

**Musculoskeletal Activities and Possible
Musculoskeletal Discomfort Among Students Using
Desktop/Laptop/Tablet Computers: A Case Study
with a Special Emphasis to the Use of Tablets for
Educational Purposes**

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ABSTRACT

Although potential long-term consequences of technology use on musculoskeletal health of children is a critical issue of today's world, tablet computer use of children, especially for educational purposes, and associated musculoskeletal outcomes have not been addressed in detail. It is also known that tablet-integrated education have been being adopted in most of the developed countries without studying the negative long-term consequences. Integrating technology in classroom activities without any prospective scientific forecasts can lead to musculoskeletal problems of in the future. Therefore, experienced musculoskeletal discomfort among students using desktop/laptop/tablet computers and the musculoskeletal activities of potential problem cases were examined with a special emphasis to the students using tablets for educational purposes throughout the study.

The first phase of the study includes a two-part questionnaire aiming to collect data about the habits, perceptions, preferences, attitudes of students using desktop/laptop/tablet computers and studies the severity and frequency of musculoskeletal discomfort experienced by the respondents exposed to such a technology intensive environment. The second phase of the study includes musculoskeletal activity assessment of subjects, using surface electromyography (sEMG) to check the main hypothesis, which says "There is no statistically significant relationship between tablet use (with desk stands) of students in classroom environment, during class activities, and musculoskeletal discomfort they experience".

In the first phase, the sample was formed based on the consent of the Ministry of Education, school authorities and the students (from both state and privately owned schools). The survey statistics imply that 70% of the respondent students use tablets everyday and nearly 44% of the respondents use these technologies for at least one activity for more than 3 hours daily. For the second phase of the study, muscle groups to be assessed were determined using the risk scores of the first phase, among the muscle groups of the upper body. The sEMG measurements were recorded during class activities in a simulated tablet-integrated class environment. At the end of the study, the main hypothesis is rejected implying that using tablets during class activities can be associated with musculoskeletal discomfort.

Keywords: tablet computer, children, musculoskeletal, survey, sEMG

ÖZ

Teknoloji kullanımının çocukların kas-iskelet sistemi üzerinde uzun dönemdeki olası sonuçları günümüz dünyasında kritik bir sorunsal olmasına rağmen çocukların tablet kullanımı, özellikle de eğitsel amaçlı tablet kullanımları ile bağlantılı kas-iskelet sistemi etkilerini irdeleyen detaylı çalışmalar henüz yapılmadı. Gelişmiş ülkelerin çoğunda uzun vadedeki olumsuz sonuçları üzerinde bir çalışma yapılmaksızın tablet entegre edilmiş eğitim sistemlerinin uygulamaya konulmakta olduğu da bilinen bir gerçektir. Bu çalışmada masaüstü/dizüstü/tablet bilgisayar kullanan öğrenciler arasından kas-iskelet sistemi sorunları yaşayanlar ve bu denekler arasından da eğitsel amaçlı tablet kullanan öğrencilerin durumları üzerinde özel olarak ilgilenmek suretiyle sorun yaşama potansiyeli yüksek öğrencilerin kas-iskelet aktiviteleri incelenmiştir.

Çalışmanın ilk aşaması masaüstü/dizüstü/tablet bilgisayar kullanan öğrencilerin söz konusu teknolojileri kullanım alışkanlıkları, algıları, tercihleri, bakış açıları ve böylesi teknoloji yoğun ortamlara maruz kalan katılımcıların yaşadığı kas-iskelet sorunlarının sıklığı ve şiddeti üzerinde yoğunlaşır. Çalışmanın ikinci aşaması ise “Sınıf ortamında eğitsel aktiviteler sırasında stantlarla tablet kullanmak ve tecrübe edilen kas iskelet sistemi sorunları arasında istatistiksel olarak anlamlı bir ilişki bulunmamaktadır.” olarak tanımlanmış temel hipotezi kontrol etmek üzere deneklerin kas-iskelet aktivitelerinin yüzeysel elektromiyografi kullanarak değerlendirilmesini içerir.

Çalışmanın birinci evresinde örneklem Eğitim Bakanlığı'nın, ilgili okulların (çeşitli devlet ve özel) ve anketi dolduran öğrencilerin izni ile oluşturulmuştur. Çalışma istatistikleri anketi yanıtlayan öğrencilerin %70'inin her gün tablet kullanan öğrenciler

olduđunu ve öğrencilerin yaklaşık %44'ünün listelenen aktivitelerden en az biri için günde 3 saatten fazla söz konusu üç bilgisayar tipinden en az birini kullandıklarını ortaya koymuştur. Çalışmanın ikinci evresinde değerlendirilecek kas grupları birinci aşama sonunda belirlenmiş risk skorları kullanılarak üst vücut bölgeleri arasından seçilmiştir. Elektromiyogram ölçümleri tablet kullanımı entegre edilmiş bir sınıf ortamı yaratılarak gerçekleştirilmiştir. Çalışmanın sonunda, temel hipotezin reddedilmesi sınıf aktiviteleri sırasında tablet kullanımının tecrübe edilen kas-iskelet rahatsızlıkları ile ilişkilendirilebileceğine işaret etmektedir.

Anahtar Kelimeler: tablet bilgisayar, çocuk, kas-iskelet, anket, yüzeysel EMG.

*I would like to **dedicate this Doctoral dissertation** to my little daughter İklım, my dear mother Jale, and last but not least to my husband Özgür, who supported me all the way.*

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LIST OF ABBREVIATIONS

CD	Reported daily duration of desktop use for communication purposes
CES	Cervical erector spinae
CL	Reported daily duration of laptop use for communication purposes
CP	Cervical paraspinals
CT	Reported daily duration of tablet use for communication purposes
CMDQ	Cornell Musculoskeletal Discomfort Questionnaire
DFH	Variable of feeling happy while using desktop computers
DMQ	Dutch Musculoskeletal Questionnaire
DPOMU	The answer to the question “where do the desktop computer user respondent use desktop computers mostly?”
ECR	Extensor carpi radialis
EMG	Electromyography
FCR	Flexor carpi radialis
IT	Information technology
ISL	The answer to the question (variable) “Does the student use laptops for Internet surfing?”
LPOMU	The answer to the question “where do the laptop computer user respondent use laptop computers mostly?”
MSD	Musculoskeletal disorder
MUAP	Motor unit action potential
PC	Personal computer
PDA	Personal digital assistant
RULA	Rapid upper limb assessment

RWE	Right wrist extensor muscle group
SASD	Studying at school using desktop computers
SCM	Sternocleido-mastoid muscle
sEMG	Surface electromyography
SS-CMDQ	Student Specific Cornell Musculoskeletal Discomfort Questionnaire
UDC	The answer to the Yes/No question “Do you use desktop computers?” [This was not a direct question, but the answer of this question can be obtained from two different questions in the questionnaire]
ULC	The answer to the Yes/No question “Do you use laptop computers?” [This was not a direct question, but the answer of this question can be obtained from two different questions in the questionnaire]
UT	Upper trapezius
UTC	The answer to the Yes/No question “Do you use tablet computers?” [This was not a direct question, but the answer of this question can be obtained from two different questions]
WFD	The answer to the question (variable) “Does the student use desktops for watching films?”
WFL	The answer to the question (variable) “Does the student use laptops for watching films?”

Chapter 1

INTRODUCTION

Children of today are being exposed to technology at very early ages. Given the widespread availability of Internet and their modern small, lightweight portable technologies, laptop and tablet computers are playing an ever-increasing role in the lives of children, both at and outside school. On one side, being familiar with such technologies early can be very beneficial for meeting the future demand of skilled labor. On the other side, given the fact that musculoskeletal development of children is still on going, any possibility of any kind of negative consequences of such portable devices on children's musculoskeletal health should not be ignored.

Bad habits of technology use acquired at early ages is likely to have more severe outcomes than bad habits of adults acquired after an age, at which musculoskeletal development is finalized. Therefore, it is really of critical importance to understand the relationships between anthropometrics of children, exposure of children to technology, children's habits developed towards technology use and musculoskeletal outcomes, and likely negative consequences of using computers (desktop/laptop/tablet). If we can understand such relationships and possible risk factors involved in the process, we can propose recommendations for healthy use of desktop/laptop/tablet computers. Laptop and tablet computers are becoming more important in the lives of children with the widespread availability and variety of uses of the Internet. Especially, educational use of portable technologies such as laptop or

tablet computers needs proper investigation, because children generally spend one-third of their day at school.

Careful investigation of use of tablet or laptop computers at school, in order to identify and eliminate probable negative effects on their musculoskeletal health, is a very important undertaking. In recent ergonomics and physiotherapy studies, it has been argued that mobile technology use of children has been associated with musculoskeletal discomfort they experience [Harris and Straker (2000); Greig et al. (2005); Sommerich et al. (2007); Straker et al. (2008b)]. Besides, prevalence of musculoskeletal discomfort, especially discomfort experienced in neck region is thought to be one of the signs of musculoskeletal disorders (MSD) [Straker (1997), Straker (2001), Oates et al. (1998), Brigs et al. (2004)]. Hedge (2005) defines MSDs are soft tissue injuries of connective tissues, muscles, or nerves. Preventing occurrence of musculoskeletal discomfort in children dealing with technological devices throughout their education at school is not only important for prevention of occurrence of MSDs but also important for the sake of a better experience of education Zunjic et al. (2015).

Tablet computer is currently the leading portable computing device all over the world. In 2010, 18 million tablet computers were sold globally and it is highly probable that this number has already exceeded 290 million today (in 2016) (Melanson (2011); Rotman (2012)). According to Statista (2016), the expected number of tablet computers to be shipped in 2017 is around 276 million units. The study Gullen and Plungis (2013) provides a nice and brief review of Statista and its reliability.

As expected, the use of tablets for educational purposes is also rapidly increasing. After the countries such as, Australia, America, Japan, Singapore and Spain, which adopted mobile technologies in their education systems [(Harris and Straker (2000), Briggs et al. (2004) Sommerich et al. (2007), Straker et al. (2009(a)), Ferrer et al. (2011), Blackwell et al. (2013)]. Turkey has also made extensive investments for enriching education in state schools with the facilities of tablet computers with the project named the Movement to Increase Opportunities and Technology or widely known in Turkey as FATİH Project. (Sönmez et al. (2013). Within the scope of this project, all students (from preschools to high schools) will receive tablet computers, their classes will be equipped with smart boards and tablet computers will also be provided to their teachers (Karaca et al. 2013).

Considering the fact that children's musculoskeletal system is still developing, in this critical period of skeletal growth their musculoskeletal health must of high priority for all of us. However, although such huge investments are becoming commonplace in the world there are very scarce resources in literature studying association of children's desktop/laptop/tablet use at schools and associated musculoskeletal discomfort they experience.

To the best of our knowledge, there is no earlier study studying both the relationship of desktop/laptop/tablet use and musculoskeletal discomfort experienced by children, and focusing especially on tablet computer use of children and adolescents, namely children from all grades of middle school and high school, with regard to educational use. This study tries to fill this gap by studying the muscle activities of the upper body of the respondent students during class activities using tablet computers according to the self reported musculoskeletal discomfort experienced by the

students of a combined middle and high school in northern Cyprus (6th, 7th, 8th, 9th, 10th, 11th and 12th grades), which is running a computer-assisted interactive education program.

Considering the ideals of the field of ergonomics, one can easily reach to the conclusion that benefits of information technology's use for educational purposes should not be achieved at the expense of musculoskeletal health. Therefore, this thesis tries to obtain some sound ergonomic findings on children's use of desktop computers, laptop computers and tablet computers. In addition to investigating relationship between exposure of children to such technological devices and self-reported musculoskeletal discomfort, the relationship between tablet computer use of students for educational purposes and their associated muscle activity is also investigated.

Chapter 2

LITERATURE REVIEW

During a search focusing on use of computers and/or mobile technologies for educational purposes, the results will provide you with plenty of studies focusing on attitudes, opinions, perceptions and preferences of teachers and/or children, who are the primary stakeholders of the mentioned studies. In addition, technology acceptance of the stakeholders, effects on academic achievement and learning outcomes, either positive or negative, are also widely investigated. (Moore J. L. (1985), Lowther et al. (2003), Schroeder D., (2004), Bonds-Raacke, J. M. and Raacke J. D. (2008), Ng and Nicholas (2009), Li, S. C. et al. (2010), Alvarez et al. (2011), El-Gayar et al. (2011), Ferrer et al. (2011), Ertmer P. A. et al. (2012), Blackwell et al. (2013), Ifenthaler D. and Schweinbenz V. (2013), Dündar and Akçayır (2014), Montrieux et al. (2014), Haßler et al. (2016). Such studies are not included in the review because this review is prepared in the light of field of Ergonomics, which says benefits of any type of information technology, even if it will be used for beneficial educational purposes should not be utilized at the expense of health, especially physical health of stakeholders, mainly students and teachers.

No improvement in technology should be used in education of children, whose physical and musculoskeletal development have not been completed, without investigating any negative implications on health of the stakeholders. It should be kept in mind that prevention is always better than cure. If there is any possibility of

any negative consequences of the types of technologies they use, on their musculoskeletal, physical, visual or general health, these possibilities should be examined in deep detail. Taking the fact that students spend approximately 30% of their day at school, educational use or integration of any type of IT (laptop/desktop/tablet) requires investigation because any risk of negative impact on physical or musculoskeletal development cannot be underestimated. Therefore, in this chapter, there is an overview of studies to date on physical and especially musculoskeletal impacts of technologies such as computers, laptops, and tablet computers with a special emphasis to the children using such technologies for educational purposes. This chapter aims to point out the research gaps of the topic, and help researches to easily identify areas for future studies.

2.1 Use of Desktop Computers by Children

Several researchers have been examining the physical impact of the use of desktop computers on the musculoskeletal system of children for many years. In literature, there are studies trying to assess the muscle activities regarding the computer use of children, to identify, propose and understand background of risk factors resulting in musculoskeletal discomfort or development of MSDs. In addition, there are studies trying to compare old paper-based information technology with new computer-based information technologies used by children in order to assess and understand details of the differences in muscle activities they result in. (References listed for studies in the category of “use of desktop by children”: Oates et al. 1998, Leaser et al. 1998, Ciccarelli et al. 2006, Breen *et al.* 2007, Straker et al. 2008a, b, Maslen and Straker 2009, Straker et al. 2009a, Brink et al. 2009; Harris 2010; Zovkic et al. 2011; Dockrell et al. 2010). Unfortunately, there are considerably fewer studies about probable negative physical consequences associated with the use of new

portable/mobile technologies such as laptops and tablets, especially about their educational usage by children.

2.2 Movable Technologies (Laptop and Tablet Computers)

Replacing Desktop Computers

If the fact that “today’s children will be the part of future workforce” is considered, the critical importance of their physical health becomes clearer. However, the postures, musculoskeletal activities, potential musculoskeletal discomfort people can experience have not been adequately examined, especially with respect to movable technologies. In addition in his book, Extra Ordinary Ergonomics, Kroemer (2005) has underlined another unfortunate fact that the ergonomics of children and teenagers is generally underemphasized and disregarding such populations in designing phase makes their lives harder. This section will be dedicated to studies considering movable technologies.

Smaller-sized technologies such as laptops and tablets are more helpful to some extent, when compared to desktop computers, in respect to being portable and lightweight. However, in addition to system capability issues, there are some physical issues. For example, laptop screens being fixed to the keyboard may add on muscle stress in the neck area or additional scrolling need. Another issue is due to the fact of smaller screen sizes the web pages that does not support small-screen mobile technologies a webpage may not be displayed fully at once. Therefore, the need for additional scrolling and multi-touch actions involved in operating tablet PCs may add a further cognitive load and/or muscle stress to the user.

Both Lozano et al. (2011) and Young et al. (2012) emphasized that the non-dominant arm (the one holding the tablet PC) experiences increased shoulder flexion, and muscle activity compared to dominant arm (the one performing the data entry). In their study, which involved 15 adult tablet users, Young et al. (2012) also underlined the fact that the use of tablet computers is associated with high head and neck flexion postures when compared to conventional desktop computers and suggested that head and neck posture can be improved through use of cases to support the tablets.

By aiming to provide the designers of tablet computers with objective measures of the impact of gestures and configurations of tablet on musculoskeletal system, Lozano et al. (2011) studied the effects of some multi-touch interactions (a set of free stroke gestures representing one and two finger type of interactions) and concluded that multi-touch interactions have impact on the entire hand shoulder system.

Werth and Babski-Reeves (2012) assessed posture associated with laptops, netbooks, and tablets on two different work surfaces. Results of the experimental study indicate that tablet computer use and/or working at a non-traditional workstation like a sofa result in degraded postures. Especially, using tablet computers leads to degraded wrist and neck postures, which may increase risk for injury or illness development for these parts of the body.

Kim et al. (2014) compared the musculoskeletal impact of conventional desktop keyboards, laptop keyboards and touch screen keyboards with the same key size and layout. The results imply that prolonged use of touch screen keyboards may increase the risk for musculoskeletal discomfort especially in shoulder region. The researchers suggest that this may be due to the fact that touch screen keyboards can be activated

by any physical contact. This fact prevents users from resting their fingers and wrists on the keyboard, which results in static muscle loading in shoulders, as the muscles are kept tense and motionless. They highlighted the fact that the prolonged static muscle loading is one of the risk factors for musculoskeletal disorders, implying that touch screen keyboard use for long periods of time may increase the risk for musculoskeletal discomfort in the shoulder region.

While many complexities and issues are added to the physical impact of technologies on the musculoskeletal systems of people with introduction of smaller sized portable technologies, there are very few studies about physical impacts of laptops and tablet computers and risks associated with their use.

In the following sections regarding movable technologies the focus will be the physical impacts of such technologies on children and/or adolescents, primarily on educational use of portable technologies, especially of middle and high school students.

If there is a possibility of a negative physical impact of the mentioned mobile technologies when or while they are used for educational purposes must be of concern, because any child/adolescent is still in the period of their physical, skeletal and musculoskeletal growth.

2.2.1 Physical Impacts of Laptops and Tablet Computers on the Musculoskeletal System

Straker et al. (1997) studied postural constraints, discomfort, and performance associated with laptop use. Although the subjects of the study were not children and/or adolescents, it underlined the fact that mobile technologies were becoming

prevalent in Australian secondary and high schools to be used in most of the schoolwork. Therefore, the risk of long term effects on student population, whose physical growth was not finalized yet, was emphasized.

They concluded that inflexibility of the laptop screen leads to increased neck and head flexion, and/or increased shoulder and elbow flexion to reach a higher keyboard, both of which can possibly result in musculoskeletal discomfort. The researchers also stated that 75 % of the participants reported visual discomfort after a 20 min use of laptop. However, when performance indexes achieved by the laptop and desktop computer users were compared, although not significantly different, laptop user performances were slightly more improved than the desktop user performances.

Although their study is not related with any mobile technology use of students Zovkic et al. (2011), in their study dealing with ergonomic conditions and habits of elementary school students related with their computer use, they explained the reasons of increased use of laptops as: needing a computing device outside offices, decreased laptop prices, mobility, size and quiet mode of operation of laptops. The study points out that laptop ergonomics is not ideal at all because laptops do not have height adjustment options and the space between the keyboard and the screen is too small. While using a laptop on a table setting with inadequate height adjustments of table and chair, low position of a screen may lead to unconscious leaning forward and thus neck and/or back pain in the long run. While using a laptop on the lap, the lack of support for the palms results in unnecessary strain to the hands. However, the trend of minimizing computing devices is prevailing and miniature laptops, mainly netbooks, PDAs are being used. The ergonomics of these devices is very poor since

their keyboard (if it exists), and monitor have been reduced to a size that is very uncomfortable to work on.

Young et al. (2013) performed a laboratory study for assessing shoulder and wrist postures and associated muscle activities during touch-screen tablet use. They tested the hypothesis that postures and muscle activities vary across different types of tablets, hand dominance and different user configurations. The study revealed that the use of tablet computers can result in extreme non-neutral wrist postures and in some configurations can result in high forearm extensor muscle activities. As a result, the study suggests placing tablet computers in cases or stands in order to allow hands free from holding or supporting the tablet. The data also reveals that there were observed differences for different tablet locations (on the lap or on a table).

On the basis of recent technological trends, Korpinen et al. (2013) conducted a cross-sectional survey study to collect information on possible relation between self-reported neck symptoms and the use of computers, portable computers, or cell phones. In the study, 15000 questionnaires were posted to working age Finns and the number of participants was 6121. The study pointed out that the respondents having neck symptoms very often also had some additional physical and mental symptoms such as exhaustion at work or sleeping disorders. In addition to this finding, the results of the study also supported the hypothesis of use of different types of computers may increase the risk of developing neck pain.

Pereira et al. (2013) evaluated the effect of tablet size, orientation, grip shape, texture and stylus shape on productivity, biomechanics, subjective usability and fatigue associated with holding the tablet with just left hand. The participants of the study

were limited with the participants with small hands, because subjects with smaller fingers are likely to be exposed to higher risk of using handheld devices. The analysis was performed by considering usability, fatigue, and biomechanics aspects. According to the study results, the small-sized or medium-sized tablets should be preferred for the cases of holding the tablet with one hand. When compared with small-sized or medium-sized tablets, large tablets had higher forearm muscle activity, shoulder moment, and wrist extension.

Werth and Babski-Reeves (2014) studied muscle activity, posture and performance differences between laptops, netbooks, and slate computers in two different work settings. The study tried to find answers to the following research questions: “Are muscle activities and postures of individuals negatively affected by the type of portable computing device used or by the different workplace settings?”, “Are typing performances on portable computing devices similar to previous studies in traditional desk settings?” The assessments of muscle activity were performed using sEMG (on the muscle groups of: the flexor carpi radialis (FCR), extensor carpi radialis (ECR), sternocleido-mastoid (SCM) and upper trapezius (UT)), while postures of wrists; elbows and neck were assessed using electrogoniometers. Results of the study revealed that using slate computers are associated with more non-neutral wrist, elbow and neck postures, and reduced performance when compared to laptops and netbooks.

2.2.1.1 Physical Impacts of Laptop Use by Children and/or Adolescents with a Special Emphasis on Usage for Educational Purposes

At the time of this research, there were only a few published studies discussing the physical impacts of laptop computer use of children in educational environments.

Although *not directly related with laptop use of children*, Straker et al. (1997) underlines the fact that *laptops are increasingly being used in education, and as a result children are likely to be exposed to prolonged poor postures*. Having such potential problems in mind, this section is not only dedicated to studies on physical impacts of laptop computers use of children but also to studies focusing on laptop computer use of children for educational purposes with more emphasis.

Harris and Straker (2000) noted the increasing use of portable computing devices in educational environments due to their flexible, easy-to use structure and conducted a two-phase descriptive study. In the study, the researchers identified the *potential physical consequences of laptop use by school children*. While the first phase of the study was comprised of a survey study, which involved 314 school children, the second phase was interviewing and observing a group of 20 school children during their laptop computer use. The results imply that children's use of portable computers with prolonged poor postures is associated with musculoskeletal discomfort they experience. In other words, according to the result of the study, there is an association between musculoskeletal discomfort and duration of exposure to information technologies. Another interesting and important statistic derived from the study is 26% of the participating children reported that they would still continue on with the task even after experiencing discomfort. The study also points out that the important ergonomic considerations such as typing postures and keyboard height are generally not considered enough at schools, potentially increasing the risk of MSDs developing in children.

Briggs et al. (2004) analysed *the sitting posture of school children* to observe the postural differences while they interact with books, laptop computers and desktop

computers. They concluded that the type of information technology used is interacted with the students' postures and students' postures are also affected from characteristics like age, gender or height of the student. The further details of this study can be found in detail under Section 2.3 "Comparison of tablet computer and/or laptop use with other types of IT and/or with each other".

2.2.1.2 Physical Impacts of Tablet Use by Children and/or Adolescents with a Special Emphasis on Usage for Educational Purposes

Sommerich et al. (2007) conducted one of the first studies related with ergonomic aspects of *tablet computers usage of high school students*. The study involved collecting data from 77 high schools students via a two-part questionnaire and a monitoring software to examine the computer usage preferences and durations. All respondents were high school students and questionnaire aimed to gather information about the respondents' experiences and attitudes and the potential body regions/parts that students are likely to experience discomfort. However, unfortunately there is no information supplied in the written text of the study whether these students were using the tablet computers in any kind of educational purpose or not. The objective of the questionnaires was *to reach statistical conclusions on students' experiences with the tablet computers*, their attitudes about tablet computers, physical discomfort associated with using or moving tablet computers, and temporal and task-driven usage patterns of tablet computers. The second part of the questionnaire was mainly focused on timing, postures, locations associated with tablet computer use and discomfort associated with moving the tablet computers as well as using them. Questionnaire results indicate that students' experiences are generally not problematic and students' attitudes are generally positive towards the tablet computers; while eyes, neck, head, right hand/wrist, upper, and lower back are the

body parts that students potentially experience discomfort associated with using tablet computers. The statistical results of the study also underline that the most prevalent discomfort experienced was eye discomfort with about 69%, followed by neck discomfort with about 60% of the participants who can use tablet computers at school and/home. Eyes, neck, head, right hand/wrist, upper and lower back body regions are under potential risk of experiencing discomfort associated with tablet usage.

The work of Straker et al. (2008b) is one of the very few studies evaluating *tablet computer use by children*. They compared use of tablets placed on tables by seated children with use of desktop computers by seated children. The details of this study can be found in further detail under Section 2.3 “Comparison of tablet computer and/or laptop use with other types of IT and/or with each other”. Results summarize that tablet computer use was associated with more neck and trunk flexion; more elevated left shoulder; more flexed right shoulder; and greater muscle activity around the neck.

The work of Pereira et al. (2013), which considered *tablet design features on biomechanics among users with small hands*, is not directly related with tablet PC use by children. However, it is still important and should be considered here because, although the overall hand size of subjects involved in the study was bigger than the hand size of children, statistical results regarding participants with small hands can still give *an idea on children’s use of same technology*.

Shan et al. (2013) conducted a questionnaire study to investigate body regions of *neck/shoulder and lower back muscles among 3600 high school students* in Shanghai.

The questionnaire is mainly aiming to discover the relationship between the pains experienced in these two body regions. In addition to the frequency of neck/shoulder and lower back pain experienced, the level of physical activity, mobile phone usage and desktop/tablet usage habits of the respondents were also examined by this questionnaire study. Statistical tests showed that gender, grade, discomfort experienced following physical exercise, usage habits of both desktop and tablet computers, sedentary time after school and academic stress are affecting neck/shoulder pain. Regarding lower back pain, this time model involves gender, grade, discomfort experienced following physical exercise, usage habits of desktop computers, mobile phone use, sedentary time after school, stress associated with school and the depression score of Centre for Epidemiological Studies. After the statistical analysis, the study concluded that tablet use is one of the factors affecting neck shoulder pain. In addition to this result, there is an important fact revealed when the questionnaires examined: 44% of the students who have a tablet computer reported neck and/or shoulder discomfort.

Aly et al. (2015) conducted sEMG study among 30 healthy, *right handed children* and investigated muscle activities of cervical erector spinae, upper trapezius, and right wrist extensors (neck and wrist regions) using sEMG and pressure pain thresholds of both right and left upper trapezius muscles (shoulder region) using a round rubber-ended algometer during tablet gaming. Pre-school aged children involved in the study were aged between 5 and 7. According to the outputs of experiments, one of the critical factors affecting the results was tablet gaming (play) duration. Results of the study supported the hypothesis of “tablet gaming is

associated with increased neck and wrist muscle activities in addition to decreased pain threshold in the shoulder region”.

Straker et al. (2015) conducted a study on *the differences between muscular activities of children while using mobile touch screen devices* (tablet computers are mainly referred in the study) and during other activities like playing with toys and watching TV. The study compared postures of upper limb and trunk, the arm movement, muscle activities of neck or shoulder of children aged between 3 and 5 while using a tablet computer to play, while playing with toys and while watching TV. During these three activities, movement of dominant arm and hand were measured by a movement ActiGraph, postures of regions like wrist, thorax and head are investigated using motion analysis and finally muscle activity of the upper trapezius muscles of the dominant hand side were studied using a wireless surface Electromyogram. Their results showed that tablet play was observed to cause repetitive wrist movements. In addition, summary of their experimental results say that young children is classified to have less muscle activity, less movement and bad spinal posture during tablet play when compared to toy play or watching TV. Research results supports the hypothesis that tablet computer usage increases the probability of experiencing musculoskeletal discomfort of young children.

2.3 Comparison of Tablet and/or Laptop use with Other Types of IT and/or with Each Other

Briggs et al. (2004) *analyzed sitting postures of school children during their interactions with desktops, laptops and books* (placed flat on the desk) to find a relation between physical posture and the type of information technology being used. The tasks performed by children on the mentioned types of IT during the study were

limited to reading (no input process). The results pointed out that the type of IT used is associated with postures of students and thus a lack of variation in postures can lead to serious and long-term problems. The results of the comparison stated that children reading from books had more head and neck flexion, and a greater gaze angle when compared to children reading from laptops, while children reading from laptop computers had more head tilt, neck flexion, and a greater gaze angle when compared to children reading from a desktop computer. Interestingly, reading from laptop computers resulted in head and neck postures closest to resting postures. Given these conflicting results, the researches decided that further studies are required before making definitive recommendations regarding use of these IT types.

Greig et al. (2005) conducted a laboratory study among school children to investigate the effects of different types of IT such as books, laptops, and desktop computers. Muscle activity data were collected from bilateral cervical erector spinae (CES) and upper trapezius (UT) muscle groups using sEMG technique, while the participants were performing reading tasks on the mentioned types of IT. It is concluded that different IT types were associated with different effects on muscle activities of CES and UT muscle groups. CES muscle activity in the book and laptop setups were found to be significantly greater than that in the desktop setup. Unexpectedly, although head/neck flexion of the book setup is the greatest, the associated muscle activity was not the greatest.

Straker et al. (2008b) compared a tablet computer-based, a desktop computer-based, and a paper-based colouring-in tasks performed by young children in order to assess the differences in postures and muscle activities of children. According to the obtained data, tablet use was associated with a more flexed and asymmetrical spinal

posture, more neck and truck flexion, more flexed and elevated shoulders, and greater muscle activity around the neck (UT and CES). According to this result, it can be concluded that tablet computer use is possibly associated with a greater risk of injury or discomfort compared with conventional computer use. On the other hand, computer tasks require less variable postures when compared to tablet computer and/or paper-based tasks. In other words, the tablet computer use is associated with a greater variability in posture and muscle activity when compared to conventional desktop computer use, which may offset the non-neutral postures and higher muscle activity associated with tablet use.

Alamargot and Morin (2015) *compared the graphomotor activities of students during a handwriting activity with tablet computers and during conventional writing*. The study was performed on 28 students from 2nd and 9th grades. Respondents performed the following two activities: writing the alphabet and writing their names and surnames. All respondents used a plastic tipped pen during the tablet activities and a ballpoint pen during the activities performed on conventional paper. Pen pressure on the surface of the tablet computers, size of letters, pen speed, and pen pauses were used as the parameters of the assessment. Handwriting movements of the respondents were more difficult because the surface of a tablet screen is smooth. In line with expectations of researchers, handwriting on a tablet computer's screen with a plastic tipped pen disturbed younger (2th graders) and older respondents (9th graders) in different ways.

Results of the study showed that handwriting on the tablet surface with a plastic-tipped pen primarily affected pen pauses in the second graders and pen movements in the ninth graders, suggesting a disturbance in segment trajectory calculation in the

younger participants and reduced control of muscular adjustment in the older children. Throughout the study tablet computers kept logs and the “Eye and Pen” software was used and an interface and control mechanism. Results showed that regardless of the grade, writing surface affects handwriting, that is handwriting on the tablet surface with a plastic tipped pen resulted in less legible letters in the task of writing name and surname, and in both tasks (writing name and surname and writing the alphabet) the size of letters was increased. Regarding the grade effect, when compared with handwriting on the tablet surface only affected the movement execution in older respondents by increasing pen pressure and speed, with respect to writing on a sheet of paper with a ballpoint pen. However, younger respondents, namely 2nd graders, were affected more, when the task was handwriting on the tablet surface, more pauses were needed and which resulted in an increased duration of the activity. Results also reveal that younger respondents had difficulty in assessing segment trajectories.

As can be realized after reading section 2.2 and 2.3, none of the existing studies are focusing on tablet computer use of children (and/or adolescents), during education or during educational activities neither in a real classroom nor in a simulated class environment. The objective of this study to determine the musculoskeletal discomfort levels of children and/or adolescents during tablet use in addition to examining muscular activity of muscle groups of upper body, which are under higher risk of musculoskeletal discomfort.

2.4 Guidelines for Children's Information and Communication Technology Products Use

This century's unavoidable fact, rapidly advancing technology, is likely to have impact on children's developing musculoskeletal, sensory, and motor systems. If adults fail to respond and act in time, the advancements in technology may result in disorders including but not limited to physical and/or musculoskeletal disorders in children. Hedge (2005) notes that in addition to improving the design of the computer workplaces of children, adults should also educate children regarding the safe use of computers in order to help them develop lifelong protective habits. For adults to educate children in an appropriate manner, after detection of potential problems through observations, experiments etc., there is a need for guidelines for children's computer use (desktop/laptop/tablet computers) to be developed. There have been several published guidelines, standards and codes in respect to computer use of and corresponding workplace requirements for adults. Harris *et al.* (2005) argued that it is likely that there are different associations between risk factors and musculoskeletal outcomes for children than for adults. Their argument is based on the facts that children and adult musculoskeletal systems are different; purpose of children in using IT is different; the physical IT environment in school or home environments are not generally adjustable; children have potential of adopting awkward postures for prolonged periods even when they experience discomfort. For example, Jacobs *et al.* (2006), assessed home computer use of children aged between 12 and 15 years old in US and deduced that most of the children involved in the study were using adult sized furniture. It is concluded that there is an association between fewer self-reported pain and the feet positioned flat on the floor. Therefore, the researchers recommend that the seat pan height to be adjusted to allow the child's

feet to be flat on the floor. They further reported an association between fewer self-reported discomfort and glare free display of screen used by children. The researchers therefore recommend that children be taught to identify glare and adjust their workstation to avoid it.

Maslen and Straker (2009) underlines the fact that there are limited numbers of experimental studies dealing with children's computer use. They associate this deficiency in literature with the fact that the guidelines for children's computer use are still not developed in the form of international standards.

It should be noted that given the differences in size and input devices, even if guidelines for children's computer use were developed, they would not be fully applicable for laptop or tablet PC use of children. However, to form a basis for such guidelines, the studies of developing guidelines for computer use are also important at this point.

Straker et al. (2009b) presented a set of guideline principles to minimize the risk of adverse effects of computer use specifically for children after a broad literature review, which highlighted the evidence of both positive and negative effects of computer use for children. Among the six general principles presented, the last one is on wise use of computers in terms of facilitating appropriate physical development by eliminating potentially damaging physical stresses. Offered set of guideline principles constitutes a basis for further detailed guideline studies. However, as mentioned above, if not used with an external keyboard and mouse, the guidelines offered do not specifically apply for laptop and tablet computers. Straker et al. (2010) published children-specific evidence-based physical guidelines for the wise use of

computers. The recommended guidelines are based on a literature review regarding the physical aspects of child–computer interaction. Although the guidelines recommended have not been supported with randomized controlled experiments, it forms a good basis for future studies.

While it does not include any guidelines for using IT for children Harris et al. (2012) have proposed a model to characterize relationships of characteristics of children users, computer exposure of children users and associated musculoskeletal outcomes. The researchers also underline the reality that models and theories developed are including adults and associated musculoskeletal outcomes. With the aim of modeling computer exposure in children and related musculoskeletal outcomes the study scanned 10 schools in Western Australia.

As mentioned before in this literature review, adult models are not fully applicable to children therefore studies focused on computer use of children at home or at school will be of great importance for future guidelines of using desktops, laptops and tablets. The study of Harris (2015) tries to fill this gap by developing and testing a child specific model, which considers child factors, computers exposure (it should be mentioned here that tablets computers are not included) and musculoskeletal outcomes. The model puts forward that self-reported musculoskeletal problems of children are found to be affected by factors like gender, age, television exposure, computer anxiety, sustained attention, socio economic status, headache and stomach pain. This study is going to enlighten the path of developing other children specific models and at the path of producing children specific guidelines.

2.5 Risk Assessment Tools and Assessment of Ergonomic Risk Factors for Children

Identifying potential physical hazards to musculoskeletal development of children is the first and most important step to protect children from musculoskeletal disorders. Before finding effective solutions to problems, we should be able to identify potential problems. Risk assessment tools have a critical importance at this stage.

In literature, there are no risk assessment tools specifically designed and presented for children; however, Rapid Upper Limb Assessment method has been utilized frequently (Leaser et al. 1998; Oates et al. 1998; Breen et al. 2007; Dockrell et al. 2010) in studies which involved children subjects.

In their study investigating children's posture and discomfort associated with computer use, Breen et al. (2007) chose RULA as an appropriate, cost-effective, reliable postural evaluation method. Dockrell et al. (2010) also utilized RULA for evaluating the postures.

Dockrell et al. (2012) investigated both inter-rater and intra-rater reliability of the use of RULA with children. Their results suggest that RULA is a moderately reliable tool for being used in assessment of school children's computing postures. Findings of the study also imply that RULA may be more suitable to assess older children's computing posture. Higher intra-rater reliability results when compared to inter-rater reliability results imply that making a series of assessments by the same person would be more consistent. The results also show that there may be a learning effect, which highlights the importance of adequate training and practice before using it.

This finding actually contradicts with the assertion of Chen et al. (2014), who investigated if experience is a factor contributing to differences in the results of the Rapid Upper Limb Assessment method. The aim of the study includes investigating the differences between results of RULA of a child using mobile ICT (in the home environment) by experienced and inexperienced assessors. As the study concludes that there were no significant differences between the RULA scores of experienced and in-experienced assessors, it can be concluded that RULA can be used in postural risk assessments regardless of the assessor's experience.

Surface electromyography has also been utilized frequently in several studies like Greig et al. (2005), Ciccarelli et al. (2006), Straker et al. (2008a), Straker et al. (2008b), Maslen and Straker (2009), Straker et al. (2009a) as a tool for assessment of ergonomic risk factors among school children and adolescents.

In some studies self-reported questionnaires and/or symptom surveys have also been utilized frequently to collect data from children on exposure and exposure intensities to both physical and psychosocial factors and to identify the potential areas deserving a deeper ergonomic analysis [Harris and Straker (2000), Harris (2010), Sommerich et al. (2007), Zovkic et al. (2011), Brink et al. (2009)].

Briggs et al. (2004), Brink et al. (2009), Straker et al. (2008a), Straker et al. (2008b), Straker et al. (2009a) have utilized some video based or photographic posture analysis methods to analyze postures of children using laptops/desktops/tablets.

As a conclusion, before investigating the possible problems associated with the tablet PC or laptop use of children and tablet use for educational purposes we have

searched the literature and reviewed the published studies about posture, musculoskeletal activities, and possible musculoskeletal discomfort among children using laptops or tablet computers and studies addressing physical impact of mobile technologies by school children for educational purposes. It is clearly obvious from the search results that the resources investigating musculoskeletal outcomes of laptop or tablet computer use of children are really scarce. There are only a few studies that investigated ergonomic aspects of laptop/tablet PC use by children for educational purposes, and there are no specific risk assessment method proposed for children. Although some methods developed for adults are considered to be reliable for children as well, there is no doubt that the working conditions (classroom environment) and physical needs of children are different than adults'. There exist some guidelines for children using conventional PCs; however, guidelines for mobile technologies such as laptops or tablet PCs have not been developed yet. More experimental studies of children's laptop and/or tablet computer use to identify the potential problems can be helpful to lead to development of the relevant guidelines for children.

Chapter 3

METHODOLOGY

3.1 Preparatory Work

A well-grounded study should be supported by appropriate preparatory work. First of all, not to violate any rights of participating students, an approving ethics committee decision was requested for both phases of our study. Required reports and letters were prepared and sent to the Ethics Board of the University to ask for a decision to approve the study. The written ethics board decision for both phases of the study (survey and SEMG), which can be seen in Appendix A1, was obtained on 17/02/2015.

In order to learn about the technologies used at schools (both secondary level and high school level schools) and to be able to plan the procedures that should be followed to make one or more schools part of our study we had several meetings in General Secondary Education Department of Ministry of Education. The General Secondary Education Department of Ministry of Education has approved the research after examining the questionnaire (The printed English version of the questionnaire can be found in Appendix A2) and the project details from the information sheet (Appendix A3, Figure A3-3). Afterwards, the only thing done as a procedure after the approval was to write a letter mentioning the schools to perform the study (this was done more than once, because the questionnaire study at the schools approved by the ministry had to finish the following week).

By spring semester of Academic year 2014-2015, education infrastructure in most of the stately owned and privately owned schools have been improved and reinforced by technologies like smart boards or good quality computer laboratories with internet access. In other words, students are currently following computer-assisted programs. However, in spite of the technological advancements in terms of equipment, nearly all of stately owned and privately owned secondary schools and high schools are still very far from tablet-integrated education. (To the best of our knowledge, there is only one private school that uses tablet computers as a medium of education in Cyprus. However, they refused to be involved in our study.)

In Appendix A3, there is a sample letter of correspondences made for obtaining the required permissions to work in some schools located in northern Cyprus (written to the Board of Education and Discipline under the General Secondary Education Department, of the Ministry of Education) and a sample as an answer to such as request from the mentioned department of the Ministry (Figures A3-1 and A3-2), respectively. The procedure works in the following way, when such an application is made to the Board of Education and Discipline under the General Secondary Education Department, giving the details of the work to be done and the name (or names) of the school. If the board decision is positive, the researcher is granted with a permission to work in that school with the pre-condition of reporting the results of the study to the board. It is also important to mention that permission from the Board does not mean that you can perform any study in that specific school, or with the students of that specific school. The consent of the participating students and their parents, in addition to the permission of the school managements is also required.

3.2 Research Objectives

The main aim of the study was to obtain original ergonomic findings on the exposure of students associated with the use of desktop/laptop/tablet computers with a special emphasis on the relationship between tablet use of students in a tablet-integrated or tablet-assisted learning environments and to investigate muscle activities of the students using tablet computers for class activities (during the activity).

As mentioned before, this research focuses of musculoskeletal issues of students using desktop/laptop/tablet computers with a special emphasis of educational use of tablet computers. Because of its properties of being portable and lightweight, and because of widespread availability of Internet, tablet computers are good candidates to replace other ITs in education.

Tablet computers have been used in education in many countries for the last decade. Although, this research focuses on probable discomfort or problems associated with tablet usage of students, getting acquainted with tablet computers from early ages may also be an advantage such as being technologically well-equipped and skilled workforce of big economies of near future. However, the literature on musculoskeletal or more generally physical impact of tablet computers used for educational purposes is very scarce. In addition, there is no study yet focused on tablet computer usage of secondary and high school students, which involved aspects of educational usage or tablet integrated education. Therefore, this study has focused on physical impacts of tablet computers in the light of self-reported symptoms and discomfort scores calculated gathered from the results of a two-phase questionnaire conducted and muscular activity in upper body parts under higher risk of

experiencing discomfort is registered through sEMG during simulated in-class activities and environment.

Recalling the fact that musculoskeletal development of secondary and high school students is not finalized yet, no educational achievement worth any musculoskeletal problem resulting from usage of such technologies. Therefore, the main aim of this research is to fill this gap by examining muscle activities of respondent students after studying self-reported musculoskeletal discomfort experienced by students (in northern Cyprus).

In line with the research objective self reported musculoskeletal discomfort experienced by students of both secondary and high schools of northern Cyprus have been investigated in order to find out both the students' and upper body parts of respondent students carrying the highest discomfort potential and examined their most exposed muscle groups while using tablet computers for educational activities.

Making reasonable recommendations to new generations for healthy use of desktop/laptop/tablet computers is only possible if we can understand the relationships mechanisms involved and risk factors involved in and eliminate the risks to prevent students experiencing musculoskeletal discomfort for extended periods.

3.2.1 Research Questions

Research questions listed below were considered in formulating the research hypotheses presented in this section.

- Do students experience different mean musculoskeletal strain in time for their muscle groups actively involved using tablet computers in class environment?
 - Is there a statistically significant relationship between “tablet use of children in classroom environment, during class activities, using the tablets with desk stands for educational purposes” and “musculoskeletal discomfort they experience”?
- Do the desktop/laptop/tablet usage habits, perceptions, attitudes and experiences of respondent students correlate with musculoskeletal discomfort experienced?
- Is there a statistically significant relationship between “durations of daily exposure of children and/or adolescents to desktop/laptop/tablet” and “musculoskeletal discomfort they experience (upper body)”?
- Is there a statistically significant relationship between “cumulative years of exposure to desktop/laptop/tablet” and “musculoskeletal discomfort they experience (upper body)”?

3.2.2 Research Hypothesis

Hypothesis 1: Mean musculoskeletal strain in time for each muscle group involved in tablet use (for educational purposes) for a subject (student) during a class activity in a tablet-integrated class environment does not differ.

- There is no statistically significant relationship between tablet use of children in classroom environment, during class activities (using the tablets with desk stands) and musculoskeletal discomfort they experience.

Hypothesis 2: There is no significant relationship between durations of daily exposure of children to desktop/laptop/tablet and musculoskeletal discomfort they experience in their (upper body) parts.

Hypothesis 3: There is no significant relationship between cumulative years of exposure to desktop/laptop/tablet and musculoskeletal discomfort they experience (upper body).

Hypothesis 4: There is no significant relationship between desktop/laptop/tablet usage habits, perceptions, attitudes and experiences of respondent students and the musculoskeletal discomfort experienced.

3.3 Data Collection and Measuring Methods

This two-phase descriptive study aimed to collect both quantitative and qualitative data for testing the hypotheses. In the first phase of the study, a two-part questionnaire was designed, while the first part aimed to obtain general information on students; on their habits, perceptions and attitudes related to desktop/laptop/tablet computer use. The second part of the questionnaire aimed to determine frequency and severity of experienced discomfort, if any discomfort was experienced. In case of reporting any discomfort, the scale to determine degree of interference to school activities is another critical question of the second part. Learning about some details such as the correlation (if any) between exposure of students to desktop/laptop/tablet computers and associated musculoskeletal discomfort they have experienced (been experiencing) can be achieved using the data from both first and second part of the questionnaire.

At the time of the questionnaire process, certain state and private schools have already adapted computer-assisted education in some particular lectures in northern Cyprus. To achieve generalizability, students from varying state and private secondary and high schools, which are located at different cities, were aimed as

potential participants. Consequently, the study guaranteed participation from different demographic and sociocultural backgrounds.

The second phase of the study included the evaluation of muscles' activities of the respondent students using surface electromyography. The main aim of this evaluation is to test the hypothesis that mean musculoskeletal strain for each muscle group determined with the results of the questionnaire process does not differ during a tablet integrated class activity in a simulated class environment. The process of determining the candidates for sEMG process and the body regions that will be studied (the body regions for sEMG evaluation was restricted to the upper body because using tablet in any class environment is a sedentary work) were done after evaluation of the questionnaire.

3.3.1 The Questionnaire – Phase I

The first part of the utilized questionnaire tool is developed after a thorough literature review and especially after studying the Dutch Musculoskeletal Questionnaire (DMQ), which was originally developed by Hildebrandt et al. (2001). The standard DMQ have been modified and shortened in order to fit the needs of the study. This section of the questionnaire part sought information on background variables (like age, height, weight, gender), on reasons, location, duration and history of desktop/laptop/tablet computer use of the participants, and on emotional background of the participants while using a desktop/laptop/tablet computer, and on lifestyle of the participants (sports activities, smartphone usage etc.).

A way for determining prevalence of musculoskeletal complaints is through the use of symptom surveys by Hedge et al. (1999). The second part of the questionnaire was the Student Specific Cornell Musculoskeletal Discomfort Questionnaire (SS-CMDQ)

by Erdinç and Ekşioğlu (2009). SS-CMDQ is a variation of Cornell Musculoskeletal Discomfort Questionnaire (CMDQ) by CUergo (1999). CMDQ is a questionnaire that was designed to find out details about subjects who are under high risk of experiencing musculoskeletal problems, which evaluates pain or discomfort frequency for the past week and checks if academic activities of students were interrupted by any discomfort experienced. Erdinç and Ekşioğlu (2009) have also developed Turkish version of Student Specific CMDQ (SS-CMDQ). While, both Turkish and English versions of Student Specific CMDQ have been validated by Erdinç et al. (2011). This study involved administration of SS-CMDQ to be able to study the correlations between musculoskeletal discomfort, frequency of discomfort and its interruption to academic activities with other research questions for desktop/laptop/tablet computer use. SS-CMDQ includes a body map diagram to track the locations of musculoskeletal discomfort, in other words to avoid any confusion in the respondent students perception of body parts.

The resulting two-stage questionnaire tries to obtain a representation of the relationships between the desktop/laptop/tablet use and musculoskeletal symptoms among students using tablet computers in classrooms. In general, the questionnaire includes a combination of measures for evaluating musculoskeletal outcomes related to children's desktop/laptop/tablet exposure both for educational and non-educational purposes.

3.3.1.1 Development of the Questionnaire

An in-deep literature review, especially reviewing the Dutch Musculoskeletal Questionnaire (DMQ), which was originally developed by Hildebrandt et al. (2001), facilitated the development of the first part of the questionnaire, while the Student

Specific Cornell Musculoskeletal Discomfort Questionnaire (SS-CMDQ) constitutes the second part. In the second part of the questionnaire, relationships between exposure of children to such technological devices and associated self-reported musculoskeletal discomforts were investigated. As mentioned before, SS-CMDQ is a variation of CMDQ derived by Erdinç and Ekşioğlu (2009), which has been shown to have good validity. It was initially developed by Alan Hedge and his graduate students at Cornell University [Hedge et al. (1999)].

Harris (2010) suggests that when children's computer exposure is the question, home environment must be considered as well as school environment. While Harris *et al.* (2015) has also concluded that both the types of tasks and exposure are different in home and at school. Therefore, the first part of the questionnaire, which was conducted for clarifying details of habits and attitudes of students towards desktop/laptop/ tablet computer use and other daily activities, did not disregard the use of such devices in environments other than classroom environment.

It must be noted that, the details provided about development of the questionnaire, is based on the printed versions of the questionnaires. In the online version, which is still available in a surveymonkey.com account (July 2016), some questions are divided into a number of questions for the sake of ease of understanding. In Appendix A2, printed version of the questionnaire (English version) is available. Management of some schools preferred filling in the online version in their computer laboratories while more school managements asked for printed versions. As mentioned before, depending on the student portfolio of schools, both English and Turkish versions of questionnaires were provided to school managements.

First four questions of the first part of the questionnaire, which are asking age, gender, height and weight of the participants, aim to collect demographic data in order to be able to describe the study population. This descriptive demographic data helps to identify range of ages, weight, height etc. of our sample population. These questions are also useful in comparing demographics related changes in reported musculoskeletal symptoms. The fifth question of the first part inquired about the type of computer(s) preferred (and used) by the students (desktop/laptop/tablet computer). This is to determine whether there is a difference in the frequency and level of musculoskeletal discomfort experienced between the students who are exposed to one of these technologies and the students who are exposed to all or more than one of these technologies. Or to find an answer to the question “does any of the three types of computer used increase the frequency of level of discomfort experienced?” Question 6, which asks about the activities that the subjects are using the computers (all three types) for and the corresponding durations of use, is designed to check whether engaging in a specific activity and/or using the mentioned types of computers for that specific activity for long periods of time results in an increased amount of reported discomfort or pain. Question 6 helps us to determine the average duration of computing time for students in a typical school day. Question 7 and 8, which is related to the setting (home, school etc.) of computer (three computer types - desktop, laptop and tablet computers) use or duration of span of computer use are asked to determine whether the mostly preferred setting or duration of span of computer use related to the amount and/or area of pain. Questions from 9 to 11 check whether the experienced feelings of subjects regarding desktop/laptop/tablet computers correlates with the frequency of discomfort experienced in any body region. Question 12 is designed to ascertain if students engaging in certain artistic or

physical activities report less discomfort compared to other students. Question 13 is to identify whether the students experienced accidents or had injuries in the past one year. The students with “Yes” answers to this question shall be removed from investigations regarding reported pain to avoid involving the effects of an accident in evaluation of computer use related pain. Question 14 of the questionnaire aims to check if the durations of smart phone use correlates with the frequency of amount of musculoskeletal discomfort.

Second part of the questionnaire (SS-CMDQ), which actually is not a separate questionnaire, addresses the frequency (in the past week) and level of musculoskeletal discomfort and pain as well as the effect of experienced musculoskeletal discomfort to the performance of academic activities (Question 15, 16, 17). For example, the answers other than “Never” to the question “How often did you experience ache/pain/discomfort during last week?” for any body region actually indicate the existence of musculoskeletal discomfort (depending on the answer to the question, musculoskeletal discomfort may be replaced by pain).

In order to help self-administration of the questionnaire, in reporting musculoskeletal complaints with respect to the corresponding body regions, second part of the questionnaire involves a body map (the body map can be seen in Figure 1) showing the basic body regions to assist with identification of body regions and quantification of discomfort.

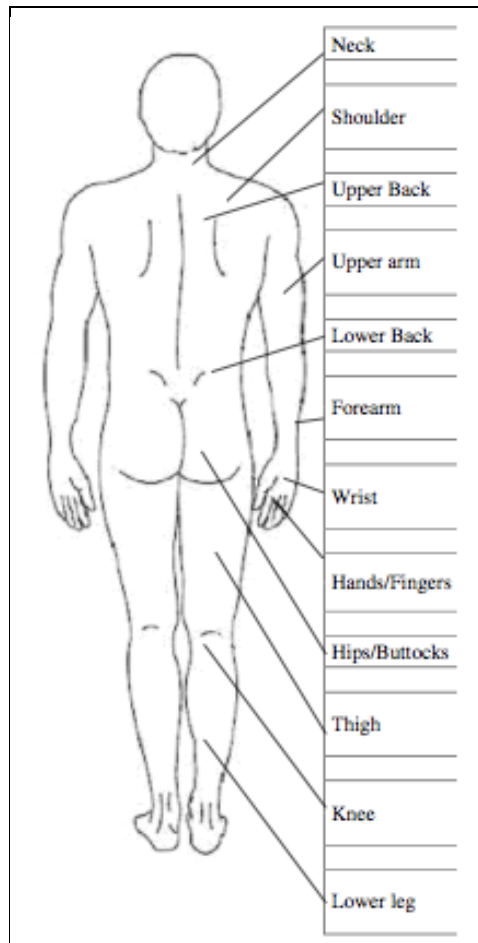


Figure 1. Body map used to help respondents in identifying the body regions.

The SS-CMDQ part asks sixty questions about the frequency of musculoskeletal discomfort/pain in 20 body parts referring to the previous week. The frequency of discomfort is assessed on a scale from 0 (none) to 4 (several times a day) and level of discomfort from is assessed on a scale ranging from 1 (slightly uncomfortable) to 3 (very uncomfortable). While the question, which helps to reveal if the experienced discomfort interfered performance of academic activities, is assessed from 1 (not at all) to 3 (substantially interfered).

3.3.1.2 Sample Size (Questionnaire)

To determine the sample size for the questionnaire process (phase 1), a confidence level of 95% and 5% sampling error was considered using the Yamane Formula.

Israel (2009) Yamane Formula says: $n = \frac{N}{(1 + Ne^2)}$, where n represents the respondents for the research, N represents the population size and e is the level of precision.

Ministry of Education (TRNC), Department of Common Services For Education compiled statistics of Academic Year 2013-2014 in a booklet named Educational Statistical Yearbook. Total number of governmental secondary and high school students were 15,247 in Academic Year 2013-2014. While total number private secondary and high school students were 3002 in the same academic year.

According to Yamane's formula, using 0.05 precision level and total population 18,249, nearly 391 respondents would be enough. We have distributed the two-part questionnaire to 500 students who consented to fill in. In total, both from secondary and high school students, 406 of them returned the questionnaire filled in appropriately. 297 of the respondents filled in either English or Turkish versions of the printed version of the form. The rest of the respondents filled in the online questionnaire.

At this point, it may be critical to mention that (in both phases of the study) before the questionnaires (or before the sEMG assessment phase) were distributed to the students an introductory letter as a cover page of an information sheet explaining the project and asking for parental consent is distributed to the students (who consented to attend the study) to be given to their parents. English version of this information sheet with the cover letter can be found in Appendix 3, Figure A3-3. Children and their guardians were also given the chance to withdraw their consent form or chose

to discontinue participating the study anytime during the study. In addition, in order to protect confidentiality of the participants, the data were recorded anonymously and no data regarding the identities of the participating children are available in the data sets of Appendix A.

3.3.1.3 The Questionnaire Process

The participants were provided with both Turkish and English version of the two-stage questionnaire. Participation to the questionnaire process was ensured from both privately and state owned schools, which are located in the three big cities of northern Cyprus. It was administered in approximately 20-30 minutes in all classrooms (online administration of the survey took a bit more time than the printed versions).

A total of 500 questionnaires were distributed (or the online version was asked to be filled in) to potential participants. At the end, a total of 406 students participated in the survey of the study. In other words, we had an approximate response rate of 81%. 62% of the questionnaires were distributed to governmental while the remaining 38% were filled in by private schools.

3.3.1.4 Analysis of the Questionnaire Results

3.3.1.4.1 Detailed Analysis of Part 1

The characteristics like age, sex, weight, and height of the respondents are summarized and categorized in Tables 1a, 1b, 2, 3, and 4 below, for further details of details please refer to in Table B1-1 in Appendix B1. Summarized sample demographics, which are presented in Tables 1a, 1b and 4, may also help to have a better understanding of the sample population.

Please note that Tables 1 and 2 include the statistics with respect to different age categories for facilitating the process of understanding the data collected from the population.

Table 1. Statistics on weight information of the sample population

	Basic statistics on weight information of respondents		
	11-13 age group	14-17 age group	above 17
min	28,00	34,00	47,00
max	90,00	95,00	96,00
average	47,90	60,09	70,51
standard deviation	10,84	12,38	12,19

Table 2. Statistics on height information of the sample population

	Basic statistics on height information of respondents		
	11-13 age group	14-17 age group	above 17
min	1,25	1,40	1,54
max	1,80	1,90	1,87
average	1,55	1,67	1,73
standard deviation	0,10	0,09	0,08

Before talking about the conventional statistical results of the questionnaire, it is important to mention that as there were some matrix like tables for respondents to answer one general question for several different cases printed version/online version are not equal in terms number of questions asked. However, for a healthy database/archive of the questionnaires all questionnaires that were filled in using the printed version were entered to the database of surveymonkey.com by hand. In other words, all answers of 406 students are collected on an online database (provided by

www.surveymonkey.com), which was helpful with respect to retrieving categorical information. Therefore, all comments and statistics of this section are made using the online database.

Female and male response percentages (Table 3) indicate that the questionnaire have received a good balance of responses in both genders.

Table 3. Ratio of male and female respondents

	Response Percent	Response Count
Female	49,3%	200
Male	50,7%	206

In addition to the respond percent distribution according to sexes of respondents average height and weight of the whole sample population is provided in Table 4 below as a generalization of detailed demographics supplied in Table 1 and 2. While Table 5 provides a summary of Table 1 and 2 for the sample population.

Table 4. Average height and weight information of the respondents

	Average height	Average weight
Female	1,59	50,46
Male	1,65	59,55

Table 5. Student demographics of the sample population (n=406)

Variables	Range	Sample Mean	Std. Dev.
Age	11-20 years old	14.06 years old	2.19
Height	1.25m-1.90 m	1.62 m	0.11
Weight	28-96 kg	55.07 kg	13.83

The questionnaire results (related with Question 5) revealed that the majority of the children prefer to have a portable computer option. This result is presented clearly in Table 6 below.

Table 6. Statistics drawn from Question 5 (*Do you use tablet, laptop, or desktop PC or all in your daily life? Please pick the correct choice below.*)

Daily life computer usage preferences of the respondents	Response Percent	Response Count
Only tablet	8,9%	36
Only laptop	15,0%	61
Only desktop	5,4%	22
Desktop and laptop	9,9%	40
Laptop and tablet	20,2%	82
Desktop and tablet	11,1%	45
All	29,6%	120

In addition to the summary table (Table 6) that presents intensity of students that prefer portable options, Figure 2 presents the same fact that nearly 95% of the students reported that they are either using a laptop or a tablet computer, if not both. In other words, only 5% of the respondents use only desktop computers in their daily lives.

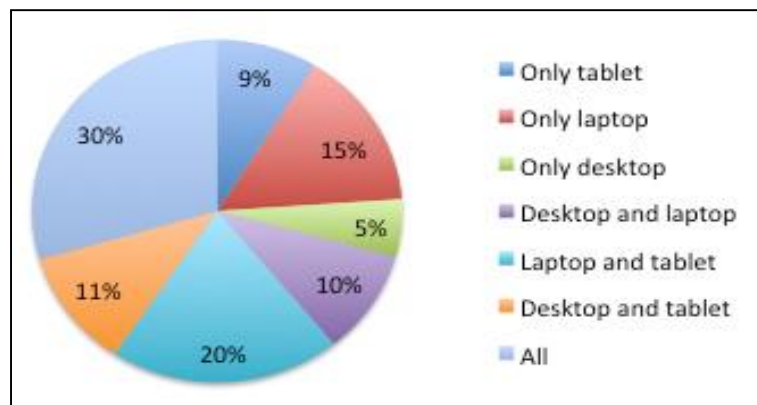


Figure 2. Daily life computer usage preferences of the respondents

More interestingly, 70.8% of the respondent students were using at least two types of computers (either a combination of tablet, laptop, and desktop computers, or all of them) in their daily lives. For detailed answers given to fifth question, Appendix B1, Table B1-2 can be referred.

As mentioned before, sixth question is about the activities that the respondent students are using the computers (all three types) for and the corresponding durations of use. The question lists dominant reasons for using desktop/laptop/tablet computers as: Communication, playing games, watching films, studying, using at lectures, Internet surfing, reading and writing. Respondents were asked to answer for all types of computers (laptop, desktop and tablet) their usage durations (if any) for the listed purposes. In Appendix B1, from Table B1-3 (a) to Table B1-3 (h), you may find the detailed answers given to sixth question.

A summary of use of laptop, desktop, and tablet for communication purposes can be found in Table 7. It can be easily visualized from the table values that both laptop and tablet computers are more popular (Figures 3a and 4a) than desktop computers for communication purposes.

Table 7. Summary table of *usage durations* with respect to *communication* purposes

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	42,86% 174	28,82% 117	17,00% 69	5,42% 22	5,91% 24
Desktop	66,50% 270	17,73% 72	10,59% 43	2,96% 12	2,22% 9
Tablet	43,10% 175	21,43% 87	13,30% 54	10,10% 41	12,07% 49

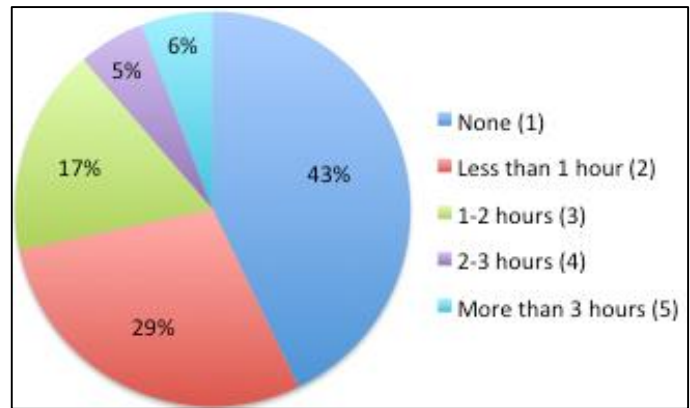


Figure 3a. Durations (& corresponding percentages) of laptop usage of all respondents for communication purposes

10% of all respondents, who use laptop computers for communication, use them for more than 3 hours. Besides, 50% of respondents, who reported laptops as one of their preferred, IT types, use laptop computers for communication purposes for at least 1 hour daily (Figures 3b).

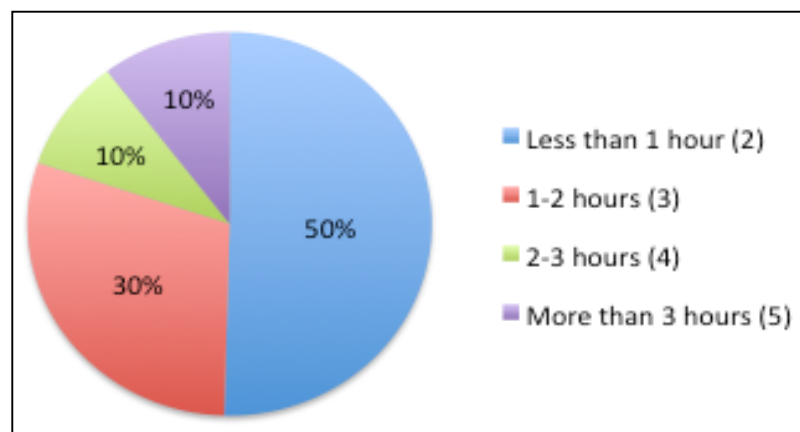


Figure 3b. Durations (& corresponding percentages) of laptop usage for respondents who reported laptop as one of their IT type preferences for communication

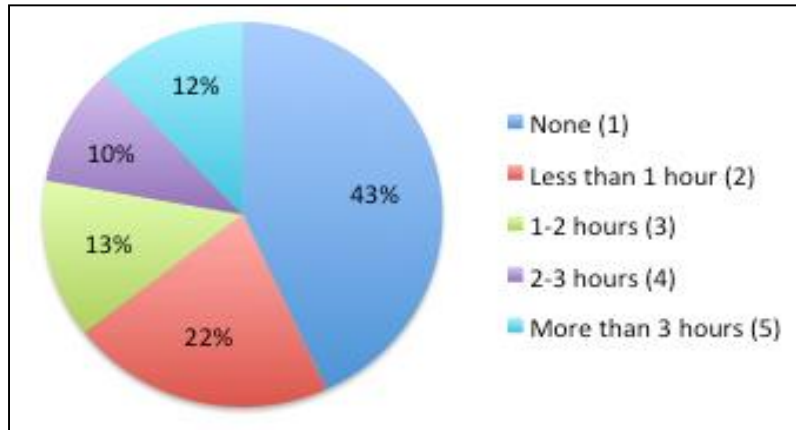


Figure 4a. Durations (& corresponding percentages) of tablet usage of all respondents for communication purposes

While working on the use of desktop/laptop/tablet computers for communication, among the used technologies, tablet computer use is for more prolonged durations (Figure 4b) when compared to laptop and desktop usage durations. Tablet computers were first in the list in this questionnaire results as well, with more than 12% of total respondents, who use tablet computers for communication purposes (daily) for more than 3 hours.

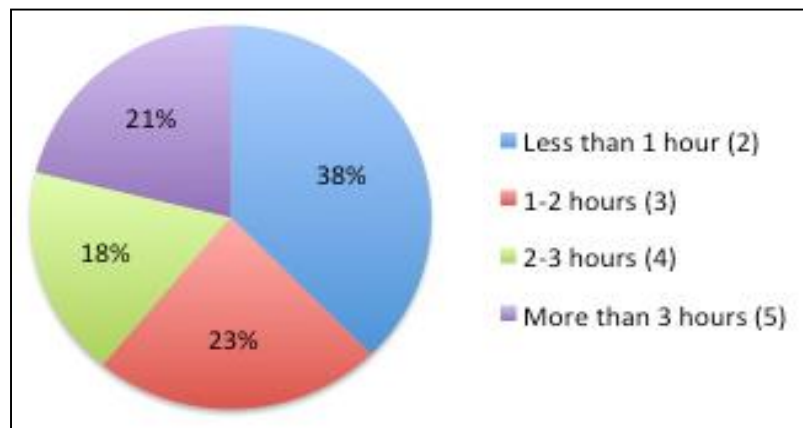


Figure 4b. Durations (& corresponding percentages) of tablet usage for respondents who reported tablets as one of their IT type preferences for communication

When Figure 4b is analyzed in detail, it is obvious that nearly 62% of the respondents who prefer tablets for communication purposes uses it for at least 1 hour daily. When all respondents (406 students) are considered, this percentage falls to 35%. The percentage about daily usage duration is considerably lower for people preferring laptop or desktop for communication purposes. Here, it is important to note that Kim *et al.* (2014) have already pointed out that prolonged use of touch screen keyboards potentially increase the risk for musculoskeletal discomfort. The reason of the research's hypothesis was simply the increased static load in forearm extensor muscles and shoulder muscles due to the fact that virtual keyboards of tablet computers can be easily activated (by touching a key on the virtual keyboard) only with a physical contact and people using virtual keyboards cannot rest their hands/fingers on the device.

Very similar to results of laptop computer usage for communication purposes, 47% of the respondents who reported desktops as one of their preferred IT types, use desktops for communication purposes for more than 1 hour (Figures 5a and 5b).

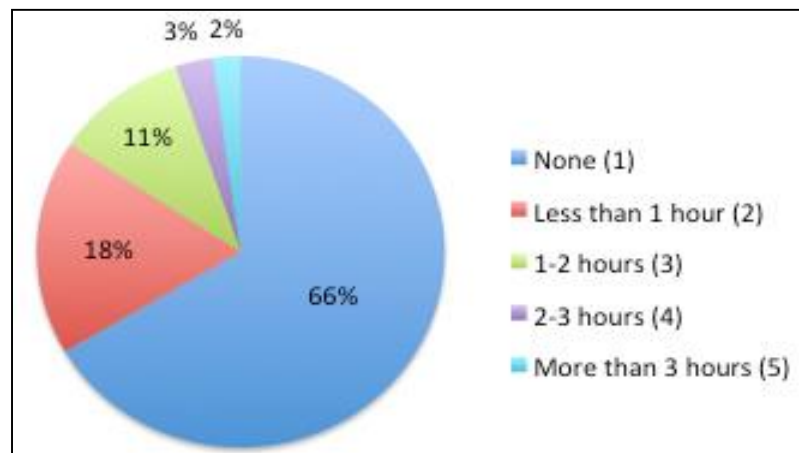


Figure 5a. Durations (& corresponding percentages) of desktop usage for all respondents for communication purposes

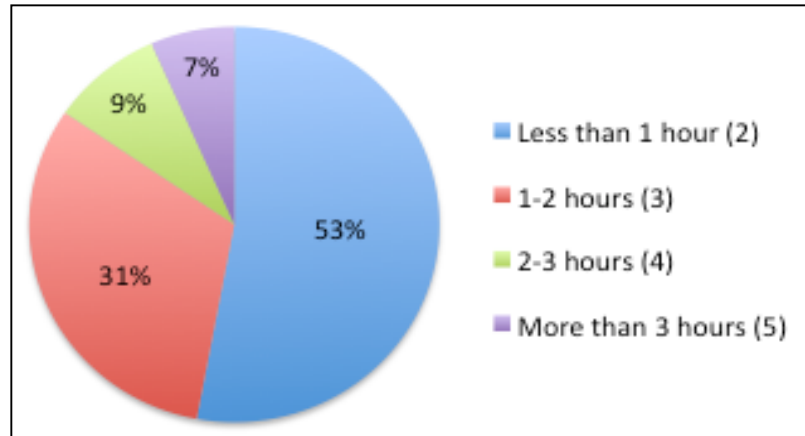


Figure 5b. Durations (& corresponding percentages) of desktop usage for respondents who reported desktop as one of their IT type preferences for communication

Figure 6 below illustrates that “communication” is not an extremely preferred reason of using laptop, desktop, and tablet computers among the respondent students.

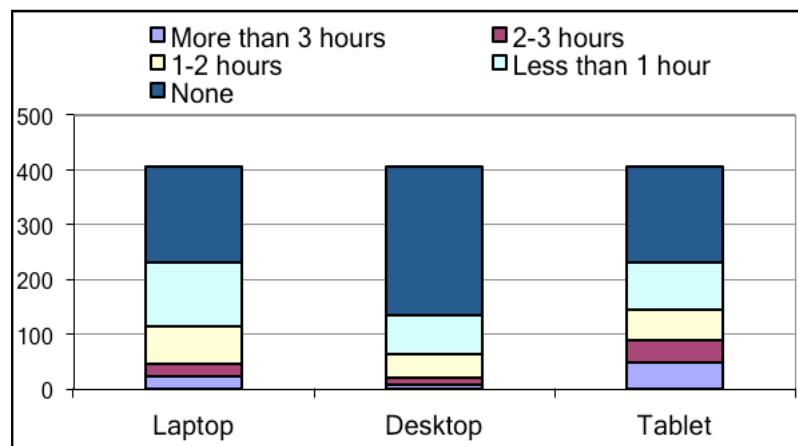


Figure 6. Number of students using desktop/laptop/tablet for communication purposes and corresponding daily usage durations (n=406)

Actually, this is not surprising when we consider the smartphones of today that are capable of sending mails, following social media, reading newspapers, writing or recording voice messages and send them via some applications developed for this purpose (although some security issues are not solved yet) in addition to traditional mobile phone actions of direct calls and SMS (Dwivedi and Deep (2016)). In

addition, majority of those who use any of laptop, desktop, and tablet computers for communication purposes, use them for less than 1 hour.

When it comes to “playing games” using Laptop/Desktop/Tablet, unexpectedly, a very high majority of the students (65.27%) provided that they do not prefer desktop computers for playing games, while 53,69% of all respondents uses tablets for playing games and approximately 47% of the respondents reported that laptops are among their preferences to play games (Table 8).

Table 8. Summary table of *usage durations* with respect to “*gaming*” purposes

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	52,96% 215	23,15% 94	14,04% 57	5,17% 21	4,68% 19
Desktop	65,27% 265	23,15% 53	9,85% 40	4,43% 18	7,39% 30
Tablet	46,31% 188	21,92% 89	15,76% 64	7,88% 32	8,13% 33

Among respondents who reported that they use *laptop computers* for *playing games*, the percentage of respondents using the IT type for *gaming*, for *at least one hour daily* is around 24%. Among respondents reporting that they use desktop computers for the purpose of playing games 21.7% uses desktops for gaming for at least one hour (daily). Finally, approximately 32% of tablet user respondents use tablets for gaming for at least an hour daily. Loosing “at least one hour” condition in playing games, students prefer tablet, laptop and desktop respectively.

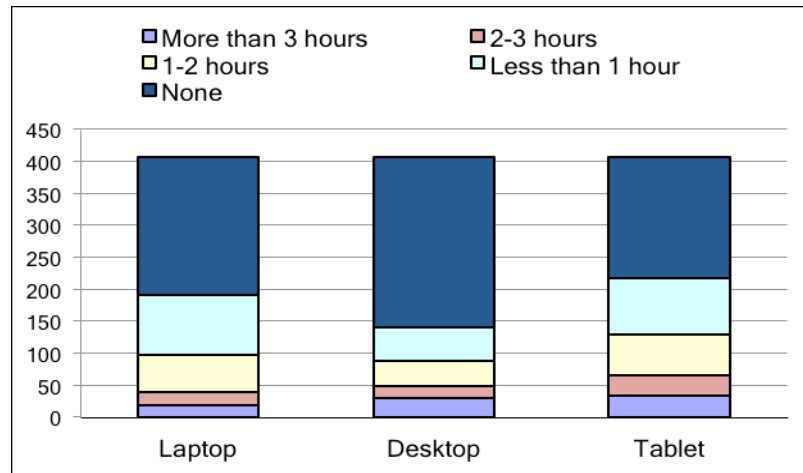


Figure 7. Number of students using *desktop/laptop/tablet* for *playing games* and corresponding *daily usage durations* (n=406)

It is obvious from Figure 7 that tablets were the most popular choice (among the three type of IT's of interest) at the time of this questionnaire process.

As can also be checked from the pie-charts below (Figure 8, 9 and 10), among the respondents, who declared that they play games using *laptop*, *desktop* or *tablet* computers, corresponding percentages of *at least one hour daily usage period for gaming* are 51%, 62%, and 32% respectively.

More than half of the laptop users of the population do not prefer to play games on laptops. This interesting result is obvious from the raw data given in Table 8 and in stacked bar chart and pie chart demonstrated in Figures 7 and 8, respectively. Among the respondents who reported that they use laptops for gaming purposes, daily usage of “*More than 2 hours*” is only around 10% (Figure 8).

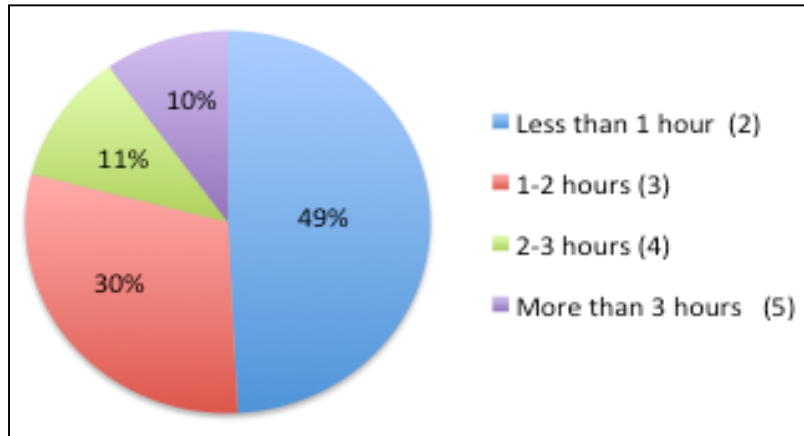


Figure 8. Durations (and corresponding percentages) of laptop usage for respondents who reported laptops as one of their computer type preferences for playing games

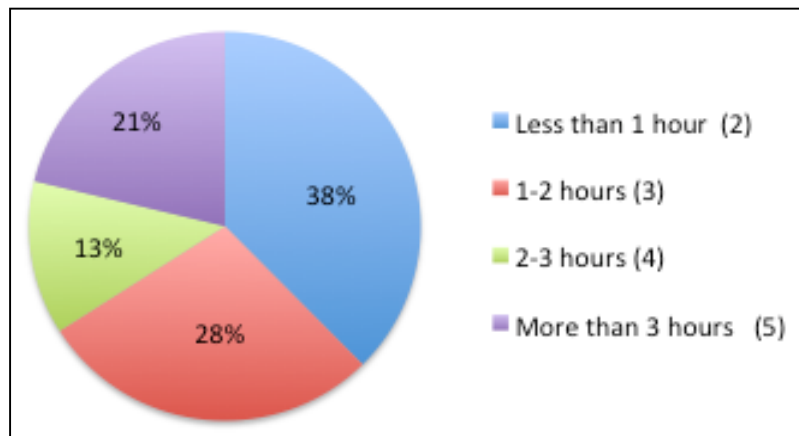


Figure 9. Durations (and corresponding percentages) of desktop usage for respondents who reported desktops as one of their computer type preferences for playing games.

Upon checking the percentages of durations spent for playing games on desktop computers, it is clear that desktops are not the most preferred option for gaming purposes as well. Among the respondents who reported that they use desktop computers for playing games approximately 21% have a daily usage of “*More than 3 hours*” (Figure 9).

Leading IT among the three mentioned types in prolonged daily usage for gaming is tablet computers category. Upon checking the questionnaire results, nearly half of the

respondents do not use tablets for gaming (Figure 10a). However, when details are checked, among the respondents who reported that tablets are among their IT preferences for gaming, 30% have an approximate daily usage of “*More than 2 hours*” (Figure 10b).

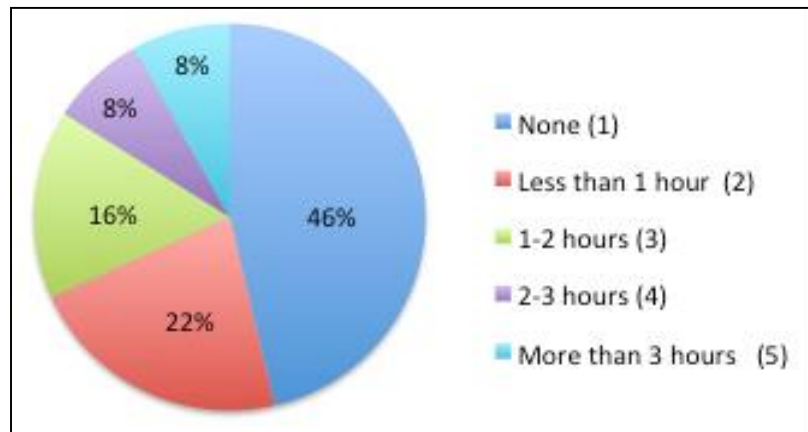


Figure 10a. Durations (& corresponding percentages) of *tablet usage* for all respondents for *playing games*

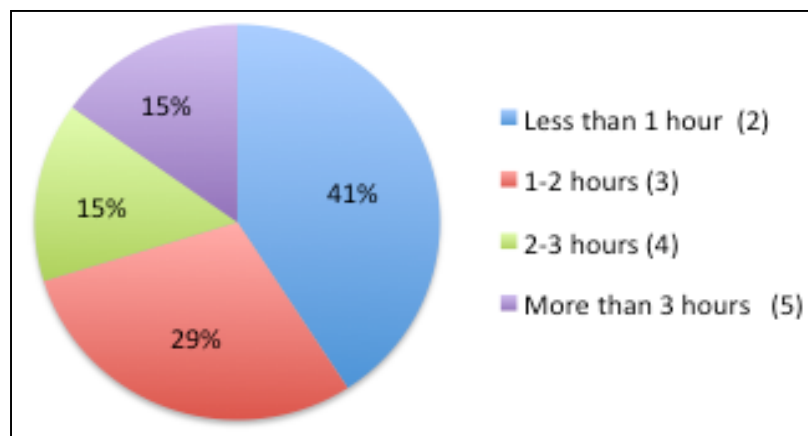


Figure 10b. Durations (& corresponding percentages) of *tablet usage* for respondents who reported tablet as one of their IT type preferences for *gaming* purposes

As can be seen from the summary table of usage durations below (Table 9), more than half of the respondent students (nearly 56%) reported that they use laptop for “watching films or TV series” during a typical day. Furthermore, when the duration

of use for “watching films” is of interest, nearly 37% (Table 9, Figure 11) of all respondents provided that they use *laptop* for “*watching films or TV series*” for at *least one hour daily*.

Table 9. Summary table of *usage durations* with respect to “*Watching Films*”

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	44,09 179	18,72% 76	17,73% 72	11,82% 48	7,64% 31
Desktop	68,47 278	11,08% 45	10,34% 42	6,16% 25	3,94% 16
Tablet	63,55 258	13,79% 56	13,55% 55	4,43% 18	4,68% 19

Although they generally have a bigger screen advantage with respect to laptop and tablet computer options, unexpectedly, desktop computers are not preferred as tablet and laptop computers both in terms of preferring a technological device for “watching films or TV series” and in terms of total daily duration of “watching films or TV series” using that device (Table 9 and Figure 11).

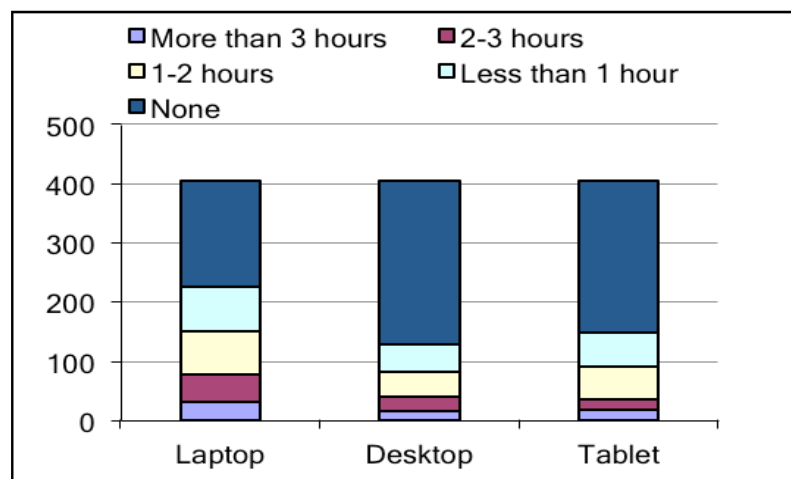


Figure 11. Number of students using *desktop/laptop/tablet* for *watching films or TV series* and corresponding *daily usage durations* (n=406)

In “watching films or TV series” category, a considerable number of respondents (37%), who reported that laptop computers are among their IT preferences, use laptops for at least an hour daily for this specific purpose (Table 9, Figure 12). Essentially, it can be concluded that laptop type computers are preferred more for “watching films or TV series” than the two other IT options (Figure 11) both in terms of usage durations and number of people preferring.

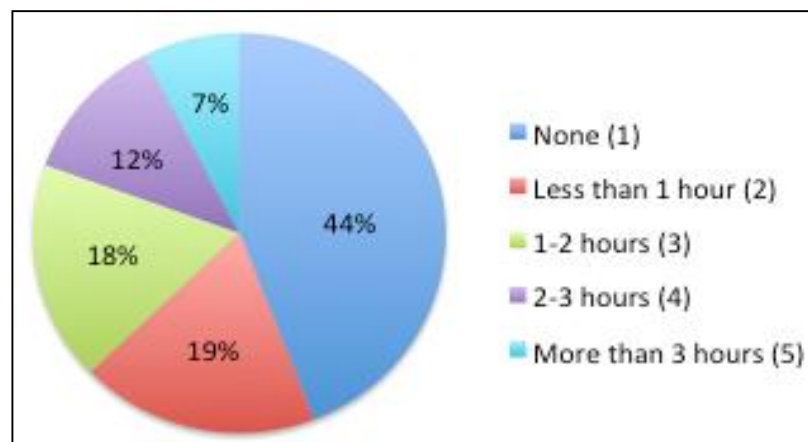


Figure 12. Durations (& corresponding percentages) of laptop usage of all respondents for watching films or TV series

Although majority of the students stated that they do not prefer desktop computers and tablets to watch films (see the stacked bar chart above in Figure 11), we can see the distribution of all respondents in addition to distribution of respondents who reported desktops/tablets as one of their computer preferences for watching films or TV series from the pie charts in (Figure 13a & b and Figure 14a & b).

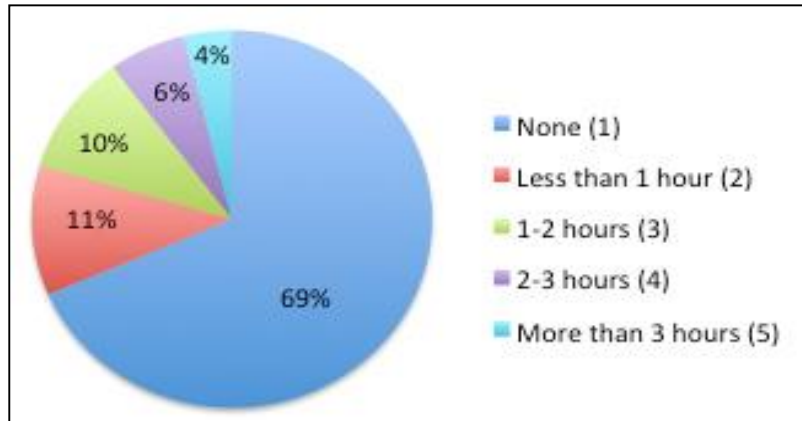


Figure 13a. Durations (& corresponding percentages) of desktop usage of all respondents for watching films or TV series

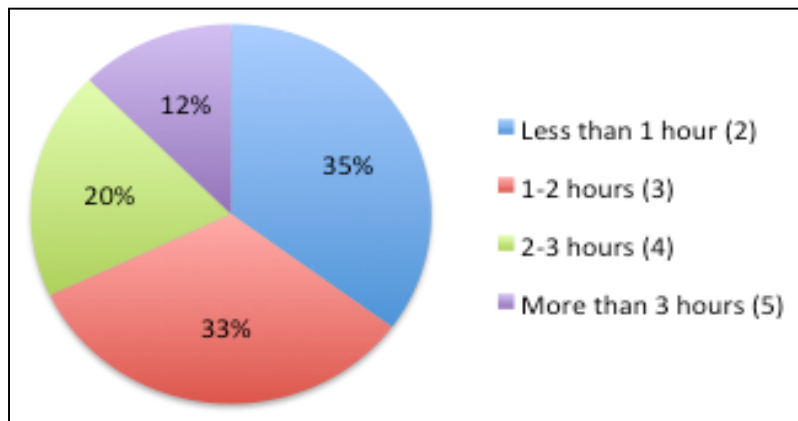


Figure 13b. Durations (and corresponding percentages) of desktop usage of respondents who reported desktops as one of their computer type preferences for watching films or TV series

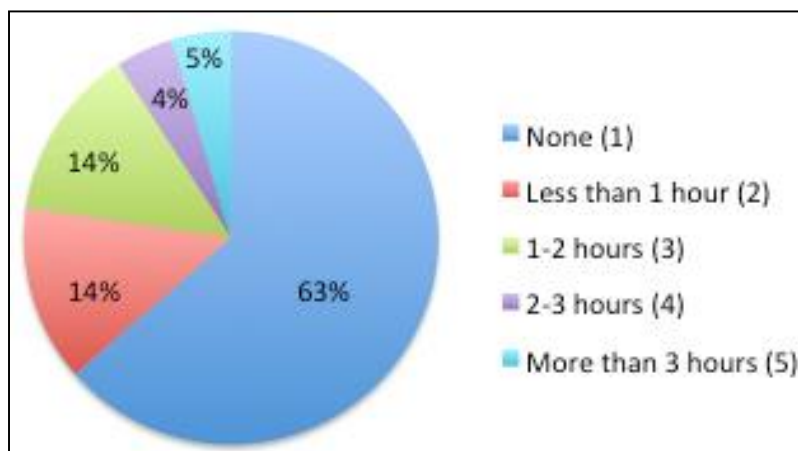


Figure 14a. Durations (& corresponding percentages) of tablet usage for all respondents for watching films or TV series

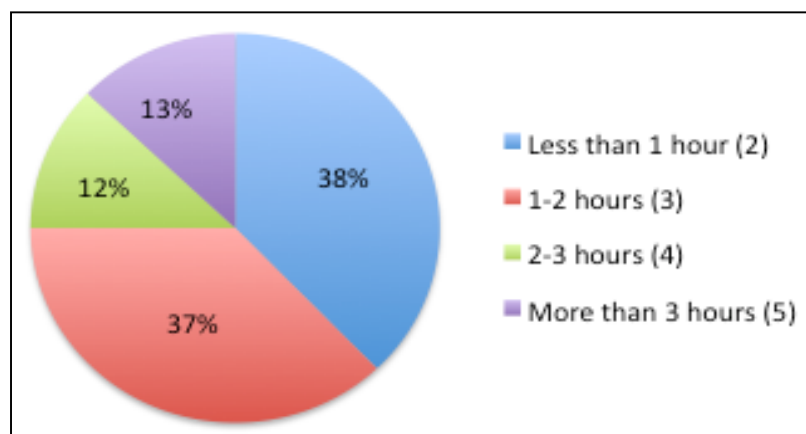


Figure 14b. Durations (and corresponding percentages) of *tablet usage* for respondents who reported tablets as one of their computer type preferences for *watching films or TV series*

If one or more of the mentioned technologies are supporting or facilitating formal education at schools, that IT type(s) (desktop/laptop/tablet) cannot be isolated to be used at schools only. However, from the data drawn from this questionnaire with 406 respondents, it is obvious that most of the students declared that they do not use any of laptop/desktop/tablet computers for studying outside the school (the first column of Table 10 below). It should be noted that, when the respondent students use one or more of the mentioned technologies for studying outside the school, obviously majority declared that they prefer laptop computers (Figure 15 and Table 10).

Table 10. Summary table for *usage durations* with respect to “*studying with - laptop/desktop/tablet outside school*”

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	52,46 213	25,62% 104	16,26% 66	3,45% 14	2,22% 9
Desktop	71,67 291	13,79% 56	8,37% 34	3,45% 14	2,71% 11
Tablet	65,52 266	19,95% 81	7,64% 31	3,94% 16	2,96% 12

On the other hand, desktop computers were observed to be the least preferred IT type for studying purposes outside school (Figure 15, 16 and Table 10).

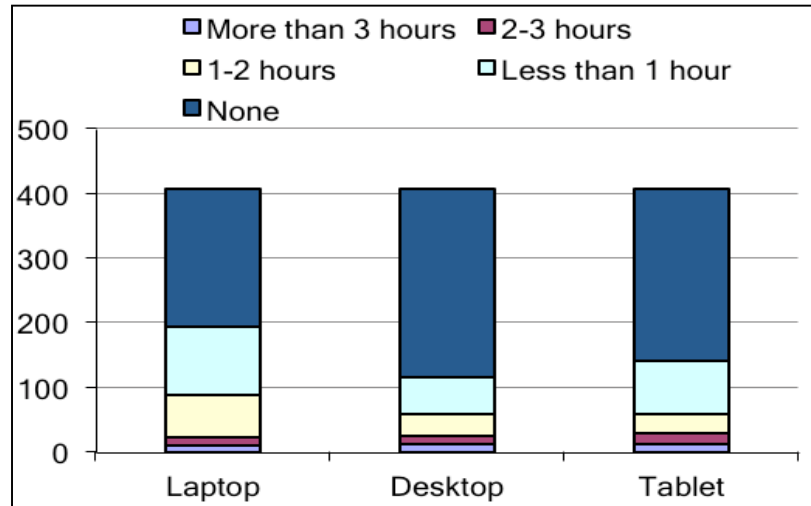


Figure 15. Number of students using *desktop/laptop/tablet* for *studying outside school* and corresponding *daily usage durations* (n=406)

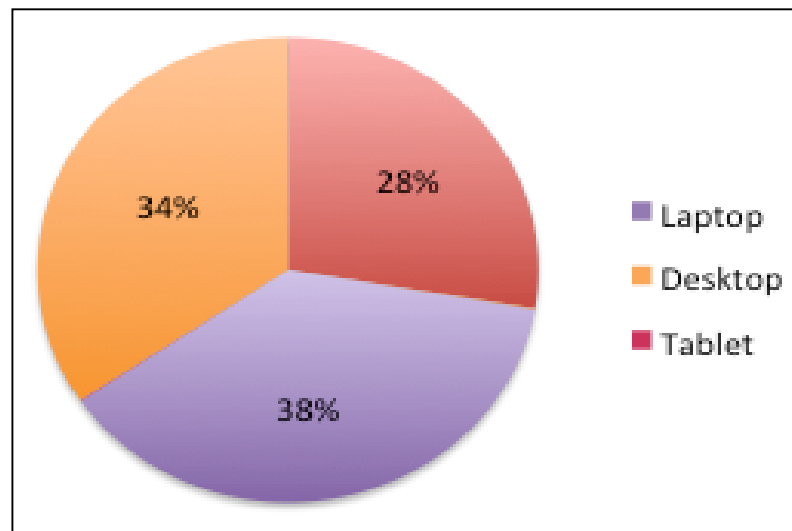


Figure 16. *Laptop/desktop/tablet preferences* drawn from the answers of respondent students who declared that they use one or more of the mentioned technologies for *studying outside the school*

Among the respondent students, who use one or more of the mentioned technologies for studying outside the school, for the ones who reported *laptop computers* as one of their computer type preferences for “*studying outside school*” nearly 46% uses

laptop *daily* for at least *more than an hour* and *12%* uses laptops *daily* for *at least 2 hours*. This can be clearer by examining the pie chart in Figure 17 below.

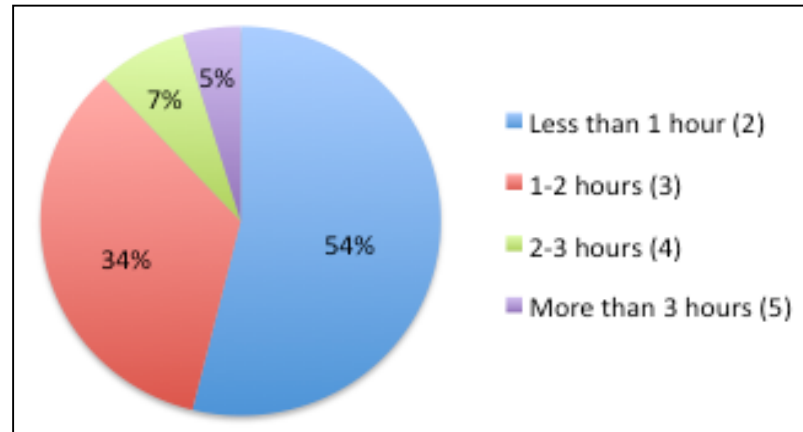


Figure 17. Durations (and corresponding percentages) of *laptop usage* for respondents who reported laptops as one of their computer type preferences for *studying outside school*

The students, who reported desktop computers as of their preferences for studying outside school, nearly 51% uses desktops daily for at least more than an hour (Figure 18).

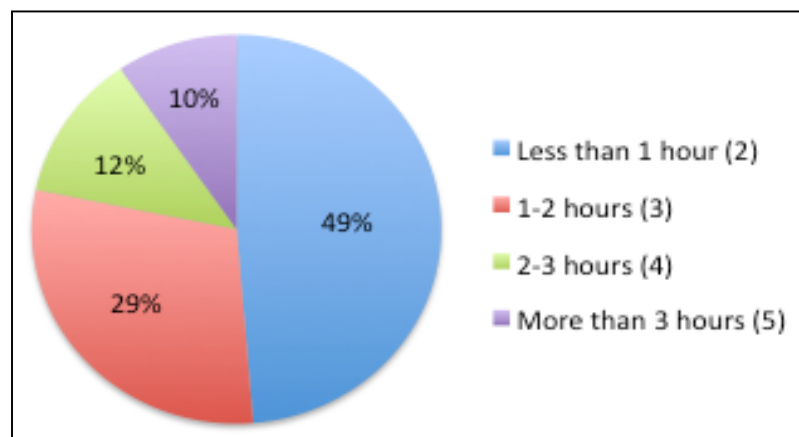


Figure 18. Durations (and corresponding percentages) of *desktop usage* for respondents who *reported desktops as one of their computer type preferences* for *studying outside school*

In addition, it is obvious from the pie chart in the above mentioned figure that 10% of total respondents, who reported desktops as one of their preferences for the purpose of studying outside school, use desktops for this purpose more than 3 hours.

As can be seen in Figure 19a, below, and in the stacked bar chart presented in Figure 15 nearly 65.5% of the respondents do not prefer tablet computers for studying outside schools. In addition, among the ones who use tablets for studying outside school, 58% uses them for less than an hour daily (Please see Figure 19b).

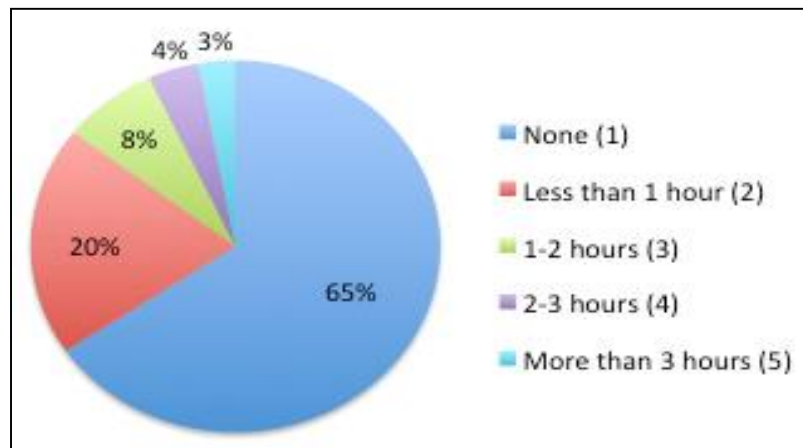


Figure 19a. Durations (& corresponding percentages) of tablet usage for all respondents for studying outside school.

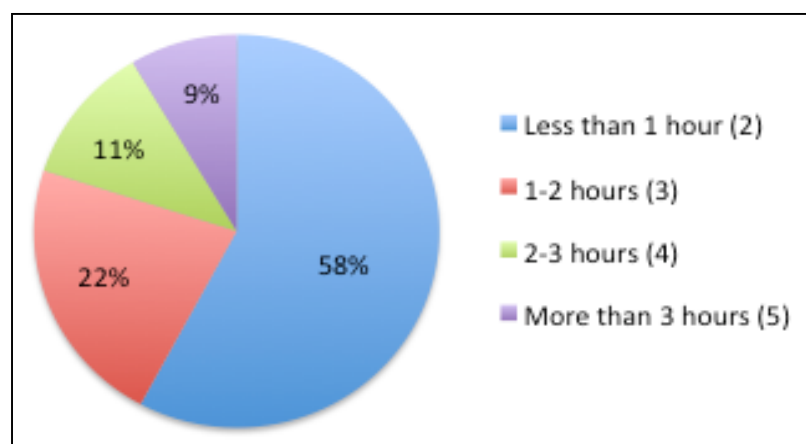


Figure 19b. Durations (and corresponding percentages) of tablet usage for respondents who reported tablets as one of their computer type preferences for studying outside school.

From the following summary table (Table 11), it can be concluded that at least 14% of the respondent students stated that they do not use any of the three types of computers (desktops/laptops/tablets) at schools for lecture purposes. While the least preferred IT type to be used at school for studying is tablet computers, desktop computers are the most preferred one (Table 11, Figure 20).

Table 11. Summary table for *usage durations* with respect to “*using laptop/desktop/tablet at school for lectures*”

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)	% Total usage
Laptop	72,41% 294	16,01% 65	7,64% 31	1,97% 8	1,97% 8	27,59%
Desktop	62,56% 254	24,88% 101	8,87% 36	2,22% 9	1,48% 6	37,44%
Tablet	79,31% 322	13,05% 53	4,68% 19	0,99% 4	1,97% 8	20,69%

Although not with a high number of users, the most preferred IT type to be used at school for lecture purposes is desktop computers (as mentioned before). Actually, this is not surprising because although in the country that this study took place (northern Cyprus) nearly all schools have computer laboratories and teachers have the opportunity to provide practice opportunities to their students using desktop computers (if students bring their laptops or tablets, it is not forbidden to be used in the laboratory exercises), however it should not be forgotten that computer practices should neither be done in all courses nor everyday.

According to results of this questionnaire, tablets are the least used computer type used for studying at schools, whereas almost one third (nearly 28%) of the students reported that they use laptops for lectures at school. This percentage is more than

34% for desktop computers. Both the stacked bar chart above (Figure 20) and the summary table (Table 11) can help to present this fact.

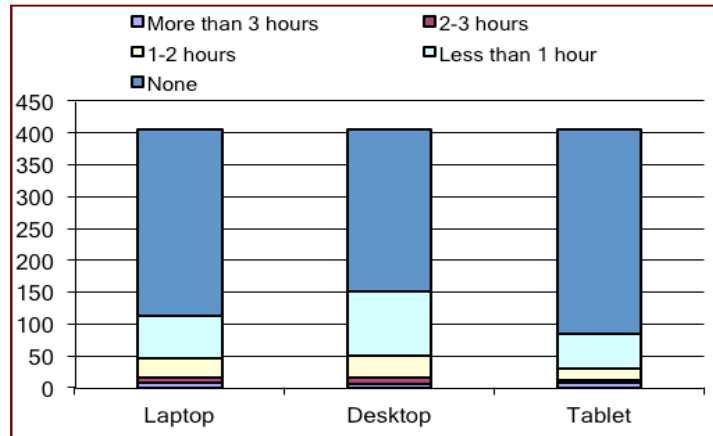


Figure 20. Number of students using desktop/laptop/tablet for studying at school and corresponding daily usage durations. (n=406)

Among those who stated that they use laptop computers at school for studying purposes (27.6%), 42% uses it for at least one hour daily (Figure 21). While between the respondents who declared desktop computers as one of their preferences for the same purpose, 34% uses desktops for at least one hour daily (Figure 22).

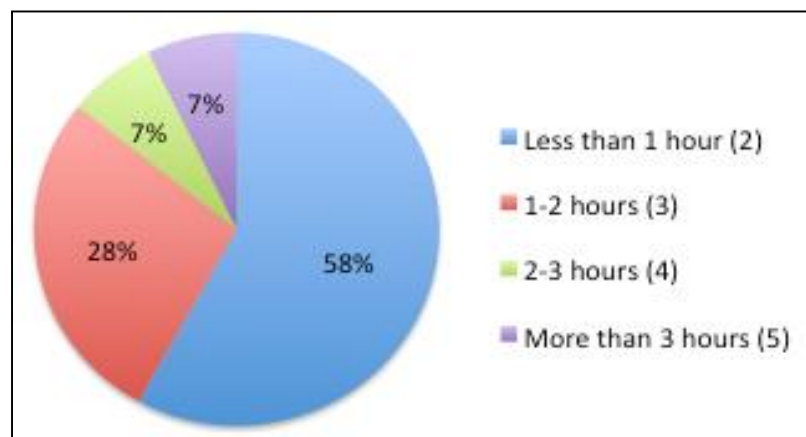


Figure 21. Durations (and corresponding percentages) of laptop usage for respondents who reported laptops as one of their computer type preferences for studying at school.

Although laptops are not the most preferred IT type, it has a higher percentage with respect to usage duration at school for lecture purposes. This is most probably due to the fact that as laptops are privately owned by students, not a service of school that can only be used at laboratories (Students, can take notes about their homework using their laptops, work in the break time for preparation for the next lecture hour etc.)

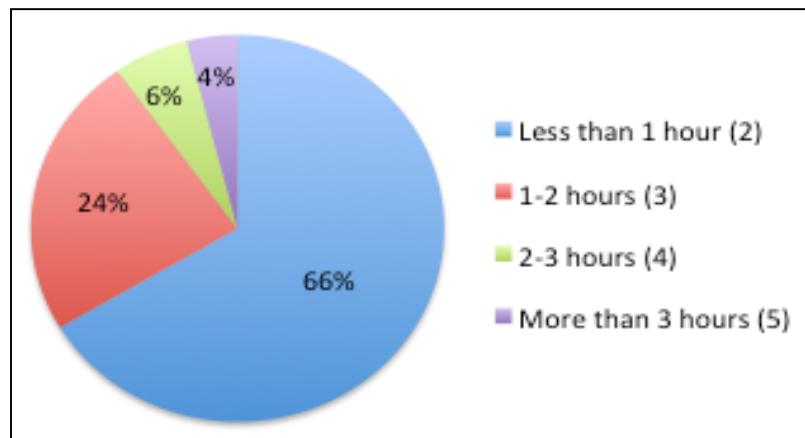


Figure 22. Durations (and corresponding percentages) of desktop usage for respondents who reported desktops as one of their computer type preferences for studying at school.

Next dominant reason in our list is “Internet surfing”, prognosticatively the most preferred IT type is tablet computer, and tablets are followed by laptops and desktops respectively.

Examining the data form another perspective, which can be use of one type of technology for “more than 2 hours” tablets are still the leader (Table 12 – summing up “2-3 hours” and “more than 3 hours” categories of tablet usage). In other words, among the respondent students who reported tablets as one of the technologies they use for Internet surfing, 19,21%, reported that they use tablets for more than 2 hours daily (Table 12 and Figure 27).

Table 12. Summary table for *usage durations* with respect to “*using laptop/desktop/tablet for internet surfing*”

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	46,80 190	21,92% 89	16,50% 67	6,90% 28	7,88% 32
Desktop	68,97 280	11,58% 47	11,08% 45	3,20% 13	5,17% 21
Tablet	45,07 183	17,49% 71	18,23% 74	8,87% 36	10,34% 42

If one checks the percentages in the “None” column of the Table 12 (here, none means that the type of technology mentioned in the following rows is not preferred (or used) by the respondents), it can easily be observed that usage ratio of laptops and tablets are really close (The percentage for tablets is 46,80% and the percentage for laptops is 45.07%). This can also be seen clearly in Figures 23 and 24. After examining these figures it can easily be concluded that according to the results of our questionnaire, desktop type computers were not a preferred type for Internet surfing at the time of this questionnaire process.

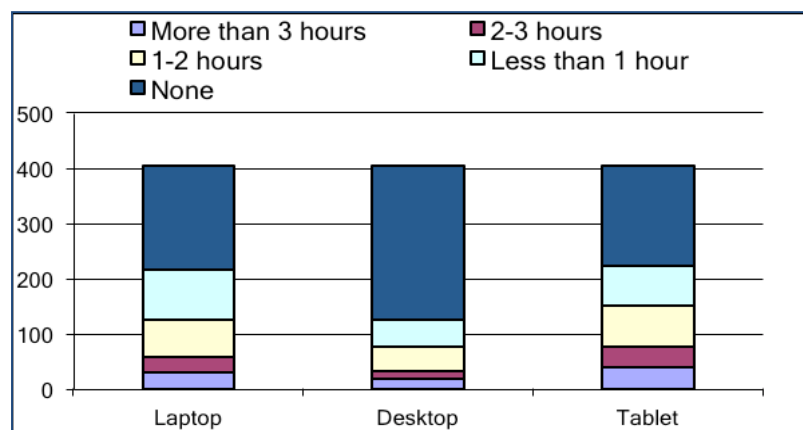


Figure 23. Number of students using *desktop/laptop/tablet* for *Internet surfing* and corresponding *daily usage durations* (n=406)

In short, Figure 24 makes it obvious that tablets and laptops are preferred more than desktops in terms of number of users. The reason of higher preference percentages of tablet and laptop computers for Internet surfing purposes than desktop option can be its lightweight, portable form and widespread, easy, cheap or even free Internet access.

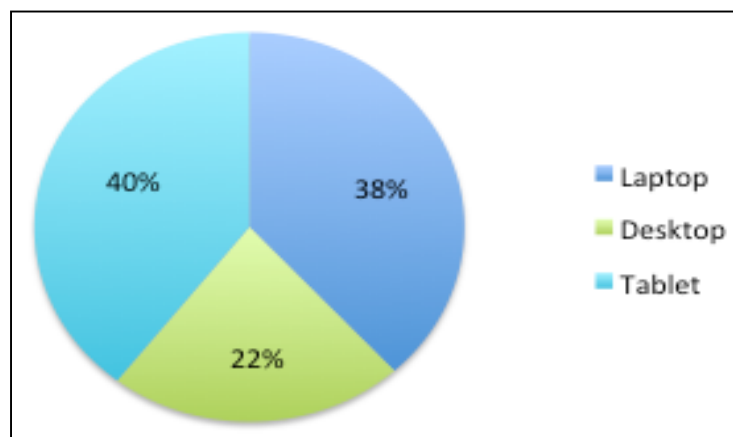


Figure 24. *Laptop/desktop/tablet preferences* drawn from the answers of respondent students who declared that they use one or more of the mentioned technologies for *Internet surfing*

The pie charts shown in Figure 25, 26, and 27 represent the usage percentages of respondents who use laptops, desktops and tablets as one of their IT type preferences, respectively. Examining the pie charts, with the perspective of using *at least one computer type* for *more than 2 hours daily*, percentages are considerable 28%, 27% and 35% (laptop, desktop, tablet, respectively). These percentages are considered considerably high because it should not be forgotten that the respondents who *uses one type of technology for more than 2 hours daily, may also use one or both of the other two technologies for longer or shorter durations for the same or other purposes daily.*

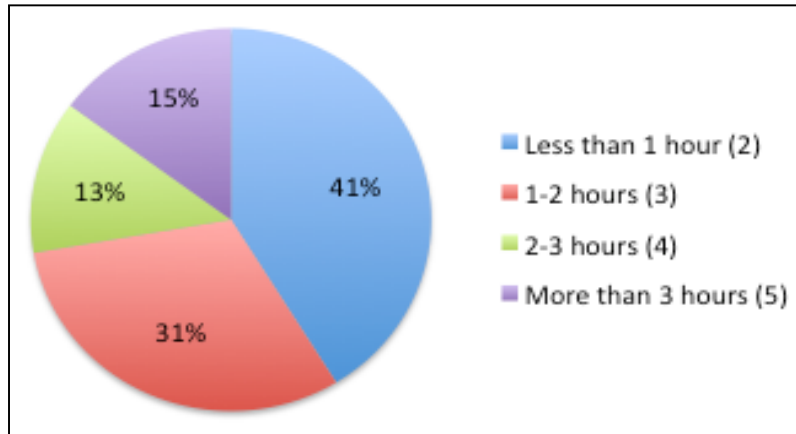


Figure 25. Durations (and corresponding percentages) of laptop usage for respondents who reported laptops as one of their computer type preferences for Internet surfing.

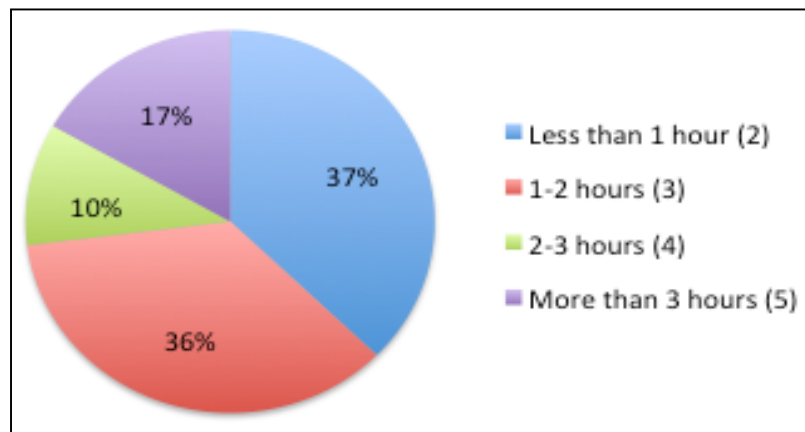


Figure 26. Durations (and corresponding percentages) of desktop usage for respondents who reported desktops as one of their computer type preferences for Internet surfing.

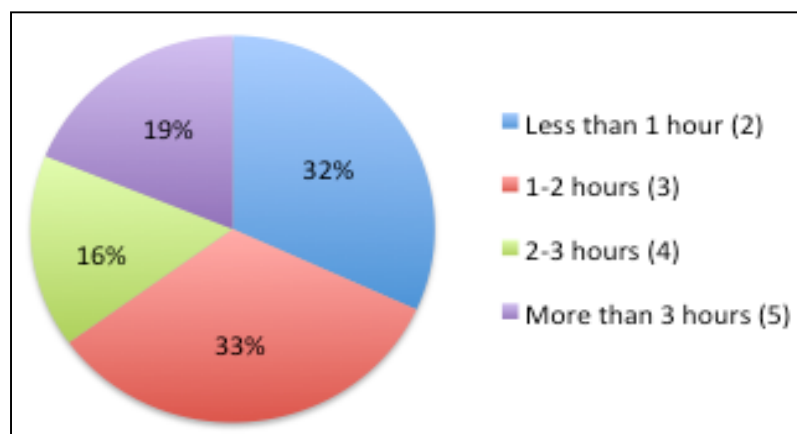


Figure 27. Durations (and corresponding percentages) of tablet usage for respondents who reported tablets as one of their computer type preferences for Internet surfing.

Table below summarizes the usage distribution and usage durations of the respondents with respect to the reading purposes (Table 13). At a glance, it can be understood that reading is not a popular activity to realize with any of our technologies (laptop/desktop/tablet). Although majority reported that they do not use the mentioned technologies for reading purposes, prognosticatively tablet computers are preferred more than the two other options (among the respondents who uses the mentioned technologies for reading purposes). The reason may be their small-size (which makes them easily portable), their ability to imitate the reading experience of real books with some gestures on the touchscreen, being easy to carry, and being sold with affordable prices, etc. Only 24.64% of all respondents use laptops, 17.98% of all respondents use desktops and 37.69% of all respondents use tablets for reading purposes.

Table 13. Summary table for *usage durations* with respect to “*reading*” purposes

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	75,37 306	14,78% 60	6,16% 25	2,71% 11	0,99% 4
Desktop	82,02 333	12,32% 50	3,69% 15	1,23% 5	0,74% 3
Tablet	62,32 253	19,95% 81	12,32% 50	2,22% 9	3,20% 13

Apart from the fact that majority of the respondents do not prefer laptops, desktops, tablets for reading purposes, data presented in Table 13 also illustrates that *most* of the students who uses one or more of these technologies for reading purposes use them for less than an hour per day (Figures 28, 29 and 30).

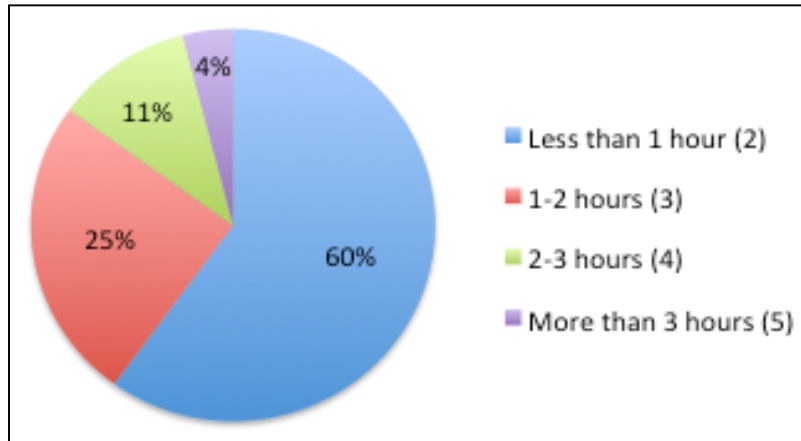


Figure 28. Durations (and corresponding percentages) of laptop usage for respondents who reported laptops as one of their computer type preferences for reading purposes.

In addition to the fact that the majority of respondent students do not use listed IT types for reading purposes, 60% of 100 respondents who reported that they use laptops for reading use laptops for reading purposes for less than an hour (daily).

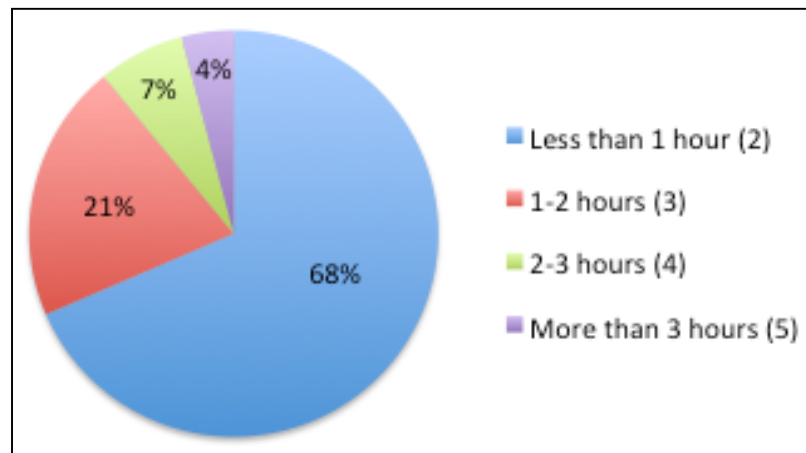


Figure 29. Durations (and corresponding percentages) of desktop usage for respondents who reported desktops as one of their computer type preferences for reading purposes.

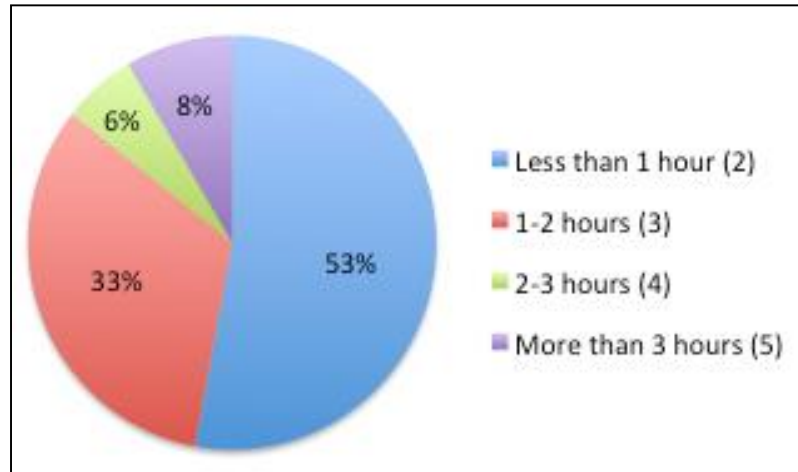


Figure 30. Durations (and corresponding percentages) of *tablet usage* for respondents who *reported tablets as one of their computer type preferences for reading purposes*.

Similarly, Table 14 summarizes laptop, desktop and tablet usage (in numbers and percentages) with respect to usage preferences and durations of the respondent students for the purpose of “writing”.

Table 14. Summary table for usage durations with respect to “*writing*” purposes

	None (1)	Less than 1 hour (2)	1-2 hours (3)	2-3 hours (4)	More than 3 hours (5)
Laptop	66,50 270	20,94% 85	8,37% 34	1,97% 8	2,22% 9
Desktop	78,57 319	11,82% 48	6,90% 28	1,23% 5	1,48% 6
Tablet	74,63 303	13,05% 53	7,88% 32	1,72% 7	2,71% 11

Similar to the “reading” category, majority of the respondents provided that they do not prefer laptops, desktops, tablets for *writing purposes*. Among those who stated that they use one or more of these technologies for writing, *laptops are the most preferred computer type* as for the results of this questionnaire.

Examining results of Question 7 (a), (b) and (c) which asks about the mostly preferred location for using desktops, laptops, tablets respectively. (Question numbers mentioned throughout the text are consistent with the printed versions of the questionnaire, not the online version) Table 15 summarizes the results of Question 7.

Table 15. Place of use - Question 7 (a), (b), (c)

Place of use	Desktop	Laptop	Tablet
	(a)	(b)	(c)
None (don't use)	35,0%	21,7%	26,4%
At home	39,2%	73,4%	59,6%
At school	20,9%	0,49%	3,7%
Other	4,9%	4,43%	10,3%

The following pie charts are representing the most preferred locations of use (for desktop, laptop, tablet respectively). Figures 31, 32 and 33 are about the usage habits of the participants.

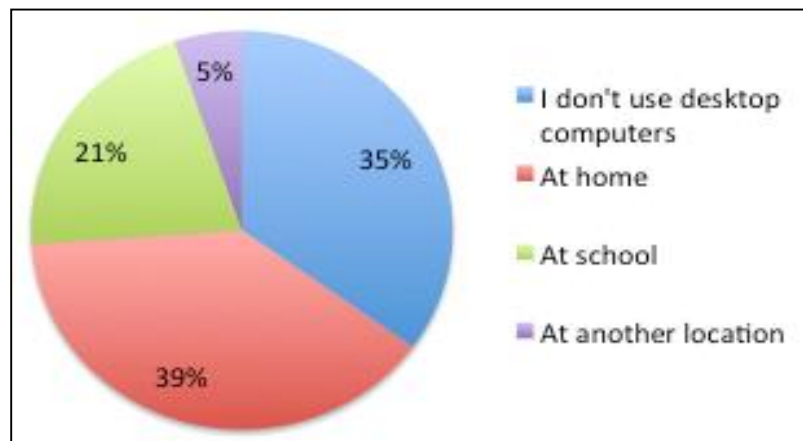


Figure 31. The pie chart showing the most preferred location for desktops – question 7 (a), “*Where do you mostly use desktops?*”

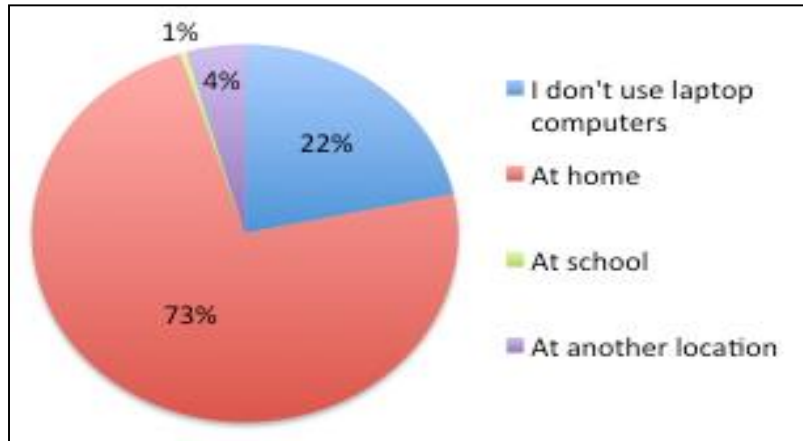


Figure 32. The pie chart showing “the most preferred location” for laptops – question 7 (b), “*Where do you mostly use laptops?*”

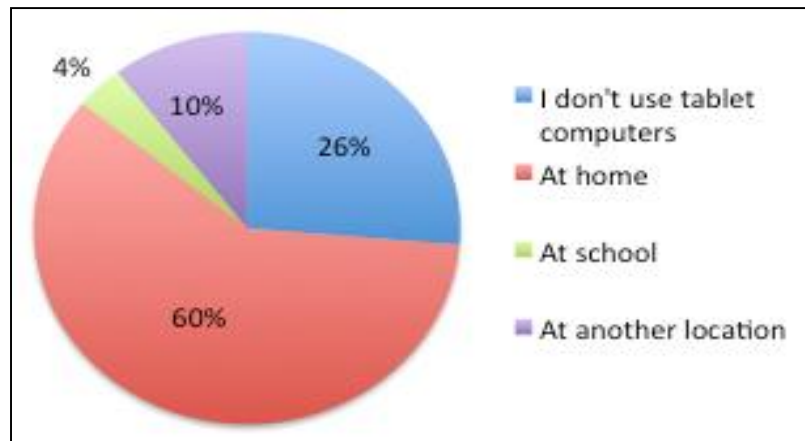


Figure 33. The pie chart showing “the most preferred location” for tablets – question 7 (b), “*Where do you mostly use tablets?*”

The question directed to the participants was asking their most preferred locations for using desktops, laptops, and tablets respectively. Checking the results from the mentioned figures, it is obvious that the most common preferred location among all participants is home setting (39% - for desktops, 73% - for laptops, 60% - for tablets). This result also supports the deduction of Harris *et al.* (2015) that students use computers at home more frequently than other places of use.

If “not used IT types” are removed from IT type preferences of respondents to reach corrected percentages, it is even more obvious that home settings are the most preferred locations (Figure 34). In spite of the fact that Laptop Computers are portable devices, majority of our respondents prefers to use these devices at home (94%). Corrected percentages corresponding to other location options for laptop computers can be seen in Figure 34 below.

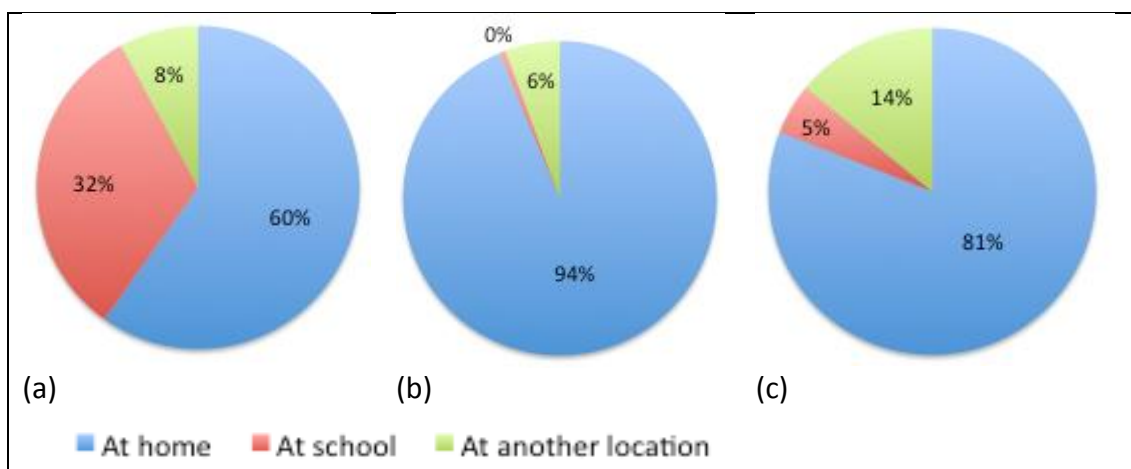


Figure 34. The pie charts showing the most preferred locations to the question 7 “Where do you mostly use desktops/laptops/tablets?” excluding “not used IT types”

Considering the fact that most of the respondents who use laptop reported that they use their devices at home, here we should underline the fact that the setting that the respondent uses the laptop (or desktop or tablet) at home should be considered as well. Because, using a laptop on the lap, on a table setting really matters and at home there is no control even on the postures.

Similarly using a desktop with a setting that was designed for an adult or using a tablet for long durations holding it with one-hand matters. Harris (2010) recommends that when studying on children’s computer exposure, home environment must also

be considered and Harris et al. (2005) claimed that different associations between risk factors and musculoskeletal outcomes for children are possible because the musculoskeletal systems of children and adults are different.

The following bar charts (Figures 35, 36 and 37) illustrates the details of answers given to “at another location” choice for Questionnaire question 7(a), 7(b), 7(c).

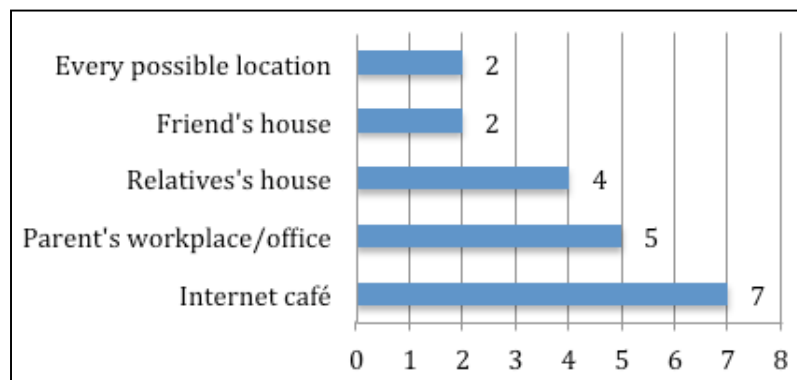


Figure 35. The answers that were categorized as “*at another location*” (for the respondent who use *desktops*)

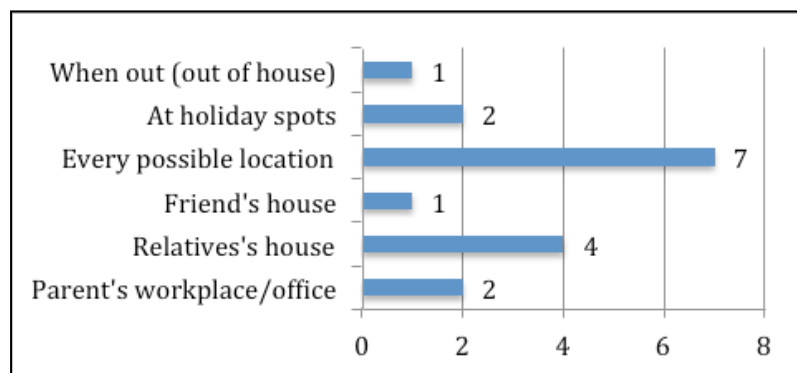


Figure 36. The answers that were categorized as “*at another location*” (for the respondent who use *laptops*)

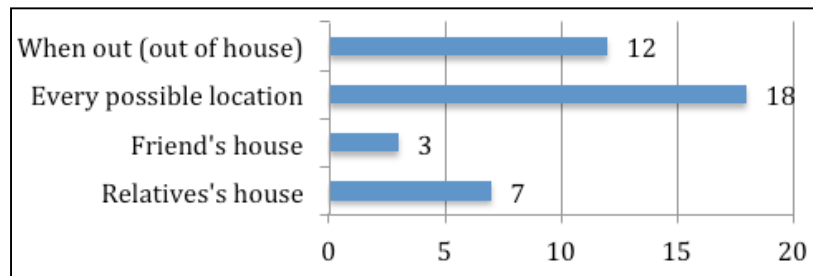


Figure 37. The answers that were categorized as “*at another location*” (for the respondent who use *tablets*)

As laptops are portable devices, therefore it is not a surprise that respondent students had answers as “Every possible location”. In addition, as expected, tablets are smaller in size and less in weight, in other words they are even easier to carry and therefore “Every possible location” answer from tablet user respondents are more (refer to Figures 36 and 37).

Results of Question 8, which was examining *total years of exposure* to the technologies under question, indicates that *for each category* (desktop/laptop/tablet) *most of the users “have been using the technology” for at least a year*. For instance, 55% of the respondents have stated that they have been using desktop computers for at least a year (*min: 1 year, max: 15 years, mean: 5,57 years*), while 67,5% of the students have reported that they have been using laptop computers for at least a year (*min: 1 year, max: 15 years, mean: 3,40 years*). 58% of the respondents stated that they have been using tablets for at least a year (*min: 1 year, max: 10 years, mean: 3,37 years*). Table 16, showing cumulative years of exposures to the technologies under question can be helpful in understanding years of desktop, laptop, tablet usage (YODU, YOLU, YOTU – as variable names).

Table 16. Total years of exposure to each type of technology under question

Total years of exposure to:	Response % according to categories
<u>Desktop Computers</u>	
I don't use desktop computers	35,0%
I have been using desktop computer for less than a year	9,6%
I have been using desktop computers for ____ years	55,4%
<u>Laptop Computers</u>	
I don't use laptop computers	21,4%
I have been using laptop computer for less than a year	11,1%
I have been using laptop computers for ____ years	67,5%
<u>Tablet Computers</u>	
I don't use tablet computers	26,8%
I have been using tablet computer for less than a year	15,5%
I have been using tablet computers for ____ years	57,6%

There are studies in literature, which study the association of musculoskeletal outcomes and exposure of children to different types of IT (Harris and Straker (2000), Harris and Courtenay (2010), Harris *et al.* (2012), Harris *et al.* (2015)). These studies are mostly assessing frequency and duration of regular exposure. However, long-term exposure can also be an important factor contributing to musculoskeletal discomfort. Unfortunately, due to the monetary and time related restrictions this study was not able to keep track of the musculoskeletal outcomes of the same group of student for a few years. Therefore, only self-reported “total years of exposure information” was gathered through the questionnaire study to check if there is a clue that cumulative years of exposure has statistically significant relationship with experienced discomfort.

Table 17. Feelings experienced by respondent students while using desktops or laptops

Frustration	25
Excitement	98
Amazement	34
Surprise	31
Anger	34
Irritation	28
Confusion	33
Nervousness	22
Happiness	179
Other	75

Table 18. Feelings experienced by respondent students while using tablets

Frustration	25
Excitement	117
Amazement	38
Surprise	48
Anger	54
Irritation	21
Confusion	36
Nervousness	27
Happiness	181
Other	57

The correlation assessment realized using the statistics Add-in of Ms. Excel (statistical significance 0,05) is also included to the thesis CD data output files. The data obtained through the questionnaire study, could not provide us any clue for a strong significant relationship between YOLU, YOTU, YODU variables and the variables related to experience of ache/pain/discomfort in the body regions shown in the body map shown in Figure 1. In other words, Hypothesis 3 fails because data does not provide and proof of relationship between years of use of the technologies under question and self-reported discomfort/ache/pain. Here, it will be appropriate to mention that Gillespie (2006) also underlined the importance of checking the correlation of long-term exposure and musculoskeletal discomfort. In the correlation

analysis, it is clear that not only the “years of exposure” variables but also all other independent variables like “*feelings experienced by respondent students while using desktops/laptops/tablets*” (Table 17 and 18), “*daily usage of the IT types under question*” etc. could not prove any high correlation with the binary dependent variable asking if any discomfort was experienced during the past week in any mentioned body region (Figure 1).

With respect to smartphone usage, the elated question just aimed to learn if there is an extended hours of usage experienced everyday. Unfortunately, as can be clearly seen from Table 19 nearly 43% of the respondents have declared that they have a smart phone usage for *extended periods everyday*.

Table 19. About the respondents with extended hours of smartphone usage

<i>Long hours of smart phone usage (daily)?</i>	
	57,39%
NO	233
	42,61%
YES (approximately ____ hours).	173

Concluding this section of the text some statistics that are really impressive worth mentioning again: The first part of the questionnaire study implies that 70% of the respondent students use *tablets, everyday*. In addition, nearly 44% of respondent students use *at least one of the desktop/laptop/tablet computers **for at least one activity for more than 3 hours daily***. Although, smartphones are another topic that should be studied in detail related statistic is also significant, which is “nearly 43% of the respondents have declared that they have a *daily smart phone* usage for *long hours*.”

3.3.1.4.2 A Study of Correlations Between Variables.

There is a marked (obvious) degree of positive correlation with a 0,05 significance level (ULC and LPOMU - nearly 0,66) between laptop user respondents and the environment they use laptops. 94,03% of laptop users prefers home environment to use their laptop for the activities listed throughout the questionnaire form. Similarly, according to the correlation coefficients of the two variables (UDC and DPOMU – nearly 0,67) there is a marked degree of correlation and checking the answers of respondents nearly 63.05% of desktop user respondents prefers home environment to use their desktops. This finding supports suggestion of Harris (2010) home environment must also be considered when computer exposure is in question.

Some other correlations between variables that worth mentioning are as follows: There is a moderate degree of positive correlation (nearly 0,47) between laptop user respondents (ULC) and reported daily duration of laptop use for communication purposes (CL). Similarly, there are moderate degree of positive correlation (nearly 0,42) between desktop user respondents (UDC) and reported daily duration of desktop use for communication purposes (CD) and between tablet user respondents (UTC) and reported daily duration of tablet use for communication purposes (CT), with a correlation coefficient of nearly 0,52. Some of other interesting correlations between two variables are listed in Table 20.

Table 20. Degree of correlation of some variables

Variable 1	Variable 2	Degree of correlation
ULC	WFL	Moderate (positive)
UDC	WFD	Moderate (positive)
UDC	SASD	Moderate (positive)
ULC	ISL	Moderate (positive)

Excel's Correlation data analysis tool, facilitated the computation of pairwise correlation coefficients. However, pairwise comparisons are just realized for obvious correlations (although not high) assessed and tabled using the statistics Add-in of Microsoft Excel. Details of all correlations (in terms of correlation coefficients) between all variables can be found in the Extended Appendix (in the CD attached).

In addition to correlation study, discriminant analysis was also conducted to model dependent variables of interest, which is the frequency of pain/ache/discomfort experienced in the last 7 days for the body regions of interest (Table B2-4-neck, Table B2-5-shoulder, Table B2-6-upper back, Table B2-7-lower back, Table B2-8-forearm, Table B2-9-wrist), as a linear combination of the independent variables.

H_0 : Y does not depend on any of the x_i 's

H_1 : Y depends on at least one of the x_i 's

$$F = w_0 + w_1x_1 + w_2x_2 + \dots + w_6x_6 + r$$

The weights are the discriminant coefficients assigned to each independent variable; they can be called discriminant coefficients. In this case $i= 1, 2, \dots,6$ and r is the residual or error term. F is a variable that is a linear combination of the dependent variable. The objective of the analysis is to test if at least of the independent variables (x_i 's) significant on the dependent variable Y .

The aim of discriminant analysis performed at this stage is to create a discriminant function, which shows the significant factors affecting the variable data that is gathered for neck, shoulder, upper back, lower back, forearm, and wrist respectively

with the question “During the last week, how often did you experience ache, pain, or discomfort in the following body regions?”

Here, it is important to note that answers to the question that asks about sports and arts activities, is not involved in the analysis because this question was not filled in properly by most of the children (may be because either the question or the presentation of the question was unsuccessful).

Standard Canonical Discriminant Function coefficients of ADFN (ache or discomfort frequency - neck), ADFSR (ache or discomfort frequency - right shoulder), ADFUB (ache or discomfort frequency – upper back), ADFLB (ache or discomfort frequency – lower back), ADFFR (ache or discomfort frequency - right forearm), ADFWR (ache or discomfort frequency - right wrist) are presented in tables from Table B2-4 to B2-9. In other words, these tables indicate how heavily each independent variable is weighted in order to maximize discrimination of the independent variable of the model.

Considering Function 1, although not strongly the following variables are significant for “the frequency of pain/ache/discomfort experienced in the past 7 days”. Obviously, for the neck region DFH, PGL, RT, TFC, TFI, WFD are independent variables significant for the dependent variable. The Table 21 lists the independent variables that are significant for the dependent variable.

Table 21. Significant independent variables according to the represented model

For the frequency of pain/ache/discomfort experienced in	Significant Independent Variables
NECK region	DFH, PGL, RT, TFC, TFI, WFD
SHOULDER region	AIAI, AIB, AIS, AIUB, CL, LFN, PGL, RT, TFC, WFD
UPPER BACK region	DFH, DFN, DPOMU, LFAM, LPOMU, TechPref, SASD, SOSL
LOWER BACK region	AgeCat, DFH, DPOMU, LFAM, LFE, SexCat, SOSL
FOREARM region	DFN, DFO, LFN, LPOMU, PGL, TFC, TFE, TFH, WD
WRIST region	AIA, AIAF, AIWH, DFE, DFN, LFC, TFI, WFD

You may find the meanings of abbreviated variables used in the Discriminant Analysis in Table 22.

Table 22. Meanings of Abbreviated Variables used in Discriminant Analysis

Age cat	Age category	SASD	Uses Desktop for studying at school	YOTU	Cumulative years of usage - tablet
Sex cat	Sex category	SAST	Uses Tablet for studying at school	AIH	Last year - Accident - Head injury
Techpref cat	Technology preference(s)	ISL	Uses Laptop for Internet surfing	AIN	Last year - Accident - Neck injury
CL	Uses Laptop for Communication Purposes	ISD	Uses Desktop for Internet surfing	AIS	Last year - Accident - Shoulder injury
CD	Uses Desktop for Communication Purposes	IST	Uses Tablet for Internet surfing	AIUB	Last year - Accident - Upper back injury
CT	Uses Tablet for Communication Purposes	RL	Uses Laptop for reading purposes	AIE	Last year - Accident - Elbow injury
PGL	Uses Laptop for Gaming Purposes	RD	Uses Desktop for reading purposes	AIA	Last year - Accident - Arm injury
PGD	Uses Desktop for Gaming Purposes	RT	Uses Tablet for reading purposes	AIWH	Last year - Accident - Wrist/hand injury
PGT	Uses Tablet for Gaming Purposes	WL	Uses Laptop for writing purposes	AIB	Last year - Accident - Belly injury
WFL	Uses Laptop for Watching Films or TV series	WD	Uses Desktop for writing purposes	AILB	Last year - Accident - Lower back injury
WFD	Uses Desktop for Watching Films or TV series	WT	Uses Tablet for writing purposes	AIH	Last year - Accident - Hips injury
WFT	Uses Tablet for Watching Films or TV series	DPOMU	Most preferred location for desktop usage	AIG	Last year - Accident - Groin injury
SOSL	Uses Laptop for studying outside school	LPOMU	Most preferred location for laptop usage	AIL	Last year - Accident - Legs injury
SOSD	Uses Desktop for studying outside school	TPOMU	Most preferred location for tablet usage	AIK	Last year - Accident - Knees injury
SOST	Uses Tablet for studying outside school	YODU	Cumulative years of usage - desktop	AIAF	Last year - Accident - Ankles/feet injury
SASL	Uses Laptop for studying at school	YOLU	Cumulative years of usage - laptop	LHSPU	Long hours of daily smartphone usage

3.3.1.4.3 Analysis of Part 1 with a Focus on Tablet Users and Education

One of the most important details that take attention is that 70% of the respondent students are tablet users (Figure 38). This is a very high percentage when the fact that the long term physical impact of tablets are not known yet; and even worse is there is not much study that worked physical impacts of tablets on children and/or adolescents as mentioned Chapter 2.

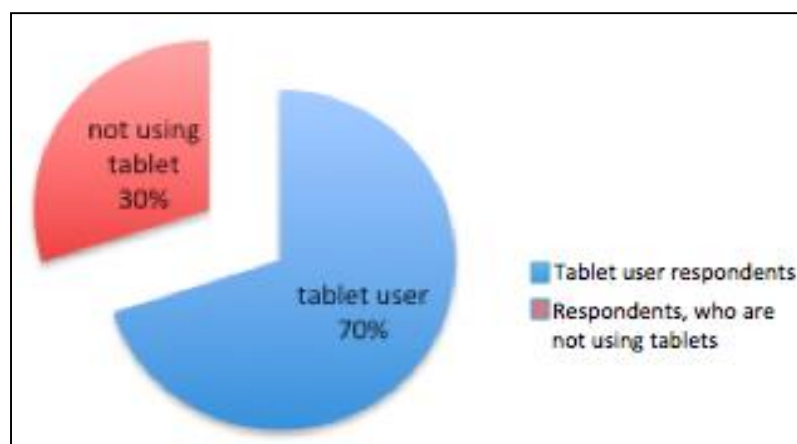


Figure 38. Tablet user respondent students

Another important point that worth mentioning is although tablets are portable enough to be used in any location, 60% of the tablet user respondents reported home as the location of use. Both Harris (2010) and Harris et al. (2015) has results inline with this high percentage.

The most disturbing part is home environment is open to many problematic postures that may disturb musculoskeletal health of children and/or adolescents both because home furniture is generally designed for adults (Harris et al. (2015)) and there is no control mechanism of posture at home environments whenever the child or teenager is using the tablet away from the other people at home.

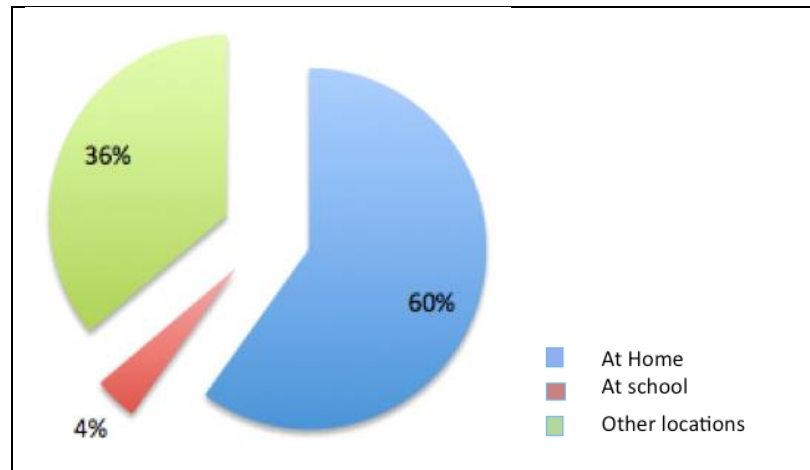


Figure 39. Location Preferences of tablet user respondent students

When we look at the results with educational use perspective, among the students who reported tablets as one of their preferences for *studying outside school* nearly 42% of these students reports that they use tablets for studying purposes (*educational*) *for at least 1 hour daily* (Remember Figure 19b).

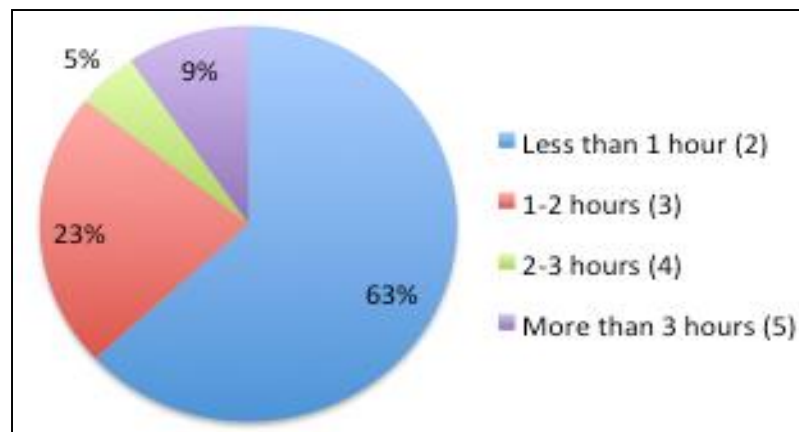


Figure 40. Durations (*and corresponding percentages*) of tablet usage of respondents who reported *tablets* as one of their computer type preferences for *studying at school* (only 84 students out of 406)

After listing all other *daily educational tablet usage reasons* and corresponding percentages and daily durations, one may understand that this is not a low percentage and duration. Although number of students studying at school with tablets is very

low (84 out of 406) compared to the other two options (Remember Table 11), it still worths to analyze for those who use for this purpose.

Figure 40 shows that 37% of students who reported tablets as one of their IT preferences for studying at school (only 84 students out of 406), uses tablets for this purpose at least one hour daily.

Remembering Figure 30 may help us to remember that 47% of the students who reported that they are using tablets for reading purposes do it for at least an hour daily.

3.3.1.4.4 Detailed Analysis of Part 2

The second part of the questionnaire is aimed to assess the musculoskeletal discomfort risks of the children and/or adolescents who participated to the study to further investigate their muscular activity (of the most exposed muscle group) in the second phase of the study. As mentioned before, the second part was the Student Specific Cornell Musculoskeletal Discomfort Questionnaire of Erdinç and Ekşioğlu (2009). CMDQ evaluates discomfort frequency for the past week and checks if work-related activities of the workers were interrupted by any discomfort experienced. CMDQ (CUergo, 1999) is a questionnaire that was constructed to find out details about subjects who are under high risk of experiencing MS problems. Both Turkish and English versions of Student Specific CMDQ (SS-CMDQ) have been developed by Erdinç and Ekşioğlu (Erdinç and Ekşioğlu, 2009). The main difference with CMDQ being if a subject is experiencing pain with some frequency, the third thing to question is if the student's academic activities are disturbed by any means as a result of the discomfort experienced.

The students who experienced of ache/pain/discomfort during the last 7 days provided the problematic body parts with the help of the SS-CMDQ's body map diagram (Figure 1). In addition, as expected, the questions that follows the question of “frequency of ache/pain/discomfort experienced (if any), in any body region, in the last 7 days”, namely the questions asking about “the severity of the problem” or “any interference with the school activities” are only answered by the respondents with one or more experience(s) of discomfort in the previous week.

In SS-CMDQ part of the survey process the discomfort scores for participants are calculated by simply multiplying the values of frequency, discomfort and interference scores (self reported) with corresponding weights and adding them up to be named as discomfort score. These scores are determined using the response codes of CMDQ. For calculation of frequency, discomfort and interference scores the weights used are the ones offered by Hedge et al. (1999)] are utilized. As proposed discomfort scores are used in order to identify the risky cases easily. You may find the weights of provided answer options in the tables below.

Table 23. Weights for frequency score calculation

Frequency score	During the last week, how often did you experience ache, pain, discomfort in _____? (all body regions are both listed and shown with a body map in both online and printed versions of the questionnaire)	
	Never	0
	1-2 times per week	1.5
	3-4 times per week	3.5
	Every day	5
	Several times a day	10

For the missing values in the raw data for the second part of the questionnaire, the way Hedge et al. (1999) used was followed. In calculating the scores, missing values

of frequency score was replaced by zeros and missing values of discomfort and interference scores were treated as missing, therefore the risk score becomes at least the value of the frequency score.

Table 24. Weights for discomfort score calculation

Discomfort score	If you experienced ache/pain/discomfort during the last week, how uncomfortable was this?	
	Slightly uncomfortable	1
	Moderately uncomfortable	2
	Very uncomfortable	3

Table 25. Weights for interference score calculation

Interference score	If you experienced ache/pain/discomfort during the last week, did this interfere with your ability to study and perform academic activities?	
	Not at all	1
	Slightly interfered	2
	Substantially interfered	3

Table 26. Categorized risk scores of respondents

Risk score from SS-CMDQ	Number of respondents falling in the corresponding risk score interval
<90	377
91-100	3
101-150	16
151-200	2
201-250	4
250-300	2
>350	2

Accepting scores that are above 90 is risky; we tried to contact students having scores above 90. There were 30 students on our list. Respondents with high discomfort scores from SS-CMDQ formed the high-risk group experiencing

musculoskeletal discomfort. Distribution of respondents according to risk scores can be found in Table 26.

Among the contacted respondents after determining the highest and least scoring respondents, the ones contacted (the students from the least discomfort scores and students within high-risk group – with scores above 90 - were in the contact list), only 14 parents could be both contacted and accepted to attend the second phase of the experiment. As mentioned before, English version of sample consent letters can be found in Appendix A, Figure A3-3. (Both Turkish and English versions were provided for the parents. The consent letter's aim was both to inform the parents about the study that their child/children is/are involved and collect their signatures as a proof of their consent for performing sEMG analysis on the muscle groups that had higher risk according to the analysis performed by calculating risk scores of muscle groups obtained through SS_CMDQ part of the questionnaire.

The reason of “score 90” in categorizing a student as possessing high discomforts is simply from the fact that 90 is the highest score for a respondent when the respondent is experiencing one problem in one of the body regions mentioned in the study.

"Experiencing a problem in a muscle group" includes the following combinations of cases:

The respondent feels "very uncomfortable discomfort, several times in a day" and experiencing this substantially interferes with the ability to study and perform

academic activities of the respondent (*a score of 90 for the muscle group: $10 \times 3 \times 3 = 90$*).

The respondent feels "very uncomfortable discomfort, several times in a day" and experiencing this slightly interferes with the ability to study and perform academic activities of the respondent (*a score of 60 for the muscle group: $10 \times 3 \times 2 = 60$*).

The respondent feels "moderately uncomfortable discomfort, several times in a day" and this substantially interferes with the ability to study and perform academic activities of the respondent (*a score of 60 for the muscle group: $10 \times 2 \times 3 = 60$*).

The respondent feels "very uncomfortable discomfort everyday" and experiencing this substantially interferes with the ability to study and perform academic activities of the respondent (*a score of 45 for the muscle group: $5 \times 3 \times 3 = 45$*).

The respondent feels moderately uncomfortable discomfort several times in a day but this "moderately uncomfortable discomfort, several times in a day" slightly interferes with the ability to study and perform academic activities of the respondent (*a score of 40 for the muscle group: $10 \times 2 \times 2 = 40$*).

The respondent feels "very uncomfortable discomfort, 3-4 times a week" and this substantially interferes with the ability to study and perform academic activities of the respondent (*a score of 31,5 for the muscle group: $3,5 \times 3 \times 3 = 31,5$*). Furthermore, if it does not interfere with the ability to study and perform academic activities of the respondent, but the respondent feels very uncomfortable several times in a day for that muscle group (*a score of 30 for the muscle group: $10 \times 3 \times 1 = 30$*).

The respondent feels "slightly uncomfortable discomfort, several times in a day" and experiencing this substantially interferes with the ability to perform academic activities of the respondent (*a score of 30 for the muscle group: $10 \times 1 \times 3 = 30$*).

The respondent feels "moderately uncomfortable discomfort, everyday" and experiencing this substantially interferes with the ability to study and perform academic activities of the respondent (*a score of 30 for the muscle group: $5 \times 2 \times 3 = 30$*). While when the respondent feels "very uncomfortable discomfort everyday" and experiencing this slightly interferes with the ability to study and perform academic activities of the respondent (*a score of 30 for the muscle group: $5 \times 3 \times 2 = 30$*).

An interesting fact about our high-risk group respondents is that among 30 high-risk group respondents 27 respondents are experiencing at least one problem in at least one of the six problematic muscle groups studied. 68,97% of respondents with high discomfort scores were also tablet users who were listed as long-hour tablet users for at least one of the listed dominant reasons. In addition, Nearly 70% of respondent students with high-discomfort (risk) scores, which are calculated using data from SS-CMDQ reported that they are tablet users and they have experienced high discomfort in at least one of their body parts (neck, shoulder (R), upper back, lower back, forearm (R), wrist (R)).

Risk scores of body regions are also calculated in addition to respondent risk scores. Both types of risk scores are listed in detail in Appendix B. Table B2-1 provides risk scores of all 406 respondents while Table B2-2 gives scores of six upper body regions that scored the highest. Table B2-2 is presented in 6-row sub-tables for the ease of demonstration. Top risk scores, among all upper body regions included in SS-

CMDQ, are included in this table, namely, neck, right shoulder, upper back and lower back, forearm-wrist extensor, wrist (all body regions are from right hand side part). Table B2-3 provides the scores of all body regions, for ease of figuring out the problematic body regions. It should be mentioned again here that the questionnaires were asked to be answered only by *students who use their right hands*.

Descriptive statistics of each upper body part under investigation, in other words standard deviation, mean value, and minimum/maximum values of self-reported discomfort for all respondents with respect to neck, shoulder, upper back, lower back, right wrist extensor and right wrist can be seen in the table below (Table 27).

Table 27. Descriptive statistics of risk scores for each body part under investigation

Neck		Right Shoulder		Upper Back	
Std dev	10,64	Std dev	11,47	Std dev	14,76
Mean	3,64	Mean	2,99	Mean	5,10
Min	0	Min	0	Min	0
Max	90	Max	90	Max	90
Lower Back		Forearm (Right)		Right Wrist	
Std dev	15,02	Std dev	5,40	Std dev	5,78
Mean	5,05	Mean	0,86	Mean	1,23
Min	0	Min	0	Min	0
Max	90	Max	90	Max	90

3.3.2 Muscle Activity Assessment – Phase II

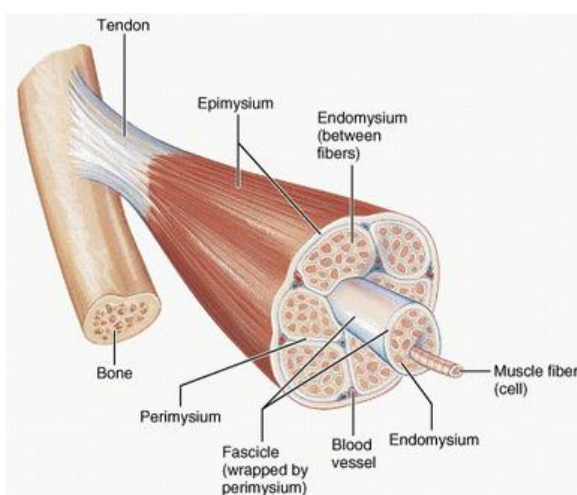
Phase 2 of the study was designed to study muscular activity of the upper bodies of the respondents during performance of in-class activities in a simulated class environment. High-risk group was invited to participate the sEMG analysis in the determined six upper body regions with an aim to test the hypothesis of mean musculoskeletal strain of each muscle group of each participant was studied to test the hypothesis that underlying patterns (statistical distributions) of mean musculoskeletal strain recorded in time differ for each participant (test group).

3.3.2.1 Muscle Activity Assessment Through Surface Electromyography

After evaluation of the two-part questionnaire, surface electromyography is used to register muscle activities of subjects from the top discomfort/risk score list (test group), who consented to attend (in addition to a parental consent). The amplitudes (measurements) were logged in microvolts.

3.3.2.1.1 The sEMG

“Electromyography is a technique used for recording changes in the electrical potential of muscle fibres that are associated with their contraction.” [Burden (2007), page 77]



http://www.medicalook.com/human_anatomy/organs/Skeletal_muscle_fiber.html (Accessed July 17, 2014)

Figure 41. Skeletal Muscle Fiber

In surface electromyography (sEMG), electrical signals are detected by sensors placed directly above the muscles. In other words, electrical activity of muscles are measured through surface electrodes. Below diagram (Figure 41) of a muscle fiber can be helpful in understanding the physiological background of sEMG.

The signal that can be detected using surface electrodes is quite complex. It can be understood by considering the underlying physiological background. Skeletal muscle tissue is composed of muscle fibers. When muscle tissue contracts the muscle cells depolarize. Action potential is the waveform detected when a motor neuron depolarizes. When a motor neuron depolarizes, action potential is generated and propagated down the nerve fiber. In other words, In order to stimulate a muscle fiber to contract, an electrical signal from the central nervous system must first reach an alpha motor neuron. Motor neurons are responsible for initiating muscle contractions. The most fundamental functional unit of a muscle is called a motor unit. It consists of a single motor neuron located in the spinal cord and all of the muscle fibers that it innervates. When a motor unit activated, the action potential is carried down the motor neuron to the muscle. The point where the nerve and the muscle communicate is known as the neuromuscular junction. After the action potential is transmitted across the neuromuscular junction, it is elicited in all of the stimulated muscle fibers of that particular motor unit. The summation of all such electrical activity, which is known as a motor unit action potential (MUAP), can be measured by EMG. [Al-Mulla et al. (2011), Burden (2007), Sousa and Tavares (2012)]

3.3.2.1.2 Sample Size

Amongst the high – risk group determined using SS-CMDQ, 10 respondent students participated in sEMG study with their own and parental consent. These 10 participants formed the test group. Likewise among the lowest discomfort score population (discomfort score = 0), 4 respondent students agreed to participate sEMG assessment forming the control group.

As a result 14 is the sample size of sEMG assessment. These 14 students (8 male and 6 female) participated in the muscular analysis study. Test group participants involved 6 male and 4 female students. While the control group participants involved 2 male and 2 female students. The ages of the participants who consented to attend the sEMG assessment sessions, ranged between 12 and 17. Both test and control group were right-handed students (actually, this is because only right-handed students attended to the study). None of the participants had a history of musculoskeletal disorder.

3.3.2.1.3 The sEMG Assessment Process

A two-channel sEMG device (MyoTrac Infinity by Thought Technology) with raw sensors was utilized to collect surface myoelectric activity signals sampled at 2048 samples per second were used to collect surface myoelectric activity signals. The muscles to be assessed were determined using the results of the SS-CMDQ. The scores of each body region (from each of the 406 participants) were determined by adding the scores corresponding to that body region.

Mean values of the raw microvolt data are updated every 5 seconds in Biograph-Infinity Software, which is the interface of our 2-channel sEMG device. In this study, mean values were recorded every 20 seconds.

6 body regions of the upper body exhibited the highest risk scores of right hand side upper body regions. Therefore, they have become the pivoted muscle groups of the study and in sEMG assessment these muscle groups were registered to record their mean musculoskeletal strain.

Muscle activity data were registered in the following muscles: C4 cervical paraspinals (CP-*neck for students*), upper trapezius (UT- *at back, below the shoulder for students*), thoracic paraspinals (UB - upper back), lumbar paraspinals (LB - lower back), right wrist-extensor (RWE – *right forearm for students*), and right wrist (W-*Wrist*) muscle groups. All measurements were collected from right-hand side (our sample included only right-handed students).

All sEMG measurements sessions were done while the students were using desk stands for tablets and although *both hands of the subjects were free most of the time (reading the questions or texts embedded in the questions and thinking about the answer of the exercise)* the right hand side of the participants were active because of being right-handed. Here, it is important to mention that participants used the tablets with desk stands at 60 degrees (Throughout the experiments, same type of tablet and same tablet stands were used, the simplest form of tablet desks stands, which is also used as the case had two options: 45 and 60 degrees options (Figure 42). Here, 60 degrees desk stand represents the stand that makes a 60-degree angle with the table surface resulting in a backward tilt of the tablet for all sEMG subjects. Davis et al. (2014) pointed out that while using a touch-screen tablet with a stand at an angled position resulted in more neutral postures than using it on the table or lap. Young et al. (2012) also supports the idea of using cases to support the tablets during usage. Their study concluded that using environment (lap, table, chair etc.) matters and neck posture can be improved when case stands are used for support.



Figure 42. Sample table stands for tablet computers

Raw sEMG signals were collected via the two-channel sEMG device, therefore for each subject we had to pause the recordings and give two 5-minute breaks to the class activity for changing the places of electrodes. Halaki and Ginn (2012) have categorized the studies of EMG in terms of the need for normalization. They summarized that for the assessments of EMG on the same subject on the same day, without changing the configuration and environment, raw data can be used without normalization. In other words, if the study is not comparing different subjects' muscles, and is only working with the amplitude of the signals, normalization is not required. Furthermore, "normalization exercises on children" is a topic that has not been clear yet in literature. Therefore, raw data had been used in this study. The students, who were called for sEMG measurements in simulated class environment, were not informed whether they are in the test group or control group.

Prior to running and recording the sessions with sEMG, a trial run was performed in order to check if the recordings are sensitive to motions. Two different types of disposable electrodes, namely strip shaped and triode electrodes, were used for ease of positioning the electrode correctly during data collection through sEMG. Mobile

phones or other wireless portable devices were not allowed into the class environment during the sEMG sessions in order to avoid artifacts.

Please note that **simulated class environment** means: (i) Using classes of a high school, which involves secondary education, with the suggestion of the General Secondary Education Department of Ministry of Education, for the sEMG assessments. This suggestion was supported with their decision that they will strongly suggest the other school managements to buy the same type of chairs because they are more comfortable (even said to be ergonomic but really far from being ergonomic with several reasons) than the traditional chairs that have been used for long years. A snap shot from a classroom of the mentioned school is shown in Figure 43.



Figure 43. A snap shot from the class assigned to us from TMK Nicosia to hold our sEMG measurements

The chair type with the following properties and specifications are unfortunately used for all students in the school. And the most unfortunate fact is the other schools all over northern Cyprus are also renewing their chairs with the same chair type just because the advertisement of the chair claims that the design of these chairs are ergonomic to support back through long periods of use (in addition to the properties

of to be free from 99% of all known bacteria that are easily transferred to skin upon touch, to be easy to clean, to be stackable, having unique anti tilt design, no sharp edges and no metalwork that can be rusted in time with full EN1729 certification).

(ii) Using Socrative software that is made for tablet-assisted education to facilitate and/or improve student engagement. The key property of the Socrative for our case is that it enables the teacher to assign some class activities to the students and gives chance to the teacher to follow the progress of the student. In our case, Socrative is used by the teacher (simulated) simply in the following way (Table B2-10, and B2-11 in Appendix B provides some screen shots to support the understanding of the way the “Socrative software” is used in this study): Teacher (the researcher in this case) logged into his/her account, a classroom number was dedicated to the teacher. Using the account, the teacher created two in-class activities. When the time came to evaluate a student by electromyography, teacher had the opportunity to assign one of the activities. On student’s side, student login is very easy in Socrative, because the only information asked is the name of the class they want to join. After joining the class, the first part of the first activity appeared and upon submitting the work referred in the first part/question, the student continued till the teacher asks him to stop upon finishing a specific activity. (ii) Two in class activities were offered to the students because of language restrictions (while some students does not know or not good at Turkish, there are some students with a very low level of English). As a result, one of the offered activities is a Turkish class activity about general knowledge while the other is an English one that even be attempted by a student with an elementary level English knowledge. In other words, involving both private an public schools made it a necessity to use activities both in English and Turkish.

The researchers were blinded to the children's answers to the first part of the questionnaire. The students (who are listed in Table 28) were asked to work on the given activity throughout the sEMG recordings and act as if they are in a real classroom. They were informed prior hand that they were not having a test or an exam, and they can ask questions to the teacher if there are any words or questions that are not clear for them.

No time limit was imposed on the students for performing these activities during sEMG recordings. Thus, there are different numbers of measurements even for each muscle group of the same participant. However, the least number of recordings were considered as a benchmark for both statistical tests and for regular comparisons with graphics.

Table 28. Participants of sEMG assessment, their age groups and sex

P1	3991206524	Age gr 14-17	Female
P2	3968537814	Age gr 14-17	Female
P3	3913081818	Age gr 11-13	Male
P4	3889746648	Age gr 14-17	Male
P5	3879241966	Age gr 14-17	Male
P6	3873049368	Age gr 11-13	Female
P7	3873028210	Age gr 11-13	Male
P8	3872953817	Age gr 14-17	Male
P9	3843558483	Age gr 14-17	Female
P10	4057273462	Age gr 11-13	Male
P11	3991219753	Age gr 14-17	Female
P12	3912881779	Age gr 11-13	Male
P13	3886583963	Age gr 11-13	Female
P14	4056994599	Age gr 14-17	Male

This chapter describes the sample population, data collection tools and procedures, and data analysis employed to conduct the research.

It should be noted that the students who participated the second phase of the study used the tablets with desk stands (similar to the ones in Figure 42). This was a constraint introduced to have the same environment for all participants.



Figure 44. sEMG device and extensor cables

One 40-inch and one 21-inch snap style sEMG extensor cables were used with the two-channel MyoTrac Infinity system (Figure 44). While, blue and yellow connectors represent the active electrodes, the black connector represents the reference electrode.

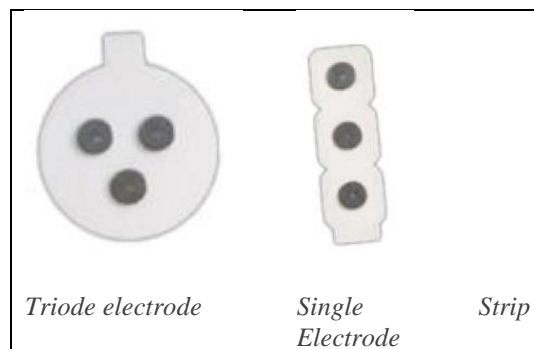


Figure 45. Types of silver/silver chloride electrodes utilized during the study

Two types of single use electrodes, that are namely single strip electrodes and triode electrodes (Figure 45) were utilized during the data collection process.

Prior to application of the electrodes the skins of subjects were cleaned with alcohol to facilitate good signal and to avoid artifacts. In order to avoid any discomfort, the electrodes were positioned on the skins of subjects after snapping the electrodes on the cable connectors. Although self-adhesive electrodes were used, for the sake of firmly placed electrodes, medical tapes were used to fix the electrodes.

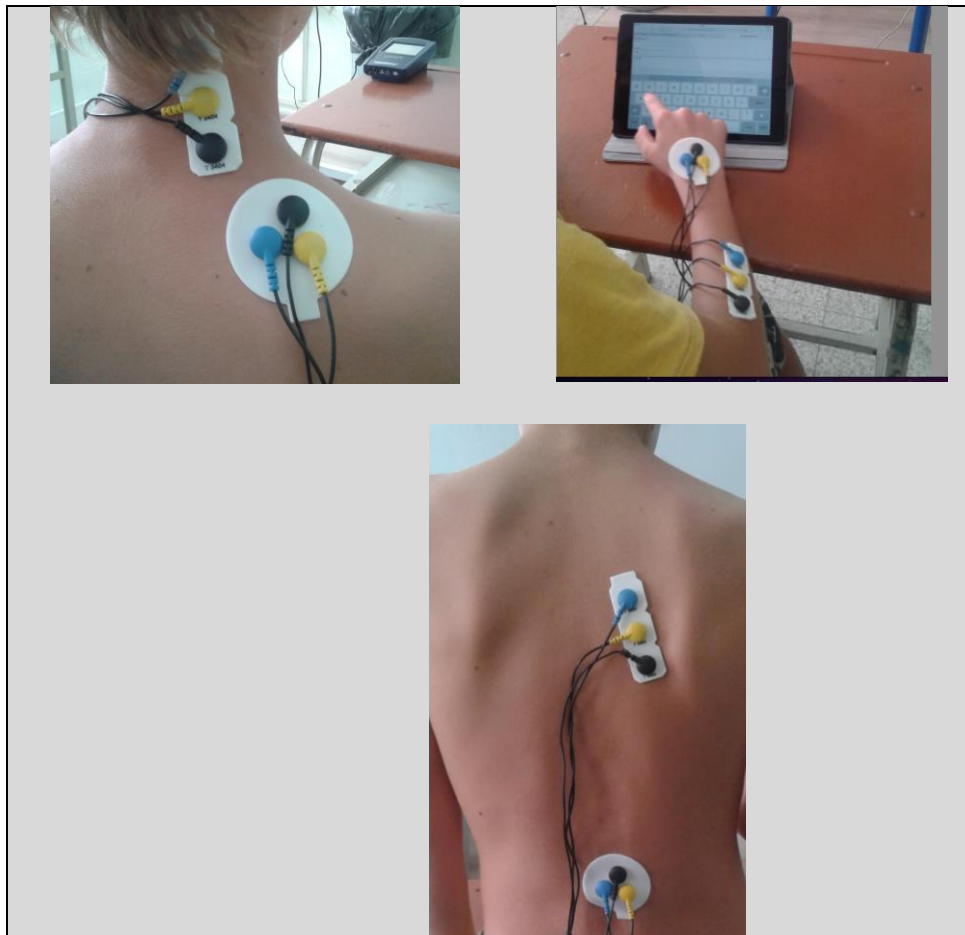


Figure 46. Some pictures taken during muscle assessment

Active electrodes (blue and yellow) were placed in line with the muscle fibres. Electrode placements were in accordance with recommendations from literature [Straker *et al.* (2009c), Young *et al.* (2013)]

3.3.2.1.4 Results of the sEMG Analysis

Single factor one-way analysis of variance (ANOVA) is used to perform a simple analysis of variance of mean muscle amplitude data for 10 and 4 samples. The analysis provides a test of the hypothesis that each sample is drawn from the same underlying probability distribution against the alternative hypothesis that underlying probability distributions are not the same for all samples.

A one-way analysis of variance (ANOVA) has been performed to test whether there is a significant difference in variance for muscular activity of each muscle group of each participant (separately) over the period of time he/she worked on the class activity. This test helps to identify if there is a significant difference in variance of different muscle groups of each participant.

There were differences among the duration of the measurements of muscle groups, because the student profiles and capabilities of our simulated class environment were not the same. However, in assessments and evaluations, the number of replications of a participant is accepted according to the muscle group that has the shortest number of replications recorded. All replications recorded through electromyogram for all 14 participants (both test group and control group) are presented in Appendix B, Figures B2-12 (a), Figures B2-12 (b), Figures B2-12 (c), Figures B2-12 (d), Figures B2-12 (e), Figures B2-12 (f), Figures B2-12 (g), Figures B2-12 (h), Figures B2-12 (i), Figures B2-12 (j), Figures B2-12 (k), Figures B2-12 (l), Figures B2-12 (m), Figures B2-12 (n).

ANOVA results of the test group (Table 29) imply that there is a significant statistical difference for all six-muscle groups for each participant. These results provide that Hypothesis 1 is failed (for the test group), and it can be stated as the mean musculoskeletal strain of the tested six muscle groups are significantly different.

Table 29. ANOVA results of test group respondents ($n=10$)

Participant	F	P-Value	F critical
1	48,29	0,00	2,30
2	9,45	0,00	2,32
3	19,16	0,00	2,47
4	3,04	0,01	2,33
5	25,33	0,00	2,34
6	41,32	0,00	2,30
7	7,43	0,00	2,33
8	6,95	0,00	2,31
9	324,88	0,00	2,43
10	22,07	0,00	2,38

However, the control group revealed different results (Table 30). In the control group while ANOVA showed that, for (participants 11 and 12) there was no significant difference between their 6 muscle groups ($\alpha=0.05$). This means checking the sEMG assessment of participant 11 and 12 we cannot reject Hypothesis 1, however as there are scarce participants and thus scarce measurements on hand, this is not enough to state it as a generalization. While for participants 13 and 14 there are significant differences between their 6 muscle groups (similar to test group).

Table 30. ANOVA results of control group respondents (n=4)

Participant	F	P-Value	F critical
11	0,70	0,62	2,33
12	1,48	0,20	2,34
13	940,63	0,00	2,28
14	13,25	0,00	2,3

3.4 Discussion and Limitations of the Study

To the extent our knowledge, this is the first study that integrates tablet-assisted class/education environment, students (children and/or adolescents: because both secondary and high school students were involved in the study), and students' musculoskeletal discomfort.

After rejecting the main research hypothesis, claiming that "*There is no statistically significant relationship between tablet use of children in classroom environment, during class activities (using the tablets with desk stands) and musculoskeletal discomfort they experience*" our (Greig et al. (2005); Sommerich et al. (2007); Straker et al. (2008b)) is not different than other researchers who worked on tablet computers, namely there is an association between tablet usage and musculoskeletal discomfort.

The result or deduction of associating educational tablet usage and experienced musculoskeletal discomfort does not necessarily mean tablet assisted education will increase musculoskeletal discomfort. At school, correct, supporting, adjustable furniture, some physical exercises to be done several times a day proposed by a specialist in that area or short but frequent breaks are the suggestions after reviewing the literature and working with students in educational settings with educational activities. However, as also underlined by Harris (2005) and (2010) home settings

should not be disregarded. Both children and parents should be educated for adopting good postures while studying in home environment.

In literature, Straker *et. al.* (2015) also studied muscular activities of children using tablet computers and doing other children activities, however we cannot use the study as a benchmark to compare its results with the results of this study because there was not educational emphasis or activity was involved in their study.

The statistical results of ANOVA (related with amplitudes of muscle activities) would be more powerful if more parents could be persuaded both for test and control groups, but especially for the control group. If the number of participants were higher, especially in the control group, the difference between the participants from high-risk group and low risk group would be more obvious.

It should not also be forgotten that results of every study need to be considered within the context of the limitations of the study. Second phase of the study was realized with the help of a simulated class environment and simulated tasks , in addition electrodes with cables were attached to the participants. As the sEMG device had only two channels, the class activity of the participants whose muscle activities were being assessed during a class activity was interrupted (stopped) two times to change the placement of the electrodes. As a result, the participants may have acted different than a more relaxed class environment, with a better chance of naturally interacting with tablets.

Interpreting or discussing the results of the study without acknowledging the limitations of the research design would not be appropriate. Another important point

that have placed limitations on the study was the fact that the subjects of the study were children. This fact placed limitations on both the time spent for explanations regarding the procedures and the time spent for data collection.

During the sEMG assessment, subjects with different muscle properties, possibility of crosstalk between muscles or possibility presence of artifacts may limit the validity of results. Although measures like amplitude normalization procedure for muscle activities, electrode placement in accordance with Florimond (2009) and placing the electrodes to the skin firmly were taken, to reduce the presence of artifacts and to minimize the presence of cross-talk between muscles (such noise may still affect the data).

Chapter 4

CONCLUSION AND FUTURE STUDIES

Computer use is proven to be associated with the formation of musculoskeletal discomfort. With the recent technologies, many types of IT (especially desktops, laptops, tablets) are more involved in education. This study was constructed to reveal the ergonomic effects of the IT use, especially tablet use for educational purposes on the students. It is obvious from the literature review of this thesis study that there is a gap in studies focusing on educational tablet computer use of children and/or adolescents or tablet assisted education programs in terms of musculoskeletal discomfort. Especially, in northern Cyprus there was no information collected on usage habits or attitudes of children and/or adolescents with respect to desktop/laptop/tablet computers.

Results of this thesis study denote that extended hours of tablet usage among education increase the risk of students to experience musculoskeletal discomfort. The fact that nearly 70% of respondents, who both use tablet computers and are listed as high-risk score of experiencing musculoskeletal discomfort is really considerable.

Musculoskeletal discomfort was experienced mostly at the neck, shoulder, upper back, lower back, forearm, and wrist regions. In addition, around 67% of high-risk group respondents are tablet users experiencing high discomfort in at least one of the six body parts under study. It is even possible that these percentages are

underestimated because some children may not be really aware of the discomfort they experience after long exposure to mobile technologies.

The sEMG measurements provided that the distributions of the mean musculoskeletal activity at the cervical paraspinals, upper trapezius, upper back, lower back, and forearm/wrist-extensor were significantly different in the test group. In other words, ANOVA results showed that the mean musculoskeletal strain - in different body regions - does significantly differ in time for all tests group respondents during tablet use. Although, this hypothesis was failed to be rejected amongst some of the control group respondents, as the number of control group respondents were very small we cannot reach a generalization for this situation. For more sound results, that will support the research, future studies must recruit more participants especially for the control group.

Thus, it can be concluded that this research indicates a significant relationship between tablet use and high musculoskeletal discomfort. That is to say, the main research hypothesis of “there is no statistically significant relationship between tablet use of children (with desk stands) in classroom environment, during class activities and musculoskeletal discomfort they experience” is rejected.

When it comes to recommendations for future studies, it is critical to always remember that in today’s world, tablet computer technology is being used in education of children; therefore, guidelines for children using tablet computers must be provided in order to prevent any harm to their developing musculoskeletal systems. For making further implications regarding such guidelines, studies that will incorporate additional data from other age groups of school children, from different

schools can contribute a lot. Further studies can examine the effects of tablet use for longer periods in classroom environment.

In addition, tracking the children for three years for the incidences and prevalence of self-reported musculoskeletal discomfort as they progress from 6th grade to 11th grade would be a good basis to further investigate the effects of using tablet computers in education for years.

Tablet-integrated education is becoming more and more popular for the sake of effective teaching, a reasonable recommendation after studying with students can be ergonomic trainings to be arranged for all stakeholders (not only for students but also for teachers and parents) as an effort to decrease the extent of musculoskeletal discomforts which is critical for the students because their musculoskeletal growth is still on-going. Short but frequent breaks for some exercises offered by physiotherapists may also cause good results.

Not only musculoskeletal discomfort experienced but also effects of using this technology for prolonged years on motor skills of children and adolescents, which is still an untouched area, is a critical issue because detrimental effects on motor skills is critical for the future of these children and adolescents.

Furthermore considering the widespread use of mobile technologies in adults, adolescents, and children, it is of importance to also investigate mobile technologies such as mobile telephones. The musculoskeletal risk factors of mobile phone users, especially children users, have remained untouched till now.

Although home usage of tablets and home environment or postures the students prefer at home are all critical issues, it is very difficult to work for such issues because of two main reasons. First and most important part is using cameras at home are generally rejected by parents and even when cordless electrodes are used, this may disturb children and they may change the regular way they work which leads to misleading results.

It should also be noted that the only stakeholders in this critical issue of children and adolescents, who are our future, are not the students, and their parents. The Ministries of Education, schools and teachers of the children in addition to the researchers should also be involved as stakeholders to assure successful implementation of tablet integration with the least harm to children/youth.

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APPENDICES

APPENDIX A: Questionnaire Related Correspondences and the Questionnaire

APPENDIX A1: Ethical Board Decision

DOĞU AKDENİZ ÜNİVERSİTESİ BİLİMSEL ARAŞTIRMA VE YAYIN ETİĞİ KURULU KARAR TUTANAĞI	
Toplantı Tarihi	: 17.12.2014
Toplantı No	: 2014/04
Toplantı Yeri	: BEA 5 Fakülte Toplantı Odası (Eski Senato odası)
Katılanlar:	Prof.Dr. Ahmet Pehlivan, Prof.Dr. Osman M. Karatepe, Prof.Dr. Özgür Eren, Prof. Dr. Özgür Dinçyürek, Prof.Dr. Cahit Adaoğlu, Doç. Dr.Hanife Aliefendioğlu, Doç. Dr. Şükrü Tüzmen, Yrd. Doç. Dr. Pervin Aksoy İpekçioğlu, Yrd.Doç.Dr. Barış Öztürk, Öğr.Gör. Hicran Bayraktaroğlu
DAÜ Bilimsel Araştırma ve Yayın Etiği Kurulu'nun yukarıda tarihi ve sayısında belirtilen toplantısında;	
2014/04-01	DAÜ Bilimsel Araştırma ve Yayın Etiği Alt Kurulu'nun 28.11.2014 tarihinde 2014/01 toplantı numaralı karar tutanağında almış olduğu <u>“Eğitsel Amaçlı Laptop veya Tablet Bilgisayar Kullanan Çocuklarda Duruş, Kas-İskelet Sistemi Aktiviteleri ve Olası Kas-İskelet Sistemi Rahatsızlıkları”</u> ve <u>“Diş Hekimleri Arasında Kas-İskelet Sistemi Rahatsızlıkları”</u> adlı çalışmaların bilim ve araştırma etiği açısından uygulanmasında sakınca olmadığına, meslek etiğinin sağlanması açısından da sağlık uzmanlarına danışılarak yapılmasına,

Figure A1. Ethical Board Decision for the study

APPENDIX A2: Questionnaire (Printed version, English)

DESKTOP/LAPTOP/TABLET COMPUTER USE HABITS OF STUDENTS

Dear students,

By filling in this survey, you will enable us to collect valuable data for our research and help us to investigate the possible physical outcomes of your technology use (use of laptops, tablets or desktop PCs).

Please complete the following survey based on your average school day. Don't think on questions for a long time or don't consult with your friends. Some questions may look the same, but please do not skip any questions...

Your responses will be anonymous, so please answer honestly.

THANK YOU!

1. AGE:
2. GENDER:
3. HEIGHT (APPROXIMATE):
4. WEIGHT:
5. Do you use tablet, laptop, or desktop PC or all in your daily life? Please pick the correct choice below.
 - Only tablet
 - Only laptop
 - Only desktop
 - Desktop & laptop
 - Laptop & tablet
 - Desktop & tablet
 - All

6. Dominant reason(s) for using a tablet, a laptop, or a desktop PC:

Using the table in the following pages, please indicate the dominant reason(s) for using a tablet, laptop or desktop PC, and the corresponding durations of use.

NOTE: While filling in the table please consider that you may report your daily duration of use calculating the daily average using the weekly regular duration of use. For example, if you use one type of the mentioned technologies 4 hours a week, you may report it as “Less than one hour”

<input type="checkbox"/> Communication (E-mail, social media, chat)	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
<input type="checkbox"/> Playing games	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
<input type="checkbox"/> Watching films	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours

<input type="checkbox"/> Studying (outside school)	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
<input type="checkbox"/> Lectures at school	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
<input type="checkbox"/> Internet surfing	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
<input type="checkbox"/> Reading (Newspapers, books, magazines)	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours

<input type="checkbox"/> Writing (Dairies, blog posts)	<i>Laptop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Desktop</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours
	<i>Tablet</i>	Duration:	<input type="checkbox"/> Less than 1 hour <input type="checkbox"/> 1-2 hours <input type="checkbox"/> 2-3 hours <input type="checkbox"/> More than 3 hours

7. Where do you use mostly

a. Desktop?

- At home
- At school
- Other: _____ (Please specify)
- I DON'T USE DESKTOP COMPUTERS

b. Laptop?

- At home
- At school
- Other: _____ (Please specify)
- I DON'T USE LAPTOP COMPUTERS

c. Tablet?

- At home
- At school
- Other: _____ (Please specify)
- I DON'T USE TABLET COMPUTERS

8. How long have you been using

(A) Desktop?

- I don't use a desktop computer
- ____ years
- Less than a year

(B) Laptop?

- I don't use a laptop computer
- ____ years
- Less than a year

(C) Tablet?

- I don't use a tablet computer
- ____ years
- Less than a year

While answering 9th, 10th, and 11th questions, please also consider your feelings during the use of the mentioned computer type in the question.

9. Which feelings do you generally experience while using desktop computers?

- | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> Frustration | <input type="checkbox"/> Surprise | <input type="checkbox"/> Confusion |
| <input type="checkbox"/> Excitement | <input type="checkbox"/> Anger | <input type="checkbox"/> Nervousness |
| <input type="checkbox"/> Amazement | <input type="checkbox"/> Irritation | <input type="checkbox"/> Happiness |

10. Which feelings do you generally experience while using laptop computers?

- | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> Frustration | <input type="checkbox"/> Surprise | <input type="checkbox"/> Confusion |
| <input type="checkbox"/> Excitement | <input type="checkbox"/> Anger | <input type="checkbox"/> Nervousness |
| <input type="checkbox"/> Amazement | <input type="checkbox"/> Irritation | <input type="checkbox"/> Happiness |

11. Which feelings do you generally experience while using tablet computers?

- | | | |
|--------------------------------------|-------------------------------------|--------------------------------------|
| <input type="checkbox"/> Frustration | <input type="checkbox"/> Surprise | <input type="checkbox"/> Confusion |
| <input type="checkbox"/> Excitement | <input type="checkbox"/> Anger | <input type="checkbox"/> Nervousness |
| <input type="checkbox"/> Amazement | <input type="checkbox"/> Irritation | <input type="checkbox"/> Happiness |

12. To which one(s) of the following artistic or physical activities/sports you participate in actively?

- | | | |
|---------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Athletics | <input type="checkbox"/> Fitness | <input type="checkbox"/> Table Tennis |
| <input type="checkbox"/> Aerobics | <input type="checkbox"/> Football | <input type="checkbox"/> Tennis |
| <input type="checkbox"/> Badminton | <input type="checkbox"/> Handball | <input type="checkbox"/> Volleyball |
| <input type="checkbox"/> Basketball | <input type="checkbox"/> Gymnastics | <input type="checkbox"/> Walking |
| <input type="checkbox"/> Horse riding | <input type="checkbox"/> Playing musical instruments | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Biking | like piano, | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Boxing | violin etc. | |
| <input type="checkbox"/> Dance | | |

13. Did you have accidents or injuries during the past 12 months?

- Yes
- No

If yes, which region of your body was affected?

- | | | |
|-------------------------------------|---------------------------------------|--------------------------------------|
| <input type="checkbox"/> Head | <input type="checkbox"/> Arms | <input type="checkbox"/> Groin |
| <input type="checkbox"/> Neck | <input type="checkbox"/> Wrists/hands | <input type="checkbox"/> Legs |
| <input type="checkbox"/> Shoulders | <input type="checkbox"/> Belly | <input type="checkbox"/> Knees |
| <input type="checkbox"/> Upper back | <input type="checkbox"/> Lower back | <input type="checkbox"/> Ankles/feet |
| <input type="checkbox"/> Elbows | <input type="checkbox"/> Hips | |

14. Do you use a smart telephone for long hours during a normal school day?

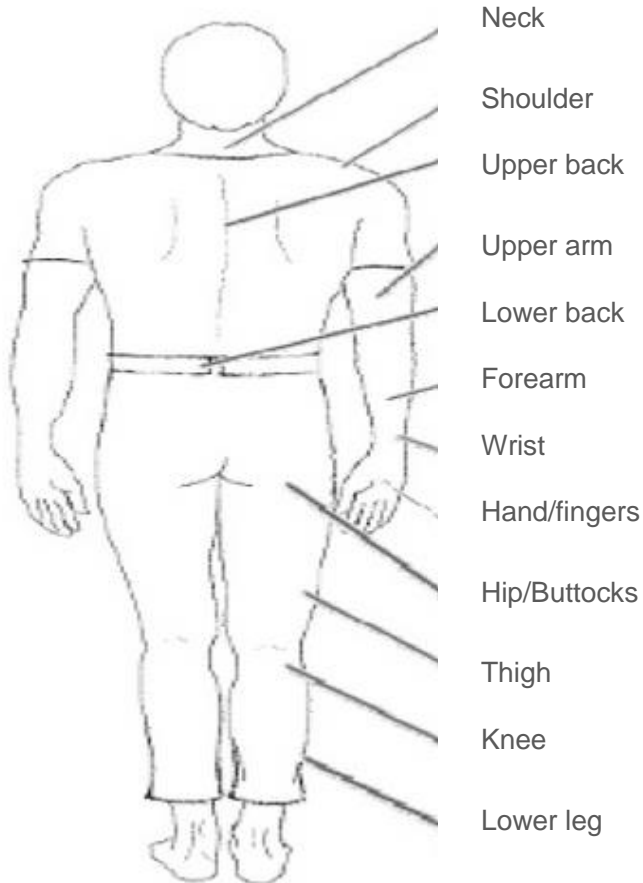
Yes

No

If yes, please indicate the approximate duration of use per day.

_____ hours

! The picture in the next page demonstrates the “body parts” (approximately) that are mentioned in the rest of the questionnaire.!



15. During the last week, how often did you experience ache, pain, discomfort in. (Please answer for all body regions.)

	Never	1-2 times last week	3-4 times last week	Once every day	Several times day
Neck	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoulder (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoulder (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper back	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper arm (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper arm (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower back	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forearm (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forearm (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wrist (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wrist (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand/fingers (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand/fingers (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hip/Buttocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cont'd in the next page

	Never	1-2 times last week	3-4 times last week	Once every day	Several times day
Thigh (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thigh (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knee (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knee (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower leg (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower leg (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

!!!! Please answer next two questions ONLY if you have mentioned one or more body regions that you have experienced any ache, pain or discomfort in the question above. AND please answer for only the body regions you have mentioned in the question above. !!!!

16. If you experienced ache, pain, discomfort, how uncomfortable was this?

Slightly uncomfortable Moderately uncomfortable Very uncomfortable

Neck

Shoulder (right)

Shoulder (left)

Upper back

Upper arm (right)

Upper arm (left)

Lower back

Forearm (right)

Forearm (left)

Wrist (right)

Wrist (left)

Hand/fingers (right)

Hand/fingers (left)

Hip/Buttocks

Thigh (right)

Thigh (left)

Boyun	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Omuz (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Omuz (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sırt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Üst kol (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Üst kol (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ön kol (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ön kol (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
El bileği (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
El bileği(sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
El/parmaklar (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
El/parmaklar (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kalça	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Üst bacak (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Üst bacak (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diz (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diz (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alt bacak (sağ)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alt bacak (sol)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17.If you experienced ache, pain, discomfort, did this interfere with your ability to study and perform academic activities?

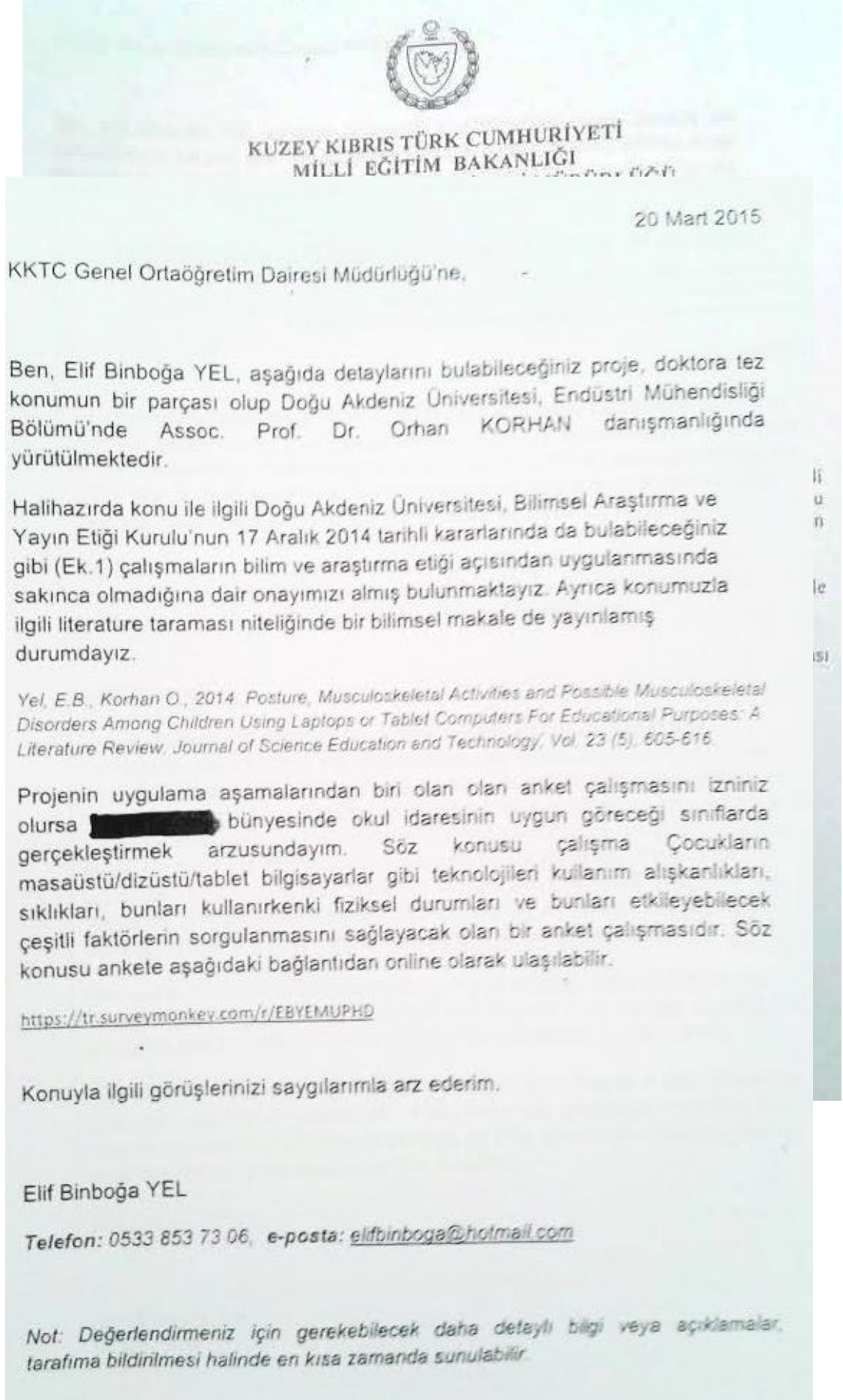
	<i>Not at all</i>	<i>Slightly interfered</i>	<i>Substantially interfered</i>
Neck	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoulder (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shoulder (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper back	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper arm (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upper arm (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower back	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cont'd in the next page

	<i>Not at all</i>	<i>Slightly interfered</i>	<i>Substantially interfered</i>
Forearm (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forearm (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wrist (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wrist (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand/fingers (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hand/fingers (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hip/Buttocks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thigh (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Thigh (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knee (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knee (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower leg (right)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lower leg (left)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX A3. Correspondences

Figure A3-1. A sample approval letter from the Ministry



Tablet/Laptop/Desktop Computer use of children

Researchers: E. Binboga Yel, O. Korhan

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E-mail#1: elifbinboga@gmail.com; E-mail#2: orhan.korhan@emu.edu.tr

15/09/2014

To: The parents of children and teenagers who have consented to attend our two phase study. The first phase includes a questionnaire that tries to collect data about their usage habits of tablet/laptop/desktop computers while the second phase will try to assess musculoskeletal strain of some specific muscle groups through use of a surface electromyogram.

Subject: About sharing information regarding a research that will be conducted on students upon the consents of school management and parents of the students that will be involved in the study.

Dear Parents,

I am a doctoral student at the Eastern Mediterranean University, Famagusta. As a part of my dissertation, we (I and my supervisor, Asst. Prof. Dr. Orhan Korhan) are doing a research project on the exposure of students associated with the use of tablet/laptop/desktop computers with a special emphasis on the relationship between tablet computer use and muscle activity of the students. We will be focusing the project on secondary and high school students of northern Cyprus. Throughout the research, a two-phase survey and a muscle activity assessment study through use of a surface electromyogram will be conducted.

The students will remain anonymous in our written reports and in the dissertation. Any data sets used will not include their names; instead the students will be referred to as a letter or a number in the report.

Please read the attached information sheet and complete the “**parental consent**” section of this letter. If you have any questions regarding the research project, feel free to contact us (the telephone numbers and e-mail addresses are provided in the header).

Sincerely,

Elif Binboga Yel
Researcher

INFORMATION SHEET

Notes of the two-part survey study:

A two-part questionnaire pursuing general information on children, on their habits related to desktop/laptop/tablet computer use as well as information on their musculoskeletal discomfort will be distributed to students. They will be asked to complete the questionnaire forms alone in at most 20 minutes. The information provided by the students in the questionnaire will be used only as anonymous data for scientific research purposes.

Notes on surface electromyography (sEMG) assessment:

Unfortunately, time and equipment limitations do not let us to perform the muscle activity assessments on each and every student of the population. A selection between the right-handed students, whose parents have signed the informed consent forms and has been identified to have high risk of experiencing musculoskeletal discomfort will be made.

Procedures during sEMG assessment:

- Preparations: Each student, who will attend to sEMG assessment phase of the research, will be briefed by the researcher about the objectives of this phase of the research, about the devices to be used and about their role in this part of the research.

sEMG measurements: Two self-adhesive electrodes of the two-channel sEMG device will be fixed on the skin of the subject (the places to fix the electrodes will be determined according to the muscle groups that will be measured for its muscle activity). The subject will then follow a lesson running in a simulated class environment for period that will be enough to solve the in-class exercises prepared for them on the Socrative - a teaching tool that allows teachers to disseminate questions to students. This interface assigns the teacher a virtual room number and the students connect this virtual room with their tablets to follow the activities of the class.

- (Here, the class means simulation of a class which provides a tablet integrated education). When the location of electrodes will be changed to measure other muscle groups, the time will be paused using the interfaced. The procedure for assessment of other muscle groups will follow the same way. It is planned to have three such sets of measurement sessions for each subject.

Risks and Benefits of the sEMG assessment:

sEMG is a non-invasive technique and there is no known health risk associated with sEMG assessment of muscle activity. There is no pain associated with electrode placement or assessment periods of the procedure. The primary discomfort is the cables that may give the subject a feeling of being limited in movements. One of the researchers will be there, observing the subject throughout the entire procedure. If the skin of the subject is very sensitive, his/her skin may be red for

a short time after the electrodes are removed. There are no other risks associated with surface EMG testing. In terms of benefits, the subjects will have helped a research that may propose ways to avoid any discomfort/health problem that may be associated with tablet use. In addition, the subjects will have a better understanding of how muscles work.

Confidentiality: All information obtained during the course of this study is strictly confidential and will not be released in any traceable form (regarding the names of the subjects). Students' names will be omitted from all kinds of data records. The names of the students will be coded on the signed consent forms and these forms will be placed in a locked file that is available to only the researchers who are processing the data. Any photographing or videotaping of the procedures will only be used for data analyses and the faces of students will be blurred if the photographs are to be published in any scientific article. Results of this study will be used as anonymous data for scientific publications and presentations and for educational purposes.

Freedom to withdraw from the study:

Participation of the students in this research is voluntary and the students are free to withdraw at any time. There will be no coercion to continue with the study if the student (or one of his/her parents) chooses to withdraw. Please discuss your concerns with

Elif Binboga Yel, PhD candidate at Industrial Engineering Department of Eastern Mediterranean University - Tel: +90 542 853 73 06, E-mail: elifbinboga@gmail.com; or

Assoc. Prof. Dr. Orhan Korhan, professor at Industrial Engineering Department of Eastern Mediterranean University - Tel: +90 392 630 10 52

By signing this Informed Consent Form, you are acknowledging that you have read this information and you consent to allow your child to participate in this study.

Parental Consent Section:

My child can participate in the survey study of the research project.

YES ____ NO ____

My child can participate in the surface electromyography assessment of the research project.

YES ____ NO ____

You can photograph or videotape my child during the study for research purposes only

YES ____ NO ____

Student's name: _____

Parent's name and signature: _____

Date: _____

Figure A3-3. Parental consent letter with information sheet for the questionnaire and sEMG procedures of the study

APPENDIX B: Results of Phase 1 (the Questionnaire) and Phase 2

(sEMG)

Table B1-1. Basic Information About Respondents (Questionnaire)

ID of the respondent	Age	Sex	Height (approximate):	Weight (approximate):
4016327570	16	Female	1,59	57
4016323071	17	Male	1,70	82
4016319090	16	Male	1,72	65
4016311412	16	Female	1,63	50
4016307251	16	Male	1,69	71
4016303216	16	Male	1,70	63
4016296167	17	Female	1,55	44
4016290910	17	Male	1,79	65
4016286833	16	Male	1,69	62
4016172184	13	Male	1,60	41
4016165993	12	Female	1,50	50
4016160969	12	Male	1,64	65
4016154648	13	Male	1,45	38
4012804018	13	Male	1,30	30
4012797964	11	Male	1,40	50
4012790555	11	Female	1,45	32
4012782011	12	Male	1,60	54
4012730725	12	Male	1,60	54
4012723554	11	Female	1,45	32
4012656140	13	Male	1,55	63
4012651160	12	Male	1,50	56
4012644259	14	Male	1,62	53
4012637005	14	Male	1,65	53
4012633162	12	Female	1,60	40
4012624811	12	Female	1,55	44
4012617660	11	Female	1,65	40
4012614159	12	Male	1,60	59
4012508792	12	Male	1,60	72
4012498640	12	Male	1,50	50
4012491488	12	Male	1,57	45
4012485284	12	Female	1,60	50
4012473633	12	Male	1,57	60
4012469464	12	Female	1,59	52
4012466160	12	Female	1,55	34
4012460658	13	Male	1,50	40
4012455947	13	Male	1,52	47
4012430576	11	Female	1,40	41
4012426652	11	Male	1,50	40
4012406783	13	Female	1,59	66
4012399710	12	Male	1,45	40
4004970129	12	Female	1,60	39
4004963506	11	Female	1,46	42
4004957167	12	Female	1,63	50
4004945257	13	Female	1,50	40
4004934437	12	Male	1,53	65
4004921493	13	Female	1,68	55
4004914674	13	Male	1,50	48
4004905832	12	Male	1,55	45
4004899412	13	Female	1,60	45
4004891212	12	Male	1,70	70

4004885248	13	Male	1,62	64
4004879116	12	Female	1,68	44
3992329563	13	Male	1,55	41
3991552998	12	Male	1,70	74
3991524993	13	Female	1,60	50
3991510154	14	Female	1,56	66
3991501190	14	Female	1,64	61
3991488370	14	Female	1,59	62
3991475073	13	Female	1,65	51
3991225783	14	Female	1,68	62
3991219753	14	Female	1,68	60
3991212143	14	Male	1,70	56
3991206524	14	Male	1,55	60
3991199746	14	Female	1,55	49
3990101142	14	Female	1,64	54
3990078514	13	Female	1,65	55
3990065394	13	Male	1,72	65
3990050548	13	Female	1,60	56
3990036940	14	Male	1,65	52
3990028350	14	Male	1,74	64
3990016288	14	Female	1,56	45
3989314032	14	Female	1,56	57
3989303005	14	Female	1,72	58
3989271549	13	Female	1,66	60
3989221063	14	Female	1,69	60
3987326905	14	Male	1,65	55
3987319596	14	Female	1,65	38
3987312489	14	Female	1,60	55
3987278903	14	Female	1,74	60
3987270618	14	Female	1,52	54
3987265971	14	Female	1,50	60
3987138863	17	Male	1,80	82
3987119797	17	Female	1,50	95
3987103718	17	Male	1,80	90
3987095737	17	Male	1,78	80
3987091706	17	Male	1,75	67
3987088444	17	Male	1,87	76
3987083033	17	Male	1,90	82
3968572950	17	Male	1,85	87
3968557021	17	Male	1,78	60
3968537814	17	Female	1,67	58
3968522980	17	Female	1,69	65
3968507520	17	Male	1,72	72
3968424226	15	Male	1,75	60
3968393898	16	Female	1,60	53
3968040530	17	Female	1,70	53
3968033599	17	Male	1,58	53
3968016333	17	Male	1,82	82
3968006605	17	Female	1,68	58
3968000019	17	Female	1,68	56
3957258512	14	Male	1,65	55
3934852622	16	Male	1,83	77
3934129822	13	Male	1,77	75
3932105563	18	Male	1,70	80
3931234753	15	Female	1,58	47
3931175964	13	Female	1,63	55

3931133172	17	Female	1,67	44
3930994714	12	Female	1,52	37
3930804586	11	Male	1,57	50
3930749449	12	Female	1,46	42
3930697280	13	Female	1,65	42
3930445230	12	Female	1,53	60
3930068383	16	Male	1,65	43
3929872863	11	Male	1,63	70
3929691190	18	Female	1,54	61
3929382688	15	Female	1,62	48
3913097202	13	Female	1,50	42
3913096620	13	Male	1,62	53
3913091157	12	Male	1,52	40
3913087916	13	Female	1,61	49
3913084313	13	Male	1,65	55
3913082865	13	Female	1,69	53
3913081818	13	Male	1,70	45
3913081704	12	Female	1,65	50
3913081489	13	Male	1,50	40
3913081461	13	Female	1,65	50
3913080016	13	Male	1,52	64
3913079239	12	Male	1,60	54
3912896144	13	Female	1,64	45
3912892626	13	Female	1,60	50
3912890441	13	Female	1,70	50
3912887032	13	Male	1,75	63
3912886614	13	Female	1,73	60
3912881779	12	Male	1,46	67
3912880151	13	Male	1,55	55
3912878868	13	Male	1,63	55
3912872911	13	Male	1,60	52
3912860210	14	Female	1,63	48
3912859078	14	Male	1,67	60
3912854606	14	Female	1,60	43
3912854551	15	Female	1,85	65
3912852270	14	Female	1,70	50
3912848038	15	Female	1,80	60
3912847968	14	Female	1,60	39
3912842944	14	Male	1,71	59
3912794147	15	Female	1,60	50
3912790105	14	Female	1,72	50
3912778536	18	Female	1,70	70
3912776656	14	Female	1,50	40
3912776486	16	Male	1,85	60
3912776152	15	Male	1,60	50
3912759330	14	Female	1,65	57
3912758978	15	Female	1,64	69
3912757730	15	Male	1,73	64
3912757652	15	Male	1,80	69
3912757524	15	Male	1,57	38
3912756711	15	Male	1,76	70
3912755385	13	Male	1,65	53
3912755235	15	Male	1,80	86
3912754149	13	Male	1,70	50
3912753957	14	Female	1,63	50

3912752597	12	Female	1,50	51
3912752289	13	Female	1,68	55
3912752184	13	Female	1,72	50
3912751242	14	Male	1,66	80
3912750658	12	Male	1,57	62
3912749617	12	Male	1,80	60
3912749016	13	Male	1,63	42
3912748143	13	Male	1,65	54
3890043736	13	Female	1,70	48
3890039997	14	Male	1,60	40
3890034529	15	Male	1,78	95
3889751162	14	Female	1,50	50
3889749232	13	Female	1,40	30
3889746648	14	Male	1,70	50
3889743576	13	Female	1,66	45
3889740298	13	Female	1,49	43
3889737922	13	Male	1,56	41
3889665520	12	Male	1,55	51
3889663586	13	Male	1,56	51
3889662276	13	Male	1,37	36
3888697183	12	Male	1,55	40
3888692963	13	Male	1,62	58
3887053010	12	Female	1,61	45
3887035703	12	Female	1,50	30
3887025511	13	Male	1,75	65
3887002730	14	Male	1,60	68
3886980755	12	Female	1,55	45
3886971427	14	Female	1,65	50
3886956905	14	Male	1,70	80
3886943878	14	Male	1,75	55
3886923599	14	Female	1,60	50
3886897659	14	Female	1,53	50
3886886502	16	Female	1,60	48
3886877969	14	Female	1,49	43
3886863958	15	Male	1,75	65
3886701572	15	Male	1,73	73
3886693846	12	Female	1,40	40
3886628016	12	Female	1,40	36
3886623361	12	Female	1,50	30
3886618521	12	Female	1,61	45
3886613583	14	Male	1,71	55
3886610784	11	Female	1,49	36
3886595224	13	Male	1,49	32
3886583963	13	Female	1,47	45
3886579521	12	Female	1,55	48
3886573614	11	Male	1,58	61
3886492182	14	Female	1,60	50
3886487836	14	Female	1,73	64
3886482983	14	Female	1,50	35
3886477400	11	Female	1,60	38
3886473563	15	Male	1,71	65
3912754149	13	Male	1,70	50
3912753957	14	Female	1,63	50
3912752597	12	Female	1,50	51
3912752289	13	Female	1,68	55

3912752184	13	Female	1,72	50
3912751242	14	Male	1,66	80
3912750658	12	Male	1,57	62
3912749617	12	Male	1,80	60
3912749016	13	Male	1,63	42
3912748143	13	Male	1,65	54
3890043736	13	Female	1,70	48
3890039997	14	Male	1,60	40
3890034529	15	Male	1,78	95
3889751162	14	Female	1,50	50
3889749232	13	Female	1,40	30
3889746648	14	Male	1,70	50
3889743576	13	Female	1,66	45
3889740298	13	Female	1,49	43
3889737922	13	Male	1,56	41
3889665520	12	Male	1,55	51
3889663586	13	Male	1,56	51
3889662276	13	Male	1,37	36
3888697183	12	Male	1,55	40
3888692963	13	Male	1,62	58
3887053010	12	Female	1,61	45
3887035703	12	Female	1,50	30
3887025511	13	Male	1,75	65
3887002730	14	Male	1,60	68
3886980755	12	Female	1,55	45
3886971427	14	Female	1,65	50
3886956905	14	Male	1,70	80
3886943878	14	Male	1,75	55
3886923599	14	Female	1,60	50
3886897659	14	Female	1,53	50
3886886502	16	Female	1,60	48
3886877969	14	Female	1,49	43
3886863958	15	Male	1,75	65
3886701572	15	Male	1,73	73
3886693846	12	Female	1,40	40
3886628016	12	Female	1,40	36
3886623361	12	Female	1,50	30
3886618521	12	Female	1,61	45
3886613583	14	Male	1,71	55
3886610784	11	Female	1,49	36
3886595224	13	Male	1,49	32
3886583963	13	Female	1,47	45
3886579521	12	Female	1,55	48
3886573614	11	Male	1,58	61
3886492182	14	Female	1,60	50
3886487836	14	Female	1,73	64
3886482983	14	Female	1,50	35
3886477400	11	Female	1,60	38
3886473563	15	Male	1,71	65
38864642578	14	Female	1,66	67
3884434183	14	Male	1,87	89
3884425269	15	Female	1,61	50
3884418684	12	Male	1,45	51
3882735466	12	Female	1,43	35
3882714719	12	Female	1,50	40

3882149265	13	Female	1,53	47
3882132493	12	Female	1,55	45
3881402826	14	Female	1,70	67
3881378615	13	Female	1,55	40
3881368250	14	Female	1,63	52
3881357441	14	Female	1,69	50
3881265294	13	Female	1,57	46
3881254139	13	Female	1,63	56
3881237980	12	Female	1,41	35
3881230356	12	Female	1,58	57
3881220157	14	Female	1,60	50
3881215195	13	Female	1,56	47
3881210102	12	Male	1,61	77
3881204090	14	Female	1,67	48
3879817918	12	Female	1,50	45
3879409688	12	Female	1,40	40
3879374635	13	Female	1,55	50
3879355152	14	Female	1,60	55
3879318196	11	Female	1,56	50
3879280118	14	Female	1,45	45
3879241966	14	Male	1,75	80
3879169212	14	Female	1,63	45
3879156353	13	Female	1,55	50
3879114622	16	Male	1,70	72
3878785230	13	Female	1,60	60
3878769580	16	Male	1,72	68
3878759308	17	Male	1,80	79
3878753669	16	Male	1,69	60
3878748875	16	Male	1,65	60
3878742830	16	Male	1,70	55
3878737152	17	Male	1,81	71
3878730696	16	Male	1,67	70
3878725762	16	Female	1,60	54
3878719521	17	Male	1,53	59
3878713486	17	Male	1,73	71
3878709205	17	Male	1,70	70
3878700132	17	Male	1,74	68
3873328056	12	Male	1,58	42
3873312445	12	Male	1,62	56
3873301897	12	Male	1,45	30
3873288043	12	Female	1,43	30
3873082048	12	Male	1,45	38
3873075081	12	Female	1,50	45
3873068691	12	Male	1,40	51
3873056977	13	Female	1,60	50
3873049368	12	Female	1,56	50
3873028210	12	Male	1,62	64
3873020393	12	Male	1,40	35
3873001235	12	Female	1,53	43
3872993752	12	Female	1,55	45
3872987133	11	Female	1,63	38
3872964285	12	Female	1,65	45
3872953817	14	Male	1,71	64
3872947394	12	Female	1,60	45
3872939332	12	Male	1,57	40

3872846015	12	Male	1,40	38
3872841613	12	Male	1,68	54
3872837796	15	Male	1,71	55
3872820378	14	Female	1,63	41
3872768107	14	Male	1,79	65
3871255066	13	Male	1,65	51
3871227626	11	Male	1,65	37
3871205440	12	Male	1,45	35
3871184697	12	Male	1,50	46
3871162565	13	Female	1,55	40
3871151654	12	Female	1,48	33
3871110433	12	Female	1,47	38
3870870493	11	Male	1,50	43
3870854704	12	Female	1,53	55
3870838781	13	Male	1,55	45
3870801193	18	Male	1,83	83
3868573297	17	Male	1,65	67
3868554028	18	Male	1,78	75
3868526738	19	Male	1,74	70
3868509803	17	Male	1,73	65
3868484667	18	Male	1,78	66
3868442104	18	Male	1,80	60
3868422304	18	Male	1,80	67
3868411080	20	Male	1,70	95
3868391766	13	Female	1,55	50
3868375041	14	Female	1,63	45
3866713588	16	Female	1,74	57
3865495924	17	Male	1,70	69
3863418934	15	Male	1,73	65
3858671359	20	Male	1,70	95
3858643095	18	Male	1,73	70
3858633255	18	Male	1,75	80
3857438462	18	Female	1,60	48
3856260669	20	Male	1,70	59
3856248923	18	Male	1,83	80
3856225449	18	Male	1,80	66
3854605877	11	Female	1,46	34
3853879738	17	Male	1,73	60
3853851932	18	Female	1,70	60
3853830935	18	Male	1,87	96
3853806357	20	Male	1,75	68
3853715854	19	Male	1,78	86
3853679395	19	Male	1,73	65
3853627220	19	Male	1,74	55
3853269579	18	Male	1,80	65
3853179710	11	Male	1,52	51
3848999317	18	Female	1,70	67
3847103154	17	Female	1,60	51
3845684674	16	Male	1,70	70
3845447408	17	Female	1,65	60
3844847491	18	Female	1,65	74
3844360977	18	Male	1,87	65
3844236222	18	Female	1,74	68
3844232462	18	Female	1,65	75
3844138637	19	Female	1,73	68

3844055790	17	Female	1,67	60
3843935898	12	Female	1,63	56
3843931544	16	Female	1,70	65
3843911811	17	Female	1,65	66
3843804662	17	Female	1,65	63
3843766328	16	Male	1,73	62
3843760219	18	Female	1,75	90
3843744801	17	Male	1,70	58
3843734569	17	Female	1,63	69
3843716341	17	Female	1,63	69
3843712724	16	Female	1,60	45
3843674785	18	Female	1,69	65
3843623603	16	Male	1,80	84
3843612922	17	Male	1,85	80
3843608317	19	Female	1,56	58
3843605819	17	Female	1,80	60
3843604500	16	Male	1,74	60
3843603283	17	Female	1,68	66
3843590935	19	Male	1,70	71
3843584691	18	Female	1,58	47
3843566558	17	Female	1,68	60
3843563669	17	Female	1,62	43
3843558483	17	Female	1,73	60
3843546559	12	Female	1,50	50
3843527212	17	Female	1,75	70
4058991282	12	Male	1,31	31
4058988558	11	Female	1,50	35
4058970974	11	Male	1,40	41
4058966399	12	Male	1,48	38
4058961408	11	Male	1,35	28
4058958230	12	Male	1,42	30
4058954419	14	Male	1,40	34
4058949738	12	Male	1,30	31
4058944768	12	Female	1,52	80
4058940279	15	Female	1,60	54
4058928337	15	Male	1,70	70
4058925829	11	Male	1,58	48
4058295828	14	Female	1,54	45
4058285308	15	Male	1,74	80
4058276966	12	Female	1,25	32
4058264705	12	Male	1,64	50
4058256269	12	Female	1,60	48
4058248054	14	Female	1,55	40
4058240982	12	Male	1,52	47
4057536878	12	Female	1,58	43
4057526407	14	Male	1,70	67
4057507742	14	Male	1,66	66
4057471823	14	Male	1,60	45
4057460212	12	Male	1,65	65
4057442304	12	Male	1,49	39
4057423702	12	Male	1,55	60
4057364669	12	Female	1,50	36
4057347523	12	Female	1,51	38
4057335898	12	Female	1,58	50
4057317286	12	Male	1,50	50

4057304812	14	Male	1,55	42
4057273462	13	Male	1,60	64
4057253149	12	Female	1,50	49
4057238269	12	Male	1,70	90
4057216892	16	Female	1,70	58
4057172013	12	Female	1,63	54
4057160934	11	Male	1,35	48
4057015182	11	Female	1,30	30
4057002543	15	Male	1,80	80
4056994599	14	Male	1,55	46
4056988375	14	Male	1,80	80
4056982171	13	Female	1,55	45
4056976704	11	Female	1,40	42
4056969438	14	Male	1,55	55
4056963885	14	Female	1,57	50
4056956531	14	Male	1,65	50
4056948732	14	Male	1,84	65
4056941323	13	Male	1,58	40
4056928489	12	Female	1,45	38
4056918542	12	Female	1,57	47
4056912185	12	Male	1,57	49
4056906655	13	Male	1,72	63
4056901873	15	Male	1,72	60

Table B1-2. Basic Information About Computer Preferences of Respondents

ID of the respondents	Computer usage preferences of the respondents	ID of the respondents	Computer usage preferences of the respondents
4016327570	Only tablet	4016165993	Only laptop
4016323071	All	4016160969	All
4016319090	All	4016154648	Laptop and tablet
4016311412	Only tablet	4012804018	Laptop and tablet
4016307251	All	4012797964	All
4016303216	Desktop and laptop	4012790555	Laptop and tablet
4016296167	Laptop and tablet	4012782011	Desktop and tablet
4016290910	Only laptop	4012730725	Desktop and tablet
4016286833	Desktop and tablet	4012723554	Only laptop
4016172184	Only laptop	4012656140	Only laptop
4012651160	All	3989314032	Only tablet
4012644259	All	3989303005	Laptop and tablet
4012637005	Desktop and laptop	3989271549	Laptop and tablet
4012633162	Only laptop	3989221063	Laptop and tablet
4012624811	Laptop and tablet	3987326905	All
4012617660	Laptop and tablet	3987319596	All
4012614159	Desktop and tablet	3987312489	Only laptop
4012508792	All	3987278903	Only tablet
4012498640	All	3987270618	Laptop and tablet
4012491488	Laptop and tablet	3987265971	Laptop and tablet
4012485284	Only tablet	3987138863	Only laptop
4012473633	Only tablet	3987119797	All
4012469464	Only tablet	3987103718	All
4012466160	Laptop and tablet	3987095737	All
4012460658	Desktop and tablet	3987091706	Only laptop

4012455947	Laptop and tablet
4012430576	Only tablet
4012426652	All
4012406783	All
4012399710	Only tablet
4004970129	Laptop and tablet
4004963506	Only tablet
4004957167	Laptop and tablet
4004945257	All
4004934437	Laptop and tablet
4004921493	Only laptop
4004914674	Desktop and laptop
4004905832	Only laptop
4004899412	All
4004891212	Laptop and tablet
4004885248	Only laptop
4004879116	All
3992329563	Only laptop
3991552998	All
3991524993	Laptop and tablet
3991510154	Laptop and tablet
3991501190	All
3991488370	All
3991475073	All
3991225783	All
3991219753	Only laptop
3991212143	Only laptop
3991206524	Laptop and tablet
3991199746	Laptop and tablet
3990101142	Laptop and tablet
3990078514	Laptop and tablet
3990065394	Desktop and laptop
3990050548	All
3990036940	Only tablet
3990028350	All
3990016288	Only laptop
3913081818	Only laptop
3913081704	Only tablet
3913081489	All
3913081461	Laptop and tablet
3913080016	Desktop and tablet
3913079239	Only tablet
3912896144	Only desktop
3912892626	All
3912890441	Only tablet
3912887032	Laptop and tablet
3912886614	All
3912881779	All
3912880151	All
3912878868	All
3912872911	Laptop and tablet
3912860210	Only tablet
3912859078	All
3912854606	Only tablet
3912854551	All
3912852270	Laptop and tablet

3987088444	Desktop and tablet
3987083033	Only tablet
3968572950	Only laptop
3968557021	Laptop and tablet
3968537814	Laptop and tablet
3968522980	All
3968507520	Desktop and laptop
3968424226	Desktop and tablet
3968393898	Desktop and laptop
3968040530	Only laptop
3968033599	Laptop and tablet
3968016333	Laptop and tablet
3968006605	All
3968000019	All
3957258512	Laptop and tablet
3934852622	Only laptop
3934129822	Only desktop
3932105563	All
3931234753	Desktop and tablet
3931175964	Only laptop
3931133172	Only laptop
3930994714	Laptop and tablet
3930804586	Desktop and laptop
3930749449	Only laptop
3930697280	Only desktop
3930445230	Only tablet
3930068383	Only laptop
3929872863	Desktop and tablet
3929691190	Desktop and laptop
3929382688	Only tablet
3913097202	Laptop and tablet
3913096620	All
3913091157	Only tablet
3913087916	All
3913084313	Only tablet
3913082865	Only tablet
3889746648	All
3889743576	Desktop and tablet
3889740298	Desktop and tablet
3889737922	Only laptop
3889665520	All
3889663586	Desktop and tablet
3889662276	Desktop and tablet
3888697183	Only desktop
3888692963	All
3887053010	Desktop and tablet
3887035703	Only laptop
3887025511	Desktop and laptop
3887002730	All
3886980755	Desktop and tablet
3886971427	Laptop and tablet
3886956905	Desktop and tablet
3886943878	Desktop and laptop
3886923599	All
3886897659	Desktop and tablet
3886886502	Only desktop

3912848038	All
3912847968	Only tablet
3912842944	Desktop and laptop
3912794147	All
3912790105	Laptop and tablet
3912778536	All
3912776656	All
3912776486	Desktop and laptop
3912776152	Desktop and laptop
3912759330	Desktop and tablet
3912758978	All
3912757730	Only laptop
3912757652	All
3912757524	Laptop and tablet
3912756711	All
3912755385	Laptop and tablet
3912755235	Desktop and laptop
3912754149	Laptop and tablet
3912753957	Desktop and tablet
3912752597	Only tablet
3912752289	Laptop and tablet
3912752184	All
3912751242	All
3912750658	All
3912749617	Laptop and tablet
3912749016	All
3912748143	All
3890043736	Laptop and tablet
3890039997	All
3890034529	Only laptop
3889751162	Desktop and tablet
3889749232	Laptop and tablet
3881237980	All
3881230356	Desktop and laptop
3881220157	All
3881215195	Only tablet
3881210102	All
3881204090	Laptop and tablet
3879817918	Laptop and tablet
3879409688	Laptop and tablet
3879374635	Only desktop
3879355152	All
3879318196	Desktop and laptop
3879280118	Laptop and tablet
3879241966	Only desktop
3879169212	Only laptop
3879156353	Only laptop
3879114622	Only desktop
3878785230	All
3878769580	All
3878759308	Desktop and laptop
3878753669	Desktop and laptop
3878748875	All
3878742830	Desktop and laptop
3878737152	All
3878730696	Desktop and laptop

3886877969	Laptop and tablet
3886863958	All
3886701572	Laptop and tablet
3886693846	Only laptop
3886628016	Only tablet
3886623361	Only laptop
3886618521	Desktop and tablet
3886613583	Only laptop
3886610784	All
3886595224	Laptop and tablet
3886583963	All
3886579521	Desktop and tablet
3886573614	Only laptop
3886492182	Desktop and laptop
3886487836	All
3886482983	All
3886477400	All
3886473563	All
3886462578	All
3884434183	Only desktop
3884425269	Only tablet
3884418684	Only desktop
3882735466	Desktop and tablet
3882714719	Only desktop
3882149265	Only tablet
3882132493	Laptop and tablet
3881402826	Only laptop
3881378615	Laptop and tablet
3881368250	Desktop and tablet
3881357441	All
3881265294	Laptop and tablet
3881254139	Laptop and tablet
3871255066	Only laptop
3871227626	Only laptop
3871205440	Desktop and tablet
3871184697	Desktop and tablet
3871162565	Laptop and tablet
3871151654	Laptop and tablet
3871110433	Desktop and laptop
3870870493	All
3870854704	Laptop and tablet
3870838781	Only desktop
3870801193	Desktop and tablet
3868573297	Desktop and laptop
3868554028	All
3868526738	Only desktop
3868509803	Desktop and laptop
3868484667	All
3868442104	All
3868422304	Only tablet
3868411080	Only laptop
3868391766	Only laptop
3868375041	Only laptop
3866713588	Only laptop
3865495924	Only laptop
3863418934	Only laptop

3878725762	Desktop and tablet
3878719521	Desktop and laptop
3878713486	All
3878709205	Desktop and laptop
3878700132	All
3873328056	Desktop and laptop
3873312445	Desktop and laptop
3873301897	All
3873288043	Desktop and tablet
3873082048	Only tablet
3873075081	All
3873068691	Laptop and tablet
3873056977	Only desktop
3873049368	Only tablet
3873028210	Only desktop
3873020393	All
3873001235	Only desktop
3872993752	All
3872987133	Desktop and tablet
3872964285	All
3872953817	Only laptop
3872947394	Desktop and tablet
3872939332	Desktop and laptop
3872846015	Desktop and laptop
3872841613	Desktop and laptop
3872837796	All
3872820378	Only desktop
3872768107	Laptop and tablet
3843931544	Only laptop
3843911811	Laptop and tablet
3843804662	Only laptop
3843766328	All
3843760219	Laptop and tablet
3843744801	Desktop and laptop
3843734569	Laptop and tablet
3843716341	All
3843712724	All
3843674785	Only laptop
3843623603	Laptop and tablet
3843612922	Desktop and laptop
3843608317	Only laptop
3843605819	Laptop and tablet
3843604500	Only laptop
3843603283	Laptop and tablet
3843590935	Desktop and laptop
3843584691	Laptop and tablet
3843566558	Laptop and tablet
3843563669	Laptop and tablet
3843558483	All
3843546559	Laptop and tablet
3843527212	All
4058991282	Only desktop
4058988558	Desktop and tablet
4058970974	All
4058966399	Only tablet
4058961408	All

3858671359	Only laptop
3858643095	All
3858633255	Only laptop
3857438462	All
3856260669	Desktop and laptop
3856248923	All
3856225449	All
3854605877	Desktop and tablet
3853879738	Desktop and laptop
3853851932	Laptop and tablet
3853830935	Laptop and tablet
3853806357	Only laptop
3853715854	Desktop and tablet
3853679395	Desktop and laptop
3853627220	Only laptop
3853269579	Only laptop
3853179710	All
3848999317	Only laptop
3847103154	Desktop and laptop
3845684674	Laptop and tablet
3845447408	All
3844847491	Laptop and tablet
3844360977	Only laptop
3844236222	Only laptop
3844232462	Only tablet
3844138637	Only laptop
3844055790	Desktop and tablet
3843935898	Laptop and tablet
4057317286	Desktop and laptop
4057304812	Desktop and tablet
4057273462	All
4057253149	Only laptop
4057238269	Laptop and tablet
4057216892	All
4057172013	Only desktop
4057160934	All
4057015182	All
4057002543	Only desktop
4056994599	Only desktop
4056988375	Desktop and tablet
4056982171	All
4056976704	All
4056969438	Only laptop
4056963885	Laptop and tablet
4056956531	All
4056948732	Desktop and tablet
4056941323	Only tablet
4056928489	Laptop and tablet
4056918542	Desktop and tablet
4056912185	All
4056906655	Desktop and tablet
4056901873	All
4058958230	All
4058954419	All
4058949738	Only laptop
4058944768	All

4058940279	Desktop and tablet
4058928337	Laptop and tablet
4058925829	All
4058295828	Desktop and tablet
4058285308	Only desktop
4058276966	Laptop and tablet
4058264705	Desktop and laptop
4058256269	Laptop and tablet
4058248054	Only tablet
4058240982	All

4057536878	Laptop and tablet
4057526407	All
4057507742	All
4057471823	Desktop and tablet
4057460212	Only tablet
4057442304	Desktop and tablet
4057423702	All
4057364669	All
4057347523	All
4057335898	All

Table B1-3 (a). Answers of the respondents to Question 6 - Communication

ID of the respondent	Communication (E-mail, social media, chat)		
	Laptop	Desktop	Tablet
4016327570	None	None	2-3 hours
4016323071	None	None	More than 3 hours
4016319090	None	None	1-2 hours
4016311412	None	None	More than 3 hours
4016307251	Less than 1 hour	None	Less than 1 hour
4016303216	Less than 1 hour	1-2 hours	None
4016296167	Less than 1 hour	None	Less than 1 hour
4016290910	More than 3 hours	None	None
4016286833	None	None	1-2 hours
4016172184	1-2 hours	None	None
4016165993	Less than 1 hour	None	None
4016160969	None	Less than 1 hour	None
4016154648	None	None	Less than 1 hour
4012804018	Less than 1 hour	None	Less than 1 hour
4012797964	None	None	None
4012790555	1-2 hours	None	None
4012782011	None	Less than 1 hour	None
4012730725	None	Less than 1 hour	None
4012723554	1-2 hours	None	None
4012656140	Less than 1 hour	None	None
4012651160	Less than 1 hour	1-2 hours	Less than 1 hour
4012644259	Less than 1 hour	None	None
4012637005	Less than 1 hour	1-2 hours	None
4012633162	Less than 1 hour	None	None
4012624811	None	None	Less than 1 hour
4012617660	None	None	Less than 1 hour
4012614159	None	None	None
4012508792	None	None	None
4012498640	Less than 1 hour	None	Less than 1 hour
4012491488	None	None	1-2 hours
4012485284	None	None	2-3 hours
4012473633	None	None	1-2 hours
4012469464	None	None	None
4012466160	Less than 1 hour	None	Less than 1 hour
4012460658	None	None	None
4012455947	Less than 1 hour	None	Less than 1 hour
4012430576	None	None	Less than 1 hour

4012426652	None	None	None
4012406783	None	None	2-3 hours
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	2-3 hours
4004963506	None	None	1-2 hours
4004957167	1-2 hours	None	More than 3 hours
4004945257	1-2 hours	None	1-2 hours
4004934437	1-2 hours	None	Less than 1 hour
4004921493	Less than 1 hour	None	None
4004914674	Less than 1 hour	None	None
4004905832	2-3 hours	None	None
4004899412	Less than 1 hour	None	Less than 1 hour
4004891212	Less than 1 hour	None	Less than 1 hour
4004885248	None	None	None
4004879116	None	None	None
3992329563	None	None	None
3991552998	1-2 hours	None	Less than 1 hour
3991524993	Less than 1 hour	None	Less than 1 hour
3991510154	None	None	None
3991501190	None	None	2-3 hours
3991488370	Less than 1 hour	Less than 1 hour	Less than 1 hour
3991475073	Less than 1 hour	Less than 1 hour	Less than 1 hour
3991225783	Less than 1 hour	None	None
3991219753	Less than 1 hour	None	None
3991212143	None	None	None
3991206524	None	None	None
3991199746	1-2 hours	None	1-2 hours
3990101142	None	None	None
3990078514	Less than 1 hour	None	Less than 1 hour
3990065394	None	Less than 1 hour	None
3990050548	None	None	Less than 1 hour
3990036940	None	None	Less than 1 hour
3990028350	Less than 1 hour	None	Less than 1 hour
3990016288	More than 3 hours	None	None
3989314032	None	None	2-3 hours
3989303005	None	None	More than 3 hours
3989271549	Less than 1 hour	None	None
3989221063	Less than 1 hour	None	None
3987326905	1-2 hours	None	None
3987319596	None	None	1-2 hours
3987312489	Less than 1 hour	None	None
3987278903	None	None	2-3 hours
3987270618	None	None	Less than 1 hour
3987265971	Less than 1 hour	None	Less than 1 hour
3987138863	More than 3 hours	None	None
3987119797	2-3 hours	None	Less than 1 hour
3987103718	None	None	1-2 hours
3987095737	Less than 1 hour	None	None
3987091706	Less than 1 hour	None	None
3987088444	None	None	None
3987083033	None	None	1-2 hours
3968572950	Less than 1 hour	None	None
3968557021	Less than 1 hour	None	1-2 hours
3968537814	Less than 1 hour	None	Less than 1 hour
3968522980	Less than 1 hour	1-2 hours	2-3 hours

3968507520	1-2 hours	None	None
3968424226	None	None	2-3 hours
3968393898	1-2 hours	None	None
3968040530	More than 3 hours	None	None
3968033599	None	None	2-3 hours
3968016333	1-2 hours	None	Less than 1 hour
3968006605	1-2 hours	1-2 hours	1-2 hours
3968000019	Less than 1 hour	None	None
3957258512	Less than 1 hour	None	None
3934852622	1-2 hours	None	None
3934129822	None	Less than 1 hour	None
3932105563	Less than 1 hour	1-2 hours	2-3 hours
3931234753	None	Less than 1 hour	Less than 1 hour
3931175964	1-2 hours	None	None
3931133172	Less than 1 hour	None	None
3930994714	Less than 1 hour	None	Less than 1 hour
3930804586	Less than 1 hour	None	Less than 1 hour
3930749449	1-2 hours	None	None
3930697280	None	Less than 1 hour	None
3930445230	None	None	None
3930068383	Less than 1 hour	1-2 hours	More than 3 hours
3929872863	None	2-3 hours	None
3929691190	More than 3 hours	Less than 1 hour	None
3929382688	Less than 1 hour	None	More than 3 hours
3913097202	Less than 1 hour	None	Less than 1 hour
3913096620	Less than 1 hour	Less than 1 hour	1-2 hours
3913091157	None	None	Less than 1 hour
3913087916	Less than 1 hour	1-2 hours	2-3 hours
3913084313	None	None	1-2 hours
3913082865	1-2 hours	1-2 hours	1-2 hours
3913081818	More than 3 hours	None	None
3913081704	None	Less than 1 hour	2-3 hours
3913081489	More than 3 hours	2-3 hours	2-3 hours
3913081461	1-2 hours	None	1-2 hours
3913080016	None	2-3 hours	Less than 1 hour
3913079239	None	None	More than 3 hours
3912896144	None	None	Less than 1 hour
3912892626	Less than 1 hour	None	1-2 hours
3912890441	Less than 1 hour	None	2-3 hours
3912887032	Less than 1 hour	None	1-2 hours
3912886614	1-2 hours	Less than 1 hour	More than 3 hours
3912881779	More than 3 hours	None	Less than 1 hour
3912880151	More than 3 hours	1-2 hours	More than 3 hours
3912878868	None	Less than 1 hour	1-2 hours
3912872911	None	None	Less than 1 hour
3912860210	None	Less than 1 hour	More than 3 hours
3912859078	None	None	None
3912854606	None	None	None
3912854551	2-3 hours	1-2 hours	More than 3 hours
3912852270	1-2 hours	Less than 1 hour	More than 3 hours
3912848038	More than 3 hours	None	2-3 hours
3912847968	None	Less than 1 hour	1-2 hours
3912842944	Less than 1 hour	Less than 1 hour	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	1-2 hours	None	More than 3 hours

3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	2-3 hours	1-2 hours	1-2 hours
3912776486	1-2 hours	2-3 hours	1-2 hours
3912776152	2-3 hours	Less than 1 hour	More than 3 hours
3912759330	None	Less than 1 hour	None
3912758978	1-2 hours	Less than 1 hour	More than 3 hours
3912757730	1-2 hours	None	None
3912757652	Less than 1 hour	More than 3 hours	Less than 1 hour
3912757524	Less than 1 hour	None	2-3 hours
3912756711	Less than 1 hour	More than 3 hours	More than 3 hours
3912755385	None	None	Less than 1 hour
3912755235	1-2 hours	More than 3 hours	Less than 1 hour
3912754149	None	None	1-2 hours
3912753957	Less than 1 hour	Less than 1 hour	More than 3 hours
3912752597	1-2 hours	1-2 hours	More than 3 hours
3912752289	Less than 1 hour	None	Less than 1 hour
3912752184	2-3 hours	1-2 hours	More than 3 hours
3912751242	1-2 hours	Less than 1 hour	More than 3 hours
3912750658	2-3 hours	1-2 hours	Less than 1 hour
3912749617	1-2 hours	None	More than 3 hours
3912749016	None	None	None
3912748143	2-3 hours	Less than 1 hour	1-2 hours
3890043736	1-2 hours	None	More than 3 hours
3890039997	Less than 1 hour	Less than 1 hour	None
3890034529	1-2 hours	None	None
3889751162	None	None	More than 3 hours
3889749232	2-3 hours	None	None
3889746648	None	More than 3 hours	None
3889743576	None	Less than 1 hour	Less than 1 hour
3889740298	None	Less than 1 hour	Less than 1 hour
3889737922	1-2 hours	None	None
3889665520	None	None	None
3889663586	None	None	None
3889662276	None	1-2 hours	More than 3 hours
3888697183	None	Less than 1 hour	None
3888692963	None	None	2-3 hours
3887053010	None	1-2 hours	Less than 1 hour
3887035703	Less than 1 hour	None	None
3887025511	1-2 hours	None	None
3887002730	Less than 1 hour	None	Less than 1 hour
3886980755	None	Less than 1 hour	None
3886971427	Less than 1 hour	None	2-3 hours
3886956905	None	Less than 1 hour	Less than 1 hour
3886943878	Less than 1 hour	Less than 1 hour	None
3886923599	2-3 hours	None	None
3886897659	None	Less than 1 hour	More than 3 hours
3886886502	None	1-2 hours	None
3886877969	Less than 1 hour	None	More than 3 hours
3886863958	None	None	None
3886701572	None	None	Less than 1 hour
3886693846	Less than 1 hour	None	None
3886628016	None	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	1-2 hours	Less than 1 hour
3886613583	Less than 1 hour	None	None

3886610784	2-3 hours	None	Less than 1 hour
3886595224	None	None	None
3886583963	1-2 hours	None	2-3 hours
3886579521	None	None	None
3886573614	Less than 1 hour	None	None
3886492182	None	None	None
3886487836	None	Less than 1 hour	None
3886482983	Less than 1 hour	None	Less than 1 hour
3886477400	Less than 1 hour	Less than 1 hour	1-2 hours
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3886462578	1-2 hours	1-2 hours	2-3 hours
3884434183	None	Less than 1 hour	None
3884425269	None	None	Less than 1 hour
3884418684	None	2-3 hours	None
3882735466	None	None	Less than 1 hour
3882714719	None	Less than 1 hour	None
3882149265	None	None	2-3 hours
3882132493	Less than 1 hour	None	Less than 1 hour
3881402826	2-3 hours	None	None
3881378615	Less than 1 hour	None	None
3881368250	None	Less than 1 hour	More than 3 hours
3881357441	1-2 hours	Less than 1 hour	1-2 hours
3881265294	None	None	2-3 hours
3881254139	None	None	1-2 hours
3881237980	Less than 1 hour	None	None
3881230356	None	None	None
3881220157	None	More than 3 hours	2-3 hours
3881215195	None	None	None
3881210102	1-2 hours	Less than 1 hour	1-2 hours
3881204090	1-2 hours	None	None
3879817918	Less than 1 hour	None	More than 3 hours
3879409688	Less than 1 hour	None	Less than 1 hour
3879374635	None	1-2 hours	None
3879355152	Less than 1 hour	Less than 1 hour	2-3 hours
3879318196	Less than 1 hour	Less than 1 hour	None
3879280118	None	None	Less than 1 hour
3879241966	None	None	None
3879169212	1-2 hours	None	None
3879156353	None	None	None
3879114622	None	1-2 hours	None
3878785230	Less than 1 hour	None	None
3878769580	None	None	2-3 hours
3878759308	Less than 1 hour	None	None
3878753669	2-3 hours	None	None
3878748875	None	None	More than 3 hours
3878742830	2-3 hours	None	None
3878737152	None	None	1-2 hours
3878730696	None	2-3 hours	None
3878725762	None	None	2-3 hours
3878719521	1-2 hours	None	None
3878713486	1-2 hours	None	Less than 1 hour
3878709205	None	2-3 hours	None
3878700132	Less than 1 hour	Less than 1 hour	2-3 hours
3873328056	None	1-2 hours	None
3873312445	Less than 1 hour	None	None

3873301897	Less than 1 hour	None	None
3873288043	None	None	None
3873082048	None	None	Less than 1 hour
3873075081	2-3 hours	1-2 hours	Less than 1 hour
3873068691	Less than 1 hour	None	Less than 1 hour
3873056977	None	2-3 hours	None
3873049368	None	None	More than 3 hours
3873028210	None	2-3 hours	None
3873020393	Less than 1 hour	Less than 1 hour	1-2 hours
3873001235	None	Less than 1 hour	None
3872993752	None	None	1-2 hours
3872987133	None	None	More than 3 hours
3872964285	None	None	Less than 1 hour
3872953817	Less than 1 hour	None	None
3872947394	None	1-2 hours	Less than 1 hour
3872939332	Less than 1 hour	None	None
3872846015	None	Less than 1 hour	None
3872841613	None	2-3 hours	None
3872837796	Less than 1 hour	None	Less than 1 hour
3872820378	None	Less than 1 hour	None
3872768107	Less than 1 hour	None	More than 3 hours
3871255066	1-2 hours	None	None
3871227626	More than 3 hours	None	None
3871205440	None	None	Less than 1 hour
3871184697	None	Less than 1 hour	Less than 1 hour
3871162565	1-2 hours	None	1-2 hours
3871151654	Less than 1 hour	None	Less than 1 hour
3871110433	Less than 1 hour	Less than 1 hour	None
3870870493	None	None	Less than 1 hour
3870854704	None	None	Less than 1 hour
3870838781	None	1-2 hours	None
3870801193	None	None	1-2 hours
3868573297	Less than 1 hour	None	None
3868554028	None	None	More than 3 hours
3868526738	None	Less than 1 hour	None
3868509803	1-2 hours	None	None
3868484667	More than 3 hours	1-2 hours	More than 3 hours
3868442104	None	Less than 1 hour	2-3 hours
3868422304	None	None	1-2 hours
3868411080	More than 3 hours	None	None
3868391766	None	None	None
3868375041	1-2 hours	None	None
3866713588	More than 3 hours	None	None
3865495924	More than 3 hours	1-2 hours	1-2 hours
3863418934	More than 3 hours	None	None
3858671359	More than 3 hours	None	None
3858643095	Less than 1 hour	More than 3 hours	Less than 1 hour
3858633255	Less than 1 hour	None	None
3857438462	1-2 hours	None	None
3856260669	1-2 hours	None	None
3856248923	None	None	1-2 hours
3856225449	1-2 hours	Less than 1 hour	1-2 hours
3854605877	Less than 1 hour	None	Less than 1 hour
3853879738	Less than 1 hour	More than 3 hours	None
3853851932	None	None	2-3 hours

3853830935	More than 3 hours	None	None
3853806357	1-2 hours	None	None
3853715854	None	None	1-2 hours
3853679395	Less than 1 hour	None	None
3853627220	Less than 1 hour	None	None
3853269579	1-2 hours	None	None
3853179710	1-2 hours	None	None
3848999317	1-2 hours	None	None
3847103154	None	Less than 1 hour	None
3845684674	None	None	Less than 1 hour
3845447408	2-3 hours	Less than 1 hour	2-3 hours
3844847491	1-2 hours	None	1-2 hours
3844360977	None	1-2 hours	None
3844236222	More than 3 hours	Less than 1 hour	None
3844232462	None	None	2-3 hours
3844138637	1-2 hours	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	2-3 hours	None	More than 3 hours
3843931544	Less than 1 hour	None	None
3843911811	None	None	Less than 1 hour
3843804662	Less than 1 hour	None	None
3843766328	1-2 hours	1-2 hours	More than 3 hours
3843760219	Less than 1 hour	None	Less than 1 hour
3843744801	More than 3 hours	2-3 hours	Less than 1 hour
3843734569	1-2 hours	None	1-2 hours
3843716341	None	1-2 hours	1-2 hours
3843712724	Less than 1 hour	1-2 hours	Less than 1 hour
3843674785	Less than 1 hour	None	Less than 1 hour
3843623603	1-2 hours	1-2 hours	Less than 1 hour
3843612922	None	1-2 hours	None
3843608317	Less than 1 hour	None	None
3843605819	Less than 1 hour	None	None
3843604500	Less than 1 hour	None	None
3843603283	Less than 1 hour	None	More than 3 hours
3843590935	1-2 hours	1-2 hours	None
3843584691	1-2 hours	None	1-2 hours
3843566558	1-2 hours	Less than 1 hour	Less than 1 hour
3843563669	More than 3 hours	None	More than 3 hours
3843558483	1-2 hours	Less than 1 hour	More than 3 hours
3843546559	1-2 hours	Less than 1 hour	More than 3 hours
3843527212	Less than 1 hour	Less than 1 hour	Less than 1 hour
4058991282	None	1-2 hours	None
4058988558	None	None	Less than 1 hour
4058970974	Less than 1 hour	None	2-3 hours
4058966399	None	None	None
4058961408	Less than 1 hour	1-2 hours	2-3 hours
4058958230	None	1-2 hours	None
4058954419	Less than 1 hour	Less than 1 hour	1-2 hours
4058949738	2-3 hours	Less than 1 hour	1-2 hours
4058944768	None	2-3 hours	None
4058940279	None	None	2-3 hours
4058928337	None	None	More than 3 hours
4058925829	None	None	2-3 hours
4058295828	None	None	More than 3 hours
4058285308	None	1-2 hours	None

4058276966	1-2 hours	None	Less than 1 hour
4058264705	None	None	None
4058256269	Less than 1 hour	None	More than 3 hours
4058248054	None	None	More than 3 hours
4058240982	None	None	1-2 hours
4057536878	1-2 hours	None	None
4057526407	None	None	1-2 hours
4057507742	More than 3 hours	None	None
4057471823	None	None	Less than 1 hour
4057460212	None	None	1-2 hours
4057442304	None	1-2 hours	None
4057423702	2-3 hours	Less than 1 hour	1-2 hours
4057364669	Less than 1 hour	None	Less than 1 hour
4057347523	Less than 1 hour	Less than 1 hour	1-2 hours
4057335898	Less than 1 hour	Less than 1 hour	1-2 hours
4057317286	2-3 hours	Less than 1 hour	None
4057304812	None	None	None
4057273462	1-2 hours	None	More than 3 hours
4057253149	1-2 hours	None	None
4057238269	Less than 1 hour	None	Less than 1 hour
4057216892	Less than 1 hour	None	1-2 hours
4057172013	None	1-2 hours	None
4057160934	2-3 hours	None	More than 3 hours
4057015182	None	None	2-3 hours
4057002543	None	None	None
4056994599	None	1-2 hours	None
4056988375	None	None	None
4056982171	2-3 hours	Less than 1 hour	2-3 hours
4056976704	1-2 hours	None	1-2 hours
4056969438	Less than 1 hour	None	None
4056963885	1-2 hours	Less than 1 hour	More than 3 hours
4056956531	Less than 1 hour	Less than 1 hour	2-3 hours
4056948732	None	Less than 1 hour	2-3 hours
4056941323	None	None	1-2 hours
4056928489	1-2 hours	None	2-3 hours
4056918542	None	Less than 1 hour	1-2 hours
4056912185	1-2 hours	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	None	1-2 hours	Less than 1 hour

Table B1-3 (b). Answers of the respondents to Question 6 – Playing games

ID of the respondent	Playing games		
	Laptop	Desktop	Tablet
4016327570	None	None	Less than 1 hour
4016323071	None	More than 3 hours	None
4016319090	None	1-2 hours	None
4016311412	None	None	Less than 1 hour
4016307251	None	2-3 hours	Less than 1 hour
4016303216	None	More than 3 hours	None
4016296167	2-3 hours	None	None
4016290910	Less than 1 hour	None	None

4016286833	None	1-2 hours	None
4016172184	None	None	None
4016165993	Less than 1 hour	None	None
4016160969	Less than 1 hour	2-3 hours	1-2 hours
4016154648	None	None	Less than 1 hour
4012804018	Less than 1 hour	None	Less than 1 hour
4012797964	None	None	1-2 hours
4012790555	None	None	None
4012730725	None	None	Less than 1 hour
4012723554	None	None	None
4012656140	Less than 1 hour	None	None
4012651160	None	More than 3 hours	2-3 hours
4012644259	None	None	1-2 hours
4012637005	Less than 1 hour	Less than 1 hour	None
4012633162	Less than 1 hour	None	None
4012624811	None	None	None
4012617660	None	None	Less than 1 hour
4012614159	None	None	Less than 1 hour
4012508792	Less than 1 hour	Less than 1 hour	Less than 1 hour
4012498640	Less than 1 hour	None	1-2 hours
4012491488	None	None	2-3 hours
4012730725	None	None	Less than 1 hour
4012723554	None	None	None
4012656140	Less than 1 hour	None	None
4012651160	None	More than 3 hours	2-3 hours
4012485284	None	None	2-3 hours
4012473633	None	None	2-3 hours
4016327570	None	None	Less than 1 hour
4016323071	None	More than 3 hours	None
4016319090	None	1-2 hours	None
4016311412	None	None	Less than 1 hour
4016307251	None	2-3 hours	Less than 1 hour
4016303216	None	More than 3 hours	None
4016296167	2-3 hours	None	None
4016290910	Less than 1 hour	None	None
4016286833	None	1-2 hours	None
4016172184	None	None	None
4016165993	Less than 1 hour	None	None
4016160969	Less than 1 hour	2-3 hours	1-2 hours
4016154648	None	None	Less than 1 hour
4012804018	Less than 1 hour	None	Less than 1 hour
4012797964	None	None	1-2 hours
4012790555	None	None	None
4012730725	None	None	Less than 1 hour
4012723554	None	None	None
4012656140	Less than 1 hour	None	None
4012651160	None	More than 3 hours	2-3 hours
4012644259	None	None	1-2 hours
4012637005	Less than 1 hour	Less than 1 hour	None
4012633162	Less than 1 hour	None	None
4012624811	None	None	None
4012617660	None	None	Less than 1 hour
4012614159	None	None	Less than 1 hour
4012508792	Less than 1 hour	Less than 1 hour	Less than 1 hour
4012498640	Less than 1 hour	None	1-2 hours
4012491488	None	None	2-3 hours
4012730725	None	None	Less than 1 hour
4012723554	None	None	None

4012656140	Less than 1 hour	None	None
4012651160	None	More than 3 hours	2-3 hours
4012485284	None	None	2-3 hours
4012473633	None	None	2-3 hours
4012469464	None	None	1-2 hours
4012466160	Less than 1 hour	None	Less than 1 hour
4012460658	None	1-2 hours	None
4012455947	Less than 1 hour	None	Less than 1 hour
4012430576	None	None	Less than 1 hour
4012426652	None	None	1-2 hours
4012406783	None	None	1-2 hours
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	1-2 hours
4004963506	None	None	Less than 1 hour
4004957167	2-3 hours	None	More than 3 hours
4004945257	None	2-3 hours	2-3 hours
4004934437	Less than 1 hour	None	1-2 hours
4004921493	Less than 1 hour	None	None
4004914674	2-3 hours	None	None
4004905832	More than 3 hours	None	None
4004899412	Less than 1 hour	None	1-2 hours
4004891212	Less than 1 hour	None	None
4004885248	More than 3 hours	None	None
4004879116	Less than 1 hour	None	None
3992329563	None	None	None
3991552998	None	None	Less than 1 hour
3991524993	1-2 hours	None	2-3 hours
3991510154	None	None	None
3991501190	None	None	2-3 hours
3991488370	None	None	None
3991475073	Less than 1 hour	Less than 1 hour	2-3 hours
3991225783	None	None	Less than 1 hour
3991219753	None	None	None
3991212143	None	None	None
3991206524	Less than 1 hour	None	Less than 1 hour
3991199746	Less than 1 hour	None	Less than 1 hour
3990101142	None	None	None
3990078514	None	None	None
3990065394	1-2 hours	Less than 1 hour	None
3990050548	None	None	1-2 hours
3990036940	None	None	1-2 hours
3990028350	Less than 1 hour	None	2-3 hours
3990016288	None	None	2-3 hours
3989314032	None	None	Less than 1 hour
3989303005	None	None	More than 3 hours
3989271549	None	None	None
3989221063	1-2 hours	None	None
3987326905	None	None	1-2 hours
3987319596	None	None	Less than 1 hour
3987312489	Less than 1 hour	None	None
3987278903	None	None	1-2 hours
3987270618	None	None	Less than 1 hour
3987265971	None	None	Less than 1 hour
3987138863	1-2 hours	None	None
3987119797	Less than 1 hour	More than 3 hours	None
3987103718	None	None	Less than 1 hour
3987095737	None	2-3 hours	None
3987091706	1-2 hours	None	None

3987088444	None	2-3 hours	More than 3 hours
3987083033	None	None	Less than 1 hour
3968572950	1-2 hours	None	None
3968557021	1-2 hours	None	1-2 hours
3968537814	None	None	None
3968522980	None	2-3 hours	None
3968507520	2-3 hours	None	None
3968424226	None	2-3 hours	None
3968393898	None	None	None
3968040530	1-2 hours	None	None
3968033599	None	None	Less than 1 hour
3968016333	1-2 hours	None	None
3968006605	Less than 1 hour	Less than 1 hour	1-2 hours
3968000019	Less than 1 hour	None	None
3957258512	1-2 hours	None	1-2 hours
3934852622	None	None	None
3934129822	None	Less than 1 hour	None
3932105563	Less than 1 hour	1-2 hours	1-2 hours
3931234753	None	1-2 hours	None
3931175964	Less than 1 hour	Less than 1 hour	None
3931133172	None	None	None
3930994714	None	None	None
3930804586	Less than 1 hour	Less than 1 hour	None
3930749449	None	None	None
3930697280	None	More than 3 hours	None
3930445230	None	None	None
3930068383	Less than 1 hour	None	2-3 hours
3929872863	None	Less than 1 hour	None
3929691190	2-3 hours	Less than 1 hour	None
3929382688	Less than 1 hour	None	More than 3 hours
3913097202	1-2 hours	Less than 1 hour	Less than 1 hour
3913096620	1-2 hours	1-2 hours	1-2 hours
3913091157	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913087916	None	Less than 1 hour	1-2 hours
3913084313	None	None	Less than 1 hour
3913082865	1-2 hours	1-2 hours	1-2 hours
3913081818	Less than 1 hour	None	None
3913081704	None	None	Less than 1 hour
3913081489	More than 3 hours	More than 3 hours	More than 3 hours
3913081461	1-2 hours	None	1-2 hours
3913080016	None	More than 3 hours	None
3913079239	None	None	More than 3 hours
3912896144	Less than 1 hour	Less than 1 hour	None
3912892626	2-3 hours	None	Less than 1 hour
3912890441	None	None	1-2 hours
3912887032	Less than 1 hour	None	2-3 hours
3912886614	More than 3 hours	Less than 1 hour	More than 3 hours
3912881779	More than 3 hours	None	Less than 1 hour
3912880151	More than 3 hours	Less than 1 hour	More than 3 hours
3912878868	Less than 1 hour	Less than 1 hour	2-3 hours
3912872911	2-3 hours	None	Less than 1 hour
3912860210	None	None	None
3912859078	More than 3 hours	More than 3 hours	More than 3 hours
3912854606	None	None	Less than 1 hour
3912854551	1-2 hours	Less than 1 hour	More than 3 hours
3912852270	1-2 hours	None	2-3 hours
3912848038	More than 3 hours	None	More than 3 hours
3912847968	Less than 1 hour	Less than 1 hour	1-2 hours

3912842944	2-3 hours	Less than 1 hour	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	1-2 hours	None	More than 3 hours
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	Less than 1 hour	Less than 1 hour
3912776486	1-2 hours	Less than 1 hour	1-2 hours
3912776152	None	More than 3 hours	None
3912759330	None	Less than 1 hour	2-3 hours
3912758978	Less than 1 hour	None	1-2 hours
3912757730	Less than 1 hour	1-2 hours	1-2 hours
3912757652	None	More than 3 hours	Less than 1 hour
3912757524	None	1-2 hours	1-2 hours
3912756711	Less than 1 hour	More than 3 hours	More than 3 hours
3912755385	None	More than 3 hours	2-3 hours
3912755235	None	More than 3 hours	None
3912754149	None	None	None
3912753957	None	None	More than 3 hours
3912752597	None	None	1-2 hours
3912752289	1-2 hours	None	1-2 hours
3912752184	More than 3 hours	1-2 hours	More than 3 hours
3912751242	1-2 hours	2-3 hours	More than 3 hours
3912750658	2-3 hours	1-2 hours	Less than 1 hour
3912749617	1-2 hours	None	More than 3 hours
3912749016	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912748143	None	More than 3 hours	None
3890043736	None	None	None
3890039997	Less than 1 hour	1-2 hours	None
3890034529	Less than 1 hour	None	None
3889751162	None	None	Less than 1 hour
3889749232	1-2 hours	None	None
3889746648	None	More than 3 hours	None
3889743576	None	2-3 hours	Less than 1 hour
3889740298	None	Less than 1 hour	1-2 hours
3889737922	1-2 hours	None	None
3889665520	1-2 hours	None	None
3889663586	None	2-3 hours	More than 3 hours
3889662276	None	None	More than 3 hours
3888697183	None	Less than 1 hour	None
3888692963	None	None	2-3 hours
3887053010	Less than 1 hour	Less than 1 hour	Less than 1 hour
3887035703	Less than 1 hour	None	None
3887025511	1-2 hours	None	None
3887002730	None	Less than 1 hour	1-2 hours
3886980755	None	None	1-2 hours
3886971427	None	None	Less than 1 hour
3886956905	None	More than 3 hours	Less than 1 hour
3886943878	None	2-3 hours	2-3 hours
3886923599	None	1-2 hours	None
3886897659	None	Less than 1 hour	Less than 1 hour
3886886502	None	None	None
3886877969	None	None	None
3886863958	2-3 hours	1-2 hours	More than 3 hours
3886701572	Less than 1 hour	None	None
3886693846	Less than 1 hour	None	None
3886628016	None	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	Less than 1 hour	Less than 1 hour
3886613583	Less than 1 hour	None	None

3886610784	1-2 hours	None	Less than 1 hour
3886595224	2-3 hours	None	None
3886583963	2-3 hours	None	More than 3 hours
3886579521	None	Less than 1 hour	None
3886573614	None	None	None
3886492182	None	None	None
3886487836	None	None	2-3 hours
3886482983	1-2 hours	None	1-2 hours
3886477400	Less than 1 hour	None	1-2 hours
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3884642578	1-2 hours	1-2 hours	1-2 hours
3884434183	None	2-3 hours	None
3884425269	None	None	Less than 1 hour
3884418684	None	1-2 hours	None
3882735466	None	None	1-2 hours
3882714719	None	Less than 1 hour	None
3882149265	None	None	None
3882132493	None	None	Less than 1 hour
3881402826	None	None	2-3 hours
3881378615	None	None	Less than 1 hour
3881368250	None	None	None
3881357441	None	None	None
3881265294	None	None	None
3881254139	None	None	None
3881237980	2-3 hours	None	None
3881230356	Less than 1 hour	1-2 hours	None
3881220157	None	None	1-2 hours
3881215195	None	None	1-2 hours
3881210102	Less than 1 hour	Less than 1 hour	1-2 hours
3881204090	None	None	None
3879817918	None	None	2-3 hours
3879409688	Less than 1 hour	None	Less than 1 hour
3879374635	None	None	None
3879355152	Less than 1 hour	Less than 1 hour	Less than 1 hour
3879318196	Less than 1 hour	Less than 1 hour	None
3879280118	Less than 1 hour	None	None
3879241966	None	More than 3 hours	None
3879169212	1-2 hours	None	None
3879156353	Less than 1 hour	None	None
3879114622	None	Less than 1 hour	None
3878785230	None	None	Less than 1 hour
3878769580	None	None	1-2 hours
3878759308	1-2 hours	None	None
3878753669	1-2 hours	None	None
3878748875	1-2 hours	None	Less than 1 hour
3878742830	1-2 hours	None	None
3878737152	1-2 hours	None	None
3878730696	None	1-2 hours	None
3878725762	None	None	1-2 hours
3878719521	1-2 hours	None	None
3878713486	None	None	2-3 hours
3878709205	None	1-2 hours	None
3878700132	None	None	2-3 hours
3873328056	None	1-2 hours	None
3873312445	Less than 1 hour	None	None
3873301897	None	None	Less than 1 hour
3873288043	None	None	1-2 hours
3873082048	None	None	Less than 1 hour

3873075081	2-3 hours	1-2 hours	Less than 1 hour
3873068691	1-2 hours	None	1-2 hours
3873056977	None	2-3 hours	None
3873049368	None	None	Less than 1 hour
3873028210	None	2-3 hours	None
3873020393	Less than 1 hour	Less than 1 hour	Less than 1 hour
3873001235	None	Less than 1 hour	None
3872993752	2-3 hours	None	None
3872987133	None	None	Less than 1 hour
3872964285	1-2 hours	None	None
3872953817	More than 3 hours	None	None
3872947394	None	2-3 hours	1-2 hours
3872939332	2-3 hours	None	None
3872846015	2-3 hours	None	None
3872841613	None	Less than 1 hour	None
3872837796	1-2 hours	More than 3 hours	1-2 hours
3872820378	None	None	None
3872768107	Less than 1 hour	None	1-2 hours
3871255066	2-3 hours	None	None
3871227626	More than 3 hours	None	None
3871205440	None	1-2 hours	None
3871184697	None	None	1-2 hours
3871162565	None	None	Less than 1 hour
3871151654	Less than 1 hour	None	Less than 1 hour
3871110433	1-2 hours	Less than 1 hour	None
3870870493	None	None	1-2 hours
3870854704	1-2 hours	None	Less than 1 hour
3870838781	None	1-2 hours	None
3870801193	None	None	Less than 1 hour
3868573297	Less than 1 hour	None	None
3868554028	None	Less than 1 hour	None
3868526738	None	Less than 1 hour	None
3868509803	More than 3 hours	None	None
3868484667	2-3 hours	None	2-3 hours
3868442104	1-2 hours	None	More than 3 hours
3868422304	None	None	None
3868411080	None	None	None
3868391766	Less than 1 hour	None	None
3868375041	1-2 hours	None	None
3866713588	None	None	None
3865495924	1-2 hours	Less than 1 hour	None
3863418934	Less than 1 hour	None	None
3858671359	None	None	None
3858643095	Less than 1 hour	More than 3 hours	None
3858633255	Less than 1 hour	None	None
3857438462	None	None	Less than 1 hour
3856260669	None	2-3 hours	None
3856248923	Less than 1 hour	None	None
3856225449	None	None	None
3854605877	1-2 hours	None	1-2 hours
3853879738	Less than 1 hour	More than 3 hours	None
3853851932	None	None	1-2 hours
3853830935	More than 3 hours	None	None
3853806357	None	None	None
3853715854	None	None	2-3 hours
3853679395	Less than 1 hour	None	None
3853627220	Less than 1 hour	None	None
3853269579	Less than 1 hour	None	None

3853179710	None	None	None
3848999317	None	None	None
3847103154	None	None	None
3845684674	Less than 1 hour	None	Less than 1 hour
3845447408	None	None	Less than 1 hour
3844847491	Less than 1 hour	None	2-3 hours
3844360977	None	More than 3 hours	None
3844236222	None	None	None
3844232462	None	None	1-2 hours
3844138637	None	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	None	None	Less than 1 hour
3843931544	Less than 1 hour	None	None
3843911811	None	None	Less than 1 hour
3843804662	None	None	None
3843766328	Less than 1 hour	2-3 hours	More than 3 hours
3843760219	None	None	Less than 1 hour
3843744801	None	More than 3 hours	None
3843734569	1-2 hours	None	1-2 hours
3843716341	None	None	None
3843712724	1-2 hours	Less than 1 hour	Less than 1 hour
3843674785	1-2 hours	None	Less than 1 hour
3843623603	None	1-2 hours	None
3843612922	None	1-2 hours	None
3843608317	1-2 hours	None	None
3843605819	Less than 1 hour	None	None
3843604500	None	None	None
3843603283	None	None	Less than 1 hour
3843590935	1-2 hours	More than 3 hours	None
3843584691	Less than 1 hour	None	Less than 1 hour
3843566558	1-2 hours	Less than 1 hour	1-2 hours
3843563669	More than 3 hours	None	More than 3 hours
3843558483	2-3 hours	None	More than 3 hours
3843546559	Less than 1 hour	Less than 1 hour	2-3 hours
3843527212	None	None	1-2 hours
4058991282	None	1-2 hours	None
4058988558	None	None	Less than 1 hour
4058970974	Less than 1 hour	None	More than 3 hours
4058966399	None	None	Less than 1 hour
4058961408	Less than 1 hour	1-2 hours	2-3 hours
4058958230	None	None	Less than 1 hour
4058954419	1-2 hours	2-3 hours	Less than 1 hour
4058949738	More than 3 hours	1-2 hours	Less than 1 hour
4058944768	None	More than 3 hours	None
4058940279	None	None	2-3 hours
4058928337	Less than 1 hour	None	None
4058925829	Less than 1 hour	None	2-3 hours
4058295828	None	1-2 hours	None
4058285308	None	Less than 1 hour	None
4058276966	Less than 1 hour	None	1-2 hours
4058264705	1-2 hours	None	None
4058256269	None	None	Less than 1 hour
4058248054	None	None	Less than 1 hour
4058240982	None	More than 3 hours	None
4057536878	None	1-2 hours	None
4057526407	None	1-2 hours	None
4057507742	None	None	More than 3 hours
4057471823	None	None	More than 3 hours

4057460212	None	None	More than 3 hours
4057442304	None	1-2 hours	Less than 1 hour
4057423702	2-3 hours	Less than 1 hour	2-3 hours
4057364669	None	None	Less than 1 hour
4057347523	Less than 1 hour	1-2 hours	1-2 hours
4057335898	Less than 1 hour	1-2 hours	1-2 hours
4057317286	1-2 hours	1-2 hours	None
4057304812	None	More than 3 hours	None
4057273462	1-2 hours	Less than 1 hour	2-3 hours
4057253149	Less than 1 hour	None	None
4057238269	More than 3 hours	None	1-2 hours
4057216892	1-2 hours	None	1-2 hours
4057172013	None	None	Less than 1 hour
4057160934	Less than 1 hour	None	More than 3 hours
4057015182	More than 3 hours	None	None
4057002543	None	More than 3 hours	None
4056994599	None	1-2 hours	None
4056988375	None	More than 3 hours	Less than 1 hour
4056982171	Less than 1 hour	Less than 1 hour	Less than 1 hour
4056976704	Less than 1 hour	None	None
4056969438	Less than 1 hour	None	None
4056963885	Less than 1 hour	Less than 1 hour	Less than 1 hour
4056956531	Less than 1 hour	1-2 hours	Less than 1 hour
4056948732	None	1-2 hours	Less than 1 hour
4056941323	None	None	1-2 hours
4056928489	Less than 1 hour	None	More than 3 hours
4056918542	None	None	1-2 hours
4056912185	None	None	1-2 hours
4056906655	None	1-2 hours	1-2 hours
4056901873	1-2 hours	1-2 hours	None

Table B1-3 (c). Answers of the respondents to Question 6 – Watching films

ID of the respondent	Watching films		
	Laptop	Desktop	Tablet
4016327570	None	None	Less than 1 hour
4016323071	Less than 1 hour	Less than 1 hour	None
4016319090	1-2 hours	Less than 1 hour	None
4016311412	None	None	None
4016307251	Less than 1 hour	None	None
4016303216	None	More than 3 hours	None
4016296167	Less than 1 hour	None	None
4016290910	Less than 1 hour	None	None
4016286833	None	Less than 1 hour	None
4016172184	None	None	None
4016165993	Less than 1 hour	None	None
4016160969	More than 3 hours	None	None
4016154648	More than 3 hours	None	None
4012804018	1-2 hours	None	None
4012797964	None	None	None
4012790555	None	None	None
4012782011	None	1-2 hours	None
4012730725	None	1-2 hours	None
4012723554	None	None	None

4012656140	None	None	None
4012651160	None	None	1-2 hours
4012644259	None	None	Less than 1 hour
4012637005	None	None	None
4012633162	None	None	None
4012624811	1-2 hours	None	None
4012617660	None	None	1-2 hours
4012614159	None	None	None
4012508792	None	None	None
4012498640	None	None	None
4012491488	None	None	1-2 hours
4012485284	None	None	2-3 hours
4012473633	None	None	Less than 1 hour
4012469464	None	None	None
4012466160	1-2 hours	None	1-2 hours
4012460658	None	None	None
4012455947	None	None	None
4012430576	None	None	1-2 hours
4012426652	2-3 hours	None	None
4012406783	None	None	Less than 1 hour
4012399710	None	None	1-2 hours
4004970129	Less than 1 hour	None	1-2 hours
4004963506	None	None	1-2 hours
4004957167	None	None	2-3 hours
4004945257	2-3 hours	None	2-3 hours
4004934437	1-2 hours	None	1-2 hours
4004921493	2-3 hours	None	None
4004914674	1-2 hours	None	None
4004905832	None	None	None
4004899412	2-3 hours	None	Less than 1 hour
4004891212	2-3 hours	None	1-2 hours
4004885248	2-3 hours	None	None
4004879116	1-2 hours	None	None
3992329563	None	None	None
3991552998	1-2 hours	None	Less than 1 hour
3991524993	Less than 1 hour	None	None
3991510154	1-2 hours	None	Less than 1 hour
3991501190	More than 3 hours	None	None
3991488370	1-2 hours	1-2 hours	1-2 hours
3991475073	1-2 hours	None	1-2 hours
3991225783	1-2 hours	None	None
3991219753	1-2 hours	None	None
3991212143	1-2 hours	None	None
3991206524	2-3 hours	None	1-2 hours
3991199746	More than 3 hours	None	Less than 1 hour
3990101142	2-3 hours	None	None
3990078514	2-3 hours	None	2-3 hours
3990065394	Less than 1 hour	1-2 hours	None
3990050548	1-2 hours	None	1-2 hours
3990036940	None	None	None
3990028350	2-3 hours	None	1-2 hours
3990016288	None	None	None
3989314032	1-2 hours	None	None
3989303005	2-3 hours	None	None
3989271549	Less than 1 hour	None	None
3989221063	Less than 1 hour	None	None
3987326905	2-3 hours	None	None
3987319596	1-2 hours	None	1-2 hours

3987312489	2-3 hours	None	None
3987278903	2-3 hours	None	None
3987270618	1-2 hours	None	None
3987265971	More than 3 hours	None	1-2 hours
3987138863	Less than 1 hour	None	None
3987119797	Less than 1 hour	None	None
3987103718	None	None	Less than 1 hour
3987095737	Less than 1 hour	None	None
3987091706	2-3 hours	None	None
3987088444	None	2-3 hours	More than 3 hours
3987083033	None	None	2-3 hours
3968572950	1-2 hours	None	None
3968557021	2-3 hours	None	1-2 hours
3968537814	1-2 hours	None	1-2 hours
3968522980	None	1-2 hours	None
3968507520	More than 3 hours	None	None
3968424226	None	2-3 hours	None
3968393898	1-2 hours	None	None
3968040530	2-3 hours	None	None
3968033599	None	None	Less than 1 hour
3968016333	2-3 hours	None	None
3968006605	Less than 1 hour	2-3 hours	Less than 1 hour
3968000019	None	None	None
3957258512	Less than 1 hour	None	Less than 1 hour
3934852622	None	None	None
3934129822	None	1-2 hours	None
3932105563	1-2 hours	None	1-2 hours
3931234753	None	None	2-3 hours
3931175964	Less than 1 hour	None	None
3931133172	Less than 1 hour	None	None
3930994714	None	None	Less than 1 hour
3930804586	Less than 1 hour	None	Less than 1 hour
3930749449	None	None	None
3930697280	None	1-2 hours	1-2 hours
3930445230	None	None	None
3930068383	1-2 hours	1-2 hours	More than 3 hours
3929872863	None	1-2 hours	None
3929691190	2-3 hours	None	None
3929382688	None	None	More than 3 hours
3913097202	2-3 hours	2-3 hours	2-3 hours
3913096620	Less than 1 hour	Less than 1 hour	1-2 hours
3913091157	1-2 hours	None	1-2 hours
3913087916	None	1-2 hours	Less than 1 hour
3913084313	None	None	None
3913082865	None	None	None
3913081818	More than 3 hours	None	None
3913081704	None	None	Less than 1 hour
3913081489	1-2 hours	1-2 hours	1-2 hours
3913081461	2-3 hours	None	1-2 hours
3913080016	None	1-2 hours	Less than 1 hour
3913079239	None	None	Less than 1 hour
3912896144	None	None	1-2 hours
3912892626	1-2 hours	None	1-2 hours
3912890441	1-2 hours	None	None
3912887032	More than 3 hours	None	None
3912886614	More than 3 hours	More than 3 hours	More than 3 hours
3912881779	2-3 hours	None	None
3912880151	More than 3 hours	Less than 1 hour	More than 3 hours

3912878868	Less than 1 hour	None	1-2 hours
3912872911	1-2 hours	None	None
3912860210	None	Less than 1 hour	1-2 hours
3912859078	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912854606	None	None	None
3912854551	2-3 hours	2-3 hours	2-3 hours
3912852270	More than 3 hours	None	More than 3 hours
3912848038	More than 3 hours	More than 3 hours	More than 3 hours
3912847968	None	None	1-2 hours
3912842944	Less than 1 hour	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	2-3 hours	None	None
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	Less than 1 hour	1-2 hours
3912776486	1-2 hours	1-2 hours	2-3 hours
3912776152	2-3 hours	2-3 hours	None
3912759330	None	None	Less than 1 hour
3912758978	2-3 hours	Less than 1 hour	More than 3 hours
3912757730	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912757652	Less than 1 hour	More than 3 hours	None
3912757524	Less than 1 hour	1-2 hours	2-3 hours
3912756711	Less than 1 hour	More than 3 hours	More than 3 hours
3912755385	None	None	2-3 hours
3912755235	None	More than 3 hours	None
3912754149	1-2 hours	None	None
3912753957	1-2 hours	None	None
3912752597	None	2-3 hours	2-3 hours
3912752289	More than 3 hours	None	More than 3 hours
3912752184	More than 3 hours	More than 3 hours	More than 3 hours
3912751242	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912750658	More than 3 hours	More than 3 hours	Less than 1 hour
3912749617	Less than 1 hour	None	None
3912749016	None	None	None
3912748143	1-2 hours	None	2-3 hours
3890043736	2-3 hours	None	None
3890039997	Less than 1 hour	Less than 1 hour	Less than 1 hour
3890034529	1-2 hours	None	None
3889751162	None	None	None
3889749232	Less than 1 hour	None	None
3889746648	None	2-3 hours	None
3889743576	None	More than 3 hours	1-2 hours
3889740298	None	Less than 1 hour	None
3889737922	2-3 hours	None	None
3889665520	None	Less than 1 hour	Less than 1 hour
3889663586	None	None	More than 3 hours
3889662276	None	1-2 hours	None
3888697183	None	1-2 hours	None
3888692963	Less than 1 hour	None	None
3887053010	Less than 1 hour	2-3 hours	Less than 1 hour
3887035703	Less than 1 hour	None	None
3887025511	None	1-2 hours	None
3887002730	1-2 hours	2-3 hours	None
3886980755	None	1-2 hours	None
3886971427	1-2 hours	None	None
3886956905	None	None	None
3886943878	2-3 hours	2-3 hours	None
3886923599	1-2 hours	None	None
3886897659	None	Less than 1 hour	None

3886886502	None	2-3 hours	None
3886877969	1-2 hours	None	None
3886863958	Less than 1 hour	Less than 1 hour	Less than 1 hour
3886701572	None	None	None
3886693846	Less than 1 hour	None	None
3886628016	None	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	2-3 hours	Less than 1 hour
3886613583	Less than 1 hour	None	None
3886610784	Less than 1 hour	None	1-2 hours
3886595224	Less than 1 hour	None	None
3886583963	1-2 hours	None	1-2 hours
3886579521	None	Less than 1 hour	None
3886573614	None	None	None
3886492182	None	None	None
3886487836	None	2-3 hours	None
3886482983	Less than 1 hour	None	Less than 1 hour
3886477400	Less than 1 hour	None	Less than 1 hour
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
38864642578	None	1-2 hours	1-2 hours
3884434183	None	More than 3 hours	None
3884425269	None	None	1-2 hours
3884418684	None	Less than 1 hour	None
3882735466	None	None	Less than 1 hour
3882714719	None	1-2 hours	None
3882149265	None	None	None
3882132493	None	None	None
3881402826	More than 3 hours	None	2-3 hours
3881378615	1-2 hours	None	None
3881368250	None	None	Less than 1 hour
3881357441	None	None	None
3881265294	None	None	None
3881254139	1-2 hours	None	None
3881237980	More than 3 hours	None	None
3881230356	None	None	None
3881220157	None	2-3 hours	None
3881215195	None	None	1-2 hours
3881210102	Less than 1 hour	Less than 1 hour	Less than 1 hour
3881204090	Less than 1 hour	None	None
3879817918	None	None	Less than 1 hour
3879409688	None	None	Less than 1 hour
3879374635	None	2-3 hours	None
3879355152	1-2 hours	1-2 hours	1-2 hours
3879318196	None	Less than 1 hour	None
3879280118	Less than 1 hour	None	None
3879241966	None	2-3 hours	None
3879169212	1-2 hours	None	None
3879156353	2-3 hours	None	None
3879114622	None	Less than 1 hour	None
3878785230	1-2 hours	None	None
3878769580	None	None	None
3878759308	1-2 hours	None	None
3878753669	1-2 hours	None	None
3878748875	None	Less than 1 hour	None
3878742830	1-2 hours	None	None
3878737152	None	None	1-2 hours
3878730696	None	Less than 1 hour	None
3878725762	None	Less than 1 hour	None

3878719521	2-3 hours	None	None
3878713486	None	None	1-2 hours
3878709205	None	Less than 1 hour	None
3878700132	None	None	Less than 1 hour
3873328056	None	2-3 hours	None
3873312445	2-3 hours	None	None
3873301897	None	Less than 1 hour	None
3873288043	None	None	None
3873082048	None	None	Less than 1 hour
3873075081	Less than 1 hour	Less than 1 hour	Less than 1 hour
3873068691	1-2 hours	None	Less than 1 hour
3873056977	None	More than 3 hours	None
3873049368	None	None	None
3873028210	None	None	None
3873020393	1-2 hours	1-2 hours	Less than 1 hour
3873001235	None	2-3 hours	None
3872993752	2-3 hours	None	More than 3 hours
3872987133	None	1-2 hours	None
3872964285	2-3 hours	None	None
3872953817	Less than 1 hour	None	None
3872947394	None	More than 3 hours	None
3872939332	Less than 1 hour	None	None
3872846015	1-2 hours	None	None
3872841613	Less than 1 hour	None	None
3872837796	1-2 hours	None	None
3872820378	None	Less than 1 hour	None
3872768107	Less than 1 hour	None	None
3871255066	2-3 hours	None	None
3871227626	More than 3 hours	None	None
3871205440	None	Less than 1 hour	None
3871184697	None	Less than 1 hour	Less than 1 hour
3871162565	More than 3 hours	None	None
3871151654	Less than 1 hour	None	Less than 1 hour
3871110433	1-2 hours	1-2 hours	None
3870870493	2-3 hours	None	None
3870854704	Less than 1 hour	None	None
3870838781	None	None	None
3870801193	None	1-2 hours	None
3868573297	Less than 1 hour	None	None
3868554028	Less than 1 hour	None	None
3868526738	None	Less than 1 hour	None
3868509803	Less than 1 hour	None	None
3868484667	More than 3 hours	None	More than 3 hours
3868442104	None	None	1-2 hours
3868422304	None	None	More than 3 hours
3868411080	None	None	None
3868391766	2-3 hours	None	None
3868375041	1-2 hours	None	None
3866713588	1-2 hours	None	None
3865495924	2-3 hours	1-2 hours	Less than 1 hour
3863418934	2-3 hours	None	None
3858671359	None	None	None
3858643095	Less than 1 hour	Less than 1 hour	Less than 1 hour
3858633255	1-2 hours	None	None
3857438462	Less than 1 hour	None	None
3856260669	None	None	None
3856248923	None	None	2-3 hours
3856225449	None	None	None

3854605877	None	None	1-2 hours
3853879738	2-3 hours	More than 3 hours	None
3853851932	None	None	None
3853830935	More than 3 hours	None	None
3853806357	None	None	None
3853715854	None	1-2 hours	None
3853679395	1-2 hours	None	None
3853627220	1-2 hours	None	None
3853269579	Less than 1 hour	None	None
3853179710	None	None	None
3848999317	More than 3 hours	None	None
3847103154	2-3 hours	1-2 hours	None
3845684674	1-2 hours	None	None
3845447408	More than 3 hours	None	1-2 hours
3844847491	1-2 hours	None	None
3844360977	None	None	None
3844236222	More than 3 hours	None	None
3844232462	Less than 1 hour	None	None
3844138637	1-2 hours	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	More than 3 hours	None	None
3843931544	Less than 1 hour	None	None
3843911811	None	Less than 1 hour	None
3843804662	None	2-3 hours	None
3843766328	1-2 hours	1-2 hours	1-2 hours
3843760219	Less than 1 hour	None	None
3843744801	Less than 1 hour	1-2 hours	None
3843734569	None	None	None
3843716341	None	1-2 hours	None
3843712724	Less than 1 hour	1-2 hours	None
3843674785	1-2 hours	None	None
3843623603	Less than 1 hour	None	Less than 1 hour
3843612922	None	2-3 hours	None
3843608317	1-2 hours	None	None
3843605819	1-2 hours	None	None
3843604500	Less than 1 hour	None	None
3843603283	None	None	None
3843590935	1-2 hours	1-2 hours	None
3843584691	1-2 hours	None	Less than 1 hour
3843566558	2-3 hours	Less than 1 hour	1-2 hours
3843563669	More than 3 hours	None	More than 3 hours
3843558483	1-2 hours	1-2 hours	Less than 1 hour
3843546559	None	1-2 hours	None
3843527212	2-3 hours	1-2 hours	Less than 1 hour
4058991282	None	1-2 hours	None
4058988558	None	None	1-2 hours
4058970974	More than 3 hours	None	2-3 hours
4058966399	None	None	2-3 hours
4058961408	Less than 1 hour	1-2 hours	More than 3 hours
4058958230	None	None	None
4058954419	Less than 1 hour	None	1-2 hours
4058949738	1-2 hours	1-2 hours	1-2 hours
4058944768	None	None	None
4058940279	None	Less than 1 hour	None
4058928337	Less than 1 hour	None	Less than 1 hour
4058925829	None	None	1-2 hours
4058295828	None	None	None
4058285308	None	More than 3 hours	None

4058276966	2-3 hours	None	1-2 hours
4058264705	None	None	None
4058256269	2-3 hours	None	None
4058248054	None	None	1-2 hours
4058240982	Less than 1 hour	None	None
4057536878	None	None	None
4057526407	None	2-3 hours	None
4057507742	More than 3 hours	None	None
4057471823	None	None	Less than 1 hour
4057460212	None	None	None
4057442304	None	None	None
4057423702	Less than 1 hour	1-2 hours	1-2 hours
4057364669	None	None	None
4057347523	Less than 1 hour	Less than 1 hour	Less than 1 hour
4057335898	Less than 1 hour	Less than 1 hour	Less than 1 hour
4057317286	1-2 hours	Less than 1 hour	None
4057304812	None	2-3 hours	None
4057273462	1-2 hours	Less than 1 hour	2-3 hours
4057253149	2-3 hours	None	None
4057238269	None	None	Less than 1 hour
4057216892	None	Less than 1 hour	None
4057172013	None	1-2 hours	None
4057160934	1-2 hours	None	1-2 hours
4057015182	2-3 hours	None	None
4057002543	None	2-3 hours	None
4056994599	None	Less than 1 hour	None
4056988375	None	2-3 hours	None
4056982171	None	None	1-2 hours
4056976704	Less than 1 hour	None	None
4056969438	Less than 1 hour	None	None
4056963885	1-2 hours	Less than 1 hour	1-2 hours
4056956531	More than 3 hours	None	None
4056948732	None	None	None
4056941323	None	None	None
4056928489	None	None	None
4056918542	None	1-2 hours	None
4056912185	Less than 1 hour	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	2-3 hours	None	Less than 1 hour

Table B1-3 (d). Answers of the respondents to Question 6 – Studying purposes

ID of the respondent	Studying purposes (outside school)		
	Laptop	Desktop	Tablet
4016327570	None	None	Less than 1 hour
4016323071	None	None	None
4016319090	None	None	None
4016311412	None	None	None
4016307251	None	None	None
4016303216	Less than 1 hour	Less than 1 hour	None
4016296167	Less than 1 hour	None	None
4016290910	Less than 1 hour	None	None
4016286833	None	Less than 1 hour	None
4016172184	Less than 1 hour	None	None

4016165993	2-3 hours	None	None
4016160969	None	1-2 hours	None
4016154648	None	None	Less than 1 hour
4012804018	Less than 1 hour	None	None
4012797964	None	None	None
4012790555	None	None	None
4012782011	None	None	None
4012730725	None	None	None
4012723554	None	None	None
4012656140	Less than 1 hour	None	None
4012651160	None	None	None
4012644259	None	None	Less than 1 hour
4012637005	None	None	None
4012633162	None	None	None
4012624811	None	None	Less than 1 hour
4012617660	None	None	2-3 hours
4012614159	None	None	None
4012508792	None	None	None
4012498640	None	None	None
4012491488	None	None	1-2 hours
4012485284	None	None	2-3 hours
4012473633	None	None	Less than 1 hour
4012469464	None	None	2-3 hours
4012466160	1-2 hours	None	1-2 hours
4012460658	None	None	None
4012455947	None	None	None
4012430576	None	None	Less than 1 hour
4012426652	None	None	None
4012406783	None	None	More than 3 hours
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	2-3 hours
4004963506	None	None	Less than 1 hour
4004957167	Less than 1 hour	None	None
4004945257	None	None	None
4004934437	Less than 1 hour	None	None
4004921493	None	None	None
4004914674	1-2 hours	None	None
4004905832	1-2 hours	None	None
4004899412	None	None	None
4004891212	Less than 1 hour	None	2-3 hours
4004885248	Less than 1 hour	None	None
4004879116	1-2 hours	None	None
3992329563	1-2 hours	None	None
3991552998	Less than 1 hour	None	Less than 1 hour
3991524993	None	None	None
3991510154	None	None	None
3991501190	None	None	None
3991488370	Less than 1 hour	None	None
3991475073	1-2 hours	None	2-3 hours
3991225783	1-2 hours	None	None
3991219753	Less than 1 hour	None	None
3991212143	Less than 1 hour	None	None
3991206524	1-2 hours	None	Less than 1 hour
3991199746	Less than 1 hour	None	Less than 1 hour
3990101142	1-2 hours	None	None
3990078514	None	None	None
3990065394	Less than 1 hour	1-2 hours	None
3990050548	None	None	1-2 hours

3990036940	None	None	Less than 1 hour
3990028350	1-2 hours	None	Less than 1 hour
3990016288	None	None	Less than 1 hour
3989314032	None	None	Less than 1 hour
3989303005	Less than 1 hour	None	Less than 1 hour
3989271549	1-2 hours	None	None
3989221063	None	None	1-2 hours
3987326905	None	2-3 hours	None
3987319596	None	None	None
3987312489	Less than 1 hour	None	None
3987278903	None	None	1-2 hours
3987270618	1-2 hours	None	None
3987265971	Less than 1 hour	None	None
3987138863	2-3 hours	None	None
3987119797	None	1-2 hours	None
3987103718	None	Less than 1 hour	1-2 hours
3987095737	Less than 1 hour	None	None
3987091706	More than 3 hours	None	None
3987088444	None	None	None
3987083033	None	None	None
3968572950	None	None	None
3968557021	1-2 hours	None	1-2 hours
3968537814	1-2 hours	None	Less than 1 hour
3968522980	None	None	None
3968507520	Less than 1 hour	None	None
3968424226	None	1-2 hours	None
3968393898	None	2-3 hours	None
3968040530	1-2 hours	None	None
3968033599	None	None	Less than 1 hour
3968016333	1-2 hours	None	Less than 1 hour
3968006605	Less than 1 hour	1-2 hours	Less than 1 hour
3968000019	1-2 hours	None	None
3957258512	Less than 1 hour	None	More than 3 hours
3934852622	1-2 hours	None	None
3934129822	None	Less than 1 hour	None
3932105563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3931234753	None	None	None
3931175964	Less than 1 hour	None	None
3931133172	Less than 1 hour	None	None
3930994714	1-2 hours	None	1-2 hours
3930804586	Less than 1 hour	None	None
3930749449	Less than 1 hour	None	None
3930697280	None	More than 3 hours	Less than 1 hour
3930445230	None	None	None
3930068383	2-3 hours	Less than 1 hour	2-3 hours
3929872863	None	1-2 hours	None
3929691190	Less than 1 hour	Less than 1 hour	None
3929382688	None	None	More than 3 hours
3913097202	Less than 1 hour	None	Less than 1 hour
3913096620	1-2 hours	1-2 hours	2-3 hours
3913091157	None	None	Less than 1 hour
3913087916	None	Less than 1 hour	None
3913084313	None	Less than 1 hour	Less than 1 hour
3913082865	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913081818	Less than 1 hour	None	None
3913081704	None	Less than 1 hour	Less than 1 hour
3913081489	More than 3 hours	More than 3 hours	More than 3 hours
3913081461	1-2 hours	None	1-2 hours

3913080016	None	1-2 hours	Less than 1 hour
3913079239	None	None	None
3912896144	None	None	Less than 1 hour
3912892626	None	Less than 1 hour	Less than 1 hour
3912890441	Less than 1 hour	None	Less than 1 hour
3912887032	Less than 1 hour	None	1-2 hours
3912886614	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912881779	Less than 1 hour	None	None
3912880151	None	None	None
3912878868	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912872911	None	None	None
3912860210	Less than 1 hour	None	None
3912859078	1-2 hours	1-2 hours	1-2 hours
3912854606	None	None	None
3912854551	None	None	None
3912852270	Less than 1 hour	None	1-2 hours
3912848038	More than 3 hours	None	More than 3 hours
3912847968	None	1-2 hours	None
3912842944	1-2 hours	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	Less than 1 hour	None	More than 3 hours
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	None	1-2 hours
3912776486	1-2 hours	More than 3 hours	1-2 hours
3912776152	1-2 hours	Less than 1 hour	None
3912759330	None	Less than 1 hour	None
3912758978	1-2 hours	Less than 1 hour	Less than 1 hour
3912757730	None	Less than 1 hour	None
3912757652	Less than 1 hour	Less than 1 hour	None
3912757524	1-2 hours	None	Less than 1 hour
3912756711	None	None	None
3912755385	1-2 hours	None	Less than 1 hour
3912755235	None	None	None
3912754149	Less than 1 hour	None	None
3912753957	None	None	None
3912752597	None	None	None
3912752289	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912752184	2-3 hours	2-3 hours	More than 3 hours
3912751242	Less than 1 hour	1-2 hours	More than 3 hours
3912750658	2-3 hours	2-3 hours	Less than 1 hour
3912749617	1-2 hours	None	Less than 1 hour
3912749016	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912748143	None	None	None
3890043736	2-3 hours	None	None
3890039997	Less than 1 hour	More than 3 hours	1-2 hours
3890034529	2-3 hours	None	None
3889751162	None	None	None
3889749232	1-2 hours	None	None
3889746648	None	Less than 1 hour	None
3889743576	None	None	None
3889740298	None	None	Less than 1 hour
3889737922	Less than 1 hour	None	None
3889665520	1-2 hours	None	None
3889663586	None	None	Less than 1 hour
3889662276	None	Less than 1 hour	None
3888697183	None	1-2 hours	None
3888692963	None	1-2 hours	None
3887053010	None	Less than 1 hour	Less than 1 hour

3887035703	Less than 1 hour	None	None
3887025511	None	1-2 hours	None
3887002730	None	2-3 hours	None
3886980755	None	None	2-3 hours
3886971427	None	None	None
3886956905	None	None	None
3886943878	Less than 1 hour	Less than 1 hour	None
3886923599	None	None	1-2 hours
3886897659	None	None	None
3886886502	None	1-2 hours	None
3886877969	1-2 hours	None	1-2 hours
3886863958	Less than 1 hour	Less than 1 hour	Less than 1 hour
3886701572	None	None	None
3886693846	Less than 1 hour	None	None
3886628016	None	None	Less than 1 hour
3886623361	Less than 1 hour	None	None
3886618521	None	Less than 1 hour	Less than 1 hour
3886613583	Less than 1 hour	None	None
3886610784	1-2 hours	None	None
3886595224	None	None	None
3886583963	Less than 1 hour	None	Less than 1 hour
3886579521	None	None	None
3886573614	None	None	None
3886492182	None	1-2 hours	None
3886487836	None	Less than 1 hour	None
3886482983	Less than 1 hour	None	Less than 1 hour
3886477400	Less than 1 hour	1-2 hours	Less than 1 hour
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
38864642578	Less than 1 hour	Less than 1 hour	Less than 1 hour
3884434183	None	1-2 hours	None
3884425269	None	None	Less than 1 hour
3884418684	None	Less than 1 hour	None
3882735466	None	None	Less than 1 hour
3882714719	None	1-2 hours	None
3882149265	None	None	None
3882132493	1-2 hours	None	None
3881402826	1-2 hours	None	Less than 1 hour
3881378615	Less than 1 hour	None	None
3881368250	None	None	Less than 1 hour
3881357441	Less than 1 hour	2-3 hours	Less than 1 hour
3881265294	None	None	None
3881254139	None	None	None
3881237980	1-2 hours	None	None
3881230356	None	None	None
3881220157	None	None	None
3881215195	None	None	None
3881210102	1-2 hours	1-2 hours	1-2 hours
3881204090	None	None	None
3879817918	None	None	More than 3 hours
3879409688	1-2 hours	None	1-2 hours
3879374635	None	1-2 hours	None
3879355152	Less than 1 hour	Less than 1 hour	Less than 1 hour
3879318196	Less than 1 hour	Less than 1 hour	None
3879280118	Less than 1 hour	None	None
3879241966	None	2-3 hours	None
3879169212	Less than 1 hour	None	None
3879156353	None	None	None
3879114622	None	1-2 hours	None

3878785230	None	None	None
3878769580	None	Less than 1 hour	None
3878759308	Less than 1 hour	None	None
3878753669	None	None	None
3878748875	None	1-2 hours	None
3878742830	Less than 1 hour	None	None
3878737152	Less than 1 hour	None	1-2 hours
3878730696	None	Less than 1 hour	None
3878725762	None	Less than 1 hour	None
3878719521	Less than 1 hour	None	None
3878713486	None	None	None
3878709205	None	1-2 hours	None
3878700132	None	None	None
3873328056	None	More than 3 hours	None
3873312445	Less than 1 hour	None	None
3873301897	None	None	Less than 1 hour
3873288043	None	None	None
3873082048	None	None	None
3873075081	1-2 hours	1-2 hours	Less than 1 hour
3873068691	1-2 hours	None	Less than 1 hour
3873056977	None	2-3 hours	None
3873049368	None	None	1-2 hours
3873028210	None	None	None
3873020393	Less than 1 hour	Less than 1 hour	Less than 1 hour
3873001235	None	1-2 hours	None
3872993752	Less than 1 hour	None	Less than 1 hour
3872987133	None	1-2 hours	None
3872964285	None	More than 3 hours	None
3872953817	1-2 hours	None	None
3872947394	None	Less than 1 hour	None
3872939332	1-2 hours	None	None
3872846015	None	Less than 1 hour	None
3872841613	None	2-3 hours	None
3872837796	Less than 1 hour	None	None
3872820378	None	None	None
3872768107	Less than 1 hour	None	None
3871255066	2-3 hours	None	None
3871227626	Less than 1 hour	None	None
3871205440	None	None	None
3871184697	None	1-2 hours	Less than 1 hour
3871162565	2-3 hours	None	None
3871151654	None	None	Less than 1 hour
3871110433	Less than 1 hour	Less than 1 hour	None
3870870493	Less than 1 hour	None	None
3870854704	1-2 hours	None	None
3870838781	None	None	None
3870801193	None	None	None
3868573297	More than 3 hours	None	None
3868554028	1-2 hours	None	None
3868526738	None	Less than 1 hour	None
3868509803	Less than 1 hour	None	None
3868484667	2-3 hours	Less than 1 hour	2-3 hours
3868442104	Less than 1 hour	None	Less than 1 hour
3868422304	None	None	None
3868411080	Less than 1 hour	None	None
3868391766	None	None	None
3868375041	Less than 1 hour	None	None
3866713588	Less than 1 hour	None	None

3865495924	2-3 hours	More than 3 hours	Less than 1 hour
3863418934	More than 3 hours	None	None
3858671359	Less than 1 hour	None	None
3858643095	None	None	None
3858633255	Less than 1 hour	None	None
3857438462	1-2 hours	None	None
3856260669	None	None	None
3856248923	None	None	2-3 hours
3856225449	None	None	None
3854605877	None	None	1-2 hours
3853879738	None	None	None
3853851932	None	None	None
3853830935	Less than 1 hour	None	None
3853806357	None	None	None
3853715854	1-2 hours	None	None
3853679395	Less than 1 hour	None	None
3853627220	Less than 1 hour	None	None
3853269579	None	None	None
3853179710	1-2 hours	None	None
3848999317	Less than 1 hour	None	None
3847103154	None	1-2 hours	None
3845684674	None	None	None
3845447408	1-2 hours	None	None
3844847491	1-2 hours	None	Less than 1 hour
3844360977	None	None	None
3844236222	More than 3 hours	None	None
3844232462	2-3 hours	None	None
3844138637	1-2 hours	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	Less than 1 hour	None	Less than 1 hour
3843931544	Less than 1 hour	None	None
3843911811	None	None	None
3843804662	None	None	None
3843766328	More than 3 hours	More than 3 hours	More than 3 hours
3843760219	1-2 hours	None	2-3 hours
3843744801	None	None	None
3843734569	1-2 hours	None	1-2 hours
3843716341	None	Less than 1 hour	Less than 1 hour
3843712724	None	1-2 hours	None
3843674785	1-2 hours	None	1-2 hours
3843623603	None	None	1-2 hours
3843612922	None	None	None
3843608317	None	None	None
3843605819	Less than 1 hour	None	None
3843604500	None	None	None
3843603283	None	None	None
3843590935	None	None	None
3843584691	None	None	None
3843566558	1-2 hours	1-2 hours	None
3843563669	Less than 1 hour	None	Less than 1 hour
3843558483	None	None	Less than 1 hour
3843546559	None	None	None
3843527212	Less than 1 hour	Less than 1 hour	Less than 1 hour
4058991282	None	1-2 hours	None
4058988558	None	Less than 1 hour	None
4058970974	Less than 1 hour	None	Less than 1 hour
4058966399	None	None	1-2 hours
4058961408	Less than 1 hour	2-3 hours	2-3 hours

4058958230	None	Less than 1 hour	None
4058954419	Less than 1 hour	More than 3 hours	None
4058949738	1-2 hours	None	None
4058944768	None	None	None
4058940279	None	None	None
4058928337	None	None	Less than 1 hour
4058925829	None	2-3 hours	1-2 hours
4058295828	None	1-2 hours	1-2 hours
4058285308	None	Less than 1 hour	None
4058276966	Less than 1 hour	None	Less than 1 hour
4058264705	None	None	None
4058256269	None	None	None
4058248054	None	None	None
4058240982	None	None	None
4057536878	None	None	None
4057526407	Less than 1 hour	None	None
4057507742	None	None	None
4057471823	None	None	Less than 1 hour
4057460212	None	None	Less than 1 hour
4057442304	None	None	None
4057423702	1-2 hours	Less than 1 hour	1-2 hours
4057364669	Less than 1 hour	None	None
4057347523	1-2 hours	Less than 1 hour	Less than 1 hour
4057335898	1-2 hours	2-3 hours	2-3 hours
4057317286	1-2 hours	2-3 hours	None
4057304812	None	None	None
4057273462	None	None	None
4057253149	Less than 1 hour	None	None
4057238269	1-2 hours	None	None
4057216892	1-2 hours	None	None
4057172013	None	None	None
4057160934	None	None	None
4057015182	1-2 hours	None	None
4057002543	None	None	None
4056994599	None	Less than 1 hour	None
4056988375	None	Less than 1 hour	1-2 hours
4056982171	2-3 hours	Less than 1 hour	2-3 hours
4056976704	1-2 hours	None	None
4056969438	Less than 1 hour	None	None
4056963885	Less than 1 hour	Less than 1 hour	Less than 1 hour
4056956531	1-2 hours	1-2 hours	1-2 hours
4056948732	None	None	None
4056941323	None	None	Less than 1 hour
4056928489	2-3 hours	None	2-3 hours
4056918542	None	Less than 1 hour	None
4056912185	1-2 hours	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	Less than 1 hour	2-3 hours	None

Table B1-3 (e). Answers of the respondents to Question 6 – (For lectures)

ID of the respondent	For lectures (at school)		
	Laptop	Desktop	Tablet
4016327570	None	None	Less than 1 hour
4016323071	None	Less than 1 hour	None
4016319090	None	1-2 hours	None
4016311412	None	None	None
4016307251	None	Less than 1 hour	None
4016303216	None	None	None
4016296167	Less than 1 hour	None	None
4016290910	Less than 1 hour	None	None
4016286833	None	Less than 1 hour	None
4016172184	Less than 1 hour	None	None
4016165993	2-3 hours	None	None
4016160969	1-2 hours	None	None
4016154648	None	None	None
4012804018	Less than 1 hour	None	None
4012797964	None	None	None
4012790555	None	None	None
4012782011	None	Less than 1 hour	None
4012730725	None	Less than 1 hour	None
4012723554	None	None	None
4012656140	None	None	None
4012651160	None	None	None
4012644259	None	Less than 1 hour	None
4012637005	None	None	None
4012633162	1-2 hours	Less than 1 hour	None
4012624811	None	Less than 1 hour	None
4012617660	None	None	1-2 hours
4012614159	None	Less than 1 hour	None
4012508792	1-2 hours	None	None
4012498640	None	Less than 1 hour	None
4012491488	None	None	1-2 hours
4012485284	None	None	1-2 hours
4012473633	None	None	Less than 1 hour
4012469464	None	None	1-2 hours
4012466160	Less than 1 hour	None	Less than 1 hour
4012460658	None	Less than 1 hour	None
4012455947	None	None	None
4012430576	None	None	None
4012426652	None	Less than 1 hour	None
4012406783	None	1-2 hours	None
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	Less than 1 hour
4004963506	None	None	Less than 1 hour
4004957167	None	None	None
4004945257	None	1-2 hours	None
4004934437	None	1-2 hours	None
4004921493	Less than 1 hour	None	None
4004914674	None	Less than 1 hour	None
4004905832	None	None	None
4004899412	None	Less than 1 hour	None
4004891212	Less than 1 hour	None	Less than 1 hour
4004885248	None	None	None
4004879116	None	1-2 hours	None
3992329563	Less than 1 hour	None	None

3991552998	None	Less than 1 hour	None
3991524993	None	Less than 1 hour	None
3991510154	None	None	None
3991501190	None	Less than 1 hour	None
3991488370	Less than 1 hour	None	None
3991475073	None	Less than 1 hour	None
3991225783	None	Less than 1 hour	None
3991219753	None	None	None
3991212143	1-2 hours	None	None
3991206524	1-2 hours	None	1-2 hours
3991199746	Less than 1 hour	None	Less than 1 hour
3990101142	2-3 hours	None	None
3990078514	None	None	None
3990065394	None	Less than 1 hour	None
3990050548	None	Less than 1 hour	None
3990036940	None	None	None
3990028350	Less than 1 hour	Less than 1 hour	Less than 1 hour
3990016288	None	None	Less than 1 hour
3989314032	None	None	None
3989303005	None	None	None
3989271549	Less than 1 hour	None	Less than 1 hour
3989221063	None	None	None
3987326905	None	1-2 hours	None
3987319596	None	Less than 1 hour	None
3987312489	None	None	Less than 1 hour
3987278903	None	None	Less than 1 hour
3987270618	None	None	None
3987265971	Less than 1 hour	None	None
3987138863	2-3 hours	None	None
3987119797	None	Less than 1 hour	Less than 1 hour
3987103718	None	None	Less than 1 hour
3987095737	None	None	None
3987091706	More than 3 hours	None	None
3987088444	None	None	None
3987083033	None	None	None
3968572950	None	None	None
3968557021	None	None	None
3968537814	None	None	None
3968522980	None	None	None
3968507520	None	1-2 hours	None
3968424226	None	Less than 1 hour	None
3968393898	1-2 hours	None	None
3968040530	1-2 hours	None	None
3968033599	None	None	None
3968016333	None	None	None
3968006605	Less than 1 hour	1-2 hours	None
3968000019	Less than 1 hour	None	None
3957258512	None	None	More than 3 hours
3934852622	None	None	None
3934129822	None	Less than 1 hour	None
3932105563	Less than 1 hour	None	Less than 1 hour
3931234753	None	None	None
3931175964	None	None	None
3931133172	1-2 hours	None	None
3930994714	None	None	None
3930804586	None	Less than 1 hour	Less than 1 hour
3930749449	Less than 1 hour	None	None
3930697280	None	None	None

3930445230	None	None	None
3930068383	Less than 1 hour	Less than 1 hour	1-2 hours
3929872863	None	None	None
3929691190	None	None	None
3929382688	None	None	More than 3 hours
3913097202	None	Less than 1 hour	None
3913096620	Less than 1 hour	1-2 hours	2-3 hours
3913091157	None	None	None
3913087916	None	Less than 1 hour	None
3913084313	None	Less than 1 hour	Less than 1 hour
3913082865	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913081818	None	None	None
3913081704	None	None	None
3913081489	None	None	None
3913081461	Less than 1 hour	None	Less than 1 hour
3913080016	None	1-2 hours	1-2 hours
3913079239	None	Less than 1 hour	None
3912896144	1-2 hours	Less than 1 hour	None
3912892626	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912890441	None	None	Less than 1 hour
3912887032	None	None	None
3912886614	None	None	None
3912881779	None	None	None
3912880151	None	None	None
3912878868	None	Less than 1 hour	None
3912872911	None	None	None
3912860210	None	None	None
3912859078	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912854606	None	None	None
3912854551	None	None	None
3912852270	None	None	Less than 1 hour
3912848038	More than 3 hours	None	More than 3 hours
3912847968	None	None	None
3912842944	None	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	1-2 hours	None	Less than 1 hour
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	1-2 hours	None
3912776486	1-2 hours	1-2 hours	2-3 hours
3912776152	Less than 1 hour	None	Less than 1 hour
3912759330	None	None	None
3912758978	Less than 1 hour	Less than 1 hour	None
3912757730	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912757652	None	Less than 1 hour	None
3912757524	None	Less than 1 hour	None
3912756711	None	Less than 1 hour	Less than 1 hour
3912755385	None	None	None
3912755235	None	None	Less than 1 hour
3912754149	None	None	None
3912753957	None	None	None
3912752597	None	None	None
3912752289	None	Less than 1 hour	None
3912752184	1-2 hours	1-2 hours	1-2 hours
3912751242	2-3 hours	2-3 hours	More than 3 hours
3912750658	None	None	None
3912749617	None	None	None
3912749016	None	None	None
3912748143	None	None	None

3890043736	None	None	1-2 hours
3890039997	None	None	None
3890034529	Less than 1 hour	None	None
3889751162	None	Less than 1 hour	None
3889749232	1-2 hours	None	None
3889746648	Less than 1 hour	None	1-2 hours
3889743576	None	Less than 1 hour	None
3889740298	None	1-2 hours	None
3889737922	None	None	None
3889665520	None	None	None
3889663586	None	None	None
3889662276	None	Less than 1 hour	None
3888697183	None	None	None
3888692963	None	More than 3 hours	None
3887053010	None	Less than 1 hour	None
3887035703	Less than 1 hour	None	None
3887025511	1-2 hours	None	None
3887002730	None	None	None
3886980755	None	2-3 hours	None
3886971427	None	None	None
3886956905	None	Less than 1 hour	None
3886943878	None	None	None
3886923599	None	Less than 1 hour	None
3886897659	None	2-3 hours	None
3886886502	None	None	None
3886877969	1-2 hours	None	1-2 hours
3886863958	None	None	None
3886701572	None	None	None
3886693846	Less than 1 hour	None	None
3886628016	More than 3 hours	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	Less than 1 hour	None
3886613583	None	None	None
3886610784	None	1-2 hours	None
3886595224	Less than 1 hour	None	None
3886583963	None	None	None
3886579521	None	None	None
3886573614	Less than 1 hour	None	None
3886492182	None	None	None
3886487836	None	1-2 hours	None
3886482983	1-2 hours	None	1-2 hours
3886477400	None	Less than 1 hour	None
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3884642578	None	None	None
3884434183	None	Less than 1 hour	None
3884425269	None	None	Less than 1 hour
3884418684	None	2-3 hours	None
3882735466	None	None	Less than 1 hour
3882714719	None	Less than 1 hour	None
3882149265	None	None	None
3882132493	None	None	None
3881402826	1-2 hours	None	None
3881378615	Less than 1 hour	None	None
3881368250	None	None	None
3881357441	None	None	None
3881265294	None	None	None
3881254139	None	None	None
3881237980	None	Less than 1 hour	None

3881230356	None	None	None
3881220157	None	None	None
3881215195	None	None	None
3881210102	Less than 1 hour	Less than 1 hour	Less than 1 hour
3881204090	None	None	None
3879817918	None	None	More than 3 hours
3879409688	Less than 1 hour	None	None
3879374635	None	Less than 1 hour	None
3879355152	Less than 1 hour	Less than 1 hour	Less than 1 hour
3879318196	None	1-2 hours	None
3879280118	None	None	Less than 1 hour
3879241966	None	None	None
3879169212	1-2 hours	None	None
3879156353	None	None	None
3879114622	None	1-2 hours	None
3878785230	None	Less than 1 hour	None
3878769580	None	1-2 hours	None
3878759308	None	1-2 hours	None
3878753669	None	1-2 hours	None
3878748875	None	More than 3 hours	None
3878742830	None	1-2 hours	None
3878737152	None	1-2 hours	None
3878730696	More than 3 hours	None	None
3878725762	None	More than 3 hours	None
3878719521	None	Less than 1 hour	None
3878713486	None	1-2 hours	None
3878709205	More than 3 hours	None	None
3878700132	None	Less than 1 hour	None
3873328056	None	Less than 1 hour	None
3873312445	None	Less than 1 hour	None
3873301897	None	None	None
3873288043	None	None	None
3873082048	None	None	None
3873075081	None	None	None
3873068691	1-2 hours	None	Less than 1 hour
3873056977	None	1-2 hours	None
3873049368	None	None	None
3873028210	None	None	None
3873020393	None	Less than 1 hour	None
3873001235	None	None	None
3872993752	None	Less than 1 hour	None
3872987133	None	None	1-2 hours
3872964285	2-3 hours	None	None
3872953817	Less than 1 hour	None	None
3872947394	None	None	None
3872939332	None	Less than 1 hour	None
3872846015	None	Less than 1 hour	None
3872841613	None	Less than 1 hour	None
3872837796	None	Less than 1 hour	None
3872820378	None	None	None
3872768107	Less than 1 hour	None	Less than 1 hour
3871255066	Less than 1 hour	None	None
3871227626	Less than 1 hour	None	None
3871205440	None	None	None
3871184697	None	Less than 1 hour	None
3871162565	None	None	None
3871151654	Less than 1 hour	None	1-2 hours
3871110433	None	Less than 1 hour	None

3870870493	Less than 1 hour	None	None
3870854704	Less than 1 hour	None	None
3870838781	None	None	None
3870801193	None	None	1-2 hours
3868573297	More than 3 hours	None	None
3868554028	None	Less than 1 hour	None
3868526738	None	Less than 1 hour	None
3868509803	None	1-2 hours	None
3868484667	2-3 hours	Less than 1 hour	None
3868442104	None	None	None
3868422304	None	None	None
3868411080	1-2 hours	None	None
3868391766	None	None	None
3868375041	1-2 hours	None	None
3866713588	Less than 1 hour	None	None
3865495924	None	None	None
3863418934	None	None	None
3858671359	1-2 hours	None	None
3858643095	None	1-2 hours	More than 3 hours
3858633255	Less than 1 hour	None	None
3857438462	None	Less than 1 hour	None
3856260669	None	1-2 hours	None
3856248923	None	Less than 1 hour	None
3856225449	None	None	None
3854605877	None	Less than 1 hour	None
3853879738	None	1-2 hours	None
3853851932	None	None	None
3853830935	None	None	None
3853806357	None	None	None
3853715854	None	None	Less than 1 hour
3853679395	Less than 1 hour	None	None
3853627220	1-2 hours	None	None
3853269579	None	None	None
3853179710	Less than 1 hour	None	None
3848999317	None	None	None
3847103154	None	Less than 1 hour	None
3845684674	None	None	None
3845447408	1-2 hours	None	None
3844847491	None	None	1-2 hours
3844360977	None	None	None
3844236222	None	None	None
3844232462	Less than 1 hour	None	None
3844138637	Less than 1 hour	None	None
3844055790	None	None	None
3843935898	None	None	None
3843931544	None	None	None
3843911811	None	None	None
3843804662	None	None	None
3843766328	2-3 hours	2-3 hours	2-3 hours
3843760219	None	None	Less than 1 hour
3843744801	None	None	None
3843734569	None	None	None
3843716341	None	None	None
3843712724	Less than 1 hour	None	None
3843674785	Less than 1 hour	None	Less than 1 hour
3843623603	None	None	None
3843612922	None	Less than 1 hour	None
3843608317	Less than 1 hour	None	None

3843605819	1-2 hours	Less than 1 hour	None
3843604500	None	None	None
3843603283	Less than 1 hour	None	Less than 1 hour
3843590935	Less than 1 hour	Less than 1 hour	None
3843584691	None	None	None
3843566558	None	2-3 hours	None
3843563669	None	More than 3 hours	None
3843558483	None	None	None
3843546559	None	None	None
3843527212	None	None	None
4058991282	None	1-2 hours	None
4058988558	None	Less than 1 hour	None
4058970974	Less than 1 hour	Less than 1 hour	None
4058966399	None	None	Less than 1 hour
4058961408	None	Less than 1 hour	None
4058958230	Less than 1 hour	None	None
4058954419	None	2-3 hours	1-2 hours
4058949738	1-2 hours	1-2 hours	1-2 hours
4058944768	None	Less than 1 hour	None
4058940279	None	Less than 1 hour	None
4058928337	None	None	Less than 1 hour
4058925829	None	Less than 1 hour	None
4058295828	None	None	Less than 1 hour
4058285308	None	Less than 1 hour	None
4058276966	1-2 hours	None	Less than 1 hour
4058264705	None	Less than 1 hour	None
4058256269	Less than 1 hour	None	None
4058248054	None	None	None
4058240982	None	Less than 1 hour	None
4057536878	2-3 hours	None	None
4057526407	None	Less than 1 hour	None
4057507742	None	2-3 hours	None
4057471823	None	None	Less than 1 hour
4057460212	None	None	1-2 hours
4057442304	None	None	None
4057423702	Less than 1 hour	1-2 hours	2-3 hours
4057364669	None	Less than 1 hour	None
4057347523	1-2 hours	Less than 1 hour	Less than 1 hour
4057335898	Less than 1 hour	Less than 1 hour	Less than 1 hour
4057317286	Less than 1 hour	1-2 hours	None
4057304812	None	Less than 1 hour	None
4057273462	1-2 hours	1-2 hours	None
4057253149	None	None	None
4057238269	None	Less than 1 hour	None
4057216892	None	Less than 1 hour	None
4057172013	None	Less than 1 hour	None
4057160934	None	Less than 1 hour	None
4057015182	None	None	Less than 1 hour
4057002543	None	None	None
4056994599	None	None	None
4056988375	None	None	None
4056982171	None	None	Less than 1 hour
4056976704	None	1-2 hours	None
4056969438	Less than 1 hour	None	None
4056963885	Less than 1 hour	1-2 hours	Less than 1 hour
4056956531	None	None	None
4056948732	None	None	None
4056941323	None	None	Less than 1 hour

4056928489	None	None	Less than 1 hour
4056918542	None	Less than 1 hour	None
4056912185	1-2 hours	None	None
4056906655	None	Less than 1 hour	None
4056901873	None	2-3 hours	None

Table B1-3 (f). Answers of the respondents to Question 6 – (Internet Surfing)

ID of the respondent	For internet surfing		
	Laptop	Desktop	Tablet
4016327570	None	None	1-2 hours
4016323071	None	None	None
4016319090	None	None	Less than 1 hour
4016311412	None	None	1-2 hours
4016307251	None	None	1-2 hours
4016303216	None	Less than 1 hour	None
4016296167	None	None	Less than 1 hour
4016290910	None	None	None
4016286833	None	None	None
4016172184	1-2 hours	None	None
4016165993	Less than 1 hour	None	None
4016160969	Less than 1 hour	Less than 1 hour	1-2 hours
4016154648	Less than 1 hour	None	None
4012804018	Less than 1 hour	None	None
4012797964	1-2 hours	1-2 hours	None
4012790555	1-2 hours	None	None
4012782011	None	None	Less than 1 hour
4012730725	None	None	Less than 1 hour
4012723554	1-2 hours	None	None
4012656140	Less than 1 hour	None	None
4012651160	Less than 1 hour	More than 3 hours	1-2 hours
4012644259	None	1-2 hours	1-2 hours
4012637005	Less than 1 hour	1-2 hours	None
4012633162	None	None	None
4012624811	Less than 1 hour	None	None
4012617660	None	None	None
4012614159	None	None	None
4012508792	Less than 1 hour	None	None
4012498640	1-2 hours	None	None
4012491488	Less than 1 hour	None	1-2 hours
4012485284	None	None	2-3 hours
4012473633	None	None	2-3 hours
4012469464	None	None	2-3 hours
4012466160	Less than 1 hour	None	Less than 1 hour
4012460658	None	1-2 hours	None
4012455947	None	None	None
4012430576	None	None	Less than 1 hour
4012426652	None	None	None
4012406783	None	None	None
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	1-2 hours
4004963506	None	None	Less than 1 hour
4004957167	1-2 hours	None	2-3 hours
4004945257	None	None	Less than 1 hour

4004934437	None	None	None
4004921493	Less than 1 hour	None	None
4004914674	None	None	None
4004905832	1-2 hours	None	None
4004899412	None	None	Less than 1 hour
4004891212	Less than 1 hour	None	Less than 1 hour
4004885248	1-2 hours	None	None
4004879116	None	None	1-2 hours
3992329563	Less than 1 hour	None	None
3991552998	Less than 1 hour	None	1-2 hours
3991524993	1-2 hours	None	2-3 hours
3991510154	1-2 hours	None	2-3 hours
3991501190	1-2 hours	Less than 1 hour	None
3991488370	Less than 1 hour	None	None
3991475073	1-2 hours	None	Less than 1 hour
3991225783	None	None	Less than 1 hour
3991219753	Less than 1 hour	None	None
3991212143	None	None	None
3991206524	Less than 1 hour	None	2-3 hours
3991199746	1-2 hours	None	1-2 hours
3990101142	2-3 hours	None	None
3990078514	None	None	Less than 1 hour
3990065394	None	1-2 hours	None
3990050548	None	None	Less than 1 hour
3990036940	None	None	1-2 hours
3990028350	2-3 hours	None	2-3 hours
3990016288	More than 3 hours	None	None
3989314032	None	None	Less than 1 hour
3989303005	More than 3 hours	None	None
3989271549	None	None	None
3989221063	None	None	1-2 hours
3987326905	1-2 hours	None	None
3987319596	None	None	1-2 hours
3987312489	1-2 hours	None	None
3987278903	None	None	2-3 hours
3987270618	None	None	1-2 hours
3987265971	1-2 hours	None	Less than 1 hour
3987138863	1-2 hours	None	None
3987119797	None	None	1-2 hours
3987103718	2-3 hours	None	2-3 hours
3987095737	None	None	None
3987091706	1-2 hours	None	None
3987088444	None	1-2 hours	Less than 1 hour
3987083033	None	None	1-2 hours
3968572950	Less than 1 hour	None	None
3968557021	Less than 1 hour	None	1-2 hours
3968537814	Less than 1 hour	None	Less than 1 hour
3968522980	1-2 hours	None	None
3968507520	2-3 hours	None	None
3968424226	None	None	1-2 hours
3968393898	None	2-3 hours	None
3968040530	Less than 1 hour	None	None
3968033599	None	None	More than 3 hours
3968016333	2-3 hours	None	None
3968006605	Less than 1 hour	1-2 hours	Less than 1 hour
3968000019	2-3 hours	None	None
3957258512	2-3 hours	None	2-3 hours
3934852622	2-3 hours	None	None

3934129822	None	2-3 hours	None
3932105563	1-2 hours	None	1-2 hours
3931234753	None	None	2-3 hours
3931175964	1-2 hours	None	None
3931133172	None	None	None
3930994714	None	None	Less than 1 hour
3930804586	Less than 1 hour	None	Less than 1 hour
3930749449	Less than 1 hour	None	None
3930697280	None	1-2 hours	Less than 1 hour
3930445230	None	None	None
3930068383	Less than 1 hour	1-2 hours	1-2 hours
3929872863	None	1-2 hours	None
3929691190	1-2 hours	Less than 1 hour	None
3929382688	None	None	More than 3 hours
3913097202	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913096620	Less than 1 hour	1-2 hours	1-2 hours
3913091157	More than 3 hours	More than 3 hours	More than 3 hours
3913087916	None	1-2 hours	1-2 hours
3913084313	None	None	Less than 1 hour
3913082865	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913081818	More than 3 hours	None	None
3913081704	None	Less than 1 hour	2-3 hours
3913081489	More than 3 hours	More than 3 hours	More than 3 hours
3913081461	1-2 hours	None	1-2 hours
3913080016	None	Less than 1 hour	Less than 1 hour
3913079239	None	None	More than 3 hours
3912896144	None	None	None
3912892626	Less than 1 hour	Less than 1 hour	Less than 1 hour
3912890441	Less than 1 hour	None	More than 3 hours
3912887032	Less than 1 hour	None	1-2 hours
3912886614	More than 3 hours	More than 3 hours	More than 3 hours
3912881779	More than 3 hours	None	Less than 1 hour
3912880151	2-3 hours	1-2 hours	More than 3 hours
3912878868	Less than 1 hour	Less than 1 hour	1-2 hours
3912872911	Less than 1 hour	None	Less than 1 hour
3912860210	None	None	2-3 hours
3912859078	None	2-3 hours	2-3 hours
3912854606	None	None	1-2 hours
3912854551	1-2 hours	Less than 1 hour	More than 3 hours
3912852270	1-2 hours	None	More than 3 hours
3912848038	More than 3 hours	None	More than 3 hours
3912847968	None	Less than 1 hour	1-2 hours
3912842944	1-2 hours	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	1-2 hours	None	More than 3 hours
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	1-2 hours	1-2 hours
3912776486	1-2 hours	1-2 hours	2-3 hours
3912776152	2-3 hours	More than 3 hours	Less than 1 hour
3912759330	None	None	1-2 hours
3912758978	Less than 1 hour	None	More than 3 hours
3912757730	Less than 1 hour	None	Less than 1 hour
3912757652	1-2 hours	More than 3 hours	Less than 1 hour
3912757524	1-2 hours	Less than 1 hour	1-2 hours
3912756711	More than 3 hours	More than 3 hours	More than 3 hours
3912755385	1-2 hours	None	2-3 hours
3912755235	None	1-2 hours	More than 3 hours
3912754149	1-2 hours	None	None

3912753957	Less than 1 hour	None	More than 3 hours
3912752597	None	None	1-2 hours
3912752289	1-2 hours	None	1-2 hours
3912752184	2-3 hours	1-2 hours	More than 3 hours
3912751242	Less than 1 hour	Less than 1 hour	More than 3 hours
3912750658	More than 3 hours	More than 3 hours	More than 3 hours
3912749617	Less than 1 hour	None	2-3 hours
3912749016	None	None	None
3912748143	2-3 hours	None	More than 3 hours
3890043736	2-3 hours	None	More than 3 hours
3890039997	More than 3 hours	None	None
3890034529	More than 3 hours	None	None
3889751162	None	None	More than 3 hours
3889749232	2-3 hours	None	None
3889746648	Less than 1 hour	More than 3 hours	More than 3 hours
3889743576	None	1-2 hours	Less than 1 hour
3889740298	None	None	Less than 1 hour
3889737922	Less than 1 hour	None	None
3889665520	None	None	None
3889663586	None	None	More than 3 hours
3889662276	None	None	1-2 hours
3888697183	None	1-2 hours	None
3888692963	None	None	2-3 hours
3887053010	None	1-2 hours	1-2 hours
3887035703	Less than 1 hour	None	None
3887025511	None	1-2 hours	None
3887002730	None	None	More than 3 hours
3886980755	None	Less than 1 hour	Less than 1 hour
3886971427	None	None	1-2 hours
3886956905	None	1-2 hours	None
3886943878	2-3 hours	2-3 hours	None
3886923599	More than 3 hours	None	None
3886897659	None	None	2-3 hours
3886886502	None	None	None
3886877969	Less than 1 hour	None	More than 3 hours
3886863958	2-3 hours	None	1-2 hours
3886701572	None	None	1-2 hours
3886693846	Less than 1 hour	None	None
3886628016	None	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	1-2 hours	1-2 hours
3886613583	None	None	None
3886610784	Less than 1 hour	None	None
3886595224	Less than 1 hour	None	None
3886583963	None	None	None
3886579521	None	Less than 1 hour	Less than 1 hour
3886573614	Less than 1 hour	None	None
3886492182	None	1-2 hours	None
3886487836	None	None	1-2 hours
3886482983	Less than 1 hour	None	Less than 1 hour
3886477400	1-2 hours	1-2 hours	1-2 hours
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3884642578	None	None	1-2 hours
3884434183	None	Less than 1 hour	None
3884425269	None	None	Less than 1 hour
3884418684	None	1-2 hours	None
3882735466	None	None	1-2 hours
3882714719	None	Less than 1 hour	None

3882149265	None	None	2-3 hours
3882132493	None	None	1-2 hours
3881402826	2-3 hours	None	None
3881378615	1-2 hours	None	None
3881368250	None	None	More than 3 hours
3881357441	Less than 1 hour	Less than 1 hour	2-3 hours
3881265294	None	None	1-2 hours
3881254139	1-2 hours	None	1-2 hours
3881237980	None	2-3 hours	None
3881230356	None	None	None
3881220157	None	None	2-3 hours
3881215195	None	None	None
3881210102	Less than 1 hour	Less than 1 hour	Less than 1 hour
3881204090	2-3 hours	None	Less than 1 hour
3879817918	None	None	1-2 hours
3879409688	Less than 1 hour	None	Less than 1 hour
3879374635	None	1-2 hours	None
3879355152	1-2 hours	1-2 hours	1-2 hours
3879318196	Less than 1 hour	None	None
3879280118	Less than 1 hour	None	None
3879241966	None	More than 3 hours	None
3879169212	More than 3 hours	None	None
3879156353	1-2 hours	None	None
3879114622	None	1-2 hours	None
3878785230	Less than 1 hour	None	None
3878769580	None	None	Less than 1 hour
3878759308	Less than 1 hour	None	None
3878753669	Less than 1 hour	None	None
3878748875	None	1-2 hours	1-2 hours
3878742830	Less than 1 hour	None	None
3878737152	None	None	2-3 hours
3878730696	None	2-3 hours	None
3878725762	None	None	2-3 hours
3878719521	1-2 hours	None	None
3878713486	None	None	Less than 1 hour
3878709205	None	More than 3 hours	None
3878700132	None	None	Less than 1 hour
3873328056	1-2 hours	None	None
3873312445	1-2 hours	None	None
3873301897	None	None	1-2 hours
3873288043	None	None	None
3873082048	None	None	Less than 1 hour
3873075081	Less than 1 hour	1-2 hours	Less than 1 hour
3873068691	1-2 hours	None	1-2 hours
3873056977	None	2-3 hours	None
3873049368	None	None	2-3 hours
3873028210	None	2-3 hours	None
3873020393	Less than 1 hour	Less than 1 hour	Less than 1 hour
3873001235	None	Less than 1 hour	None
3872993752	2-3 hours	None	2-3 hours
3872987133	None	None	More than 3 hours
3872964285	None	None	Less than 1 hour
3872953817	More than 3 hours	None	None
3872947394	None	More than 3 hours	More than 3 hours
3872939332	2-3 hours	None	None
3872846015	None	Less than 1 hour	None
3872841613	None	Less than 1 hour	None
3872837796	None	Less than 1 hour	None

3872820378	None	Less than 1 hour	None
3872768107	Less than 1 hour	None	More than 3 hours
3871255066	2-3 hours	None	None
3871227626	More than 3 hours	None	None
3871205440	None	None	Less than 1 hour
3871184697	None	1-2 hours	Less than 1 hour
3871162565	None	None	Less than 1 hour
3871151654	1-2 hours	None	1-2 hours
3871110433	None	Less than 1 hour	None
3870870493	None	None	None
3870854704	Less than 1 hour	None	None
3870838781	None	1-2 hours	None
3870801193	None	1-2 hours	None
3868573297	None	Less than 1 hour	None
3868554028	More than 3 hours	None	None
3868526738	None	More than 3 hours	None
3868509803	More than 3 hours	None	None
3868484667	None	None	More than 3 hours
3868442104	More than 3 hours	None	More than 3 hours
3868422304	None	None	Less than 1 hour
3868411080	Less than 1 hour	None	None
3868391766	1-2 hours	None	None
3868375041	More than 3 hours	None	None
3866713588	More than 3 hours	None	None
3865495924	1-2 hours	Less than 1 hour	Less than 1 hour
3863418934	More than 3 hours	None	None
3858671359	Less than 1 hour	None	None
3858643095	More than 3 hours	None	None
3858633255	Less than 1 hour	None	None
3857438462	More than 3 hours	None	None
3856260669	1-2 hours	None	None
3856248923	None	None	1-2 hours
3856225449	None	None	None
3854605877	None	None	Less than 1 hour
3853879738	More than 3 hours	More than 3 hours	None
3853851932	None	None	1-2 hours
3853830935	More than 3 hours	None	None
3853806357	None	None	None
3853715854	None	None	1-2 hours
3853679395	1-2 hours	None	None
3853627220	Less than 1 hour	None	None
3853269579	Less than 1 hour	None	None
3853179710	Less than 1 hour	None	None
3848999317	1-2 hours	None	None
3847103154	None	Less than 1 hour	None
3845684674	None	None	Less than 1 hour
3845447408	1-2 hours	Less than 1 hour	1-2 hours
3844847491	Less than 1 hour	None	1-2 hours
3844360977	More than 3 hours	More than 3 hours	More than 3 hours
3844236222	More than 3 hours	None	None
3844232462	None	None	1-2 hours
3844138637	1-2 hours	None	None
3844055790	None	None	None
3843935898	1-2 hours	2-3 hours	More than 3 hours
3843931544	Less than 1 hour	None	None
3843911811	Less than 1 hour	None	Less than 1 hour
3843804662	None	None	Less than 1 hour
3843766328	2-3 hours	2-3 hours	2-3 hours

3843760219	Less than 1 hour	None	Less than 1 hour
3843744801	Less than 1 hour	More than 3 hours	None
3843734569	None	None	1-2 hours
3843716341	None	None	1-2 hours
3843712724	2-3 hours	Less than 1 hour	Less than 1 hour
3843674785	1-2 hours	None	None
3843623603	1-2 hours	None	None
3843612922	None	Less than 1 hour	None
3843608317	1-2 hours	None	None
3843605819	Less than 1 hour	None	None
3843604500	None	None	None
3843603283	More than 3 hours	None	More than 3 hours
3843590935	1-2 hours	1-2 hours	None
3843584691	2-3 hours	None	1-2 hours
3843566558	1-2 hours	Less than 1 hour	2-3 hours
3843563669	2-3 hours	None	1-2 hours
3843558483	2-3 hours	Less than 1 hour	More than 3 hours
3843546559	1-2 hours	1-2 hours	2-3 hours
3843527212	Less than 1 hour	2-3 hours	1-2 hours
4058991282	None	1-2 hours	None
4058988558	None	None	1-2 hours
4058970974	More than 3 hours	2-3 hours	1-2 hours
4058966399	None	None	1-2 hours
4058961408	1-2 hours	2-3 hours	2-3 hours
4058958230	None	1-2 hours	None
4058954419	Less than 1 hour	More than 3 hours	Less than 1 hour
4058949738	Less than 1 hour	Less than 1 hour	Less than 1 hour
4058944768	None	None	More than 3 hours
4058940279	None	None	Less than 1 hour
4058928337	None	None	None
4058925829	Less than 1 hour	None	None
4058295828	None	None	None
4058285308	None	More than 3 hours	None
4058276966	1-2 hours	None	2-3 hours
4058264705	None	Less than 1 hour	None
4058256269	None	None	2-3 hours
4058248054	None	None	Less than 1 hour
4058240982	None	None	1-2 hours
4057536878	Less than 1 hour	None	None
4057526407	2-3 hours	None	1-2 hours
4057507742	2-3 hours	None	None
4057471823	None	None	Less than 1 hour
4057460212	None	None	More than 3 hours
4057442304	None	1-2 hours	None
4057423702	1-2 hours	Less than 1 hour	2-3 hours
4057364669	None	None	Less than 1 hour
4057347523	1-2 hours	Less than 1 hour	Less than 1 hour
4057335898	Less than 1 hour	Less than 1 hour	1-2 hours
4057317286	Less than 1 hour	1-2 hours	None
4057304812	None	None	None
4057273462	1-2 hours	1-2 hours	1-2 hours
4057253149	Less than 1 hour	None	None
4057238269	1-2 hours	None	None
4057216892	Less than 1 hour	Less than 1 hour	Less than 1 hour
4057172013	None	Less than 1 hour	None
4057160934	None	None	More than 3 hours
4057015182	None	None	More than 3 hours
4057002543	None	More than 3 hours	None

4056994599	None	1-2 hours	None
4056988375	None	1-2 hours	None
4056982171	Less than 1 hour	None	1-2 hours
4056976704	Less than 1 hour	None	1-2 hours
4056969438	None	None	None
4056963885	1-2 hours	Less than 1 hour	2-3 hours
4056956531	1-2 hours	Less than 1 hour	Less than 1 hour
4056948732	Less than 1 hour	Less than 1 hour	2-3 hours
4056941323	None	None	1-2 hours
4056928489	Less than 1 hour	None	1-2 hours
4056918542	None	1-2 hours	None
4056912185	1-2 hours	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	None	1-2 hours	None

Table B1-3 (g). Answers of the respondents to Question 6 – (For reading)

ID of the respondent	Reading (Newspapers, books, magazines)		
	Laptop	Desktop	Tablet
4016327570	None	None	1-2 hours
4016323071	None	None	Less than 1 hour
4016319090	None	None	Less than 1 hour
4016311412	None	None	Less than 1 hour
4016307251	None	None	None
4016303216	Less than 1 hour	None	None
4016296167	None	None	Less than 1 hour
4016290910	Less than 1 hour	None	None
4016286833	None	None	1-2 hours
4016172184	None	None	None
4016165993	1-2 hours	None	None
4016160969	None	None	1-2 hours
4016154648	None	None	None
4012804018	None	None	None
4012797964	None	None	None
4012790555	None	None	None
4012782011	None	None	None
4012730725	None	None	None
4012723554	None	None	None
4012656140	None	None	None
4012651160	None	None	Less than 1 hour
4012644259	None	None	Less than 1 hour
4012637005	None	None	None
4012633162	None	None	None
4012624811	None	None	Less than 1 hour
4012617660	1-2 hours	None	None
4012614159	None	None	None
4012498640	None	None	1-2 hours
4012491488	None	None	1-2 hours
4012485284	None	None	More than 3 hours
4012473633	None	None	Less than 1 hour
4012469464	None	None	2-3 hours
4012466160	1-2 hours	None	1-2 hours
4012460658	None	None	None
4012455947	None	None	None

4012430576	None	None	Less than 1 hour
4012426652	None	None	None
4012406783	None	None	Less than 1 hour
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	Less than 1 hour
4004963506	None	None	Less than 1 hour
4004957167	Less than 1 hour	None	2-3 hours
4004945257	None	None	Less than 1 hour
4004934437	None	None	1-2 hours
4004921493	1-2 hours	None	None
4004914674	None	None	None
4004905832	None	None	None
4004899412	None	None	Less than 1 hour
4004891212	Less than 1 hour	None	More than 3 hours
4004885248	None	None	None
4004879116	Less than 1 hour	None	None
3992329563	None	None	None
3991552998	None	None	None
3991524993	None	None	Less than 1 hour
3991510154	None	None	None
3991501190	2-3 hours	None	None
3991488370	None	None	None
3991475073	Less than 1 hour	Less than 1 hour	Less than 1 hour
3991225783	None	None	2-3 hours
3991219753	None	None	None
3991212143	None	None	None
3991206524	None	None	1-2 hours
3991199746	None	None	More than 3 hours
3990101142	None	None	Less than 1 hour
3990078514	More than 3 hours	None	None
3990065394	None	Less than 1 hour	None
3990050548	None	None	None
3990036940	None	None	Less than 1 hour
3990028350	Less than 1 hour	None	1-2 hours
3990016288	2-3 hours	None	None
3989314032	None	None	1-2 hours
3989303005	None	None	Less than 1 hour
3989271549	1-2 hours	None	2-3 hours
3989221063	None	None	1-2 hours
3987326905	None	2-3 hours	None
3987319596	None	None	Less than 1 hour
3987312489	None	None	More than 3 hours
3987278903	None	None	1-2 hours
3987270618	None	None	1-2 hours
3987265971	None	None	None
3987138863	2-3 hours	None	None
3987119797	None	None	Less than 1 hour
3987103718	None	2-3 hours	None
3987095737	None	None	None
3987091706	Less than 1 hour	None	None
3987088444	None	Less than 1 hour	Less than 1 hour
3987083033	None	None	None
3968572950	None	None	None
3968557021	None	None	None
3968537814	None	None	None
3968522980	None	None	None
3968507520	Less than 1 hour	None	None
3968424226	None	None	Less than 1 hour

3968393898	1-2 hours	None	None
3968040530	Less than 1 hour	None	None
3968033599	None	None	Less than 1 hour
3968016333	1-2 hours	None	None
3968006605	None	None	None
3968000019	Less than 1 hour	None	None
3957258512	None	None	None
3934852622	None	None	None
3934129822	None	Less than 1 hour	None
3932105563	None	None	None
3931234753	None	None	1-2 hours
3931175964	Less than 1 hour	None	None
3931133172	None	None	None
3930994714	None	None	None
3930804586	None	None	None
3930749449	None	None	None
3930697280	None	None	None
3930445230	None	None	None
3930068383	2-3 hours	Less than 1 hour	1-2 hours
3929872863	None	Less than 1 hour	None
3929691190	Less than 1 hour	Less than 1 hour	None
3929382688	None	None	More than 3 hours
3913097202	None	None	Less than 1 hour
3913096620	None	None	None
3913091157	None	None	None
3913087916	None	None	Less than 1 hour
3913084313	None	None	None
3913082865	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913081818	None	None	None
3913081704	None	None	Less than 1 hour
3913081489	None	None	None
3913081461	1-2 hours	None	1-2 hours
3913080016	None	Less than 1 hour	Less than 1 hour
3913079239	None	None	None
3912896144	None	None	1-2 hours
3912892626	None	None	None
3912890441	None	None	More than 3 hours
3912887032	Less than 1 hour	None	1-2 hours
3912886614	1-2 hours	1-2 hours	1-2 hours
3912881779	None	None	None
3912880151	None	None	None
3912878868	None	None	None
3912872911	None	None	None
3912860210	None	None	2-3 hours
3912859078	None	None	None
3912854606	None	None	1-2 hours
3912854551	None	None	None
3912852270	None	None	More than 3 hours
3912848038	Less than 1 hour	None	Less than 1 hour
3912847968	None	None	Less than 1 hour
3912842944	None	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	None	None	None
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	1-2 hours	1-2 hours
3912776486	2-3 hours	1-2 hours	1-2 hours
3912776152	1-2 hours	2-3 hours	More than 3 hours
3912759330	None	None	None

3912758978	None	None	1-2 hours
3912757730	2-3 hours	None	Less than 1 hour
3912757652	None	None	1-2 hours
3912757524	None	None	None
3912756711	None	Less than 1 hour	1-2 hours
3912755385	None	None	None
3912755235	None	Less than 1 hour	Less than 1 hour
3912754149	None	None	None
3912753957	None	None	None
3912752597	None	None	Less than 1 hour
3912752289	1-2 hours	Less than 1 hour	1-2 hours
3912752184	2-3 hours	1-2 hours	More than 3 hours
3912751242	None	1-2 hours	More than 3 hours
3912750658	None	None	None
3912749617	Less than 1 hour	None	Less than 1 hour
3912749016	None	None	None
3912748143	Less than 1 hour	None	1-2 hours
3890043736	None	None	1-2 hours
3890039997	None	None	None
3890034529	Less than 1 hour	None	None
3889751162	None	None	None
3889749232	None	None	1-2 hours
3889746648	None	None	Less than 1 hour
3889743576	None	1-2 hours	1-2 hours
3889740298	None	Less than 1 hour	None
3889737922	None	None	None
3889665520	None	Less than 1 hour	None
3889663586	None	None	None
3889662276	None	None	None
3888697183	None	Less than 1 hour	None
3888692963	None	Less than 1 hour	None
3887053010	None	Less than 1 hour	Less than 1 hour
3887035703	Less than 1 hour	None	None
3887025511	None	Less than 1 hour	None
3887002730	None	None	None
3886980755	None	None	1-2 hours
3886971427	None	None	1-2 hours
3886956905	None	None	None
3886943878	None	None	None
3886923599	None	None	1-2 hours
3886897659	None	Less than 1 hour	Less than 1 hour
3886886502	None	None	None
3886877969	None	None	None
3886863958	None	None	None
3886701572	None	None	None
3886693846	None	None	None
3886628016	None	None	None
3886623361	Less than 1 hour	None	None
3886618521	None	Less than 1 hour	Less than 1 hour
3886613583	Less than 1 hour	None	None
3886610784	Less than 1 hour	None	None
3886595224	None	None	None
3886583963	None	None	None
3886579521	None	None	None
3886573614	None	None	None
3886492182	None	None	None
3886487836	None	None	Less than 1 hour
3886482983	None	None	None

3886477400	None	None	None
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
3884642578	None	None	None
3884434183	None	1-2 hours	None
3884425269	None	None	None
3884418684	None	Less than 1 hour	None
3882735466	None	None	Less than 1 hour
3882714719	None	None	None
3882149265	None	None	None
3882132493	None	None	None
3881402826	Less than 1 hour	None	None
3881378615	None	None	Less than 1 hour
3881368250	None	Less than 1 hour	None
3881357441	None	None	None
3881265294	None	None	None
3881254139	None	None	None
3881237980	Less than 1 hour	None	None
3881230356	None	None	None
3881220157	None	None	Less than 1 hour
3881215195	None	None	1-2 hours
3881210102	Less than 1 hour	Less than 1 hour	Less than 1 hour
3881204090	None	None	Less than 1 hour
3879817918	None	None	None
3879409688	None	None	Less than 1 hour
3879374635	None	None	None
3879355152	1-2 hours	1-2 hours	Less than 1 hour
3879318196	None	None	None
3879280118	Less than 1 hour	None	None
3879241966	None	None	None
3879169212	1-2 hours	None	None
3879156353	None	None	None
3879114622	None	Less than 1 hour	None
3878785230	None	None	None
3878769580	None	None	Less than 1 hour
3878759308	None	None	None
3878753669	Less than 1 hour	None	None
3878748875	None	None	Less than 1 hour
3878742830	None	None	None
3878737152	None	None	None
3878730696	None	Less than 1 hour	None
3878725762	None	None	Less than 1 hour
3878719521	None	None	None
3878713486	None	None	Less than 1 hour
3878709205	None	Less than 1 hour	None
3878700132	None	None	None
3873328056	None	2-3 hours	None
3873312445	Less than 1 hour	None	None
3873301897	None	None	1-2 hours
3873288043	None	None	None
3873082048	None	None	None
3873075081	Less than 1 hour	1-2 hours	Less than 1 hour
3873068691	Less than 1 hour	None	Less than 1 hour
3873056977	None	Less than 1 hour	None
3873049368	None	None	1-2 hours
3873028210	None	None	None
3873020393	None	None	None
3873001235	None	Less than 1 hour	None
3872993752	None	None	None

3872987133	None	None	2-3 hours
3872964285	1-2 hours	None	None
3872953817	2-3 hours	None	None
3872947394	None	None	None
3872939332	1-2 hours	None	None
3872846015	None	Less than 1 hour	None
3872841613	None	1-2 hours	None
3872837796	None	Less than 1 hour	None
3872820378	None	Less than 1 hour	None
3872768107	None	None	None
3871255066	Less than 1 hour	None	None
3871227626	None	None	None
3871205440	None	None	None
3871184697	None	None	None
3871162565	None	None	None
3871151654	None	None	1-2 hours
3871110433	Less than 1 hour	Less than 1 hour	None
3870870493	None	None	Less than 1 hour
3870854704	Less than 1 hour	None	None
3870838781	None	None	None
3870801193	None	None	None
3868573297	1-2 hours	None	None
3868554028	Less than 1 hour	None	None
3868526738	None	Less than 1 hour	None
3868509803	2-3 hours	None	None
3868484667	None	None	1-2 hours
3868442104	None	None	None
3868422304	None	None	None
3868411080	None	None	None
3868391766	None	None	None
3868375041	1-2 hours	None	None
3866713588	Less than 1 hour	None	None
3865495924	1-2 hours	Less than 1 hour	Less than 1 hour
3863418934	1-2 hours	None	None
3858671359	None	None	None
3858643095	None	None	None
3858633255	Less than 1 hour	None	None
3857438462	None	None	None
3856260669	None	None	None
3856248923	None	None	Less than 1 hour
3856225449	None	None	None
3854605877	None	None	None
3853879738	None	None	None
3853851932	None	None	None
3853830935	None	None	None
3853806357	None	None	None
3853715854	None	None	1-2 hours
3853679395	1-2 hours	None	None
3853627220	None	None	None
3853269579	None	None	None
3853179710	None	None	None
3848999317	Less than 1 hour	None	None
3847103154	None	Less than 1 hour	None
3845684674	None	None	None
3845447408	None	None	Less than 1 hour
3844847491	None	None	Less than 1 hour
3844360977	None	Less than 1 hour	None
3844236222	Less than 1 hour	None	None

3844232462	None	None	Less than 1 hour
3844138637	None	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	None	None	None
3843931544	Less than 1 hour	None	None
3843911811	None	None	Less than 1 hour
3843804662	None	None	None
3843766328	None	None	None
3843760219	None	None	None
3843744801	Less than 1 hour	Less than 1 hour	None
3843734569	None	None	None
3843716341	None	None	None
3843712724	Less than 1 hour	Less than 1 hour	None
3843674785	2-3 hours	None	Less than 1 hour
3843623603	None	None	1-2 hours
3843612922	None	None	None
3843608317	None	None	None
3843605819	Less than 1 hour	None	Less than 1 hour
3843604500	None	None	None
3843603283	None	None	None
3843590935	None	None	None
3843584691	None	None	Less than 1 hour
3843566558	Less than 1 hour	1-2 hours	1-2 hours
3843563669	More than 3 hours	None	More than 3 hours
3843558483	None	None	None
3843546559	None	None	None
3843527212	None	None	1-2 hours
4058991282	None	Less than 1 hour	None
4058988558	None	None	Less than 1 hour
4058970974	None	None	Less than 1 hour
4058966399	None	None	Less than 1 hour
4058961408	Less than 1 hour	Less than 1 hour	Less than 1 hour
4058958230	None	Less than 1 hour	None
4058954419	2-3 hours	2-3 hours	Less than 1 hour
4058949738	Less than 1 hour	1-2 hours	2-3 hours
4058944768	None	None	1-2 hours
4058940279	None	None	None
4058928337	None	None	Less than 1 hour
4058925829	Less than 1 hour	None	None
4058295828	None	None	1-2 hours
4058285308	None	1-2 hours	None
4058276966	1-2 hours	None	Less than 1 hour
4058264705	None	None	None
4058256269	None	None	None
4058248054	None	None	1-2 hours
4058240982	None	None	Less than 1 hour
4057536878	None	None	None
4057526407	None	None	Less than 1 hour
4057507742	None	None	None
4057471823	None	Less than 1 hour	None
4057460212	None	None	1-2 hours
4057442304	None	None	Less than 1 hour
4057423702	Less than 1 hour	None	None
4057364669	None	None	None
4057347523	1-2 hours	Less than 1 hour	1-2 hours
4057335898	1-2 hours	1-2 hours	1-2 hours
4057317286	1-2 hours	1-2 hours	None
4057304812	None	None	None

4057273462	None	None	2-3 hours
4057253149	Less than 1 hour	None	None
4057238269	None	None	None
4057216892	None	None	Less than 1 hour
4057172013	None	None	None
4057160934	Less than 1 hour	None	Less than 1 hour
4057015182	None	None	Less than 1 hour
4057002543	None	None	None
4056994599	None	Less than 1 hour	None
4056988375	None	None	None
4056982171	None	None	None
4056976704	Less than 1 hour	None	None
4056969438	Less than 1 hour	None	None
4056963885	Less than 1 hour	Less than 1 hour	Less than 1 hour
4056956531	Less than 1 hour	Less than 1 hour	2-3 hours
4056948732	None	None	Less than 1 hour
4056941323	None	None	1-2 hours
4056928489	Less than 1 hour	None	1-2 hours
4056918542	None	Less than 1 hour	None
4056912185	Less than 1 hour	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	None	More than 3 hours	None

Table B1-3 (h). Answers of the respondents to Question 6 – (For writing)

ID of the respondent	Writing (Dairies, blog posts, etc.)		
	Laptop	Desktop	Tablet
4016327570	None	None	None
4016323071	Less than 1 hour	None	None
4016319090	None	None	None
4016311412	None	None	None
4016307251	Less than 1 hour	None	None
4016303216	None	None	None
4016296167	Less than 1 hour	None	None
4016290910	None	None	None
4016286833	None	None	None
4016172184	None	None	None
4016165993	Less than 1 hour	None	None
4016160969	None	1-2 hours	None
4016154648	None	None	Less than 1 hour
4012804018	Less than 1 hour	None	None
4012797964	None	None	Less than 1 hour
4012790555	None	None	None
4012782011	None	None	None
4012730725	None	None	None
4012723554	None	None	None
4012656140	None	None	None
4012651160	None	None	None
4012644259	None	None	Less than 1 hour
4012637005	None	None	None
4012633162	None	None	None
4012624811	None	None	Less than 1 hour
4012617660	1-2 hours	None	None
4012614159	None	None	None

4012508792	None	None	None
4012498640	Less than 1 hour	None	None
4012491488	None	None	1-2 hours
4012485284	None	None	Less than 1 hour
4012473633	None	None	Less than 1 hour
4012469464	None	None	1-2 hours
4012466160	1-2 hours	None	1-2 hours
4012460658	None	None	None
4012455947	None	None	None
4012430576	None	None	Less than 1 hour
4012426652	None	None	None
4012406783	Less than 1 hour	None	None
4012399710	None	None	Less than 1 hour
4004970129	Less than 1 hour	None	None
4004963506	None	None	Less than 1 hour
4004957167	Less than 1 hour	None	None
4004945257	1-2 hours	None	None
4004934437	None	None	None
4004921493	1-2 hours	None	None
4004914674	None	None	None
4004905832	None	None	None
4004899412	None	None	None
4004891212	None	None	None
4004885248	None	None	None
4004879116	None	None	None
3992329563	None	None	None
3991552998	Less than 1 hour	None	Less than 1 hour
3991524993	Less than 1 hour	None	None
3991510154	None	None	None
3991501190	More than 3 hours	None	None
3991488370	None	None	None
3991475073	1-2 hours	Less than 1 hour	Less than 1 hour
3991225783	None	None	1-2 hours
3991219753	None	None	None
3991212143	None	None	None
3991206524	Less than 1 hour	None	Less than 1 hour
3991199746	Less than 1 hour	None	Less than 1 hour
3990101142	None	None	1-2 hours
3990078514	Less than 1 hour	None	Less than 1 hour
3990065394	None	None	None
3990050548	None	None	None
3990036940	None	None	None
3990028350	Less than 1 hour	None	Less than 1 hour
3990016288	None	None	None
3989314032	None	None	None
3989303005	None	None	2-3 hours
3989271549	1-2 hours	None	1-2 hours
3989221063	None	None	1-2 hours
3987326905	Less than 1 hour	None	None
3987319596	None	None	None
3987312489	Less than 1 hour	None	None
3987278903	None	None	Less than 1 hour
3987270618	None	None	None
3987265971	None	None	None
3987138863	More than 3 hours	None	None
3987119797	None	1-2 hours	None
3987103718	None	1-2 hours	None
3987095737	None	None	None

3987091706	Less than 1 hour	None	None
3987088444	None	Less than 1 hour	Less than 1 hour
3987083033	None	None	None
3968572950	None	None	None
3968557021	Less than 1 hour	None	Less than 1 hour
3968537814	None	None	None
3968522980	None	None	None
3968507520	Less than 1 hour	None	None
3968424226	None	1-2 hours	None
3968393898	Less than 1 hour	None	None
3968040530	1-2 hours	None	None
3968033599	None	None	More than 3 hours
3968016333	Less than 1 hour	None	None
3968006605	None	Less than 1 hour	None
3968000019	1-2 hours	None	None
3957258512	Less than 1 hour	None	Less than 1 hour
3934852622	None	None	None
3934129822	None	None	None
3932105563	Less than 1 hour	None	Less than 1 hour
3931234753	None	None	Less than 1 hour
3931175964	None	None	None
3931133172	None	None	None
3930994714	Less than 1 hour	None	None
3930804586	None	None	None
3930749449	None	None	None
3930697280	None	None	None
3930445230	None	None	None
3930068383	Less than 1 hour	Less than 1 hour	1-2 hours
3929872863	None	None	None
3929691190	None	None	None
3929382688	None	None	More than 3 hours
3913097202	None	None	None
3913096620	Less than 1 hour	Less than 1 hour	1-2 hours
3913091157	None	None	None
3913087916	None	1-2 hours	1-2 hours
3913084313	None	None	None
3913082865	Less than 1 hour	Less than 1 hour	Less than 1 hour
3913081818	None	None	None
3913081704	None	Less than 1 hour	None
3913081489	None	None	None
3913081461	Less than 1 hour	None	Less than 1 hour
3913080016	None	Less than 1 hour	1-2 hours
3913079239	None	None	None
3912896144	Less than 1 hour	None	Less than 1 hour
3912892626	Less than 1 hour	None	Less than 1 hour
3912890441	None	None	None
3912887032	None	None	Less than 1 hour
3912886614	More than 3 hours	More than 3 hours	More than 3 hours
3912881779	None	None	None
3912880151	1-2 hours	Less than 1 hour	1-2 hours
3912878868	None	None	None
3912872911	None	None	None
3912860210	None	None	Less than 1 hour
3912859078	2-3 hours	1-2 hours	2-3 hours
3912854606	None	None	None
3912854551	None	None	None
3912852270	1-2 hours	None	More than 3 hours
3912848038	More than 3 hours	None	More than 3 hours

3912847968	None	None	None
3912842944	None	None	None
3912794147	More than 3 hours	More than 3 hours	More than 3 hours
3912790105	None	None	2-3 hours
3912778536	More than 3 hours	More than 3 hours	More than 3 hours
3912776656	1-2 hours	1-2 hours	2-3 hours
3912776486	1-2 hours	1-2 hours	1-2 hours
3912776152	More than 3 hours	More than 3 hours	Less than 1 hour
3912759330	None	None	None
3912758978	Less than 1 hour	Less than 1 hour	1-2 hours
3912757730	None	Less than 1 hour	1-2 hours
3912757652	Less than 1 hour	More than 3 hours	None
3912757524	None	None	None
3912756711	None	2-3 hours	2-3 hours
3912755385	1-2 hours	None	2-3 hours
3912755235	None	None	None
3912754149	Less than 1 hour	None	None
3912753957	None	None	None
3912752597	None	None	Less than 1 hour
3912752289	Less than 1 hour	None	1-2 hours
3912752184	2-3 hours	1-2 hours	More than 3 hours
3912751242	2-3 hours	Less than 1 hour	1-2 hours
3912750658	1-2 hours	1-2 hours	1-2 hours
3912749617	1-2 hours	None	Less than 1 hour
3912749016	None	None	None
3912748143	Less than 1 hour	None	Less than 1 hour
3890043736	1-2 hours	None	1-2 hours
3890039997	None	None	None
3890034529	2-3 hours	None	None
3889751162	None	None	None
3889749232	None	None	1-2 hours
3889746648	Less than 1 hour	Less than 1 hour	Less than 1 hour
3889743576	None	Less than 1 hour	Less than 1 hour
3889740298	None	None	None
3889737922	None	None	None
3889665520	None	None	None
3889663586	None	Less than 1 hour	None
3889662276	None	None	None
3888697183	None	1-2 hours	None
3888692963	None	Less than 1 hour	None
3887053010	None	1-2 hours	Less than 1 hour
3887035703	1-2 hours	None	None
3887025511	None	1-2 hours	None
3887002730	None	None	None
3886980755	None	2-3 hours	None
3886971427	None	None	None
3886956905	None	None	None
3886943878	None	None	None
3886923599	1-2 hours	None	None
3886897659	None	None	None
3886886502	None	None	None
3886877969	Less than 1 hour	None	None
3886863958	None	None	None
3886701572	None	None	None
3886693846	None	None	None
3886628016	None	None	None
3886623361	1-2 hours	None	None
3886618521	None	1-2 hours	Less than 1 hour

3886613583	Less than 1 hour	None	None
3886610784	Less than 1 hour	None	None
3886595224	None	None	None
3886583963	None	None	None
3886579521	None	None	Less than 1 hour
3886573614	Less than 1 hour	None	None
3886492182	None	None	None
3886487836	None	Less than 1 hour	None
3886482983	None	None	None
3886477400	Less than 1 hour	Less than 1 hour	None
3886473563	Less than 1 hour	Less than 1 hour	Less than 1 hour
388642578	None	None	None
3884434183	None	Less than 1 hour	None
3884425269	None	None	None
3884418684	None	1-2 hours	None
3882735466	None	Less than 1 hour	None
3882714719	None	None	None
3882149265	None	None	None
3882132493	None	None	None
3881402826	Less than 1 hour	None	None
3881378615	Less than 1 hour	None	None
3881368250	None	None	Less than 1 hour
3881357441	None	None	None
3881265294	None	None	None
3881254139	None	None	None
3881237980	1-2 hours	None	None
3881230356	None	None	None
3881220157	None	None	None
3881215195	None	None	None
3881210102	Less than 1 hour	Less than 1 hour	Less than 1 hour
3881204090	Less than 1 hour	None	None
3879817918	None	None	1-2 hours
3879409688	Less than 1 hour	None	None
3879374635	None	Less than 1 hour	None
3879355152	None	None	None
3879318196	None	None	None
3879280118	Less than 1 hour	None	None
3879241966	None	None	None
3879169212	Less than 1 hour	None	None
3879156353	Less than 1 hour	None	None
3879114622	None	Less than 1 hour	None
3878785230	None	None	None
3878769580	None	None	None
3878759308	None	None	None
3878753669	None	None	None
3878748875	None	Less than 1 hour	Less than 1 hour
3878742830	None	None	None
3878737152	Less than 1 hour	None	None
3878730696	None	Less than 1 hour	None
3878725762	None	None	1-2 hours
3878719521	None	None	None
3878713486	None	None	None
3878709205	None	1-2 hours	None
3878700132	None	None	None
3873328056	2-3 hours	None	None
3873312445	Less than 1 hour	None	None
3873301897	None	None	None
3873288043	None	None	None

3873082048	None	None	None
3873075081	None	None	None
3873068691	Less than 1 hour	None	Less than 1 hour
3873056977	None	1-2 hours	None
3873049368	None	None	1-2 hours
3873028210	None	Less than 1 hour	None
3873020393	None	None	None
3873001235	None	None	None
3872993752	1-2 hours	None	1-2 hours
3872987133	None	None	More than 3 hours
3872964285	None	None	1-2 hours
3872953817	Less than 1 hour	None	None
3872947394	None	More than 3 hours	1-2 hours
3872939332	Less than 1 hour	None	None
3872846015	1-2 hours	1-2 hours	None
3872841613	1-2 hours	None	None
3872837796	None	Less than 1 hour	None
3872820378	None	None	None
3872768107	Less than 1 hour	None	Less than 1 hour
3871255066	More than 3 hours	None	None
3871227626	Less than 1 hour	None	None
3871205440	None	None	None
3871184697	None	None	None
3871162565	None	None	1-2 hours
3871151654	1-2 hours	None	1-2 hours
3871110433	1-2 hours	Less than 1 hour	None
3870870493	None	None	None
3870854704	Less than 1 hour	None	None
3870838781	None	Less than 1 hour	None
3870801193	None	Less than 1 hour	None
3868573297	Less than 1 hour	None	None
3868554028	Less than 1 hour	None	None
3868526738	None	Less than 1 hour	None
3868509803	1-2 hours	None	None
3868484667	None	1-2 hours	1-2 hours
3868442104	None	None	None
3868422304	None	None	None
3868411080	Less than 1 hour	None	None
3868391766	Less than 1 hour	None	None
3868375041	Less than 1 hour	None	None
3866713588	None	None	None
3865495924	2-3 hours	None	None
3863418934	1-2 hours	None	None
3858671359	Less than 1 hour	None	None
3858643095	None	None	None
3858633255	1-2 hours	None	None
3857438462	More than 3 hours	None	None
3856260669	None	None	None
3856248923	None	Less than 1 hour	None
3856225449	None	None	None
3854605877	None	Less than 1 hour	None
3853879738	None	None	None
3853851932	None	None	None
3853830935	None	None	None
3853806357	None	None	None
3853715854	None	Less than 1 hour	Less than 1 hour
3853679395	Less than 1 hour	None	None
3853627220	None	None	None

3853269579	None	None	None
3853179710	Less than 1 hour	None	None
3848999317	None	None	None
3847103154	None	None	None
3845684674	None	None	None
3845447408	1-2 hours	1-2 hours	None
3844847491	None	None	None
3844360977	None	None	None
3844236222	1-2 hours	None	None
3844232462	None	None	Less than 1 hour
3844138637	None	None	None
3844055790	Less than 1 hour	Less than 1 hour	None
3843935898	Less than 1 hour	None	Less than 1 hour
3843931544	Less than 1 hour	None	None
3843911811	None	None	None
3843804662	None	None	None
3843766328	None	None	None
3843760219	None	None	None
3843744801	None	None	None
3843734569	None	None	None
3843716341	None	None	None
3843712724	Less than 1 hour	1-2 hours	None
3843674785	None	None	None
3843623603	None	None	None
3843612922	None	Less than 1 hour	None
3843608317	None	None	None
3843605819	None	None	None
3843604500	None	None	None
3843603283	Less than 1 hour	None	Less than 1 hour
3843590935	None	None	None
3843584691	None	None	None
3843566558	Less than 1 hour	Less than 1 hour	Less than 1 hour
3843563669	Less than 1 hour	None	None
3843558483	2-3 hours	None	More than 3 hours
3843546559	None	None	Less than 1 hour
3843527212	None	None	None
4058991282	None	Less than 1 hour	None
4058988558	None	None	None
4058970974	None	None	None
4058966399	None	None	1-2 hours
4058961408	Less than 1 hour	1-2 hours	None
4058958230	None	Less than 1 hour	None
4058954419	None	2-3 hours	More than 3 hours
4058949738	1-2 hours	1-2 hours	1-2 hours
4058944768	None	None	None
4058940279	None	None	None
4058928337	None	None	None
4058925829	Less than 1 hour	None	None
4058295828	None	None	None
4058285308	None	Less than 1 hour	None
4058276966	Less than 1 hour	None	Less than 1 hour
4058264705	None	None	None
4058256269	None	None	None
4058248054	None	None	None
4058240982	Less than 1 hour	None	None
4057536878	None	None	None
4057526407	Less than 1 hour	Less than 1 hour	None
4057507742	None	None	None

4057471823	None	Less than 1 hour	1-2 hours
4057460212	None	None	Less than 1 hour
4057442304	None	1-2 hours	None
4057423702	1-2 hours	1-2 hours	None
4057364669	None	None	None
4057347523	1-2 hours	Less than 1 hour	None
4057335898	None	2-3 hours	None
4057317286	Less than 1 hour	2-3 hours	None
4057304812	None	None	None
4057273462	Less than 1 hour	Less than 1 hour	None
4057253149	None	None	None
4057238269	None	None	None
4057216892	None	None	None
4057172013	None	None	None
4057160934	Less than 1 hour	None	None
4057015182	1-2 hours	None	None
4057002543	None	None	None
4056994599	None	None	None
4056988375	None	1-2 hours	None
4056982171	None	None	None
4056976704	None	None	Less than 1 hour
4056969438	Less than 1 hour	None	None
4056963885	2-3 hours	1-2 hours	2-3 hours
4056956531	None	Less than 1 hour	None
4056948732	None	None	None
4056941323	None	None	None
4056928489	Less than 1 hour	None	Less than 1 hour
4056918542	None	1-2 hours	None
4056912185	Less than 1 hour	None	None
4056906655	None	Less than 1 hour	Less than 1 hour
4056901873	None	Less than 1 hour	None

Table B1-4 (a). Answers of the respondents to Question 7 – Desktop

ID of the respondent	Where do you mostly use Desktop?
4016327570	I don't use desktop computers
4016323071	At home
4016319090	At home
4016311412	I don't use desktop computers
4016307251	At home
4016303216	At home
4016296167	I don't use desktop computers
4016290910	I don't use desktop computers
4016286833	At home
4016172184	I don't use desktop computers
4016165993	I don't use desktop computers
4016160969	At home
4016154648	I don't use desktop computers
4012804018	I don't use desktop computers
4012797964	At home

4012790555	I don't use desktop computers
4012782011	At home
4012730725	At home
4012723554	I don't use desktop computers
4012656140	I don't use desktop computers
4012651160	At home
4012644259	I don't use desktop computers
4012637005	At home
4012633162	At school
4012624811	At school
4012617660	I don't use desktop computers
4012614159	At school
4012508792	At home
4012498640	At school
4012491488	I don't use desktop computers
4012485284	I don't use desktop computers
4012473633	I don't use desktop computers
4012469464	I don't use desktop computers
4012466160	I don't use desktop computers
4012460658	At home
4012455947	I don't use desktop computers
4012430576	I don't use desktop computers
4012426652	At school
4012406783	At school
4012399710	I don't use desktop computers
4004970129	I don't use desktop computers
4004963506	I don't use desktop computers
4004957167	I don't use desktop computers
4004945257	At another location (Pls indicate)
4004934437	At school
4004921493	I don't use desktop computers
4004914674	At school
4004905832	I don't use desktop computers
4004899412	At school
4004891212	I don't use desktop computers
4004885248	I don't use desktop computers
4004879116	At school
3992329563	I don't use desktop computers
3991552998	At school
3991524993	At school
3991510154	I don't use desktop computers
3991501190	At school
3991488370	At school
3991475073	At home
3991225783	At school
3991219753	I don't use desktop computers
3991212143	I don't use desktop computers
3991206524	I don't use desktop computers
3991199746	I don't use desktop computers
3990101142	I don't use desktop computers
3990078514	I don't use desktop computers
3990065394	At home
3990050548	At school
3990036940	I don't use desktop computers
3990028350	At school
3990016288	At school

3989314032	I don't use desktop computers
3989303005	I don't use desktop computers
3989271549	I don't use desktop computers
3989221063	I don't use desktop computers
3987326905	At home
3987319596	At school
3987312489	I don't use desktop computers
3987278903	I don't use desktop computers
3987270618	I don't use desktop computers
3987265971	I don't use desktop computers
3987138863	I don't use desktop computers
3987119797	At home
3987103718	At home
3987095737	At home
3987091706	I don't use desktop computers
3987088444	At home
3987083033	I don't use desktop computers
3968572950	I don't use desktop computers
3968557021	I don't use desktop computers
3968537814	I don't use desktop computers
3968522980	At home
3968507520	At school
3968424226	At home
3968393898	At home
3968040530	I don't use desktop computers
3968033599	I don't use desktop computers
3968016333	I don't use desktop computers
3968006605	At home
3968000019	I don't use desktop computers
3957258512	I don't use desktop computers
3934852622	I don't use desktop computers
3934129822	At home
3932105563	At home
3931234753	At home
3931175964	At home
3931133172	I don't use desktop computers
3930994714	At school
3930804586	At home
3930749449	At home
3930697280	At home
3930445230	I don't use desktop computers
3930068383	At school
3929872863	At home
3929691190	At home
3929382688	I don't use desktop computers
3913097202	At school
3913096620	At another location (Pls indicate)
3913091157	At home
3913087916	At home
3913084313	At home
3913082865	At home
3913081818	At another location (Pls indicate)
3913081704	At home
3913081489	At home
3913081461	At another location (Pls indicate)

3913080016	At home
3913079239	At school
3912896144	I don't use desktop computers
3912892626	At home
3912890441	At school
3912887032	At another location (Pls indicate)
3912886614	At another location (Pls indicate)
3912881779	At another location (Pls indicate)
3912880151	At another location (Pls indicate)
3912878868	At school
3912872911	I don't use desktop computers
3912860210	I don't use desktop computers
3912859078	At home
3912854606	I don't use desktop computers
3912854551	At home
3912852270	At school
3912848038	I don't use desktop computers
3912847968	At home
3912842944	At home
3912794147	At school
3912790105	I don't use desktop computers
3912778536	At school
3912776656	At school
3912776486	At home
3912776152	At home
3912759330	At home
3912758978	At school
3912757730	At home
3912757652	At home
3912757524	At school
3912756711	At home
3912755385	I don't use desktop computers
3912755235	At home
3912754149	At school
3912753957	At school
3912752597	At home
3912752289	At school
3912752184	At home
3912751242	At home
3912750658	At school
3912749617	I don't use desktop computers
3912749016	At home
3912748143	At home
3890043736	At school
3890039997	At home
3890034529	I don't use desktop computers
3889751162	At school
3889749232	I don't use desktop computers
3889746648	At home
3889743576	At home
3889740298	At home
3889737922	I don't use desktop computers
3889665520	At home
3889663586	At home
3889662276	At home

3888697183	At home
3888692963	At school
3887053010	At home
3887035703	I don't use desktop computers
3887025511	At home
3887002730	At home
3886980755	At home
3886971427	I don't use desktop computers
3886956905	At home
3886943878	At home
3886923599	At school
3886897659	At school
3886886502	At home
3886877969	I don't use desktop computers
3886863958	At home
3886701572	I don't use desktop computers
3886693846	I don't use desktop computers
3886628016	I don't use desktop computers
3886623361	I don't use desktop computers
3886618521	At home
3886613583	I don't use desktop computers
3886610784	At school
3886595224	I don't use desktop computers
3886583963	At another location (Pls indicate)
3886579521	At home
3886573614	I don't use desktop computers
3886492182	At home
3886487836	At home
3886482983	I don't use desktop computers
3886477400	At another location (Pls indicate)
3886473563	At home
3884642578	At home
3884434183	At home
3884425269	I don't use desktop computers
3884418684	At home
3882735466	At home
3882714719	At home
3882149265	I don't use desktop computers
3882132493	I don't use desktop computers
3881402826	I don't use desktop computers
3881378615	I don't use desktop computers
3881368250	At home
3881357441	At home
3881265294	I don't use desktop computers
3881254139	I don't use desktop computers
3881237980	At another location (Pls indicate)
3881230356	At home
3881220157	At home
3881215195	I don't use desktop computers
3881210102	At school
3881204090	I don't use desktop computers
3879817918	At home
3879409688	I don't use desktop computers
3879374635	At home
3879355152	At home

3879318196	At home
3879280118	I don't use desktop computers
3879241966	At home
3879169212	I don't use desktop computers
3879156353	I don't use desktop computers
3879114622	At home
3878785230	At school
3878769580	At school
3878759308	At school
3878753669	At school
3878748875	At school
3878742830	At school
3878737152	At school
3878730696	At school
3878725762	At school
3878719521	At school
3878713486	At school
3878709205	At home
3878700132	At school
3873328056	At home
3873312445	At school
3873301897	At home
3873288043	At home
3873082048	I don't use desktop computers
3873075081	At home
3873068691	I don't use desktop computers
3873056977	At home
3873049368	I don't use desktop computers
3873028210	At home
3873020393	At home
3873001235	At home
3872993752	At school
3872987133	At home
3872964285	At school
3872953817	I don't use desktop computers
3872947394	At home
3872939332	At school
3872846015	At home
3872841613	At home
3872837796	At home
3872820378	At home
3872768107	At school
3871255066	I don't use desktop computers
3871227626	I don't use desktop computers
3871205440	At home
3871184697	At home
3871162565	I don't use desktop computers
3871151654	At school
3871110433	At school
3870870493	I don't use desktop computers
3870854704	I don't use desktop computers
3870838781	At home
3870801193	At home
3868573297	At school
3868554028	At school

3868526738	At home
3868509803	At school
3868484667	At home
3868442104	At home
3868422304	I don't use desktop computers
3868411080	I don't use desktop computers
3868391766	I don't use desktop computers
3868375041	I don't use desktop computers
3866713588	I don't use desktop computers
3865495924	At school
3863418934	I don't use desktop computers
3858671359	I don't use desktop computers
3858643095	I don't use desktop computers
3858633255	I don't use desktop computers
3857438462	At home
3856260669	At another location (Pls indicate)
3856248923	At school
3856225449	At home
3854605877	At school
3853879738	At home
3853851932	I don't use desktop computers
3853830935	I don't use desktop computers
3853806357	I don't use desktop computers
3853715854	At school
3853679395	At school
3853627220	I don't use desktop computers
3853269579	I don't use desktop computers
3853179710	At school
3848999317	At school
3847103154	At home
3845684674	I don't use desktop computers
3845447408	At home
3844847491	I don't use desktop computers
3844360977	I don't use desktop computers
3844236222	I don't use desktop computers
3844232462	I don't use desktop computers
3844138637	At school
3844055790	At home
3843935898	I don't use desktop computers
3843931544	I don't use desktop computers
3843911811	At another location (Pls indicate)
3843804662	I don't use desktop computers
3843766328	At another location (Pls indicate)
3843760219	I don't use desktop computers
3843744801	At home
3843734569	I don't use desktop computers
3843716341	I don't use desktop computers
3843712724	At school
3843674785	I don't use desktop computers
3843623603	At home
3843612922	At home
3843608317	At school
3843605819	I don't use desktop computers
3843604500	At school
3843603283	I don't use desktop computers

3843590935	At home
3843584691	At home
3843566558	At school
3843563669	At school
3843558483	At home
3843546559	At home
3843527212	At home
4058991282	At home
4058988558	At school
4058970974	At home
4058966399	I don't use desktop computers
4058961408	At home
4058958230	At home
4058954419	At home
4058949738	At school
4058944768	At home
4058940279	At home
4058928337	I don't use desktop computers
4058925829	At home
4058295828	At school
4058285308	At home
4058276966	I don't use desktop computers
4058264705	At school
4058256269	I don't use desktop computers
4058248054	I don't use desktop computers
4058240982	At home
4057536878	I don't use desktop computers
4057526407	At home
4057507742	At home
4057471823	At home
4057460212	I don't use desktop computers
4057442304	At home
4057423702	At another location (Pls indicate)
4057364669	At school
4057347523	At home
4057335898	At home
4057317286	At another location (Pls indicate)
4057304812	At home
4057273462	At another location (Pls indicate)
4057253149	I don't use desktop computers
4057238269	At another location (Pls indicate)
4057216892	At home
4057172013	At home
4057160934	At school
4057015182	At another location (Pls indicate)
4057002543	At home
4056994599	At home
4056988375	At home
4056982171	At home
4056976704	At school
4056969438	At home
4056963885	At home
4056956531	At home
4056948732	At home
4056941323	I don't use desktop computers

4056928489	I don't use desktop computers
4056918542	At home
4056912185	At home
4056906655	At another location (Pls indicate)
4056901873	At home

*** The details of the answers of the respondents to this question as "At another location" can be found in **Table B1-4 (b)**.

Table B1-4 (b). Answers of the respondents who replied Question 7 (desktop) as "at another location"

ID of the respondent	"Where do you mostly use Desktop?" Answers which were not mentioned as a category in the questionnaire
4004945257	Internet cafe
3913096620	Parent's office
3913081818	Internet cafe
3913081461	Parent's office
3912887032	Internet cafe
3912886614	Parent's office
3912881779	Parent's office
3912880151	Internet cafe
3886583963	Relative's house
3886477400	Friend's house
3881237980	Relative's house
3856260669	Internet cafe
3843766328	Every possible location
4057423702	Parent's office
4057317286	Internet cafe
4057273462	Every possible location
4057238269	Friend's house
4057015182	Friend's house
4056906655	Internet cafes

Table B1-4 (c). Answers of the respondents to Question 7 - Laptop

ID of the respondent	Where do you mostly use Laptop? - At home - At school - At another location (Pls. indicate)*** - I don't use desktop
4016327570	I don't use laptop computers
4016323071	At home
4016319090	At another location (Pls indicate)
4016311412	I don't use laptop computers
4016307251	At home
4016303216	At home
4016296167	At home
4016290910	At home
4016286833	I don't use laptop computers
4016172184	At home
4016165993	At home
4016160969	At home

4016154648	At home
4012804018	At home
4012797964	At home
4012790555	At home
4012782011	I don't use laptop computers
4012730725	I don't use laptop computers
4012723554	At home
4012656140	At home
4012651160	At another location (Pls indicate)
4012644259	At home
4012637005	At home
4012633162	At home
4012624811	At home
4012617660	At home
4012614159	I don't use laptop computers
4012508792	At home
4012498640	At home
4012491488	At home
4012485284	I don't use laptop computers
4012473633	I don't use laptop computers
4012469464	I don't use laptop computers
4012466160	At home
4012460658	I don't use laptop computers
4012455947	At home
4012430576	I don't use laptop computers
4012426652	At home
4012406783	At home
4012399710	I don't use laptop computers
4004970129	At home
4004963506	I don't use laptop computers
4004957167	At home
4004945257	At home
4004934437	At home
4004921493	At home
4004914674	At home
4004905832	At home
4004899412	At home
4004891212	At home
4004885248	At home
4004879116	At home
3992329563	At home
3991552998	At home
3991524993	At home
3991510154	At home
3991501190	At home
3991488370	At home
3991475073	At home
3991225783	At home
3991219753	At home
3991212143	At home
3991206524	At home
3991199746	At home
3990101142	At home
3990078514	At home
3990065394	At home

3990050548	At home
3990036940	I don't use laptop computers
3990028350	At home
3990016288	At home
3989314032	At home
3989303005	At home
3989271549	At home
3989221063	At home
3987326905	At home
3987319596	At home
3987312489	At home
3987278903	At home
3987270618	At home
3987265971	At home
3987138863	At home
3987119797	At home
3987103718	At home
3987095737	At home
3987091706	At home
3987088444	I don't use laptop computers
3987083033	I don't use laptop computers
3968572950	At home
3968557021	At home
3968537814	At home
3968522980	At home
3968507520	At home
3968424226	I don't use laptop computers
3968393898	At home
3968040530	At home
3968033599	At home
3968016333	At home
3968006605	At home
3968000019	At home
3957258512	At home
3934852622	At home
3934129822	I don't use laptop computers
3932105563	At home
3931234753	I don't use laptop computers
3931175964	At home
3931133172	At home
3930994714	At home
3930804586	At home
3930749449	At home
3930697280	I don't use laptop computers
3930445230	I don't use laptop computers
3930068383	At home
3929872863	I don't use laptop computers
3929691190	At home
3929382688	At home
3913097202	At home
3913096620	At home
3913091157	At home
3913087916	At home
3913084313	I don't use laptop computers
3913082865	At another location (Pls indicate)

3913081818	At home
3913081704	I don't use laptop computers
3913081489	At home
3913081461	At home
3913080016	I don't use laptop computers
3913079239	I don't use laptop computers
3912896144	I don't use laptop computers
3912892626	I don't use laptop computers
3912890441	At home
3912887032	At home
3912886614	At home
3912881779	I don't use laptop computers
3912880151	At home
3912878868	At home
3912872911	At home
3912860210	At home
3912859078	At home
3912854606	I don't use laptop computers
3912854551	At home
3912852270	At home
3912848038	At home
3912847968	At home
3912842944	At home
3912794147	At home
3912790105	At home
3912778536	At another location (Pls indicate)
3912776656	At home
3912776486	At home
3912776152	At another location (Pls indicate)
3912759330	At home
3912758978	At home
3912757730	At home
3912757652	At home
3912757524	At home
3912756711	I don't use laptop computers
3912755385	At home
3912755235	At another location (Pls indicate)
3912754149	At home
3912753957	At home
3912752597	At home
3912752289	At home
3912752184	At another location (Pls indicate)
3912751242	At home
3912750658	At home
3912749617	At home
3912749016	At home
3912748143	At home
3890043736	At home
3890039997	At home
3890034529	At home
3889751162	I don't use laptop computers
3889749232	At home
3889746648	At home
3889743576	I don't use laptop computers
3889740298	I don't use laptop computers

3889737922	At home
3889665520	At home
3889663586	I don't use laptop computers
3889662276	I don't use laptop computers
3888697183	I don't use laptop computers
3888692963	At home
3887053010	I don't use laptop computers
3887035703	At home
3887025511	At home
3887002730	At home
3886980755	I don't use laptop computers
3886971427	At home
3886956905	I don't use laptop computers
3886943878	At home
3886923599	At home
3886897659	I don't use laptop computers
3886886502	I don't use laptop computers
3886877969	At home
3886863958	At home
3886701572	At home
3886693846	At home
3886628016	I don't use laptop computers
3886623361	At home
3886618521	I don't use laptop computers
3886613583	At home
3886610784	At home
3886595224	At home
3886583963	At home
3886579521	I don't use laptop computers
3886573614	At home
3886492182	At home
3886487836	At home
3886482983	At home
3886477400	At home
3886473563	At home
3884642578	At home
3884434183	I don't use laptop computers
3884425269	I don't use laptop computers
3884418684	At another location (Pls indicate)
3882735466	At home
3882714719	I don't use laptop computers
3882149265	I don't use laptop computers
3882132493	At home
3881402826	At home
3881378615	At home
3881368250	I don't use laptop computers
3881357441	At another location (Pls indicate)
3881265294	At home
3881254139	At home
3881237980	At home
3881230356	At home
3881220157	At home
3881215195	I don't use laptop computers
3881210102	At home
3881204090	At home

3879817918	At home
3879409688	At home
3879374635	I don't use laptop computers
3879355152	At home
3879318196	At another location (PIs indicate)
3879280118	At home
3879241966	At home
3879169212	At home
3879156353	At home
3879114622	I don't use laptop computers
3878785230	At home
3878769580	At home
3878759308	At home
3878753669	At home
3878748875	At home
3878742830	At home
3878737152	At home
3878730696	At home
3878725762	I don't use laptop computers
3878719521	At home
3878713486	At home
3878709205	At school
3878700132	At home
3873328056	At home
3873312445	At home
3873301897	At home
3873288043	I don't use laptop computers
3873082048	I don't use laptop computers
3873075081	At home
3873068691	At home
3873056977	I don't use laptop computers
3873049368	I don't use laptop computers
3873028210	I don't use laptop computers
3873020393	At home
3873001235	I don't use laptop computers
3872993752	At home
3872987133	I don't use laptop computers
3872964285	At home
3872953817	At home
3872947394	I don't use laptop computers
3872939332	At home
3872846015	At home
3872841613	At home
3872837796	At home
3872820378	I don't use laptop computers
3872768107	At home
3871255066	At home
3871227626	At home
3871205440	I don't use laptop computers
3871184697	I don't use laptop computers
3871162565	At home
3871151654	At home
3871110433	At home
3870870493	At home
3870854704	At home

3870838781	I don't use laptop computers
3870801193	I don't use laptop computers
3868573297	At home
3868554028	At home
3868526738	I don't use laptop computers
3868509803	At home
3868484667	At home
3868442104	At home
3868422304	I don't use laptop computers
3868411080	At home
3868391766	At home
3868375041	At home
3866713588	At home
3865495924	At home
3863418934	At home
3858671359	At home
3858643095	At home
3858633255	At home
3857438462	At home
3856260669	At home
3856248923	At home
3856225449	At home
3854605877	At home
3853879738	At home
3853851932	At home
3853830935	At home
3853806357	At home
3853715854	I don't use laptop computers
3853679395	At home
3853627220	At school
3853269579	At home
3853179710	At home
3848999317	At home
3847103154	At home
3845684674	At home
3845447408	At home
3844847491	At home
3844360977	At home
3844236222	At home
3844232462	At home
3844138637	At home
3844055790	At home
3843935898	At home
3843931544	At home
3843911811	At home
3843804662	At home
3843766328	At another location (PIs indicate)
3843760219	At home
3843744801	At another location (PIs indicate)
3843734569	At home
3843716341	At home
3843712724	At home
3843674785	At home
3843623603	At home
3843612922	At another location (PIs indicate)

3843608317	At home
3843605819	At home
3843604500	At home
3843603283	At home
3843590935	At home
3843584691	At home
3843566558	At home
3843563669	At home
3843558483	At home
3843546559	At home
3843527212	At home
4058991282	I don't use laptop computers
4058988558	At home
4058970974	At home
4058966399	At home
4058961408	At home
4058958230	At another location (PIs indicate)
4058954419	I don't use laptop computers
4058949738	At home
4058944768	I don't use laptop computers
4058940279	I don't use laptop computers
4058928337	At another location (PIs indicate)
4058925829	At home
4058295828	I don't use laptop computers
4058285308	I don't use laptop computers
4058276966	At home
4058264705	At home
4058256269	At home
4058248054	I don't use laptop computers
4058240982	At another location (PIs indicate)
4057536878	At home
4057526407	At home
4057507742	At home
4057471823	I don't use laptop computers
4057460212	I don't use laptop computers
4057442304	I don't use laptop computers
4057423702	At home
4057364669	At home
4057347523	At home
4057335898	At home
4057317286	At home
4057304812	I don't use laptop computers
4057273462	At home
4057253149	At home
4057238269	At home
4057216892	At another location (PIs indicate)
4057172013	At home
4057160934	At home
4057015182	At home
4057002543	I don't use laptop computers
4056994599	I don't use laptop computers
4056988375	I don't use laptop computers
4056982171	At home
4056976704	At home
4056969438	At home

4056963885	At home
4056956531	At home
4056948732	I don't use laptop computers
4056941323	I don't use laptop computers
4056928489	At home
4056918542	I don't use laptop computers
4056912185	At home
4056906655	I don't use laptop computers
4056901873	At home
4057460212	I don't use laptop computers
4057442304	I don't use laptop computers

*** The details of the answers of the respondents to this question as “At another location” can be found in **Table B1-4 (d)**.

Table B1-4 (d). Answers of the respondents who replied Question 7 (laptop) as “at another location”

ID of the respondent	“Where do you mostly use Laptop?” Answers which were not mentioned as a category in the questionnaire
4016319090	Family visits / relative’s house
4012651160	Holiday spots
3913082865	Every possible location
3912778536	Every possible location
3912776152	Every possible location
3912755235	Holiday spots
3912752184	Every possible location
3884418684	Parent’s office
3881357441	Relative’s house
3879318196	Every possible location
3843766328	Every possible location
3843744801	Every possible location
3843612922	Friends’ house
4058958230	Outdoors and during visits
4058928337	Relative’s house
4058240982	Relative’s house
4057216892	Parent’s office

Table B1-4 (e). Answers of the respondents to Question 7 - Tablet

ID of the respondent	Where do you mostly use Tablets? - At home - At school - At another location (Pls. indicate)*** - I don't use desktop
4016327570	At home
4016323071	At home
4016319090	At home
4016311412	At home
4016307251	At home
4016303216	I don't use tablet computers
4016296167	At home
4016290910	I don't use tablet computers

4016286833	At home
4016172184	I don't use tablet computers
4016165993	At another location (PIs indicate)
4016160969	At home
4016154648	At school
4012804018	At home
4012797964	At home
4012790555	At home
4012782011	At home
4012730725	At home
4012723554	At home
4012656140	I don't use tablet computers
4012651160	At another location (PIs indicate)
4012637005	I don't use tablet computers
4012633162	I don't use tablet computers
4012624811	At home
4012617660	At home
4012614159	At home
4012508792	At home
4012498640	At home
4012491488	At another location (PIs indicate)
4012485284	At home
4012473633	At home
4012469464	At home
4012466160	At home
4012460658	At home
4012455947	At home
4012430576	At home
4012426652	At home
4012406783	At home
4012399710	At home
4004970129	At home
4004963506	At home
4004957167	At home
4004945257	At home
4004934437	At home
4004921493	I don't use tablet computers
4004914674	I don't use tablet computers
4004905832	I don't use tablet computers
4004899412	At home
4004891212	At home
4004885248	I don't use tablet computers
4004879116	At home
3992329563	I don't use tablet computers
3991552998	At home
3991524993	At home
3991510154	At another location (PIs indicate)
3991501190	At home
3991488370	At home
3991475073	At home
3991225783	At home
3991219753	I don't use tablet computers
3991212143	I don't use tablet computers
3991206524	At home
3991199746	At home

3990101142	At another location (PIs indicate)
3990078514	At school
3990065394	I don't use tablet computers
3990050548	At home
3990036940	At home
3990028350	At home
3990016288	At another location (PIs indicate)
3989314032	At home
3989303005	At home
3989271549	I don't use tablet computers
3989221063	At home
3987326905	At home
3987319596	At home
3987312489	At home
3987278903	At home
3987270618	At home
3987265971	At home
3987138863	I don't use tablet computers
3987119797	At school
3987103718	At home
3987095737	At home
3987091706	I don't use tablet computers
3987088444	At home
3987083033	At home
3968572950	I don't use tablet computers
3968557021	At home
3968537814	At another location (PIs indicate)
3968522980	At home
3968507520	I don't use tablet computers
3968424226	At home
3968393898	I don't use tablet computers
3968040530	I don't use tablet computers
3968033599	At home
3968016333	At home
3968006605	At home
3968000019	I don't use tablet computers
3957258512	At school
3934852622	I don't use tablet computers
3934129822	I don't use tablet computers
3932105563	At school
3931234753	At home
3931175964	I don't use tablet computers
3931133172	I don't use tablet computers
3930994714	At home
3930804586	At another location (PIs indicate)
3930749449	At home
3930697280	At home
3930445230	At home
3930068383	At home
3929872863	At home
3929691190	I don't use tablet computers
3929382688	At home
3913097202	At another location (PIs indicate)
3913096620	At home
3913091157	At home

3913087916	At home
3913084313	At home
3913082865	At home
3913081818	I don't use tablet computers
3913081704	At home
3913081489	At home
3913081461	At home
3913080016	At home
3913079239	At another location (PIs indicate)
3912896144	I don't use tablet computers
3912892626	At another location (PIs indicate)
3912890441	At home
3912887032	At home
3912886614	At home
3912881779	At home
3912880151	At another location (PIs indicate)
3912878868	At home
3912872911	At home
3912860210	At home
3912859078	At home
3912854606	At home
3912854551	At home
3912852270	At another location (PIs indicate)
3912848038	At home
3912847968	At home
3912842944	At home
3912794147	At home
3912790105	At another location (PIs indicate)
3912778536	At another location (PIs indicate)
3912776656	I don't use tablet computers
3912776486	At home
3912776152	Home
3912759330	At home
3912758978	At home
3912757730	At home
3912757652	At home
3912757524	At home
3912756711	At another location (PIs indicate)
3912755385	At home
3912755235	At school
3912754149	At home
3912753957	I don't use tablet computers
3912752597	At school
3912752289	At home
3913091157	At home
3913087916	At home
3913084313	At home
3913082865	At home
3913081818	I don't use tablet computers
3913081704	At home
3913081489	At home
3913081461	At home
3913080016	At home
3913079239	At another location (PIs indicate)
3912896144	I don't use tablet computers
3912892626	At another location (PIs indicate)

3912890441	At home
3912887032	At home
3912886614	At home
3912881779	At home
3912880151	At another location (Pls indicate)
3912878868	At home
3912872911	At home
3912860210	At home
3912859078	At home
3912854606	At home
3912854551	At home
3912852270	At another location (Pls indicate)
3912848038	At home
3912847968	At home
3912842944	At home
3912794147	At home
3912790105	At another location (Pls indicate)
3912778536	At another location (Pls indicate)
3912776656	I don't use tablet computers
3912776486	At home
3912776152	Home
3912759330	At home
3912758978	At home
3912757730	At home
3912757652	At home
3912757524	At home
3912756711	At another location (Pls indicate)
3912755385	At home
3912755235	At school
3912754149	At home
3912753957	I don't use tablet computers
3912752597	At school
3912752289	At home
3912752184	At another location (Pls indicate)
3912751242	At home
3912750658	At home
3912749617	At home
3912749016	At home
3912748143	At another location (Pls indicate)
3890043736	At home
3890039997	At home
3890034529	I don't use tablet computers
3889751162	At home
3889749232	At home
3889746648	At home
3889743576	At home
3889740298	At home
3889737922	I don't use tablet computers
3889665520	At another location (Pls indicate)
3889663586	At home
3889662276	At home
3888697183	I don't use tablet computers
3888692963	At home
3887053010	At home
3887035703	I don't use tablet computers

3887025511	At home
3887002730	At home
3886980755	At home
3886971427	At home
3886956905	At home
3886943878	I don't use tablet computers
3886923599	At home
3886897659	At home
3886886502	I don't use tablet computers
3886877969	At another location (PIs indicate)
3886863958	At another location (PIs indicate)
3886701572	At home
3886693846	I don't use tablet computers
3886628016	At another location (PIs indicate)
3886623361	I don't use tablet computers
3886618521	At home
3886613583	I don't use tablet computers
3886610784	At home
3886595224	At home
3886583963	At another location (PIs indicate)
3886579521	At home
3886573614	I don't use tablet computers
3886492182	I don't use tablet computers
3886487836	At home
3886482983	At home
3886477400	At home
3886473563	At home
38864642578	At home
3884434183	I don't use tablet computers
3884425269	At home
3884418684	I don't use tablet computers
3882735466	At home
3882714719	I don't use tablet computers
3882149265	At home
3882132493	At home
3881402826	At home
3881378615	At home
3881368250	At home
3881357441	At another location (PIs indicate)
3881265294	At home
3881254139	At home
3881237980	At home
3881230356	I don't use tablet computers
3881220157	At home
3881215195	At home
3881210102	At home
3881204090	At home
3879817918	At school
3879409688	At home
3879374635	I don't use tablet computers
3879355152	At home
3879318196	I don't use tablet computers
3879280118	At home
3879241966	I don't use tablet computers
3879169212	I don't use tablet computers

3879156353	I don't use tablet computers
3879114622	I don't use tablet computers
3878785230	At home
3878769580	At home
3878759308	I don't use tablet computers
3878753669	I don't use tablet computers
3878748875	At home
3878742830	I don't use tablet computers
3878737152	At home
3878730696	I don't use tablet computers
3878725762	At home
3878719521	I don't use tablet computers
3878713486	At home
3878709205	I don't use tablet computers
3878700132	At home
3873328056	I don't use tablet computers
3873312445	I don't use tablet computers
3873301897	At another location (PIs indicate)
3873288043	At another location (PIs indicate)
3873082048	At home
3873075081	At home
3873068691	At home
3873056977	I don't use tablet computers
3873049368	At home
3873028210	I don't use tablet computers
3873020393	At home
3873001235	I don't use tablet computers
3872993752	At home
3872987133	At home
3872964285	At home
3872953817	I don't use tablet computers
3872947394	At home
3872939332	I don't use tablet computers
3872846015	I don't use tablet computers
3872841613	I don't use tablet computers
3872837796	At home
3872820378	I don't use tablet computers
3872768107	At home
3871255066	I don't use tablet computers
3871227626	I don't use tablet computers
3871205440	At home
3871184697	At home
3871162565	At home
3871151654	At home
3871110433	I don't use tablet computers
3870870493	At home
3870854704	At home
3870838781	I don't use tablet computers
3870801193	At home
3868573297	I don't use tablet computers
3868554028	At school
3868526738	I don't use tablet computers
3868509803	I don't use tablet computers
3868484667	At home
3868442104	At home

3868422304	At home
3868411080	I don't use tablet computers
3868391766	I don't use tablet computers
3868375041	I don't use tablet computers
3866713588	I don't use tablet computers
3865495924	At home
3863418934	At home
3858671359	I don't use tablet computers
3858643095	At another location (PIs indicate)
3858633255	I don't use tablet computers
3857438462	At home
3856260669	I don't use tablet computers
3856248923	At home
3856225449	At home
3854605877	At home
3853879738	I don't use tablet computers
3853851932	At home
3853830935	At home
3853806357	I don't use tablet computers
3853715854	At home
3853679395	I don't use tablet computers
3853627220	I don't use tablet computers
3853269579	I don't use tablet computers
3853179710	At home
3848999317	I don't use tablet computers
3847103154	I don't use tablet computers
3845684674	At home
3845447408	At home
3844847491	At school
3844360977	At home
3844236222	I don't use tablet computers
3844232462	At home
3844138637	I don't use tablet computers
3844055790	I don't use tablet computers
3843935898	At school
3843931544	I don't use tablet computers
3843911811	At home
3843804662	I don't use tablet computers
3843766328	At another location (PIs indicate)
3843760219	At school
3843744801	I don't use tablet computers
3843734569	At home
3843716341	At home
3843712724	At home
3843674785	At home
3843623603	At home
3843612922	I don't use tablet computers
3843608317	I don't use tablet computers
3843605819	At home
3843604500	I don't use tablet computers
3843603283	At another location (PIs indicate)
3843590935	I don't use tablet computers
3843584691	At home
3843566558	At home
3843563669	At another location (PIs indicate)

3843558483	At school
3843546559	At home
3843527212	At home
4058991282	I don't use tablet computers
4058988558	At home
4058970974	At home
4058966399	At home
4058961408	At another location (PIs indicate)
4058958230	At home
4058954419	At home
4058949738	At another location (PIs indicate)
4058944768	At another location (PIs indicate)
4058940279	At another location (PIs indicate)
4058928337	At home
4058925829	At home
4058295828	At home
4058285308	I don't use tablet computers
4058276966	At home
4058264705	I don't use tablet computers
4058256269	At home
4058248054	At home
4058240982	At home
4057536878	At home
4057526407	At another location (PIs indicate)
4057507742	At another location (PIs indicate)
4057471823	At home
4057460212	At home
4057442304	At home
4057423702	At home
4057364669	At another location (PIs indicate)
4057347523	At home
4057335898	At home
4057317286	I don't use tablet computers
4057304812	At home
4057273462	At another location (PIs indicate)
4057253149	I don't use tablet computers
4057238269	At another location (PIs indicate)
4057216892	At home
4057172013	At home
4057160934	At home
4057015182	At school
4057002543	I don't use tablet computers
4056994599	I don't use tablet computers
4056988375	At home
4056982171	At home
4056976704	At home
4056969438	I don't use tablet computers
4056963885	At home
4056956531	At another location (PIs indicate)
4056948732	At school
4056941323	At home
4056928489	At home
4056918542	At home
4056912185	At home
4056906655	At home

4056901873	At home
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*** The details of the answers of the respondents to this question as “At another location” can be found in **Table B1-4 (f)**.

Table B1-4 (f). Answers of the respondents who replied Question 7 (tablet) as “at another location”

ID of the respondent	“Where do you mostly use tablet?” Answers which were not mentioned as a category in the questionnaire
4016165993	Friend's house
4012651160	Every possible location
4012491488	Every possible location
3991510154	Cafes
3990101142	Relative's house
3990016288	Friend's houses
3968537814	Every possible location
3930804586	Relative's house
3913097202	Relative's house
3913079239	Every possible location
3912892626	Every possible location
3912880151	Every possible location
3912852270	Every possible location
3912790105	Every possible location
3912778536	Every possible location
3912756711	Every possible location
3912752184	Every possible location
3912748143	Every possible location
3889665520	Outdoors
3886877969	Every possible location
3886863958	Outdoors
3886628016	Relative's location
3886583963	Every possible location
3881357441	Relatives house
3873301897	Outdoors and during visits
3873288043	Parent's house
3858643095	Every possible location
3843766328	Every possible location
3843603283	Outdoors
3843563669	Outdoors and during visits
4058961408	Outdoors and during visits
4058949738	Outdoors and during visits
4058944768	Outdoors and during visits
4058940279	Outdoors and during visits
4057526407	Outdoors
4057507742	Outdoors
4057364669	Relative's house
4057273462	Every possible location
4057238269	Friend's house
4056956531	Every possible location

Table B1-5 (a). Answers of respondents to the question “*How long have you been using desktop computers?*”

	Answers to the question “How long have you been using laptop computers?”	Not categorized answers “I have been using for ___ years”
4016327570	I don't use a desktop computer	
4016323071	I have been using for ___ years	7
4016319090	I have been using for ___ years	2
4016311412	I don't use a desktop computer	
4016307251	I have been using for ___ years	5
4016303216	I have been using for ___ years	10
4016296167	I don't use a desktop computer	
4016290910	I don't use a desktop computer	
4016286833	I have been using for ___ years	5
4016172184	I don't use a desktop computer	
4016165993	I don't use a desktop computer	
4016160969	I have been using for less than a year	
4016154648	I don't use a desktop computer	
4012804018	I don't use a desktop computer	
4012797964	I have been using for ___ years	5
4012790555	I don't use a desktop computer	
4012782011	I have been using for ___ years	3
4012730725	I have been using for ___ years	3
4012723554	I don't use a desktop computer	
4012656140	I don't use a desktop computer	
4012651160	I have been using for ___ years	6
4012644259	I have been using for less than a year	
4012637005	I have been using for ___ years	9
4012633162	I have been using for less than a year	
4012624811	I have been using for less than a year	
4012617660	I don't use a desktop computer	
4012614159	I have been using for ___ years	1
4012508792	I have been using for less than a year	
4012498640	I have been using for ___ years	5
4012491488	I don't use a desktop computer	
4012485284	I don't use a desktop computer	
4012473633	I don't use a desktop computer	
4012469464	I don't use a desktop computer	
4012466160	I don't use a desktop computer	
4012460658	I have been using for ___ years	6
4012455947	I don't use a desktop computer	
4012430576	I don't use a desktop computer	
4012426652	I have been using for ___ years	3
4012406783	I have been using for less than a year	
4012399710	I don't use a desktop computer	
4004970129	I don't use a desktop computer	
4004963506	I don't use a desktop computer	
4004957167	I don't use a desktop computer	
4004945257	I have been using for less than a year	
4004934437	I don't use a desktop computer	
4004921493	I don't use a desktop computer	
4004914674	I have been using for ___ years	5
4004905832	I don't use a desktop computer	
4004899412	I have been using for ___ years	2
4004891212	I don't use a desktop computer	
4004885248	I don't use a desktop computer	

4004879116	I have been using for ___ years	8
3992329563	I don't use a desktop computer	
3991552998	I have been using for ___ years	2
3991524993	I have been using for ___ years	8
3991510154	I don't use a desktop computer	
3991501190	I have been using for ___ years	8
3991488370	I have been using for ___ years	3
3991475073	I have been using for ___ years	5
3991225783	I have been using for ___ years	5
3991219753	I don't use a desktop computer	
3991212143	I don't use a desktop computer	
3991206524	I don't use a desktop computer	
3991199746	I don't use a desktop computer	
3990101142	I don't use a desktop computer	
3990078514	I don't use a desktop computer	
3990065394	I have been using for ___ years	8
3990050548	I have been using for ___ years	9
3990036940	I don't use a desktop computer	
3990028350	I have been using for ___ years	3
3990016288	I have been using for ___ years	3
3989314032	I have been using for less than a year	
3989303005	I don't use a desktop computer	
3989271549	I don't use a desktop computer	
3989221063	I don't use a desktop computer	
3987326905	I have been using for ___ years	8
3987319596	I have been using for ___ years	3
3987312489	I have been using for ___ years	8
3987278903	I don't use a desktop computer	
3987270618	I don't use a desktop computer	
3987265971	I don't use a desktop computer	
3987138863	I don't use a desktop computer	
3987119797	I have been using for less than a year	
3987103718	I have been using for less than a year	
3987095737	I have been using for ___ years	5
3987091706	I don't use a desktop computer	
3987088444	I have been using for ___ years	5
3987083033	I don't use a desktop computer	
3968572950	I don't use a desktop computer	
3968557021	I don't use a desktop computer	
3968537814	I don't use a desktop computer	
3968522980	I have been using for ___ years	4
3968507520	I have been using for ___ years	3
3968424226	I have been using for ___ years	10
3968393898	I have been using for ___ years	4
3968040530	I don't use a desktop computer	
3968033599	I don't use a desktop computer	
3968016333	I don't use a desktop computer	
3968006605	I have been using for ___ years	9
3968000019	I don't use a desktop computer	
3957258512	I don't use a desktop computer	
3934852622	I don't use a desktop computer	
3934129822	I have been using for ___ years	3
3932105563	I have been using for ___ years	8
3931234753	I have been using for ___ years	5
3931175964	I have been using for ___ years	9

3931133172	I don't use a desktop computer	
3930994714	I have been using for less than a year	
3930804586	I have been using for ___ years	2
3930749449	I don't use a desktop computer	
3930697280	I have been using for ___ years	6
3930445230	I don't use a desktop computer	
3930068383	I have been using for ___ years	3
3929872863	I have been using for less than a year	
3929691190	I have been using for ___ years	10
3929382688	I don't use a desktop computer	
3913097202	I have been using for less than a year	
3913096620	I have been using for ___ years	7
3913091157	I have been using for ___ years	8
3913087916	I have been using for less than a year	
3913084313	I have been using for ___ years	4
3913082865	I have been using for ___ years	10
3913081818	I don't use a desktop computer	
3913081704	I have been using for ___ years	8
3913081489	I have been using for ___ years	5
3913081461	I don't use a desktop computer	
3913080016	I have been using for ___ years	4
3913079239	I have been using for ___ years	6
3912896144	I don't use a desktop computer	
3912892626	I have been using for ___ years	5
3912890441	I have been using for ___ years	3
3912887032	I have been using for ___ years	7
3912886614	I have been using for ___ years	2
3912881779	I have been using for ___ years	7
3912880151	I have been using for ___ years	6
3912878868	I have been using for ___ years	5
3912872911	I don't use a desktop computer	
3912860210	I don't use a desktop computer	
3912859078	I have been using for less than a year	
3912854606	I don't use a desktop computer	
3912854551	I have been using for ___ years	8
3912852270	I have been using for less than a year	
3912848038	I have been using for ___ years	5
3912847968	I don't use a desktop computer	
3912842944	I have been using for ___ years	8
3912794147	I have been using for ___ years	12
3912790105	I don't use a desktop computer	
3912778536	I have been using for ___ years	15
3912776656	I have been using for less than a year	
3912776486	I have been using for ___ years	7
3912776152	I have been using for ___ years	12
3912759330	I have been using for ___ years	6
3912758978	I have been using for ___ years	9
3912757730	I have been using for less than a year	
3912757652	I have been using for ___ years	3
3912757524	I have been using for less than a year	
3912756711	I have been using for ___ years	9
3912755385	I don't use a desktop computer	
3912755235	I have been using for ___ years	7
3912754149	I have been using for less than a year	
3912753957	I have been using for ___ years	10

3912752597	I have been using for ___ years	5
3912752289	I have been using for less than a year	
3912752184	I have been using for ___ years	10
3912751242	I have been using for ___ years	6
3912750658	I have been using for less than a year	
3912749617	I don't use a desktop computer	
3912749016	I have been using for ___ years	13
3912748143	I have been using for ___ years	11
3890043736	I have been using for ___ years	6
3890039997	I have been using for ___ years	5
3890034529	I don't use a desktop computer	
3889751162	I have been using for ___ years	2
3889749232	I don't use a desktop computer	
3889746648	I have been using for ___ years	10
3889743576	I have been using for ___ years	1
3889740298	I have been using for ___ years	6
3889737922	I don't use a desktop computer	
3889665520	I have been using for less than a year	
3889663586	I have been using for ___ years	9
3889662276	I have been using for ___ years	2
3888697183	I have been using for ___ years	2
3888692963	I have been using for ___ years	2
3887053010	I have been using for ___ years	4
3887035703	I don't use a desktop computer	
3887025511	I have been using for ___ years	2
3887002730	I have been using for ___ years	3
3886980755	I have been using for ___ years	5
3886971427	I don't use a desktop computer	
3886956905	I have been using for ___ years	6
3886943878	I have been using for ___ years	6
3886923599	I have been using for ___ years	4
3886897659	I have been using for ___ years	9
3886886502	I have been using for ___ years	2
3886877969	I have been using for ___ years	2
3886863958	I have been using for ___ years	8
3886701572	I don't use a desktop computer	
3886693846	I don't use a desktop computer	
3886628016	I don't use a desktop computer	
3886623361	I don't use a desktop computer	
3886618521	I have been using for ___ years	4
3886613583	I don't use a desktop computer	
3886610784	I have been using for less than a year	
3886595224	I don't use a desktop computer	
3886583963	I have been using for ___ years	6
3886579521	I have been using for ___ years	1
3886573614	I don't use a desktop computer	
3886492182	I have been using for ___ years	7
3886487836	I have been using for ___ years	12
3886482983	I have been using for ___ years	4
3886477400	I have been using for less than a year	
3886473563	I have been using for ___ years	5
388642578	I have been using for ___ years	10
3884434183	I have been using for ___ years	11
3884425269	I don't use a desktop computer	
3884418684	I have been using for ___ years	4

3882735466	I have been using for ___ years	2
3882714719	I have been using for ___ years	2
3882149265	I don't use a desktop computer	
3882132493	I don't use a desktop computer	
3881402826	I don't use a desktop computer	
3881378615	I don't use a desktop computer	
3881368250	I have been using for ___ years	2
3881357441	I have been using for ___ years	8
3881265294	I don't use a desktop computer	
3881254139	I don't use a desktop computer	
3881237980	I have been using for ___ years	3
3881230356	I have been using for ___ years	2
3881220157	I have been using for ___ years	6
3881215195	I don't use a desktop computer	
3881210102	I have been using for ___ years	3
3881204090	I don't use a desktop computer	
3879817918	I have been using for less than a year	
3879409688	I don't use a desktop computer	
3879374635	I have been using for ___ years	4
3879355152	I have been using for less than a year	
3879318196	I have been using for ___ years	6
3879280118	I don't use a desktop computer	
3879241966	I have been using for ___ years	9
3879169212	I don't use a desktop computer	
3879156353	I don't use a desktop computer	
3879114622	I have been using for ___ years	2
3878785230	I have been using for less than a year	
3878769580	I have been using for ___ years	6
3878759308	I have been using for ___ years	8
3878753669	I have been using for ___ years	6
3878748875	I have been using for ___ years	5
3878742830	I have been using for ___ years	5
3878737152	I have been using for ___ years	7
3878730696	I have been using for ___ years	6
3878725762	I have been using for ___ years	6
3878719521	I have been using for ___ years	7
3878713486	I have been using for ___ years	6
3878709205	I have been using for ___ years	5
3878700132	I have been using for ___ years	7
3873328056	I have been using for ___ years	3
3873312445	I have been using for less than a year	
3873301897	I have been using for ___ years	6
3873288043	I have been using for ___ years	3
3873082048	I don't use a desktop computer	
3873075081	I have been using for ___ years	3
3873068691	I don't use a desktop computer	
3873056977	I have been using for ___ years	3
3873049368	I don't use a desktop computer	
3873028210	I have been using for ___ years	10
3873020393	I have been using for ___ years	9
3873001235	I have been using for ___ years	3
3872993752	I have been using for less than a year	
3872987133	I have been using for ___ years	2
3872964285	I have been using for ___ years	1
3872953817	I don't use a desktop computer	

3872947394	I have been using for ___ years	6
3872939332	I have been using for ___ years	2
3872846015	I have been using for ___ years	4
3872841613	I have been using for ___ years	10
3872837796	I have been using for ___ years	9
3872820378	I have been using for ___ years	7
3872768107	I have been using for ___ years	6
3871255066	I don't use a desktop computer	
3871227626	I don't use a desktop computer	
3871205440	I have been using for ___ years	5
3871184697	I have been using for ___ years	1
3871162565	I don't use a desktop computer	
3871151654	I don't use a desktop computer	
3871110433	I have been using for ___ years	2
3870870493	I don't use a desktop computer	
3870854704	I don't use a desktop computer	
3870838781	I have been using for ___ years	5
3870801193	I have been using for less than a year	
3868573297	I have been using for ___ years	5
3868554028	I have been using for ___ years	5
3868526738	I have been using for ___ years	4
3868509803	I have been using for ___ years	1
3868484667	I have been using for ___ years	6
3868442104	I have been using for ___ years	2
3868422304	I don't use a desktop computer	
3868411080	I don't use a desktop computer	
3868391766	I don't use a desktop computer	
3868375041	I don't use a desktop computer	
3866713588	I don't use a desktop computer	
3865495924	I have been using for ___ years	4
3863418934	I don't use a desktop computer	
3858671359	I don't use a desktop computer	
3858643095	I have been using for ___ years	9
3858633255	I don't use a desktop computer	
3857438462	I have been using for ___ years	12
3856260669	I have been using for ___ years	9
3856248923	I have been using for ___ years	2
3856225449	I have been using for ___ years	5
3854605877	I have been using for ___ years	5
3853879738	I have been using for ___ years	6
3853851932	I don't use a desktop computer	
3853830935	I don't use a desktop computer	
3853806357	I don't use a desktop computer	
3853715854	I have been using for ___ years	3
3853679395	I have been using for ___ years	2
3853627220	I don't use a desktop computer	
3853269579	I don't use a desktop computer	
3853179710	I have been using for less than a year	
3848999317	I have been using for ___ years	10
3847103154	I have been using for ___ years	6
3845684674	I don't use a desktop computer	
3845447408	I have been using for ___ years	5
3844847491	I don't use a desktop computer	
3844360977	I have been using for less than a year	
3844236222	I have been using for ___ years	10

3844232462	I don't use a desktop computer	
3844138637	I don't use a desktop computer	
3844055790	I have been using for ___ years	4
3843935898	I don't use a desktop computer	
3843931544	I don't use a desktop computer	
3843911811	I have been using for ___ years	10
3843804662	I don't use a desktop computer	
3843766328	I have been using for less than a year	
3843760219	I don't use a desktop computer	
3843744801	I have been using for ___ years	7
3843734569	I don't use a desktop computer	
3843716341	I don't use a desktop computer	
3843712724	I have been using for ___ years	10
3843674785	I don't use a desktop computer	
3843623603	I have been using for ___ years	6
3843612922	I have been using for ___ years	5
3843608317	I have been using for ___ years	7
3843605819	I have been using for less than a year	
3843604500	I don't use a desktop computer	
3843603283	I don't use a desktop computer	
3843590935	I have been using for ___ years	14
3843584691	I have been using for ___ years	9
3843566558	I have been using for ___ years	6
3843563669	I don't use a desktop computer	
3843558483	I have been using for ___ years	7
3843546559	I have been using for ___ years	2
3843527212	I have been using for ___ years	12
4058991282	I have been using for _____ years	4
4058988558	I have been using for _____ years	1
4058970974	I have been using for _____ years	1
4058966399	I don't use a desktop computer	
4058961408	I have been using for _____ years	4
4058958230	I have been using for _____ years	2
4058954419	I have been using for _____ years	5
4058949738	I have been using for _____ years	2
4058944768	I have been using for _____ years	4
4058940279	I have been using for _____ years	7
4058928337	I don't use a desktop computer	
4058925829	I have been using for _____ years	3
4058295828	I have been using for _____ years	7
4058285308	I have been using for _____ years	10
4058276966	I don't use a desktop computer	
4058264705	I have been using for less than a year	
4058256269	I don't use a desktop computer	
4058248054	I don't use a desktop computer	
4058240982	I have been using for _____ years	3
4057536878	I don't use a desktop computer	
4057526407	I have been using for _____ years	10
4057507742	I have been using for _____ years	8
4057471823	I have been using for _____ years	3
4057460212	I don't use a desktop computer	
4057442304	I have been using for _____ years	4
4057423702	I have been using for _____ years	6
4057364669	I have been using for less than a year	
4057347523	I have been using for _____ years	5

4057335898	I have been using for _____ years	3
4057317286	I have been using for _____ years	2
4057304812	I have been using for _____ years	9
4057273462	I have been using for _____ years	6
4057253149	I don't use a desktop computer	
4057238269	I have been using for _____ years	2
4057216892	I have been using for _____ years	4
4057172013	I have been using for _____ years	3
4057160934	I have been using for _____ years	2
4057015182	I have been using for _____ years	4
4057002543	I have been using for _____ years	4
4056994599	I have been using for _____ years	5
4056988375	I have been using for _____ years	7
4056982171	I have been using for _____ years	5
4056976704	I have been using for _____ years	3
4056969438	I don't use a desktop computer	
4056963885	I have been using for _____ years	6
4056956531	I have been using for _____ years	8
4056948732	I have been using for _____ years	5
4056941323	I don't use a desktop computer	
4056928489	I don't use a desktop computer	
4056918542	I have been using for less than a year	
4056912185	I have been using for _____ years	2
4056906655	I have been using for _____ years	5
4056901873	I have been using for less than a year	

Table B1-5 (b). Answers of respondents to the question *“How long have you been using laptop computers?”*

	Answers to the question “How long have you been using laptop computers?”	Not categorized answers “I have been using for ___ years”
4016327570	I don't use a laptop computer	
4016323071	I have been using for ___ years	5
4016319090	I have been using for ___ years	4
4016311412	I don't use a laptop computer	
4016307251	I have been using for ___ years	2
4016303216	I have been using for ___ years	3
4016296167	I have been using for ___ years	1
4016290910	I have been using for ___ years	5
4016286833	I don't use a laptop computer	
4016172184	I have been using for ___ years	3
4016165993	I have been using for ___ years	5
4016160969	I have been using for ___ years	1
4016154648	I have been using for less than a year	
4012804018	I have been using for ___ years	7
4012797964	I have been using for ___ years	3
4012790555	I have been using for ___ years	6
4012782011	I don't use a laptop computer	
4012730725	I don't use a laptop computer	
4012723554	I have been using for ___ years	6
4012656140	I have been using for ___ years	5
4012651160	I have been using for ___ years	5
4012644259	I have been using for ___ years	3
4012637005	I have been using for ___ years	2

4012633162	I have been using for ___ years	1
4012624811	I have been using for ___ years	2
4012617660	I have been using for less than a year	
4012614159	I don't use a laptop computer	
4012508792	I have been using for ___ years	1
4012498640	I have been using for ___ years	5
4012491488	I have been using for ___ years	4
4012485284	I don't use a laptop computer	
4012473633	I have been using for ___ years	2
4012469464	I don't use a laptop computer	
4012466160	I have been using for ___ years	2
4012460658	I don't use a laptop computer	
4012455947	I have been using for ___ years	4
4012430576	I don't use a laptop computer	
4012426652	I have been using for ___ years	1
4012406783	I have been using for ___ years	10
4012399710	I don't use a laptop computer	
4004970129	I have been using for ___ years	2
4004963506	I don't use a laptop computer	
4004957167	I have been using for ___ years	2
4004945257	I have been using for less than a year	
4004934437	I have been using for ___ years	2
4004921493	I have been using for ___ years	2
4004914674	I have been using for ___ years	7
4004905832	I have been using for ___ years	2
4004899412	I have been using for less than a year	
4004891212	I have been using for ___ years	4
4004885248	I have been using for ___ years	5
4004879116	I have been using for ___ years	2
3992329563	I have been using for ___ years	4
3991552998	I have been using for less than a year	
3991524993	I have been using for ___ years	4
3991510154	I have been using for ___ years	1
3991501190	I have been using for ___ years	10
3991488370	I have been using for ___ years	7
3991475073	I have been using for ___ years	4
3991225783	I have been using for ___ years	2
3991219753	I have been using for ___ years	3
3991212143	I have been using for ___ years	3
3991206524	I have been using for ___ years	5
3991199746	I have been using for ___ years	4
3990101142	I have been using for less than a year	
3990078514	I have been using for ___ years	3
3990065394	I have been using for ___ years	3
3990050548	I have been using for ___ years	7
3990036940	I don't use a laptop computer	
3990028350	I have been using for ___ years	8
3990016288	I have been using for ___ years	6
3989314032	I have been using for ___ years	1
3989303005	I have been using for ___ years	4
3989271549	I have been using for less than a year	
3989221063	I have been using for ___ years	4
3987326905	I have been using for ___ years	6
3987319596	I have been using for ___ years	5
3987312489	I have been using for ___ years	5

3987278903	I have been using for ___ years	5
3987270618	I have been using for ___ years	5
3987265971	I have been using for ___ years	9
3987138863	I have been using for less than a year	
3987119797	I have been using for less than a year	
3987103718	I have been using for less than a year	
3987095737	I have been using for ___ years	4
3987091706	I have been using for ___ years	7
3987088444	I don't use a laptop computer	
3987083033	I don't use a laptop computer	
3968572950	I have been using for ___ years	6
3968557021	I have been using for ___ years	6
3968537814	I have been using for ___ years	6
3968522980	I have been using for ___ years	2
3968507520	I have been using for ___ years	12
3968424226	I don't use a laptop computer	
3968393898	I have been using for ___ years	4
3968040530	I have been using for ___ years	5
3968033599	I have been using for ___ years	2
3968016333	I have been using for ___ years	2
3968006605	I have been using for ___ years	6
3968000019	I have been using for ___ years	4
3957258512	I have been using for ___ years	5
3934852622	I have been using for ___ years	6
3934129822	I don't use a laptop computer	
3932105563	I have been using for ___ years	5
3931234753	I don't use a laptop computer	
3931175964	I have been using for ___ years	4
3931133172	I have been using for ___ years	3
3930994714	I have been using for less than a year	
3930804586	I have been using for less than a year	
3930749449	I have been using for ___ years	4
3930697280	I don't use a laptop computer	
3930445230	I don't use a laptop computer	
3930068383	I have been using for less than a year	
3929872863	I don't use a laptop computer	
3929691190	I have been using for ___ years	4
3929382688	I have been using for ___ years	8
3913097202	I have been using for ___ years	4
3913096620	I have been using for ___ years	7
3913091157	I have been using for ___ years	8
3913087916	I have been using for ___ years	3
3913084313	I don't use a laptop computer	
3913082865	I have been using for less than a year	
3913081818	I have been using for ___ years	10
3913081704	I don't use a laptop computer	
3913081489	I have been using for ___ years	7
3913081461	I have been using for ___ years	6
3913080016	I don't use a laptop computer	
3913079239	I don't use a laptop computer	
3912896144	I don't use a laptop computer	
3912892626	I don't use a laptop computer	
3912890441	I have been using for ___ years	9
3912887032	I have been using for ___ years	3
3912886614	I have been using for ___ years	4

3912881779	I have been using for ___ years	2
3912880151	I have been using for ___ years	8
3912878868	I have been using for ___ years	2
3912872911	I have been using for ___ years	4
3912860210	I have been using for ___ years	5
3912859078	I have been using for less than a year	
3912854606	I don't use a laptop computer	
3912854551	I have been using for ___ years	6
3912852270	I have been using for ___ years	3
3912848038	I have been using for ___ years	10
3912847968	I have been using for less than a year	
3912842944	I have been using for ___ years	5
3912794147	I have been using for ___ years	5
3912790105	I have been using for ___ years	4
3912778536	I have been using for ___ years	15
3912776656	I have been using for less than a year	
3912776486	I have been using for ___ years	7
3912776152	I have been using for ___ years	13
3912759330	I have been using for less than a year	
3912758978	I have been using for ___ years	7
3912757730	I have been using for ___ years	5
3912757652	I have been using for ___ years	5
3912757524	I have been using for ___ years	3
3912756711	I don't use a laptop computer	
3912755385	I have been using for less than a year	
3912755235	I have been using for ___ years	3
3912754149	I have been using for less than a year	
3912753957	I have been using for ___ years	8
3912752597	I have been using for ___ years	3
3912752289	I have been using for ___ years	3
3912752184	I have been using for ___ years	3
3912751242	I have been using for less than a year	
3912750658	I have been using for less than a year	
3912749617	I have been using for ___ years	7
3912749016	I have been using for ___ years	10
3912748143	I have been using for ___ years	3
3890043736	I have been using for ___ years	5
3890039997	I have been using for ___ years	1
3890034529	I have been using for less than a year	
3889751162	I don't use a laptop computer	
3889749232	I have been using for ___ years	7
3889746648	I have been using for less than a year	
3889743576	I don't use a laptop computer	
3889740298	I don't use a laptop computer	
3889737922	I have been using for ___ years	5
3889665520	I have been using for ___ years	1
3889663586	I don't use a laptop computer	
3889662276	I don't use a laptop computer	
3888697183	I don't use a laptop computer	
3888692963	I have been using for ___ years	4
3887053010	I don't use a laptop computer	
3887035703	I have been using for ___ years	2
3887025511	I have been using for ___ years	2
3887002730	I have been using for ___ years	3
3886980755	I don't use a laptop computer	

3886971427	I have been using for ___ years	6
3886956905	I don't use a laptop computer	
3886943878	I have been using for ___ years	3
3886923599	I have been using for ___ years	5
3886897659	I don't use a laptop computer	
3886886502	I don't use a laptop computer	
3886877969	I have been using for ___ years	4
3886863958	I have been using for ___ years	2
3886701572	I have been using for ___ years	8
3886693846	I have been using for ___ years	2
3886628016	I don't use a laptop computer	
3886623361	I have been using for ___ years	2
3886618521	I don't use a laptop computer	
3886613583	I have been using for ___ years	9
3886610784	I have been using for ___ years	3
3886595224	I have been using for ___ years	8
3886583963	I have been using for ___ years	6
3886579521	I don't use a laptop computer	
3886573614	I have been using for ___ years	2
3886492182	I have been using for ___ years	2
3886487836	I have been using for less than a year	
3886482983	I have been using for ___ years	3
3886477400	I have been using for ___ years	1
3886473563	I have been using for ___ years	6
388642578	I have been using for ___ years	5
3884434183	I don't use a laptop computer	
3884425269	I don't use a laptop computer	
3884418684	I don't use a laptop computer	
3882735466	I have been using for ___ years	2
3882714719	I don't use a laptop computer	
3882149265	I don't use a laptop computer	
3882132493	I have been using for less than a year	
3881402826	I have been using for ___ years	6
3881378615	I have been using for less than a year	
3881368250	I don't use a laptop computer	
3881357441	I have been using for ___ years	3
3881265294	I have been using for less than a year	
3881254139	I have been using for ___ years	2
3881237980	I have been using for ___ years	4
3881230356	I have been using for ___ years	2
3881220157	I have been using for ___ years	2
3881215195	I don't use a laptop computer	
3881210102	I have been using for ___ years	4
3881204090	I have been using for ___ years	6
3879817918	I have been using for ___ years	5
3879409688	I have been using for ___ years	1
3879374635	I don't use a laptop computer	
3879355152	I have been using for less than a year	
3879318196	I have been using for ___ years	3
3879280118	I have been using for ___ years	1
3879241966	I have been using for ___ years	2
3879169212	I have been using for ___ years	4
3879156353	I have been using for ___ years	1
3879114622	I don't use a laptop computer	
3878785230	I have been using for less than a year	

3878769580	I have been using for ___ years	6
3878759308	I have been using for ___ years	7
3878753669	I have been using for ___ years	6
3878748875	I have been using for ___ years	2
3878742830	I have been using for ___ years	5
3878737152	I have been using for ___ years	5
3878730696	I have been using for ___ years	3
3878725762	I don't use a laptop computer	
3878719521	I have been using for ___ years	4
3878713486	I have been using for ___ years	3
3878709205	I have been using for ___ years	4
3878700132	I have been using for ___ years	4
3873328056	I have been using for less than a year	
3873312445	I have been using for ___ years	3
3873301897	I have been using for ___ years	5
3873288043	I don't use a laptop computer	
3873082048	I don't use a laptop computer	
3873075081	I have been using for ___ years	2
3873068691	I have been using for ___ years	3
3873056977	I don't use a laptop computer	
3873049368	I don't use a laptop computer	
3873028210	I don't use a laptop computer	
3873020393	I have been using for ___ years	9
3873001235	I don't use a laptop computer	
3872993752	I have been using for ___ years	3
3872987133	I don't use a laptop computer	
3872964285	I have been using for ___ years	3
3872953817	I have been using for ___ years	3
3872947394	I don't use a laptop computer	
3872939332	I have been using for ___ years	3
3872846015	I have been using for ___ years	3
3872841613	I have been using for ___ years	3
3872837796	I have been using for ___ years	4
3872820378	I don't use a laptop computer	
3872768107	I have been using for ___ years	6
3871255066	I have been using for ___ years	3
3871227626	I have been using for ___ years	3
3871205440	I don't use a laptop computer	
3871184697	I don't use a laptop computer	
3871162565	I have been using for less than a year	
3871151654	I have been using for ___ years	2
3871110433	I have been using for ___ years	2
3870870493	I have been using for ___ years	5
3870854704	I have been using for ___ years	2
3870838781	I don't use a laptop computer	
3870801193	I have been using for ___ years	3
3868573297	I have been using for ___ years	5
3868554028	I have been using for ___ years	5
3868526738	I don't use a laptop computer	
3868509803	I have been using for ___ years	3
3868484667	I have been using for ___ years	4
3868442104	I have been using for ___ years	4
3868422304	I don't use a laptop computer	
3868411080	I have been using for ___ years	2
3868391766	I have been using for ___ years	1

3868375041	I have been using for ___ years	4
3866713588	I have been using for ___ years	4
3865495924	I have been using for ___ years	2
3863418934	I have been using for ___ years	2
3858671359	I have been using for ___ years	2
3858643095	I have been using for ___ years	6
3858633255	I have been using for ___ years	10
3857438462	I have been using for ___ years	6
3856260669	I have been using for ___ years	5
3856248923	I have been using for ___ years	5
3856225449	I have been using for ___ years	3
3854605877	I have been using for ___ years	3
3853879738	I have been using for ___ years	8
3853851932	I have been using for ___ years	5
3853830935	I have been using for ___ years	10
3853806357	I have been using for ___ years	3
3853715854	I don't use a laptop computer	
3853679395	I have been using for ___ years	3
3853627220	I have been using for ___ years	4
3853269579	I have been using for ___ years	4
3853179710	I have been using for ___ years	5
3848999317	I have been using for less than a year	
3847103154	I have been using for ___ years	3
3845684674	I have been using for ___ years	4
3845447408	I have been using for ___ years	8
3844847491	I have been using for ___ years	4
3844360977	I have been using for less than a year	
3844236222	I have been using for less than a year	
3844232462	I have been using for ___ years	6
3844138637	I have been using for ___ years	7
3844055790	I don't use a laptop computer	
3843935898	I have been using for less than a year	
3843931544	I have been using for ___ years	4
3843911811	I have been using for ___ years	6
3843804662	I have been using for ___ years	2
3843766328	I have been using for less than a year	
3843760219	I have been using for ___ years	5
3843744801	I have been using for ___ years	5
3843734569	I have been using for less than a year	
3843716341	I have been using for less than a year	
3843712724	I have been using for ___ years	8
3843674785	I have been using for ___ years	4
3843623603	I have been using for ___ years	3
3843612922	I have been using for less than a year	
3843608317	I have been using for ___ years	4
3843605819	I have been using for ___ years	4
3843604500	I have been using for ___ years	7
3843603283	I have been using for ___ years	5
3843590935	I have been using for ___ years	5
3843584691	I have been using for ___ years	5
3843566558	I have been using for ___ years	6
3843563669	I have been using for ___ years	6
3843558483	I have been using for ___ years	7
3843546559	I have been using for less than a year	
3843527212	I have been using for ___ years	10

4058991282	I don't use a laptop computer	
4058988558	I have been using for _____ years	4
4058970974	I have been using for _____ years	1
4058966399	I don't use a laptop computer	
4058961408	I have been using for _____ years	4
4058958230	I have been using for _____ years	2
4058954419	I have been using for _____ years	2
4058949738	I have been using for _____ years	4
4058944768	I don't use a laptop computer	
4058940279	I don't use a laptop computer	
4058928337	I have been using for _____ years	3
4058925829	I have been using for _____ years	4
4058295828	I don't use a laptop computer	
4058285308	I don't use a laptop computer	
4058276966	I have been using for _____ years	5
4058264705	I have been using for less than a year	
4058256269	I have been using for _____ years	1
4058248054	I don't use a laptop computer	
4058240982	I have been using for _____ years	1
4057536878	I have been using for _____ years	6
4057526407	I have been using for _____ years	10
4057507742	I have been using for _____ years	3
4057471823	I don't use a laptop computer	
4057460212	I don't use a laptop computer	
4057442304	I don't use a laptop computer	
4057423702	I have been using for _____ years	6
4057364669	I have been using for _____ years	5
4057347523	I have been using for _____ years	3
4057335898	I have been using for _____ years	4
4057317286	I have been using for _____ years	5
4057304812	I don't use a laptop computer	
4057273462	I have been using for _____ years	6
4057253149	I have been using for _____ years	5
4057238269	I have been using for _____ years	5
4057216892	I have been using for _____ years	2
4057172013	I have been using for less than a year	
4057160934	I have been using for _____ years	5
4057015182	I have been using for _____ years	3
4057002543	I don't use a laptop computer	
4056994599	I don't use a laptop computer	
4056988375	I don't use a laptop computer	
4056982171	I have been using for _____ years	3
4056976704	I have been using for less than a year	
4056969438	I have been using for _____ years	9
4056963885	I have been using for _____ years	7
4056956531	I have been using for _____ years	4
4056948732	I don't use a laptop computer	
4056941323	I don't use a laptop computer	
4056928489	I have been using for _____ years	1
4056918542	I don't use a laptop computer	
4056912185	I have been using for _____ years	3
4056906655	I don't use a laptop computer	
4056901873	I have been using for less than a year	

Table B1-5 (c). Answers of respondents to the question *“How long have you been using tablet computers?”*

	Answers to the question “How long have you been using tablet computers?”	Not categorized answers “I have been using for ___ years”
4016327570	I have been using for ___ years	3
4016323071	I have been using for less than a year	
4016319090	I have been using for ___ years	1
4016311412	I have been using for ___ years	2
4016307251	I have been using for less than a year	
4016303216	I don't use a tablet computer	
4016296167	I have been using for ___ years	2
4016290910	I don't use a tablet computer	
4016286833	I have been using for ___ years	4
4016172184	I don't use a tablet computer	
4016165993	I have been using for ___ years	2
4016160969	I have been using for ___ years	1
4016154648	I have been using for less than a year	
4012804018	I have been using for ___ years	2
4012797964	I have been using for ___ years	1
4012790555	I have been using for ___ years	4
4012782011	I have been using for less than a year	
4012730725	I have been using for less than a year	
4012723554	I have been using for ___ years	4
4012656140	I don't use a tablet computer	
4012651160	I have been using for ___ years	2
4012644259	I have been using for ___ years	1
4012637005	I don't use a tablet computer	
4012633162	I don't use a tablet computer	
4012624811	I have been using for ___ years	1
4012617660	I have been using for less than a year	
4012614159	I have been using for ___ years	3
4012508792	I have been using for ___ years	2
4012498640	I have been using for ___ years	4
4012491488	I have been using for ___ years	2
4012485284	I have been using for ___ years	5
4012473633	I have been using for ___ years	2
4012469464	I have been using for less than a year	
4012466160	I have been using for ___ years	2
4012460658	I have been using for ___ years	2
4012455947	I have been using for less than a year	
4012430576	I have been using for ___ years	3
4012426652	I have been using for ___ years	4
4012406783	I have been using for ___ years	2
4012399710	I have been using for ___ years	1
4004970129	I have been using for ___ years	3
4004963506	I have been using for ___ years	2
4004957167	I have been using for ___ years	4
4004945257	I have been using for ___ years	2
4004934437	I have been using for less than a year	
4004921493	I don't use a tablet computer	
4004914674	I don't use a tablet computer	
4004905832	I don't use a tablet computer	
4004899412	I have been using for ___ years	3
4004891212	I have been using for less than a year	
4004885248	I don't use a tablet computer	

4004879116	I have been using for ___ years	3
3992329563	I don't use a tablet computer	
3991552998	I have been using for ___ years	1
3991524993	I have been using for ___ years	6
3991510154	I have been using for ___ years	4
3991501190	I have been using for ___ years	3
3991488370	I have been using for ___ years	5
3991475073	I have been using for ___ years	3
3991225783	I have been using for ___ years	2
3991219753	I don't use a tablet computer	
3991212143	I don't use a tablet computer	
3991206524	I have been using for ___ years	2
3991199746	I have been using for ___ years	1
3990101142	I have been using for less than a year	
3990078514	I have been using for ___ years	3
3990065394	I don't use a tablet computer	
3990050548	I have been using for ___ years	4
3990036940	I have been using for ___ years	3
3990028350	I have been using for ___ years	4
3990016288	I have been using for less than a year	
3989314032	I have been using for ___ years	2
3989303005	I have been using for ___ years	3
3989271549	I have been using for less than a year	
3989221063	I have been using for ___ years	6
3987326905	I have been using for ___ years	4
3987319596	I have been using for ___ years	5
3987312489	I have been using for ___ years	3
3987278903	I have been using for ___ years	4
3987270618	I have been using for ___ years	2
3987265971	I have been using for ___ years	3
3987138863	I don't use a tablet computer	
3987119797	I have been using for ___ years	3
3987103718	I have been using for less than a year	
3987095737	I have been using for ___ years	1
3987091706	I don't use a tablet computer	
3987088444	I have been using for ___ years	3
3987083033	I have been using for ___ years	2
3968572950	I don't use a tablet computer	
3968557021	I have been using for ___ years	2
3968537814	I have been using for ___ years	3
3968522980	I have been using for less than a year	
3968507520	I don't use a tablet computer	
3968424226	I have been using for ___ years	7
3968393898	I don't use a tablet computer	
3968040530	I don't use a tablet computer	
3968033599	I have been using for ___ years	2
3968016333	I have been using for ___ years	1
3968006605	I have been using for ___ years	2
3968000019	I don't use a tablet computer	
3957258512	I have been using for ___ years	3
3934852622	I don't use a tablet computer	
3934129822	I don't use a tablet computer	
3932105563	I have been using for less than a year	
3931234753	I have been using for ___ years	3
3931175964	I don't use a tablet computer	

3931133172	I don't use a tablet computer	
3930994714	I have been using for less than a year	
3930804586	I have been using for less than a year	
3930749449	I don't use a tablet computer	
3930697280	I have been using for less than a year	
3930445230	I have been using for ___ years	1
3930068383	I don't use a tablet computer	
3929872863	I don't use a tablet computer	
3929691190	I don't use a tablet computer	
3929382688	I have been using for less than a year	
3913097202	I have been using for ___ years	2
3913096620	I have been using for ___ years	3
3913091157	I have been using for ___ years	4
3913087916	I have been using for less than a year	
3913084313	I have been using for ___ years	2
3913082865	I have been using for ___ years	5
3913081818	I don't use a tablet computer	
3913081704	I have been using for ___ years	2
3913081489	I have been using for less than a year	
3913081461	I have been using for ___ years	5
3913080016	I have been using for less than a year	
3913079239	I have been using for ___ years	1
3912896144	I don't use a tablet computer	
3912892626	I have been using for ___ years	5
3912890441	I have been using for ___ years	9
3912887032	I have been using for ___ years	3
3912886614	I have been using for ___ years	5
3912881779	I have been using for ___ years	6
3912880151	I have been using for ___ years	7
3912878868	I have been using for ___ years	3
3912872911	I have been using for ___ years	2
3912860210	I have been using for ___ years	4
3912859078	I have been using for less than a year	
3912854606	I have been using for ___ years	2
3912854551	I have been using for ___ years	5
3912852270	I have been using for less than a year	
3912848038	I have been using for ___ years	6
3912847968	I have been using for ___ years	3
3912842944	I have been using for less than a year	
3912794147	I have been using for ___ years	3
3912790105	I have been using for ___ years	4
3912778536	I have been using for ___ years	15
3912776656	I have been using for less than a year	
3912776486	I have been using for ___ years	4
3912776152	I have been using for ___ years	8
3912759330	I have been using for less than a year	
3912758978	I have been using for ___ years	2
3912757730	I have been using for ___ years	3
3912757652	I have been using for ___ years	2
3912757524	I have been using for ___ years	4
3912756711	I have been using for ___ years	4
3912755385	I have been using for ___ years	5
3912755235	I have been using for less than a year	
3912754149	I have been using for less than a year	
3912753957	I have been using for ___ years	5

3912752597	I have been using for ___ years	7
3912752289	I have been using for ___ years	3
3912752184	I have been using for ___ years	10
3912751242	I have been using for less than a year	
3912750658	I have been using for ___ years	3
3912749617	I have been using for ___ years	3
3912749016	I have been using for ___ years	10
3912748143	I have been using for ___ years	6
3890043736	I have been using for ___ years	3
3890039997	I have been using for ___ years	1
3890034529	I don't use a tablet computer	
3889751162	I have been using for ___ years	6
3889749232	I have been using for ___ years	3
3889746648	I have been using for ___ years	2
3889743576	I have been using for ___ years	4
3889740298	I have been using for less than a year	
3889737922	I don't use a tablet computer	
3889665520	I have been using for less than a year	
3889663586	I have been using for less than a year	
3889662276	I have been using for ___ years	4
3888697183	I don't use a tablet computer	
3888692963	I have been using for ___ years	4
3887053010	I have been using for ___ years	2
3887035703	I don't use a tablet computer	
3887025511	I have been using for less than a year	
3887002730	I have been using for ___ years	3
3886980755	I have been using for ___ years	4
3886971427	I have been using for ___ years	6
3886956905	I have been using for ___ years	6
3886943878	I don't use a tablet computer	
3886923599	I have been using for ___ years	2
3886897659	I have been using for ___ years	2
3886886502	I don't use a tablet computer	
3886877969	I have been using for ___ years	4
3886863958	I have been using for ___ years	1
3886701572	I have been using for ___ years	4
3886693846	I don't use a tablet computer	
3886628016	I have been using for less than a year	
3886623361	I don't use a tablet computer	
3886618521	I have been using for ___ years	2
3886613583	I don't use a tablet computer	
3886610784	I have been using for ___ years	2
3886595224	I have been using for ___ years	2
3886583963	I have been using for ___ years	3
3886579521	I have been using for less than a year	
3886573614	I don't use a tablet computer	
3886492182	I don't use a tablet computer	
3886487836	I have been using for ___ years	4
3886482983	I have been using for ___ years	3
3886477400	I have been using for less than a year	
3886473563	I have been using for ___ years	7
38864642578	I have been using for ___ years	3
3884434183	I don't use a tablet computer	
3884425269	I have been using for ___ years	4
3884418684	I don't use a tablet computer	

3882735466	I have been using for ___ years	2
3882714719	I don't use a tablet computer	
3882149265	I have been using for ___ years	3
3882132493	I have been using for less than a year	
3881402826	I have been using for ___ years	5
3881378615	I have been using for less than a year	
3881368250	I have been using for ___ years	5
3881357441	I have been using for ___ years	3
3881265294	I have been using for ___ years	3
3881254139	I have been using for ___ years	2
3881237980	I have been using for less than a year	
3881230356	I don't use a tablet computer	
3881220157	I have been using for ___ years	3
3881215195	I have been using for ___ years	1
3881210102	I have been using for ___ years	2
3881204090	I have been using for ___ years	3
3879817918	I have been using for less than a year	
3879409688	I have been using for less than a year	
3879374635	I don't use a tablet computer	
3879355152	I have been using for ___ years	6
3879318196	I don't use a tablet computer	
3879280118	I have been using for less than a year	
3879241966	I don't use a tablet computer	
3879169212	I don't use a tablet computer	
3879156353	I don't use a tablet computer	
3879114622	I don't use a tablet computer	
3878785230	I have been using for ___ years	1
3878769580	I have been using for less than a year	
3878759308	I don't use a tablet computer	
3878753669	I don't use a tablet computer	
3878748875	I have been using for ___ years	1
3878742830	I don't use a tablet computer	
3878737152	I have been using for ___ years	3
3878730696	I don't use a tablet computer	
3878725762	I have been using for ___ years	2
3878719521	I don't use a tablet computer	
3878713486	I have been using for ___ years	1
3878709205	I don't use a tablet computer	
3878700132	I have been using for ___ years	2
3873328056	I don't use a tablet computer	
3873312445	I don't use a tablet computer	
3873301897	I have been using for ___ years	7
3873288043	I have been using for ___ years	3
3873082048	I have been using for ___ years	9
3873075081	I have been using for ___ years	1
3873068691	I have been using for ___ years	4
3873056977	I don't use a tablet computer	
3873049368	I have been using for ___ years	5
3873028210	I don't use a tablet computer	
3873020393	I have been using for ___ years	6
3873001235	I don't use a tablet computer	
3872993752	I have been using for ___ years	2
3872987133	I have been using for ___ years	3
3872964285	I have been using for ___ years	1
3872953817	I don't use a tablet computer	

3872947394	I have been using for ___ years	3
3872939332	I don't use a tablet computer	
3872846015	I don't use a tablet computer	
3872841613	I don't use a tablet computer	
3872837796	I have been using for ___ years	3
3872820378	I don't use a tablet computer	
3872768107	I have been using for ___ years	2
3871255066	I don't use a tablet computer	
3871227626	I don't use a tablet computer	
3871205440	I have been using for ___ years	6
3871184697	I have been using for ___ years	2
3871162565	I have been using for ___ years	1
3871151654	I have been using for ___ years	1
3871110433	I don't use a tablet computer	
3870870493	I have been using for ___ years	5
3870854704	I have been using for ___ years	1
3870838781	I don't use a tablet computer	
3870801193	I have been using for less than a year	
3868573297	I don't use a tablet computer	
3868554028	I have been using for ___ years	2
3868526738	I don't use a tablet computer	
3868509803	I don't use a tablet computer	
3868484667	I have been using for ___ years	1
3868442104	I have been using for ___ years	3
3868422304	I have been using for less than a year	
3868411080	I don't use a tablet computer	
3868391766	I don't use a tablet computer	
3868375041	I don't use a tablet computer	
3866713588	I don't use a tablet computer	
3865495924	I have been using for less than a year	
3863418934	I don't use a tablet computer	
3858671359	I don't use a tablet computer	
3858643095	I have been using for ___ years	2
3858633255	I don't use a tablet computer	
3857438462	I have been using for ___ years	3
3856260669	I don't use a tablet computer	
3856248923	I have been using for ___ years	2
3856225449	I have been using for ___ years	2
3854605877	I have been using for ___ years	2
3853879738	I don't use a tablet computer	
3853851932	I have been using for ___ years	5
3853830935	I have been using for ___ years	8
3853806357	I don't use a tablet computer	
3853715854	I have been using for ___ years	7
3853679395	I don't use a tablet computer	
3853627220	I don't use a tablet computer	
3853269579	I don't use a tablet computer	
3853179710	I have been using for less than a year	
3848999317	I don't use a tablet computer	
3847103154	I don't use a tablet computer	
3845684674	I have been using for less than a year	
3845447408	I have been using for ___ years	2
3844847491	I have been using for ___ years	6
3844360977	I don't use a tablet computer	
3844236222	I don't use a tablet computer	

3844232462	I have been using for ___ years	2
3844138637	I don't use a tablet computer	
3844055790	I don't use a tablet computer	
3843935898	I have been using for less than a year	
3843931544	I don't use a tablet computer	
3843911811	I have been using for ___ years	3
3843804662	I don't use a tablet computer	
3843766328	I have been using for less than a year	
3843760219	I have been using for ___ years	5
3843744801	I have been using for ___ years	2
3843734569	I have been using for less than a year	
3843716341	I have been using for less than a year	
3843712724	I have been using for ___ years	2
3843674785	I have been using for ___ years	2
3843623603	I have been using for less than a year	
3843612922	I don't use a tablet computer	
3843608317	I don't use a tablet computer	
3843605819	I have been using for less than a year	
3843604500	I don't use a tablet computer	
3843603283	I have been using for ___ years	7
3843590935	I don't use a tablet computer	
3843584691	I have been using for ___ years	3
3843566558	I have been using for ___ years	6
3843563669	I have been using for less than a year	
3843558483	I have been using for ___ years	3
3843546559	I have been using for ___ years	3
3843527212	I have been using for ___ years	3
4058991282	I don't use a tablet computer	
4058988558	I have been using for _____ years	8
4058970974	I have been using for _____ years	1
4058966399	I have been using for _____ years	2
4058961408	I have been using for _____ years	4
4058958230	I have been using for _____ years	3
4058954419	I have been using for _____ years	3
4058949738	I have been using for _____ years	1
4058944768	I have been using for _____ years	6
4058940279	I have been using for _____ years	2
4058928337	I have been using for _____ years	2
4058925829	I have been using for _____ years	3
4058295828	I have been using for _____ years	5
4058285308	I don't use a tablet computer	
4058276966	I have been using for _____ years	3
4058264705	I don't use a tablet computer	
4058256269	I have been using for _____ years	4
4058248054	I have been using for _____ years	3
4058240982	I have been using for _____ years	1
4057536878	I have been using for _____ years	8
4057526407	I have been using for _____ years	9
4057507742	I have been using for _____ years	2
4057471823	I have been using for _____ years	4
4057460212	I have been using for _____ years	3
4057442304	I have been using for _____ years	2
4057423702	I have been using for less than a year	
4057364669	I have been using for less than a year	
4057347523	I have been using for _____ years	2

4057335898	I have been using for _____ years	2
4057317286	I don't use a tablet computer	
4057304812	I don't use a tablet computer	
4057273462	I have been using for _____ years	6
4057253149	I don't use a tablet computer	
4057238269	I have been using for _____ years	2
4057216892	I have been using for less than a year	
4057172013	I have been using for less than a year	
4057160934	I have been using for _____ years	5
4057015182	I have been using for _____ years	5
4057002543	I don't use a tablet computer	
4056994599	I don't use a tablet computer	
4056988375	I have been using for _____ years	2
4056982171	I have been using for _____ years	2
4056976704	I have been using for _____ years	1
4056969438	I don't use a tablet computer	
4056963885	I have been using for _____ years	2
4056956531	I have been using for _____ years	10
4056948732	I have been using for _____ years	6
4056941323	I have been using for less than a year	
4056928489	I have been using for _____ years	2
4056918542	I have been using for _____ years	1
4056912185	I have been using for _____ years	1
4056906655	I have been using for _____ years	1
4056901873	I have been using for less than a year	

Table B2-1. SS-CMDQ scores for all respondent students for determining the ones under higher risk than the other students involved in the study

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
4016327570	40	90	0	1,5	0	0	0	10	0	0	1,5	0	0	0	0	0	0	0	0	0	0	143
4016323071	3,5	0	3,5	0	0	0	0	0	3,5	0	3,5	0	0	0	0	0	0	0	0	0	0	14
4016319090	0	6	0	3	0	6	0	0	0	3,5	0	0	0	0	0	0	0	0	0	0	0	18,5
4016311412	7	7	0	0	3	0	0	0	0	20	4,5	3	0	0	0	0	0	0	0	0	0	44,5
4016307251	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4016303216	3	14	0	1,5	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	58,5
4016296167	0	3	0	1,5	1,5	0	0	0	0	0	3	0	1,5	0	0	0	0	0	0	0	0	10,5
4016290910	7	40	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	48,5
4016286833	7	0	14	0	0	0	0	0	1,5	0	0	0	1,5	0	0	0	0	0	0	0	0	24
4016172184	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4016165993	3	0	0	10	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	13
4016160969	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	40
4016154648	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4012804018	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
4012797964	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	6	0	0	0	0	12
4012790555	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
4012782011	1,5	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	14	14	0	7,5
4012730725	1,5	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	14	14	0	7,5
4012723554	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
4012656140	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
4012651160	0	0	0	0	0	0	1,5	0	0	0	0	0	0	1,5	1,5	1,5	0	0	1,5	1,5	0	1,5
4012644259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand / fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score
4012637005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	1,5	0	0	1,5	1,5	0
4012633162	0	3	3	30	0	0	3	3	0	0	0	0	0	0	3	3	0	0	7	10	42
4012624811	0	10	0	0	0	0	0	10	0	10	0	0	0	0	5	0	0	0	10	0	30
4012617660	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
4012614159	3	0	0	3	0	0	1,5	0	0	0	0	0	0	1,5	0	0	0	0	0	0	7,5
4012508792	10	0	0	3	0	0	3,5	0	0	0	0	1,5	1,5	0	1,5	0	3	1,5	0	0	19,5
4012498640	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	1,5	0
4012491488	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4012485284	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4012473633	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4012469464	9	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	0	0	0	0	9
4012466160	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	1,5	0	0	0	1,5
4012460658	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	3	3	0	0	0	0	1,5
4012455947	0	0	0	0	0	0	1,5	0	0	3	0	0	0	0	0	0	0	0	0	0	4,5
4012430576	3,5	1,5	1,5	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6,5
4012426652	0	0	1,5	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	4,5
4012406783	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4012399710	7	0	0	60	0	0	6	0	0	3	0	0	0	14	30	3	3	0	0	0	76
4004970129	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20
4004963506	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
4004957167	1,5	1,5	1,5	1,5	0	0	0	1,5	1,5	3,5	3,5	3,5	3,5	0	0	0	1,5	1,5	1,5	1,5	23
4004945257	0	0	0	0	0	0	3	0	0	1,5	1,5	3	0	0	0	0	0	0	0	0	9
4004934437	7	3	0	1,5	0	0	3	0	0	0	0	1,5	1,5	0	1,5	1,5	3	0	1,5	1,5	17,5

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
4004921493	<1	0	0	3	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
4004914674	1,5	1,5	0	0	0	0	1,5	0	0	0	0	0	0	3	0	0	6	6	0	0	0	4,5
4004905832	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
4004899412	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4004891212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4004885248	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4004879116	1,5	10	10	10	0	1,5	0	3	1,5	0	0	0	0	0	3,5	3,5	1,5	1,5	0	0	0	37,5
3992329563	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	14	0	0	0	0	3
3991552998	0	0	0	0	1,5	0	0	0	0	1,5	0	1,5	1,5	0	0	0	1,5	1,5	0	0	0	6
3991524993	3,5	3,5	3,5	10	0	0	20	5	5	5	5	5	5	0	1,5	1,5	1,5	1,5	0	0	0	70,5
3991510154	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
3991501190	60	0	0	9	0	0	90	0	0	0	0	0	0	30	10	10	0	0	0	0	0	159
3991488370	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
3991475073	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3991225783	1,5	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	1,5	1,5	0	0	0	21,5
3991219753	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3991212143	1,5	0	0	1,5	1,5	0	1,5	1,5	0	1,5	0	0	0	0	0	0	0	0	0	0	0	9
3991206524	1,5	9	9	90	0	0	0	0	0	0	0	0	0	0	1,5	1,5	14	14	14	14	0	109,5
3991199746	0	0	0	1,5	0	0	1,5	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	4,5
3990101142	40	20	20	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
3990078514	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3990065394	3,5	0	0	60	0	0	20	0	0	6	6	0	0	3,5	7	7	7	7	20	0	0	95,5
3990050548	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand / fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3990036940	1,5	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3990028350	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3990016288	3,5	0	0	10	0	0	10	0	0	0	0	0	0	0	10	10	0	0	10	10	23,5	
3989314032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3989303005	0	0	0	1,5	0	0	1,5	0	0	1,5	1,5	0	0	0	0	0	0	0	0	0	0	6
3989271549	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
3989221063	7	1,5	1,5	1,5	0	0	1,5	1,5	0	0	0	0	0	3	0	0	0	0	0	0	0	14,5
3987326905	0	0	0	0	0	3,5	0	0	7	0	3	0	3	0	0	0	0	0	0	0	0	16,5
3987319596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3987312489	3	1,5	1,5	20	0	0	20	0	0	3	1,5	1,5	1,5	1,5	1,5	1,5	0	0	3	3	53,5	
3987278903	7	3	3	14	0	0	14	0	0	3	0	0	0	0	0	1,5	0	1,5	1,5	0	44	
3987270618	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3987265971	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3987138863	3,5	3,5	7	7	0	15	10	0	0	5	0	10,5	3	3,5	3,5	3,5	7	0	10	10	64,5	
3987119797	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3987103718	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3987095737	0	0	0	1,5	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3987091706	0	0	0	0	0	0	10,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,5
3987088444	1,5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3987083033	1,5	0	0	7	0	0	0	0	0	0	0	0	0	3,5	0	0	0	0	0	0	0	8,5
3968572950	0	0	0	0	0	0	3	0	0	0	0	3,5	10	0	3,5	3,5	0	0	7	7	16,5	
3968557021	0	0	0	0	3	3	60	3	3	0	0	0	0	0	3	3	3,5	1,5	7	3	72	
3968537814	10	9	9	90	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	158	

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3968522980	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3968507520	7	0	0	1,5	7	3	10	7	7	1,5	1,5	0	0	0	0	0	7	7	0	0	0	45,5
3968424226	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
3968393898	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3968040530	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	1,5
3968033599	0	0	0	0	3,5	0	0	0	0	0	0	3,5	3,5	0	3,5	0	0	0	0	0	0	10,5
3968016333	0	0	0	1,5	0	0	0	21	0	0	0	0	0	3,5	0	0	3	0	0	3,5	3,5	22,5
3968006605	3	0	0	0	3	3	3	0	0	0	0	0	0	1,5	7	7	0	0	3,5	3,5	12	
3968000019	1,5	7	7	0	0	0	21	0	0	0	0	6	3	14	0	0	0	0	0	0	0	45,5
3957258512	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3934852622	1,5	0	0	0	0	0	1,5	1,5	1,5	0	0	0	0	0	3,5	3,5	0	0	1,5	1,5	6	
3934129822	1,5	0	0	1,5	0	0	1,5	0	0	1,5	1,5	1,5	0	3	10	10	1,5	0	30	30	9	
3932105563	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3931234753	7	3	14	21	0	0	21	0	0	0	1,5	0	7	1,5	1,5	1,5	0	0	1,5	1,5	74,5	
3931175964	6	3	1,5	6	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19,5
3931133172	0	0	0	4,5	0	0	4,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3930994714	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3930804586	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3930749449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3930697280	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3930445230	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3930068383	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	3,5	0	0	1,5	0	0	0
3929872863	0	0	0	0	0	3,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,5

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3929691190	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	
3929382688	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0
3913097202	0	0	0	0	0	0	0	0	0	13,5	0	0	0	0	0	0	0	0	0	0	13,5	
3913096620	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3913091157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3913087916	0	0	0	1,5	0	0	3	0	0	1,5	0	0	0	0	0	3	1,5	0	0	0	6	
3913084313	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3913082865	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3913081818	60	60	60	60	0	0	6	0	0	0	0	6	6	6	9	9	6	6	6	6	258	
3913081704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3913081489	30	30	30	15	15	15	21	21	21	0	0	4,5	9	21	0	45	9	30	21	31,5	211,5	
3913081461	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	3	3	0	
3913080016	20	0	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	40	
3913079239	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3912896144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3912892626	30	7	7	3	0	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	68	
3912890441	7	0	0	10	0	0	0	7	0	0	0	0	0	0	0	0	1,5	0	0	7	24	
3912887032	0	0	0	0	0	0	3,5	0	0	10	0	0	0	0	0	0	0	0	0	0	13,5	
3912886614	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	3	3	0	0	7	7	1,5	
3912881779	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3912880151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3912878868	0	0	1,5	0	0	0	0	0	0	0	1,5	0	0	0	1,5	0	0	3	0	0	3	
3912872911	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3912860210	0	1,5	1,5	0	0	0	0	0	0	0	0	1,5	0	0	1,5	1,5	1,5	0	0	0	0	4,5
3912859078	0	0	0	0	0	0	0	0	0	0	1,5	0	1,5	1,5	0	0	0	0	0	0	0	3
3912854606	1,5	1,5	1,5	1,5	0	0	1,5	1,5	1,5	5	5	7	7	0	0	0	0	0	3	3	3	34,5
3912854551	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912852270	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3912848038	3,5	10	10	60	0	0	10	0	0	0	0	0	0	0	0	0	10	10	0	0	0	93,5
3912847968	3	3	0	3,5	0	0	3,5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	16
3912842944	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3912794147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912790105	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	60	0	0	0	40
3912778536	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	1170
3912776656	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912776486	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912776152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912759330	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912758978	1,5	0	0	1,5	0	0	3,5	1,5	0	0	0	0	0	0	0	0	0	0	3	1,5	0	8
3912757730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912757652	0	0	0	1,5	3	3	1,5	3	3	7	0	0	0	0	7	7	3	3	1,5	1,5	0	22
3912757524	3	1,5	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
3912756711	6	10	20	21	3	6	21	0	0	0	0	0	0	14	21	7	20	30	14	7	0	87
3912755385	3	0	6	0	0	6	0	0	3	0	3	0	6	0	0	6	0	0	0	0	0	27
3912755235	5	0	0	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
3912754149	13,5	3,5	0	6	0	0	9	0	0	0	0	0	0	0	20	40	0	90	0	0	0	32

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3912753957	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912752597	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912752289	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	1,5
3912752184	0	3	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	0	0	0	4,5
3912751242	0	3	0	7	7	7	3	3	3	3	3	3	3	3	3	3	3	3	3	4,5	45	
3912750658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912749617	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3912749016	30	0	0	0	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	0	0	40
3912748143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3890043736	0	0	0	30	0	0	30	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	60
3890039997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
3890034529	1,5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,5
3889751162	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3889749232	3	3	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
3889746648	0	0	90	0	0	1,5	0	0	1,5	0	0	0	0	6	0	0	0	0	0	0	0	<u>93</u>
3889743576	40	60	1,5	3	3	3	1,5	3	3	7	7	3	3	1,5	20	20	10	10	20	20	0	<u>138</u>
3889740298	0	0	0	40	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>130</u>
3889737922	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3889665520	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3889663586	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3889662276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	0	0
3888697183	1,5	0	0	0	7	7	10	0	0	0	0	0	0	0	1,5	1,5	20	5	0	0	0	25,5
3888692963	10	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	15

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3887053010	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3887035703	0	0	0	0	0	0	1,5	0	0	1,5	0	0	0	1,5	0	0	0	0	1,5	0	0	3
3887025511	0	0	0	0	0	0	0	0	3	0	3,5	0	13,5	0	7	1,5	0	1,5	3,5	1,5	0	20
3887002730	0	1,5	1,5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3886980755	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
3886971427	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3886956905	1,5	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3886943878	3	3	3	14	14	14	14	7	7	7	7	7	7	0	0	0	0	0	0	0	0	107
3886923599	0	1,5	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6	0	13,5	13,5	0	7,5
3886897659	1,5	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3886886502	0	3	3	0	10,5	10,5	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	27
3886877969	3	0	0	3	0	0	0	0	0	1,5	0	0	0	60	0	0	0	0	0	0	0	7,5
3886863958	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886701572	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886693846	0	0	0	5	0	0	5	0	0	5	5	5	5	0	0	0	0	0	0	0	0	30
3886628016	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3886623361	0	0	0	0	0	0	1,5	0	0	1,5	0	0	0	1,5	0	0	0	0	1,5	0	0	3
3886618521	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3886613583	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3886610784	0	0	0	0	0	0	1,5	3	0	0	0	0	0	4,5	0	0	3	0	0	0	0	4,5
3886595224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886583963	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886579521	4,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3886573614	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	1,5	0	0	0	0	0	0	1,5
3886492182	1,5	0	0	1,5	0	0	1,5	0	0	0	0	1,5	1,5	0	0	0	0	0	0	0	0	7,5
3886487836	10	15	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
3886482983	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886477400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3886473563	0	0	0	0	0	0	6	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	7,5
3884642578	14	1,5	1,5	1,5	0	0	1,5	1,5	1,5	0	3	3	1,5	0	0	0	0	0	0	0	0	30,5
3884434183	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	10
3884425269	3	3	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	6
3884418684	10	0	0	10	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	30
3882735466	6	0	0	0	0	0	6	0	0	0	6	0	0	1,5	3	3	6	6	1,5	1,5	0	18
3882714719	3	3	3	14	0	0	0	0	0	0	0	31,5	31,5	0	3	3	45	45	0	0	0	86
3882149265	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3882132493	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3881402826	1,5	0	0	1,5	0	0	0	0	0	1,5	0	0	0	0	6	6	0	0	0	0	0	4,5
3881378615	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3881368250	3	14	14	3,5	3,5	3,5	1,5	0	1,5	6	0	6	3	0	1,5	1,5	0	0	0	0	0	59,5
3881357441	7	0	0	1,5	0	0	10	0	0	0	0	0	0	0	6	6	0	0	6	6	0	18,5
3881265294	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3881254139	0	1,5	0	0	0	0	1,5	0	0	6	0	6	0	0	0	3	0	0	0	0	0	15
3881237980	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3881230356	3	0	0	3	0	0	7	0	0	3	0	0	0	0	3	1,5	0	0	0	0	0	16
3881220157	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3881215195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3881210102	14	1,5	1,5	7	1,5	1,5	0	0	0	6	3	0	0	0	3	3	0	0	3	3	36	36
3881204090	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3879817918	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3879409688	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3879374635	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3879355152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3879318196	1,5	0	0	0	1,5	0	0	1,5	0	0	0	1,5	0	0	0	0	0	0	0	0	0	6
3879280118	7	0	0	0	7	0	0	0	0	40	40	14	0	0	0	0	7	7	30	30	<u>108</u>	108
3879241966	14	40	20	90	0	0	40	0	0	20	20	10	10	3	20	20	20	20	10	10	<u>264</u>	264
3879169212	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3879156353	1,5	0	0	14	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	15,5
3879114622	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3878785230	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
3878769580	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3878759308	3	0	0	3	0	0	3	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	10,5
3878753669	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3878748875	0	3,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	0	3,5
3878742830	3	0	0	0	0	0	1,5	0	0	6	0	0	0	0	0	0	6	6	0	0	0	10,5
3878737152	3,5	0	0	3,5	0	0	3,5	0	0	3,5	0	0	0	0	0	0	0	0	0	0	0	14
3878730696	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3878725762	6	0	0	6	0	0	13,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,5
3878719521	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3878713486	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3878709205	0	6	6	7	0	0	6	0	0	0	0	0	0	0	0	0	3	3	0	0	0	25
3878700132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3873328056	7	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,5
3873312445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3873301897	3	0	1,5	1,5	0	0	1,5	0	0	1,5	1,5	0	0	0	0	0	0	0	0	0	0	10,5
3873288043	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3873082048	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	3	3	0	0	0	0	0	0
3873075081	3	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3873068691	0	0	1,5	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3873056977	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6
3873049368	1,5	21	0	90	1,5	1,5	4,5	0	0	0	1,5	0	0	14	0	0	60	0	0	0	0	<u>121,5</u>
3873028210	90	0	0	0	0	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	<u>90</u>
3873020393	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	1,5
3873001235	10	0	0	7	0	0	7	0	0	3	0	3	0	0	0	0	0	0	0	0	0	30
3872993752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3872987133	0	3	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3872964285	21	9	1,5	30	9	0	90	6	0	9	0	45	1,5	20	6	0	5	3,5	6	0	0	<u>222</u>
3872953817	4,5	7	0	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>101,5</u>
3872947394	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3872939332	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	1,5	4,5	3
3872846015	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	1,5
3872841613	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score
3872837796	6	0	0	6	0	0	14	0	0	0	0	0	0	0	0	0	0	6	0	0	26
3872820378	3	0	0	0	0	0	3	0	0	0	3,5	0	0	0	0	0	0	0	0	3	9,5
3872768107	6	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18
3871255066	1,5	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	5	0	0	3
3871227626	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3871205440	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3871184697	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3871162565	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3871151654	1,5	0	0	6	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3871110433	6	0	0	14	0	0	31,5	0	0	0	0	0	0	0	0	0	0	0	0	0	51,5
3870870493	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0
3870854704	6	0	0	14	0	0	1,5	0	0	0	6	0	0	0	6	0	0	0	0	6	27,5
3870838781	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3870801193	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3868573297	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3868554028	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3868526738	0	0	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	1,5
3868509803	0	3	3	0	3	3	0	3	3	0	0	0	0	0	0	0	0	0	0	0	18
3868484667	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3868442104	1,5	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	21,5
3868422304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3868411080	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
3868391766	1,5	0	0	14	0	0	21	0	0	0	0	1,5	0	0	0	0	0	0	0	0	38

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3868375041	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3866713588	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	7
3865495924	6	20	20	90	1,5	1,5	90	1,5	0	0	0	0	0	45	0	0	0	0	0	0	0	230,5
3863418934	1,5	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3858671359	21	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
3858643095	0	0	0	7	0	0	3	0	0	1,5	0	0	0	0	0	0	0	1,5	0	0	0	11,5
3858633255	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3857438462	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3856260669	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3856248923	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3856225449	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3854605877	1,5	1,5	0	1,5	0	0	0	0	0	1,5	0	0	0	0	1,5	1,5	3	3	1,5	1,5	6	6
3853879738	3	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3853851932	1,5	0	0	3,5	0	0	0	0	0	0	0	0	0	1,5	1,5	1,5	0	0	0	0	0	5
3853830935	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3853806357	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3853715854	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
3853679395	0	6	0	14	0	0	1,5	20	3,5	6	0	0	0	7	0	3,5	0	3	7	5	51	51
3853627220	6	0	0	20	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
3853269579	3,5	0	0	3,5	0	0	3,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10,5
3853179710	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3848999317	0	0	0	1,5	0	0	3	0	0	0	0	0	0	1,5	0	0	0	0	1,5	0	0	4,5
3847103154	3	0	0	14	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	20

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
3845684674	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3845447408	20	0	0	1,5	0	0	90	0	0	0	0	0	0	3	0	0	0	0	0	0	0	<u>111,5</u>
3844847491	90	90	90	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	<u>360</u>
3844360977	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7	7
3844236222	3	1,5	1,5	15	0	3,5	30	0	0	0	0	0	0	4,5	0	0	0	0	0	0	0	54,5
3844232462	0	0	0	3,5	0	0	30	0	0	0	0	0	0	30	0	0	20	20	0	0	0	33,5
3844138637	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3844055790	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0	0	0
3843935898	0	0	0	7	1,5	0	3	0	0	1,5	0	0	0	3,5	0	0	0	0	0	0	0	13
3843931544	1,5	60	3,5	40	1,5	1,5	0	0	0	0	0	1,5	1,5	5	1,5	1,5	1,5	1,5	1,5	1,5	1,5	<u>111</u>
3843911811	1,5	10	0	40	0	0	60	0	0	3,5	0	0	0	0	0	0	0	0	0	0	0	<u>115</u>
3843804662	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
3843766328	3,5	3,5	3,5	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
3843760219	0	3	0	3,5	3	0	3,5	0	0	1,5	0	1,5	0	0	0	0	3	0	0	0	0	16
3843744801	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3843734569	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
3843716341	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40
3843712724	3	0	0	1,5	0	0	3	1,5	1,5	1,5	1,5	0	0	1,5	0	0	0	0	0	0	0	13,5
3843674785	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0
3843623603	6	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,5
3843612922	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
3843608317	1,5	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
3843605819	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)		
3843604500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3843603283	1,5	0	0	10,5	0	0	3,5	0	0	10,5	3,5	0	0	0	7	7	10,5	0	0	0	0	29,5
3843590935	0	0	0	0	0	0	21	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21
3843584691	3	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	10,5	0	0	0	4,5
3843566558	1,5	0	0	0	0	0	3,5	0	0	0	0	1,5	1,5	0	0	0	0	0	0	0	0	8
3843563669	0	90	0	0	0	0	30	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	120
3843558483	3	1,5	4,5	3,5	0	0	90	0	0	3,5	14	14	14	0	0	0	0	0	0	0	0	148
3843546559	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3843527212	0	1,5	0	1,5	0	0	1,5	0	0	0	0	0	0	0	1,5	1,5	0	0	0	0	0	4,5
4058991282	3,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,5
4058988558	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4058970974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0
4058966399	0	0	0	30	0	0	0	6	6	7	7	0	0	0	0	0	1,5	9	0	0	0	56
4058961408	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
4058958230	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
4058954419	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
4058949738	0	3,5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	30	0	0	6,5
4058944768	1,5	1,5	1,5	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,5
4058940279	0	14	0	14	3,5	3,5	0	1,5	1,5	3	3	0	0	0	0	0	0	0	0	0	0	44
4058928337	3	0	9	0	0	0	0	0	3,5	1,5	3,5	1,5	3,5	0	0	0	0	0	0	0	0	25,5
4058925829	0	0	0	1,5	0	0	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	3
4058295828	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4058285308	0	3	0	3	0	0	7	7	7	3	0	0	0	0	0	0	0	0	1,5	1,5	0	30

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score
4058276966	0	0	0	1,5	0	0	1,5	0	0	3	0	3	0	0	1,5	1,5	0	0	0	0	9
4058264705	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4058256269	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
4058248054	0	14	1,5	6	6	0	0	20	0	20	3	1,5	0	0	0	0	3	3	0	0	72
4058240982	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057536878	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057526407	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
4057507742	3	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
4057471823	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057460212	0	0	0	4,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	6
4057442304	1,5	0	0	1,5	0	0	1,5	0	0	1,5	0	0	1,5	0	0	7	0	1,5	0	0	7,5
4057423702	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057364669	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057347523	0	0	0	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	14	0	28
4057335898	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4057317286	10	0	0	10	0	0	10	0	0	0	0	0	0	10	0	0	0	0	0	0	30
4057304812	3	3	0	40	0	0	0	3	3	10	0	10	0	10	0	0	4,5	4,5	0	0	72
4057273462	3	40	6	40	0	0	0	0	0	13,5	0	7	0	0	0	0	3,5	3,5	0	0	109,5
4057253149	6	21	0	0	3,5	7	3,5	3,5	3,5	0	0	0	0	0	0	0	0	0	0	0	48
4057238269	0	0	0	14	0	0	14	0	0	1,5	0	0	0	3	0	0	0	0	0	0	29,5
4057216892	14	14	3,5	1,5	0	1,5	1,5	3,5	1,5	0	1,5	3	0	0	0	0	3	3	0	0	45,5
4057172013	0	0	0	0	1,5	1,5	0	3	3	0	0	0	0	0	0	0	0	0	0	0	9
4057160934	3,5	14	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	20,5

	Neck	Shoulder (right)	Shoulder (left)	Upper back	Upper arm (right)	Upper arm (left)	Lower back	Forearm (right)	Forearm (left)	Wrist (right)	Wrist (left)	Hand / fingers (right)	Hand/ fingers (left)	Hip / Buttocks	Thigh (right)	Thigh (left)	Knee (right)	Knee (left)	Lower leg (right)	Lower leg (left)	SS-CMDQ score	
4057015182	14	0	1,5	90	0	0	90	9	9	0	0	0	0	0	1,5	0	14	14	1,5	1,5	213,5	
4057002543	1,5	3,5	0	14	0	0	40	0	0	0	0	40	20	0	0	0	0	0	0	0	0	119
4056994599	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0
4056988375	0	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4056982171	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4056976704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4056969438	0	0	0	0	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5
4056963885	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
4056956531	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	10,5	0	7	0	0	0
4056948732	1,5	0	0	1,5	0	0	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,5
4056941323	0	0	7	10	1,5	0	7	0	10,5	3	0	5	7	0	1,5	0	0	0	15	0	0	51
4056928489	10	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	15
4056918542	1,5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,5	1,5	0	0	0	1,5
4056912185	0	0	0	5	0	0	10	0	0	0	0	0	0	0	5	5	5	5	0	0	0	15
4056906655	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
4056901873	6	0	0	1,5	0	0	0	0	0	4,5	0	4,5	9	0	0	9	3	0	0	0	0	25,5
SS-CMDQ score	1477,5	1213	694	2071,5	240,5	250	2049,5	350,5	228,5	498	311,5	395,5	328	636	461	450,5	595	621	517,5	455		

Table B2-2. Upper body regions with highest discomfort/risk scores (contributions of each respondent to these scores are also presented)

	4016327570	4016323071	4016319090	4016311412	4016307251	4016303216	4016296167	4016290910
Neck	40	3,5	0	7	0	3	0	7
Shoulder (right)	90	0	6	7	0	14	3	40
Upper back	1,5	0	3	0	0	1,5	1,5	0
Lower back	0	0	0	0	0	0	0	0
Forearm	10	0	0	0	0	0	0	0
Wrist	0	0	3,5	20	0	40	0	1,5

	4016286833	4016172184	4016165993	4016160969	4016154648	4012804018	4012797964	4012790555
Neck	7	0	3	0	0	0	0	0
Shoulder (right)	0	0	0	0	0	20	0	0
Upper back	0	0	10	0	0	0	6	6
Lower back	0	0	0	0	0	0	6	6
Forearm	0	0	0	40	0	0	0	0
Wrist	0	0	0	0	0	0	0	0

	4012782011	4012730725	4012723554	4012656140	4012651160	4012644259	4012637005	4012633162
Neck	1,5	1,5	0	1,5	0	0	0	0
Shoulder (right)	0	0	0	0	0	0	0	3
Upper back	0	0	6	0	0	0	0	30
Lower back	0	0	6	0	1,5	0	0	3
Forearm	0	0	0	0	0	0	0	0
Wrist	3	3	0	0	0	0	0	0

	4012624811	4012617660	4012614159	4012508792	4012498640	4012491488	4012485284	4012473633
Neck	0	0	3	10	0	0	1,5	0
Shoulder (right)	10	0	0	0	0	0	0	0
Upper back	0	0	3	3	0	0	1,5	0
Lower back	0	0	1,5	3,5	0	0	0	0
Forearm	10	0	0	0	0	0	0	0
Wrist	10	0	0	0	0	0	0	0

	4012469464	4012466160	4012460658	4012455947	4012430576	4012426652	4012406783	4012399710
Neck	9	0	0	0	3,5	0	0	7
Shoulder (right)	0	0	0	0	1,5	0	0	0
Upper back	0	0	0	0	0	0	0	60
Lower back	0	0	0	1,5	0	0	0	6
Forearm	0	0	0	0	0	0	0	0
Wrist	0	1,5	0	3	0	0	0	3

	4004970129	4004963506	4004957167	4004945257	4004934437	4004921493	4004914674	4004905832
Neck	0	0	1,5	0	7	6	1,5	3
Shoulder (right)	0	0	1,5	0	3	0	1,5	0
Upper back	0	0	1,5	0	1,5	3	0	0
Lower back	20	0	0	3	3	21	1,5	3
Forearm	0	0	1,5	0	0	0	0	0
Wrist	0	0	3,5	1,5	0	0	0	0

	4004899412	4004891212	4004885248	4004879116	3992329563	3991552998	3991524993	3991510154
Neck	0	0	0	1,5	0	0	3,5	14
Shoulder (right)	0	0	0	10	0	0	3,5	0
Upper back	3	0	0	10	1,5	0	10	0
Lower back	0	0	0	0	1,5	0	20	0
Forearm	0	0	0	3	0	0	5	0
Wrist	0	0	0	0	0	1,5	5	0

	3991501190	3991488370	3991475073	3991225783	3991219753	3991212143	3991206524	3991199746
Neck	60	0	0	1,5	0	1,5	1,5	0
Shoulder (right)	0	0	0	0	0	0	9	0
Upper back	9	0	0	20	0	1,5	90	1,5
Lower back	90	40	0	0	0	1,5	0	1,5
Forearm	0	0	0	0	0	1,5	0	0
Wrist	0	0	0	0	0	1,5	0	0

	3990101142	3990078514	3990065394	3990050548	3990036940	3990028350	3990016288	3989314032
Neck	40	0	3,5	0	1,5	0	3,5	0
Shoulder (right)	20	0	0	0	0	1,5	0	0
Upper back	0	0	60	0	0	0	10	0
Lower back	40	0	20	0	0	0	10	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	6	0	0	0	0	0

	3989303005	3989271549	3989221063	3987326905	3987319596	3987312489	3987278903	3987270618
Neck	0	10	7	0	0	3	7	0
Shoulder (right)	0	0	1,5	0	0	1,5	3	0
Upper back	1,5	10	1,5	0	0	20	14	5
Lower back	1,5	0	1,5	0	0	20	14	0
Forearm	0	0	1,5	0	0	0	0	0
Wrist	1,5	0	0	0	0	3	3	0

	3987265971	3987138863	3987119797	3987103718	3987095737	3987091706	3987088444	3987083033
Neck	0	3,5	0	0	0	0	1,5	1,5
Shoulder (right)	0	3,5	3	0	0	0	3	0
Upper back	0	7	0	0	1,5	0	0	7
Lower back	0	10	0	0	3	10,5	0	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	5	0	0	0	0	0	0

	3968572950	3968557021	3968537814	3968522980	3968507520	3968424226	3968393898	3968040530
Neck	0	0	10	0	7	0	0	0
Shoulder (right)	0	0	9	0	0	0	0	0
Upper back	0	0	90	0	1,5	0	0	0
Lower back	3	60	40	0	10	0	0	0
Forearm	0	3	0	0	7	0	0	0
Wrist	0	0	0	0	1,5	0	0	1,5

	3968033599	3968016333	3968006605	3968000019	3957258512	3934852622	3934129822	3932105563
Neck	0	0	3	1,5	0	1,5	1,5	6
Shoulder (right)	0	0	0	7	1,5	0	0	0
Upper back	0	1,5	0	0	0	0	1,5	0
Lower back	0	0	3	21	0	1,5	1,5	0
Forearm	0	21	0	0	0	1,5	0	0
Wrist	0	0	0	0	0	0	1,5	0

	3931234753	3931175964	3931133172	3930994714	3930804586	3930749449	3930697280	3930445230
Neck	7	6	0	0	0	0	0	0
Shoulder (right)	3	3	0	0	0	0	0	0
Upper back	21	6	4,5	0	1,5	0	0	0
Lower back	21	3	4,5	0	1,5	0	0	0
Forearm	0	0	0	0	0	0	0	3
Wrist	0	0	0	0	0	0	0	0

	3930068383	3929872863	3929691190	3929382688	3913097202	3913096620	3913091157	3913087916
Neck	0	0	0	0	0	0	0	0
Shoulder (right)	0	0	0	0	0	0	0	0
Upper back	0	0	0	0	0	0	0	1,5
Lower back	0	0	0	0	0	0	0	3
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	14	0	0	1,5

	3913084313	3913082865	3913081818	3913081704	3913081489	3913081461	3913080016	3913079239
Neck	0	0	60	0	30	0	20	0
Shoulder (right)	0	0	60	0	30	0	0	0
Upper back	0	0	60	0	15	0	10	0
Lower back	0	0	6	0	21	0	10	0
Forearm	0	0	0	0	21	0	0	0
Wrist	0	0	0	0	0	0	0	0

	3912896144	3912892626	3912890441	3912887032	3912886614	3912881779	3912880151	3912878868
Neck	0	30	7	0	0	0	0	0
Shoulder (right)	0	7	0	0	0	0	0	0
Upper back	0	3	10	0	1,5	0	0	0
Lower back	0	21	0	3,5	0	0	0	0
Forearm	0	0	7	0	0	0	0	0
Wrist	0	0	0	10	0	0	0	0

	3912872911	3912860210	3912859078	3912854606	3912854551	3912852270	3912848038	3912847968
Neck	0	0	0	1,5	0	0	3,5	3
Shoulder (right)	0	1,5	0	1,5	0	0	10	3
Upper back	0	0	0	1,5	0	6	60	3,5
Lower back	0	0	0	1,5	0	0	10	3,5
Forearm	0	0	0	1,5	0	0	0	0
Wrist	0	0	0	5	0	0	0	0

	3912842944	3912794147	3912790105	3912778536	3912776656	3912776486	3912776152	3912759330
Neck	1,5	0	40	90	0	0	0	0
Shoulder (right)	0	0	0	90	0	0	0	0
Upper back	0	0	0	90	0	0	0	0
Lower back	0	0	0	90	0	0	0	0
Forearm	0	0	0	90	0	0	0	0
Wrist	0	0	0	90	0	0	0	0

	3912758978	3912757730	3912757652	3912757524	3912756711	3912755385	3912755235	3912754149
Neck	1,5	0	0	3	6	3	5	13,5
Shoulder (right)	0	0	0	1,5	10	0	0	3,5
Upper back	1,5	0	1,5	0	21	0	10	6
Lower back	3,5	0	1,5	0	21	0	10	9
Forearm	1,5	0	3	0	0	0	0	0
Wrist	0	0	7	0	0	0	0	0

	3912753957	3912752597	3912752289	3912752184	3912751242	3912750658	3912749617	3912749016
Neck	0	0	0	0	0	0	0	30
Shoulder (right)	0	0	0	3	3	0	0	0
Upper back	0	0	0	0	7	0	0	0
Lower back	0	0	0	0	3	0	0	7
Forearm	0	0	0	0	3	0	0	0
Wrist	0	0	1,5	0	3	0	0	0

	3912748143	3890043736	3890039997	3890034529	3889751162	3889749232	3889746648	3889743576
Neck	0	0	0	1,5	0	3	0	40
Shoulder (right)	0	0	0	0	0	3	0	60
Upper back	0	30	0	0	0	3	0	3
Lower back	0	30	0	0	0	3	0	1,5
Forearm	0	0	0	0	0	0	0	3
Wrist	0	0	0	0	0	0	0	7

	3889740298	3889737922	3889665520	3889663586	3889662276	3888697183	3888692963	3887053010
Neck	0	0	0	0	0	1,5	10	0
Shoulder (right)	0	0	0	0	0	0	0	0
Upper back	40	0	0	0	0	0	5	0
Lower back	90	0	0	0	0	10	0	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	0	0	0	0

	3887035703	3887025511	3887002730	3886980755	3886971427	3886956905	3886943878	3886923599
Neck	0	0	0	0	0	1,5	3	0
Shoulder (right)	0	0	1,5	0	0	1,5	3	1,5
Upper back	0	0	0	0	7	0	14	3
Lower back	1,5	0	0	0	0	0	14	0
Forearm	0	0	0	0	0	0	7	0
Wrist	1,5	0	0	0	0	0	7	0

	3886897659	3886886502	3886877969	3886863958	3886701572	3886693846	3886628016	3886623361
Neck	1,5	0	3	0	0	0	0	0
Shoulder (right)	0	3	0	0	0	0	0	0
Upper back	0	0	3	0	0	5	3	0
Lower back	1,5	0	0	0	0	5	3	1,5
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	1,5	0	0	5	0	1,5

	3886618521	3886613583	3886610784	3886595224	3886583963	3886579521	3886573614	3886492182
Neck	0	0	0	0	0	4,5	0	1,5
Shoulder (right)	0	0	0	0	0	0	0	0
Upper back	0	0	0	0	0	0	0	1,5
Lower back	0	1,5	1,5	0	0	0	0	1,5
Forearm	0	3	3	0	0	0	0	0
Wrist	0	0	0	0	0	0	1,5	0

	3886487836	3886482983	3886477400	3886473563	3884642578	3884434183	3884425269	3884418684
Neck	10	0	0	0	14	0	3	10
Shoulder (right)	15	0	0	0	1,5	0	3	0
Upper back	7	0	0	0	1,5	0	0	10
Lower back	0	0	0	6	1,5	0	0	0
Forearm	0	0	0	0	1,5	0	0	0
Wrist	0	0	0	1,5	0	0	0	0

	3882735466	3882714719	3882149265	3882132493	3881402826	3881378615	3881368250	3881357441
Neck	6	3	0	0	1,5	0	3	7
Shoulder (right)	0	3	0	0	0	0	14	0
Upper back	0	14	0	1,5	1,5	0	3,5	1,5
Lower back	6	0	0	0	0	0	1,5	10
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	1,5	0	6	0

	3881265294	3881254139	3881237980	3881230356	3881220157	3881215195	3881210102	3881204090
Neck	3	0	1,5	3	1,5	0	14	0
Shoulder (right)	0	1,5	0	0	0	0	1,5	0
Upper back	0	0	1,5	3	1,5	0	7	0
Lower back	0	1,5	0	7	0	0	0	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	6	0	3	0	0	6	0

	3879817918	3879409688	3879374635	3879355152	3879318196	3879280118	3879241966	3879169212
Neck	1,5	0	0	0	1,5	7	14	0
Shoulder (right)	0	0	0	0	0	0	40	0
Upper back	0	0	0	0	0	0	90	1,5
Lower back	0	3	0	0	0	0	40	1,5
Forearm	0	0	0	0	1,5	0	0	0
Wrist	0	0	0	0	0	40	20	0

	3879156353	3879114622	3878785230	3878769580	3878759308	3878753669	3878748875	3878742830
Neck	1,5	0	10	5	3	0	0	3
Shoulder (right)	0	0	0	0	0	0	3,5	0
Upper back	14	1,5	0	5	3	0	0	0
Lower back	0	1,5	0	0	3	0	0	1,5
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	0	0	0	6

	3878737152	3878730696	3878725762	3878719521	3878713486	3878709205	3878700132	3873328056
Neck	3,5	0	6	0	0	0	0	7
Shoulder (right)	0	0	0	0	0	6	0	0
Upper back	3,5	0	6	0	0	7	0	0
Lower back	3,5	0	13,5	0	0	6	0	1,5
Forearm	0	0	0	0	0	0	0	0
Wrist	3,5	0	0	0	0	0	0	0

	3873312445	3873301897	3873288043	3873082048	3873075081	3873068691	3873056977	3873049368
Neck	0	3	0	0	3	0	0	1,5
Shoulder (right)	0	0	0	0	0	0	0	21
Upper back	0	1,5	0	0	3	0	0	90
Lower back	0	1,5	0	0	3	0	6	4,5
Forearm	0	0	0	0	0	1,5	1,5	0
Wrist	0	1,5	0	0	0	0	0	0

	3873028210	3873020393	3873001235	3872993752	3872987133	3872964285	3872953817	3872947394
Neck	90	1,5	10	0	0	21	4,5	0
Shoulder (right)	0	0	0	0	3	9	7	0
Upper back	0	0	7	0	0	30	90	0
Lower back	0	0	7	0	0	90	0	0
Forearm	0	0	0	0	0	6	0	0
Wrist	0	0	3	0	0	9	0	0

	3872939332	3872846015	3872841613	3872837796	3872820378	3872768107	3871255066	3871227626
Neck	0	1,5	0	6	3	6	1,5	0
Shoulder (right)	0	0	0	0	0	0	0	0
Upper back	0	0	0	6	0	6	0	0
Lower back	0	0	0	14	3	6	1,5	0
Forearm	0	0	0	0	0	0	0	0
Wrist	3	0	0	0	0	0	0	0

	3871205440	3871184697	3871162565	3871151654	3871110433	3870870493	3870854704	3870838781
Neck	0	0	3	1,5	6	0	6	0
Shoulder	0	0	0	0	0	0	0	0
Upper back	0	0	0	6	14	0	14	0
Lower back	0	0	0	1,5	31,5	0	1,5	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	0	0	0	0

	3870801193	3868573297	3868554028	3868526738	3868509803	3868484667	3868442104	3868422304
Neck	0	0	0	0	0	0	1,5	0
Shoulder (right)	0	0	0	0	3	0	0	0
Upper back	0	0	0	0	0	0	0	0
Lower back	0	0	0	0	0	0	20	0
Forearm	0	0	0	0	3	0	0	0
Wrist	0	0	0	0	0	0	0	0

	3868411080	3868391766	3868375041	3866713588	3865495924	3863418934	3858671359	3858643095
Neck	21	1,5	0	7	6	1,5	21	0
Shoulder (right)	0	0	0	0	20	0	0	0
Upper back	0	14	1,5	0	90	1,5	14	7
Lower back	0	21	1,5	0	90	1,5	0	3
Forearm	0	0	0	0	1,5	0	0	0
Wrist	0	0	0	0	0	0	0	1,5

	3858633255	3857438462	3856260669	3856248923	3856225449	3854605877	3853879738	3853851932
Neck	0	0	0	0	0	1,5	3	1,5
Shoulder (right)	0	0	0	0	0	1,5	0	0
Upper back	0	3	0	0	0	1,5	0	3,5
Lower back	0	3	0	0	0	0	7	0
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	0	1,5	0	0

	3853830935	3853806357	3853715854	3853679395	3853627220	3853269579	3853179710	3848999317
Neck	0	0	0	0	6	3,5	0	0
Shoulder (right)	0	0	0	6	0	0	0	0
Upper back	0	3	0	14	20	3,5	0	1,5
Lower back	0	0	6	1,5	7	3,5	0	3
Forearm	0	0	0	20	0	0	0	0
Wrist	0	0	0	6	0	0	0	0

	3847103154	3845684674	3845447408	3844847491	3844360977	3844236222	3844232462	3844138637
Neck	3	0	20	90	0	3	0	0
Shoulder (right)	0	0	0	90	0	1,5	0	0
Upper back	14	1,5	1,5	0	0	15	3,5	3
Lower back	1,5	0	90	90	0	30	30	0
Forearm	0	0	0	0	0	0	0	0
Wrist	1,5	0	0	0	0	0	0	0

	3843527212	4058991282	4058988558	4058970974	4058966399	4058961408	4058958230	4058954419
Neck	0	3,5	0	0	0	5	0	20
Shoulder (right)	1,5	0	0	0	0	0	0	0
Upper back	1,5	0	0	0	30	0	0	0
Lower back	1,5	0	0	0	0	0	0	0
Forearm	0	0	0	0	6	0	5	0
Wrist	0	0	0	0	7	0	0	0

	4058949738	4058944768	4058940279	4058928337	4058925829	4058295828	4058285308	4058276966
Neck	0	1,5	0	3	0	0	0	0
Shoulder (right)	3,5	1,5	14	0	0	0	3	0
Upper back	0	1,5	14	0	1,5	0	3	1,5
Lower back	3	1,5	0	0	0	0	7	1,5
Forearm	0	0	1,5	0	0	0	7	0
Wrist	0	0	3	1,5	0	0	3	3

	4058264705	4058256269	4058248054	4058240982	4057536878	4057526407	4057507742	4057471823
Neck	0	1,5	0	0	0	3	3	0
Shoulder (right)	0	0	14	0	0	0	0	0
Upper back	0	0	6	0	0	3	7	0
Lower back	0	0	0	0	0	0	0	0
Forearm	0	0	20	0	0	0	0	0
Wrist	0	0	20	0	0	0	0	0

	4057460212	4057442304	4057423702	4057364669	4057347523	4057335898	4057317286	4057304812
Neck	0	1,5	0	0	0	0	10	3
Shoulder (right)	0	0	0	0	0	0	0	3
Upper back	4,5	1,5	0	0	14	0	10	40
Lower back	1,5	1,5	0	0	0	0	10	0
Forearm	0	0	0	0	0	0	0	3
Wrist	0	1,5	0	0	0	0	0	10

	4057273462	4057253149	4057238269	4057216892	4057172013	4057160934	4057015182	4057002543
Neck	3	6	0	14	0	3,5	14	1,5
Shoulder (right)	40	21	0	14	0	14	0	3,5
Upper back	40	0	14	1,5	0	0	90	14
Lower back	0	3,5	14	1,5	0	0	90	40
Forearm	0	3,5	0	3,5	3	0	9	0
Wrist	14	0	1,5	0	0	3	0	0

	4056994599	4056988375	4056982171	4056976704	4056969438	4056963885	4056956531	4056948732
Neck	0	0	0	0	0	60	0	1,5
Shoulder (right)	0	0	0	0	0	0	0	0
Upper back	0	1,5	0	0	0	0	0	1,5
Lower back	0	1,5	0	0	1,5	0	0	1,5
Forearm	0	0	0	0	0	0	0	0
Wrist	0	0	0	0	0	0	0	0

	4056941323	4056928489	4056918542	4056912185	4056906655	4056901873	Top Risk scores among all body regions included in SS-CMDQ
Neck	0	10	1,5	0	14	6	1478
Shoulder (right)	0	0	0	0	0	0	1213
Upper back	10	0	0	5	0	1,5	2072
Lower back	7	5	0	10	0	0	2050
Forearm	0	0	0	0	0	0	351
Wrist	3	0	0	0	0	4,5	498

Table B2-3. Scores of all body regions

1477,5	Neck
1213,0	Shoulder (right)
694,0	Shoulder (left)
2071,5	Upper back
240,5	Upper arm (right)
250,0	Upper arm (left)
2049,5	Lower back
350,5	Forearm (right)
228,5	Forearm (left)
498,0	Wrist (right)
311,5	Wrist (left)
395,5	Hand / fingers (right)
328,0	Hand/ fingers (left)
636,0	Hip / Buttocks
461,0	Thigh (right)
450,5	Thigh (left)
595,0	Knee (right)
621,0	Knee (left)
517,5	Lower leg (right)
455,0	Lower leg (left)

Table B2-4. Dependent variable# 1: Frequency of pain/ache/discomfort within last 7 days (*Neck*)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	,217	-,209	,066	,193	DFN	,239	-,064	-,254	,220
Sex cat	,118	-,055	,169	,121	DFH	,428	-,203	-,295	,067
Techpref cat	,151	-,195	-,172	,165	DFO	,291	,055	,150	,393
CL	,280	-,094	-,194	-,014	LFF	,005	,073	-,144	-,014
CD	-,287	,321	-,161	-,003	LFE	-,007	-,016	,145	,046
CT	-,112	-,186	,096	-,707	LFAM	,084	-,045	-,009	,030
PGL	,379	-,162	,232	-,016	LFS	-,304	,119	-,075	-,115
PGD	,053	-,204	,073	,223	LFAN	,066	-,114	-,035	,108
PGT	,118	,080	-,018	,056	LFI	-,091	-,106	-,195	-,128
WFL	-,137	,109	-,185	,190	LFC	-,251	-,241	,003	,183
WFD	,484	,167	,114	-,073	LFN	,130	,085	,051	-,182
WFT	,134	-,095	-,225	,038	LFH	,009	,042	,045	-,109
SOSL	-,091	,225	,340	,102	LFO	,134	-,134	-,123	-,226
SOSD	,007	,187	,257	,317	TFF	-,270	,040	-,153	-,281
SOST	-,126	,141	-,131	,119	TFE	,046	,051	,175	,048
SASL	,123	,018	-,010	-,087	TFAM	-,050	-,130	,035	-,033
SASD	,094	,111	,162	-,070	TFS	-,010	-,210	-,213	-,101
SAST	,175	-,200	-,237	-,140	TFAN	,262	,113	,007	,025
ISL	-,225	,179	-,015	-,109	TFI	,366	-,165	-,193	,045
ISD	,233	-,135	,186	-,277	TFC	,408	-,036	,314	-,080
IST	-,066	-,216	,232	,380	TFN	-,266	,091	-,048	,384
RL	,013	-,027	,088	-,164	TFH	,189	,079	,266	,128
RD	-,244	,007	-,385	-,061	TFO	,145	,291	,372	-,025
RT	,342	-,055	,253	,442	Yes/No	,390	-,484	,255	-,196
WL	-,085	-,286	-,087	-,128	AIH	-,134	,235	-,369	,348
WD	-,196	,059	-,432	-,163	AIN	,211	-,096	-,020	,082
WT	-,277	,138	,096	,069	AIS	-,284	,184	-,063	-,229
DPOMU	,158	,261	,090	-,087	AIUB	-,341	,266	-,060	-,054
LPOMU	-,048	-,163	,086	,004	AIE	,002	,058	-,021	,251
YODU	-,183	-,101	-,011	,090	AIA	,175	-,111	-,019	-,137
YOLU	-,031	,249	-,026	-,023	AIWH	-,039	,228	,032	,038
YOTU	-,210	,429	,083	-,167	AIB	,240	-,223	-,073	-,308
DLC	-,370	-,220	,136	,243	AILB	-,035	,117	-,072	,334
DFE	-,116	,049	,050	-,204	AIH	,185	-,382	,022	,235
DFE	,069	-,100	,424	-,010	AIG	-,184	-,201	,143	-,532
DFA	,190	,067	-,191	,035	AIL	-,254	,180	,176	,057
DFS	-,036	-,127	-,042	,282	AIK	,038	,179	-,150	-,222
DFA	-,149	,172	-,077	-,151	AIAF	,113	,294	,041	,391
DFI	,246	,169	-,126	-,146	LHSPU	,081	-,357	,093	-,216
DFC	,091	-,078	,103	,274					

Table B2-5. Dependent variable# 2: Frequency of pain/ache/discomfort within last 7 days (*Shoulder*)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	,217	-,209	,066	,193	DFN	,097	-,064	,082	,057
Sex cat	,118	-,055	,169	,121	DFH	-,013	,294	,053	-,155
Techpref cat	,151	-,195	-,172	,165	DFO	-,069	-,007	-,161	-,021
CL	,280	-,094	-,194	-,014	LFF	,094	,055	,235	,109
CD	-,287	,321	-,161	-,003	LFE	,032	-,114	,022	,167
CT	-,112	-,186	,096	-,707	LFAM	-,022	,200	-,321	-,017
PGL	,379	-,162	,232	-,016	LFS	-,088	-,064	-,092	-,123
PGD	,053	-,204	,073	,223	LFAN	,013	,115	,407	-,049
PGT	,118	,080	-,018	,056	LFI	-,273	,412	-,072	-,032
WFL	-,137	,109	-,185	,190	LFC	-,056	-,251	,088	,031
WFD	,484	,167	,114	-,073	LFN	,331	-,048	,110	-,021
WFT	,134	-,095	-,225	,038	LFH	-,265	,140	,037	-,118
SOSL	-,091	,225	,340	,102	LFO	,022	,264	,020	,031
SOSD	,007	,187	,257	,317	TFF	-,031	-,172	-,157	,155
SOST	-,126	,141	-,131	,119	TFE	,013	,114	-,407	-,117
SASL	,123	,018	-,010	-,087	TFAM	-,098	-,210	,364	-,139
SASD	,094	,111	,162	-,070	TFS	-,047	-,041	,028	,081
SAST	,175	-,200	-,237	-,140	TFAN	,012	,025	-,237	,221
ISL	-,225	,179	-,015	-,109	TFI	-,014	,141	,301	-,094
ISD	,233	-,135	,186	-,277	TFC	,430	,088	,097	-,004
IST	-,066	-,216	,232	,380	TFN	-,008	,016	-,053	-,164
RL	,013	-,027	,088	-,164	TFH	,174	,051	,086	-,029
RD	-,244	,007	-,385	-,061	TFO	,174	,055	-,037	,106
RT	,342	-,055	,253	,442	Yes/No	,106	,112	,301	,176
WL	-,085	-,286	-,087	-,128	AIH	-,032	-,131	,024	-,451
WD	-,196	,059	-,432	-,163	AIN	-,272	-,226	,300	-,013
WT	-,277	,138	,096	,069	AIS	,539	,423	-,369	-,232
DPOMU	,158	,261	,090	-,087	AIUB	,447	-,190	-,219	,107
LPOMU	-,048	-,163	,086	,004	AIE	-,322	,008	,190	-,219
YODU	-,183	-,101	-,011	,090	AIA	,158	,175	-,295	,072
YOLU	-,031	,249	-,026	-,023	AIWH	-,006	-,189	-,160	,027
YOTU	-,210	,429	,083	-,167	AIB	,260	,021	-,273	-,059
DLC	-,370	-,220	,136	,243	AILB	,143	-,334	,015	,137
DFE	-,116	,049	,050	-,204	AIH	-,051	-,001	,609	,187
DFE	,069	-,100	,424	-,010	AIG	-,371	,343	-,010	,203
DFA	,190	,067	-,191	,035	AIL	-,095	-,215	,005	,312
DFS	-,036	-,127	-,042	,282	AIK	-,063	,366	-,129	,021
DFA	-,149	,172	-,077	-,151	AIAF	,250	-,122	-,296	-,266
DFI	,246	,169	-,126	-,146	LHSPU	-,088	,278	,064	-,053
DFC	,091	-,078	,103	,274					

Table B2-6. Dependent variable# 3: Frequency of pain/ache/discomfort within last 7 days Upper Back)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	-,036	,470	,099	-,115	TFF	-,018	-,179	-,275	,089
Sex cat	,080	,386	,141	,196	TFE	-,144	,019	,008	,010
Techpref cat	-,276	,090	,113	,125	TFAM	,047	,337	,174	,121
CL	-,074	,061	,008	-,002	TFS	,101	,090	-,266	-,017
CD	-,137	-,073	-,134	,278	TFAN	,183	,220	-,098	-,220
CT	-,398	,052	,202	-,231	TFI	,028	-,067	-,110	,063
PGL	,020	-,061	,340	,192	TFC	,047	,247	,085	,244
PGD	,039	,194	,361	,000	TFN	-,010	-,277	,198	-,247
PGT	,061	,230	-,133	-,159	TFH	,044	,118	,085	,063
WFL	-,112	-,092	-,238	,008	TFO	,077	,128	-,169	,080
WFD	,025	-,163	,200	-,189	Yes/No	,214	-,031	-,352	-,152
WFT	-,193	-,207	,306	-,037	AIH	-,065	-,078	,426	,266
SOSL	,313	,039	-,410	-,017	AIN	-,226	-,130	,035	,081
SOSD	,163	,081	-,224	-,041	AIS	,161	-,132	-,115	-,123
SOST	-,226	-,151	,083	-,018	AIUB	-,186	,120	,064	,022
SASL	,092	-,002	-,123	-,032	AIE	-,176	-,084	,112	,174
SASD	,294	,055	-,085	-,247	AIA	,011	-,063	,065	,148
SAST	,095	-,271	,005	-,254	AIWH	-,004	,020	-,133	-,254
ISL	,101	,010	-,091	,104	AIB	,241	-,206	,184	,076
ISD	,018	,193	,129	-,022	AILB	,212	,265	-,095	,192
IST	,134	,022	-,290	-,108	AIH	,190	-,087	-,147	-,342
RL	,201	-,316	,158	,095	AIG	-,090	,372	-,211	-,129
RD	-,191	,007	,059	-,235	AIL	-,098	,121	,130	,262
RT	,246	,070	-,269	,322	AIK	-,056	-,021	-,204	-,283
WL	-,047	,256	,126	-,101	AIAF	,060	-,174	,422	,193
WD	-,160	-,123	,183	,152	LHSPU	,196	-,338	,066	-,144
WT	-,012	-,013	,014	,150	LFI	-,008	,143	,019	,142
DPOMU	,323	-,028	,294	,285	LFC	-,074	-,145	,076	,060
LPOMU	,317	-,009	-,229	,203	LFN	,177	-,099	,056	,140
YODU	-,175	,000	-,312	,071	LFH	-,097	,043	-,108	,152
YOLU	-,385	-,039	,061	-,371	LFO	,097	,067	,042	,058
YOTU	,309	-,301	-,046	,139	TFF	-,018	-,179	-,275	,089
DLC	-,119	-,264	-,408	-,329	TFE	-,144	,019	,008	,010
DFD	-,222	-,455	-,231	,011	TFAM	,047	,337	,174	,121
DFE	-,065	,034	-,198	,207	TFS	,101	,090	-,266	-,017
DFA	-,087	-,066	-,303	-,306	TFAN	,183	,220	-,098	-,220
DFS	,017	,079	,407	,050	TFI	,028	-,067	-,110	,063
DFA	,073	-,163	-,037	-,114	TFC	,047	,247	,085	,244
DFI	,212	-,027	,073	,112	TFN	-,010	-,277	,198	-,247
DFC	-,135	,437	-,178	-,078	TFH	,044	,118	,085	,063
DFN	,455	,212	,286	-,300	TFO	,077	,128	-,169	,080
DFH	,313	,126	-,076	,263	Yes/No	,214	-,031	-,352	-,152
DFO	-,152	-,199	,288	,055	AIH	-,065	-,078	,426	,266
LFF	,205	,244	,233	-,113	AIN	-,226	-,130	,035	,081
LFE	,201	-,188	,130	-,132	AIS	,161	-,132	-,115	-,123
LFAM	,486	-,058	-,135	,157					
LFS	-,209	,067	-,262	-,033					
LFAN	-,219	,038	,486	-,010					
LFI	-,008	,143	,019	,142					
LFC	-,074	-,145	,076	,060					
LFN	,177	-,099	,056	,140					
LFH	-,097	,043	-,108	,152					
LFO	,097	,067	,042	,058					

Table B2-7. Dependent variable# 4: Frequency of pain/ache/discomfort within last 7 days (Lower Back)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	,283	,081	,041	-,005	LFH	-,136	-,386	,026	,058
Sex cat	,359	-,198	-,212	,070	LFO	,014	-,068	-,120	,254
Techpref cat	-,022	-,101	,029	,116	TFF	-,129	-,085	-,068	,055
CL	-,133	-,095	,283	,292	TFE	-,306	,275	-,060	-,252
CD	-,098	-,045	-,031	,001	TFAM	-,058	-,420	-,193	,197
CT	-,148	,165	,025	-,117	TFS	,066	,105	,256	,179
PGL	,129	,145	-,332	-,055	TFAN	,371	,163	,106	,157
PGD	,151	-,060	-,321	,021	TFI	,119	,143	,155	-,180
PGT	,225	,074	-,089	-,043	TFC	-,048	-,271	,011	-,070
WFL	,038	,254	-,028	-,413	TFN	-,114	,146	,072	,047
WFD	,103	,020	-,004	-,342	TFH	-,065	,134	-,015	,080
WFT	-,084	,120	,021	-,044	TFO	-,042	-,081	,423	-,226
SOSL	,252	-,338	,119	,027	Yes/No	,175	,019	,093	-,334
SOSD	,058	,091	,212	-,050	AIH	-,067	-,025	-,133	,191
SOST	-,072	,198	-,171	-,340	AIN	-,226	-,318	,278	,054
SASL	,089	,095	-,043	,187	AIS	-,187	,130	,144	-,206
SASD	-,027	-,032	-,101	,091	AIUB	-,188	,398	-,120	,085
SAST	-,037	-,089	,286	,009	AIE	,141	,179	-,315	-,047
ISL	,048	-,233	-,013	-,088	AIA	,075	-,018	,070	-,189
ISD	,101	-,050	-,038	,039	AIWH	-,106	-,031	,362	,156
IST	-,151	-,175	,163	-,188	AIB	,153	,020	-,035	-,084
RL	,072	,225	,267	,005	AILB	,375	-,395	,293	,127
RD	-,174	,047	-,257	-,096	AIH	,020	-,055	-,055	-,098
RT	-,074	-,201	,001	,154	AIG	,327	-,194	,107	-,111
WL	,104	,032	,181	,119	AIL	-,252	-,169	,086	,486
WD	-,128	,067	,044	,181	AIK	-,025	,012	-,274	-,279
WT	,090	,147	-,270	,230	AIAF	-,021	-,030	-,065	,510
DPOMU	,272	-,027	-,089	,054	LHSPU	,121	,024	-,229	-,189
LPOMU	,095	-,176	,284	-,206					
YODU	-,389	-,107	,476	-,060					
YOLU	-,217	,442	-,286	,127					
YOTU	,207	,216	,255	,211					
DLC	-,079	,140	-,163	,150					
DFD	-,061	,082	,130	-,157					
DFE	,081	,040	,077	,129					
DFA	-,093	,021	,044	-,196					
DFS	,017	,079	,407	,050					
DFA	,073	-,163	-,037	-,114					
DFS	,078	-,339	-,117	,098					
DFA	-,197	,124	,049	-,011					
DFI	,399	,263	,219	,139					
DFC	,157	-,017	-,220	-,090					
DFN	,109	,088	-,088	,063					
DFH	,386	,132	,099	,009					
DFO	,184	,186	-,054	-,160					
LFF	,192	,096	-,078	,314					
LFE	,276	-,226	,171	-,090					
LFAM	,325	,074	-,104	,057					
LFS	-,224	-,048	-,042	-,379					
LFAN	-,171	-,022	-,050	,049					
LFI	-,292	-,319	-,225	,056					
LFC	,031	-,066	,083	-,240					
LFN	,398	,283	-,024	,072					

Table B2-8. Dependent variable# 5: Frequency of pain/ache/discomfort within last 7 days (*Forearm*)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	,157	,016	-,081	-,004	TFF	-,306	,025	,076	,124
Sex cat	,205	,239	,012	-,137	TFE	,578	-,029	,024	,205
Techpref cat	-,255	,184	-,048	,258	TFAM	-,169	-,075	-,010	-,156
CL	-,099	,092	,088	,181	TFS	-,231	,092	-,059	-,049
CD	,083	-,099	-,214	-,017	TFAN	,159	,428	,105	,235
CT	-,163	-,148	,077	,039	TFI	-,164	-,002	,093	,194
PGL	,277	,340	,146	-,119	TFC	,447	-,078	-,322	-,553
PGD	,230	-,041	,089	,214	TFN	,008	-,233	-,141	,056
PGT	,082	-,173	,256	-,226	TFH	,268	-,255	-,120	-,214
WFL	,106	-,364	,147	-,034	TFO	,155	-,154	,086	-,182
WFD	-,158	,164	,287	-,054	Yes/No	-,171	-,186	,054	,125
WFT	-,028	,052	-,233	,178	AIN	-,035	,092	-,163	-,028
SOSL	-,043	,124	,375	,028	AIS	,158	-,142	-,063	-,023
SOSD	,198	,054	-,055	,022	AIUB	,110	-,416	-,007	-,002
SOST	-,120	,034	,214	,004	AIE	,070	,187	,006	-,191
SASL	,182	,007	-,324	,045	AIA	,051	,216	-,055	-,065
SASD	-,055	-,018	-,004	,156	AIWH	,126	,222	-,096	,162
SAST	-,019	-,303	-,044	,173	AIB	,161	-,101	,044	,051
ISL	-,103	-,032	,116	-,179	AILB	,033	,168	,088	,153
ISD	-,160	-,287	,380	-,123	AIH	,040	-,191	,041	,048
IST	,067	,185	,059	,226	AIG	,077	,157	,049	,142
RL	-,044	,004	,027	,076	AIL	-,157	-,098	-,213	,190
RD	-,169	-,336	,158	-,136	AIK	,054	-,147	,244	-,052
RT	,076	,171	,003	-,135	AIAF	,178	,483	-,297	-,181
WL	-,008	,076	-,384	,036	LHSPU	-,275	-,009	-,073	,025
WD	,326	-,048	-,154	,254					
WT	-,067	,058	-,155	-,154					
DPOMU	,142	,151	-,240	-,166					
LPOMU	,325	,169	,048	-,402					
YODU	,109	-,109	-,221	,011					
YOLU	-,217	-,009	-,125	,289					
YOTU	-,142	-,003	,002	,012					
DLC	-,455	-,025	,054	-,456					
DFD	-,059	,109	,053	,098					
DFE	-,131	,326	-,176	,255					
DFA	-,025	-,331	-,210	-,247					
DFS	,026	,123	,349	,038					
DFA	,062	-,097	,057	-,074					
DFI	,060	,066	,130	,229					
DFC	-,005	,293	-,083	-,177					
DFN	,276	-,079	,212	,137					
DFH	,187	,189	,063	,001					
DFO	,391	-,124	,245	,102					
LFF	,218	,166	-,032	,079					
LFE	-,340	-,284	-,225	-,303					
LFAM	-,010	,306	,349	,057					
LFS	,134	,221	,093	,113					
LFAN	-,092	-,299	-,129	,221					
LFI	,113	,306	-,023	-,373					
LFC	-,282	-,375	-,011	,093					
LFN	,280	-,015	,211	-,402					
LFH	-,232	-,247	,220	,150					
LFO	-,258	-,087	-,125	,107					

Table B2-9. Dependent variable# 4: Frequency of pain/ache/discomfort within last 7 days (Wrist)

Standardized Canonical Discriminant Function Coefficients									
	Function					Function			
	1	2	3	4		1	2	3	4
Age cat	,179	-,106	,147	,098	TFF	-,184	,348	-,058	,197
Sex cat	,150	,026	,167	-,199	TFE	-,016	,202	,000	,381
Techpref cat	,016	,138	-,319	,052	TFAM	-,120	,272	,183	-,419
CL	-,107	-,173	-,144	-,120	TFS	-,122	,153	-,114	-,103
CD	-,201	-,064	-,024	,324	TFAN	,190	-,069	,107	-,046
CT	-,047	-,154	-,217	,009	TFI	,317	-,492	-,137	,287
PGL	-,115	,092	,036	-,123	TFC	-,090	,317	,159	-,088
PGD	,034	-,104	,333	-,135	TFN	,093	-,435	,083	-,130
PGT	,110	-,149	-,100	-,061	TFH	,063	-,020	,053	,009
WFL	-,050	-,369	-,383	,069	TFO	,168	,102	,000	-,051
WFD	,306	-,075	-,230	-,137	Yes/No	-,236	,075	,155	,005
WFT	-,061	,196	-,098	,029	AIH	,050	-,337	-,117	-,009
SOSL	-,009	-,033	,202	,253	AIN	-,349	-,075	,391	,146
SOSD	-,149	-,104	,224	,252	AIS	,093	,071	-,006	,152
SOST	,063	-,070	,002	-,055	AIUB	,093	,169	-,261	,015
SASL	-,134	,074	,027	-,198	AIE	-,089	,109	,651	-,263
SASD	-,129	,052	,010	-,217	AIA	,379	-,090	-,146	,107
SAST	-,048	-,091	-,332	,101	AIWH	,357	-,064	-,089	,108
ISL	,116	,222	,107	,151	AIB	,132	-,126	-,185	-,092
ISD	,069	,136	,053	-,019	AILB	,182	-,150	-,384	-,297
IST	-,007	,212	,136	-,027	AIH	-,164	-,261	,044	,158
RL	,145	-,265	,027	,065	AIG	,006	-,085	-,255	,033
RD	-,170	,014	-,203	-,142	AIL	-,305	,064	,018	-,008
RT	,112	,104	,127	-,216	AIK	,217	,251	-,092	,203
WL	,039	,022	,108	-,237	AIAF	,413	,058	-,181	-,059
WD	-,006	,204	-,001	,270	LHSPU	-,104	,265	,350	-,103
WT	,094	,030	,204	,082					
DPOMU	,017	-,114	,261	,315					
LPOMU	,413	,159	-,011	,173					
YODU	-,111	-,038	,044	-,222					
YOLU	-,195	-,033	,126	,078					
YOTU	-,210	-,093	,105	,210					
DLC	-,117	-,175	-,280	-,034					
DFE	,142	,266	,003	,152					
DFE	,408	-,045	-,052	,152					
DFA	,104	,019	-,276	,180					
DFS	,037	-,112	,211	-,307					
DFA	-,214	-,085	,105	-,176					
DFI	,185	,350	,119	,231					
DFC	-,026	,254	-,311	-,109					
DFN	,274	-,038	,222	-,049					
DFH	,226	,120	,293	,051					
DFO	,205	,205	,145	-,077					
LFF	,025	,057	-,067	-,029					
LFE	-,030	-,355	,183	-,445					
LFAM	-,064	-,290	-,096	,231					
LFS	-,072	,081	-,235	,293					
LFAN	-,217	,006	-,206	,055					
LFI	,000	,105	-,123	-,233					
LFC	,346	-,139	,183	-,082					
LFN	,173	-,001	,075	-,138					
LFH	-,107	,021	-,162	,070					
LFO	-,160	,014	-,003	,085					

Table B2-10. Socrative Software’s modules related with teacher of the class


(a)	 STUDENT LOGIN TEACHER LOGIN	
	Teacher’s account	(b) Room: Y1MDDJVA
(d) <div> Dashboard Manage Quizzes Live Results </div> <div> RECENT ALL Select a Quiz </div> <div> <p>english test</p> </div> <div> <p>genel kültür</p> </div>		

Table B2-11. Socrative software for students


(a)	 <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="background-color: #4a86e8; color: white; padding: 10px 20px; border-radius: 5px;">STUDENT LOGIN</div> <div style="background-color: #4a86e8; color: white; padding: 10px 20px; border-radius: 5px;">TEACHER LOGIN</div> </div>	
<p>Students' Login</p>	<p>(b)</p>  <div style="background-color: #d9e1f2; padding: 10px; margin-top: 10px; border: 1px solid #ccc;"> <p style="text-align: center; margin: 0;">STUDENT</p> <div style="border: 1px solid #ccc; padding: 5px; margin: 5px 0;">Room Name</div> <div style="background-color: #f1a333; color: white; text-align: center; padding: 5px; margin: 5px 0;">JOIN ROOM</div> </div>	<p>(c)</p>  <p style="text-align: center; font-size: small;">Q zoom</p> <p style="margin-top: 10px;">Please write the possible thoughts or feelings of the green team (<i>or thoughts or feelings of just one player from the green team</i>) at the end of the story (below)... <i>Hint: If you check the picture, Green team - visitor, Red Team - Home</i></p> <p style="font-size: small; margin-top: 5px;"><i>The game was tied. The green team had three goals and we had three goals. Pete Breen kicked the ball to me. It did not seem like a hard kick. The ball came to me but I did not see it. It hit my knee. I could see it go deep into the goal. We scored! We beat the green team, four to three. My teammates ran to me. They screamed and cheered. I could not speak. It was like a dream. It was a sweet feeling.</i></p> <div style="background-color: #d9e1f2; height: 40px; margin-top: 10px; border: 1px solid #ccc;"></div> <div style="background-color: #f1a333; color: white; text-align: center; padding: 5px; margin-top: 10px; width: fit-content; margin-left: auto;">SUBMIT ANSWER</div>

Table B2-12 (a) sEMG recordings of participant #1

Participant 1 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	94,14	93,77	162,80	61,34	172,05	1637,00
2	132,79	83,92	200,58	86,51	163,26	1435,60
3	86,67	4,49	260,45	55,43	288,72	783,21
4	172,84	50,37	323,69	202,38	41,57	649,05
5	149,58	51,08	233,75	42,35	39,63	632,47
6	108,51	29,91	151,80	544,81	76,24	880,12
7	96,46	1,89	319,77	1466,30	77,15	819,70
8	88,31	2,46	23,57	30,65	133,21	2133,90
9	81,20	2,72	37,96	214,77	82,30	1374,50
10	77,28	2,17	160,20	147,85	95,89	2596,30
11	70,18	5,01	107,78	166,50	110,56	2718,80
12	72,47	78,02	119,30	198,28	107,74	2670,70
13	72,19	9,37	96,23	231,65	64,94	2603,00
14	85,29	3,03	132,33	246,01	44,77	2352,00
15	78,95	3,17	152,80	246,01	73,68	2450,60
16	120,41	4,00	115,47	469,02	52,21	2396,80
17	77,88	1,83	175,24	627,90	58,46	982,82
18	85,66	2,96	181,09	91,35	51,41	296,76
19	216,42	17,12			69,86	1716,60
20	158,09	64,68			93,31	265,68
21	203,12	2,49			94,37	330,89
22	149,76	2,62			40,82	121,32
23	241,29	25,75			48,11	267,04
24	162,05	1,94			85,04	171,82
25	167,38	2,07			97,97	99,41
26					94,12	83,33
27					66,94	23,90
28					104,45	61,33
29					16,16	59,59
30					44,62	80,71
31					80,61	66,66
32					56,36	34,16

Table B2-12 (b) sEMG recordings of participant #2

Participant 2 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	18.16	36,92	53,03	56,03	2,08	2,21
2	18,66	50,58	25,97	6,22	2,31	2,30
3	15,72	59,43	31,86	18,73	2,26	2,96
4	16,01	59,43	14,09	2,41	2,02	4,54
5	15,41	50,09	16,89	32,68	3,24	18,16
6	21,30	75,52	14:53	17,91	2,84	42,86
7	14,98	35,75	9,08	10,96	2,67	22,78
8	14,18	37,69	19,52	11,62	11,69	40,97
9	10,77	38,64	49,66	34,76	10,17	66,69
10	9,69	39,93	14,52	17,28	6,33	43,63
11	9,28	42,55	46,77	23,61	8,70	44,43
12	6,97	17,96	47,53	26,20	11,75	78,45
13	15,44	73,63	33,04	33,61	12,33	36,10
14	13,53	43,14	17,84	56,19	6,75	14,23
15	21,06	16,77	33,12	14,93	13,27	74,14
16	19,39	12,86	16,24	55,45	15,88	67,58
17	20,12	83,25	55,45	16,42	14,53	70,81
18	11,85	41,76	15,80	18,28	6,32	45,06
19	16,43	52,54	58,09	20,63	4,80	48,86
20	11,28	40,17	70,24	34,63	6,04	17,17
21	14,17	59,77	19,91	12,41	5,78	59,41
22	15,36	48,85	45,80	27,05	2,31	39,88
23	15,71	23,56	163,11	30,68	5,91	4,56
24	10,95	7,39	69,12	16,4	10,15	33,70
25	25,74	100,75	25,89	11,87	3,72	52,83
26	22,26	85,80	22,83	14,86	3,62	63,05
27	22,20	100,62	28,82	23,57	4,19	57,23
28	6,07	35,77	36,68	14,21	3,64	61,76
29	26,03	111,06	36,93	14,24	3,54	60,90
30			38,32	15,62	3,30	55,05
31			15,23	12,01	3,11	50,18
32					3,86	50,64

Table B2-12 (c) sEMG recordings of participant #3

Participant 3 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	2,18	10,76	14,94	30,08	14,82	13,53
2	2,23	10,58	14,77	30,89	13,92	15,02
3	9,33	15,62	14,24	29,97	20,27	15,03
4	9,74	16,82	13,10	28,50	15,39	12,53
5	5,28	14,24	14,11	26,34	19,38	19,05
6	8,67	17,51	14,25	26,41	5,86	7,55
7	12,58	22,16	20,66	25,78	2,91	5,11
8	10,58	18,87			21,00	58,63
9	9,28	18,04			14,87	14,10
10	10,05	18,90			6,41	2,92
11	10,40	16,78			18,46	7,85
12	8,48	14,56			17,91	13,57
13	13,55	21,20				
14	11,21	14,66				
15	10,37	13,48				
16	14,57	19,90				
17	10,00	16,57				
18	7,63	8,50				
19	8,32	13,35				
20	9,17	16,62				

Table B2-12 (d) sEMG recordings of participant #4

Participant 4 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	7,05	9,45	68,87	15,31	2,09	14,94
2	6,75	7,80	8,13	5,09	2,86	12,78
3	6,74	2,68	5,47	4,88	1,52	4,09
4	6,29	2,84	9,50	5,37	1,53	5,93
5	6,32	2,55	5,55	4,64	5,36	12,95
6	6,18	2,64	10,52	5,8	6,11	15,78
7	6,89	6,36	11,59	5,45	2,93	8,38
8	6,56	4,02	13,70	5,45	2,76	10,96
9	6,37	7,82	4,27	4,81	26,20	6,80
10	6,63	4,64	5,11	3,85	2,87	6,41
11	7,13	17,48	8,22	3,35	6,69	22,15
12	7,57	13,51	32,84	4,19	1,55	3,59
13	7,55	13,25	11,38	3,88	1,55	3,47
14	7,19	2,89	14,94	2,09	1,40	3,64
15	7,25	3,13			9,61	18,05
16					7,81	21,51
17					7,99	12,10
18					5,17	11,40
19					4,14	6,22
20					14,29	13,70
21					10,53	16,78
22					9,57	16,60
23					11,69	19,68
24					12,14	15,95
25					12,69	18,57
26					10,50	20,04

Table B2-12 (e) sEMG recordings of participant #5

Participant 5 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	19,37	21,03	115,01	133,41	98,50	306,40
2	25,16	28,79	136,14	78,16	106,25	270,64
3	49,97	45,11	123,10	67,43	169,43	255,45
4	39,92	62,92	76,02	88,86	231,94	259,27
5	18,68	31,91	63,77	76,15	135,36	282,93
6	25,29	54,71	55,36	74,73	237,90	247,41
7	24,35	58,36	44,13	103,53	170,71	262,62
8	42,27	148,07	32,11	145,62	185,56	255,81
9	27,49	66,36	87,26	340,17	87,89	257,70
10	21,78	53,12	91,89	352,57	149,93	258,77
11	19,85	39,69	92,50	356,56	207,78	249,29
12	19,08	31,38	26,31	188,02	29,12	301,17
13	46,89	266,32	29,20	140,68	80,35	254,29
14	22,48	69,75	29,16	144,73		
15	23,26	81,21	23,83	148,76		
16	20,58	58,76				
17	22,34	61,72				
18	19,86	54,70				
19	20,78	60,93				
20	21,92	68,18				
21	20,58	53,78				
22	27,51	100,63				
23	17,22	40,04				
24	24,62	65,41				
25	22,66	65,24				
26	21,08	50,53				
27	19,60	57,00				
28	20,19	40,05				
29	21,38	30,42				
30	26,39	69,92				
31	40,41	126,90				
32	23,09	71,87				
33	20,49	56,90				
34	18,52	35,10				
35	22,36	36,54				
36	18,88	66,18				

Table B2-12 (f) sEMG recordings of participant #6

Participant 6 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	361,47	21,05	393,88	97,90	426,94	367,22
2	388,67	130,83	10,09	235,23	375,68	297,42
3	397,28	107,25	10,09	119,88	383,62	181,75
4	429,89	110,07	10,53	82,84	352,60	182,61
5	393,22	119,83	12,03	60,56	321,30	134,89
6	384,04	120,10	14,80	101,54	293,24	137,49
7	214,05	385,52	14,44	71,54	292,60	122,11
8	345,99	214,05	13,44	84,66	268,87	127,10
9	412,80	185,88	12,82	85,24	259,66	116,63
10	412,96	453,93	11,64	71,57	264,91	105,51
11	397,48	77,09	11,61	74,42	233,28	113,85
12	367,49	87,00	11,14	67,19	247,62	98,79
13	388,04	128,53	11,28	69,96	241,31	98,03
14	368,57	100,22	11,84	63,23	200,97	103,43
15	335,56	80,26	15,14	299,79	215,82	93,75
16	346,92	134,31	13,21	41,79	255,55	103,56
17	366,18	159,80	12,60	155,82	210,88	95,20
18	374,15	123,82			202,40	84,35
19	393,88	125,09			198,62	94,20
20					220,22	90,29
21					190,77	108,54
22					202,85	89,76
23					213,22	87,48
24					207,61	95,67
25					188,82	99,09
26					195,75	102,35
27					220,51	98,66

Table B2-12 (g) sEMG recordings of participant #7

Participant 7 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	10,96	9,65	4,32	34,45	9,42	9,75
2	12,03	9,19	3,77	22,39	30,58	15,50
3	9,51	1,97	4,32	34,45	9,42	9,75
4	9,64	2,67	3,08	28,69	21,11	15,50
5	10,10	3,00	8,10	38,87	68,78	9,68
6	11,63	2,30	9,97	12,35	11,51	15,69
7	9,82	2,05	5,70	8,66	11,51	11,15
8	13,75	6,74	7,03	13,11	9,81	16,02
9	10,97	2,00	6,94	9,27	8,06	12,71
10	11,09	6,74	5,41	9,79	8,51	12,21
11	9,18	2,13	7,40	6,58	43,26	15,04
12	8,88	2,15	8,14	9,43	11,31	6,60
13	12,28	3,51	3,40	4,64	15,87	14,29
14	9,26	2,34	12,50	12,55	9,40	12,95
15			6,00	3,81	71,63	11,03
16					30,57	7,80

Table B2-12 (h) sEMG recordings of participant #8

Participant 8 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	1,83	5,94	2,93	8,06	47,65	13,33
2	2,02	5,32	4,11	17,56	77,66	23,81
3	2,29	6,00	3,24	12,45	276,02	11,85
4	2,47	6,28	3,20	10,73	57,55	17,70
5	2,35	6,27	4,65	20,84	20,65	14,18
6	2,96	6,43	6,12	37,40	13,20	9,42
7	3,45	5,32	5,31	42,08	69,03	44,03
8	2,37	5,15	5,23	12,27	257,53	30,70
9	8,85	6,06	2,91	4,45	5,15	19,01
10	7,35	6,05	9,31	38,16	389,63	6,32
11	5,07	6,92	2,48	8,20	302,65	11,73
12	4,53	6,68	27,95	40,92	9,07	3,64
13	2,52	6,15	20,39	66,26	6,37	8,74
14	3,92	6,01	11,17	33,72	8,20	21,11
15	2,65	7,56	63,35	70,80	12,00	50,39
16	1,95	4,46	5,16	20,18	14,84	25,50
17	2,08	4,72			11,24	15,98
18	8,94	6,27			7,78	13,04
19	4,87	6,29				
20	2,85	5,43				
21	2,97	5,14				
22	19,86	17,75				
23	3,48	0,63				
24	3,37	6,59				
25	3,18	6,59				

Table B2-12 (i) sEMG recordings of participant #9

Participant 9 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	36,41	184,28	19,66	13,11	120,41	305,78
2	37,78	199,02	14,04	12,38	110,82	336,80
3	29,87	184,97	14,55	15,18	106,79	333,87
4	27,75	192,59	14,77	13,09	123,00	384,44
5	26,27	186,43	15,82	13,70	108,49	350,98
6	23,73	134,34	21,38	14,41	91,61	344,64
7	23,88	149,96	21,47	21,72	84,49	334,83
8	27,91	82,29	18,13	21,81	88,17	328,20
9	28,53	123,16			53,56	265,61
10	24,86	118,73			60,21	123,55
11	33,89	127,74			29,16	79,25
12					15,87	69,76
13					16,70	68,39
14					20,97	21,32
15					17,12	68,41
16					21,81	18,13
17					21,85	18,25
18					120,47	305,99
19					120,75	336,80
20					106,80	333,87
21					123,02	384,44
22					108,49	350,98
23					91,61	344,64
24					98,77	452,64
25					88,17	328,20
26					53,56	265,61
27					60,21	123,55
28					29,16	79,25
29					15,87	69,76
30					16,70	68,39
31					17,12	68,41

Table B2-12 (j) sEMG recordings of participant #10

Participant 10 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	19,85	12,84	64,36	10,02	4,83	27,01
2	18,43	19,96	40,61	10,07	6,35	24,61
3	18,50	35,10	79,96	12,72	12,80	23,30
4	19,51	33,48	58,49	11,89	23,07	14,17
5	19,04	29,34	43,50	10,94	9,15	14,17
6	18,02	26,48	62,37	13,01	6,68	17,96
7	13,74	25,32	60,03	8,47	7,29	7,73
8	16,02	20,70	27,52	4,58	5,25	22,09
9	15,90	20,20	23,51	5,29	14,70	20,39
10	19,13	23,82	19,11	10,15	2,43	4,41
11	19,67	22,76			5,95	26,26
12	22,30	33,71			4,17	23,05
13	18,47	21,96			1,87	5,50
14	18,84	22,63			8,93	32,16
15	19,46	26,30			1,45	7,59
16	14,97	18,53			8,41	19,59
17	21,73	28,80			18,78	34,98
18	11,85	6,28			18,87	29,13
19	17,55	18,74				
20	20,78	31,71				
21	25,00	33,79				
22	24,23	32,50				
23	17,72	22,31				

Table B2-12 (k) sEMG recordings of participant #11 (control group)

Participant 11 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	6,89	8,62	25,67	164,26	10,18	71,73
2	65,82	8,75	28,23	102,96	9,35	256,72
3	71,14	9,82	26,42	45,90	3,14	64,10
4	65,23	9,32	20,66	23,52	8,38	61,99
5	65,49	8,59	17,19	28,51	8,61	62,67
6	70,75	8,54	8,54	75,71	555,26	38,45
7	68,06	12,95	8,55	19,02	47,92	56,25
8	69,14	8,54	11,67	26,88	88,30	47,60
9	71,73	10,18	9,32	26,30	165,26	25,67
10	256,72	9,55	14,86	39,03	102,96	28,23
11	73,12	21,01	114,57	15,72	45,90	26,42
12	61,99	8,38	23,65	11,75	20,66	23,52
13	62,67	8,61	9,00	8,63	28,51	17,19
14	38,45	555,26	69,14	8,54	75,71	8,54
15	56,25	47,92			19,22	8,55
16	47,60	88,30			26,88	11,67
17					26,34	9,32
18					39,03	14,86
19					15,72	44,57
20					11,79	23,65
21					8,63	9,00
22					8,42	60,36
23					115,62	68,08
24					143,79	79,49
25					8,10	60,09
26					328,02	30,97
27					452,87	30,76
28					62,25	29,07
29					16,49	34,21
30					109,80	31,22
31					226,12	479,39
32					362,59	226,12

Table B12-6 (I) sEMG recordings of participant #12 (control group)

Participant 12 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	58,47	223,92	22,22	66,35	7,88	15,84
2	56,02	64,10	21,39	52,80	27,94	116,68
3	45,84	56,31	17,83	44,38	32,89	371,06
4	27,99	55,59	14,31	342,89	29,62	41,73
5	28,27	75,95	24,94	65,89	23,28	422,77
6	26,89	213,65	39,35	258,81	18,54	97,76
7	10,83	91,15	42,32	244,02	17,02	30,56
8	31,97	31,89	35,03	67,98	19,77	29,45
9	39,69	157,68	16,02	62,58	35,66	65,29
10	14,40	51,97	44,40	161,42	27,97	58,04
11	20,80	179,26	41,52	170,46	25,07	16,12
12	1115,50	1464,30	51,20	179,98	41,27	16,43
13	293,20	885,94	21,03	91,14	761,32	398,43
14			37,48	21,23	513,54	628,66
15			26,87	24,43	99,24	162,37
16			28,43	36,28		
17			1724,60	4,98		

Table B12-6 (m) sEMG recordings of participant #13 (control group)

Participant 13 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	343,01	5,99	3721,40	3495,70	322,84	2402,70
2	346,60	6,67	3541,10	3543,10	331,50	1651,50
3	351,99	9,19	3851,30	3556,90	263,14	2667,40
4	306,38	70,52	3818,70	3615,60	949,78	2098,20
5	313,35	67,55	3930,00	3594,70	227,50	1999,80
6	309,82	167,26	3913,90	3657,30	113,29	1535,10
7	311,60	220,24	3988,30	3662,00	153,00	1443,30
8	357,97	229,63	4001,70	3642,90	207,01	1353,10
9	379,99	215,45	3891,80	3637,30	177,43	1354,00
10	323,98	219,49	3902,00	3630,40	348,90	1849,50
11	359,32	237,92	3902,30	3668,10	131,63	1342,00
12	374,28	238,61	3882,80	3717,90	60,67	1330,30
13	301,26	243,39	3964,80	3723,60	1119,20	235,25
14	301,02	237,35	3976,70	3722,10	32,51	907,31
15	369,03	277,62	3967,70	3717,00	124,45	862,88
16	343,90	274,86	3753,20	3723,30	996,77	138,28
17	284,02	271,06	3716,10	3721,90	71,61	827,37
18	247,90	269,53	3924,10	3662,90	29,15	728,70
19	336,83	280,76	3888,40	3587,90	41,53	705,15
20	495,00	257,96	3939,30	3717,10	60,48	724,70
21	326,95	239,83	3981,60	3635,70	215,98	794,75
22	340,90	232,82	3609,40	3467,40	85,05	497,03
23			3380,70	3094,30	49,39	1378,60
24			1027,20	2866,30		

Table B2-12 (n) sEMG recordings of participant #14 (control group)

Participant 14 (Recorded replications)						
Replications	CP	UT	UB	LB	Wrist	RWE
1	125,87	359,23	603,50	279,30	86,03	225,82
2	164,86	447,75	279,30	20,52	349,29	405,91
3	249,77	763,67	172,70	7,93	76,13	17,32
4	38,07	448,80	19,57	5,58	67,71	119,93
5	419,00	473,92	18,70	9,61	80,03	78,71
6	388,80	481,08	18,10	8,21	37,15	5,43
7	303,11	943,16	57,67	6,96	69,31	23,14
8	443,12	500,70	32,96	6,78	40,37	161,57
9			169,72	178,65	8,75	49,14
10			44,02	7,79	5,92	7,93
11					6,14	12,54
12					13,86	17,40
13					17,96	37,36
14					15,79	20,37
15					15,14	2,73