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Abstract

Internet usage in general and social networking platforms (SNPs) in particular have dramatically changed the way we spend our time. A relevant question is how this change in time-use affected the well-being of people in general and younger people in particular. We answer this question by reporting, for the first time, detailed information about time-use in SNPs and the well-being of Jammers, the users of HaikuJAM (HJ), a mobile app that aims to boost emotional well-being using collaborative writing techniques. HaikuJAM is output-dependent. Our explorative analysis finds that Jammers who spent most of their SNP time in HJ have, on average, a slightly higher level of both life satisfaction and other domain satisfactions (especially satisfaction with family and friends) than the other Jammers. They also have a few sociodemographic characteristics that are statistically significant different from the other Jammers (i.e., they are slightly older and more of them work and are married). Predominant Jammers also have higher expectations about the importance of the use of HaikuJAM for their well-being and their personal development.

Our results suggests that the app features attract a specific group of users who have a relatively high level of satisfaction with their life in general and with their family and friends, in particular. It is quite possible that creative individuals who might be introverts and/or are *lonely* are using HaikuJAM not only to write but also to connect with other individuals who like to write. Despite the fact that our analysis is largely exploratory, our results suggest a few possibilities to addresses the causality between users' time spent in a SNP and their well-being.

Keywords: well-being, life satisfaction, social networking platform, social media, community, time-use, collaborative writing, poetry, haiku, HaikuJAM App, Jammers, predominant Jammers.

Introduction

During the last decade, Internet usage in general and social networking platforms (SNPs) have dramatically changed the way in which we spend our time. A relevant question is how this change in time-use affected the well-being of people in general and younger people in particular? Using previous theoretical and empirical results on time-use, it is relatively easy to build hypotheses. Given that a day has 24 hours for every individual, if time-use of the Internet and SNPs increases such that it decreases an individual's number of hours of sleep, it is expected that people's negative stress is increasing. Increasing the level of negative stress is expected to increase the probability of depression. Being depressed for a long period of time is expected to decrease an individual's well-being.

Therefore, it is not surprising that an increasing number of studies have examined the overall effect of frequent social media use on the mental health and well-being of users, reporting that the effects are mediated by a set of personal characteristics that are specific to each individual (e.g., psychological functioning, capabilities, culture and beliefs). The constraints and specialization of SNPs are expected to affect users' decisions to join a given platform and the amount of time spent on any given platform. Both specialization and efficiency of communication are relatively controlled by the platform itself, such as the number of characters allowed for a tweet by Twitter and the mandatory inclusion of a photograph by Instagram. These constraints are likely to attract only certain users, but they are also more likely to offer users more satisfaction. For example, there are a few platforms that specialize in writing and inspiration (i.e., Pinterest, Tumblr, Quora and HaikuJAM). However, to our knowledge, the literature analyzing platforms specialized in writing and inspiration is very limited.

Our paper adds to this, yet small but growing, literature by reporting, for the first time, detailed information about time-use in SNPs and the well-being of the users of HaikuJAM (**HJ**), a mobile app specializing in boosting emotional well-being using collaborative writing techniques. HaikuJAM is output-dependent. The users of the HaikuJAM app, called **Jammers**, collaborate to create short poems inspired by haiku - a Japanese poetic form of 3 unrhymed lines (i.e., each Jammer writes one line in relay, until the completion of each poem). Therefore, HaikuJAM is, by design, an app for togetherness. HaikuJAM's existence manifests in thousands of collaborative poems written daily, which is proof that the app is fundamentally bringing people together. Therefore, some natural questions are: Who are the individuals using the app? How often and how long are they using the app? What are the effects of using the app?

Our analysis is explorative, focusing, in a first step, on learning about the demographic and socioeconomic characteristics of the Jammers and how they spend time in ten other social media platforms, i.e., the most popular and commonly known social networking sites/platforms (SNPs) in the Western world: Facebook, WhatsApp, Twitter, Instagram, Snapchat, YouTube and LinkedIn, as well as Pinterest, Tumblr and other SMPs that have some emphasis on artistic content. In the second step, we analyze in depth the well-being of Jammers, with a focus on the usual determinants of well-being (i.e., domain satisfactions, demographic and socioeconomic characteristics) with a special emphasis on the time they spend in the HaikuJAM app and ten other SNPs.

We found that that Jammers' level of life satisfaction (6.7 out of 10) is lightly higher than OECD average level (6.5), which is a relatively high level of subjective well-being since 87% of the Jammers are from India, a country with a low level of life satisfaction. Our results suggest that writing together implies a special selection of users; individuals who seek self-expression and human connection. In other words, the app's specific production, collaborative poems, requires certain human, emotional, intellectual and social capital of the users.

The remainder of the paper is organized as follows. Section 2 presents shortly the early literature and the HaikuJAM app. Section 3 presents the sample selection, the characteristics of the Jammers. Section 4 presents and discusses 4 Jammers' time-use in SNPs and their well-being. Section 5 presents the empirical approach and discusses the main results, how they can be interpreted from the perspective of previous studies and our working hypotheses. The last section concludes our study.

2 Well-being and the social networking platforms

2.1 Earlier literature

Since the beginning of the new millennium, there has been increasing interest in self-reported measures of well-being that are needed to supplement the standard economic measures of a nation's wellbeing, such as GDP. Therefore, individual well-being, people's thoughts and feelings about their own quality of life, has increasingly become recognized as an important aspect of national well-being.[1] At the same time, due to digitalization and the rapid development of social media and social networking platforms (SNP), especially after the establishment of Facebook in 2004, there is an increasing need for accessing peoples' well-being and judgments about their current situation and experiential measures that incorporate time usage. Increasing attention is allocated to the time people spend in SNPs and how this affects their individual well-being. SNPs are online environments that enable individuals to create a public profile and connect with other users and quickly and easily share contact information, messages, pictures, life events and other content (Ellison et al. 2007). SNPs facilitate an increase in individuals' social capital. Given that social capital is an important determinant of subjective well-being (Myers and Diener 1995), to explore how SNS use affects users' subjective well-being, it is necessary to understand what is motivating their decision to join the platform as well as the decisions about how often to visit and how long time to spend in the platform each time.

Based on a survey performed by Pew Research Center in early 2018, in the US, the landscape of time-use in the social media content for adult users is still dominated by Facebook (68%), followed by YouTube (40%) and Instagram (35%). The most notable change over time is Instagram, which was used only by approximately 28% of users in 2016. However, the majority of younger Americans

[1] There is an increasing number of initiatives to move the measure of well-being 'beyond GDP': UNDP Human Development Reports, Stiglitz-Sen-Fitoussi report, EU 2020, UN Resolution calling for a "holistic approach to development" to promote sustainable happiness and well-being, and Rio+20 "The Future We Want" declaration, June 2012. Stiglitz-Sen-Fitoussi Commission (2009) recommended to focus on income and consumption (rather than production) when evaluating economic well-being, to focus on households, and to take in account the joint distribution of economic resources.

(especially those between the ages of 18 to 24 years) frequently used Snapchat (78%), Instagram (71%) and Twitter (45%) (Smith & Anderson, 2018). The Pew Research Center has asked about the use of five SNPs (Facebook, Twitter, Instagram, LinkedIn and Pinterest) in several previous surveys. Since 2016, Facebook has remained the most widely used SNP. The most notable change is Instagram, which increased in use from 28% in 2016 to 35% in 2018.

An increasing number of studies relate the time spent online and in SNPs as potential causes of light depression, anxiety and suicide, and focus on the overall effects on mental health and well-being with a particular concern for teens and young adults, who are often the early adopters of SNPs. The alarming results and measures being designed to inform users about the potential negative effects of spending time on SNPs might, however, cause users to miss the important finding that several features on SNPs that are active and creative can facilitate the growth of their users' human and social capital.

There is a substantial number of users who are often spending their time on several platforms. Most Facebook users frequently use their YouTube account. Among users of Twitter or Snapchat, approximately 75% also use Instagram. The literature focusing on the relationship between SNP use and subjective well-being has increased in recent years. Although mostly focused on the correlation between well-being and SNP use, the results of earlier studies have been inconsistent; some studies report positive correlations (e.g., Ellison et al. 2007; Grieve et al. 2013, Oh et al. 2014), while others report negative correlations (e.g., Fox and Moreland 2015; Kross et al. 2013). A few studies have a design that allows for better inference, using either a prospective longitudinal design (Kross et al. 2013; Steers et al. 2014) or an experimental design (Verduyn et al. 2015; Tromhol 2016; Hunt et al. 2018). Hunt et al. (2018) suggested that it is quite possible that more depressed or *lonely* individuals use SNPs more in an attempt to connect with others. Similarly, it is possible that individuals with lower self-esteem or poorer self-image are more prone to engage in social comparison by spending time on SNPs. Therefore, it has been suggested that only experimental studies can definitively address the direction of causality.

The specific methodological requirements for being able to estimates effects might be easily identify by analyzing users of specialized platforms. The well-established SNPs, such as Instagram and Twitter, which progressively have attracted more users to spend a greater amount of private and work time online to exchange ideas, experiences and feelings, have considerably dissimilar constraints affecting the users' decision to join and spend time within the SNP, such as the number of characters by Twitter and the mandatory photo in Instagram. SNPs that provide a sharper specialization might have significantly fewer users than established general SNPs such as Facebook, but they are, for sure, more attractive and creative for users interested in the platform's specialization. However, to our knowledge, we know very little about the users of the few platforms that specialize in writing and inspiration, i.e., Pinterest, Tumblr, Quora and HaikuJAM. This report offers a first picture about HaikuJAM app, focusing on its users' well-being and time spent in various SNPs.

2.2 HaikuJAM app - interacting in a creative way

Once upon a time, millions of minutes ago, a student of Economics at University College London (UCL) named Dhrupad Karwa, was sitting in a London teashop with his friend, feeling quite low over a failed startup venture and recent heartbreak. As the tea arrived, Dhrupad realized that he was tired of feeling lonely and depressed. Therefore, to take his mind off things, he pulled out a notebook, opened a blank page and wrote the first line of a haiku - a form of 3-line poetry that comes from Japan. However, instead of finishing the haiku himself, Dhrupad pushed the notebook towards his friend and asked him to write the next line. He did, and then Dhrupad wrote the final line. For the next few hours, they kept writing haiku together (called in this report haiku-jams), and Dhrupad found himself smiling again. It was magical to release his tensions through these little lines of haiku and watch his friend take the thoughts in completely new directions. With each line that passed between them, he felt less alone and more connected. The experience uplifted Dhrupad and inspired him to build a tool called HaikuJAM, which would help transform a person's isolation into a sense of connection. He shared the idea of an app, where people around the world write short poems together, with his university friends Andrew Leung and Neer Sharma. Together, they co-founded HaikuJAM and upon graduation, Dhrupad dove into the startup full-time and served as CEO, while Andrew and Neer joined investment banking firms. After two years of working in finance, Andrew and Neer both left their jobs and joined HaikuJAM full-time.

The HaikuJAM app officially launched in March 2015 on Android and iOS in London, but the team moved to Mumbai, India, in January 2017, as the majority of their 'Jammers' (users) were coming from South Asia. In the beginning of the summer 2019, there are over 700,000 Jammers who have written over 12 million collaborative poems in approximately 100 different languages in the app. The HaikuJAM team itself has grown to 17 people, all of whom are based in a colorful cottage in Bandra (Mumbai). As of summer 2019, the HaikuJAM app was used in approximately 100 languages by over 700,000 Jammers. The HaikuJAM app has been profiled in Vice, The New York Times, BBC, Forbes, The Guardian, The Huffington Post and many other media outlets. Alongside the app, HaikuJAM runs a gift shop, a community arts space and various events around the world for as many as 3000 people. For more information, visit haikujam.com.

Created in London and now based in a colorful cottage in Mumbai HaikuJAM is led by an international team that is on a mission to help the world feel better through writing, creativity and technology. The company is backed by top-tier investors across Asia and Silicon Valley. HaikuJAM's main goal is to help the world feel better through self-improvement achieved by writing poems of a maximum of 27 words and always together with one or two other users. One haiku-jam can never be written by a single user. Therefore, Jammers are never alone in their writing. However, as of summer 2019, almost one year after we collected the data, Jammers who pay a small fee can even write "solo".

3. Methodology

3.1 Sample Selection

Respondents were recruited online via invitation to participate in our web survey. Invitations were sent via Instagram to all Jammers who were online during the period of 21-22 August 2018, and via the HaikuJAM app to all Jammers who were online during the periods 16-27 August 2018 and 15-17 September 2018. To access the questions, respondents clicked a link that directed them to a secure online survey website (ORU-Survey). Upon giving consent, respondents were directed to complete a questionnaire. The final sample consisted of 556 respondents.

3.2 Survey design

3.2.1 The structure

A total of 27 questions were distributed in 5 key areas:

1. General life satisfaction and domain satisfaction (8 questions).
2. Attitudes towards the need of being informed about well-being, mental health and potential problems related to the use of social media (2 questions).
3. Demographic and socioeconomic characteristics (8 questions).
4. HaikuJAM app-related characteristics (4 questions).
5. Use and time-use of twelve different social media platforms, and attitudes to their importance for the Jammers' development and their well-being.

3.3 Who are the Jammers?

If our sample is representative for the population of *active* Jammers, then the active Jammers are *young*, *highly educated* or attending a higher education focused on *Science & Technology* and *live with their family* in *India.* See Table A1 in the Appendix.

- ♥ There is an almost even gender distribution of women (51.8%) and men (47.5% or 263); 4 Jammers identify as other gender.
- ♥ Approximately half of the Jammers are 19-24 years old (51.7%); the next most representative age group is the very young Jammers, aged 18 years or younger, who represent 25.4% of the sample. There are very few Jammers who are 36 years or older (approximately 4%).
- ♥ Most Jammers are studying (43.7%), but 38% finished a higher education program; 18% of the Jammers are studying in high school or lower level.
- ♥ Most of the Jammers are studying or have a higher education degree in Science and Technology (46.8%) or Economics & Business Administration (17.9%);
- ♥ The majority of Jammers live with their parents and siblings (35.6%), with their parents (21.7%), or with their parents, siblings and others (11.2%); 11.2% are living with their friends, and approximately 8.5% live alone.
- ♥ Approximately 85% of the Jammers were born and live in India; 12.6% of the Jammers were born and live in other Asian countries (many from the Philippines).
- ♥ The majority of the Jammers are students (61.4%); 23.3% are employed, 8% are self-employed and 9% are unemployed.

3.4 Jammers' Well-being

As already mentioned in the Introduction, individual well-being, people's thoughts and feelings about their own quality of life, has become increasingly recognized as an important aspect of national well-being. Research documenting determinants of subjective well-being has primarily focused on evaluative measures of well-being, such as life satisfaction, often used in large, national surveys (Krueger et al. 2009). However, several studies have documented how immediate mood and context can bias retrospective evaluations and have argued that the act of thinking about such quantities may focus individuals on aspects of their life that are not crucial to their actual well-being (Kahneman and Krueger 2006). Therefore, one critical issue for the evaluations of public policies, including intervention programs, is how well-being should be measured (Kahneman and Deaton 2010), even though a growing amount of literature has emerged on the use of global retrospective measures of well-being, such as evaluations of life satisfaction and accounts of happiness (OECD, 2011). These measures have the advantage of providing information on the appraisal of circumstances and feelings about them; however, there is a debate regarding their consistency. The subjective well-being measure used in our survey is *life satisfaction*, which measures *how* people evaluate *their life as a whole* rather than their current feelings. This was elicited through the following question: "*All things considered, how satisfied are you with your life as a whole these days*?", with answers on a 0-10 scale, where 0 = *Completely Dissatisfied* and 10 = *Completely Satisfied*.

The Jammers reported an average life satisfaction score of **6.4** (see Figure 2a1), which is at the same level as the average score of **6.5** reported by OECD in 2017 for the 35 OECD countries, as well as Brazil, Colombia, Costa Rica, Lithuania, the Russian Federation and South Africa. Life satisfaction is not evenly shared across the OECD countries (see Figure A3.4.1 in Appendix). Some countries – Greece, Hungary, Portugal and Turkey – have a relatively low level of overall life satisfaction, with average scores of **5.5 or less**. At the other end of the scale, scores reached 7.5 in Denmark, Finland, Iceland, Norway and Switzerland.[2]

More than 50% of the Jammers answered with a score of 7 or higher, but 5% are completely dissatisfied (Figure 1). Approximately 12% of the Jammers are completely satisfied (i.e., have a score of 10). The Jammers from India have an average life satisfaction of 6.3 (Figure 2), which is much higher than the average for the population of India. Regional average composite well-being suggests that the levels of life satisfaction for East Asia are relatively high after the 2000s but significantly lower than the regions of the OECD's countries. The indicator's values for South and South East Asia are very low (see Figure 3.4.2 in the Appendix).

[2] Available at www.oecd.org/howslife. The OECD's Better Life Initiative was launched in 2011 to measure well-being and progress beyond traditional metrics such as GDP. Another component of the Initiative, the Better Life Index, allows users to compare countries according to their own vision of what constitutes well-being.

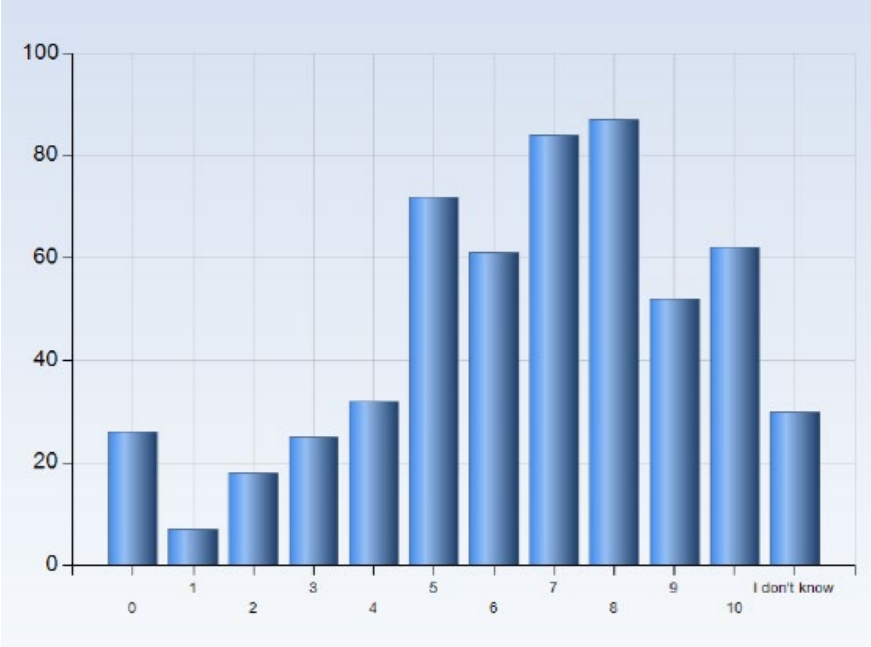

Figure 1 Jammers' life satisfaction
Mean = 6.4; Standard deviation = 2.6

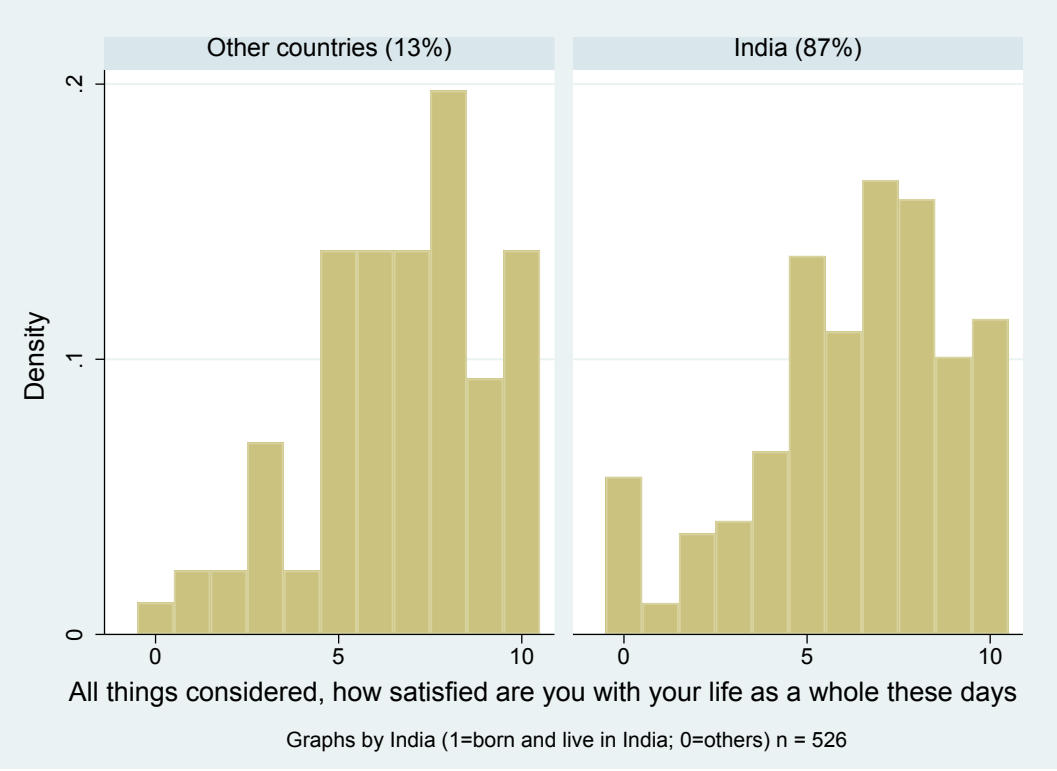

Figure 2 Jammers' life satisfaction, by country of birth
Mean(India) = 6.3; Mean(others) =6.7

To summarize, the **Jammers have a relatively high level of life satisfaction**, and the variation among life satisfaction is relatively small.

- ♥ Female Jammers have, on average, a relatively *higher* level of life satisfaction than male Jammers. There are relatively fewer female than male Jammers who are completely dissatisfied and relatively more women than men who are completely satisfied (Figure 3.4.3 in the Appendix).
- ♥ There are relatively more Jammers 19-24 years old who are *completely dissatisfied* than Jammers in other age groups. It seems that the Jammers 25-30 years old are more represented in the *higher* level of life satisfaction (Figure A3.4.4 in the Appendix).
- ♥ Jammers who are studying at the university level seem to be more represented in the *lower* tail of life satisfaction, while those in high school seem to be more concentrated in the *upper* tail of life satisfaction (Figure A3.4.5 in the Appendix).
- ♥ Jammers living alone are less represented in the tails of life satisfaction, while the group living with their parents seems to be overrepresented in the lowest tail (Figure 3.4.6 in the Appendix).
- ♥ Jammers who were born and live in India (who represent 87% of the sample) have a lower life satisfaction than all other Jammers, but the difference is very small (Figure 3.4.7 in the Appendix and Figure 2).
- ♥ Jammer who are employed or self-employed have a higher life satisfaction than all other Jammers (Figure 3.4.8 in the Appendix).

4 Jammers' time-use in SNP and their well-being

The Jammers were asked about their time-use of ten other social media platforms, namely, the most popular and commonly known social networking sites/platforms (SNPs) in the Western world (Alexa 2017), including Facebook, WhatsApp, Twitter, Instagram, Snapchat, YouTube and LinkedIn. Additionally, we chose the most commonly used SMPs, Pinterest, Tumblr and Quora, which have some emphasis on artistic content. This section focuses on Jammers' use of these SNPs and their well-being. The first subsection presents descriptive statistics for the Jammers' number of SNP accounts, the time spent in each SNP and their well-being. The next sections present Jammers' own expectations about the importance of the time spent in different SNPs for their well-being and personal development.

4.1 Jammers and their use of SNP

Jammers have an average of 6.5 SNP accounts and most of the Jammers have accounts for Instagram (85%), WhatsApp (81%), YouTube (88.2%) and Facebook (78%). Fewer Jammers have accounts for Snapchat (32%), LinkedIn (38%) and Twitter (42%). See Table 4.1.1 in the Appendix.

There are 163 combinations of accounts. There are only 24 Jammers that reported not having any account other SNP account than for HaikuJAM. The most frequent combinations of all 11 accounts are all (13 Jammers), all without Tumblr (13 Jammers), and all without Pinterest, Tumblr, Twitter and LinkedIn (9 Jammers) (Table 4.1.1 in the Appendix.). However, without Snapchat, the majority

of the Jammers (59%) use Facebook, WhatsApp, Instagram and YouTube, and 12% have WhatsApp, Instagram and YouTube accounts (Table 4.1.2 in the Appendix.). Only 4.71% of the Jammers have none of these accounts.

In regard to Jammers' use of only SNPs and/or apps with artistic content, i.e., Instagram, Pinterest, Tumblr and Quora, approximately 8% of Jammers use all four, but approximately 18.2% of Jammers use Instagram, Pinterest and Quora, and 20.3% use Instagram and Quora (Table 4.1.3 in the Appendix.).

Figure 4.1.1 in the Appendix and Table 4.1.5 present the Jammers' time-use in the twelve SNPs, suggesting a few differences across Jammers' usage of these platforms.

- HaikuJAM: Approximately 33% spend 1 hour or more daily, 26% spend 15-59 minutes daily, approximately 20% use it a few times each week, 4% use it once per month and less than 1% use it once every 3 months. The Jammers time-use in SNP seems to be significantly different from the average time-use of 142 minutes per day reported for many countries during the third quarter of 2018, (according to figures reported by Digital Information World, based on a report from GlobalWebIndex, GWI, that highlights how much the global population is using social media).[3] Interestingly, in 11 out of the 31 countries analyzed, including India, the time spent online has either stayed the same or decreased from the previous analysis, which seems to be linked to users' better understanding of the benefits of limiting 'screen time' as well as the drawbacks of being too active on social media.[4]
- Instagram (470 Jammers): 40% spend 1 hour or more daily on this platform.
- WhatsApp (451 Jammers): 82% spend time daily on this platform.
- Facebook (455 Jammers): 5% never use their account, 20% rarely or sometimes use their account and 16.7% use their account a few times each week. 68% spend time on Facebook daily.
- 50% of the Jammers have Twitter and LinkedIn accounts. 11% of them never use their accounts, and 22-23% of them rarely use their accounts.
- Only 109 Jammers have Tumblr accounts; 28.44% of them never use their account, 27% use their account rarely, and 18% use their account sometimes.
- YouTube (489 Jammers): Approximately 75% use their account daily, 7% spend 3 hours or longer, and 21% use their account only a few times each week.

The figures above suggest a few differences across the Jammers' use of SNPs, but it is less clear from the descriptive statistics of our data if there are any differences across the Jammers' well-being due to the time spent in different SNPs. See Figures 3.1.2 - 3.1.4. Therefore, in the next step, we identified 152 Jammers who spent most of their SNP time in HaikuJAM and analyzed them in comparison with the other 400 Jammers. The descriptive statistics suggest that the predominant Jammers have, on average, a slightly higher level of life satisfaction and domain satisfaction than the other Jammers, and they also have a few characteristics that are significantly different from the other Jammers (i.e., they are older, and more of them work, are married and have very high expectations

[3] https://www.digitalinformationworld.com/2019/01/how-much-time-do-people-spend-social-media-infographic.html, accessed June 16, 1019.

[4] https://www.digitalinformationworld.com/2019/01/how-much-time-do-people-spend-social-media-infographic.html

about the importance of HaikuJAM for their well-being and their personal development). See Subsection 4.3.

4.2 Jammers' expectations about the SMPs' importance

Table 4.2.1 presents Jammer's opinion about the importance of each of the twelve SMPs for their personal development. The majority of Jammers (approximately 55%) reported a score of at least **9** (out of 10) regarding their expectation of **HaikuJAM** being good for personal development. Almost **30%** agree with this (score 10 of 10).

- ♥ Approximately half of the Jammers using **Instagram** reported a score of at least **7** (out of 10); approximately 17% totally agree (i.e., score of 10 out of 10) that the use of Instagram is good for their personal development.
- ♥ Approximately half of the Jammers using **Quora** gave a score of at least 6 (out of 10); approximately **33%** totally agree (i.e., score of 10 out of 10) that the use of Quora is good for their personal development.
- ♥ Approximately half of the Jammers using **YouTube** gave a score of at least 6 (out of 10); approximately **32%** totally agree (i.e., score of 10 out of 10) that the use of YouTube is good for their personal development.

4.3 Differences between Jammers

As already mentioned, the *predominant* Jammers, i.e., Jammers that spent most of their SNP time in HaikuJAM, have a slightly higher level of life satisfaction and domain satisfaction than the other Jammers (Tables 4.3.1-4.3.4). The predominant Jammers also have a few characteristics that are significantly different from the other Jammers; i.e., more men, older, employed, higher educated, married and very high expectations about the importance of the use of HaikuJAM for their well-being and their personal development (Table 4.3.5). Some of these differences in characteristics seem to explain the differences in the life satisfaction of Jammers (see Figures 4.3.1-4.3.3 in the Appendix).

Predominant Jammers who are 30 years or older have a slightly higher satisfaction than the other younger Jammers who spent more time in other SNPs (Figure 4.3.1).

Predominant Jammers who are women have a higher satisfaction than the other three groups. The difference is highest compared to male Jammers who spent more time in other SNPs (Figure 4.3.2).

Table 4.1.5 How often Jammers use the eleven SNPs (%)

	HJ	IG	WA	SC	Pin	Tamblr	Quora	FB	YT	Tw	LI
Never		*0.64*	*0.44*	*17.37*	*10.15*	*28.44*	*4.83*	*5.27*	*0.41*	*11.15*	*11.39*
Rarely (once every 3 months)	0.58	3.19	1.55	**18.78**	**22.93**	**27.52**	20.34	9.67	0.82	**23.46**	**22.36**
Sometimes (once per month)	4.07	5.11	0.89	**13.15**	**17.67**	18.35	**24.83**	11.43	2.66	14.23	17.72
Often (a few times each week)	**19.77**	10.85	6.21	**18.31**	**23.31**	9.17	**24.83**	16.7	**20.65**	16.54	21.52
Each day											
Each day; less than 15 min.	15.89	14.89	**21.95**	**13.15**	9.02	6.42	8.28	**19.34**	5.93	13.85	10.55
Each day; 15-59 minutes	**26.16**	**23.19**	**23.51**	9.39	7.14	7.34	10	15.16	**21.27**	9.62	8.86
Each day;1-2 hours	15.7	16.81	13.3	2.35	6.39	0.92	2.76	10.33	**19.84**	3.85	4.22
Each day; 2-3 hours	7.36	10.85	12.42	3.29	1.5		2.07	5.49	12.68	3.08	2.53
Each day; more than 3 hours	10.47	14.47	**19.73**	4.23	1.88	1.83	2.07	6.59	15.75	4.23	0.84
N (have an account in SNP)	516	470	451	213	266	109	290	455	489	260	237

Table 4.2.1 Spending time in social media is good for my personal development, by SNP (%)

	HJ	IG	WA	SC	Pin	Tumblr	Quora	FB	YT	Tw	LI
Totally disagree	0.39	2.36	6.58	**29.66**	5.43	9.45	0.96	10.74	1.43	6.27	4.82
1	0.39	2.58	3.51	8.05	1.45	6.3	2.55	5.05	0	3.83	2.81
2	0.19	3.86	3.29	7.2	1.45	3.94	1.59	4.21	2.44	3.83	2.01
3	1.16	5.15	4.61	6.36	2.9	3.94	1.59	6.11	0.61	5.92	1.61
4	1.93	7.51	6.36	7.63	3.26	9.45	2.23	9.68	1.83	10.1	5.62
5	8.11	**18.67**	**17.11**	11.44	14.49	12.6	6.69	14.74	6.72	13.59	6.02
6	6.76	9.66	9.21	4.24	5.07	6.3	6.69	12.21	6.72	10.8	7.63
7	13.9	13.52	13.6	8.47	11.96	13.39	9.55	11.58	12.63	8.01	10.84
8	22.39	13.73	12.72	7.2	15.58	11.81	18.15	10.32	18.94	9.76	13.25
9	15.83	6.44	8.55	1.69	11.96	8.66	16.56	4.63	16.7	7.67	14.46
Totally agree	**28.96**	**16.52**	**14.47**	8.05	**26.45**	**14.17**	**33.44**	10.74	**31.98**	**20.21**	**30.92**
n	519	466	456	236	276	127	314	475	491	287	249
% No account	0	89.79	87.86	45.47	53.18	24.47	60.50	91.52	94.61	55.30	47.98

Table 4.3.1 Jammers' general life satisfaction and domain satisfaction (**0-10**), by time-use in HaikuJAM (means)

	Most time spent in other SNP (n = 400)			Most time spent in HaikuJAM (n = 150)		
	Obs	Mean	Std.	Obs	Mean	Std.
All things considered, how satisfied are you with your life as a whole these days*	380	6.26	(2.64)	142	**6.64**	(2.64)
My health is excellent	395	**6.92**	(2.40)	147	6.90	(2.67)
I am self-confident	394	6.96	(2.64)	146	**7.10**	(2.73)
I am satisfied with my family	395	7.75	(2.63)	149	**8.16**	(2.45)
I am satisfied with my friends	389	**7.00**	(2.97)	145	6.83	(2.97)
I am satisfied with the money in my pocket	388	5.37	(3.35)	147	**5.84**	(3.27)
So far I have achieved life goals that are important for my age	384	5.35	(3.12)	144	**5.42**	(3.37)
I am very positive about my future	380	7.05	(3.03)	147	**7.26**	(3.14)

*All questions are answered using a 0-10 scale; 0 = completely disagree to 10= completely agree

Table 4.3.2 Jammers' expectation about the positive impact of time-use in SNPs increases individual well-being (**0-4**), by SNP and time-use in HaikuJAM

	Most time spent in other SNP (n = 401)			Most time spent in HaikuJAM (n = 150)		
	Obs	Mean	Std.	Obs	Mean	Std.
- HaikuJAM	376	**3.10**	(0.80)	128	**3.12**	(0.89)
- Instagram	345	**2.33**	(1.03)	99	**2.62**	(1.07)
- WhatsApp	323	2.33	(1.00)	100	2.38	(0.97)
- Snapchat	174	*1.49*	(1.07)	36	1.36	(1.31)
- Pinterest	187	*2.78*	(0.98)	44	2.70	(1.09)
- Tumblr	90	*2.37*	(1.06)	21	2.00	(1.10)
- Quora	219	3.07	(0.98)	56	3.16	(0.97)
- Facebook	333	1.94	(1.10)	96	2.05	(1.20)
- You Tube	354	**3.10**	(0.85)	106	**3.11**	(0.81)
- Twitter	193	2.46	(1.04)	50	2.66	(1.02)
- LinkedIn	167	2.80	(0.97)	43	**2.88**	(1.05)

*All questions are answered using a 0-4 scale; 0 = strongly disagree to 4= strongly agree
Statistically significant differences in bold

Table 4.3.3 Jammers' expectation of communicating via SNPs develops their understanding (**0-4**) by SNP and time-use in HaikuJAM

	Most time spent in other SNP (n = 401)			Most time spent in HaikuJAM (n = 150)		
	Obs	Mean	Std.	Obs	Mean	Std.
- HaikuJAM	362	**2.72**	(1.18)	122	**2.84**	(1.17)
- Instagram	329	**2.37**	(1.26)	93	**2.55**	(1.36)
- WhatsApp	313	*2.59*	(1.26)	96	2.53	(1.28)
- Snapchat	168	*1.72*	(1.20)	39	1.67	(1.46)
- Pinterest	171	2.08	(1.17)	45	2.31	(1.22)
- Tumblr	88	2.00	(1.14)	18	2.17	(1.29)
- Quora	204	***2.47***	(1.16)	51	**2.45**	(1.30)
- Facebook	309	*2.19*	(1.24)	90	2.08	(1.37)
- You Tube	327	*2.43*	(1.15)	91	2.27	(1.20)
- Twitter	189	**2.29**	(1.18)	49	**2.51**	(1.24)
- LinkedIn	163	**2.26**	(1.11)	44	**2.61**	(1.30)

*All questions are answered using a 0-4 scale; 0 = strongly disagree to 4= strongly agree. Statistically significant differences in bold.

Table 4.3.4 Jammers time-use (in minutes) in SNPs, by SNP and time-use in HaikuJAM

	Most time spent in other SNP (n = 401)			Most time spent in HaikuJAM (n = 150)		
	Obs	Mean	Std.	Obs	Mean	Std.
- HaikuJAM	402	47.35	(43.67)	150	**135.30**	(72.28)
- Instagram	402	**83.45**	(69.87)	150	62.70	(70.40)
- WhatsApp	402	**80.30**	(72.94)	150	61.77	(69.24)
- Snapchat	402	26.70	(55.78)	150	17.50	(47.31)
- Pinterest	402	38.37	(64.62)	150	20.37	(45.68)
- Tumblr	402	15.20	(45.51)	150	5.83	(26.02)
- Quora	402	51.53	(74.71)	150	19.63	(44.95)
- Facebook	402	66.87	(70.73)	150	45.53	(65.14)
- You Tube	402	**84.42**	(68.24)	150	**73.27**	(74.77)
- Twitter	402	36.06	(61.67)	150	22.90	(51.53)
- LinkedIn	402	34.91	(62.96)	150	13.27	(33.39)
Time all SNP	402	612.50	(263.35)	150	613.37	(407.75)

*All the differences are statistically significant.

Table 4.3.5 Jammers sociodemographic characteristics, by time-use in HaikuJAM

	Most time spent in other SNP (n = 401)			Most time spent in HaikuJAM (n = 150)		
	Obs	Mean	Std.	Obs	Mean	Std.
Age						
_18	402	0.27	(0.45)	150	0.19	(0.40)
19_24	402	0.52	(0.50)	150	0.51	(0.50)
25_30	402	0.15	(0.36)	150	0.16	(0.37)
30_	**402**	**0.05**	**(0.23)**	**150**	**0.13**	**(0.34)**
Female	402	0.54	(0.50)	148	0.48	(0.50)
Living/Family status						
Alone	402	0.08	(0.27)	150	0.09	(0.29)
Parents	402	0.20	(0.40)	150	**0.27**	(0.44)
Parents & siblings	402	**0.37**	(0.48)	150	0.31	(0.47)
Parents &siblings&	402	**0.13**	(0.33)	150	0.07	(0.26)
Partner &..	402	0.05	(0.22)	150	**0.11**	(0.31)
Friends	402	**0.12**	(0.32)	150	0.09	(0.28)
Other	402	0.05	(0.22)	150	0.05	(0.23)
Lives in India	402	0.84	(0.37)	150	0.83	(0.38)
University education	402	0.36	(0.48)	150	**0.43**	(0.50)
Employment status						
Student	401	**0.63**	0.48	149	0.56	0.50
Self-employed	401	0.08	0.27	149	0.08	0.27
Employed	401	0.22	0.41	149	**0.28**	0.45
Unemployed	401	0.10	0.30	149	0.07	0.26

Figure 4.3.1 Jammers' life satisfaction by age and time spent in HaikuJAM

Figure 4.3.2 Jammers' life satisfaction by gender and time spent in HaikuJAM

5 The empirical approach and results

We estimated the impact of time-use in different social networking platforms (*TUSM*) on general life satisfaction (*LS*) of Jammers, controlling for their domain satisfaction, their sociodemographic characteristics, their attitudes and their expectations about the importance of their time use in different SNPs for their well-being.

$$LS_i = \alpha_i + \beta_X X_i + \beta_{TUSM} TUSM_i + \beta_{XTUSM} X * TUSM_i + \epsilon_i$$

While we controlled for all of the key drivers of life satisfaction, it is important to caveat this approach as there may still be omitted confounding variables included in ϵ_i, which would bias our estimates of the vectors of estimates β_X, β_{TSUM} and β_{XTSUM}. However, this approach represents one of the best methods for estimating *impacts* using observational data (i.e., data where the outcome has not been randomly assigned) and is the main method used in social science research on well-being. We estimated the loge satisfaction bu using both order probit (Tables 5.1-5.3) and OLS models (Tables A5.1 and A5.2 in the Appendix).

Table 5.1 presents the estimation of the effects of domain satisfaction and sociodemographic characteristics, *X,* assuming that there are no effects from time spent in SNPs (*TUSM*).[5] Table 5.2 presents the time effects (i.e., the betas for *TUSM*) assuming that there are no effects from domain satisfaction and from demographics. Table 5.3 presents the estimates for both *X*, *TUSM* and their interactions.

Our estimates are in line with the previous literature, suggesting that domain satisfaction is the most important factor for individuals' life satisfaction (Table 5.1). We also found, in line with previous findings, that the time spent in SNPs has a concave shape, suggesting that after an optimal number of minutes, there is a negative impact on life satisfaction, and the magnitude of this negative impact increases with the time spent in the SPMs. Most relevant for the Jammers is the result suggesting that the predominant Jammers, i.e., the Jammers who spent most of their SNP-time in HaikuJAM, have a higher probability of increasing their life satisfaction, with everything else considered constant.

[5] All regressions were estimated with ordered probit.

Table 5.1 Well-being equations by groups of X variables (ordered probit)

	(1)	(2)	(3)
Domain satisfaction (0 = Completely Disagree…10 = Completely Agree)			
Health	0.124***	0.134***	0.137***
Self-confident	0.119***	0.123***	0.123***
Family	0.054**	0.057**	0.053**
Friends	0.087***	0.088***	0.091***
Money in pocket	0.073***	0.078***	0.075***
Achieved life goals imp for own age	0.061***	0.062***	0.063***
Very positive about my future	0.020	0.019	0.018
Explicit information about (0 = Strongly Disagree; 4= Strongly Agree)			
SNP: potential problems	0.037	0.028	0.027
School: well-being and mental health	0.067	0.058	0.060
Socio-demographics			
Female		0.035	0.041
Age (CG: 12-18 years)			
19_24		-0.135	-0.148
25_30		0.753*	0.750*
30_		0.685	0.680
Higher-education		-0.602	-0.623
Ongoing higher-education		0.030	0.033
Higher-education & 19-24 years		0.748*	0.775*
Employment status			
- Self-employed		-0.200	-0.195
- Employed		-0.150	-0.156
Living/family status (CG: single)			
Parents		-0.320	-0.339
Parents & siblings		-0.546***	-0.549***
Parents &siblings & others		-0.101	-0.094
Partner &.		-0.352	-0.373
Friends		-0.275	-0.270
other		0.005	-0.035
India		-0.048	-0.039
Predominant Jammer			**0.194***

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Probit cut points			
/cut2	1.562***	1.151***	1.196***
/cut2	1.760***	1.361***	1.406***
/cut3	2.185***	1.810***	1.854***
/cut4	2.509***	2.148***	2.192***
/cut5	2.850***	2.501***	2.546***
/cut6	3.472***	3.132***	3.178***
/cut7	3.906***	3.565***	3.612***
/cut8	4.534***	4.204***	4.252***
/cut9	5.222***	4.910***	4.962***
/cut10	5.717***	5.426***	5.482***
Observations	454	453	453

*** p<0.01, ** p<0.05, * p<0.1

Table 5.2 Well-being equations by groups of TUSM variables (ordered probit)

	(1)	(2)	(3)	(4)	(5)	(6)
SNP-accounts	0.003	-0.095	-0.070	-0.030	0.002	0.042
Squared		0.008	0.007	0.005	0.001	0.000
SNP daily time	(in min.)		-0.000	-0.000	0.006*	0.005
Squared			0.000	-0.000	-0.000	-0.000
Pred Jammer				0.191*	0.307*	0.301*
Daily minutes,	by SNP					
- HaikuJAM					-0.011	-0.010
Squared					-0.001	-0.000
- Instagram					-0.005	-0.006
Squared					-0.000	0.000
- WhatsApp					-0.006	-0.002
Squared					0.000	-0.001
- Snapchat					-0.006	-0.007
Squared					0.001	0.001
- Pinterest					-0.003	-0.003
Squared					-0.002	-0.001
- Tumblr					-0.012**	-0.013**
Squared					0.003	0.004
- Quora					-0.006	-0.005
Squared					0.000	0.000
- Facebook					-0.009**	-0.011**
Squared					0.002	0.003**
- You Tube					-0.007*	-0.002
Squared					-0.000	-0.002
- Twitter					-0.005	-0.005
Squared					-0.000	0.000
- LinkedIn					-0.003*	-0.002
Daily time-dummy						
- HaikuJAM						0.045
- Instagram						0.157
- WhatsApp						-0.329**
- Pinterest						-0.005
- Tumblr						0.057
- Quora						0.103
- Facebook						0.007
- You Tube						0.153
- Twitter						-0.267
- LinkedIn					-	-
Probit cut points						
/cut1	-1.623***	-1.880***	-1.899***	-1.686***	-1.585***	-1.552***
/cut2	-1.504***	-1.762***	-1.782***	-1.568***	-1.466***	-1.430***
/cut3	-1.271***	-1.529***	-1.549***	-1.335***	-1.230***	-1.191***
/cut4	-1.040***	-1.298***	-1.318***	-1.103***	-0.995***	-0.951***
/cut5	-0.806***	-1.064***	-1.084***	-0.867***	-0.756**	-0.709**
/cut6	-0.384***	-0.641**	-0.661**	-0.443	-0.323	-0.272
/cut7	-0.084	-0.341	-0.360	-0.142	-0.017	0.036
/cut8	0.326**	0.070	0.051	0.270	0.400	0.455
/cut9	0.810***	0.555**	0.537**	0.757***	0.893***	0.952***
/cut10	1.211***	0.957***	0.941***	1.162***	1.303***	1.367***
Observations	520	520	520	520	520	520

Table 5.3 Well-being equations by groups of X & TUSM variables (ordered probit)

	(1)	(2)	(3)	(4)	(5)
Domain satisfaction (0 = Completely Disagree…10 = Completely Agree)					
Health	0.124***	0.134***	0.137***	0.137***	0.149***
Self-confident	0.119***	0.123***	0.123***	0.124***	0.114***
Family	0.054**	0.057**	0.053**	0.050**	0.050**
Friends	0.087***	0.088***	0.091***	0.094***	0.101***
Money in pocket	0.073***	0.078***	0.075***	0.074***	0.077***
Achieved life goals // age	0.061***	0.062***	0.063***	0.064***	0.066***
V. positive about future	0.020	0.019	0.018	0.017	0.014
Explicit information about					
(0 = Strongly Disagree…4= Strongly Agree)					
SNP: potential problems	0.037	0.028	0.027	0.030	0.026
School: wellbeing & health	0.067	0.058	0.060	0.063	0.064
Socio-demographics					
Female		0.035	0.041	0.028	-0.067
Age (CG: -18 years)					
19_24		-0.135	-0.148	-0.138	-0.126
25_30		0.753*	0.750*	0.708*	0.701*
30_		0.685	0.680	0.627	0.523
Higher-education		-0.602	-0.623	-0.586	-0.500
Ongoing higher-education		0.030	0.033	0.022	0.017
Higher-education & 19-24		0.748*	0.775*	0.727*	0.653
Employment status					
- Self-employed		-0.200	-0.195	-0.171	-0.163
- Employed		-0.150	-0.156	-0.179	-0.196
Living (CG: single)					
Parents		-0.320	-0.339	-0.359*	-0.349
Parents & siblings		-0.546***	-0.549***	-0.585***	-0.626***
Parents &sibl & others		-0.101	-0.094	-0.133	-0.175
Partner &.		-0.352	-0.373	-0.361	-0.366
Friends		-0.275	-0.270	-0.280	-0.254
other		0.005	-0.035	-0.063	-0.106
India		-0.048	-0.039	-0.019	0.003
Predominant Jammer			0.194*	0.122	0.196
SNP-accounts				-0.134	-0.073
Squared				0.009	0.006

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	(1)	(2)	(3)	(4)	(5)
Daily minutes, by SNP					
- HaikuJAM					0.003
Squared					-0.001
- Instagram					0.001
Squared					-0.000
- WhatsApp					-0.003
Squared					0.001
- Snapchat					-0.001
Squared					0.001
- Pinterest					0.004
Squared					-0.001
- Tumblr					**-0.011****
Squared					**0.005***
- Quora					0.000
Squared					0.000
- Facebook					**-0.006***
Squared					**0.003***
- You Tube					-0.003
Squared					0.001
- Twitter					-0.002
Squared					0.001
- LinkedIn					0.004
Squared					-0.002
/cut1	1.562***	1.151***	1.196***	0.677	0.794
/cut2	1.760***	1.361***	1.406***	0.886	1.001*
/cut3	2.185***	1.810***	1.854***	1.331**	1.447***
/cut4	2.509***	2.148***	2.192***	1.669***	1.794***
/cut5	2.850***	2.501***	2.546***	2.024***	2.160***
/cut6	3.472***	3.132***	3.178***	2.656***	2.812***
/cut7	3.906***	3.565***	3.612***	3.089***	3.257***
/cut8	4.534***	4.204***	4.252***	3.730***	3.910***
/cut9	5.222***	4.910***	4.962***	4.444***	4.637***
/cut10	5.717***	5.426***	5.482***	4.970***	5.177***
Observations	454	453	453	453	453

*** p<0.01, ** p<0.05, * p<0.1

6. Discussion and conclusions

To our knowledge, the literature analyzing the platforms specializing in writing and inspiration is very limited, and no study builds on the popularity of such apps. Therefore, our study is the first to report detailed information about the users of HaikuJAM, a mobile app specializing in boosting emotional well-being by using collaborative writing techniques. During the Summer/Fall 2018, we invited all users who visited the app during three different periods of two-three days to participate in a web-survey aimed to answer questions about their time-use in social media and their well-being.

Our analysis was, in a first step, explorative, focusing on learning about the demographic and socioeconomic characteristics of the users and how they spent their time in ten other social media platforms; i.e., the most popular and commonly known social networking sites/platforms (SNPs) in the Western world: Facebook, WhatsApp, Twitter, Instagram, Snapchat, YouTube and LinkedIn, as well as Pinterest, Tumblr and SMPs which have some emphasis on artistic content. The majority of the 552 Jammers who answered our web-survey were students from India.

In the second step, we analyzed in depth the well-being of Jammers, with a focus on the usual determinants of well-being (i.e., domain satisfactions, demographic and socioeconomic characteristics) and a special emphasis on the time they spend in the HaikuJAM app and ten other SNPs. The active Jammers are typically using several (on average 6.5) social media platforms, but this usage is generally lightly related to their well-being. However, Jammers' well-being is positively associated with their belief that using HaikuJAM is very good for their personal development, much better than using other SNPs in general, but also in comparison to those that are closest to HaikuJAM's artistic content (Quora and Pinterest).

Our results showed that Jammers' level of life satisfaction is approximately the same as the OECD average level (6.5 out of 10), which implies that Jammers have a relatively high level of subjective well-being since most Jammers are from India, a country with a low level of life satisfaction. Additionally, Jammers have a high level of satisfaction with health, family and friends. Specifically, the satisfaction with family is significantly higher than the OECD average level.

However, why do Jammers have a high level of well-being? To answer this question, in the next step, we identified 152 of the 552 Jammers who spent most of their SNP time in HaikuJAM (i.e., the predominant Jammers) and analyzed them in comparison with the other 400 Jammers who spent more time in other social networking platforms than in HaikuJAM. Predominant Jammers have, on average, a slightly higher level of both life satisfaction and other domain satisfactions (especially, satisfaction with family and friends) than the other Jammers. They also have a few characteristics that are significantly different from the other Jammers; i.e., they are slightly older, and more of them work, are married and have very high expectations about the importance of the use of HaikuJAM for their well-being and their personal development.

Our explorative analysis is a robust preparation for designing a correct experimental setting that would allow us to test in a future study the effects of using the HaikuJAM app on Jammers' well-being.

Writing together implies a special selection of users: individuals who seek self-expression and human connection. In other words, the app's specific purpose, the collaborative writing of poems, requires a certain human, emotional, intellectual and social capital of the users. Therefore, the expectation is that Jammers are relatively more educated users. As with any other apps, the population of Jammers is increasing daily, and therefore, the demographic and socioeconomic characteristics of users might also change over time.

We conclude that the features of the app attract a specific group of users who have a relatively high level of satisfaction with their life in general and with their family and friends, in particular. It is quite possible that creative individuals who might be introverts and/or lonely are using HaikuJAM not only to write but also to connect with other individuals who like to write. We need to deeply analyze these mechanisms, and therefore, a new experimental study will be initiated to address the causality between Jammers' time spent in the HaikuJAM app and their well-being.

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"I should not have been sorry to have had the old fairy-tale ending affixed to this ***true story****, 'And they lived* ***together*** *very* ***happily*** *for ever after'."*
Charles Dickens in the 1850s, known as Household Words

Epilogue

I started this report with a fairy tale about the magical entrepreneurial idea of HaikuJAM. The HaikuJAM app is a reality. A beautiful reality. A creative supply that meets the huge demand for a meaningful, intimate and honest way of communicating. It is a platform where users' joint collaborative words suggest what we humans need, dream, want…

Communication *is the process of passing* ***information*** *and* ***understanding*** *from* ***one*** *person to* ***another****. In simple words, it is a process of transmitting and sharing ideas, opinions, facts, values, etc. from one person to another. Writing together with persons that you never met, without knowing their sociodemographic characteristics, increases the freedom of communication with respect to a given focus.* ***This freedom of communication removes many constraints that many individuals face each day, and therefore, it is logical to expect that, at least in the short run, this freedom of communication has positive effects on the individuals' feelings, on their happiness****. But… HaikuJAM is not only an app that aims to boost emotional well-being using creative writing, it is also a new kind of app for social networking! And, as many others who listen to and read the daily news, I was confronted almost every day with the wariness of the negative effects of the Internet and/or social media on people's well-being. In this context, it is the app's mission and my hypothesis that spending time by creatively writing haiku-jams with other Jammers increases their happiness and their well-being, correct? Theoretically, this hypothesis can be empirically tested! How? We need data. How could I get such data?*

Almost one year ago*, on 21 May 2018, when, I believe, I never spent more than 30 minutes a day on any social networking platforms on which I have an active account (Twitter, LinkedIn, Instagram, ResearchGate and very seldom HaikuJAM), I posted for the first time on my Instagram account, a Figure from a study of a sample of 14-24-year-olds living in the UK that reported that Instagram use was found to positively associated with the young users' self-expression and self-identity, but … it also suggested increases in anxiety and depression.* ***Connected and affected?!...*** *See below.*

What about creative apps? *After one month, on 24 June 24, 2018, I sent a DM from Instagram to the HaikuJAM app's CEO, Dhruv Karwa, if I could conduct similar research by inviting the app's users to answer questions via a web-survey. Yes, you know by now what happened.*

However, what, maybe, most of you do not know is that I received a reply within a few minutes: ***Let's do it!*** *And, since then, I started to live "together very happily ever after." I started to work with the most brilliant and collaborative team that no fairy tale can describe.* ***To be continued…***

Appendix

Descriptive Statistics
Tables

Table A1 Jammers sociodemographic characteristics, all and by time-use in HaikuJAM

	Most time spent in HaikuJAM (n = 150)		Most time spent in other SNP (n = 401)		All Jammers	
	Mean	Std.	Mean	Std.	Mean	Std.
Age						
_18	0.20	0.40	**0.27**	0.45	0.25	0.43
19_24	0.52	0.50	0.52	0.50	0.52	0.50
25_30	0.16	0.37	0.15	0.36	0.16	0.36
30_	**0.12**	0.33	0.05	0.23	0.07	0.26
Female	**0.48**	0.50	0.54	0.50	0.52	0.50
Living/Family status						
Alone	0.09	(0.29)	0.08	(0.27)	0.08	0.28
Parents	**0.27**	(0.44)	0.20	(0.40)	0.22	0.41
Parents & siblings	0.31	(0.47)	**0.37**	(0.48)	0.36	0.48
Parents &siblings&	0.07	(0.26)	**0.13**	(0.33)	0.11	0.32
Partner &..	**0.11**	(0.31)	0.05	(0.22)	0.06	0.24
Friends	0.09	(0.28)	**0.12**	(0.32)	0.11	0.31
Other	0.05	(0.23)	0.05	(0.22)	0.05	0.22
Lives in India	0.84	0.37	0.84	0.37	0.84	0.37
University education	**0.43**	0.50	0.36	0.48	0.38	0.49
Employment status						
Student	0.56	0.50	**0.63**	0.48	0.61	0.49
Self-employed	0.08	0.27	0.08	0.27	0.08	0.27
Employed	**0.28**	0.45	0.22	0.41	0.23	0.42
Unemployed	0.07	0.26	0.10	0.30	0.09	0.29

Table 4.1.1 Jammers' SNP accounts; mean and standard deviation

	n	mean	std
Binary (1=Yes; 0=No)			
Instagram (ig)	552	0.846	0.361
Pinterest (pint)	552	0.433	0.496
Tumblr (tum)	552	0.141	0.349
Quora (quo)	552	0.500	0.500
WhatsApp (wa)	552	0.813	0.390
Facebook (fb)	552	0.781	0.414
Snapchat (sc)	552	0.319	0.466
YouTube (yt)	552	0.882	0.323
Twitter (twi)	552	0.418	0.494
LinkedIn (li)	552	0.380	0.486
Number accounts	552	6.514	2.244

Table 4.1.2 Jammers' use of the five most frequently used SNPs

hj	ig	wa	fb	yt	N	%
1	0	0	0	0	26	4.71
1	0	0	0	1	2	0.36
1	0	0	1	0	4	0.72
1	0	0	1	1	17	3.08
1	0	1	0	0	3	0.54
1	0	1	0	1	7	1.27
1	0	1	1	1	26	4.71
1	1	0	0	0	6	1.09
1	1	0	0	1	3	0.54
1	1	0	1	0	1	0.18
1	1	0	1	1	**44**	7.97
1	1	1	0	0	10	1.81
1	1	1	0	1	**64**	11.59
1	1	1	1	0	15	2.72
1	1	1	1	1	**324**	58.70

Table 4.1.3 All combinations of use of the five SNPs with artistic content by Jammers

	hj	ig	Pinterest	Tumblr	Quora	N	%
1	1	0	0	0	0	57	10.33
2	1	0	0	0	1	8	1.45
3	1	0	0	1	0	1	0.18
4	1	0	0	1	1	1	0.18
5	1	0	1	0	0	11	1.99
6	1	0	1	0	1	5	0.91
7	1	0	1	1	1	2	0.36
8	1	1	0	0	0	**125**	22.64
9	1	1	0	0	1	**112**	20.29
10	1	1	0	1	0	5	0.91
11	1	1	0	1	1	4	0.72
12	1	1	1	0	0	56	10.14
13	1	1	1	0	1	**100**	18.12
14	1	1	1	1	0	21	3.80
15	1	1	1	1	1	44	7.97

Table 4.1.4 The most frequent combinations of the Jammers' use of 11 SNP accounts

hj	ig	wa	schat	Pinterest	Tumblr	Quora	fb	yt	twi	li	N
1	0	0	0	0	0	0	0	0	0	0	**24**
1	1	1	1	0	0	1	1	1	0	0	**9**
1	1	1	1	0	0	1	1	1	1	0	**8**
1	1	1	1	1	0	1	1	1	0	0	**6**
1	1	1	1	1	0	1	1	1	0	1	**6**
1	1	1	1	1	0	1	1	1	1	0	**8**
1	1	1	1	1	0	1	1	1	1	1	**13**
1	1	1	1	1	1	1	1	1	1	1	**13**

Tables of Estimates

Table A5.1 Well-being equations, by group of variables. OLS estimates

	(1) Domain Satisfaction	(2) + Expectations	(3) + attitude about info need	(4) + demographics	(5) + employment status	(6) + country of birth
My health is excellent	0.243***	0.199***	0.206***	0.211***	0.196***	0.198***
I am self-confident	0.284***	0.214***	0.213***	0.210***	0.236***	0.238***
I am satisfied with my family	0.094**	0.099**	0.105**	0.104**	0.113***	0.109**
I am satisfied with my friends	0.162***	0.159***	0.156***	0.155***	0.146***	0.145***
with the money in my pocket	0.170***	0.129***	0.124***	0.123***	0.129***	0.134***
achieved life goals that are important		0.120***	0.116***	0.113***	0.108***	0.106***
very positive about my future		0.039	0.036	0.037	0.033	0.029
Each SMP should provide information			0.083	0.079	0.100	0.105
information provided in school			0.103	0.098	0.108	0.112
Employment status(CG: other)						
- Self-employed					-0.682*	-0.657*
- Employed					-0.495*	-0.500*
- Student					-0.878***	-0.882***
My gender				-0.017	-0.082	-0.115
My age				0.069	0.001	-0.020
My education					-0.227	-0.210
- Science & Technology					-0.192	-0.199
- Economics & Business Administration					-0.072	-0.040
My current living arrangement.						0.015
My country of birth						0.086
Constant	-0.095	-0.025	-0.820	-0.909	0.410	0.259
Observations	480	457	455	454	445	438
R-squared	0.490	0.499	0.500	0.501	0.510	0.507

Table A5.2 Well-being, use and time-use of social media platforms. OLS estimates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Number of accounts (NA)	0.013	-0.232	-0.098	-0.079	-0.124	0.034	-0.060	-0.166	-0.131	-0.014
NA-quadratic		0.020	0.014	0.010	0.012	0.007	0.010	0.016	0.016	0.002
Time-use (10 minutes) TU										
HaikuJAM (hj)			0.014	0.017	0.058	0.003	0.037	0.034	0.021	0.019
Instagram (ig)			-0.010	**0.006**	0.059	-0.026	-0.004	0.006	-0.001	0.007
WhatsApp (wa)			-0.010	-0.003	-0.044	0.072	0.087	0.066	0.062	0.065
Snapchat (sc)			-0.002	-0.031	-0.021	-0.072	-0.064	-0.059	-0.053	-0.013
Pinterest (pint)			-0.031	**0.051**	0.047	0.018	0.023	0.027	-0.000	-0.008
Tumblr (tum)			-0.006	-0.147	-0.131	-0.211	-0.250*	-0.274**	-0.273*	-0.231
Quora (quo)			0.000	**-0.013**	0.009	-0.005	-0.004	0.010	0.004	0.004
Facebook (fb)			0.015	**-0.087**	-0.101	-0.146**	-0.111	-0.106	-0.113	-0.094
YouTube (yt)			-0.041**	-0.035	0.032	0.108	0.113	0.107	0.099	0.104
Twitter (twi)			0.004	0.022	0.037	-0.000	-0.032	-0.032	-0.026	-0.025
LinkedIn (li)			0.003	0.144*	0.153*	0.119	0.130	0.130	0.118	0.033
TU quadratic				**YES**	YES	YES	YES	YES	YES	YES
tu_each day more than 1h					YES	YES	YES	YES	YES	YES
Time-use in SMP each day										
HaikuJAM (hj)						0.072	-0.257	-0.232	-0.212	-0.079
Instagram (ig)						0.303	0.181	0.114	0.196	0.128
WhatsApp (wa)						-0.815*	-0.712*	-0.742*	-0.831*	-0.812*
Snapchat (sc)						0.003	-0.468	-0.291	-0.414	-0.227
Pinterest (pint)						0.195	0.137	0.051	0.157	0.246
Tumblr (tum)						0.320	0.644	0.613	0.782	0.725
Quora (quo)						-0.005	0.306	0.314	0.436	0.351
Facebook (fb)						0.354	0.305	0.301	0.341	0.249
YouTube (yt)						-0.897*	-0.724	-0.675	-0.706	-0.717

(continued next page)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Expectations										
SMP good for personal development										
HaikuJAM (hj)							0.795***	0.662**	0.684**	0.627**
Instagram (ig)							0.621*	0.687*	0.724*	0.687*
WhatsApp (wa)							0.515	0.429	0.430	0.554
Snapchat (sc)							1.404*	1.533**	1.497**	1.612**
Pinterest (pint)							0.180	0.135	0.068	0.070
Tumblr (tum)							-0.086	-0.084	-0.077	0.039
Quora (quo)							-0.372	-0.352	-0.340	-0.236
Facebook (fb)							-0.034	0.088	0.037	-0.018
YouTube (yt)							0.145	0.081	0.101	0.150
Spending time in this SMP increases WB										
HaikuJAM (hj)								0.530	0.610*	0.581*
Instagram (ig)								-0.099	-0.104	-0.109
WhatsApp (wa)								0.296	0.239	0.220
Snapchat (sc)								-0.875	-0.880	-0.786
Pinterest (pint)								0.199	0.102	0.002
Tumblr (tum)								0.218	0.345	0.490
Quora (quo)								-0.181	-0.086	0.053
Facebook (fb)								-0.070	-0.080	-0.028
YouTube (yt)								0.232	0.232	0.272
Twitter (twi)								0.530	0.610*	0.581*
LinkedIn (li)								-0.099	-0.104	-0.109
Communicating via SMP develops my understanding									YES	YES

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(Continued from previous page)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Having friends in this SMP										
HaikuJAM (hj)										**0.172**
Instagram (ig)										-0.007
WhatsApp (wa)										-0.098
Snapchat (sc)										-0.099
Pinterest (pint)										**0.094**
Tumblr (tum)										-0.200
Quora (quo)										-0.068
Facebook (fb)										-0.038
YouTube (yt)										-0.111
Twitter (twi)										-0.009
LinkedIn (li)										**0.343****
Constant	6.278***	6.910***	6.702***	6.706***	6.639***	6.543***	6.313***	6.298***	6.281***	6.145***
Observations	522	522	522	522	522	522	522	522	522	522
R-squared	0.000	0.003	0.020	0.034	0.045	0.054	0.129	0.144	0.153	0.174

*** p<0.01, ** p<0.05, * p<0.1

Descriptive Statistics
Figures

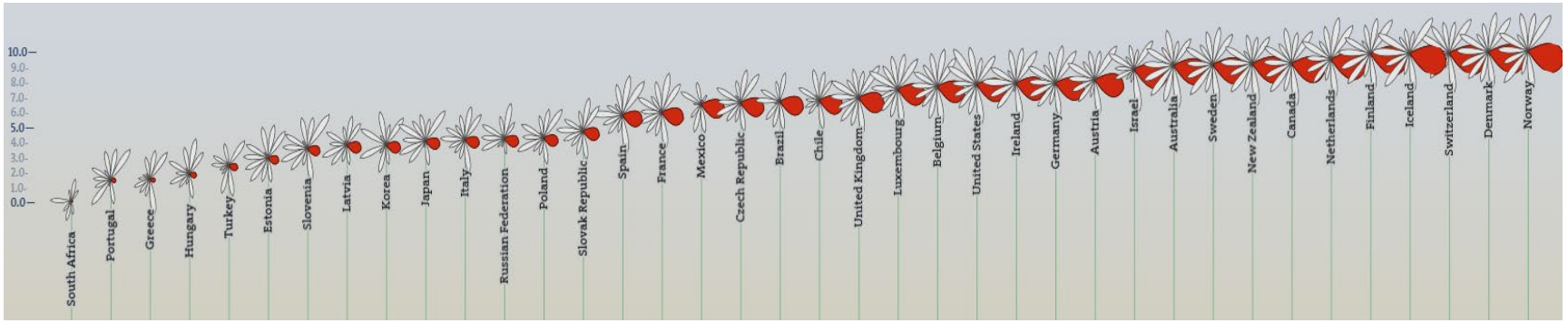

Figure 3.4.1 OECD's Life satisfaction

Life measures how people evaluate their life as a whole rather than their current feelings.
Source: http://www.oecdbetterlifeindex.org/topics/life-satisfaction/

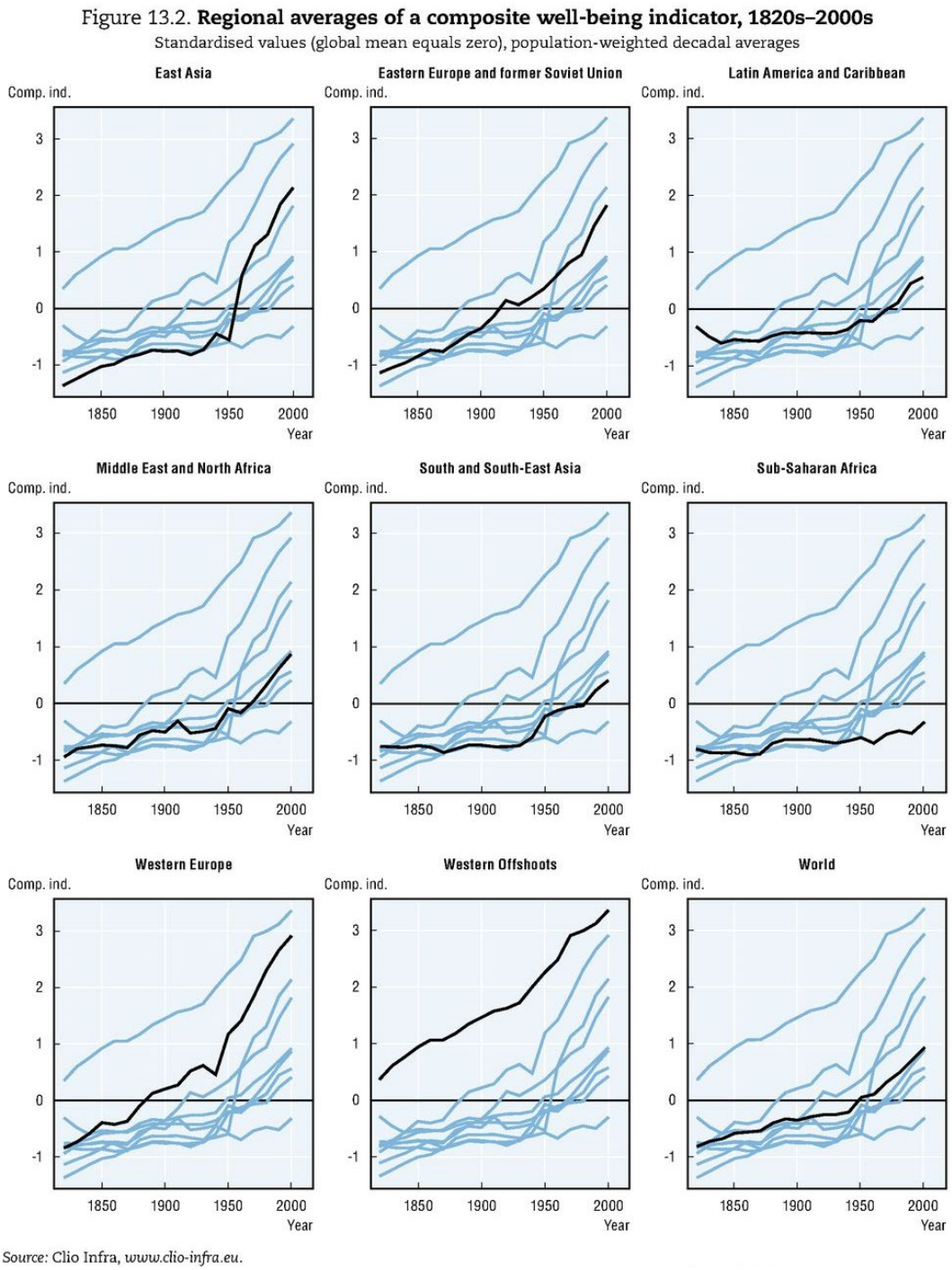

Figure 3.4.2 Regional average composite well-being indicator
Source: Rijpma, A. (2014). A composite view of well-being, since 1820, OECD

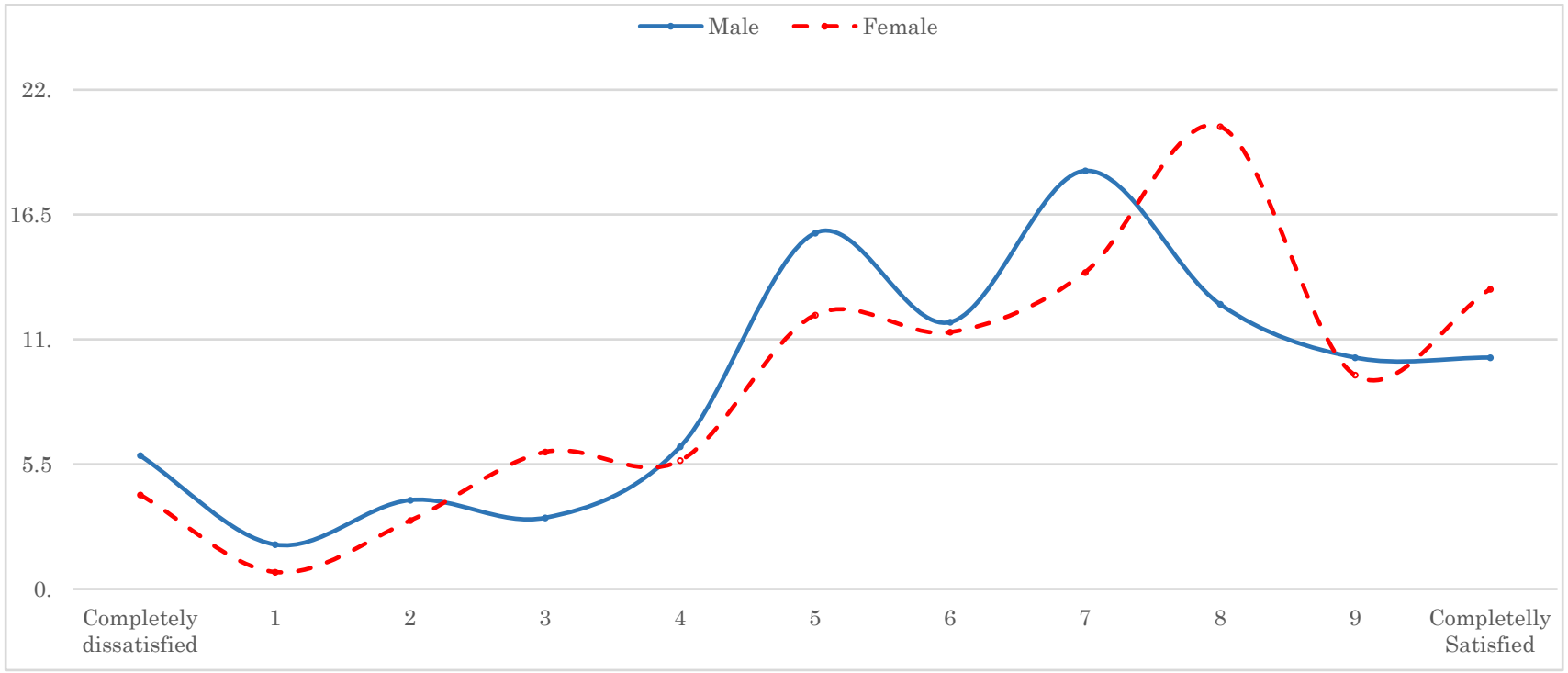

Figure 3.4.3 Jammers' well-being by gender (%)

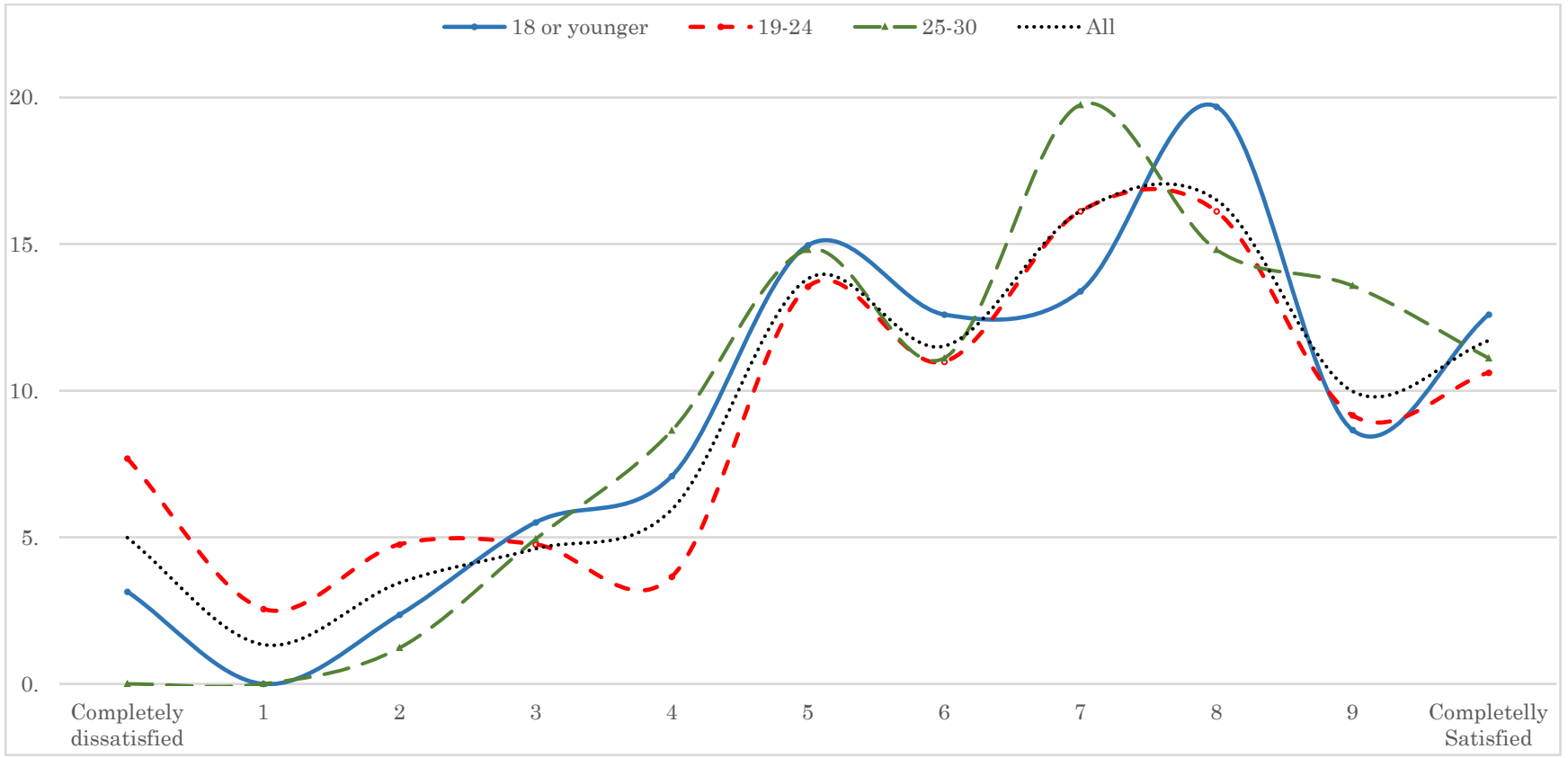

Figure 3.4.4 Jammers' well-being by age groups (%)

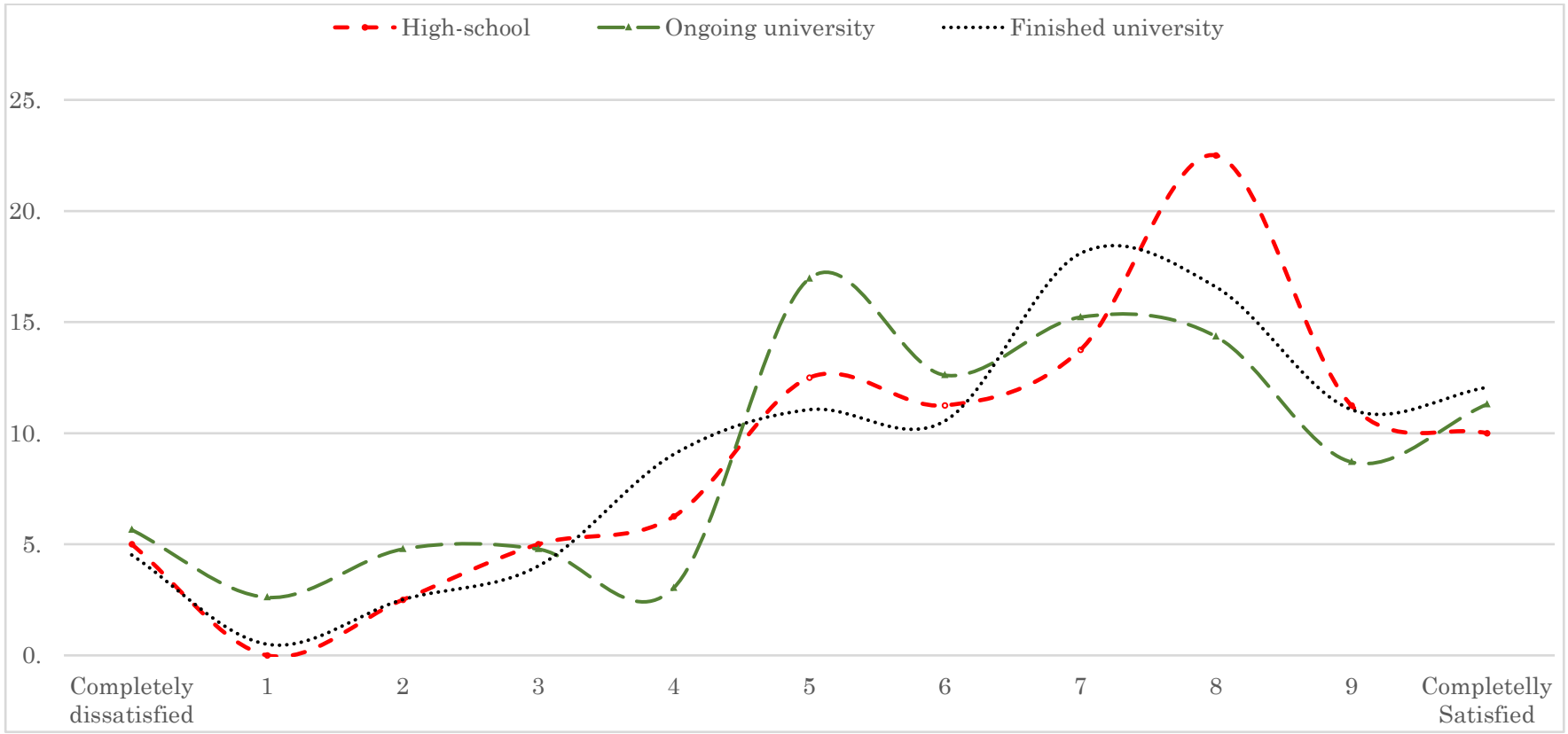

Figure 3.4.5 Jammers' well-being by education groups (%)

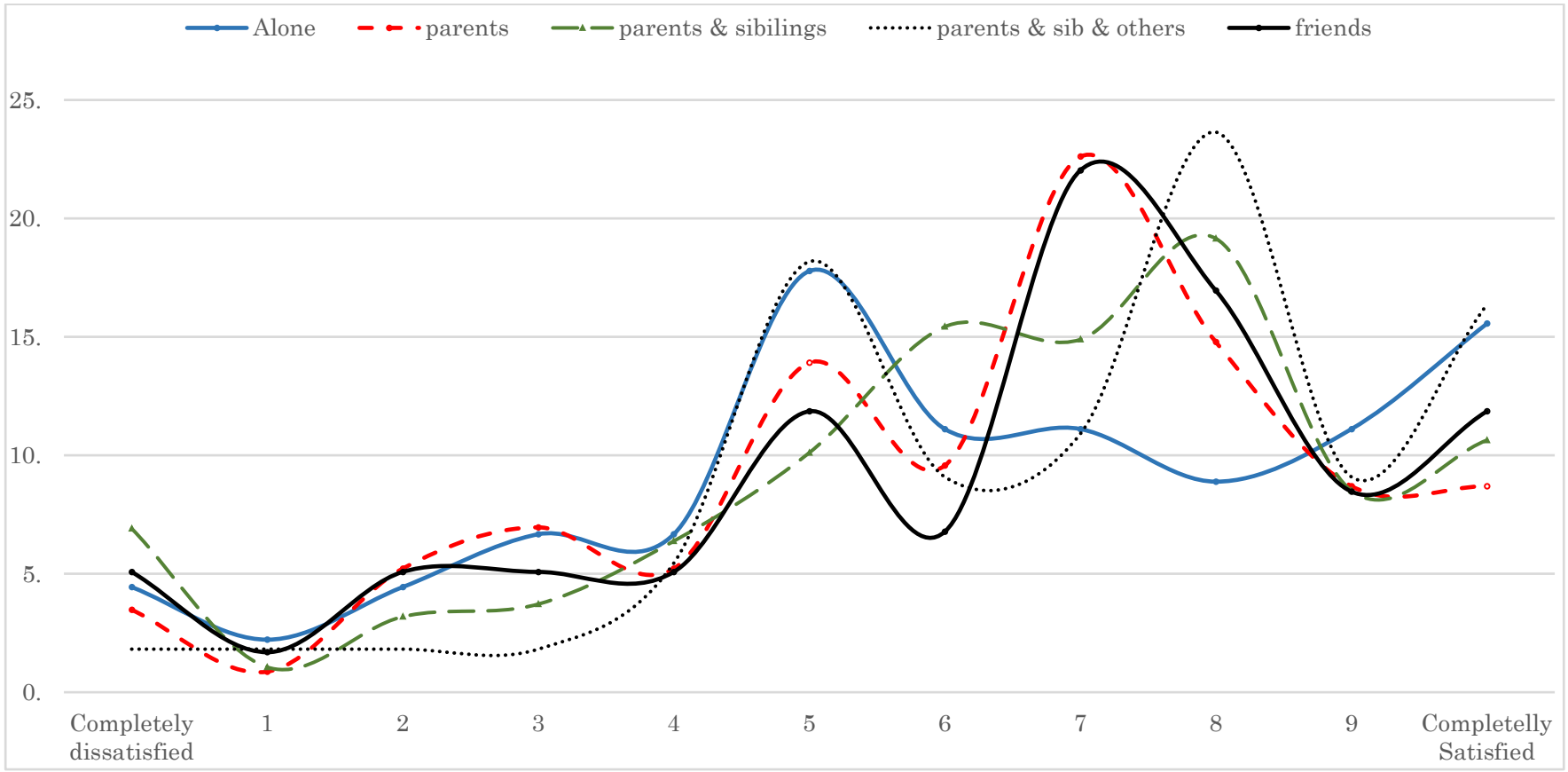

Figure 3.4.6 Jammers' well-being by living arrangements (%)

Figure 3.4.7 Jammers' well-being by country of birth (%)

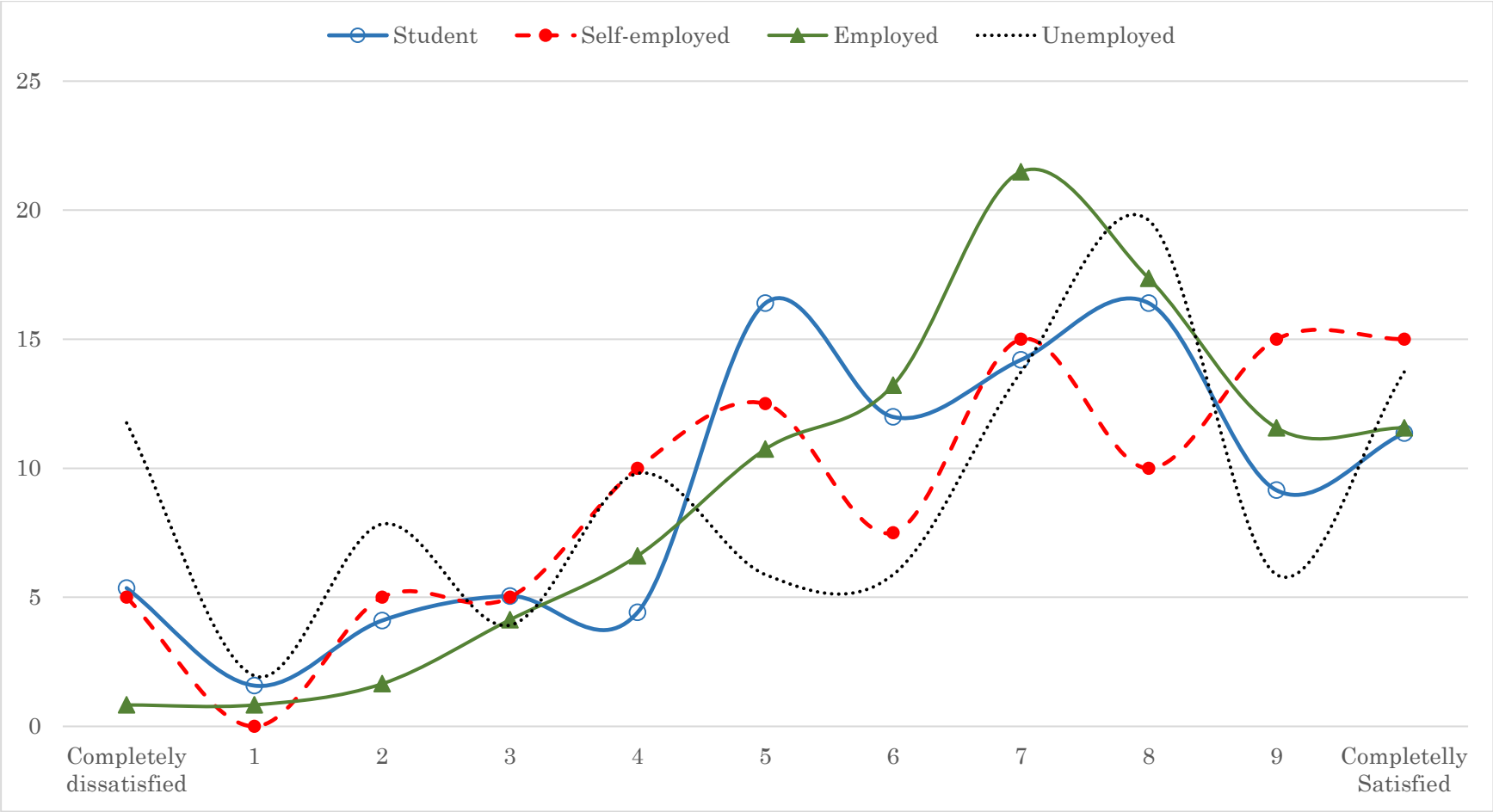

Figure 3.4.8 Jammers' well-being by employment (%)

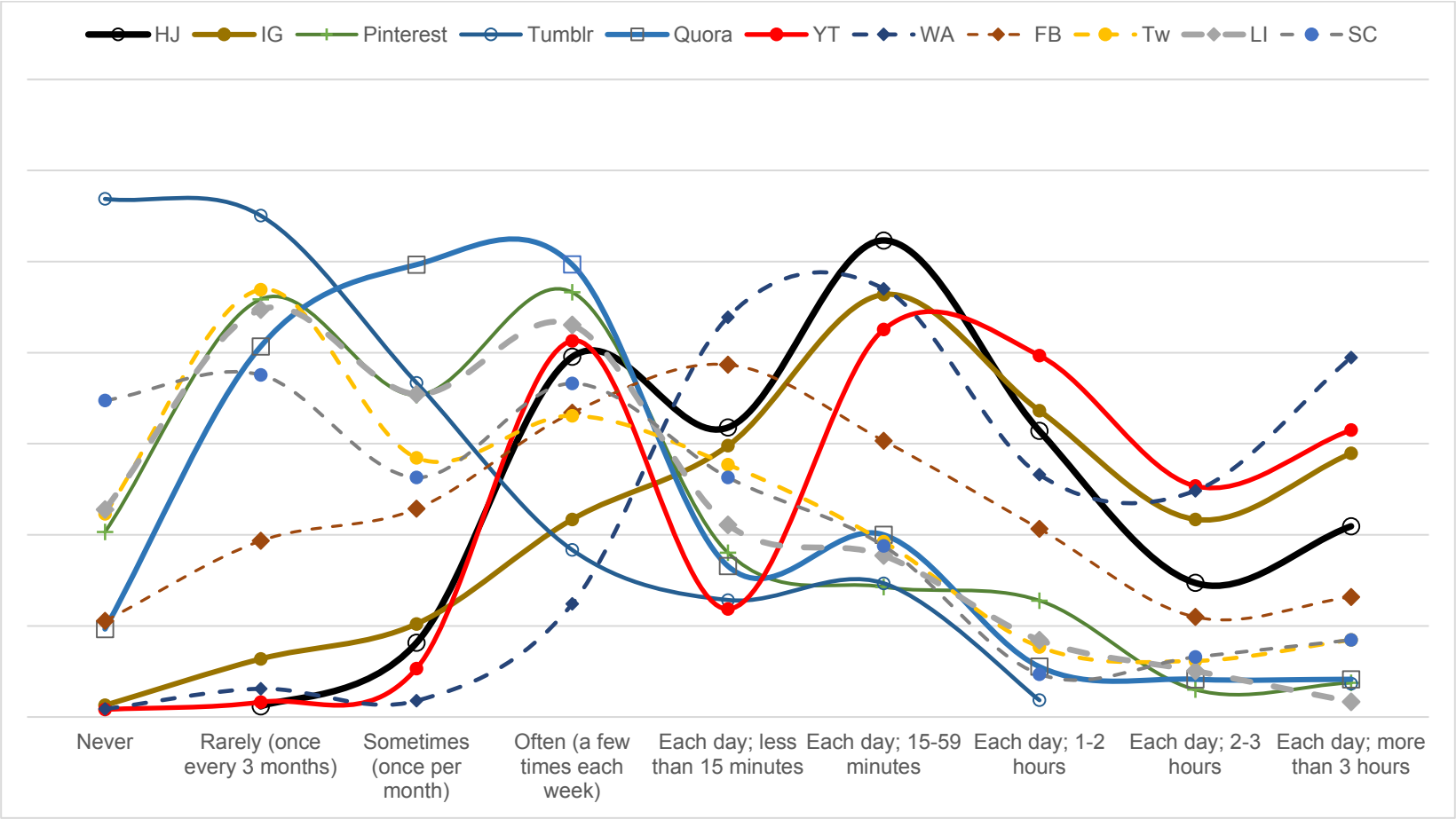

Figure 4.1.1 Time-use of social media, by SNP (%)

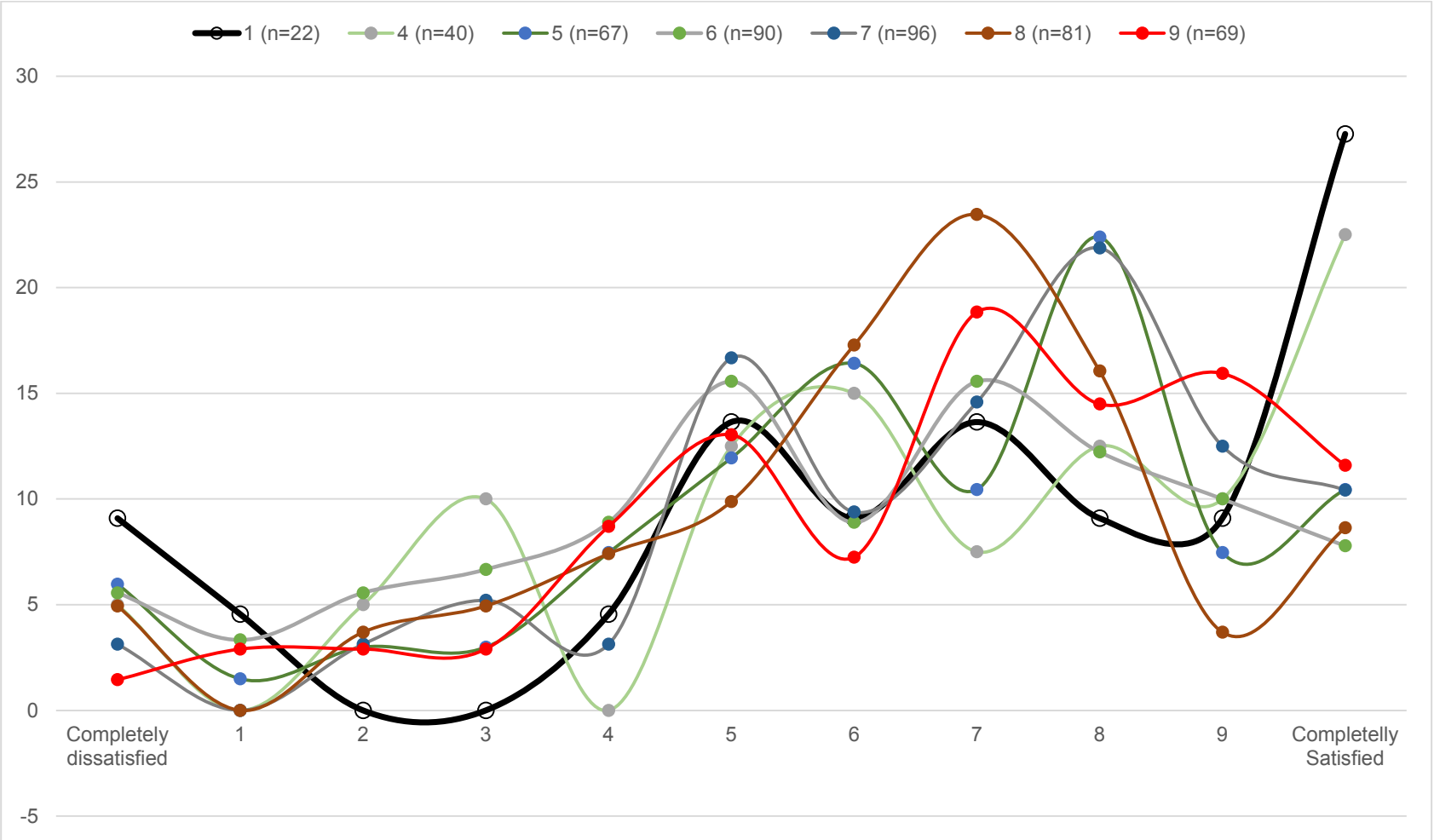

Figure 4.1.2 Jammers' well-being by number of used accounts (%)

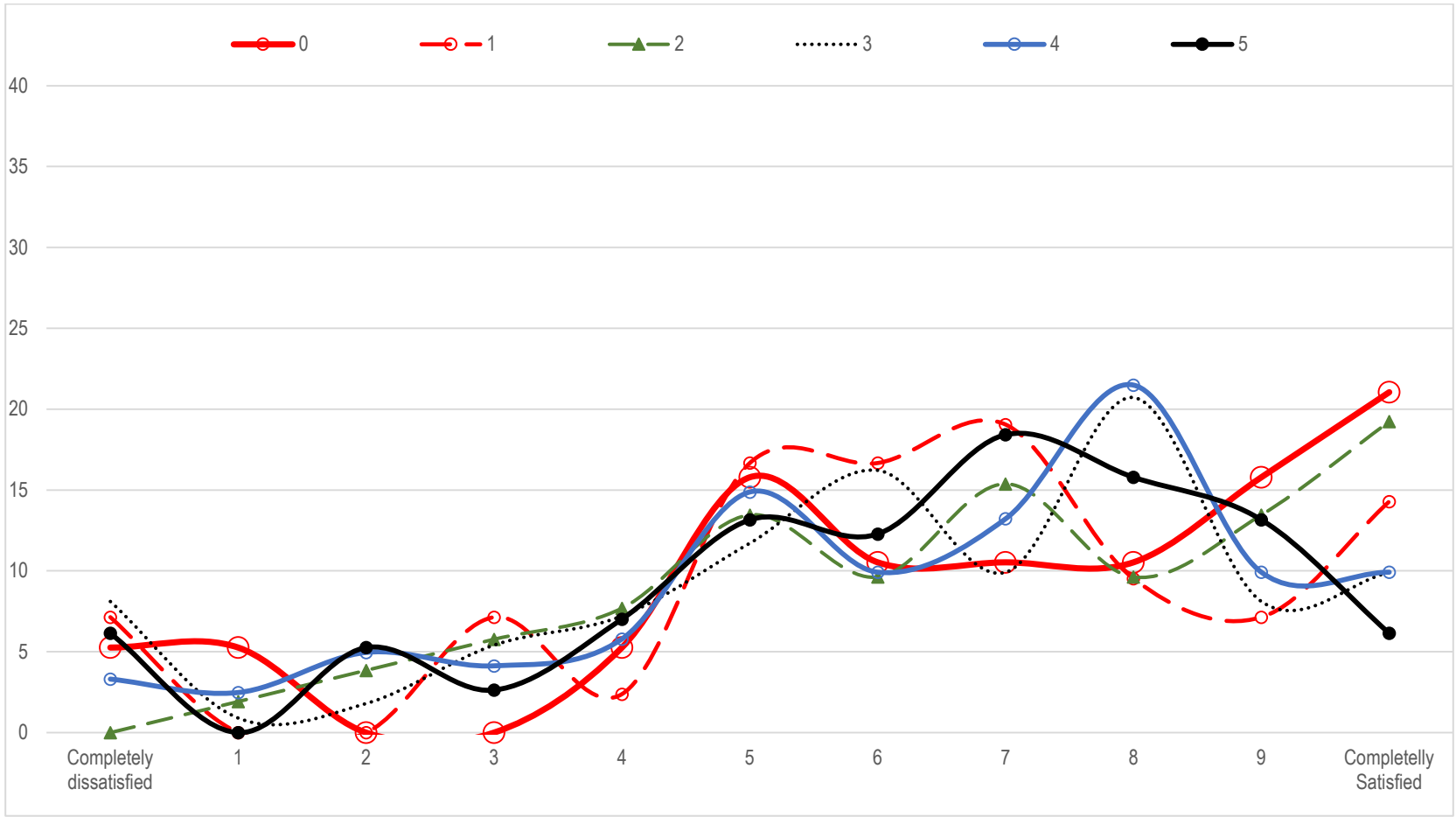

Figure 4.1.3 Jammers' well-being by number of SNPs visited daily

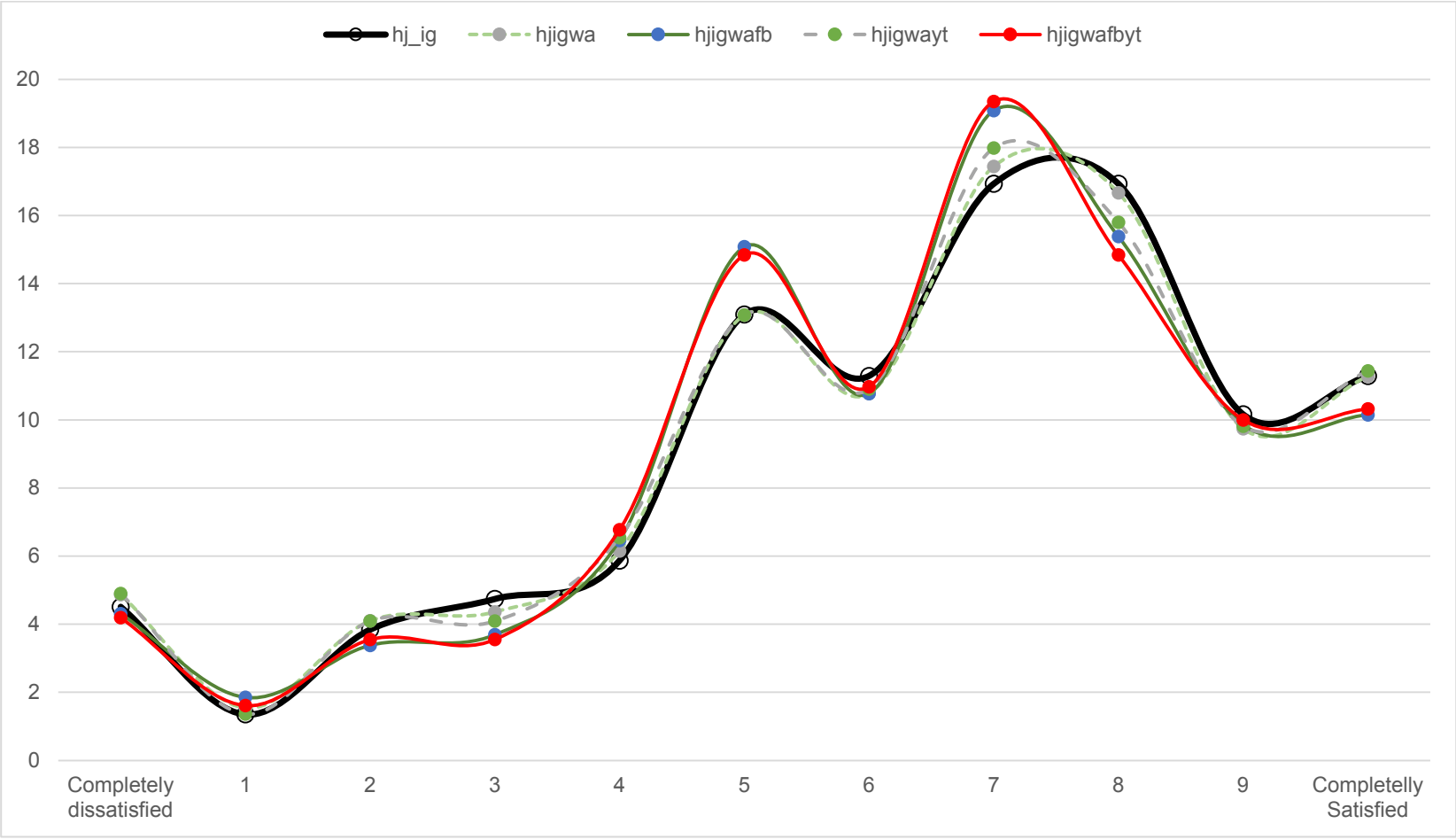

Figure 4.1.4 Jammers' well-being by the combinations of SNPs visited often (%)

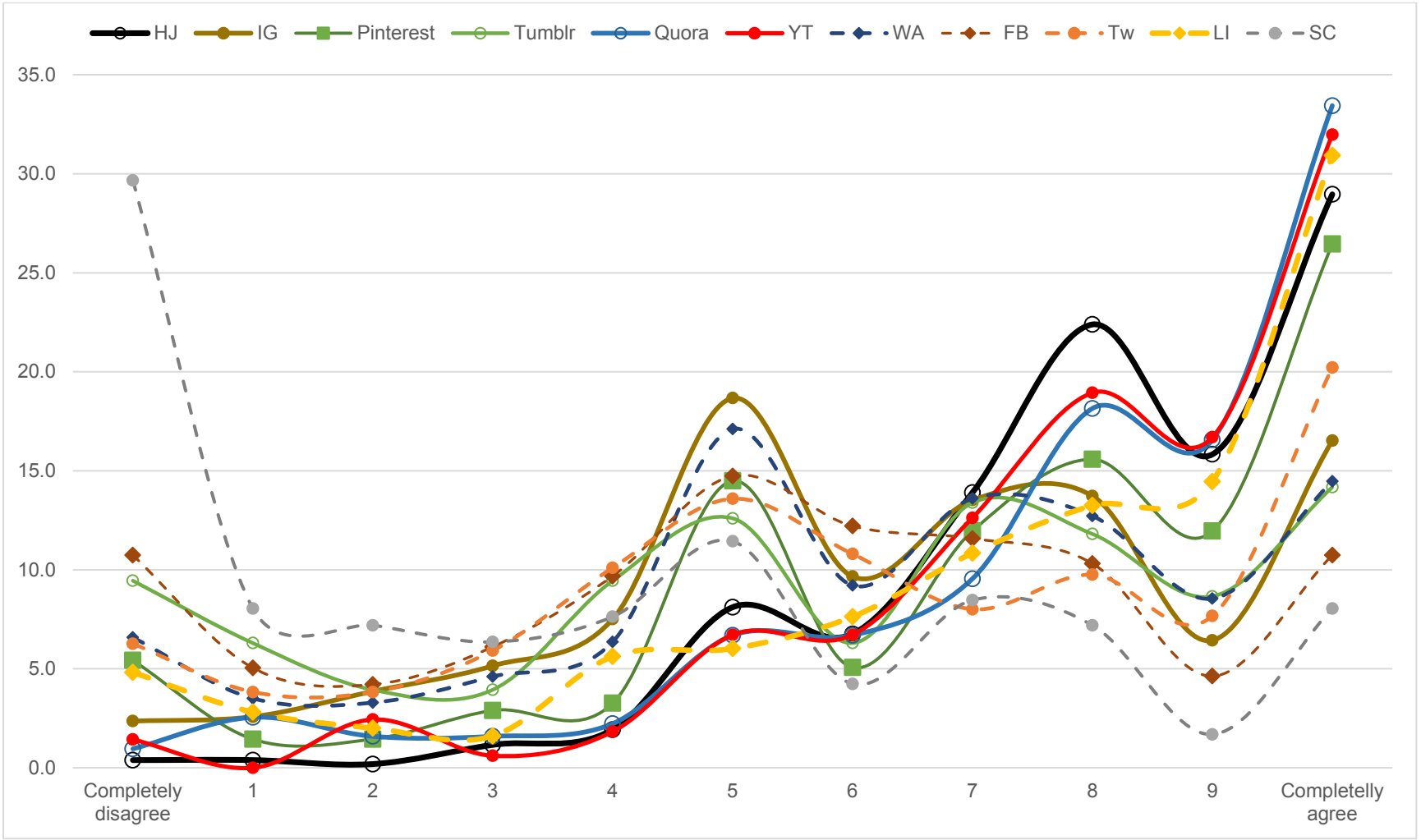

Figure 4.2.1 Spending time in social media is good for my personal development, by SNP (%)