# Social networking sites and employment status: an investigation based on *Understanding Society* data

### By John Mowbray, Robert Raeside, Hazel Hall, and Peter Robertson, Edinburgh Napier University

# Introduction

This paper provides an analysis of secondary data derived from the 2012 *Understanding Society: The UK household longitudinal study*[[1]](#footnote-1) related to the use of social networking sites (SNSs) amongst 16-21 year olds. The key purpose is to determine the relationship between employment status and the use of SNSs. However, other key variables cited in the extant literature pertaining to the adoption of SNSs are also considered. The results of the analysis are then used as a basis to discuss future research on the information seeking behaviours of young jobseekers in the UK, using social media tools such as SNSs.

# Background

In the UK, youth unemployment levels currently reside at 14.8% (McGuinness, 2015) – 9.4 percentage points above the national average of 5.4% (Trading Economics, 2015). Evidence suggests that the more time young people spend estranged from the labour market at an early age, the more susceptible they become to long-term ‘scarring’ effects such as further bouts of unemployment and below-average earnings later in life (Bell and Branchflower, 2010; Scherer 2004; Steijn et al., 2006). In addition to this, the individual experience of unemployment is often associated with a multitude of negative health outcomes including illness, mental stress, and an increased risk of committing suicide (Bell and Blanchflower, 2010, pp.11-12). Given such trends, it is of paramount importance that young people can increase their employability levels in order to establish themselves in the labour market - an imperative which has been recognised by the UK Government, and incorporated into its policy objectives (Gov.uk, 2012).

The structure of social networks, and the ability to use network contacts effectively during job search, is considered a key contributor towards social inclusion and the employability of individuals in the labour market (Calvo-Armengol and Jackson, 2004; Falcón, 1995; McQuaid and Lindsay, 2005, p.210; Skills Development Scotland, 2012, p.7). The dissemination of useful job information throughout social structures has often been used as an explanation for the impact of interpersonal relationships on labour mobility (Granovetter, 1973, 1974, 1983, 1995; Lin, 1999, 2002). Granovetter’s (1973) conception of the “strength” of ties is particularly important in this regard. Herein, it is posited that “weak” ties (i.e. acquaintances) propagate the flow of novel information throughout network structures, as they are more likely to reach into different areas of the social system. Conversely, “strong” ties (e.g. family and close friends) tend to overlap and create dense network clusters which can strangulate the flow of information. Despite this, strong ties can also be beneficial to individuals, as evidence suggests that such contacts are more likely to wield greater influence on their behalf (Brown & Reingen, 1987).

Mobilizing network contacts for informational purposes is recognised as a key method of job search in the job search literature, wherein it is posited that jobseekers are faced with two primary sources of information whilst looking for employment: (1) formal sources (e.g. online search engines, recruitment agencies); and (2) informal sources (i.e. network contacts such as friends, family members and acquaintances) (Saks, 2005; van Hoye et al., 2013; Wanberg, 2012). The process of utilising informal sources is known as “networking”, and has been described as individual actions by the jobseeker directed towards contacting associates to attain information and advice about getting a job (Wanberg, Kanfer & Banas, 2000, p.492). Networking is also recognised as a fundamental information seeking activity in information science research, and has been found to involve activities such as building and maintaining close relationships in order to gather and share information (Foster, 2003; Meho and Tibbo, 2003).

Whilst networking during job search has been addressed in the job search literature (see for example, van Hoye et al., 2013; Wanberg, 2012), such work has not taken into consideration the potential impact of digital technologies on this process. The bearing is likely to have been significant, given that the expansion of social media technologies, coupled with widespread access to mobile and other “wearable” devices, has facilitated access to “information gathering capacities that dwarf those of the past” (Rainie and Wellman, 2012, p.11). The different functionalities of certain social media tools have also played a central role in how such platforms are used for informational purposes. For example, SNSs allow users to construct public or semi-public profiles within a bounded system, through which they can articulate a list of connections with other users (boyd and Ellison, 2007; Stenger and Coutant, 2009). By facilitating communication between users with connected profiles, SNSs such as Facebook lend themselves primarily to the practice of sharing and networking (Ouiridi et al, 2014, p.121). They have also been associated with higher levels of social capital, by providing a channel through which both weak and strong ties can be accessed (Burke and Kraut, 2013; Ellison et al., 2007).

This paper is part of a larger project which considers the information seeking behaviours of young jobseekers during the job search process, regarding their use of both offline and online social networks to source job information. The wider study uses Wilson’s (1997) general model of information seeking behaviour to analyse relevant concepts taken from information behaviour theory, job search theory, network theory and social media theory, including those mentioned above. Issues such as information literacy in the use of SNSs during job search are also addressed at length. Findings from the wider study will be disseminated in due course.

## Employment, social exclusion and the use of SNSs

Social networks have an empirically demonstrable impact on the mobility of labour markets. For example, Granovetter (1974) found in a study of professionals and technical workers in Boston, US, that 56% of the sample reported that they found their then current position through a network contact. More recently, Franzen and Hangartner (2006, p.357) found that in a study of 27 different countries, the variation in jobs sourced via interpersonal relationships ranged from a low of 25.77% in Finland, to a high of 82.85% in the Philippines. The figure in the UK was found to be just under a third, at 31.06%. Web-based technologies have the capacity to extend such networking opportunities for jobseekers, and can act as valuable information seeking tools (Foster, 2003; Meho and Tibbo, 2003). This can be explained by the loosely-knit social circles that technologies such as SNSs can help to generate across geographical boundaries. These also facilitate membership of multiple networks and a more diverse set of relationships than would have been feasible in the past (Rainie and Wellman, 2012).

Given the social and informational affordances of ICTs, early “digital divide” research focused on the physical access individuals have to computers. However, research has since shown that in developed countries like the UK, such basic access (whether at home, school, or elsewhere) is near ubiquitous, particularly amongst young people (Livingstone and Helsper, 2007; van Dijk, 2006). Indeed, evidence shows that 96% of children in the UK live in households with an internet connection (ONS, 2014). Due to such a prevalence of ICT use, it may be expected that there be no significant difference in SNS membership between 16-21 year olds who are in paid employment, and those who are unemployed. To this end, the following hypotheses were tested as part of the study reported in this paper:

*Hypothesis 1o: Employment status is not associated with membership of SNSs.*

*Vs.*

*Hypothesis 1a: Employment status is positively associated with membership of SNSs.*

Despite the contention outlined above, research has also shown that as a direct result of having greater home access, middle-class children use the Internet more frequently than their working-class counterparts (Livingstone and Helsper, 2007). Such a distinction could be crucial as evidence indicates that there is a link between higher levels of Internet use and educational attainment (Chowdry, 2010). Additionally, more frequent online activity, greater online skills and self-efficacy have been found to encourage young people to take up opportunities found on the Internet (Eastin and LaRose, 2000; Livingstone and Helsper, 2007). Given this evidence, it would be anticipated that whilst membership of SNSs will not be associated with employment or social exclusion, frequent use of SNSs will be closely associated with employment status. Therefore, the following hypotheses were tested:

*Hypothesis 2o: Employment status is not associated with frequency of SNS use.*

*Vs.*

*Hypothesis 2a: Employment status is associated with frequency of SNS use.*

In addition to the above, evidence has also suggested that whilst there is a relationship between unemployment and social exclusion - in that unemployment increases the risk of poverty (which in turn, is strongly associated to exclusion) - they cannot necessarily be equated (Atkinson, 1998; Gallie et al., 2010, Canduela et al., 2015). So other economic, social and cultural factors have a bearing on whether individuals become socially isolated, and this is not necessarily related to their employment status. To this end, it was expected that there would be no direct association between the number of close friends individuals have and their employment status. This leads to the hypotheses:

*Hypothesis 3o: Employment status is not associated with number of close friends.*

*Vs.*

*Hypothesis 3a: Employment status is associated with number of close friends.*

## Age and the use of SNSs

Younger generations entering the labour market for the first time have been termed “digital natives”. This is due to the embeddedness of information and communication technologies (ICTs) in their lives (Bennett et al., 2008). Indeed, much of the extant research on the adoption and usage of social media tools has focused on young people. For example, within the field of information behaviour, there has been a focus on how students use social media tools to satisfy their information needs (Sin and Kim, 2013; Kim et al., 2014). In education research, attempts have been made to decipher the necessity of incorporating ICTs such as social media tools into modern teaching methods, in order to disseminate information to students in ways they would find accessible (Ko, et al., 2014; Palfrey and Gasser 2013). The careers guidance sector has also recognised the need to adapt its services for modern clients via the inclusion of social media tools, and attempts have been made to gauge the attitudes of careers professionals towards such ICTs (Kettunen et al., 2015; Kettunen et al., 2013). In light of this, it was expected that the analysis reported here would show that younger people are more likely to be members of SNSs than their older counterparts. This leads to the following hypotheses:

*Hypothesis 4o: Age is not associated with membership of SNSs*

*Vs.*

*Hypothesis 4a: Age is not positively associated with membership of SNSs.*

## Sex and the use of SNSs

Sex has been found to be a key variable in the adoption of social media tools. For example, males tend to use a broader range of social media tools in order to complete tasks which involve sourcing information (Sin & Kim, 2013; Kim et al, 2014). This reflects research which pertains to general Internet use, wherein it has been found that males engage in a broader range of activities online, and use the Internet more frequently than females (Li & Kirkup, 2007; Fallows, 2005; Jones Johnson-Yale, Millermaier & Perez, 2009). However, evidence suggests that females are more likely to use SNSs for social rather than task-oriented purposes (Lin & Lu, 2011). Additionally, whilst males tend to use social media tools to generate new social contacts, females use them to build upon existing relationships (Muscanell & Guadagno, 2012). Given such fundamental differences in approach to the use of ICTs, it was expected that females would engage in more frequent use of SNSs, leading to the following hypotheses:

*Hypothesis 5o: Sex is not associated with the use of SNSs.*

*Vs.*

*Hypothesis 5a: Sex is associated with the use of SNSs*

# Method

Having identified five hypotheses related to SNS, employment status, age and gender, a secondary data analysis was conducted using data sourced from *Understanding Society: The UK household longitudinal study.* The purpose of the survey is to understand 21st century life in the UK, and the nature of people’s social and economic circumstances, as well as their attitudes and behaviours (Understanding Society, 2015). The survey allows cohorts to be followed over time, thus permitting longitudinal analysis. Specifically, the data for this study was taken from Wave 6 of the *Innovation Panel,* which was conducted in 2012, and consists of a sample of 2,760 addresses in the UK.

Wave 6 of the *Innovation Panel* asked questions on the use of SNSs amongst 16-21 year olds resident at the interviewed households. This produced a sample of 3,616, of whom 52.5% were female, 24.0% employed, 11.0% unemployed, and 65.0% students. Additionally, 90.8% were members of SNSs, whilst the average number of friends reported by the sample was 6.3. In terms of intensity of social media use, 26.9% of the sample used SNSs for under one hour per day, 13.3% seven hours or more per day, and 38.7% from one to three hours per day.

The hypotheses outlined in the previous section were tested using Chi square analysis and independent t-tests. To understand multivariate effects and to control for gender and age, a binary logistic regression model was fitted to determine the relationship between both SNS membership and number of close friends, to employment status. The results of the analysis are detailed in the following section.

# Results

Hypothesis 1*o* addresses the relationship between employment status and membership of SNSs, and asserts that there is no association between employment status and membership of SNSs. An alternative hypothesis 1a is also provided, this asserts that there *is* a relationship between employment status and membership of an SNS. The data from the survey show that a higher proportion of those who were in paid employment in 2012 were members of a SNS (92.0% as compared to 83.2% of those who were unemployed), whilst the rate of not being a member of an SNS amongst those who were unemployed (16.8%) was double that of those in paid employment (8.0%). Using a Chi Square test the association was found to be statistically significant (p <0.001), thus providing support for hypothesis 1a (see Table 1).

In Table 1, the association between employment status and intensity of SNS use is documented, as measured by hours per day interacting with friends. A significant association is found (p=0.02), which confirms hypothesis 2a, that there is an association between frequency of SNS use and employment status. This result was achieved by performing an independent *t*–test. However, the relationship is a complex one; whilst proportionately more unemployed participants reported spending no hours per day using SNSs than those in paid employment, conversely, significantly more unemployed participants reported using SNSs for one hour or more per day (72.50% as compared to 65.30% of those who were in paid employment). Therefore, the relationship between frequency of SNS use and employment status is not a linear one.

To test hypothesis 3*o -* that a greater number of close friends is not positively associated with being in paid employment - an independent *t*–test was performed. In doing so it was found that the mean number of friends of those in paid employment was 6.05, compared to 5.88 for those unemployed. This difference was not found to be statistically significant (p = 0.674), and as such the null hypothesis is accepted: there is no association between employment status and number of close friends. However, it is notable from the analysis that males reported having significantly more close friends than females (7.22 compared with 5.47; p <0.001).

Table 1: The relationship between paid employment and membership and use of social websites (n=3,616)

|  |  |  |
| --- | --- | --- |
|  | Member of SNS | Hours per day spent interacting with friends through SNSs |
| Economic Status | Yes | No | none | under an hour | 1-3 hours | 4-6 hours | 7 or more hours |
| Employed | 92.0% | 8.0% | 4.5% | 30.3% | 36.9% | 16.1% | 12.3% |
| Unemployed | 83.2% | 16.8% | 6.3% | 21.2% | 33.9% | 20.6% | 18.0% |
| Student | 91.6% | 8.4% | 3.4% | 26.5% | 40.1% | 17.0% | 12.9% |
| All respondents | 90.8% | 9.2% | 4.0% | 26.9% | 38.7% | 17.2% | 13.3% |

For the age demographic, it was found that members of SNSs had a younger mean age (18.34 years) than those who were not members of SNSs (18.68 years) amongst the 16-21 year old sample. This difference is statistically significant (p=0.001), meaning that hypothesis *4a -* age is not positively associated with membership of SNSs - is accepted. For the demographic variable of sex, females were found to be proportionately higher users of SNSs than males (90.1% compared to 88.1%). This difference is also statistically significant (p=0.001). Additionally, females were found to be more frequent users of SNSs than males, with 33.0% spending more than three hours per day, and only 28.0% of males spending over 3 hours per day interacting with friends online. This difference is also statistically significant (p<0.001). As such, both hypothesis *4a -* age is not positively associated with membership of SNSs - and5a - sex is associated with the use of SNSs - are accepted.

Four of the key variables considered in this study – (1) membership of a SNS, (2) number of close friends, (3) age, and (4) sex - were applied within a logistic regression model to predict the likelihood of being in paid employment. In this analysis students were removed from the sample leaving only those who were employed and unemployed. This model successfully predicted 96.6% of those in employment but only 8.4% of those who were unemployed. For all respondents, 68.8% were correctly predicted. The coefficients of the model are displayed in Table 2. This test confirms the association of being a member of a SNS and being unemployed. The number of close friends appears as insignificant and young females and younger people are less likely to be unemployed.

Table 2: Logistic regression model of the likelihood of being unemployed (n=2,350)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  Variable | B | S.E. | Sig. | Odds Ratio |
| Member of social media website | -.896 | .192 | .000 | .408 |
| Number of close friends | -.011 | .010 | .295 | .989 |
| Age | -.198 | .045 | .000 | .820 |
| Female | -.339 | .129 | .009 | .713 |
| Constant | 4.027 | .912 | .000 | 56.109 |

# Discussion

As demonstrated above, there is a statistically significant association between being a member of a SNS and being in paid employment amongst 16-21 year olds in the UK. This finding runs contrary to the assertion proffered earlier in the paper that such an association does not exist. This hypothesis was based on the near ubiquity of ICT use amongst younger people in developed nations (Livingstone & Helsper, 2007; ONS, 2014). However, the proposed hypothesis takes for granted the association between use of ICTs and membership of social media tools such as SNSs. As explained by van Dijk (2006, p.223-230), material access to innovative ICTs is only one of a number of successive “access” factors which can impinge upon the usage of digital innovations such as social media tools. These factors also include motivational access and skills (e.g. instrumental skills, digital skills) access. From the analysis put forth in this paper, it appears that material access alone is not enough to encourage membership of SNSs amongst younger people.

Given the association between membership of SNSs and being in paid employment, it could be argued young people are increasing their likelihood of encountering new information online which is conducive to the generation of employment opportunities. Indeed, the available evidence suggests that effective use of social media tools can provide informational opportunities to users (Panahi et al., 2015). Awareness of such an issue could substantiate a clear educational or training directive for schools and careers guidance bodies in the UK, to target those who may not possess adequate digital skills to use SNSs effectively. However, further research is required to determine the specific barriers or enablers experienced by young people when using social media tools, and how employment information is sourced via such platforms. This need is exemplified by the finding of this study which shows that unemployed young people are significantly more likely to spend more than one hour a day using SNSs. The nature of such use needs to be investigated in a similar fashion to previous research, wherein clear distinctions have been drawn between social and task-oriented use of SNSs (Lin and Lu, 2011).

The results presented in this paper also suggest that the number of close friends young people have is not associated to employment status. However, the secondary data does not provide an opportunity to analyse the broader social network of the participants. It is possible that young people who are unemployed are stymied by dense social networks wherein strong ties are dominant, with fewer weak ties acting as bridges into other social circles. Indeed, research in Glasgow - Scotland’s largest city - has shown that social networks which are confined to small geographical areas characterised by high levels of worklessness can have a deleterious impact on the employment opportunities of individuals residing in those areas (Quinn and Seaman, 2008). To this end, the informational benefits of SNSs could provide a valuable outlet to young jobseekers.

Another interesting finding from this study is the association between both age and sex, and the use of SNSs. As hypothesised, age was negatively associated with membership of SNSs. This suggests that emerging generations are increasingly adopting new digital platforms for interaction, and exemplifies the need for information literacy to be integrated into education to assist learners navigate information online (Bruce, 2004; Fitzgerald, 2005). In terms of sex, it is notable that females use SNSs more frequently than males, and that young females (and younger people generally) are less likely to be unemployed. Again, this reinforces the potential relationship between the use of SNSs and being in paid employment, and highlights the need for further research in this area.

# Limitations

Despite the inferences derived from the results outlined above, there are a number of caveats that must be acknowledged. Firstly, the questions posed by the *Innovation Panel* regarding the use of SNSs do not specify individual digital platforms. As such, the responses would have been based on the respondents’ own definition of SNSs. Additionally, given the use of secondary data, is impossible to fully determine the causal factors which influence the results. For example, whilst the data imply that membership of SNSs is beneficial for employment outcomes, it is feasible that young people are more likely to join SNSs *after* securing employment. Also, the original survey was reporting circumstances from 2012. Given the continual advances in technology and adoption rates it is possible that there has been a significant shift in that time, which would affect the outcome of a similar study with contemporary data. Finally, wealth is a potentially important variable which has not been controlled for in this study. It is plausible that personal or family wealth predicts the use of SNSs over and above employment status

# Conclusion

This paper provides clear evidence of a link between the use of SNSs and employment status amongst young people in the 16-21 age group. By utilising data sourced from the *Understanding Society* study, it also highlights the value of using secondary data for such purposes, and how the results from such projects can be used as a basis for conducting further research. For example, the outcomes of the current study provide a useful platform from which to investigate the adoption of social media tools during job search, and the barriers or enablers young people face when using such technologies to source relevant job information. It also underlines the importance of demonstrating the means by which social media tools such as SNSs are used by young jobseekers, and which specific functions they use for that purpose. This knowledge will be particularly relevant to education careers guidance providers, in assisting jobseekers in an increasingly networked environment. Such work is currently being undertaken as part of the wider study cited earlier which is funded by the ESRC (grant no. ES/J500136/1) and Skills Development Scotland.

# References

Adecco Group (2014). *#Socialrecruiting a global study: Job search, digital reputation, and HR practices in the social media age.* [Online]. Available at: <http://www.adecco.com/en-US/Industry-Insights/Documents/social-recruiting/adecco-global-social-recruiting-survey-global-report.pdf> [Accessed 16th August 2015].

Bell, D. N., & Blanchflower, D. G. (2011). Young people and the Great Recession. *Oxford Review of Economic Policy*, *27*(2), 241-267.

Bennett, S., Maton, K., & Kervin, L. (2008). The ‘digital natives’ debate: A critical review of the evidence. *British journal of educational technology*, *39*(5), 775-786.

boyd, d. & Ellison, N. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer‐Mediated Communication, 13*(1), 210-230.

Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer research, 14*(3), 350-362.

Bruce, C.S. (2004) Information literacy as a catalyst for educational change. A background paper. In P.A. Danaher (Ed.), *Lifelong Learning: Whose responsibility and what is your contribution?*, *The 3rd International Lifelong Learning Conference*, [Online]. Available at: <http://eprints.qut.edu.au/4977/1/4977_1.pdf>, [Accessed 17th December 2015].

Burke, M., & Kraut, R. (2013, February). Using Facebook after losing a job: Differential benefits of strong and weak ties. In *Proceedings of the 2013 conference on Computer supported cooperative work,* [Online]. Available at: <http://community.hciresearch.org/sites/community.hciresearch.org/files/Burke-CSCW2013-FBandJobLoss-1.pdf>, [Accessed 17th December 2015].

Calvo-Armengol, A., & Jackson, M. O. (2004). The effects of social networks on employment and inequality. *American economic review*, 426-454.

Canduela, J., Graham, H., Lindsay, C. and Raeside, R., (2015). Employability, poverty and the spheres of sociability: evidence from the British Household Panel Survey. *Social Policy & Administration, 49*(5), 571-592.

Chowdry, H., Crawford, C., & Goodman, A. (2011). The role of attitudes and behaviours in explaining socio-economic differences in attainment at age 16. *Longitudinal and Life Course Studies, 2*(1), 59-76.

Eastin, M. S., & LaRose, R. (2000). Internet self‐efficacy and the psychology of the digital divide. *Journal of Computer‐Mediated Communication, 6*(1), 0-0.

Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” Social capital and college students’ use of online social network sites. *Journal of Computer‐Mediated Communication, 12*(4), 1143-1168.

Falcon, L. M. (1995). Social networks and employment for Latinos, Blacks, and Whites. *New England Journal of Public Policy, 11*(1), 4.

Fallows, D. (2005). How women and men use the Internet. *Pew Internet & American Life Project*, *28*. Available at: http://www.pewinternet.org/files/2005/12/PIP\_Women\_and\_Men\_online.pdf [Accessed 08th December 2015].

Fitzgerald, M. A. (2005). Skills for evaluating web-based information. In *Symposium on Internet Credibility and the User*. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.117.6149&rep=rep1&type=pdf> [Accessed 8th December 2015].

Franzen, A., & Hangartner, D. (2006). Social networks and labour market outcomes: The non-monetary benefits of social capital. *European Sociological Review*, *22*(4), 353-368.

Gallie, D., Paugam, S., & Jacobs, S. (2003). Unemployment, poverty and social isolation: Is there a vicious circle of social exclusion?. *European Societies*, *5*(1), 1-32.

Gov.UK (2012). *Tackling youth unemployment.* [Online]. Available at: <https://www.gov.uk/government/speeches/tackling-youth-unemployment>. [Accessed 20th October 2015].

Grabowicz, P. A., Ramasco, J. J., Moro, E., Pujol, J. M., & Eguiluz, V. M. (2012). Social features of online networks: The strength of intermediary ties in online social media. *PloS one, 7*(1), 1-9.

Granovetter, M. S. (1973). The strength of weak ties. *American journal of sociology*, *78*(6), 1360-1380.

Granovetter, M. (1974). *Getting a job*. Cambridge, MA: Harvard University Press.

Granovetter, M. (1983). The strength of weak ties: A network theory revisited. *Sociological theory*, *1*(1), 201-233.

Granovetter, M. (1995). *Getting a job: A study of contacts and careers*. University of Chicago Press.

Jones, S., Johnson‐Yale, C., Millermaier, S., & Pérez, F. S. (2009). US college students’ Internet use: Race, gender and digital divides. *Journal of Computer‐Mediated Communication*, *14*(2), 244-264.

Kettunen, J., Vuorinen, R., & Sampson Jr, J. P. (2013). Career practitioners' conceptions of social media in career services. *British journal of guidance & counselling*, *41*(3), 302-317.

Kim, K. S., Sin, S. C. J., & Tsai, T. I. (2014). Individual differences in social media use for information seeking. *The Journal of Academic Librarianship*, *40*(2), 171-178.

Ko, C. J., Thang, S. M., & Ou, S. C. (2014). Investigating the ICT Use and Needs of ‘Digital Natives' In Learning English at a Taiwanese University. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, *9*(2), 32-45.

Li, N., & Kirkup, G. (2007). Gender and cultural differences in Internet use: A study of China and the UK. *Computers & Education*, *48*(2), 301-317.

Lin, N. (1999). Building a network theory of social capital. *Connections*, *22*(1), 28-51.

Lin, N. (2002). *Social capital: A theory of social structure and action* (Vol. 19). Cambridge university press.

Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, *27*(3), 1152-1161.

Livingstone, S., & Helsper, E. (2007). Gradations in digital inclusion: children, young people and the digital divide. *New media & society*, *9*(4), 671-696.

McGuiness, F. (2015). *Youth Unemployment Statistics*. [Online]. Available at: [www.parliament.uk/briefing-papers/SN05871.pdf](http://www.parliament.uk/briefing-papers/SN05871.pdf). [Accessed 20th October 2015].

McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban studies*, *42*(2), 197-219.

Meho, L. I., & Tibbo, H. R. (2003). Modeling the information‐seeking behavior of social scientists: Ellis's study revisited. *Journal of the American society for Information Science and Technology*, *54*(6), 570-587.

Mo, R., & Leung, L. (2015). Exploring the roles of narcissism, uses of, and gratifications from microblogs on affinity‐seeking and social capital. *Asian Journal of Social Psychology*, *18*(2), 152-162.

Muscanell, N. L., & Guadagno, R. E. (2012). Make new friends or keep the old: Gender and personality differences in social networking use. *Computers in Human Behavior*, *28*(1), 107-112.

ONS (2014). *Internet access – households and individuals 2014.* [Online]. Available at: <http://www.ons.gov.uk/ons/dcp171778_373584.pdf>. [Accessed: 28th October 2015].

El Ouirdi, M., El Ouirdi, A., Segers, J., & Henderickx, E. (2014). Social Media Conceptualization and Taxonomy A Lasswellian Framework. *Journal of Creative Communications, 9*(2), 107-126.

Panahi, S., Watson, J., & Partridge, H. (2015). Information encountering on social media and tacit knowledge sharing. *Journal of Information Science*. Advance online publication. doi: 10.1177/0165551515598883

Palfrey, J., & Gasser, U. (2013). *Born digital: Understanding the first generation of digital natives*. New York: Basic Books.

Quinn, P., & Seaman, P. (2008). *Social networks and employability*. A report by the Full Employment Areas Initiative and the Glasgow Centre for Population Health. [Online]. Available at: http://www.gcph.co.uk/assets/0000/0437/SocialNetworks\_Employability\_Jan08.pdf [Accessed 8th December 2015].

Rainie, L., Wellman, B. (2012). *Networked: the new social operating system.* Cambridge, MA: MIT Press.

Saks, A. M. (2005). Job search success: A review and integration of the predictors, behaviors, and outcomes. *Career development and counseling: Putting theory and research to work*, 155-179.

Scherer, S. (2004). Stepping-stones or traps? The consequences of labour market entry positions on future careers in West Germany, Great Britain and Italy. *Work, Employment & Society*, *18*(2), 369-394.

Sin, S. C. J., & Kim, K. S. (2013). International students' everyday life information seeking: The informational value of social networking sites. *Library & Information Science Research*, *35*(2), 107-116.

Skills Development Scotland (2012). *Career management skills framework for Scotland.* [Online]. Available at: <https://www.skillsdevelopmentscotland.co.uk/media/752669/career_management_skills_framework_scotland.pdf> [Accessed 20th October 2015].

Steijn, B., Need, A., & Gesthuizen, M. (2006). Well begun, half done? Long-term effects of labour market entry in the Netherlands, 1950-2000. *Work, Employment & Society*, *20*(3), 453-472.

Stenger, T., & Coutant, A. (2009). Social Network Sites vv Social Network Analysis: do they match? Definition and methodological issues. In *Sunbelt Social Networks Conference de l’International Network for Social Network Analysis*. [Online]. Available at: <https://hal.archives-ouvertes.fr/hal-00458325/document>, [Accessed 17th December 2015].

Trading Economics (2015). *United Kingdom Unemployment Rate 1971-2015.* [Online]. Available at: <http://www.tradingeconomics.com/united-kingdom/unemployment-rate>. [Accessed 20th October 2015].

Understanding Society (2015) *Innovation Panel – A guide to the panel, experiments and research.* [Online]. Available at: <https://www.understandingsociety.ac.uk/about/innovation-panel> [Accessed 21st October 2015].

Utz, S. (2015). Is LinkedIn making you more successful? The informational benefits derived from public social media. *new media & society*. Advance online publication. doi: 10.1177/1461444815604143.

Van Dijk, J. A. (2006). Digital divide research, achievements and shortcomings. *Poetics*, *34*(4), 221-235.

Van Hoye, G., Hooft, E. A., & Lievens, F. (2009). Networking as a job search behaviour: A social network perspective. *Journal of Occupational and Organizational Psychology*, *82*(3), 661-682.

Wanberg, C. R. (2012). The individual experience of unemployment. *Annual review of psychology*, *63*(1), 369-396.

Wilson, T. D. (1997). Information behaviour: an interdisciplinary perspective. *Information processing & management, 33*(4), 551-572.

1. University of Essex. Institute for Social and Economic Research and National Centre for Social Research/TNS BMRB, Understanding Society: Innovation Panel, Waves 1-7, 2008-2014 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2015. SN: 6849 [↑](#footnote-ref-1)