012)	(0.010)	(0.012)	(0.009)	(0.010)	(0.009)	(0.008)
	Web response	0.214*	0.178*	0.152*	0.146*	0.132*	0.159*	0.134*		0.128*	0.144*	0.084*	0.099*
		(0.032)	(0.027)	(0.030)	(0.026)	(0.020)	(0.023)	(0.020)		(0.022)	(0.018)	(0.017)	(0.016)
Region	All internet users	0.052*	0.061*	0.042*	0.041*	0.039*	0.037*	0.020*	0.028*	0.030*	0.037*	0.036*	0.021*
		(0.012)	(0.012)	(0.010)	(0.009)	(0.010)	(0.009)	(0.007)	(0.009)	(0.009)	(0.008)	(0.008)	(0.007)
	Daily internet users	0.098*	0.094*	0.077*	0.078*	0.064*	0.040*	0.036*	0.030*	0.022	0.029*	0.036*	0.023*
		(0.022)	(0.020)	(0.016)	(0.016)	(0.015)	(0.014)	(0.011)	(0.014)	(0.012)	(0.011)	(0.010)	(0.009)
	Web response	0.084*	0.102*	0.108*	0.105*	0.051*	0.086*	0.062*		0.095*	0.036	0.043*	0.031
		(0.036)	(0.027)	(0.029)	(0.026)	(0.022)	(0.025)	(0.022)		(0.022)	(0.021)	(0.018)	(0.018)

Sig. * $p < .05$

Table B6. Conditional partial coefficients of variation (CV_c) and standard errors at the variable level for internet users and web respondents in Great Britain over time

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Age	All internet users	0.111*	0.115*	0.094*	0.088*	0.100*	0.090*	0.097*	0.073*	0.057*	0.078*	0.076*	0.054*
		(0.013)	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.010)	(0.011)	(0.010)	(0.011)	(0.011)	(0.009)
	Daily internet users	0.184*	0.197*	0.158*	0.143*	0.157*	0.131*	0.135*	0.102*	0.082*	0.100*	0.106*	0.081*
		(0.018)	(0.016)	(0.013)	(0.014)	(0.014)	(0.013)	(0.011)	(0.012)	(0.012)	(0.011)	(0.013)	(0.011)
	Web response	0.132*	0.102*	0.086*	0.049	0.082*	0.125*	0.108*		0.097*	0.101*	0.069*	0.060*
		(0.028)	(0.025)	(0.028)	(0.026)	(0.020)	(0.023)	(0.020)		(0.021)	(0.018)	(0.017)	(0.016)
Behind with bills	All internet users	0.009	0.006	0.015	0.017	0.003	0.005	0.007	0.023*	0.004	0.000	0.002	0.009*
		(0.040)	(0.009)	(0.013)	(0.011)	(0.025)	(0.138)	(0.004)	(0.002)	(0.005)	(0.006)	(0.005)	(0.004)
	Daily internet users	0.006	0.008	0.015	0.007	0.009	0.007	0.006	0.001	0.007	0.004	0.001	0.009
		(0.043)	(0.068)	(0.748)	(0.019)	(0.015)	(0.013)	(0.036)	(0.011)	(0.012)	(0.022)	(0.009)	(0.006)
	Web response	0.003	0.037	0.014	0.004	0.009	0.018	0.002		0.012	0.012	0.003	0.001
		(0.030)	(0.031)	(0.028)	(0.025)	(0.020)	(0.023)	(0.021)		(0.021)	(0.019)	(0.019)	(0.016)
Employment status	All internet users	0.012	0.034*	0.034*	0.020*	0.013	0.021*	0.015*	0.023*	0.017*	0.017*	0.006	0.014*
		(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.005)
	Daily internet users	0.005	0.018	0.016	0.015	0.018	0.027*	0.023*	0.027*	0.032*	0.020*	0.011	0.020*
		(0.021)	(0.019)	(0.015)	(0.015)	(0.015)	(0.013)	(0.010)	(0.012)	(0.010)	(0.009)	(0.009)	(0.008)
	Web response	0.015	0.001	0.039	0.009	0.023	0.003	0.041		0.004	0.033	0.003	0.010
		(0.032)	(0.027)	(0.029)	(0.027)	(0.020)	(0.024)	(0.021)		(0.023)	(0.025)	(0.035)	(0.683)
Gender	All internet users	0.021	0.013	0.023*	0.017	0.013	0.001	0.001	0.005	0.004	0.002	0.018*	0.012
		(0.011)	(0.011)	(0.009)	(0.009)	(0.009)	(0.013)	(0.012)	(0.011)	(0.009)	(0.007)	(0.008)	(0.007)
	Daily internet users	0.056*	0.039	0.043*	0.035*	0.020	0.009	0.013	0.007	0.006	0.006	0.006	0.006
		(0.022)	(0.020)	(0.016)	(0.015)	(0.016)	(0.017)	(0.013)	(0.063)	(0.021)	(0.010)	(0.085)	(0.015)
	Web response	0.060	0.022	0.046	0.032	0.055*	0.044	0.025		0.021	0.037	0.033	0.025
		(0.037)	(0.050)	(0.031)	(0.031)	(0.021)	(0.025)	(0.023)		(0.026)	(0.019)	(0.017)	(0.016)
Household income	All internet users	0.050*	0.037*	0.039*	0.034*	0.018	0.027*	0.020*	0.044*	0.026*	0.034*	0.044*	0.024*

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		(0.012)	(0.012)	(0.010)	(0.010)	(0.009)	(0.009)	(0.007)	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)
	Daily internet users	0.072*	0.082*	0.057*	0.054*	0.053*	0.050*	0.043*	0.068*	0.042*	0.047*	0.051*	0.027*
		(0.020)	(0.019)	(0.014)	(0.015)	(0.014)	(0.013)	(0.010)	(0.014)	(0.010)	(0.010)	(0.010)	(0.008)
	Web response	0.161*	0.159*	0.056	0.126*	0.060*	0.076*	0.068*		0.050*	0.087*	0.049*	0.068*
		(0.031)	(0.027)	(0.029)	(0.026)	(0.020)	(0.024)	(0.022)		(0.023)	(0.019)	(0.018)	(0.016)
Household tenure	All internet users	0.029*	0.049*	0.043*	0.039*	0.048*	0.028*	0.035*	0.025*	0.027*	0.027*	0.013*	0.036*
		(0.010)	(0.009)	(0.007)	(0.007)	(0.007)	(0.006)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)
	Daily internet users	0.052*	0.042*	0.032*	0.051*	0.046*	0.047*	0.039*	0.029*	0.022*	0.033*	0.017*	0.041*
		(0.021)	(0.019)	(0.014)	(0.014)	(0.013)	(0.011)	(0.009)	(0.010)	(0.009)	(0.008)	(0.009)	(0.007)
	Web response	0.093*	0.120*	0.107*	0.070*	0.068*	0.072*	0.074*		0.054*	0.047*	0.042*	0.031*
		(0.032)	(0.026)	(0.028)	(0.025)	(0.020)	(0.023)	(0.021)		(0.021)	(0.019)	(0.018)	(0.016)
Household type	All internet users	0.033*	0.046*	0.032*	0.020*	0.027*	0.040*	0.032*	0.034*	0.015	0.029*	0.026*	0.017*
		(0.013)	(0.012)	(0.010)	(0.010)	(0.010)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)	(0.007)
	Daily internet users	0.053*	0.077*	0.047*	0.036*	0.052*	0.060*	0.027*	0.045*	0.031*	0.031*	0.036*	0.021*
		(0.021)	(0.019)	(0.014)	(0.014)	(0.014)	(0.012)	(0.010)	(0.012)	(0.009)	(0.010)	(0.009)	(0.008)
	Web response	0.147*	0.106*	0.088*	0.097*	0.073*	0.120*	0.084*		0.083*	0.085*	0.054*	0.063*
		(0.032)	(0.027)	(0.030)	(0.026)	(0.020)	(0.023)	(0.020)		(0.022)	(0.018)	(0.017)	(0.016)
Region	All internet users	0.028*	0.029*	0.020	0.029*	0.031*	0.033*	0.020*	0.030*	0.031*	0.039*	0.048*	0.027*
		(0.012)	(0.012)	(0.010)	(0.009)	(0.010)	(0.009)	(0.007)	(0.009)	(0.009)	(0.008)	(0.008)	(0.007)
	Daily internet users	0.044*	0.040*	0.039*	0.049*	0.040*	0.021	0.020	0.011	0.017	0.014	0.032*	0.019*
		(0.022)	(0.020)	(0.016)	(0.016)	(0.015)	(0.014)	(0.011)	(0.014)	(0.012)	(0.011)	(0.010)	(0.009)
	Web response	0.054	0.067*	0.072*	0.062*	0.037	0.067*	0.037		0.071*	0.022	0.030	0.026
		(0.036)	(0.027)	(0.029)	(0.026)	(0.022)	(0.025)	(0.022)		(0.022)	(0.021)	(0.018)	(0.018)

Sig. * $p < .05$

Table B7. Unconditional partial coefficients of variation (CV_u) and standard errors at the group level for internet users and web respondents in Great Britain over time

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Age	16-34	All internet users	0.106*	0.101*	0.077*	0.066*	0.067*	0.050*	0.041*	0.040	0.028	0.036	0.028	0.024
			(0.024)	(0.023)	(0.022)	(0.022)	(0.024)	(0.021)	(0.019)	(0.024)	(0.026)	(0.023)	(0.024)	(0.022)
		Daily internet users	0.236*	0.243*	0.192*	0.146*	0.160*	0.115*	0.113*	0.114*	0.069*	0.085*	0.065*	0.049*
			(0.028)	(0.028)	(0.026)	(0.025)	(0.027)	(0.023)	(0.022)	(0.027)	(0.028)	(0.025)	(0.025)	(0.023)
		Web response	-0.070*	-0.034	-0.079*	-0.101*	-0.083*	-0.056*	-0.073*		-0.105*	-0.112*	-0.080*	-0.097*
			(0.018)	(0.020)	(0.019)	(0.019)	(0.018)	(0.018)	(0.018)		(0.016)	(0.014)	(0.014)	(0.014)
	35-54	All internet users	0.061*	0.071*	0.063*	0.055*	0.058*	0.043*	0.041*	0.039	0.033	0.035	0.031	0.026
			(0.018)	(0.019)	(0.017)	(0.018)	(0.019)	(0.017)	(0.016)	(0.020)	(0.022)	(0.019)	(0.020)	(0.020)
		Daily internet users	0.042*	0.045*	0.070*	0.088*	0.090*	0.091*	0.080*	0.071*	0.066*	0.066*	0.057*	0.055*
			(0.019)	(0.020)	(0.018)	(0.019)	(0.020)	(0.019)	(0.017)	(0.021)	(0.023)	(0.019)	(0.021)	(0.021)
		Web response	0.140*	0.063*	0.104*	0.050*	0.073*	0.045*	0.020		0.058*	0.011	0.034*	0.034
			(0.021)	(0.020)	(0.022)	(0.022)	(0.019)	(0.018)	(0.018)		(0.019)	(0.016)	(0.016)	(0.017)
	55-74	All internet users	-0.060*	-0.066*	-0.046*	-0.040*	-0.041*	-0.020	-0.011	-0.021	-0.014	-0.003	0.004	-0.007
			(0.015)	(0.016)	(0.015)	(0.015)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.016)	(0.017)	(0.017)
		Daily internet users	-0.138*	-0.144*	-0.127*	-0.112*	-0.116*	-0.097*	-0.081*	-0.091*	-0.055*	-0.048*	-0.017	-0.025
			(0.015)	(0.016)	(0.014)	(0.015)	(0.016)	(0.015)	(0.014)	(0.016)	(0.018)	(0.016)	(0.017)	(0.017)
		Web response	0.054*	0.066*	0.047*	0.068*	0.061*	0.091*	0.115*		0.082*	0.118*	0.060*	0.048*
			(0.019)	(0.020)	(0.020)	(0.022)	(0.019)	(0.020)	(0.020)		(0.019)	(0.017)	(0.016)	(0.017)
	75+	All internet users	-0.194*	-0.187*	-0.160*	-0.140*	-0.143*	-0.130*	-0.125*	-0.093*	-0.074*	-0.102*	-0.093*	-0.063*
			(0.010)	(0.010)	(0.011)	(0.012)	(0.012)	(0.012)	(0.011)	(0.015)	(0.017)	(0.016)	(0.017)	(0.018)
		Daily internet users	-0.252*	-0.252*	-0.218*	-0.209*	-0.220*	-0.185*	-0.186*	-0.142*	-0.119*	-0.144*	-0.150*	-0.113*
			(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.009)	(0.008)	(0.013)	(0.014)	(0.013)	(0.014)	(0.015)
		Web response	-0.213*	-0.155*	-0.124*	-0.027	-0.083*	-0.126*	-0.092*		-0.058*	-0.029	-0.022	0.012
			(0.010)	(0.016)	(0.017)	(0.033)	(0.024)	(0.021)	(0.026)		(0.023)	(0.023)	(0.024)	(0.028)
Behind with bills	All paid	All internet users	0.001	-0.007	0.002	0.006	-0.001	0.000	-0.003	-0.004	-0.003	-0.001	-0.002	-0.002
			(0.008)	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.008)	(0.010)	(0.008)	(0.009)	(0.009)
		Daily internet users	0.002	-0.001	0.000	0.004	-0.005	-0.004	-0.001	-0.005	-0.002	-0.001	-0.004	-0.005

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.008)	(0.008)	(0.008)	(0.006)	(0.008)	(0.007)	(0.007)	(0.008)	(0.010)	(0.008)	(0.009)	(0.010)
		Web response	0.023*	0.009	0.031*	0.026*	0.027*	0.030*	0.014*		0.021*	0.012*	0.007	0.011*
			(0.004)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.006)		(0.005)	(0.005)	(0.005)	(0.005)
	Unpaid bills	All internet users	-0.002	0.024	-0.006	-0.026	0.002	-0.000	0.012	0.018	0.009	0.005	0.007	0.008
			(0.027)	(0.028)	(0.025)	(0.025)	(0.028)	(0.025)	(0.024)	(0.032)	(0.034)	(0.028)	(0.029)	(0.029)
		Daily internet users	-0.008	0.004	-0.000	-0.015	0.020	0.016	0.002	0.019	0.007	0.003	0.012	0.017
			(0.028)	(0.027)	(0.026)	(0.026)	(0.030)	(0.027)	(0.024)	(0.032)	(0.034)	(0.028)	(0.030)	(0.030)
		Web response	-0.084*	-0.031	-0.096*	-0.089*	-0.092*	-0.100*	-0.046*		-0.074*	-0.042*	-0.023	-0.037*
			(0.016)	(0.021)	(0.019)	(0.018)	(0.016)	(0.016)	(0.021)		(0.017)	(0.018)	(0.018)	(0.017)
Employment status	Employed	All internet users	0.096*	0.100*	0.092*	0.079*	0.066*	0.062*	0.051*	0.049*	0.039*	0.047*	0.038*	0.033*
			(0.014)	(0.014)	(0.013)	(0.013)	(0.014)	(0.013)	(0.012)	(0.015)	(0.017)	(0.014)	(0.015)	(0.015)
		Daily internet users	0.136*	0.133*	0.123*	0.124*	0.123*	0.116*	0.107*	0.107*	0.081*	0.087*	0.073*	0.062*
			(0.016)	(0.016)	(0.014)	(0.014)	(0.015)	(0.013)	(0.012)	(0.016)	(0.017)	(0.015)	(0.016)	(0.015)
		Web response	0.145*	0.079*	0.113*	0.040*	0.070*	0.045*	0.049*		0.028*	0.010	0.004	0.000
			(0.014)	(0.014)	(0.014)	(0.016)	(0.014)	(0.014)	(0.015)		(0.014)	(0.013)	(0.012)	(0.015)
	Non-employed	All internet users	-0.105*	-0.110*	-0.100*	-0.087*	-0.073*	-0.069*	-0.057*	-0.053*	-0.040*	-0.049*	-0.040*	-0.036*
			(0.016)	(0.016)	(0.014)	(0.015)	(0.016)	(0.014)	(0.013)	(0.016)	(0.017)	(0.015)	(0.016)	(0.016)
		Daily internet users	-0.149*	-0.146*	-0.134*	-0.136*	-0.137*	-0.129*	-0.119*	-0.115*	-0.083*	-0.090*	-0.077*	-0.067*
			(0.017)	(0.018)	(0.016)	(0.016)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.015)	(0.016)	(0.016)
		Web response	-0.161*	-0.088*	-0.128*	-0.046*	-0.076*	-0.050*	-0.053*		-0.031*	-0.010	-0.005	-0.000
			(0.015)	(0.016)	(0.016)	(0.019)	(0.016)	(0.016)	(0.016)		(0.015)	(0.014)	(0.014)	(0.015)
Gender	Female	All internet users	-0.020	-0.014	-0.013	-0.015	-0.010	-0.002	-0.002	-0.002	-0.003	-0.005	0.003	0.003
			(0.015)	(0.015)	(0.014)	(0.014)	(0.015)	(0.014)	(0.013)	(0.016)	(0.017)	(0.015)	(0.016)	(0.015)
		Daily internet users	-0.058*	-0.038*	-0.030	-0.034*	-0.019	-0.007	0.007	0.001	0.003	-0.011	-0.000	0.002
			(0.017)	(0.017)	(0.015)	(0.016)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.015)	(0.016)	(0.015)
		Web response	0.031*	0.008	0.034*	0.019	0.042*	0.032*	0.018		0.016	0.030*	0.033*	0.023
			(0.015)	(0.015)	(0.016)	(0.017)	(0.015)	(0.015)	(0.015)		(0.014)	(0.013)	(0.013)	(0.015)
	Male	All internet users	0.021	0.015	0.013	0.015	0.010	0.002	0.002	0.002	0.003	0.005	-0.003	-0.003
			(0.015)	(0.016)	(0.014)	(0.015)	(0.015)	(0.014)	(0.013)	(0.016)	(0.017)	(0.015)	(0.016)	(0.016)

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		Daily internet users	0.059*	0.039*	0.031	0.035*	0.020	0.007	-0.007	-0.001	-0.003	0.012	0.001	-0.002
			(0.018)	(0.018)	(0.016)	(0.016)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.015)	(0.016)	(0.016)
		Web response	-0.032*	-0.009	-0.035*	-0.019	-0.043*	-0.032*	-0.018		-0.017	-0.031*	-0.034*	-0.023
			(0.016)	(0.016)	(0.016)	(0.018)	(0.015)	(0.015)	(0.015)		(0.015)	(0.013)	(0.013)	(0.015)
Household income	Q1 (Bottom)	All internet users	-0.129*	-0.103*	-0.097*	-0.092*	-0.068*	-0.072*	-0.060*	-0.071*	-0.044	-0.062*	-0.059*	-0.045*
			(0.017)	(0.018)	(0.017)	(0.017)	(0.020)	(0.017)	(0.016)	(0.020)	(0.023)	(0.018)	(0.020)	(0.020)
		Daily internet users	-0.199*	-0.178*	-0.131*	-0.134*	-0.132*	-0.121*	-0.103*	-0.132*	-0.071*	-0.094*	-0.081*	-0.051*
			(0.017)	(0.018)	(0.017)	(0.017)	(0.019)	(0.017)	(0.016)	(0.019)	(0.022)	(0.018)	(0.020)	(0.020)
		Web response	-0.221*	-0.153*	-0.120*	-0.086*	-0.071*	-0.065*	0.003		-0.016	0.031	0.049*	0.033
			(0.013)	(0.016)	(0.017)	(0.023)	(0.020)	(0.020)	(0.023)		(0.020)	(0.019)	(0.019)	(0.023)
	Q2	All internet users	-0.026	-0.015	-0.035*	-0.016	-0.021	-0.009	-0.003	-0.001	-0.002	0.005	0.004	-0.000
			(0.020)	(0.021)	(0.018)	(0.020)	(0.021)	(0.019)	(0.017)	(0.023)	(0.023)	(0.021)	(0.021)	(0.022)
		Daily internet users	-0.049*	-0.035	-0.059*	-0.037	-0.025	-0.028	-0.035*	-0.013	-0.015	0.002	-0.014	-0.018
			(0.021)	(0.022)	(0.018)	(0.020)	(0.022)	(0.019)	(0.018)	(0.023)	(0.024)	(0.021)	(0.021)	(0.022)
		Web response	-0.109*	-0.092*	-0.050*	-0.037	-0.034	-0.022	-0.044*		-0.008	0.069*	-0.031	-0.018
			(0.016)	(0.018)	(0.020)	(0.022)	(0.020)	(0.020)	(0.020)		(0.020)	(0.020)	(0.017)	(0.020)
	Q3	All internet users	0.027	0.014	0.031	0.023	0.019	0.015	0.014	0.026	0.007	0.021	0.024	0.015
			(0.022)	(0.023)	(0.021)	(0.021)	(0.021)	(0.020)	(0.018)	(0.022)	(0.024)	(0.022)	(0.023)	(0.021)
		Daily internet users	0.031	0.018	0.018	0.031	0.018	0.033	0.029	0.032	0.011	0.014	0.033	0.015
			(0.025)	(0.025)	(0.022)	(0.023)	(0.023)	(0.022)	(0.019)	(0.023)	(0.025)	(0.022)	(0.024)	(0.022)
		Web response	0.039	-0.053*	0.012	0.017	-0.009	-0.006	0.042		0.001	-0.042*	-0.027	-0.052*
			(0.023)	(0.020)	(0.024)	(0.025)	(0.020)	(0.021)	(0.022)		(0.020)	(0.017)	(0.016)	(0.018)
	Q4	All internet users	0.067*	0.040	0.046*	0.039	0.033	0.032	0.026	0.021	0.020	0.023	0.022	0.017
			(0.023)	(0.022)	(0.021)	(0.022)	(0.022)	(0.020)	(0.019)	(0.021)	(0.024)	(0.021)	(0.022)	(0.022)
		Daily internet users	0.104*	0.067*	0.063*	0.042	0.041	0.046*	0.038	0.057*	0.031	0.048*	0.043	0.021
			(0.027)	(0.025)	(0.023)	(0.023)	(0.023)	(0.021)	(0.020)	(0.023)	(0.025)	(0.022)	(0.024)	(0.022)
		Web response	0.133*	0.090*	0.069*	-0.032	0.032	0.010	-0.034		-0.034	-0.032	0.024	-0.012
			(0.025)	(0.023)	(0.024)	(0.022)	(0.021)	(0.020)	(0.018)		(0.020)	(0.017)	(0.018)	(0.018)
	Q5 (Top)	All internet users	0.070*	0.067*	0.063*	0.052*	0.047*	0.040	0.030	0.027	0.024	0.028	0.024	0.020

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.023)	(0.023)	(0.022)	(0.022)	(0.022)	(0.021)	(0.019)	(0.023)	(0.023)	(0.021)	(0.022)	(0.021)
		Daily internet users	0.126*	0.134*	0.121*	0.106*	0.117*	0.081*	0.083*	0.062*	0.054*	0.053*	0.041	0.042
			(0.028)	(0.028)	(0.025)	(0.025)	(0.026)	(0.023)	(0.021)	(0.025)	(0.025)	(0.022)	(0.023)	(0.022)
		Web response	0.174*	0.214*	0.095*	0.138*	0.093*	0.093*	0.038		0.061*	-0.034*	-0.018	0.053*
			(0.027)	(0.030)	(0.026)	(0.029)	(0.024)	(0.024)	(0.020)		(0.022)	(0.016)	(0.017)	(0.022)
Household tenure	Owned	All internet users	-0.078*	-0.070*	-0.045*	-0.038*	-0.037*	-0.034*	-0.028*	-0.020	-0.012	-0.024	-0.029	-0.011
			(0.016)	(0.016)	(0.015)	(0.016)	(0.016)	(0.015)	(0.014)	(0.017)	(0.018)	(0.016)	(0.017)	(0.017)
		Daily internet users	-0.153*	-0.144*	-0.113*	-0.085*	-0.106*	-0.088*	-0.080*	-0.062*	-0.043*	-0.053*	-0.059*	-0.033*
			(0.017)	(0.017)	(0.016)	(0.017)	(0.017)	(0.015)	(0.014)	(0.017)	(0.018)	(0.016)	(0.017)	(0.017)
		Web response	-0.025	0.025	0.019	0.027	0.056*	0.036	0.076*		0.014	0.065*	-0.008	0.052*
			(0.018)	(0.019)	(0.019)	(0.022)	(0.019)	(0.019)	(0.020)		(0.017)	(0.016)	(0.015)	(0.018)
	Owned mort.	All internet users	0.086*	0.088*	0.076*	0.064*	0.062*	0.051*	0.042*	0.034	0.027	0.039*	0.033	0.027
			(0.018)	(0.018)	(0.017)	(0.017)	(0.017)	(0.017)	(0.016)	(0.019)	(0.020)	(0.017)	(0.019)	(0.018)
		Daily internet users	0.164*	0.150*	0.125*	0.114*	0.131*	0.116*	0.103*	0.090*	0.059*	0.077*	0.064*	0.049*
			(0.021)	(0.021)	(0.019)	(0.019)	(0.019)	(0.018)	(0.017)	(0.021)	(0.021)	(0.018)	(0.019)	(0.019)
		Web response	0.194*	0.164*	0.167*	0.122*	0.078*	0.103*	0.026		0.078*	-0.008	0.038*	-0.006
			(0.019)	(0.020)	(0.020)	(0.021)	(0.017)	(0.018)	(0.017)		(0.018)	(0.015)	(0.015)	(0.016)
	Rented	All internet users	-0.017	-0.024	-0.035	-0.031	-0.029	-0.018	-0.013	-0.012	-0.013	-0.015	-0.003	-0.017
			(0.020)	(0.020)	(0.019)	(0.019)	(0.021)	(0.019)	(0.017)	(0.021)	(0.024)	(0.020)	(0.022)	(0.021)
		Daily internet users	-0.029	-0.015	-0.015	-0.036	-0.029	-0.028	-0.018	-0.023	-0.012	-0.023	-0.003	-0.017
			(0.022)	(0.022)	(0.021)	(0.021)	(0.022)	(0.019)	(0.018)	(0.022)	(0.024)	(0.020)	(0.022)	(0.021)
		Web response	-0.197*	-0.209*	-0.205*	-0.165*	-0.155*	-0.155*	-0.107*		-0.101*	-0.064*	-0.037*	-0.059*
			(0.015)	(0.015)	(0.016)	(0.018)	(0.016)	(0.016)	(0.017)		(0.017)	(0.016)	(0.015)	(0.017)
Household type	1 adult, children	All internet users	0.023	0.036	0.030	0.020	0.022	0.009	0.011	0.012	0.012	0.013	0.012	0.007
			(0.029)	(0.031)	(0.028)	(0.028)	(0.031)	(0.026)	(0.024)	(0.030)	(0.034)	(0.027)	(0.029)	(0.026)
		Daily internet users	0.032	0.054	0.067*	0.051	0.052	0.042	0.023	0.029	0.031	0.025	0.024	0.018
			(0.031)	(0.035)	(0.033)	(0.032)	(0.035)	(0.031)	(0.025)	(0.033)	(0.037)	(0.029)	(0.031)	(0.028)
		Web response	-0.024	-0.062*	-0.026	-0.038	-0.086*	-0.070*	-0.065*		-0.023	-0.031	0.003	-0.018
			(0.022)	(0.017)	(0.026)	(0.025)	(0.014)	(0.015)	(0.017)		(0.020)	(0.017)	(0.019)	(0.014)

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	1 adult, no children	All internet users	-0.126*	-0.120*	-0.103*	-0.082*	-0.077*	-0.074*	-0.068*	-0.058*	-0.046	-0.067*	-0.049*	-0.043*
			(0.017)	(0.018)	(0.016)	(0.019)	(0.020)	(0.018)	(0.016)	(0.021)	(0.024)	(0.019)	(0.022)	(0.021)
		Daily internet users	-0.161*	-0.164*	-0.127*	-0.111*	-0.118*	-0.095*	-0.094*	-0.082*	-0.059*	-0.089*	-0.057*	-0.049*
			(0.018)	(0.018)	(0.016)	(0.019)	(0.020)	(0.018)	(0.016)	(0.020)	(0.023)	(0.019)	(0.022)	(0.021)
		Web response	-0.158*	-0.103*	-0.074*	0.017	-0.036	-0.045	-0.040		-0.015	-0.022	0.035	0.028
			(0.015)	(0.019)	(0.020)	(0.031)	(0.025)	(0.023)	(0.024)		(0.022)	(0.020)	(0.022)	(0.026)
	Couple with children	All internet users	0.067*	0.068*	0.065*	0.054*	0.051*	0.040	0.034	0.032	0.026	0.026	0.024	0.020
			(0.023)	(0.023)	(0.022)	(0.022)	(0.023)	(0.021)	(0.019)	(0.024)	(0.026)	(0.023)	(0.025)	(0.024)
		Daily internet users	0.118*	0.120*	0.117*	0.105*	0.116*	0.099*	0.079*	0.079*	0.059*	0.061*	0.048	0.045
			(0.026)	(0.026)	(0.025)	(0.024)	(0.026)	(0.023)	(0.021)	(0.027)	(0.028)	(0.024)	(0.026)	(0.025)
		Web response	0.047*	0.065*	0.075*	0.020	-0.010	0.012	-0.039*		-0.018	0.005	0.001	0.007
			(0.022)	(0.025)	(0.027)	(0.024)	(0.020)	(0.020)	(0.019)		(0.020)	(0.019)	(0.018)	(0.018)
	Couple, no children	All internet users	-0.023	-0.022	-0.024	-0.016	-0.016	-0.001	0.001	-0.001	-0.006	0.003	-0.004	0.001
			(0.017)	(0.017)	(0.015)	(0.016)	(0.017)	(0.016)	(0.015)	(0.017)	(0.018)	(0.016)	(0.017)	(0.017)
		Daily internet users	-0.058*	-0.054*	-0.085*	-0.069*	-0.057*	-0.040*	-0.043*	-0.036*	-0.030	-0.018	-0.023	-0.023
			(0.019)	(0.019)	(0.016)	(0.016)	(0.017)	(0.016)	(0.015)	(0.017)	(0.018)	(0.016)	(0.017)	(0.017)
		Web response	0.143*	0.114*	0.095*	0.110*	0.099*	0.129*	0.112*		0.113*	0.121*	0.046*	0.060*
			(0.023)	(0.023)	(0.023)	(0.025)	(0.021)	(0.022)	(0.022)		(0.021)	(0.019)	(0.016)	(0.019)
	Other household	All internet users	0.050*	0.040*	0.033	0.025	0.025	0.023	0.022	0.019	0.017	0.026	0.021	0.017
			(0.021)	(0.020)	(0.019)	(0.019)	(0.019)	(0.017)	(0.017)	(0.021)	(0.022)	(0.019)	(0.020)	(0.019)
		Daily internet users	0.065*	0.053*	0.055*	0.045*	0.035	0.022	0.047*	0.033	0.020	0.036	0.024	0.024
			(0.023)	(0.023)	(0.021)	(0.021)	(0.021)	(0.018)	(0.018)	(0.022)	(0.022)	(0.020)	(0.020)	(0.019)
		Web response	-0.046*	-0.052*	-0.072*	-0.099*	-0.023	-0.064*	-0.015		-0.070*	-0.084*	-0.072*	-0.082*
			(0.017)	(0.017)	(0.017)	(0.018)	(0.017)	(0.016)	(0.017)		(0.016)	(0.014)	(0.014)	(0.016)
Region	East	All internet users	0.025	0.033	0.018	0.027	0.018	0.009	0.002	0.003	0.009	0.010	0.003	0.002
			(0.020)	(0.020)	(0.019)	(0.019)	(0.020)	(0.019)	(0.016)	(0.020)	(0.021)	(0.019)	(0.020)	(0.020)
		Daily internet users	0.043	0.041	-0.002	0.015	0.015	0.001	0.004	-0.009	0.008	-0.002	-0.005	0.002
			(0.023)	(0.023)	(0.020)	(0.020)	(0.021)	(0.019)	(0.017)	(0.020)	(0.022)	(0.019)	(0.021)	(0.020)
		Web response	0.065*	0.020	0.057*	0.044	0.031	0.065*	0.047*		0.082*	0.025	0.020	-0.005

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.022)	(0.021)	(0.023)	(0.024)	(0.020)	(0.021)	(0.021)		(0.020)	(0.017)	(0.016)	(0.018)
	North	All internet users	-0.015	-0.014	0.003	-0.002	0.002	0.006	0.004	0.009	0.007	0.010	0.006	0.008
			(0.017)	(0.018)	(0.016)	(0.017)	(0.017)	(0.016)	(0.015)	(0.019)	(0.020)	(0.018)	(0.018)	(0.018)
		Daily internet users	-0.044*	-0.041*	0.003	-0.015	-0.016	-0.004	-0.009	0.008	-0.003	0.009	0.000	0.002
			(0.019)	(0.019)	(0.018)	(0.018)	(0.018)	(0.017)	(0.016)	(0.020)	(0.021)	(0.018)	(0.019)	(0.018)
		Web response	-0.059*	0.026	0.019	0.035	0.015	0.009	0.007		-0.006	-0.009	0.002	0.022
			(0.016)	(0.018)	(0.018)	(0.021)	(0.018)	(0.017)	(0.019)		(0.017)	(0.015)	(0.016)	(0.020)
	South	All internet users	0.022	0.019	0.008	-0.002	0.006	0.010	0.007	0.007	0.005	0.004	0.015	0.003
			(0.022)	(0.023)	(0.019)	(0.020)	(0.021)	(0.019)	(0.018)	(0.022)	(0.024)	(0.020)	(0.021)	(0.020)
		Daily internet users	0.054*	0.052*	0.047*	0.047*	0.040	0.027	0.025	0.017	0.010	0.011	0.025	0.011
			(0.026)	(0.026)	(0.022)	(0.022)	(0.023)	(0.020)	(0.019)	(0.023)	(0.024)	(0.020)	(0.022)	(0.021)
		Web response	0.006	0.022	-0.007	-0.014	-0.022	-0.060*	-0.037		-0.051*	-0.024	-0.037*	-0.024
			(0.022)	(0.022)	(0.023)	(0.024)	(0.020)	(0.019)	(0.019)		(0.019)	(0.017)	(0.016)	(0.018)
	West	All internet users	-0.037	-0.046*	-0.038	-0.032	-0.035	-0.035	-0.018	-0.027	-0.029	-0.034	-0.033	-0.020
			(0.020)	(0.020)	(0.020)	(0.020)	(0.022)	(0.020)	(0.018)	(0.021)	(0.022)	(0.020)	(0.022)	(0.021)
		Daily internet users	-0.057*	-0.055*	-0.063*	-0.060*	-0.045*	-0.030	-0.025	-0.022	-0.018	-0.026	-0.026	-0.020
			(0.021)	(0.022)	(0.020)	(0.020)	(0.022)	(0.021)	(0.019)	(0.022)	(0.023)	(0.020)	(0.022)	(0.022)
		Web response	-0.007	-0.098*	-0.097*	-0.095*	-0.035	-0.018	-0.024		-0.032	0.012	0.022	0.009
			(0.021)	(0.017)	(0.018)	(0.020)	(0.020)	(0.021)	(0.020)		(0.019)	(0.021)	(0.020)	(0.020)

Sig. * p < .05

Table B8. Conditional partial coefficients of variation (CV_c) and standard errors at the group level for internet users and web respondents in Great Britain over time

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Age	16-34	All internet users	0.051*	0.062*	0.045*	0.041*	0.040*	0.030*	0.030*	0.020*	0.017*	0.018*	0.017*	0.016*
			(0.008)	(0.007)	(0.006)	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.006)	(0.004)	(0.005)	(0.004)
		Daily internet users	0.111*	0.123*	0.094*	0.071*	0.082*	0.063*	0.060*	0.051*	0.033*	0.042*	0.034*	0.027*
			(0.011)	(0.010)	(0.008)	(0.008)	(0.008)	(0.007)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.004)
		Web response	0.046*	0.016	0.035*	0.032*	0.033*	0.025*	0.028*		0.053*	0.055*	0.047*	0.045*
			(0.017)	(0.010)	(0.016)	(0.014)	(0.009)	(0.008)	(0.010)		(0.012)	(0.011)	(0.010)	(0.009)
	35-54	All internet users	0.042*	0.035*	0.030*	0.025*	0.037*	0.028*	0.032*	0.032*	0.018*	0.024*	0.018*	0.021*
			(0.005)	(0.005)	(0.005)	(0.004)	(0.006)	(0.004)	(0.005)	(0.006)	(0.006)	(0.007)	(0.004)	(0.006)
		Daily internet users	0.077*	0.075*	0.053*	0.042*	0.054*	0.042*	0.046*	0.037*	0.027*	0.032*	0.024*	0.027*
			(0.008)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.005)
		Web response	0.052*	0.021	0.035*	0.022	0.042*	0.036*	0.030*		0.043*	0.030*	0.029*	0.035*
			(0.018)	(0.011)	(0.015)	(0.013)	(0.010)	(0.011)	(0.009)		(0.011)	(0.008)	(0.009)	(0.009)
	55-74	All internet users	0.062*	0.070*	0.053*	0.052*	0.057*	0.053*	0.055*	0.041*	0.032*	0.049*	0.049*	0.033*
			(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.006)	(0.005)
		Daily internet users	0.104*	0.115*	0.092*	0.092*	0.092*	0.081*	0.078*	0.064*	0.050*	0.063*	0.067*	0.050*
			(0.010)	(0.010)	(0.008)	(0.008)	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)	(0.007)	(0.005)
		Web response	0.076*	0.067*	0.052*	0.029	0.043*	0.082*	0.073*		0.057*	0.069*	0.043*	0.027*
			(0.014)	(0.013)	(0.015)	(0.015)	(0.009)	(0.012)	(0.012)		(0.012)	(0.011)	(0.011)	(0.009)
	75+	All internet users	0.067*	0.061*	0.059*	0.055*	0.064*	0.062*	0.070*	0.050*	0.044*	0.056*	0.055*	0.036*
			(0.009)	(0.009)	(0.008)	(0.008)	(0.009)	(0.008)	(0.007)	(0.008)	(0.008)	(0.007)	(0.008)	(0.006)
		Daily internet users	0.078*	0.077*	0.075*	0.076*	0.086*	0.073*	0.082*	0.053*	0.052*	0.061*	0.074*	0.055*
			(0.011)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.008)	(0.009)	(0.009)	(0.008)	(0.009)	(0.007)
		Web response	0.092*	0.077*	0.056*	0.021	0.051*	0.093*	0.078*		0.053*	0.052*	0.029*	0.016*
			(0.017)	(0.014)	(0.016)	(0.014)	(0.011)	(0.013)	(0.012)		(0.012)	(0.011)	(0.011)	(0.008)
Behind with bills	All paid	All internet users	0.006	0.004	0.010*	0.011*	0.002	0.003	0.004	0.014*	0.003	0.000	0.001	0.006
			(0.005)	(0.005)	(0.005)	(0.004)	(0.007)	(0.005)	(0.004)	(0.004)	(0.004)	(0.098)	(0.008)	(0.004)
		Daily internet users	0.004	0.005	0.009	0.005	0.006	0.005	0.004	0.000	0.004	0.003	0.000	0.006

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.009)	(0.010)	(0.006)	(0.006)	(0.005)	(0.006)	(0.005)	(0.032)	(0.005)	(0.007)	(0.034)	(0.004)
		Web response	0.002	0.023*	0.010	0.003	0.006	0.011	0.001		0.008	0.008	0.002	0.000
			(0.049)	(0.010)	(0.011)	(0.025)	(0.009)	(0.009)	(0.039)		(0.008)	(0.008)	(0.015)	(0.063)
	Unpaid bills	All internet users	0.007	0.005	0.012*	0.014*	0.002	0.004	0.006	0.019*	0.004	0.000	0.002	0.007
			(0.005)	(0.006)	(0.006)	(0.005)	(0.008)	(0.007)	(0.006)	(0.006)	(0.005)	(0.111)	(0.011)	(0.005)
		Daily internet users	0.005	0.006	0.012	0.006	0.007	0.006	0.005	0.000	0.005	0.003	0.000	0.008
			(0.011)	(0.011)	(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.046)	(0.007)	(0.007)	(0.047)	(0.005)
		Web response	0.002	0.031*	0.011	0.003	0.008	0.015	0.001		0.011	0.010	0.003	0.001
			(0.069)	(0.013)	(0.013)	(0.030)	(0.011)	(0.011)	(0.049)		(0.011)	(0.010)	(0.019)	(0.080)
Employment status	Employed	All internet users	0.009	0.027*	0.028*	0.016*	0.010	0.017*	0.012*	0.018*	0.015*	0.014*	0.004	0.012*
			(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)
		Daily internet users	0.004	0.014	0.012	0.012	0.014	0.021*	0.018*	0.021*	0.026*	0.016*	0.009	0.016*
			(0.019)	(0.010)	(0.009)	(0.008)	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)	(0.005)	(0.005)
		Web response	0.011	0.000	0.028*	0.007	0.017	0.002	0.030*		0.003	0.024*	0.002	0.007
			(0.023)	(0.269)	(0.014)	(0.018)	(0.009)	(0.040)	(0.009)		(0.025)	(0.009)	(0.026)	(0.010)
	Non-employed	All internet users	0.007	0.022*	0.020*	0.012*	0.009	0.013*	0.009*	0.015*	0.010*	0.010*	0.004	0.008*
			(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.003)	(0.003)	(0.004)	(0.003)	(0.004)	(0.004)	(0.003)
		Daily internet users	0.004	0.013	0.011	0.010	0.012	0.018*	0.015*	0.018*	0.020*	0.012*	0.007	0.012*
			(0.019)	(0.009)	(0.008)	(0.007)	(0.007)	(0.006)	(0.005)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)
		Web response	0.011	0.000	0.030*	0.007	0.018	0.002	0.031*		0.003	0.025*	0.002	0.007
			(0.024)	(0.278)	(0.015)	(0.018)	(0.009)	(0.042)	(0.010)		(0.025)	(0.010)	(0.027)	(0.010)
Gender	Female	All internet users	0.015*	0.009	0.016*	0.012	0.009	0.001	0.001	0.003	0.003	0.001	0.013*	0.008
			(0.007)	(0.007)	(0.007)	(0.006)	(0.007)	(0.027)	(0.032)	(0.010)	(0.009)	(0.016)	(0.006)	(0.006)
		Daily internet users	0.041*	0.028*	0.031*	0.025*	0.014	0.006	0.010	0.005	0.004	0.004	0.005	0.004
			(0.011)	(0.010)	(0.009)	(0.008)	(0.009)	(0.010)	(0.007)	(0.011)	(0.011)	(0.010)	(0.009)	(0.008)
		Web response	0.045*	0.017	0.035*	0.024	0.041*	0.032*	0.018		0.016	0.028*	0.025*	0.019*
			(0.020)	(0.017)	(0.017)	(0.015)	(0.011)	(0.013)	(0.012)		(0.013)	(0.011)	(0.010)	(0.010)
	Male	All internet users	0.015*	0.009	0.016*	0.012	0.009	0.001	0.001	0.004	0.003	0.002	0.013*	0.009
			(0.007)	(0.008)	(0.007)	(0.007)	(0.007)	(0.026)	(0.032)	(0.010)	(0.010)	(0.018)	(0.006)	(0.006)

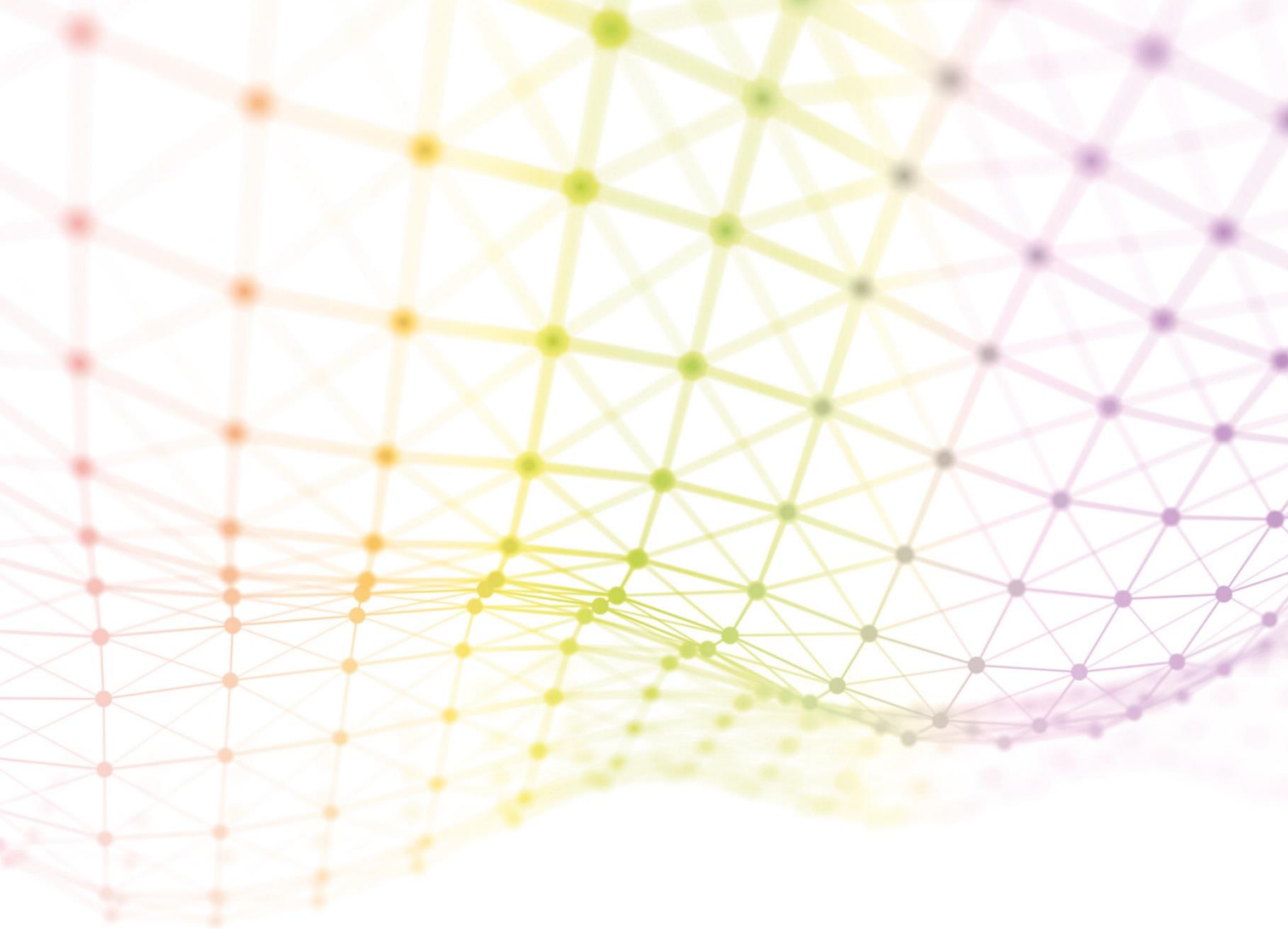
			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
		Daily internet users	0.040*	0.028*	0.031*	0.026*	0.015	0.006	0.010	0.005	0.004	0.004	0.005	0.004
			(0.011)	(0.010)	(0.008)	(0.008)	(0.009)	(0.010)	(0.007)	(0.012)	(0.011)	(0.010)	(0.009)	(0.009)
		Web response	0.044*	0.016	0.035*	0.024	0.041*	0.032*	0.018		0.016	0.028*	0.026*	0.019*
			(0.020)	(0.017)	(0.016)	(0.015)	(0.011)	(0.013)	(0.012)		(0.013)	(0.011)	(0.010)	(0.009)
Household income	Q1 (Bottom)	All internet users	0.027*	0.015	0.018*	0.023*	0.007	0.012*	0.014*	0.032*	0.018*	0.023*	0.028*	0.017*
			(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)	(0.006)	(0.006)	(0.005)
		Daily internet users	0.046*	0.046*	0.028*	0.033*	0.030*	0.035*	0.024*	0.052*	0.026*	0.031*	0.032*	0.013*
			(0.012)	(0.012)	(0.009)	(0.010)	(0.009)	(0.009)	(0.007)	(0.009)	(0.008)	(0.007)	(0.007)	(0.007)
		Web response	0.078*	0.056*	0.025	0.057*	0.025*	0.024	0.033*		0.009	0.046*	0.027*	0.014
			(0.019)	(0.015)	(0.018)	(0.015)	(0.011)	(0.014)	(0.012)		(0.015)	(0.010)	(0.011)	(0.008)
	Q2	All internet users	0.018*	0.014	0.017*	0.013*	0.008	0.011*	0.010	0.018*	0.012*	0.017*	0.016*	0.011*
			(0.006)	(0.007)	(0.006)	(0.004)	(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.005)	(0.005)	(0.005)
		Daily internet users	0.030*	0.032*	0.022*	0.017*	0.014*	0.019*	0.013*	0.026*	0.012*	0.020*	0.017*	0.009
			(0.010)	(0.010)	(0.008)	(0.006)	(0.006)	(0.005)	(0.005)	(0.005)	(0.005)	(0.006)	(0.004)	(0.005)
		Web response	0.091*	0.069*	0.031	0.046*	0.019*	0.024*	0.024*		0.011	0.051*	0.026*	0.017*
			(0.019)	(0.015)	(0.018)	(0.011)	(0.009)	(0.010)	(0.010)		(0.013)	(0.010)	(0.011)	(0.007)
	Q3	All internet users	0.020*	0.011	0.018*	0.012*	0.008	0.009*	0.005	0.022*	0.007	0.012*	0.026*	0.013*
			(0.007)	(0.007)	(0.006)	(0.006)	(0.008)	(0.004)	(0.005)	(0.006)	(0.005)	(0.005)	(0.006)	(0.004)
		Daily internet users	0.026*	0.025*	0.019*	0.020*	0.013*	0.019*	0.016*	0.024*	0.012*	0.013*	0.023*	0.011
			(0.008)	(0.007)	(0.006)	(0.008)	(0.007)	(0.007)	(0.006)	(0.007)	(0.005)	(0.004)	(0.007)	(0.006)
		Web response	0.054*	0.063*	0.022	0.040*	0.027*	0.032*	0.024		0.011	0.041*	0.022	0.043*
			(0.012)	(0.014)	(0.016)	(0.008)	(0.012)	(0.014)	(0.012)		(0.013)	(0.010)	(0.012)	(0.011)
	Q4	All internet users	0.025*	0.017*	0.014*	0.012*	0.007	0.014*	0.006	0.007	0.008	0.008	0.013*	0.006
			(0.007)	(0.008)	(0.005)	(0.006)	(0.007)	(0.005)	(0.005)	(0.005)	(0.005)	(0.004)	(0.004)	(0.004)
		Daily internet users	0.030*	0.030*	0.019*	0.015*	0.017*	0.017*	0.011*	0.023*	0.013*	0.024*	0.028*	0.007
			(0.011)	(0.010)	(0.006)	(0.006)	(0.007)	(0.007)	(0.004)	(0.008)	(0.006)	(0.007)	(0.007)	(0.006)
		Web response	0.074*	0.057*	0.026	0.052*	0.018*	0.026*	0.048*		0.029*	0.036*	0.031*	0.019*
			(0.020)	(0.010)	(0.017)	(0.012)	(0.008)	(0.011)	(0.014)		(0.014)	(0.011)	(0.012)	(0.007)
	Q5 (Top)	All internet users	0.022*	0.025*	0.021*	0.016*	0.010	0.014*	0.009*	0.010*	0.013*	0.013*	0.011*	0.006

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.007)	(0.007)	(0.005)	(0.006)	(0.007)	(0.005)	(0.005)	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)
		Daily internet users	0.028*	0.047*	0.037*	0.031*	0.038*	0.019*	0.029*	0.017*	0.027*	0.013*	0.012*	0.018*
			(0.012)	(0.012)	(0.009)	(0.009)	(0.009)	(0.007)	(0.006)	(0.007)	(0.006)	(0.006)	(0.005)	(0.006)
		Web response	0.075*	0.110*	0.029	0.091*	0.044*	0.060*	0.024*		0.040*	0.029*	0.011	0.051*
			(0.021)	(0.017)	(0.019)	(0.015)	(0.012)	(0.015)	(0.011)		(0.014)	(0.010)	(0.011)	(0.011)
Household tenure	Owned	All internet users	0.014*	0.025*	0.023*	0.022*	0.028*	0.016*	0.019*	0.017*	0.019*	0.017*	0.009	0.024*
			(0.006)	(0.006)	(0.006)	(0.005)	(0.006)	(0.005)	(0.004)	(0.006)	(0.006)	(0.005)	(0.006)	(0.005)
		Daily internet users	0.020*	0.015*	0.013*	0.029*	0.021*	0.019*	0.018*	0.018*	0.014*	0.019*	0.010	0.027*
			(0.008)	(0.007)	(0.006)	(0.007)	(0.005)	(0.005)	(0.004)	(0.007)	(0.007)	(0.006)	(0.006)	(0.005)
		Web response	0.032*	0.052*	0.044*	0.023*	0.036*	0.032*	0.050*		0.020*	0.029*	0.024*	0.022*
			(0.012)	(0.011)	(0.011)	(0.008)	(0.009)	(0.011)	(0.011)		(0.008)	(0.010)	(0.010)	(0.009)
	Owned mort.	All internet users	0.012*	0.020*	0.015*	0.010*	0.012*	0.011*	0.015*	0.003	0.004	0.008	0.002	0.006
			(0.006)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.005)	(0.007)	(0.005)	(0.006)	(0.007)	(0.004)
		Daily internet users	0.034*	0.027*	0.015	0.017*	0.023*	0.028*	0.023*	0.011	0.005	0.012*	0.005	0.009*
			(0.010)	(0.010)	(0.008)	(0.005)	(0.008)	(0.007)	(0.006)	(0.007)	(0.008)	(0.006)	(0.006)	(0.004)
		Web response	0.051*	0.058*	0.055*	0.043*	0.030*	0.033*	0.027*		0.038*	0.017*	0.032*	0.013
			(0.016)	(0.011)	(0.012)	(0.012)	(0.007)	(0.010)	(0.006)		(0.011)	(0.007)	(0.010)	(0.007)
	Rented	All internet users	0.023*	0.038*	0.034*	0.031*	0.039*	0.020*	0.026*	0.018*	0.020*	0.020*	0.010	0.028*
			(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.036*	0.030*	0.026*	0.040*	0.035*	0.034*	0.027*	0.022*	0.017*	0.025*	0.013	0.031*
			(0.011)	(0.011)	(0.009)	(0.008)	(0.008)	(0.008)	(0.006)	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)
		Web response	0.076*	0.097*	0.089*	0.056*	0.054*	0.059*	0.053*		0.039*	0.037*	0.022*	0.022*
			(0.018)	(0.014)	(0.015)	(0.014)	(0.011)	(0.013)	(0.011)		(0.012)	(0.011)	(0.009)	(0.009)
Household type	1 adult, children	All internet users	0.005	0.015*	0.013*	0.005	0.007	0.003	0.000	0.003*	0.004	0.008*	0.005*	0.001
			(0.008)	(0.004)	(0.004)	(0.004)	(0.006)	(0.005)	(0.010)	(0.001)	(0.002)	(0.004)	(0.002)	(0.008)
		Daily internet users	0.013	0.029*	0.027*	0.021*	0.017*	0.014*	0.002	0.012*	0.010*	0.008	0.006	0.005
			(0.012)	(0.010)	(0.007)	(0.007)	(0.006)	(0.005)	(0.009)	(0.005)	(0.004)	(0.005)	(0.005)	(0.005)
		Web response	0.023	0.012	0.009	0.014	0.028*	0.025*	0.023*		0.007	0.019	0.008	0.009
			(0.017)	(0.014)	(0.018)	(0.010)	(0.011)	(0.012)	(0.010)		(0.016)	(0.011)	(0.011)	(0.011)

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
	1 adult, no children	All internet users	0.019*	0.020*	0.015*	0.007	0.015*	0.019*	0.018*	0.011*	0.009	0.017*	0.014*	0.009
			(0.008)	(0.007)	(0.006)	(0.007)	(0.007)	(0.006)	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.005)
		Daily internet users	0.013	0.017*	0.012*	0.007	0.014*	0.013*	0.007	0.017*	0.010*	0.012*	0.011*	0.006
			(0.011)	(0.007)	(0.006)	(0.008)	(0.007)	(0.004)	(0.006)	(0.007)	(0.005)	(0.006)	(0.004)	(0.005)
		Web response	0.039*	0.022*	0.020	0.041*	0.025*	0.036*	0.038*		0.022*	0.045*	0.017*	0.016*
			(0.014)	(0.009)	(0.012)	(0.012)	(0.006)	(0.007)	(0.010)		(0.007)	(0.010)	(0.008)	(0.006)
	Couple with children	All internet users	0.004	0.005	0.011*	0.004	0.004	0.004	0.003	0.012*	0.003	0.002	0.001	0.002
			(0.006)	(0.004)	(0.004)	(0.004)	(0.002)	(0.003)	(0.003)	(0.006)	(0.002)	(0.013)	(0.013)	(0.001)
		Daily internet users	0.014	0.017*	0.018*	0.013*	0.014*	0.016*	0.004	0.008*	0.008*	0.006	0.004	0.005*
			(0.009)	(0.006)	(0.006)	(0.006)	(0.005)	(0.004)	(0.004)	(0.004)	(0.004)	(0.005)	(0.004)	(0.001)
		Web response	0.044*	0.027*	0.033*	0.027*	0.022*	0.029*	0.027*		0.024*	0.021*	0.015	0.015*
			(0.016)	(0.011)	(0.016)	(0.009)	(0.008)	(0.006)	(0.010)		(0.010)	(0.009)	(0.008)	(0.007)
	Couple, no children	All internet users	0.023*	0.029*	0.016*	0.012	0.018*	0.027*	0.023*	0.019*	0.011	0.020*	0.018*	0.013*
			(0.007)	(0.007)	(0.006)	(0.007)	(0.007)	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)	(0.005)
		Daily internet users	0.033*	0.041*	0.015*	0.012	0.026*	0.030*	0.015*	0.020*	0.016*	0.018*	0.016*	0.011*
			(0.012)	(0.010)	(0.006)	(0.007)	(0.008)	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.005)	(0.005)
		Web response	0.117*	0.073*	0.054*	0.053*	0.050*	0.086*	0.064*		0.065*	0.060*	0.037*	0.042*
			(0.021)	(0.015)	(0.016)	(0.011)	(0.010)	(0.013)	(0.012)		(0.012)	(0.011)	(0.010)	(0.009)
	Other household	All internet users	0.015*	0.026*	0.017*	0.013*	0.012	0.023*	0.015*	0.024*	0.005	0.011*	0.013*	0.008
			(0.007)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)	(0.007)	(0.006)	(0.006)	(0.006)	(0.006)
		Daily internet users	0.036*	0.054*	0.030*	0.024*	0.038*	0.046*	0.021*	0.035*	0.023*	0.021*	0.030*	0.016*
			(0.011)	(0.011)	(0.008)	(0.008)	(0.008)	(0.008)	(0.007)	(0.008)	(0.007)	(0.006)	(0.007)	(0.006)
		Web response	0.079*	0.074*	0.065*	0.072*	0.038*	0.075*	0.032*		0.050*	0.042*	0.040*	0.048*
			(0.017)	(0.014)	(0.016)	(0.013)	(0.008)	(0.012)	(0.007)		(0.011)	(0.009)	(0.010)	(0.009)
Region	East	All internet users	0.013	0.019*	0.005	0.018*	0.012	0.007	0.003	0.006	0.013*	0.015*	0.010*	0.005
			(0.008)	(0.009)	(0.009)	(0.007)	(0.008)	(0.006)	(0.009)	(0.008)	(0.007)	(0.006)	(0.004)	(0.007)
		Daily internet users	0.020	0.016	0.014	0.009	0.011	0.010	0.005	0.007	0.011	0.005	0.009	0.004
			(0.013)	(0.012)	(0.009)	(0.007)	(0.009)	(0.010)	(0.010)	(0.012)	(0.009)	(0.011)	(0.007)	(0.011)
		Web response	0.036	0.016	0.032	0.020	0.019	0.042*	0.024		0.055*	0.018	0.012	0.006

			2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
			(0.024)	(0.013)	(0.018)	(0.015)	(0.013)	(0.015)	(0.013)		(0.014)	(0.014)	(0.013)	(0.012)
	North	All internet users	0.011	0.015*	0.008	0.009	0.010	0.014*	0.008	0.011	0.010	0.013*	0.015*	0.014*
			(0.007)	(0.008)	(0.008)	(0.006)	(0.006)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)	(0.004)	(0.006)
		Daily internet users	0.027*	0.030*	0.011	0.014*	0.016*	0.005	0.005	0.004	0.011	0.006	0.009	0.005
			(0.013)	(0.012)	(0.008)	(0.006)	(0.008)	(0.010)	(0.008)	(0.015)	(0.009)	(0.009)	(0.005)	(0.007)
		Web response	0.041	0.027	0.025	0.028*	0.017	0.022	0.012		0.019*	0.012	0.008	0.017
			(0.023)	(0.015)	(0.015)	(0.014)	(0.012)	(0.012)	(0.013)		(0.008)	(0.014)	(0.012)	(0.011)
	South	All internet users	0.016	0.011	0.004	0.006	0.008	0.010	0.007	0.008	0.005	0.008	0.027*	0.007
			(0.008)	(0.009)	(0.011)	(0.008)	(0.008)	(0.007)	(0.007)	(0.008)	(0.008)	(0.007)	(0.007)	(0.006)
		Daily internet users	0.025	0.021	0.027*	0.032*	0.028*	0.017	0.013	0.007	0.006	0.007	0.025*	0.012
			(0.013)	(0.012)	(0.010)	(0.009)	(0.010)	(0.009)	(0.008)	(0.011)	(0.012)	(0.010)	(0.008)	(0.007)
		Web response	0.011	0.023	0.016	0.015	0.020	0.048*	0.017		0.041*	0.008	0.024*	0.021
			(0.030)	(0.015)	(0.015)	(0.012)	(0.013)	(0.015)	(0.013)		(0.013)	(0.016)	(0.012)	(0.011)
	West	All internet users	0.017	0.013	0.017*	0.021*	0.027*	0.028*	0.016*	0.027*	0.027*	0.034*	0.037*	0.022*
			(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)	(0.007)	(0.009)	(0.008)	(0.008)	(0.008)	(0.008)
		Daily internet users	0.018	0.008	0.023*	0.034*	0.022*	0.008	0.014	0.004	0.006	0.010	0.016*	0.014
			(0.014)	(0.014)	(0.011)	(0.011)	(0.010)	(0.012)	(0.009)	(0.020)	(0.012)	(0.010)	(0.008)	(0.008)
		Web response	0.008	0.058*	0.063*	0.054*	0.021	0.017	0.023		0.026	0.004	0.018	0.007
			(0.045)	(0.018)	(0.019)	(0.017)	(0.014)	(0.016)	(0.015)		(0.015)	(0.033)	(0.013)	(0.016)

Sig. * $p < .05$



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