

## Examining Internet Use Through a Weberian Lens

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Research on Internet use typically has been concerned with issues of access or activities people do online. This research has been fruitful, but it has not been fully linked to larger theories of stratification. Although Max Weber says little about technology, his general approach to studying society suggests concepts other than access and demographics will be important. From his perspective, the primary sources of social stratification are class, status, and power. As the Internet has become more important, it has moved to a steadily more central position in the stratification system. Thus, it is important to look at Internet use through a Weberian lens, asking how class, status, and power help explain who participates in what online activities.

*Keywords: Max Weber, class, status, power, Internet use, stratification, Internet activity, amount, variety, types*

### Introduction

Early research on Internet use (e.g., Hoffman & Novak, 1998; Katz & Aspden, 1997) focused on a narrow version of the digital divide, which was defined as “the gap between those who do and those who do not have access to computers and the Internet” (van Dijk, 2005, p. 1). Access was conceptualized in largely technical terms—as access to computers and the Internet. Work on this “first-level digital divide” led to the recognition that Internet access alone was not sufficient for people to reap the full benefits of the Internet. The conceptual focus of digital divide research has shifted to a more subtle question: Who is able to make effective use of the potential benefits of the Internet (DiMaggio, Hargittai, Celeste, & Shafer, 2004)? Hence, “the divide among information ‘haves’ and ‘have-nots’, resulting from the ways in which people use the Internet” (Ragnedda & Muschert, 2013, p. 2) has shifted the field to the study of *digital inequalities*. Effective use is related to users’ digital skills (Hargittai, 2008); to users’ autonomy in accessing the Internet (Hassani, 2006); to the type and amount of available social support (DiMaggio et al., 2004); and to successful integration into the existing “techno-culture” (Selwyn, 2004, p. 355).

A common criticism of studies of unequal access and use is that they lack theoretical grounding (DiMaggio, Hargittai, Neuman, & Robinson, 2001; Selwyn, 2004). Different approaches to the study of digital inequalities have a common starting point: Unequal access to economic, cultural, social, and

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personal resources translates into differential engagement with Internet technologies (cf. Helsper, 2012; van Dijk, 2005; Warschauer, 2004). This links the concept of digital inequalities with the concept of social inequalities (DiMaggio et al., 2004; Sparks, 2013). Although inequality is a classic sociological concept, its digital extension "has received less sociological attention than it should" (Ragnedda & Muschert, 2013, p. 1).

A Weberian approach to social stratification (Weber, 1958) relates unequal access to resources to digital inequalities as well as linking Internet use to wider notions of stratification. Weber says the primary sources of social stratification are economic class, social status, and political power. Weber is concerned with how individuals' position on these three dimensions of stratification influences their life chances. Wessels (2013) has drawn an explicit parallel between Weber's work and the key themes in digital inequality research when she argues that "politics and cultural life [are] organized via flows of information within networks shaped by status, class and power" (p. 23). In a technology-rich landscape where hardware, software, and subscription-based access to the Internet require sufficient material resources, economic class is relevant to the study of digital inequalities. Fast-changing technology requires continued investment in new equipment to retain high-quality access, but that is relatively harder to achieve by individuals who are economically disadvantaged (Eynon & Geniets, 2012; van Dijk, 2005). Social status influences the online choices people make when they put the technology to use. People's social environments and their social group membership are likely to shape these choices (Blank, 2013; Schradie, 2011). Finally, in a networked society where social structure is made of networks powered by information and communication technologies (Castells, 2010), political power can be increasingly exercised through the Internet (González-Bailón, 2013). Hence, the elements of social stratification proposed by Weber relate to the study of digital inequalities insofar as access and use of technologies "contribute to increased political power, social prestige, and economic influence" (Ragnedda & Muschert, 2013, p. 3). Hence, translating Weber's approach to stratification into cyberspace could have significant value.

### **Weber and Digital Inequalities**

Weber describes class, status, and power as analytically separate dimensions of social stratification. As we shall see, these dimensions apply a century after they were first published to a technology Weber never envisioned: the Internet. We begin this section by describing Weber's understanding of class, status, and power and conclude by reviewing prior studies that have applied some aspect of Weber's social stratification work to explain differences in online engagement.

Economic class has multiple characteristics, which Weber spells out in his definition.

We may speak of a "class" when (1) a number of people have in common a specific causal component of their life chances, insofar as (2) this component is represented exclusively by economic interests in the possession of goods and opportunities for income, and (3) it is represented under the conditions of the commodity or labor markets. (Weber, 1978, p. 927)

Class is purely the economic aspects of people's lives, and it answers questions such as: What do they own? How much can they buy?

Status is a claim to social privilege based on a particular set of values, and it may have several possible sources. Weber gives the examples of "style of life . . . formal education . . . , [and] hereditary or occupational prestige" (Weber, 1978, pp. 305–306). These distinctive claims have no necessary relation to income, as Weber says, status "normally stands in sharp opposition to the pretensions of sheer property" (Weber, 1978, p. 932). He explicitly compares the social status to class:

With some over-simplification, one might thus say that classes are stratified according to their relations to the production and acquisition of goods; whereas status groups are stratified according to the principles of their consumption of goods as represented by special styles of life. (Weber, 1978, p. 937)

If class refers to whether you have the income to buy goods, status is about *which* goods you choose to buy. It is not about how much money you have; it is how you spend it. This means that property owners and non-owners who share the same values can both have the same status.

Political power is the third dimension in Weber's model of social stratification. He defines it in political terms as the chance that people can "realize their own will in communal action, even against the resistance of others" (Weber, 1978, p. 926). Power is an independent dimension in the social order, because people can value power for its own sake, not just because it offers opportunities to become wealthy or achieve high status. Unlike class, where self-conscious groups are not a requirement (though they may occur), and status, where groups can be fairly amorphous (though, again, they may also be focused), power is carried by self-conscious groups that form communal associations. Weber is talking about political parties, because modern political entities such as nongovernmental organizations and other components of civil society were not very important during his time. We note that not everyone is interested in participating in political organizations of any kind. People can be high or low on their willingness to participate in political organizations.

These three dimensions define Weber's approach to social stratification, which are broadly economic (class), cultural (social status), and political (power). Are these dimensions still relevant in the age of the Internet? Although there is an ongoing debate over this question (e.g., Lee & Turner, 1996; Weeden & Grusky, 2005), certainly, class, status, and power remain core elements in contemporary society (Crompton, 2008). To what extent do they play a role in stratification on the Internet? Do patterns of engagement with online content and services reflect people's position in the (offline) social stratification system? These questions have been partially addressed in previous studies. However, no previous study has systematically examined all three dimensions of social stratification and their role in online engagement. Below we review previous research, which leads to our general hypothesis that an individual's position in the class, status, and power stratification system shapes his or her participation in online activities.

Some previous work has demonstrated that the characteristics of the offline world are reproduced online; in other words, people who are high on all three dimensions of stratification reap more benefits from the Internet than people with low class, status, and power. Zillien and Hargittai (2009) examined "status-specific" Internet use. Their multivariate analyses revealed that people with higher social status engage more in "capital-enhancing" activities, such as reading news and using e-mail and search engines. They used a measure of social status that consists of four items: "educational degree, income, occupational prestige, and a subjective rating by the interviewer based on respondent characteristics and lifestyle observed" (Zillien & Hargittai, 2009, p. 280). This unfortunate measure conflates Weber's explicit distinctions between class and status. It leaves open the question of whether all forms of high rank are equivalent or whether the effects of class are different from status or different from power. Schradie (2011) focused on the role of class in online content production. Her primary measure of "class" was educational level, although "other variables that explain the class differences . . . are income, as well as location and frequency of Internet use" (Schradie, 2011, p. 154). Like Zillien and Hargittai, Schradie did not distinguish between economic class and social status, and she has no measure of power. Schradie found that education has a statistically significant effect on online content production activities in general and concluded that class-based inequalities persist among Internet users in the United States. Blank (2013) also examined online content creation, but he distinguished between different types of content creation. He found that income is negatively related to entertainment and social content creation, whereas education has a positive effect only on political content creation. Blank concluded that British people who create political content are members of status elites. However, his analysis did not include a measure of political power, which also may be a significant antecedent of political content creation. In fact, we have been unable to find any study that includes a measure of political power as an explanatory variable.

Other studies that have examined the effects of economic class and social status on Internet use do not refer to any formal stratification approach. Blank and Groselj (2014) included education in their set of multivariate analyses and found that education is significantly and positively related to more frequent participation in all types of online activities except for vice activities. Van Deursen and van Dijk (2014) examined the effects of education and income on online engagement among the Dutch population. They found that educational levels are positively associated with overall amount of use as well as informational and personal development uses, but not with news and leisure activities. By contrast, levels of household income are positively related to news, leisure, and commercial activities online. White and Selwyn (2013, p. 1) studied use of the Internet for four different purposes and argued that use "remain[s] structured along socio-economic and educational lines that work against already disadvantaged groups." Their study revealed positive effects of occupational class and educational background on using the Internet for government, banking or financial services, purchasing goods or services, and looking for jobs online.

Taken together, previous research suggests that engagement in online activities is related to dimensions of social stratification. However, no research has systematically examined the effects of class, status, and power on a comprehensive range of online engagement types. We contribute to this research stream by examining how class, status, and power predict engagement in a wide range of online activities.

### Methodology

The Oxford Internet Surveys (OxIS) collect data on British Internet users and nonusers. Conducted biennially since 2003, the surveys are nationally representative random samples of more than 2,000 individuals aged 14 and older in England, Scotland, and Wales. Interviews are conducted face-to-face by an independent survey research company. The response rate for 2013 was 51%. The analyses reported below are based on 1,396 Internet users age 18 and older out of the full 2013 sample of 2,053 respondents.

There are two possible objections to the use of survey data in a Weberian study of stratification. First, Weber's best known methodology is a *verstehen* approach, and quantitative data may be seen as in conflict. *Verstehen* means "to understand" in English; as a method, it focuses on understanding the meanings people associate with their actions. Although *verstehen* is one of Weber's best-known contributions to method, he did not limit himself to it. He undertook quantitative studies in which meaning is expressed only in probabilistic terms; see Lazarsfeld and Obershall's (1965) summary. Our approach is consistent with these Weberian projects.

Second, class, status, and power are complex concepts that may seem to be oversimplified by the use of survey-based indicators and measures. Measurement is always an issue, and our measures are simpler than the underlying concepts. This is a common situation in empirical research. Although they may not measure everything, our measures tap into central dimensions of class, status, and power. As such, they are succinct indicators of the underlying phenomena. We return to the measurement issue in the discussion. With this background, we turn to a description of how we measure each of Weber's concepts.

According to Weber, class pertains to possession of goods and individuals' ability to acquire goods. Thus, income is the most straightforward measure of economic class in British society. Previous research on digital inequalities employed income as a measure of social status and class (see above) and demonstrated its relevancy in online engagement. Income is a five-category variable measured as total household income before tax: less than £12,500 (29%); £12,501–£20,000 (25%); £20,001–£30,000 (20%); £30,001–£40,000 (13%); more than £40,000 (12%).<sup>1</sup> As one would expect, this variable is positively skewed because there are more people at lower income levels.

We operationalize status with education. This corresponds to Weber (1978, p. 305), where he mentions "formal education" as one possible source of status. Education teaches certain values and promotes certain points of view. It broadens people's vision and acquaints them with a wider variety of experiences. This tends to increase tolerance and promote interest in the wider world, a relationship that has been established since the 1950s (Hyman & Wright, 1979; Kingston, Hubbard, Lapp, Schroeder, &

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<sup>1</sup> When the survey was in the field, in winter 2013, the exchange rate averaged £1 = USD1.70, so the categories translate into dollars as £12,500 = USD21,250; £20,000 = USD34,000; £30,000 = USD51,000; £40,000 = \$78,000. This reflects only the official exchange rate and not purchasing power parity, which was closer to £1 = USD1.20.

Wilson, 2003; Weil, 1982, 1985).<sup>2</sup> This gives educated people a different perspective, and, to the extent that it fosters a particular set of values, it creates a status ranking where prestige is based on high regard for educational credentials. The more education people receive, the more likely they are to adopt this lifestyle.<sup>3</sup> We use four levels of educational attainment: no educational qualifications (12%), secondary education degree (38%), further education (18%), and university undergraduate or postgraduate degree (32%).

In Weberian terms, power is always linked to organizations. Thus, we operationalize power as membership in up to four political or civil society organizations. This is consistent with Weber's understanding that individuals exercise power through self-conscious, political organizations. The four political organizations are a trade union; an environmental or animal welfare organization; a neighborhood, school or other local group; and any other political organization, which includes political party membership. We include civil society groups because in contemporary Britain, like most developed countries, many nongovernmental organizations have a political agenda that they promote in the political arena. The most common activity is membership in a neighborhood organization, which involves 12% of respondents. The power variable, which we will call "political participation," has a possible range from zero to four, but most people in Britain are not very politically or civically engaged, so it is strongly positively skewed. About 23% of the respondents are members of at least one political organization (one organization 17%; two organizations 5%; three organizations 1%; four organizations < 1%), and 77% of the respondents do not participate in any.

Following Blank and Groselj (2014), we conceptualize Internet use as a property space of three independent dimensions: amount of use, variety of use, and types of use. The advantages of this approach are that it distinguishes different ways of engaging with the Internet and it allows nuanced understanding of Internet activity. People can vary independently on each dimension. They can have different amounts of use, which refers to sheer frequency of engagement. When they are online, they can do many different activities or just a few, a question of variety. Using principal components analysis, we identified 11 types of activities that people can participate in when they are online. Individual users can participate in one, some, or all of the 11 types of activities. The ability to differentiate between categories of activity is particularly valuable when we are trying to distinguish possible differences in the effects of class, status, and power. We used factor score coefficients from these 11 components as the dependent variable in regressions. For more details, see the Appendix. The 11 activities with the percent of respondents who report engaging in them are:

1. *Socializing* (81%) includes e-mailing, use of social network sites and instant messaging, posting and reposting photos.

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<sup>2</sup> This does not imply that educated people are incapable of racism or intolerance, only that overt intolerance becomes less common as people are more educated.

<sup>3</sup> There are other bases for status groups in addition to education. We use education because Weber mentions it, prior research shows it often influences Internet use, and it works in this rather preliminary test of a Weberian-style model of Internet use. We return to this issue in the discussion.

2. *Information seeking* (79%) is looking up definitions, fact finding, and exploring topics of interest.
3. *Classic media use* (73%) includes reading news online, looking for national and international news, getting information about local events, looking for sports information online, and making travel plans.
4. *Commerce* (60%) includes buying products, making travel reservations, selling products, ordering groceries online, comparing prices and products, and using bank services.
5. *Entertainment* (55%) is downloading music and videos, listening to music online, and watching movies and TV programs online.
6. *Infotainment* (51%) is finding information about other people, health information, getting jokes, looking for celebrity news, looking up something to help settle an argument.
7. *School and work* (39%) is use of the Internet for school or work projects, for distance learning, or to find a job.
8. *Blogging* (27%) is reading and writing blogs, maintaining a personal website, participating in chat rooms, and posting on discussion boards.
9. *Content creation* (23%) includes posting and reposting videos and posting any creative work.
10. *Political activity* (23%) includes expressing political opinions on social media, forwarding or reposting someone else's political comments, following political news, and sending messages or e-mail supporting a social or political cause.
11. *Vice* (18%) includes gambling and visiting adult websites.

Amount of use is measured as the sum of the values of all the 48 activity variables. Since the Likert scale for each variable ranges from 0 to 5, the maximum possible range for amount of use is from 0 to 240. Variety is measured by how many of the 11 activities each respondent participated in. We used the binary measure of participation described above, so this variable has a theoretical range from 0 to 11.

We also include a set of sociodemographic variables. Race is coded into two categories: White and non-White. Place is coded as urban versus rural. Life stage is a four-category variable: students, employed, unemployed, and retired. Marital status has three categories: single, married/living with partner, and divorced/widowed. We also include gender and age.

## Results

We begin by examining the amount and variety of Internet use. In the regressions shown in Table 1, all measures used to represent stratification in terms of class, status, and power are statistically significant and positive. People with a higher standing in the stratification system are more likely to use the Internet more, both in terms of amount and variety of use. The Weberian coefficients are important, adding 15 to 20 percentage points to the  $R^2$  (hierarchical regressions are not shown). Among the other significant variables, age is always significant and negative, indicating that older people are less likely to use the Internet extensively. Age is by far the strongest single predictor of amount and variety of use.

Gender is significant and negative; men use the Internet more and in more varied ways than women. Living in an urban area slightly increases the amount and variety of Internet use. All Weberian coefficients—income, education, and political participation—are of roughly similar strength, although the effect of education is slightly larger than the others. Thus, we need to examine specific activities to get a more nuanced understanding how offline stratification translates to online stratification.

**Table 1. Standardized Regression Coefficients for Amount and Variety of Internet Use.**

	Amount of Internet use	Variety of Internet use
Age	-0.40***	-0.39***
Female	-0.09***	-0.12***
Urban	0.05*	0.06*
Non-White	-0.03	-0.06*
<b>Life stage</b>		
Employed	-0.05	0.01
Retired	0.00	0.02
Unemployed	-0.06	-0.03
<b>Marital status</b>		
Married/living with partner	-0.07*	-0.06
Divorced/widowed	-0.00	0.00
<b>Status: Education</b>		
Secondary education	0.14***	0.16***
Further education	0.15***	0.18***
Higher education	0.23***	0.25***
<b>Class: Yearly household income</b>		
£12,500-£20,000	0.07*	0.06*
£20,001-£30,000	0.11***	0.11***
£30,001-£40,000	0.11***	0.09**
£40,001 or more	0.17***	0.18***
<b>Power: Political participation</b>	0.10***	0.12***
<b>Constant</b>	0.02	0.02
<i>N</i>	1,285	1,285
<i>R</i> <sup>2</sup>	0.29	0.29

Note. Omitted categories are male, rural, White, student, single, no educational qualifications, income £12,500 or less.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .



Although all three Weberian coefficients turn out to be important predictors of engagement with the Internet, their effects are not uniform. Important differences emerge in different activities (see Table 2). Since Table 2 contains standardized regression coefficients (beta coefficients), the size of the coefficients can be compared directly. Weberian coefficients have similar effects and are all statistically significant for three activities: classic media use, information seeking, and entertainment. All coefficients are positive, and they are larger for higher-ranked people. This means that people with higher income, education, and political participation tend to do more of all three activities. They are more connected to the center of society by classic media, are more likely to use the Internet to inform themselves, and are likely to use the Internet for entertainment. This result seems similar to the effects on amount and variety.

Although the three Weberian coefficients are all significantly positively related to more frequent participation in all three activities, some interesting differences in the sizes of the coefficients can be observed. Education has the biggest effect on classic media use and information seeking; income and education have effects of similar magnitude on entertainment. This means that Internet users who are high on all three dimensions of social stratification are more likely to engage in these activities. Controlling for the other two dimensions, individuals with high education consume more media and more information, and individuals with high income and high education use about the same amount of Internet entertainment. Individuals who are members of political organizations lag in entertainment use of the Internet.

Apart from classic media and information seeking discussed above, education also dominates the use of the Internet for commerce and school and work. The effect of education is most prominent for school and work activities, where income has no effect and the political participation coefficient is small compared to the education coefficient. Political participation, however, has no effect on commercial activities. Income is important in predicting engagement with commerce, but its effect is slightly smaller than the effect of education.

Online political activity is dominated by two variables: education and political participation. This is not surprising. Participation in political organizations has an obvious link to political activity on the Internet. Politics in Britain seems to be the preserve of the well-educated, a finding consistent with previous work (Blank, 2013).

Income as a proxy for economic class alone dominates two categories of activities: blogs and content creation. Only one education coefficient is statistically significant for each of those two activities. Political participation is not significant. Income is also the only Weberian variable that is a significant predictor of infotainment.<sup>4</sup>

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<sup>4</sup> For entertainment, income has about the same effect as education and political participation. We do not discuss it here because it does not dominate the activity like it does for blogging and content creation.

**Table 2. Standardized Regression Coefficients for 11 Types of Internet Activities.**

	Classic media	Information seeking	Entertainment	Commerce	School & work	Political activity	Blogging	Content creation	Socializing	Information	Vice
<b>Age</b>	-0.13**	-0.11*	-0.47***	-0.25***	-0.17***	-0.05	-0.23***	-0.27***	0.50***	-0.21***	-0.14***
<b>Female</b>	-0.19***	-0.07*	-0.18***	0.03	0.03	-0.09**	-0.06*	-0.09***	0.11***	0.02	-0.29***
<b>Urban</b>	0.02	-0.01	0.00	0.00	0.01	0.03	0.06*	0.03	0.07**	0.08**	0.03
<b>Non-White</b>	0.04	-0.08*	-0.02	-0.06	0.05	-0.02	-0.01	-0.03	0.03	-0.01	-0.15***
<b>Life stage</b>											
Employed	-0.08	-0.38***	0.05	0.23**	-0.71***	0.05	-0.05	0.02	0.13	0.03	0.24**
Retired	-0.02	-0.22**	0.08	0.17*	-0.64***	0.00	-0.02	0.09	0.15*	0.06	0.16*
Unemployed	-0.08	-0.29***	0.06	0.08	-0.56***	0.05	-0.06	-0.05	0.09	0.05	0.17*
<b>Marital status</b>											
Married/living with partner	-0.04	-0.01	-0.12***	0.11**	-0.09**	-0.05	-0.05	-0.09**	-0.11***	-0.12**	-0.08*
Divorced/widowed	0.01	0.02	-0.02	0.08**	-0.07**	0.00	0.01	-0.03	-0.04	-0.04	-0.01
<b>Status: Education</b>											
Secondary education	0.09*	0.13**	0.09*	0.19***	0.06	0.05	0.06	0.10*	0.10**	0.06	0.09*
Further education	0.18***	0.17***	0.04	0.17***	0.07*	0.09*	0.06	0.03	0.09*	0.06	0.07
Higher education	0.28***	0.30***	0.10*	0.26***	0.20***	0.19***	0.09*	0.03	0.07	0.07	0.04
<b>Class: Yearly household income</b>											
£12,500-£20,000	0.07*	0.06	0.04	0.12***	0.02	0.01	0.02	0.06	0.03	0.05	0.00
£20,001-£30,000	0.11***	0.10**	0.09**	0.15***	-0.03	0.04	0.06	0.06	0.03	0.10**	0.02
£30,001-£40,000	0.13***	0.10**	0.04	0.13***	-0.02	0.01	0.10**	0.10**	0.04	0.03	0.02
£40,001 or more	0.19***	0.05	0.11***	0.22***	0.02	0.06	0.16***	0.12***	0.08*	0.07	0.00
<b>Power: Political participation</b>	0.12***	0.11***	0.07**	0.04	0.08***	0.15***	0.04	0.04	0.05*	0.02	0.02
Constant	0.03	0.02	0.00	0.04	-0.01	0.02	0.00	-0.01	0.00	0.01	0.00
<i>N</i>	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255	1,255
<i>R</i> <sup>2</sup>	0.22	0.13	0.30	0.20	0.30	0.09	0.12	0.11	0.31	0.09	0.14

Note. Omitted categories are male, rural, White, student, single, no educational qualifications, income £12,500 or less. Source: OxIS 2013.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Vice is influenced by a single coefficient of the education variable. This is the other place in the regression where the education order reverses itself. The overall  $R^2$ , only 14%, is among the lower coefficients. The political participation and education variables are not significant predictors of infotainment; only a single coefficient of income is statistically significant.<sup>5</sup> The overall  $R^2$  of 9% is the lowest in the regression. Infotainment includes such activities as looking up celebrity news or jokes. Neither vice nor infotainment seem to be much influenced by the Weberian variables. Participation in most activities is influenced by people's position in Weber's stratification scheme. Participation in these activities is certainly stratified, but the stratification is not captured by the Weberian variables, and it is only weakly captured by the demographic variables. The best conclusion seems to be that vice and infotainment stand largely outside the scheme described by Weberian social stratification. This suggests an interesting question for future research: Are there ways that stratification influences participation in vice and infotainment?

In summary, social status has its strongest effect on classic media, informational, commercial, and work-related activities, whereas class has a positive effect on consumption, leisure, and content creation activities. Political power has an effect on activities related to political participation and information gathering.

In a larger sense, the real message of the results is one of complexity. For example, both class and social status have an important place in the world of commerce. Class has a role in cultural consumption. Likewise, social status has an important place in the world of politics. The overall message may be that social stratification has a strong influence on most Internet activities. This suggests a question about the nature of contemporary society. Weber separated the dimensions of stratification analytically; are they also empirically distinct?

We test this question with correlations between the Weberian variables (see Table 3). The correlations are relatively low. The highest correlation is between education and income, 0.38. Even though all coefficients are statistically significant, the effect size is small; at most, about 14% of the variance overlaps. The other coefficients have overlapping variance of about 4% and 1%. Thus, the three dimensions of status are not only analytically separate but largely empirically unrelated.

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<sup>5</sup> Here we may have a reversal of the usual effect of income, the £20,001–30,000 is the only significant category.

**Table 3. Correlations Among the Weberian Variables.**

	Education	Income
Education	1.0	
Yearly household income	0.38	1.0
Political participation	0.20	0.11

*Note.* Source: OxIS 2013.  $N = 1,255$  Internet users.  
All correlations are statistically significant at  $p < .001$ .

The different dimensions of stratification are separate; high ranking on one is not strongly associated with a high ranking on any of the others. It also may reveal something about Internet activities. Internet activities are more likely to be done by people who are high ranking on the Weberian stratification dimensions, but the different dimensions do not overlap much. Activity on the Internet seems to be dominated by members of the society who are better off in terms of their economic, social, and political position, but these are separate dimensions.

### Discussion

The impact of social stratification on online engagement displays an interesting pattern. Dimensions that relate to status and power are more important for activities that involve formal links to the larger society: classic media use, information seeking, work and school, and political activities. These are *capital-enhancing* activities (Zillien & Hargittai, 2009) that link people to the world of jobs, the economy, politics, and information. They are dominated by formal organizations. These are conventional and they are official in the sense that they are governed by bureaucracies and accountable to rules and regulations. For example, activities of classic news media are large, bureaucratic, and regulated. Likewise, activities included in information seeking and school and work are examples of interest-specific activities that may be motivated by institutionalized background. This is the public sphere.

By contrast, the dimension of class is more important in informal, often personal links such as blogging, content creation, or infotainment. People who are upper class make more use of informal links where gossip, rumor, and informal conversations flow. For example, they read and write blogs, participate in chat rooms, and look for jokes and celebrity news. These are not direct sources of national news in the classic media sense. They are places where people can talk about personal concerns and personal joys. National news may have little salience in these settings. This fits well with their use of entertainment activities. This is not the public sphere. It is only a small oversimplification to say that people who are well educated do serious things, but people who have money entertain themselves.

Anyone who knows much about Weber will have noticed that our measures of class, status, and power dimensions are less than ideal. Probably the best measured is class, where income is well understood. Our measure of social status has a problem with scope. It focuses only on a single kind of values, those promoted by education. Education is an easily measurable status marker, and Weber mentions it explicitly, but Weber's concept includes all kinds of lifestyles and divergent values; thus, it is

much broader. For example, David Brooks (2000) describes a status group he calls “bourgeois bohemians” or “bobos”—upper-middle-class or wealthy people who have liberal social and cultural attitudes. Bobos are defined by a particular lifestyle and attitudes toward consumption, but we cannot distinguish them with our instruments.

In Weber’s view, status is a diverse concept. Lifestyles tie it together, so that status includes such diverse possibilities as ethnicity, rural residence, gender, religion (particularly religions that promote dress codes and other distinctive lifestyle markers), and age (especially where people live together in age monocultures, such as students or elderly people). In this view, many of the sociodemographic variables that we have referred to as control variables are actually measures of status. Because many of these variables are statistically significant, the range of predictions generated by Weberian concepts of status is considerably larger than we have considered in this article. For example, the coefficient for female is statistically significant in 8 of 11 activities. It is positive for socializing, meaning that women do more communication activities on the Internet. It is negative for 7 activities, suggesting that men do more classic media (perhaps because sports news is included in that category), information seeking, politics, entertainment, blogging, content creation, and vice. Lifestyle-related Internet use is also measured by life stage categories. Students are less likely than those in other life stages to engage in commerce and vice activities, but they are more likely to seek information and do activities related to school and work. Recent work on the 2013 Oxford Internet Surveys data by Dutton and Blank (2013) suggests that there are several cultures of the Internet—or consistent sets of values and attitudes toward the Internet and its value. Five cultures were identified, which also may form statuses defined by certain distinctive values about Internet attitudes and use. The expansive view of social status that we suggest here expands its scope; exploring the implications of this perspective should be on the agenda for future research.

Power is difficult to measure in contemporary Britain. Membership in a political party, which in the United Kingdom involves payment of annual fees, is no longer a good sign of political interest or commitment. Many people with strong political interests are not party members. We used membership in politically oriented organizations as our measure of power. Membership in a political organization only speaks to interest in power, not whether people actually have any power. Our measures of political power are weaker than our measures of class and status. This is another area where further research is needed.

Power is often statistically significant; however, it is hard to believe that there is a direct connection between power and variables such as entertainment or socializing, especially considering that the level of political engagement in Britain is low—about 23% of the population are members of a political organization. Our suspicion is that the statistical significance of power does not always reflect a direct effect of political organization on Internet activity. We suggest that this is an effect of a third variable, possibly being an active, energetic person who participates in many voluntary activities.

This study complements previous research in the field of digital inequalities by focusing on specific effects of the dimensions of class, status, and power on online engagement. It offers a more nuanced view of how social stratification influences the way people use the Internet as part of their daily lives. For example, Zillien and Hargittai (2009) found that social status (measured as a combination of education, income, occupational prestige, and self-perceived status) is related to engagement with capital-

enhancing activities such as news reading and searching for information. Our analysis not only provides further evidence that supports this claim but shows that, in both cases, education plays a bigger role than income. The value of separating dimensions of social stratification and distinguishing different activities is also demonstrated when we compare the results of this study to our previous work using similar data (Blank & Groselj, 2014). That study included only education, and we concluded that education is related to all but one type of online engagement. Here, after statistically controlling for other forms of Weberian stratification, we find that education is unrelated or only marginally related to five of the Internet activities. The results presented here paint a more nuanced picture of how socialization through educational institutions influences online engagement. Finally, our study is in general agreement with van Deursen and van Dijk's (2014) Netherlands study, in which they conclude that education is related to use of the Internet for personal development and income is related to leisure activities.

The fact that participation in online activities is stratified by both status and class is intriguing. Some have seen the Internet as a democratic medium without barriers for participation (Castells, 2010). It is said to erase the distinction between the public and private space by making everything public. There is no formal barrier that restricts access to certain activities, and whatever people do online is a voluntary choice. Anyone can read news online, search for information, or use social network sites, regardless of their status and class. In theory, perhaps. Although everyone *could* act the same on the Internet, they do not. Having Internet access does not change people so that they are immediately interested in national events, politics, and voicing their opinion on important issues. This requires cultural norms that value such things. Those values are not acquired by the mere presence of the Internet. Despite the lack of formal mechanisms restricting Internet participation, our results indicate that people voluntarily choose to do online that which replicates the offline stratification system.<sup>6</sup> Offline inequalities in participation in politics and society are duplicated online. It does not seem that the Internet is a democratizing force promoting social mobility. The Internet seems to amplify and support existing stratification. The idea that people choose to do what they have to do to sustain the preexisting stratification system is consistent with Bourdieu's (1988) theory of distinction-based stratification. Thus, to better understand the relationship between offline and online social stratification, future research should focus on how and why offline social stratification so strongly influences the choice of online activity.

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<sup>6</sup> We are generalizing in this paragraph. The effect of education on content creation, socializing, and possibly infotainment and vice are exceptions to the idea that the Internet replicates existing stratification.

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## Appendix

### Examining Internet Use through a Weberian Lens

We examine the effect of class, status and power on participation in 11 types of Internet use, based on the work of Blank and Groselj (2014). OxIS contains measures of participation in 53 activities. Each activity was measured using an identical 6-category Likert scale ranging from 0, meaning never participate in the activity, to 5, meaning do the activity several times per day. We use these variables to measure amount, variety and types of Internet use. We create variables following definitions and procedures used by Blank and Groselj (2014). They used OxIS 2011 data; we are working with the 2013 wave. In addition, we included five variables measuring political activity that were not in Blank and Groselj's analysis. Like Blank and Groselj we did a principal components analysis to reduce the 53 variables to a more manageable set of types of Internet use. After eliminating five variables that did not load above 0.25 on any component, we used 48 variables in the final PCA. After Varimax rotation and Kaiser normalization the PCA yielded 11 components with eigenvalues greater than 1.0. The regressions use the factors scores from the PCA results reported below. The 11 activities are described in the main text.

To count the number of activities each respondent participated in, we constructed binary variables measuring participation and non-participation in each of the 11 types. To be counted as participating in a type, a respondent had to report doing the activities that load strongly on a component an average of more than Never. We used the sum of these variables as the measure of variety of participation.

The table of sorted, varimax-rotated factor loadings is below, see Table A1. For this analysis  $Rho = .6311$ , so the 11 components summarize about 63% of the variation in the original 48 variables.

**Table A1. Internet Activity Types Sorted Factor Loadings from Principal Components Analysis**

	Entertain- ment	Com- merce	Classic media	Social- izing	Blogging	Political Activity	Infotain- ment	Info seeking	Content product	School & work	Vice
Download music	0.3743										
Download videos	0.4152										
Listen music	0.4194										
Watch movies/films	0.4759										
Watch TV	0.4172										
Online banking		0.3278	0.2262				-0.2070				
Pay bills		0.3944									
Buy products		0.4024									
Compare products/prices		0.3202						0.2321			
Order groceries		0.4048									
Sell online		0.3576					0.2002				
Travel reservation		0.3061									
Local events information			0.3562								
News; (inter)national			0.3973								
Sports information			0.3842								
Travel plans			0.3147								
Online newspapers			0.2952								
Email			0.3104	0.3320			-0.2357				
Instant messaging				0.4567							
Social network sites				0.4123							
Post photos				0.3900							
Re-post photos				0.3859					0.2314		
Discussion boards					0.2906						

**Table A1. Internet Activity Types Sorted Factor Loadings from Principal Components Analysis**

	Entertain- ment	Com- merce	Classic media	Social- izing	Blogging	Political Activity	Infotain- ment	Info seeking	Content product	School & work	Vice
Chat					0.4210						
Read blog					0.4165						
Personal website					0.4587						
Write blog					0.4925						
Information on political/social						0.4162					
Forward political videos						0.3860					
Forward political comment						0.4291					
Comment on political/social						0.4585					
Support political/ social						0.4297					
Info about others							0.3616				
Health information							0.3959				
Get Jokes							0.3371				
Celebrity news							0.3780		-0.2069		
Information to settle an argument							0.3653				
Look up definitions								0.4507			
Find/check a fact								0.5008			
Investigate topics of interest								0.4992			
Post videos									0.4626		
Repost videos									0.4504		
Post creative work									0.4423		
Look for jobs/work										0.4110	

**Table A1. Internet Activity Types Sorted Factor Loadings from Principal Components Analysis**

	Entertain- ment	Com- merce	Classic media	Social- izing	Blogging	Political Activity	Infotain- ment	Info seeking	Content product	School & work	Vice
Distance learning										0.5905	
Information for school										0.5566	
Gamble, bet											0.6762
Adult content											0.6494

Source: OxIS 2013, N=1,363 Internet users

Notes: Table contains sorted factor loadings after varimax rotation and Kaiser normalization  
Loadings less than absolute value of 0.20 have been omitted