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WHY STUDY ONLINE IN UPPER SECONDARY SCHOOL? QUALITATIVE ANALYSIS OF ONLINE LEARNING EXPERIENCES

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Abstract: *In Finland, online learning has become more common in recent years. In this study, we examined why adult students chose to study online for upper secondary school. The research also focused on the support needed for learning from a special education perspective. Both qualitative and quantitative data were collected using an electronic questionnaire. In total, 58 students responded. Data were analyzed qualitatively using the content analysis technique. The findings indicate that the main reasons for online studies are similar in Finland to those found internationally: flexibility of timetables, the student's health condition, and family situations. The findings also indicate that a student's school history leads them to choose online studies. This history included a lack of support, health issues, bullying, and too large class size. Suggested future research and practical implications also are discussed.*

Keywords: *online learning, online student, online upper secondary school, online school, school history.*

INTRODUCTION

In Finland, and especially in the context of this study, *online learning* means that the students are studying exclusively via the Internet, with no compulsory contact learning or meetings in a school building. The online students can themselves choose the time, pace, and place to study; thus learning is primarily asynchronous. A related term to online learning is distance education

(Barbour et al., 2011), which refers to any educational activity in which the participants are geographically distant from each other. In that case, the learner and the teacher are situated in different physical locations. However, distance studies can also involve some face-to-face learning or physical meetings at school, for example, to take exams. Distance learning can be asynchronous or synchronous, but is not usually completely asynchronous.

Online learning is linked closely to the term virtual learning, which has become popular in Finland and Europe (Bacsich, Pepler, Phillips, Öström, & Reynolds, 2012). Only two online upper secondary schools in Finland offer an opportunity to choose online studies instead of traditional schooling. This scarcity might be the reason for the lack of studies investigating this phenomenon in the Finnish context. There also seems to be a shortage of research focusing on special educational needs and support measures for students enrolled in online learning, even though supporting students with diverse learning needs in traditional schooling is suggested to be one of the factors in the success of Finnish education (Kupiainen, Hautamäki, & Karjalainen, 2009). Barbour and Reeves (2008) found that some virtual schools use certain tools that contribute to the success of online studies, for example, the Educational Success Prediction Instrument, which examines a student's aptitude and predicts how well the student will perform in a virtual school course. These kinds of tools are only just developing, for example, in the United States of America (Barbour & Reeves, 2008).

Another common term in studies via the Internet is blended learning, which combines face-to-face and distance learning in various ways (Staker & Horn, 2012). The general perception is that learning over the Internet means online learning (e.g., Barbour et al., 2011; Barbour & Reeves, 2008; Cavanaugh, Barbour, & Clark, 2009). According to Barbour and Reeves (2008), the general perception is that a virtual school is an online, Internet-based distance education program available to students from kindergarten through Grade 12. Virtual schooling is common in the United States, Canada, multiple countries in Latin America, Australia, and New Zealand (Bacsich et al., 2012). Barbour et al. (2011, p. 15) noted, however, that "the term 'online learning' is used to identify any kind of learning that involves information and communications technology but does not necessarily have anything to do with virtual education." Thus, virtual education is a subcategory of online learning.

Virtual schools are mainly for elementary and secondary students (e.g., in North America). In addition, virtual schools are typically supplemental entities (Barbour & Kennedy, 2014; Center on Education Policy, 2002) and are not full-time in line with the online learning discussed herein. These virtual schools are supplemental in that the students who take online classes from the virtual schools also are enrolled in a brick-and-mortar school (Barbour & Kennedy, 2014). Although virtual schools are classified in numerous ways, the common methods of delivery are by independent, asynchronous or synchronous, means (Barbour & Reeves, 2008). The unifying element between Finnish online learning and virtual schools in North America the United States and Canada is that the delivery is most commonly via the Internet.

Students from all over the world are drawn to distance learning for many different reasons. First, the school they attend does not offer the subject or offers it at a time that does not fit the student's schedule (Bennett & Barbour, 2012; Grabinger, 2010). For instance, students who are immigrants with poor host nation language skills and specific language needs (Bacsich et al., 2012) may require the flexible pace that online learning offers. Also, for some subjects, hiring specialized small group teachers is not feasible for small groups, so

teaching is done from a distance (Lehtinen & Nummenmaa, 2012). In these cases, students are at school physically, but the subject teacher is in another location and teaches virtually.

Second, the school offers the subject, but the student prefers to study it online (Bennett & Barbour, 2012). Some students or parents might prefer homeschooling (Barbour et al., 2011; Chaney, 2001), often for religious reasons (Lehtinen & Nummenmaa, 2012). Some athletes might feel more comfortable studying online due to its flexibility (Barbour et al., 2011; Nummenmaa, 2012).

The third group of reasons for online studying is multifold and involves students whose life situation is temporarily exceptional or are not able to be physically presents at school. For example, student's life situation could demand flexible studies, in the case of single parents (Chaney, 2001), young parents, or pregnant young women (Bacsich et al., 2012). Furthermore, this third group consist of *geographically isolated students* that refers to persons who (a) might have a long commute to school and/or poor transportation connections between home and school (Bacsich et al., 2012; Barbour et al., 2011; Grabinger, 2010; Nummenmaa, 2012), (b) has a less privileged socioeconomic status, (c) lives abroad (Chaney, 2001), or (d)online learning may be at times the only option for students who travel frequently abroad alone or with their family (Bacsich et al., 2012; Barbour et al., 2011; Bennett & Barbour, 2012; Nummenmaa, 2012).

The fourth group includes students with chronic illnesses (Nummenmaa, 2012), diseases, injuries, or disabilities (including cognitive impairments; Bacsich et al., 2012; Chaney, 2001) often can work more comfortably at home, where they can work at their own pace and have time to make thoughtful responses in discussion forums or via e-mail to teachers or other students. For students who are hospitalized (Bacsich et al., 2012; Barbour et al., 2011) and those with mobility disabilities, online classes could be the only way to study (Grabinger, 2010). Indeed, for school-phobic individuals, dropouts, expelled students, inmates, and those who have been bullied (Bacsich et al., 2012; Chaney, 2001), online classes may be the only accessible way to study. Online studying can be considered as an important form of education for individuals in various life circumstances. For some students, it might be the only forum for interacting with other individuals, as well as for participating in education. This study was conducted to fill a gap in current literature within this field of study, too.

In this study, we examine why students chose online studies instead of a traditional upper secondary school education, even though most students in Finland can attend a school that is reasonably close to home and tuition free. This study also focuses on the support needed for learning, specifically from a special education perspective. Currently, online education is available to adult students, who are at least 18 years old in Finland. However, physical or/and mental health problems can be a reason for special authorization for younger students to study online. Thus the online students in this study were mainly adults, primarily those who had withdrawn from studying basic (i.e., compulsory) education in their youth and older adults who attended school before the basic education system was in place.

METHODS

One of the two possible online schools in Finland was selected, and the questionnaire was sent by e-mail to all 637 students who had registered their e-mail addresses with the online

upper secondary school at the start of their studies. The web based survey link along with a cover letter (e.g., purpose of research, survey response time, voluntary participation etc.) was sent to the students October first 2012 and the survey was open until the 12th of October 2012. By this date, the response rate was quite low, therefore a reminder was sent on October 8th and the response time was extended until October 19, 2012. An instructor from the online school sent the enquiry to students and collected the responses. The names and e-mail addresses of the respondents remained anonymous to the researchers. Thus the confidentiality of responses was guaranteed. Additionally, because all respondents were adults, no formal consent forms signed by students' parents were required.

The data were collected via a questionnaire designed to produce qualitative and quantitative data. The questionnaire comprised 16 items: 12 multiple-choice and four open-ended. The multiple-choice items were devised to collect information on the respondents' backgrounds, the types of support they needed and received, and the current organization of counseling. Four of the multiple-choice items were paired with a prompt for the student to further comment. One such pair was Do you currently hold a diagnosis that might set barriers to your learning?, and Please indicate if you have any of the diagnosis listed below. The four open-ended questions were (a) Are you going to continue your studies after upper secondary school? (b) Would you like to tell more about your current situation in life or online studies? (c) What are your main experiences of success regarding online studies? and (d) What are your main concerns in online studies? The purpose of these open-ended questions was to support the quantitative data, as well as give a voice to the students. The data collection was conducted in Finnish and distributed to native Finnish speaking students. The data analysis was undertaken in Finnish, and portions of the responses were translated into English by the authors for use in this paper. A flow chart of the analysis is presented in Figure 1.

Frequencies were calculated from the data. Open-ended answers and all comments were analyzed using content analysis, which is a method that seeks to obtain a description of the phenomenon in a condensed and general form (Krippendorff, 2013). We closely analyzed answers regarding the students' school histories. The research data obtained from the comments and open-ended questions were reduced so as to eliminate irrelevant material (Krippendorff, 2013). The answers then were clustered based on content; four main themes emerged concerning school issues. Because one response could include several different themes, there are more response comments than the number of open-ended answers. Throughout the analysis, the team of researchers (authors) discussed the data.

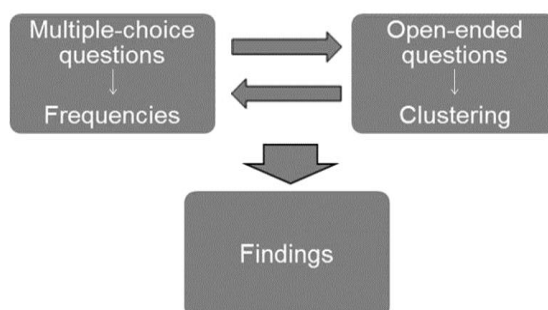


Figure 1. A flow chart of the applied analysis.

FINDINGS

Of the 637 students at this online upper secondary school, 58 completed the questionnaire. The low response rate of 9.1% could be explained by the fact that online upper secondary school students' levels of school activity fluctuate greatly depending on their life situations (i.e., some students may have been taking a break from their studies and, therefore, unavailable to respond to the questionnaire). Online courses typically have many interruptions (e.g., Roblyer & Marshall, 2003). Moreover, a high rate of nonresponse is a common problem with an electronic survey (Cook & Heath, 2000; Shih & Fan, 2008). However, many respondents answered the open-ended questions; thus, despite the low response rate, the qualitative data provided rich descriptions of the phenomenon. Those who completed the questionnaire filled in the form with care and detail, so only minimal data were missing. Two respondents did not answer the multiple-choice items regarding full- or part-time studies, but their statuses were revealed in their open-ended answers. Three respondents did not answer the multiple-choice question "Do you feel you get enough support and instruction in your studies in the current school?" but two of them addressed this issue in the open-ended sections on the questionnaire. Almost half (44.8%) of the respondents had studied at the online upper secondary school for less than 1 year at the time of the survey and therefore may not have had enough experience with the program to answer sufficiently the question regarding adequate support and instruction. All other multiple-choice items were answered. In response to open-ended questions, we received descriptive material totaling 2,382 words.

Although nearly half of the respondents were 20–29 years old, the overall age range of respondents was from late teens to over 60 years old. Most of the respondents were female (84.5%). Of the respondents, 56 (96.6%) had been students at the online upper secondary school for 0–3 years; only two students attended longer. Almost half (39.7%) of the respondents reported that they were working full-time, and 18 (31%) were full-time students. Almost one third (27.6%) of respondents were part-time students. Some respondents were pensioner (12.1%), unemployed (6.9%) or as student somewhere else (6.9%). Additionally, 12.1% of respondents were in maternity or parental leave. The same respondent could answer that she/he were working full-time and studying part-time. Background information of online students is presented in Table 1.

In the survey, we enquired about online students' learning and medical diagnoses (Table 2). The multiple-choice item comprised options from the diagnostic criterion for individual education arrangements (see Statistics Finland, 2011, p. 5) and additionally it was possible to write about other medical condition. Of the 58 respondents, 19 reported their diagnoses. The most common diagnoses were other learning challenges ($n = 9$), such as dyslexia ($n = 4$) and emotional disturbance or social maladjustment ($n = 8$). Two students had hearing defects and one indicated having a cerebral dysfunction/physical disability or similar. None of the respondents reported having an Autism Spectrum Disorder (ASD), impaired linguistic development (dysphasia), slightly delayed development, severely delayed development, or visual impairment.

According to Mehtäläinen's (2005) study, 0.4% of general upper secondary school students experienced social maladjustment, 2.8% had dyslexia, and 2.3% suffered from stress, performance anxiety, tension, and panic disorder. Those figures for students of upper secondary school for adults were 0.2%, 3.2%, and 1.8%, respectively (Mehtäläinen, 2005). Contrary to the minimal figures for social maladjustment at general upper secondary school (0.4%)

Table 1. Demographics of the Respondents and Registered Students at this Online Upper Secondary School in October 2012.

	Respondents (<i>N</i> = 58)	Registered students (<i>N</i> = 637)
Gender:		
Female	49 (84.5%)	68.1%
Male	9 (15.5%)	31.9%
Age:		
Under 20	6 (10.3%)	2.7%
20–29	27 (46.6%)	60.8%
30–39	12 (20.7%)	21.5%
40–49	5 (8.6%)	8.5%
50–59	4 (6.9%)	4.4%
60+	4 (6.9%)	2.2%
Enrolled as online student:		
Less than 1 year	26	–
1–2 years	15	–
2–3 years	13	–
3–4 years	2	–
Missing	2	–

Table 2. Diagnoses Reported by the Respondents.

	<i>n</i>
Other learning challenge (e.g., dyslexia)	9
Emotional disturbance or social maladjustment	8
Hearing impairment	2
Cerebral dysfunction, physical disability, or similar	1

Note. Survey diagnoses options were drawn from the Statistics Finland (2011, p. 5) classification.

and at upper secondary school for adults (0.2%), our sample reported a considerably higher (13.8%) incidence of social maladjustment.

School History Might Lead to Online Studies

Online learning is completely flexible, and the entire upper secondary school curriculum can be completed online without having to visit the virtual school location or meet (in person) fellow students, instructors, or other school staff. A student can choose the progression of the studies to meet his or her own needs and can access various kinds of support and instruction to fulfill the course or curriculum requirements. These forms of support are being developed continuously based on the feedback received from the students. Moreover, students can meet online to interact with each other. For example, students use chat areas to conduct school-related official and unofficial discussions, and less formal interaction take place in closed Facebook groups. Most of the students never visit the school building.

Almost half of the respondents gave more than one reason for choosing to study online. In addition, open-ended answers revealed additional reasons that led students to online studies. The reasons are grouped into categories in Table 3.

School history was the most common reason for taking online courses (24 replies). Seventeen respondents cited work, specifically shift work (11), entrepreneurship (3), and excessive travel for work (3) as the reasons to partake in online studies. Distance, meaning living abroad (7) or the distance between home and the nearest upper secondary school for adults (9), and the desire to have a hobby without being limited by studying were both mentioned by 16 respondents. The fourth most common answers were health issues (e.g., depression, dyslexia, or physical impairment) and the desire for flexibility (11 replies each). The next most common reason was at home with children (9). The aforementioned flexibility and many of the less frequently mentioned reasons were revealed by respondents who selected the generic Other reason. The following example shows a respondent having several reasons for choosing the online upper secondary school: “*The nearest upper secondary school is 40 kilometers away... Health reasons, I have depression and panic disorder... Also ... moderate dyslexia and moderate hearing defects. The teachers teased me at school...*” (45, f, 50–59).¹

The flexibility of online learning means that learning is detached from time and location. Some of the respondents wanted to finish the curriculum in less time than the average period of 3 years, whereas some preferred to move more slowly, without an exact timetable for completion. For example, some students stated:

I am able to focus on a specific course and subject well when I have the time and nobody tells me what I should study. (25, f, 20–29)

I really appreciate the possibility of an online school because it will enable me to complete high school with a flexible schedule. Studies have also been a part of rehabilitating my mental health. The online school is less stressful because the work is independent and the tuition is free. (23, f, 20–29)

I am on a disability pension for depression and for a social anxiety disorder and other issues.... My goal would be to go to university in the future. The online school is my ticket out of the prison of inactivity and aimlessness. With its help, I can develop better self-esteem and many other things will begin through studying.... I suffered from depression, shyness, and a fear of teamwork at previous schools. (40, f, 20–29)

This flexibility is expressed in other research as well (e.g., Rice, 2006; Tunison & Noonan, 2001). According to Rice (2006), students also appreciated the freedom and autonomy to search for information, instead of waiting for the teacher to tell them what they should do.

As shown in Table 4, the most frequent issues concerning school history were reported as a lack of support at a bricks-and-mortar school. For example, the lack of remedial teaching and personal instruction or the accommodation for one’s hearing defects were explicitly noted.

In my previous upper secondary school, ... I always felt that if I did not understand something, I was simply left alone with it ... and then, when it was exam week and the tests went badly, I received only negative feedback.... So far, I have gotten good help and advice, amazingly, more than at general upper secondary school.... The care and instruction feels better at the online upper secondary school. (49, f, 20–29)

Table 3. Respondents' Reasons for Choosing Online Upper Secondary School.

	Number of replies
School history	24
Work	17
Distance	16
Hobby	16
Health	11
Flexibility	11
At home with children	9
Work and family	3
Self-directed	2
Old age	2
Something to do	1
Familiar school	1

Note. Some respondents designated multiple reasons.

Table 4. Issues in School History of Respondents.

	Number of replies
Lack of support	18
Health	13
Bullying	6
Class size	4

One respondent reported that he was expelled from school because of absences, without concern from administrators for the root cause: *"I got in [to vocational education and training] via flexible selection [the Finnish admission system for students with special needs] but, when I was expelled after many absences, no one asked the reasons for my absences"* (50, m, 20–29). Two respondents also mentioned the fast pace of courses at traditional schools, which they found difficult to manage.

Health issues, such as social anxiety disorder or panic disorder, also had a significant influence on the students' decisions. Two respondents with allergies revealed that they had not been able to experience face-to-face teaching at general upper secondary schools for adults due to poor air quality in the buildings. *"The school denied the problem of mold in the school building, so I had to be homeschooled. At the same time, they tried to stigmatize me as someone who refused to attend school"* (38, f, less than 20).

Several accounts of bullying were reported involving both students and teachers. Class size was mentioned four times in the students' responses with complaints that the classes were too large. All of these responses indicated that the teacher did not have time to focus on the individual student's learning or problems with learning.

School bullying is not taken seriously. Even the teachers were afraid of the bullies.... Sometimes the teachers were the bullies. The teachers did not have time for one student's needs, but everyone had to go on at the same pace. The largest class size was 32 students. (5, f, 30–39)

Various Kinds of Support in Online Studies and Previous Studies

The questionnaire results illustrate the variety of support and counseling services offered at this online school and help determine how they could be developed to provide the students with the best possible service. Only 56.9% of the respondents reported feeling satisfied with the level of support and instruction in their offline basic education or previous studies. They had received guidance counseling and other instruction and positive experiences from teachers and fellow students, which had helped and supported them. In contrast, almost every respondent (96.6%) was satisfied with the level of support and instruction in their online studies. Only one student reported that she did not get enough support and instruction in online studies, and one respondent did not answer this question.

It should be noted that 43.1% of respondents reported that, despite their favorable assessment of the overall counseling they received from their online institution, they had not received enough support, instruction, and encouragement from their subject teachers. However, the discussions with their counselors were useful, as were the personal guidance and orientation to the online learning environment received at the beginning of their studies. Students' comments referred to the need for support and organized guidance.

Most of the teachers reply to e-mails, but some of them too slowly, and the problem is not solved right away when I need help. Fortunately, some online students and tutors help. (3, f, 30–39)

Each teacher provides support. There are many possibilities, such as e-mail, phone, Skype, etc. Also, my guidance counselor is easy to contact and, at least for my inquiries, always answers immediately. (5, f, 30–39)

I thought I needed a new manual, but the teacher told me to use the book that I already had [because] it was pretty good. When I've wanted to take a break, the two teachers have helped me to continue with my studies. So I am relieved. A teacher encouraged me by saying that my studies have gone well and that I have time to go at my own pace and should continue. (29, f, 40–49)

According to Bennett and Barbour (2012), Nummenmaa (2012), and Rice (2006), motivation, feedback, activation, and guidance are important additions to the interaction in distance learning. The answers of the online students show that all means of support are useful. Only one type of support, creating a daily or weekly schedule with the instructor, divided the students' opinions: Half were pleased with the help they received, whereas the remaining half considered that support service not useful.

Experiences of Learning and Studying in an Online School

A few respondents said that they had no worries about their online school or neglected to answer the question. Most reported concerns regarding the progress of their studies, possible failure in some subjects, such as foreign languages, and their preparedness for the matriculation examination and graduation. Some reported worrying about maintaining motivation or discipline, concentration, reading task assignments carefully, understanding the contents and assessments (e.g., retaking exams, fulfilling tasks, giving extensive feedback and accounts), doing too many courses at the same time, not being able to finish a course, and performing

tasks via the telephone. In addition, the respondents raised issues related to organizing their lives, time management, getting peace and quiet to study (with children at home), and dealing with changes in life circumstances, which cut down the time available to study.

There is not enough time to study when no one is in control. (17, f, 20–29)

I would like to complete all the courses in three years but I don't know if I can do it because the online school has so many interesting courses... On the other hand, because I have a disability, I have given myself permission to stretch my studies to four years. (31, f, 20–29)

Another respondent was concerned about whether she could pass the exams; what to do when there is no Internet access, which is relied upon for online learning; and what kind of grades can be achieved through self-study, because it is difficult to know how well things are learned. Elderly students were concerned with how well they could remember what they had studied, whereas other students were worried about technical issues, such as not receiving e-mails or experiencing problems with the computer crashing.

Although many expressed some level of worry, most respondents felt that they had succeeded in organizing their studies, boosting their self-esteem, managing their lives and progressing through the schedule, upholding discipline and self-direction, and developing their ability to think. Some respondents also reported that they had made use of their life experience, had improved their writing, developed their concentration and patience, and maintained the motivation to study independently. Others noted they had learned how to research information and to learn in depth, had practiced theme-based learning, and achieved self-realization. *“My learning is self-directed when I am able to concentrate on my studies”* (21, f, 20–29). In addition, overcoming technical matters, such as learning to use the tools and new equipment in their studies, were considered successes by the students. Learning also had taken place in individual subjects, such as mathematics and languages. *“My self-esteem has gone up...the game is not yet lost. I like learning more about my mother tongue [Finnish]. I am doing a creative writing course. Math is no longer a complete mystery”* (43, f, over 60).

Overall, the online students had positive experiences with studying, and they learned without encountering problems or bullying. In addition to studying and learning, the success was felt in social situations—such as networking and discussions with other students, presentation skills, and encouraging other students—even though most of the students never met each other face-to-face. One student wrote that she was able to do performances, such as presentations, when she was able to work at her own pace without pressure.

I learn new things well, at my own pace I have been able to practice in the presence of people (... via the Internet), both in writing and through the computer's microphone, and, at times, video camera. It has given me a lot of self-confidence and a feeling of success, even though it does not always go perfectly. Communicating via the Internet creates a challenge, but I can express myself better in writing. (7, f, 20–29)

This study has some limitations that should be carefully noted. First, this study had a considerably low response rate, as only 58 out of the 637 responded to the questionnaire. Therefore, the low response rate sets boundaries to the generalizability of the findings. Despite this, we received replies from a variety of students (e.g., their age, disabilities, school experiences, life situation, etc.) providing diverse perspectives on the phenomenon under investigation.

DISCUSSION

The findings show that, among other things, a lack of support and (mental) health problems during offline basic education are influential in students choosing to study at an online upper secondary school. The respondents explained that, in their previous school experience, sufficient support for learning and remedial teaching had not been available. Also, in some cases, circumstances at the traditional school drove the affected students to choose a form of education where they could avoid being bullied or problematic interaction with fellow students and teachers. Some students mentioned that class size had been too large and therefore teachers did not have enough time to take into account students' individual needs, particularly for those struggling. The responses in this research were received mainly from young adults, mostly between 20 and 29 years of age. Despite this largest cohort having attended comprehensive school at a time when extensive remedial teaching and general individual support were provided for students with special needs and learning difficulties and when the knowledge about dyslexia was widely understood among teachers, the findings of the current study indicate that support did not reach all the students sufficiently.

Previous research, not limited to Finland, rarely has shown school history as a reason for students choosing online learning or distance learning courses (Bacsich et al., 2012; Chaney, 2001). But Bacsich et al. (2012) presented characteristics of students' former exclusion that are addressed by European virtual schools. Two key social problems identified are students who have been bullied or who are school phobic. Many researchers have suggested that bullying can predict psychological problems such as depression, anxiety, and suicidal tendencies (e.g., Klomek et al., 2009; Rigby, 2001).

However, the students in this study generally were satisfied in their online studies and felt all forms of support were useful. Each of the respondents reported having positive learning experiences during the online studies, resulting in improved self-esteem and self-perceptions as learners. None of the students mentioned experiencing any form of bullying in the online school. Students who interacted with other students reported positive experiences, and these experiences have encouraged them to interact with other people outside of their studies. The important issue in successful distance learning is the interaction between the teacher and the learner (Barbour & Bennett, 2013; Bennett & Barbour, 2012; Lehtinen & Nummenmaa, 2012; Nummenmaa, 2012; Picciano, 2002; Rice, 2006). The respondents in this study experienced individual instruction from teachers, as well as better and faster responses to their questions than in their previous schools.

Health issues caused absences at traditional upper secondary school for some of the respondents, sometimes to the extent that courses were left unfinished, which in turn caused additional pressure that hindered the healing process. In contrast, absences at the online upper secondary schools are not problematic because the students determine the timing and pace of study for themselves. In addition, our data show that dyslexia, for example, was not a barrier to online studies. Flexibility of completing online studies was found to be very important.

According to Pääkkönen (2005), traditional upper secondary school students have similar learning difficulties as students in basic education, but the older students are under additional pressure from an increased amount of reading, tighter schedules, and tests. Students in this sample had more special needs than is usual in Finnish upper secondary schools; therefore, our results support the idea that the need for specific pedagogical support is greater at upper

secondary schools for adults than at traditional upper secondary schools (Mehtäläinen, 2005). Students at an upper secondary school for adults tend to be more heterogeneous as a group as compared to a typical upper secondary school. For example, a school for adults includes students starting upper secondary school from the beginning, students continuing their unfinished studies, students continuing their studies after vocational education and training, students studying only one or a few subjects, immigrants, mental health rehabilitants, and so on (Mehtäläinen, 2005).

The concerns and successes noted by the online students were similar to students at general upper secondary schools in terms of making progress, taking the matriculation examination, and maintaining motivation. Indeed, online studies demand more self-discipline and organizational skills than face-to-face studies. Nevertheless, these particular worries may be explained by the fact that most of the respondents had only been students of online learning for a few months or a maximum of 1 year. So it is encouraging that the online students reported that they have acquired skills that will be beneficial throughout their lives, for example, management of time, skill development, thinking ability, and reflection.

CONCLUSIONS AND IMPLICATIONS

There are several implications of this study for future research. First, research focusing on a greater number of online high school students would be useful and would improve the reliability of the data. Second, it would be interesting to investigate younger students in online schools, particularly those who were at risk for dropping out of school, to determine whether the online studies have helped them to succeed. Third, the results of a longitudinal study could be valuable: Researching the students' impressions of their learning and courses at online upper secondary school after they have completed their studies would allow students to evaluate retrospectively the meaning of those studies to their lives.

The findings of this study hold implications for practice, particularly in the need to focus on issues concerning students with special educational needs. Other important areas of concern—students' physical and, especially, mental health, school bullying, and class size in online school settings—need further investigation. In addition, better access to information should be a priority, so that students and parents are aware of the availability of online schools and the possibility to study online. Even in traditional schools, teachers could organize the online studies as an alternative way to study. However, online schooling should not be viewed as the only option for students who experience learning problems or bullying. Online learning demands, for example, self-discipline and organizational skills, and thus this mode of education is not the best solution for everyone. Face-to-face interaction is still one of the basic elements of education and learning.

ENDNOTE

1. Following every data excerpt is the respondent's number, gender (f = female, m = male), and age range. In addition, we authors translated the respondents' comments from Finnish into English.

REFERENCES

- Bacsich, P., Pepler, G., Phillips, B., Öström, M., & Reynolds, S. (2012). *Virtual schools and colleges—Providing alternatives for successful learning: Vol. 1*. Roosbeek, Belgium: ATiT bvba. Retrieved March 24, 2015, from http://www.virtualschoolsandcolleges.info/sites/default/files/VISCED_Handbook-Volume-1/index.pdf
- Barbour, M. K., & Bennett, C. (2013). The FarNet journey: Effective teaching strategies for engaging Māori students on the Virtual Learning Network. *Journal of Open, Flexible and Distance Learning*, 17(1), 12–23.
- Barbour, M. K., Brown, R., Hasler Waters, L., Hoey, R., Hunt, J., Kennedy, K., Ounsworth, C., Powell, A., & Trimm, T. (2011). *Online and blended learning: A survey of policy and practice from K–12 schools around the world*. Vienna, VA, USA: International Association for K–12 Online Learning. Retrieved October 10, 2014, from <http://files.eric.ed.gov/fulltext/ED537334.pdf>
- Barbour, M. K., & Kennedy, K. (2014). K–12 online learning: A worldwide perspective. In A. Hirumi (Ed.), *Grounded designs for online and hybrid learning: Trends and technologies* (pp. 53–74). Washington, DC, USA: International Society for Technology in Education.
- Barbour, M. K., & Reeves, T. C. (2008). The reality of virtual schools: A review of the literature. *Computers and Education*, 52(2), 402–416.
- Bennett, C., & Barbour, M. K. (2012). The FarNet journey: Perceptions of Māori students engaged in secondary online learning. *Journal of Open, Flexible and Distance Learning*, 16(1), 83–98.
- Cavanaugh, C., Barbour, M. K., & Clark, T. (2009). Research and practice in K–12 online learning: A review of literature. *International Review of Research in Open and Distance Learning*, 10(1), 1–22.
- Center on Education Policy. (2002). *Preserving principles of public education in an online world*. Retrieved March 24, 2015, from <http://www.cep-dc.org/displayDocument.cfm?DocumentID=143>
- Chaney, E. G. (2001). Web-based instruction in a rural high school: A collaborative inquiry into its effectiveness and desirability. *National Association of Secondary School Principals Bulletin*, 85(20), 20–35.
- Cook, C., & Heath, F. (2000). A meta-analysis of response rates in web- or internet-based surveys. *Educational and Psychological Measurements*, 60(6), 821–836.
- Grabinger, S. (2010). A framework for supporting postsecondary learners with psychiatric disabilities in online environments. *Electronic Journal of e-Learning*, 8(2), 101–110.
- Klomek, A. B., Sourander, A., Niemelä, S., Kumpulainen, K., Piha, J., Tamminen, T., Almqvist, F., & Gould, M. S. (2009). Childhood bullying behaviors as a risk for suicide attempts and completed suicides: A population-based birth cohort study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 48(3), 254–261.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology*. Los Angeles, CA, USA: SAGE.
- Kupiainen, S., Hautamäki, J., & Karjalainen, T. (2009). *The Finnish education system and PISA*. Finland: Ministry of Education. Retrieved March 24, 2015, from <http://www.minedu.fi/export/sites/default/OPM/Julkaisut/2009/liitteet/opm46.pdf?lang=en>
- Lehtinen, E., & Nummenmaa, M. (2012). *Etäopetuksen lumo: Kansainvälinen kirjallisuuskatsaus* [The spell of distance education: Review of the international literature]. Turku, Finland: University of Turku. Retrieved March 24, 2015, from http://etaopetus.files.wordpress.com/2012/03/etaopetuksen_lumo.pdf
- Mehtäläinen, J. (2005). *Koulutuksen arviointineuvoston julkaisuja 11: Erityisopetuksen tarve lukiokoulutuksessa* [The Finnish Education Evaluation Council's publication 11: Special educational needs in upper secondary education]. Jyväskylä, Finland: Koulutuksen arviointineuvosto.
- Nummenmaa, M. (2012). Etäopetus tarjoaa monia mahdollisuuksia oppimiseen ja opetukseen [Distance education offers many opportunities for learning and teaching]. In M. Kankaanranta, I. Mikkonen, & K. Vähähyyppä (Eds.), *Tutkittua tietoa oppimisympäristöistä. Tieto- ja viestintätekniikan käyttö opetuksessa* [Research information about learning environments. Information and communication technologies in education; pp. 20–33]. Finland: Opetushallitus. Retrieved December 10, 2014, from http://www.oph.fi/download/147821_Tutkittua_tietoa_oppimisymparistoista.pdf

- Pääkkönen, R. (2005). Erityisopetusta lukiolaisillekin? [Special education at upper secondary school?] In E. Korkeakoski (Ed.), *Koulutuksen arviointineuvoston julkaisuja 10: Koulutuksen perusturva ja oppimisen tuki perusopetuksessa—Osaraportti 3: Syventävät artikkelit* [The Finnish Education Evaluation Council's publication 10: Basic security of education and support of learning in basic education—Volume of the report 3: Advanced articles; pp. 110–122]. Jyväskylä, Finland: Koulutuksen arviointineuvosto.
- Picciano, A. G. (2002). Beyond student perceptions: Issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks*, 6(1), 21–40.
- Rice, K. (2006). A comprehensive look at distance education in the K–12 context. *Journal of Research on Technology in Education*, 38(4), 241–255.
- Rigby, K. (2001). Health consequences of bullying and its prevention in schools. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 310–331). New York, NY, USA: Guilford.
- Roblyer, M. D., & Marshall, J. C. (2003). Predicting success of virtual high school students: Preliminary results from an educational success prediction instrument. *Journal of Research on Technology in Education*, 35(2), 241–255.
- Shih, T.-H., & Fan, X. (2008). Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods*, 20, 249–271.
- Staker, H., & Horn, M. B. (2012). *Classifying K–12 blended learning*. Retrieved March 24, 2015, from <http://www.christenseninstitute.org/wp-content/uploads/2013/04/Classifying-K-12-blended-learning.pdf>
- Statistics Finland (2011). *Special education 2010* [e-publication]. Helsinki, Finland: Statistics Finland. Retrieved May 12, 2015, from http://www.stat.fi/til/erop/2010/erop_2010_2011-06-09_en.pdf
- Tunison, S., & Noonan, B. (2001). On-line learning: Secondary students' first experience. *Canadian Journal of Education*, 26(4), 495–514.

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