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User Experience and Continued Adoption of Mobile Interpretation Services

Case Study among parents with an immigrant background in Finland

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ABSTRACT

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The topic of this thesis focuses on working life and how learners with an immigrant background are not getting equal support and opportunities because of the language barrier of the parents. There are no immediate interpretation services available to support home-school collaboration. The purpose of this study is to explore the user experience of mobile interpretation services for parents with an immigrant background. This descriptive empirical research aims to explore how mobile interpreting services can help parents with an immigrant background to strengthen home-school collaboration in order to corroborate and support child´s learning. The specific objective of this work is to explore how a mobile interpretation services can help parents and school in collaboration for the benefit of the learner.

The theoretical framework grounding for this work is the technology acceptance model and unified theory of acceptance and use of technology. The study is conducted qualitatively by exploring user experience and continued adoption and based on technology acceptance model with the definitions ease of use and usability. The aim of the study is to determine the relationship between these definitions and the degree of their existence to technology adoption.

The main findings in this study indicate a connection between technology adoption, ease of use and usability with respect to interpretation services. Stated by respondents the results support the increase usage of mobile interpretation services in schools to support learner´s learning and strengthen home-school collaboration and thereby increase student home support for schooling. The results of the study confirm the potential and need of mobile interpreting to support schooling and home-school collaboration of learners with an immigrant background.

Further study would be needed to explore the potential of mobile interpretation services in schools with a larger sample of parents and learners. There is a need to find out different use possibilities in schools for the benefit of a learner with an immigrant background for example user experiences from preparatory teaching.

Keywords: technology acceptance model, unified theory of acceptance and use of technology, user experience, continued adoption, mobile interpretation services

CONTENTS

1   INTRODUCTION

"I have a dream, I want to be an engineer", said an eager and conscientious little boy with an immigrant background in my class during this research. I didn't know what to answer because I didn't know if his dream could ever come true.

My idea to research user experience and acceptance of mobile interpretation services among parents with an immigrant background came while working as a class teacher in Finland and experiencing many challenges that parents with an immigrant background face in home-school collaboration. As a teacher I felt that learners with an immigrant background are not equal compared to other learners because the language barrier between school and home. When parents with an immigrant background don´t understand information about the child from school and other school matter it makes the situation unequal compared to parents who speak Finnish and can therefore support their child´s schooling. My pain about the unequal situation of learners and parents with an immigrant background was the main driver for this research.

At the same time, in order to find a topic for my research, I contacted the company Visma and asked if they had a topic that could connect to my research. We agreed that I could research about the user experience of Youpret mobile interpretation services. Visma and Youpret wanted to find out if mobile interpretation services could help parents in home-school collaboration. My interests and thoughts were similar and I agreed to do the research in Vaasa. I didn´t have any professional connection to Youpret before my research. Our agreement was that I would do the research for them without compensation and I would get to use the service for free.

The biggest challenge for home-school collaboration with parents with an immigrant background is the lack of Finnish language skills of the parent. This is concluded in a study by the City of Vaasa on educational pathways for children and adolescents with an immigrant background. The study was published during my research and it gave additional assurance that further research is necessary to facilitate more effective educational paths for children and adolescents with an immigrant background. The study describes the situation in the city of Vaasa but is applicable to Finland. (Vaasa 2020, 1,19,21)

Finnish Immigration Service writes that in 2015 many asylum seekers arrived in Finland. By the end of 2015, 32 476 people had applied for asylum (Migri, 2016). In 2017, approximately 12 600 people received Finnish citizenship. In 2016, approximately 9600 citizenships were granted (Helsingin uutiset, 2018). The changing migration situation in Europe can quickly bring many pupils with an immigrant background to Finland. The children of the families who came in 2015 - 2016 are the ones whose situation at school this study wants also to improve. Maybe their parents do not yet know Finnish, even though they received teaching in Finnish language from the very beginning. This study also wants to improve the status of children with an immigrant background who have come to Finland with their families before the 2015 refugee crisis.

Many parents with an immigrant background are illiterate in all languages. This impacts on their ability to support the pupil's schooling. Home-school cooperation poses challenges for this group (Vaasa 2020, 21). My research attempts to find solutions to the challenge that parents with an immigrant background can´t support their child´s schooling.

The study conducted in Vaasa states that the cooperation and encouragement can increase the immigrant parent's confidence and sense of inclusion (Vaasa 2020, 21). The study tells that support to an immigrant learner gives better options for postgraduate study opportunities and thereby integration into working life and society (Vaasa 2020, 21). In my point of view, research that promotes the integration of immigrant students into society is important.

The use of mobile services has increased dramatically in society and in schools, but interpreting services are primarily offered face to face. When talking about interpretation services, there can be misunderstanding about the terms interpret and translate. The difference between interpreting and translation is the difference in the medium: an interpreter translates orally, a translator interprets written text. My research is conducted concerning interpretation.

Technological know-how is becoming more achievable, and manufacturing costs are continuously decreasing, which is in turn widening the user segment and causing a rapid progression of mobile technology adoption (Sanakulov, 2019). Therefore the service used in this research might support schools with new innovative ways in home-school collaboration with parents with an immigrant background.

The presence of information technologies in today´s society has expanded dramatically. New technology is helping learners at schools in many ways. I want to find out what is user experience, what technology acceptance means and what factors affect it. The main purpose is to find determinants affecting the adoption of it and to find out what are the factors in order to adopt new digital interpretation services. This study examines how a parent adopts a new digital interpretation services and to explore the user experience when using digital interpretation services. The study introduces the Youpret mobile interpretation services. I wanted to explore the potential of Youpret mobile interpretation services at school. Can it be useful, ease to use, support child´s feeling of safety at school, support parents and strengthen home-school collaboration with parents? The conceptual framework of the research was adopted from technology acceptance model, unified theory of acceptance and use of technology and user experience. Based on the theoretical model the research questions and methodology were developed to correspond to the research purpose.

As this study investigates online interpretation services from consumer point of view, not all aspects in interpretation are discussed in depth. The attention is paid to user experience and continued adoption. The research wants to know does the use of the mobile interpretation services bring added value to home-school collaboration. The study benefits teachers who teach students with an immigrant background, school principals, families with an immigrant background and most importantly, children with an immigrant background.

The theoretical part of the thesis begins with a literature review of the topic in chapter two. The third chapter describes the theories and key concepts of the topic. In chapter four, the research methodology is presented. In chapter five, the analysis of data is presented. After that, in chapter six the findings and results are presented. The research closes in chapter seven with a discussion and in chapter eight with conclusions and development proposals.

1.1 Research objective

The right to be equally treated is a challenge in schools with learners from immigrant background. This is recognized, but there are few ways and resources to correct it. The increased tasks and responsibilities of the school, as well as the new curriculum, also take time and reduce the chances of getting involved with this challenge. However, I have seen in my work that parents with an

immigrant background are pleased that their children are able to attend school that is free. Learners from migrant background face unfair situations due to language challenges. Parents from migrant background face even more challenging situations than learners. Home-school collaboration is challenging with a new and difficult language. Sometimes, in the beginning there is no understanding of the language spoken at school. In home-school collaboration I have experienced numerous situations where the parent doesn´t have a common understanding with me due to language challenges. In these situations, I feel that the best interest of the learner is not met. The child is suffering from this unfortunate situation. As a teacher I wanted find ways to help learners and parents from immigrant background and wanted to know if there is a way to help this pain I encounter often in my school.

I came across to digital interpretation services in collaboration with Visma and wanted to find out how it works at school, what are the user experiences of mobile interpretation services at school with parents from immigrant background and will their experience of the service help them and will it lead to continued adoption. The study empirically examines the research problem by interviewing parents with an immigrant background to develop better understanding on the adoption and future usage of mobile interpretation services.

The main research question is "What is the User Experience and Continued Adoption of Mobile Interpretation Services". Two research sub-questions were set to support the main question:

What types of user experience do parents have when using a mobile interpretation services?

What are the main factors impacting on whether a person continues to use a mobile interpretation service?

2 LITERATURE REVIEW

This chapter outlines the key concepts grounding this study. Although the theory and subject of the study have been studied extensively (Shachak, 2019), no similar research on mobile interpretation services has been carried out before. Telephone interpreting has not previously been studied from the perspective of parents with an immigrant background. The theories I use, especially technology acceptance model and unified theory of acceptance and use of technology have been used in numerous studies around the world. There are many published studies about technology adoption, understanding adoption and the reasons that affect the adoption process.

In my research technology acceptance model is sometimes shortened as TAM and unified theory of acceptance and use of technology as UTAUT.

Horberry et al. (2014) examined drivers' acceptance of new technology. The research uses TAM and UTAUT in defining acceptance. It shows a clear connection between the acceptance and perceived ease of use and perceived usefulness. Their research states that in order to be acceptable, new technology must be useful and satisfying to use. If isn´t, the acceptance rate is lower among drivers in the research. Even though the driver's acceptance is the focus, acceptance of new technology in other fields is also covered. Perspectives are derived from domains such as human computer interaction, where user acceptance has long been regarded as a key driver of product success. (Horberry et al., 2014)

Sanakulov et al. (2018) examined salespersons' adoption and usage of mobile sales configuration tools using TAM and UTAUT as a theoretical framework. Research indicates that the adoption of any technology includes a set of factors that determine if the technology is either accepted or rejected, and the individual strengths of these determining factors may vary greatly, depending on the importance placed on them by an individual. In the study the main determinants in adoption are ease of use and usability. The results of the study confirm the importance of cultural factors in technology adoption.

Meriläinen (2011) conducted a research about the user experience of Duuo translation system at the reception center. The dialogue interpreter was developed based on the model of nursing communications. The research material was interviews with nurses. The theoretical framework was

the user experience theory and the nursing communication model, for which common elements were found. According to the study, the user experience with the nurse seems to be related to the amount of orientation and use. As it grows, it enhances the positive user experience and makes the dialog interpreter a tool for discussion. (Meriläinen, 2011)

Lehtonen (2015) researched user-centered design methods in adopting new software in an organization. Lehtonen used TAM model as a theoretical framework. Lehtonen (2015) stated that as the two main criteria for persons attitude towards technology acceptance are perceived usefulness and perceived ease of use, a good way of affecting these criteria is to have the business process carefully defined, thus easily adaptable. The two main themes raised from the analysis: platform adequacy and platform maturity. Theme platform adequacy refers to platform functionality being versatile enough for creating increasingly complex integrations. Theme platform maturity refers to functionality being easy to adapt with.

Holm (2013) examined in her research what implementation of a new information system means and what are the factors that affect success of the implementation process. Holm also researched what are the factors for a successful information system and how the success can be measured. Based on the study the most important factors of a successful implementation process are the organization of the project, managerial support and user participation. The information system needs to work technically, be useful for work tasks and it has to create effects for individuals and organization. The study was based on the essential literature of the domain.

Kiili et al. (2012) studied the design principles for flow experience in educational games. The flow framework describes the building blocks of flow experience that can be used to design appealing and effective educational games for formal and informal learning contexts. The framework provides the principles for a good educational game design, based upon associative, cognitive and situational learning theories. The study examines user experience. Experience can be described as a continuous interaction between the present situation and prior experiences. The study states that there is a need for designers of educational artefacts to understand how users interact with different types of artefacts and how this interaction affects users´ educational experiences. The study states that the educational games have to be well designed to incorporate learner engagement to be effective. Kiili writes that user experience is often parallel with usability, although it does not consider the deeper principles of experience design or consider the emotional side of

product use enough. In the research the respondents played a simulation game twice and filled a questionnaire after the game session. (Kiili et al. 2012, 1, 90)

Kari et al. (2018) examined the user expectations before and the use experiences during the implementation phase of a mobile secure communication application together with expectation – confirmation and its influence on continued adoption. The data was collected from pilot users of a mobile secure communication application. The study was qualitative. The theoretical framework for the study was the expectation – confirmation theory (ECT) and UTAUT. The findings were that the continued adoption of the application was influenced by various types of user expectations and use experiences. One the central findings was that even in an organizational setting, the use experience of an individual user play an important role in the continued adoption or discontinuance intention even with such important tools as mobile secure communication application.

These studies are relevant to my research by giving background to my research and detailing related studies focusing on user experience in a similar manner as this research.

3   THEORETICAL FRAMEWORK

This chapter will present different theories about technology acceptance and user experience and explain reasons for the theoretical framework grounding this research. The base for theoretical framework derived from reviewing previous studies and literature relating to the key subjects covered in this study. Ultimately, I ended up using two theories as the most appropriate framework for research. TAM and UTAUT were chosen as a theoretical background of my research.

The conceptual framework is more than the overall "game plan" or "modus operandi" for a research study. It is the theoretical glue that holds all of the preliminary design decisions together (Saldana 2011). According to Sanakulov et al. (2018, 3) technology adoption can be categorized to three streams:

- individual acceptance of technology
- implementation success at the organizational level
- task technology fit

3.1   Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is a theoretical framework that is often used to explain an individual´s acceptance of an information technology or an information technology system. TAM tries to understand how users accept and use a technology (Rondan-Cataluña et al 2015). The key purpose of TAM is to provide a basis for tracing the impact of external factors on internal beliefs, attitudes and intentions (Davis et al. 1989, 985).
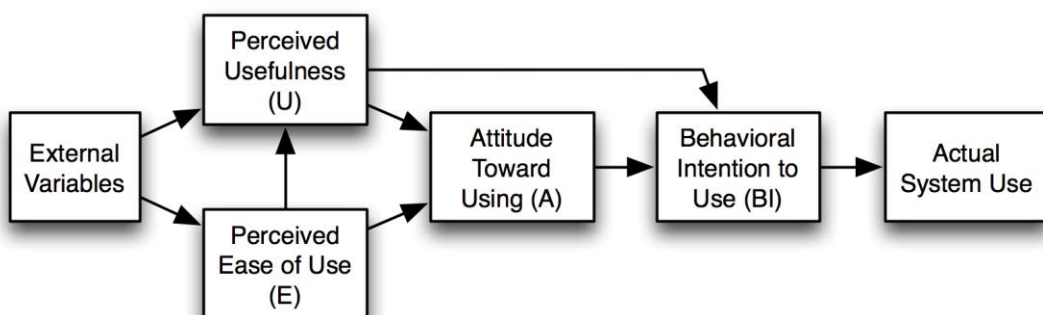
Figure 1 Technology Acceptance Model (TAM) (Davis et al. 1989, 985)

Technology Acceptance Model was developed from the theory of reasoned action (TRA) (Fisbein&Ajacen 1975, 406-408) and the theory of planned behavior (TBR) (Ajazen 1991, 181-182). Both models are based on the premise that individuals make logical, reasoned decisions to engage in specific behaviors by evaluating the information available to them. The performance of a behavior is determined by the individual's intention to engage in it and the perception that the behavior is within his/her control (Ryan&Carr 2010, 1). Davis employed TRA to explore the relationship among perception, factors of affections, and technology usage, and he used the derived findings to construct TAM, which proposes that users´ acceptance of a new system is affected by their attitude toward using the system (Wu et al. 2011, 135).

Compared with TRA, there are two additional constructs in TAM:

- Perceived usefulness: This is the degree to which one believes that using a particular information technology or system can enhance his/her job performance. In other words, the more one perceives a new technology or system as useful, the more positive is his/her attitude toward using the technology system.
- Perceived ease of use: This is the degree to which one believes that a particular information technology or system is easy to use. In other words, the more one perceives a technology or system as easy to use, the more positive is his/her attitude toward using the technology or system.

Other constructs include:

- Attitude toward using: A user´s attitude toward a new information technology is simultaneously influenced by perceived usefulness and perceived ease of use of the technology. Higher perceived usefulness of a technology or system leads to a more positive attitude toward using it.
- Behavioral Intention to use: A user´s behavioral intention to use a new system is influenced by his/her attitude and perceived usefulness of the system. (Wu et al. 2011, 135-136)

According to Wu et al. (2011, 135) TAM is expected to be applicable across different technology behaviors, user genders, and user groups. In other words, the fundamental idea of TAM is

consistent with that of the theory of reasoned action attitude and intention are determinants of beliefs.

Over time, the TAM model has been implemented in a variety of contexts, beyond the mere acceptance of computers in the workplace. Therefore, TAM has become well - established as a robust, powerful, and parsimonious model for predicting user acceptance (Rondan-Cataluña et al 2015). TAM has become so popular that it has been cited in most of the research that deals with user acceptance of technology (Chuttur 2009, 2).

Chuttur divides the criticism for the TAM model in three categories:
- The methodology used for testing the TAM model
- The variables and relationships that exist within the TAM model
- The core theoretical foundation underlying the TAM model. (Chuttur 2009, 15)

Because of the generic nature of this model, it has been modified and expanded by adding new explanatory factors to the perceived ease of use and usefulness (Holm 2013, 38).

TAM2 was proposed by adding two groups of constructs to TAM:
- Social influence: image, subject norms and voluntariness
- Cognitive: result demonstrability, job relevance and output quality

The intension was to improve the predictive power of perceived usefulness (Taherdoost 2018, 963).

3.2   Unified Theory of Acceptance and Use of Technology (UTAUT)

Venkates and Morris compared the similarities and differences among the eight models which were previously used in the context of information system. These models are:
- Technology Acceptance Model
- Theory of Reasoned Action
- combined TAM and TPB
- Theory of Planned Behavior
- Model of PC Utilization
- Diffusion of Innovation
- Motivational Model

- Social Cognitive Theory

UTAUT identified for antecedents of the acceptance of information systems. They were developed by tailoring the fourteen initial constructs from eight acceptance theories. (Taherdoost 2017,965)

UTAUT pointed out four constructs that play a significant role as direct determinants of user acceptance and usage behavior: performance expectancy, effort expectancy, social influence, and facilitating conditions (Rondan-Cataluña et al 2015). Four significant moderating variables were identified: gender, age, experience and voluntariness of use (Taherdoost 2017, 965)

The constructs are:
- Effort expectancy: It means how much the user thinks that using the system will help them improve their performance.
- Performance expectancy: It means how much ease of use is associated with using the system.
- Social influence: Means how much the user feels that important people in user´s life believe that the user should use the new system.
- Facilitation conditions: Means how much the user believes the organization and technical infrastructure support the system. (Holm 2013, 26-27)
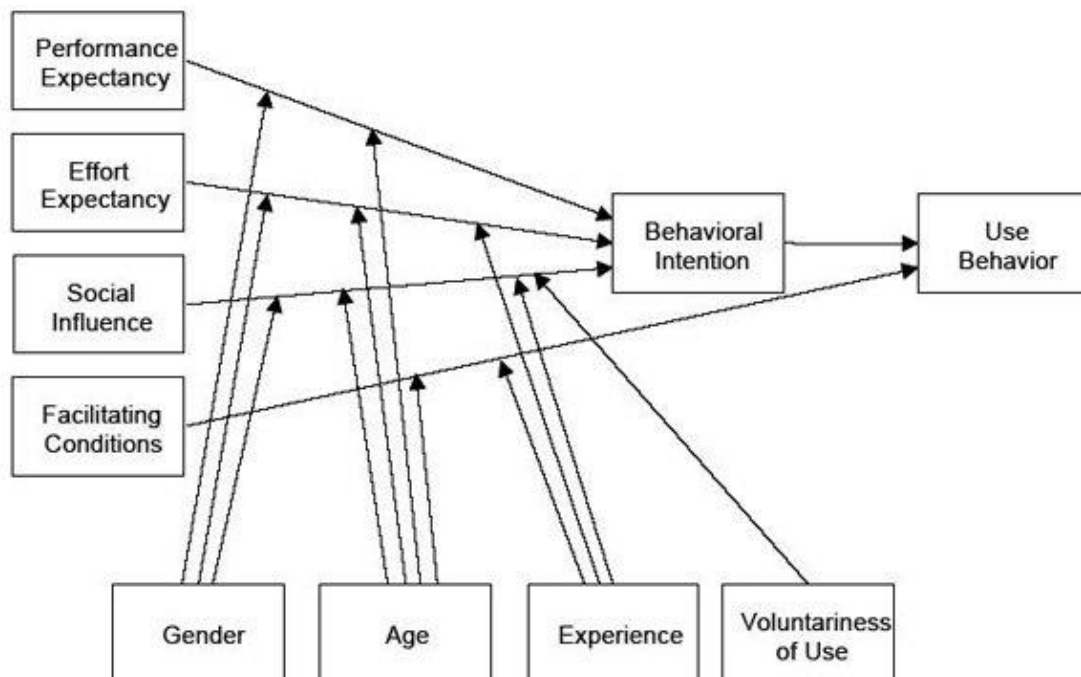

Figure 2 The Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT lends credence to the fact that technology and its usage in different spheres of life ought to go through various stages like designing, planning, implementing and leveraging in various ways before making that much needed change in human lives. The stakeholders involved in various stages of technology need to know the challenges they might come across in order to overcome them while successfully implementing technology (Chakraborty&Rashdi 2005,1).

In the UTAUT model, intent to use is a predictor of technology use. In the UTAUT model, external factors directly influence the intention to use. In the TAM model, they are assumed to influence the intent of use through perceived usefulness and ease of use. (Holm 2013, 30)

Past studies have indicated that these models have been successful in examining technology adoption. (Sanakulov et al, 2018, 3).

TAM and UTAUT are used together in this research as the theoretical background.

3.3   Acceptance

Horberry et al. (2014) write that although we do not have a single agreed definition, or a single model, of acceptance, there seems to be general consensus on some important issues relating to acceptance:
- Acceptance is a complex construct which has many facets and dependencies
- Acceptance is based on individual judgements, so a driver-centric view is required to measure or predict acceptance at an individual level (assessing societal acceptance requires an additional broader perspective)
- Two key determinants of acceptance of new technology are usefulness and ease of use
- Acceptance depends on the individual, so issues such as gender, age, culture and personality are likely to be important
- The context of use is also important, including the supporting 'infrastructure' (in its widest sense), whether use of the technology is voluntary and also broader social/cultural influences.
- Drivers do not have to actually like a technology/system to be accepting of it (but liking it may increase use of the technology)
- Acceptance should be regarded as a continuous variable, not a binary concept

- Acceptance is not invariant; it may change (even for one individual) depending on the specific time/context in which the new technology is used and as experience with the technology develops.

Horberry et al. (2014) identify five categories of acceptance definitions:
- Using the word 'accept'
- Satisfying user needs and requirements
- The summation of attitudes
- Willingness to use
- Actual use.

3.4   User Experience

User experience is referred to as UX (Hassenzahl and Tractinsky 2006, 1). Norman describes the user experience as covering all the aspects of user interactions with the product: the system experience occurs when interacting with the system. (Norman 1999, 3, 321)

Kiili (2018, 80) writes that user experience consists of three main elements: users, an artefact and a task. User experience emerges from the interplay between these elements in certain context of use. The context of use is the actual conditions under which a given artefact is normally used. The characteristics of users, such as emotions, values and prior experience, determine how users perceive an artefact and the task at hand. (Kiili, 2018, 80) According to Kiili (2018, 79) user experience is focused on the interactions between people and product, and the experience that results in certain context of use.

Mahlke (2005) has integrated four dimensions of experience into the basic user experience model. The four dimensions are perceived usefulness, ease of use, hedonic quality and visual attractiveness.
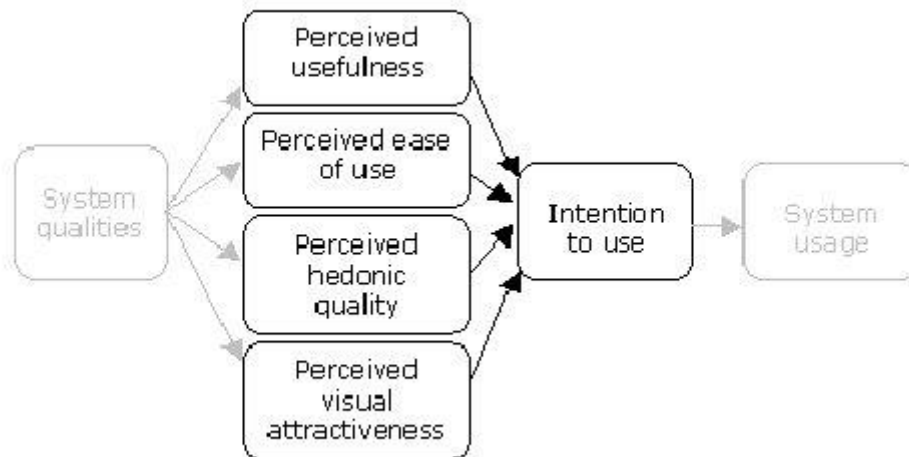
Figure 3 User experience model by Sascha Mahlke (2005)

According to Mahlke (2005) all four aspects of experience are mostly independently perceived by the user and all contribute significantly to the intention to use while perceived usefulness had the major influence and the other experience dimensions had smaller effects.

According to Hassenzahl and Tractinsky (2006) the experiential perspective on UX emphasizes two aspects of technology use: its situatedness and its temporality. In this view, an experience is a unique combination of various elements, such as the product and internal states of the user (e.g. mood, expectations, active goals), which extends overtime with a definitive beginning and end. The experiential assumes all these elements to be interrelated – to interact and modify each other. The outcome of this process is the actual experience (Hassenzahl andTractinsky 2006, 94).

According to Kari et al. if the user perceived the application to be adequately easy to use, trustworthy and reliable, and exceeding the expectations, it positively influenced the use experiences of the application. The user expects and needs experiences that concretely exhibit that the use has been beneficial for oneself (Kari et al. 2018, 6).

3.5   Use case

A use case is a situation in which a user would want to use the system. Usually, at least one use case is obvious, but more use cases come to mind as you think about the system from different users´ perspective (Jackson 2009, 39).

A use case is a methodology used in system analysis to identify, clarify and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal (Rouse 2020, 1).

A use case is a list of steps that illustrate how a process will be carried out in a system. The document walks you through the steps the actor will take to achieve a goal. A use case is written by a business analyst who meets with each user, or actor, to write out the explicit steps in a process (McIntyre 2019, 1).

Use case contains three essential elements:

- The actor: The system user - this can be a single person or a group of people interacting with the process.
- The goal: The final successful outcome that completes the process.
- The system: The process and steps taken to reach the end goal, including the necessary functional requirements and their anticipated behaviours. (Rouse 2020,1)

Additional elements that are included in a complex use case:

- Stakeholders: which are those who have an interest in how the system turns out, even if they aren't direct users
- Preconditions: which are things that must be true before a use case is run
- Triggers: which are events that occur for a use case to begin. (McIntyre 2019, 1)

At the end of the research, in chapter 8, I will present use cases that have emerged in the course of the research to give an extensive overview of the possibilities of using the service in different fields of study.

4 RESEARCH METHODS

In this chapter, the research methods used in descriptive empirical research will be detailed. Topics to be covered include the Youpret mobile interpretation services, qualitative research, case study and theme interviews.

4.1 Youpret

Youpret Ltd is a Finnish company that provides mobile interpretation services. Youpret has over 20 years of expertise in the field of interpreting. It utilises professional interpreters who work in accordance with the code of conduct. Youpret offers interpretation for over 60 languages. The company's strategy is to ensure that every person can be understood and served in their own language. Youpret provides instant interpretation with no start-up fee at per-minute rate or by appointment. A mobile phone subscription is required for interpretation. The application selects an interpreter who is currently online and forwards the user's information. The interpreter then calls the given phone number within a few minutes.

4.2 Qualitative research

The empirical part of the study is conducted using a qualitative approach since the aim of the study is to gather deep understanding of the adoption process. Qualitative research is an umbrella term for a wide variety of approaches to and methods for the study of natural social life. The information or data collected and analyzed is primarily (but not exclusively) nonquantitative in character, consisting of textual materials such as interview transcripts and fieldnotes (Saldana et al, 2011).

Have (2004) states that qualitative research is especially used to study what he calls commonalities, i.e. common properties, within a relatively small number of cases of which many aspects are considered. Cases are examined intensively with techniques designed to facilitate the clarification of theoretical concepts and empirical categories.

A good qualitative research study is likely to exhibit the following general features:

- Its aim and purpose should be explained and set in the context (e.g. historical, political, disciplinary) in which these arose.

- The rationale for the design of the enquiry should be explained.

- The researcher should demonstrate openness to emergent issues.

- The researcher should seek to be transparent and reflexive about conduct, theoretical perspective and values.

- The study should provide understanding of context.

- The study should re-present data or evidence faithfully.

- A qualitative research study is likely to convey depth, diversity, subtlety and complexity.

- Data or evidence should be actively and critically interrogated.

- Claims should be supported by evidence for those claims.

- Some (but not all) studies may be judged according to their utility or relevance for particular groups of people and particular power relations.

- Some (but not all) studies may be judged according to whether they provide understanding of subjective meanings (see our comments earlier about the limitations of romantic interpretations that seek for 'authentic' human experience).

- The study should provide new insights. (Seal 2004, 9)

4.3 Case study

The case study approach is used in this research. A case study focuses on a single unit for analysis (Saldana 2011). My unit is eight parents from immigrant background at one school in Vaasa. Saldana (2011) states that purpose in case study is not necessarily to develop an argument for how the single case represents or reflects comparable individuals or sites. Unlike studies that research many settings or participants to gather a broader and more representative spectrum of perspectives, the case study in and of itself is valued as a unit that permits in-depth examination. Case study explains how the case speaks to a broader population or issue (Saldana 2011). My research doesn´t try to create a new theory but focuses more deeply on one unit.

The two processes (getting to know the literature and getting to know the case) should go along simultaneously so that the reading and what is turning up in case study interact: they feed into each other. (Gillham 2000, 38)

In case study research the researcher is the (human) research instrument (Gillham 2000, 27). Case study research work. Nothing is disregarded, sifted and checked. It is very much like detective, everything is weighed and corroborated. (Gillham 2000,32)

A case study is one which investigates specific research questions (that may be fairly loose to begin with) and which seeks a range of different kinds of evidence, evidence which is there in the case setting, and which has to be abstracted and collated to get the best possible answers (Gillham 2000, 1).

4.4   Theme interview

Have (2004) writes that the crucial property when doing qualitative interview is that the researcher arranges sessions with the research subjects in which the latter talk about their ideas at the initiative of and for the benefit of the researcher. In that sense, the data produced in interviews have an experimental quality. Without the research project, they would not exist. Óskarsdóttir (2015) writes that the form and the style of an interview depends on its purpose.

Saldana (2011) writes that an interview is an effective way of soliciting and documenting, in their own words, an individual's or group's perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, in addition to factual information about their lives.

Have (2004) states that doing interviews has several obvious practical advantages. The researcher can collect a large amount of on-target information with a minimal investment in terms of time and social effort. Have (2004) writes that the interview format tends to be based on an asymmetrical distribution of interactional jobs. The interviewer is to produce utterances that can be taken as questions, although their actual format may be not be question like.

The target group of interviewees consisted of parents from immigrant background at one school in Vaasa. In the beginning of the research I told about the research, theme, companies involved, the fact that I won´t profit from the research and that the use of mobile interpretation services in the research is free for them. The questions were formed by the theoretical background of the research.

Because of the language skills of the interviewees I made simple and short questions. I listened carefully and let them talk for a long time and used an interpreter when needed.

The interviews were semi-structured. Semi-structured interviews are a suitable method for data collection when information is sought on intimate and sensitive issues or issues that the informants do not easily recognize, such as values. Interviews make it easier for a researcher to repeat and clarify questions and to have discussions. (Metsämuuronen 2008, 41). Óskarsdóttir (2015) writes that in semi-structured interviews the researcher asks mainly open-ended questions.

Semi-structured interview allows a range of views to be taken using a flexible approach with an evolving nature of questioning based on interviewee response. (Chatterjee 2018, 61). A semi-structured interview anticipates analysis and facilitates the organization of that final stage (Gillham 2005, 75).

Probes also exemplify the point that there is a great deal more to interviewing than simply asking questions. The semi-structured interview is both flexible and, at the same time, standardized. Every interview is 'unique' and personal, and yet covers essentially the same ground (Gillham 2000, 69).

4.5   Methods of data collection

The name of the school and the languages the respondents spoke has been changed or omitted to ensure confidentiality. The respondents spoke four different languages. The venue for the research was a classroom at a school in Vaasa, Finland. The interviews took place during January-February 2020. Eight parents were interviewed after they used Youpret interpretation services with a teacher. The interviewees were invited to the research in writing and they volunteered to attend. None of the meetings with the interviewees were canceled. In the beginning of every research situation, the interviewees were told about the research and asked for a written permission to participate in the research. They were also reminded that participation was voluntary and could opt-out at any time. I explained to the parent (and learner) what was going to happen and how we would contact the interpreter in the research. I had downloaded the Youpret mobile interpreter application on my phone and also practiced using the service with Youpret representative.

When the mobile interpreting and the discussion were over, we moved to the theme interview. The theme interviews were conducted as confidential in an environment familiar to the interviewees. Questions were asked in order to get deeper in answers and to be able to get insight to the subject.

The researcher knew the participants in advance. The place for the research was the classroom of the learners. Two research situations were conference calls to the parent with the interpreter online at the same time. In these cases, the interview took place on the following day at school. The schedule for the research was made based on the normal schedule of the class and school. January and February were chosen as the time frame because a lot important is happening in home-school collaboration. Based on the regulations in Vaasa city, the assessment discussions should be held between November and January. For the validity of the research, the research events were intended to follow normal school practices in relation to home-school collaboration, not organized separately for the research. The assessment discussions were held in January, other discussions in February.

From eight research situations, four were assessment discussions, two were language choices for the coming year and two were discussions on activities to support student learning. The respondents were approached through the personal relations as a teacher in the class.

The assessment discussions replace the midterm report card in the city of Vaasa. The discussion covers general discussion about learner´s issues at school, evaluation for support, the success of different subjects, evaluation of wide competence and setting a goal for the student for the current school year. The issues and goals of the assessment discussion are recorded in Wilma.

Discussion on support for learning covers topics concerning three stage support. If general support is not enough, the learner will receive intensified support. These issues are discussed with parents. The teacher tells the parents what kind of support measure the learner has received and what kind of support the learner will receive. The support measures and support decisions are recorded in Wilma.

When discussing a child's language choice, the teacher will discuss with the parent whether it is wise to start a new language volunteer next school year, or whether it is still worthwhile to focus on studying one's mother tongue, confirming Finnish as a second language and studying English. A

Wilma message is sent home about these issues, but many parents with an immigrant background do not understand what the language bulletin says.

Research situations and interpretation methods are presented in tables below.

Table 1 Research situations

Participant	Research situation
Participant 1	Assessment discussion, child present
Participant 2	Assessment discussion, child present
Participant 3	Assessment discussion, child present
Participant 4	Assessment discussion, child present
Participant 5	Discussion on support for learning, child present
Participant 6	Discussion on support for learning, child present
Participant 7	Discussion of the child's language choice
Participant 8	Discussion of the child's language choice

Table 2 Interpretation methods

Participant	Interpretation method	Occation
Participant 1	Request for interpretation by appointment	Meeting at school
Participant 2	Request for interpretation by appointment	Meeting at school
Participant 3	Request for interpretation by appointment	Meeting at school
Participant 4	Request for interpretation by appointment	Meeting at school
Participant 5	Instant request for interpretation	Meeting at school
Participant 6	Instant request for interpretation	Meeting at School
Participant 7	Instant request for interpretation	A conference call
Participant 8	Instant request for interpretation	A conference call

A permission to conduct the research was received from the principal of the school. The participants were chosen from those parents with an immigrant background who the researcher knew from the school. Interviewees were asked about their willingness to participate in the study when they were invited to the situation by Wilma message or in a conference call at the beginning of the call before the matter was started. In research situations at the school the participants were told about the research, its objectives and practices before the research began. Participants were asked to sign a paper describing the study (appendix 1). The main content of the paper was interpreted to the parent.

The signature was requested at school prior to the research when using a conference call. Because I knew the interviewees beforehand, the interviewees were happy with the research and the participating parents were positive to get help with their children's schooling through mobile interpretation services. It made sense to organize research situations in the students' own, familiar classroom, where parents had attended discussions earlier.

5   ANALYSIS OF DATA

In this chapter, the analysis of data, reliability, validity and ethics of this research will be outlined.

A deductive content analysis was used to examine the data collected.

Saldana (2011) writes that qualitative researchers should not shy away from researching and including any statistical information relevant to their studies. This is not to suggest that mixed methods studies should always be the norm, but sometimes numbers can add insight, texture, and context to the repository of qualitative data in a report.

After interviewing the parents, recordings were transcribed. A process of coding was completed using color codes with different topics to combine answers. After that I formed the entities and calculated the percentages.

In data analysis the respondents used term "service". This term refers to the Youpret interpretation services application downloaded to my phone and used in the research. The service was used either as instant request for interpretation or request for interpretation by appointment. The results were reflected and analyzed based on TAM and UTAUT.

5.1   Reliability of analysis

Reliability is a measure of trustworthiness or stability of the result of a questionnaire (Wu et al. 2011, 143) The interview questions were made easy to understand and the alternatives in the questions were clear. If necessary, an interpreter was used. This implies that the research featured high reliability. It is suggested that this research holds an acceptable level of reliability since responses from the target group are assumed to be comparable to similar groups of respondents. It is assumed that the study could be renewed with another similar group and to get similar results. Even though the sample size in this research is relatively small, I feel that the results are reliable because it consisted of different families from different cultures and backgrounds.

5.2 Validity

Wu et al. (2011, 143) Validity refers to an extent or level to which a measure represents all the facets of a concept. It indicates the representativeness of the test content, sampling adequacy and whether or not the content of the interview represents all the constructs of the measurement. In my research the questions to the interviews were developed on the basis of the theoretical framework and literature. The questions were first presented to a group of teachers teaching learners with an immigrant background as a process of validation. The sample of the research is narrow in size. This may affect the generalizability of the results.

5.3 Ethics

Saldana (2011) writes that participants' voluntary engagement in the project and our supportive rapport with them are necessary for the ethical conduct of research. Researcher's autobiography and identity influence and affect how the researcher navigate through the enterprise and approach other important elements, such as the relationship between the researcher and the participants and the analysis of data, life experiences, knowledge, training, emotions, values, attitudes, beliefs, gender, ethnicity, and so forth. The classic principle, "But first, do no harm," is the primary objective when working with human participants. (Saldana 2011)

In my research the consent of the person interview and observed was asked before the research in in writing and it was ensured that the person understands the issue through an interpreter. The participation in the study was based on voluntary compliance.

The Finnish Advisory Board on Research Integrity states that "sources of financing, conflicts of interest or other commitments relevant to the conduct of research are announced to all members of the research project and reported when publishing the research results." (The Finnish Advisory Board on Research Integrity 2018, 8). In my research I told these facts to the participants in the beginning of the research and they are stated in different parts of this research. My research was done in cooperation with Visma and Youpret. I took care that the ethnical aspects of research were included in all stages of the research. I made an agreement with Youpret that I can use mobile interpretation services for free to my research, but I didn´t or don´t have any other financial connection with Youpret or Visma in this study.

All European Academies write that it is underpinned by freedom to define research questions and develop theories, gather empirical material and employ appropriate methods. Allea (2018, 3) I formed research questions, developed theories, gathered empirical material and employed appropriate methods based on my interests and discussions in my own living area and workplace. I made decisions independently without the pressure of other parties but still listening to thoughts from Visma and Youpret when we discussed the research topic before starting the research.

In my research I don´t expose the race or ethnic origin of the participants in the study because it is sensitive information of the participants and recommended in guidelines of research that it is not appropriate. (Ammattikorkeakoulujen rehtorineuvosto Arene ry, 2018,11).

6   FINDINGS

In this chapter, I`ll present findings drawn from the interviews conducted. Data focuses on the topics of usefulness, ease of use, continued adoption, social influence, reliability, usability perceptions, accessibility, accuracy, currency, security and willingness to recommend the service to others.

The data is presented in written form and illustrated by tables and figures. The research findings are divided in sub chapters based on the theories presented earlier in the study. The perceived usefulness and perceived ease of use are presented in results in the beginning. The most attention was given to these determinants during the research. The data on parent´s experiences derived from interviews.

6.1   Profile of the interviewees

The age distribution of the respondents illustrates two demographics in this study. The first age group is from 30 to 35 years old with 50 percent of the respondents. The second age group is from 35 to 40 years old. Fifty percent of all respondents were in the second age group. Distribution between age groups is presented below in figure 4. There were 37 percent male and 63 percent female respondents. Distribution between male and female is presented in figure 5.
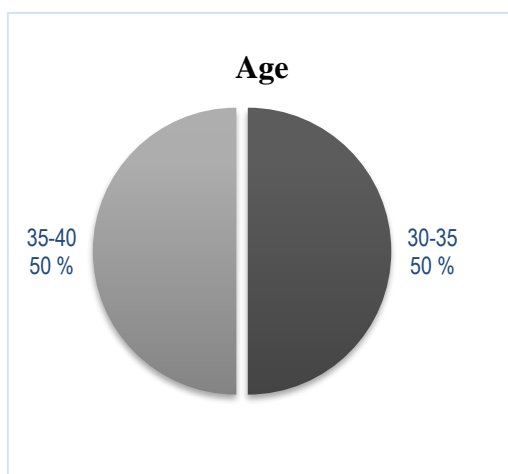
Figure 4 Age of the interviewees

Gender

Male
37 %

Female
63 %
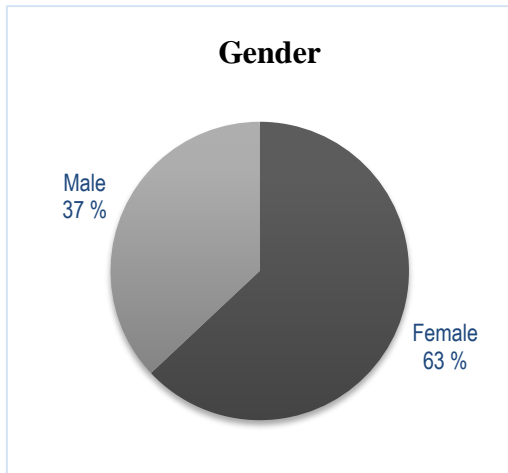
Figure 5 Gender of the interviewees

6.2   Pre usage beliefs

According to the interviews 37 percent of the respondents use the computer daily. 63 percent of the respondents don´t use computer daily. The percentage is illustrated in figure 6. None of the respondents had used Youpret interpretation services before.

The results show that 63% of respondents had experiences of similar services. 37% of respondents had no experience with similar services. The percentages are illustrated in figure 8 below.

63 percent of the respondents were open to try new IT services. 25 percent were not open to try new services. The percentages are shown in figure 9 below.

Daily use of the computer

Yes
37 %

No
63 %
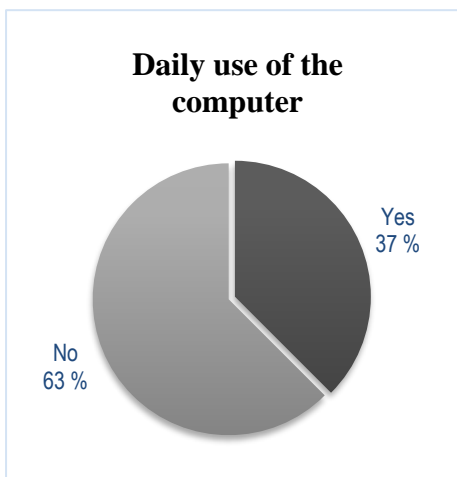
Figure 6 Daily use of computer

Previous experience of Youpret service

Yes
0 %

No
100 %
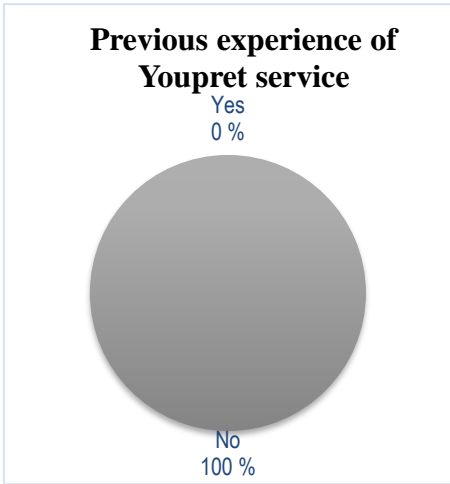
Figure 7 Previous experience of Youpret service

Previous experience of similar service

No
37 %

Yes
63 %
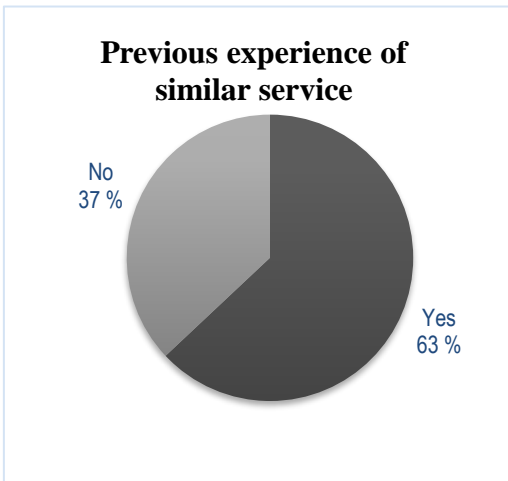
Figure 8 Previous experience of similar services

Open to try new IT services

Can't say
12 %

No
25 %

Yes
63 %
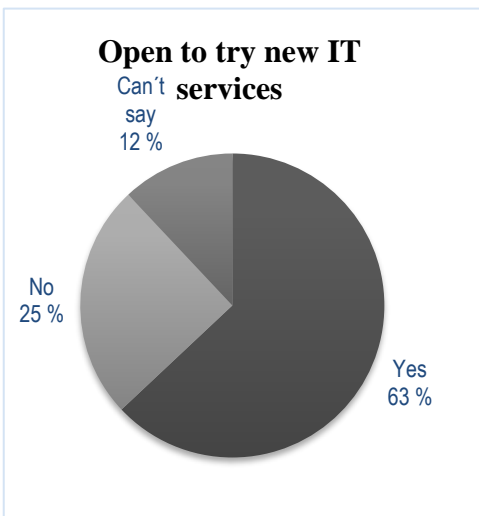
Figure 9 Open to try new IT services

6.3   Perceived usefulness

All parents had a very vague idea of the mobile interpretation service beforehand. The change in them was enormous when they used the service and noticed how useful and ease of use it is. One respondent said:

"Where can I download the service? Can I use it anywhere? How much does it cost to use it?"

According to the interview all respondents found the service useful. One parent said:

"I found the service really useful in many ways. I was able to tell in my own language things that I had not been able to say before because of my lack of language skills. I also heard my child's grades from previous years' school certificates because I didn't understand what the certificate said."

This parent's answer tells the harsh language of how important things can be missed due to lack of language skills. Research shows that school may not understand all situations where language barrier prevent understanding. The threshold to ask a teacher can be great for a parent who does not understand the language or may not be able to read. Another parent said:

"My child got a possible concussion last week during recess. The child came home and said he had fallen off from a stone during recess and hit his head. The teacher had not been informed of what had happened. I would have liked to call the teacher about the situation but due to the lack of a common language, I could not call."

When asked about perceived usefulness, on parent answered:

"I received a Wilma message about my child's language selection. I did not understand enough what the message said or where and when the language selection should be reported."

Another parent said:

"The service was useful because I don't often understand what the teacher says in assessment discussion because the school language and words are so difficult. Usually I just sit and say yes. I would like to know everything about my child´s education to be able to support him better."

The results from perceived usefulness show that there is a lot of things that parents from immigrant background can´t express because of language barrier. It is difficult for a school or teacher to know

when a parent does not understand. Often, the presence of the child affect that a parent does not dare to say that she/he doesn´t understand what is being said. One parent said:

"I can't read or write. This service gave me the opportunity to ask about reading practice at home. I wanted to know how I can support my child's literacy as much as possible even though I cannot read by myself."

One parent asked:

"Why there wasn´t such service before at school? This is so good service."

The percentages are illustrated in figure 10 below.
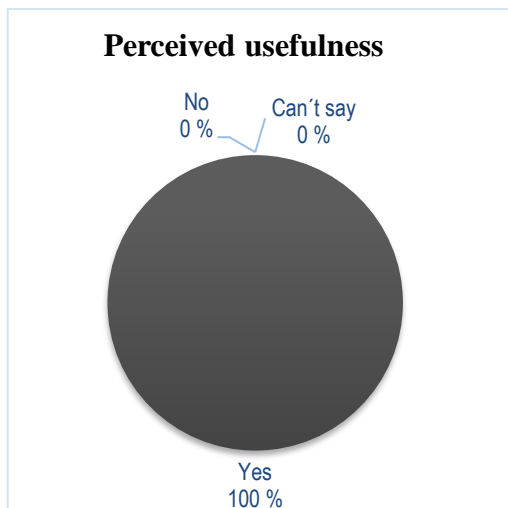
Figure 10 Perceived usefulness

6.4   Perceived ease of use

Figure 11 show that, 87 percent felt that the service was easy to use. 13 percent felt that it was not. Reasons for not experiencing ease of use were said:

"The dialect used by the interpreter was not the same as my dialect. It was difficult for me to find out some issues because I didn't understand them."

The service was considered ease of use. One respondent said:

"It was easy to use the service at school with the teacher. The teacher contacted the interpreter by telephone and the interpretation worked well."

One parent commented:

"The service was ease to use. I would have needed this service at a health center with a doctor. Although the phone connection was occasionally unclear, I was very pleased with the opportunity to use the service."

Another parent commented:

"I do anything for my child´s schooling. This service was ease to use with the teacher. I'd be happy to re-participate in research related to my child's schooling."
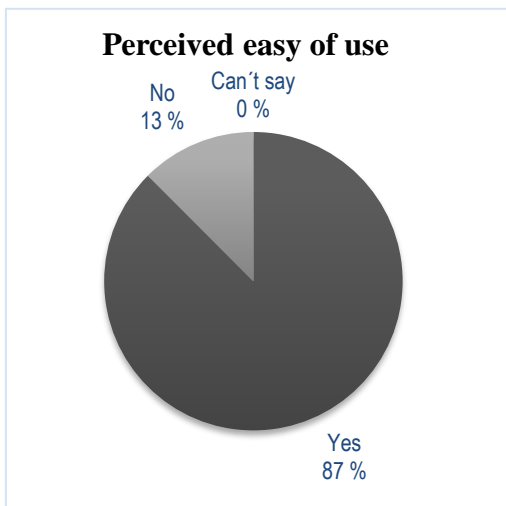
Figure 11 Perceived easy of use

6.5   Continued adoption

All respondents responded that they would continue to use Youpret mobile interpretation services at school. One parent asked:

"Is this interpreter service available for assessment discussions with my other children?"

One parent asked:

"I want to use this service in my business. Where can I find it?"

All the parents were curious after using the service that where can they find the service and how much it costs. One parent said:

"I hope I can use the service after my child gets his report card this year. I would like to know what the report card says."

The percentage of continued adoption of Youpret mobile interpretation services is shown below in figure 12.
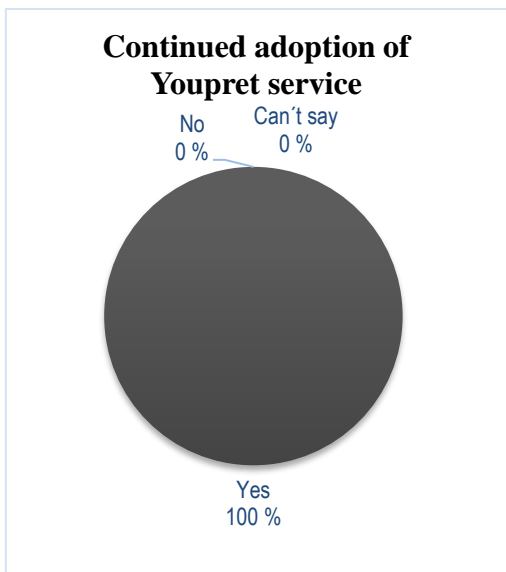

Continued adoption of Youpret service

No 0 %

Can´t say 0 %

Yes 100 %

Figure 12 Continued adoption of Youpret service

6.6 Social influence

All the respondents felt that the social influence is great when using the service. One parent said:

"I found it important to get the chance to talk to the teacher about things I couldn't talk to earlier this year. For once I felt like other parents who, because of their language skills, can get help with their child's school challenges at any time, for example by calling the teacher."

Another parent said:

"I felt a bond with my child because now I understood what I needed to do to help my child with homework. This is very good service."

One parent commented:

"I felt so good to understand everything the teacher said. It was also good to my child to see my interaction with the teacher."

According to the interviews, one parent felt good that once she could understand what was said at school and could answer herself to the teacher. The respondent felt that she could be a real parent because she understood the language. She said:

"Often my child translates papers from school to me. Also, he has interpreted discussion held at school to me afterwards at home. I felt so good when I could be a real parent in the discussion with the teacher with the service."

The percentages of social influence are shown below in figure 13.
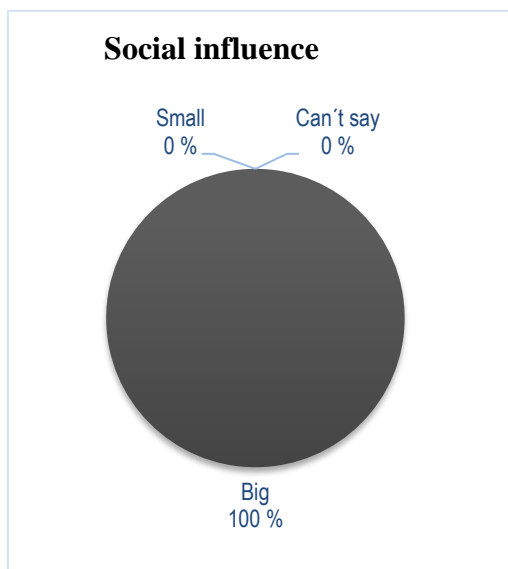
Figure 13 Social influence

6.7   Reliability

According to the interviews, all the respondents felt that the use of the service is reliable. One parent commented:

"The service was reliable. It was good that my name was not mentioned. It felt like my case was handled privately, even though there was an interpreter on the phone."

Another respondent said:

"I feel that it was reliable to use the service. I forgot that the interpreter is a stranger. After a short time, he seemed familiar because we spoke the same language."
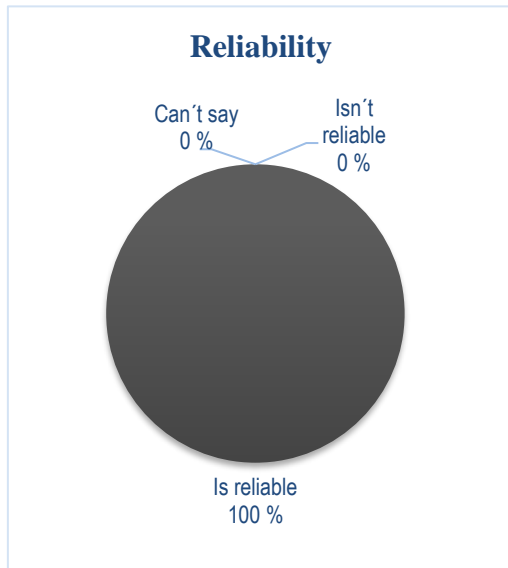
The results are reported in figure 14 below.

Figure 14 Reliability

6.8   Usability perceptions

All the interviewees but one felt that the usability perceptions were good. One respondent said:

"It was difficult for me to start talking to the interpreter. First she spoke another dialect and I didn't understand what she was saying and it took a while before the interpreter realized what dialect I was talking."

One respondent said:

"I was satisfied with the service."

Another respondent said:

 "It was good experience to use the service."

According to the interview there were many different opinions about the usability perceptions. One respondent said:

"This was a really good service as time was not booked in advance and the teacher contacted the interpreter by telephone and interpretation started very quickly."

Another respondent said:

"Interpretation was not my dialect. I realized it right away, but it didn't bother me at all. In this situation, interpreting at school worked well. For my child, for example, in an emergency at school, this service would work really well."

One respondent said:

"I have nothing bad to say about this service."

Another said:

"Talking with the teacher was easy with this service. I often find the conversations difficult because I don't speak Finnish very well."

One parent said:

"I feel that this service would help my child in school. I could understand what the certificate says, for example, and could support my child in the things that go wrong. This service would also help me a lot with the doctor as a parent."

Figure 15 indicates the percentages of usability perceptions.
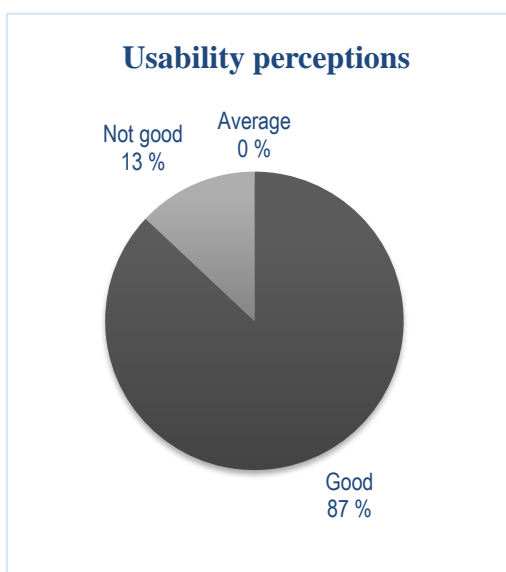
Figure 15 Usability perceptions

6.9   Accessibility

87 percent of the respondents felt that accessibility to the service with the teacher was good. One respondent said that the accessibility was average. That parent said:

"It took some time for the interpretation to start. While waiting, the teacher changed the interpretation method. Once the interpretation started, everything worked fine."

One parent commented:

"It's amazing how easy it was for a teacher to contact an interpreter over the phone. And yet, the interpreter spoke my language, which I rarely hear."

Another respondent said:

"Contact with the interpreter was quickly established. I guess we waited a minute or two. It's great that interpreters are waiting to call and they respond so quickly."

Percentages of accessibility at school with the teacher are shown below in figure 16.
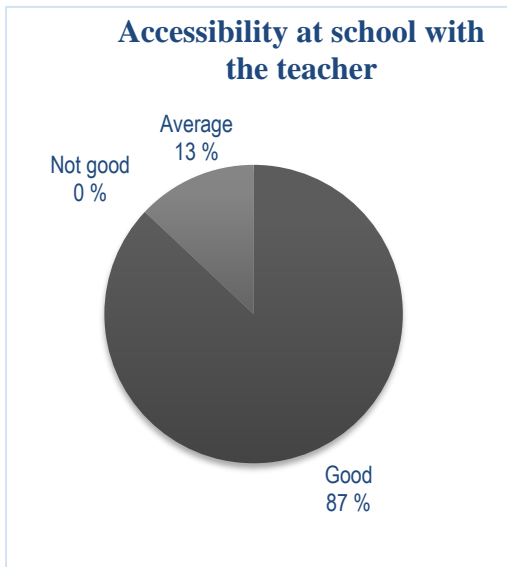
Figure 16 Accessibility at school with the teacher

6.10 Accessibility independently

There is a difference on the results concerning accessibility with a teacher and independently. Majority of respondents say that the accessibility independently is not good. One respondent didn´t have an answer to this. Two respondents said that the accessibility independently is good. When asked about possible challenges in accessibility independently, one respondent said:

"I am afraid to try new services. Usually I don´t understand the instructions how to start."

Another respondent said:

"I find all new things concerning services with computer or cellphone difficult in the beginning."

Percentages of accessibility on own are shown below in figure 17.
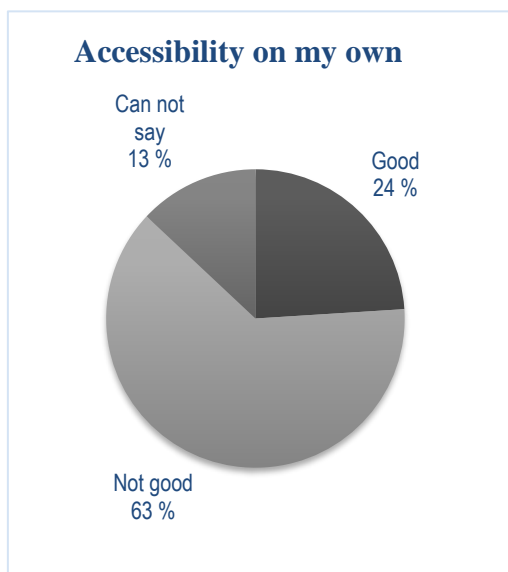
Figure 17 Accessibility on my own

6.11 Accuracy

The interviews showed that 63 percent of the parents felt that the service was accurate. 24 percent felt that the service wasn´t accurate. 13 percent felt that the service was average. One parent said:

"The dialect spoken by the interpreter was different from my dialect. I understood almost everything that was said, but a few words were words I didn't understand in my own language."

Another respondent said:

"The beginning of interpretation was difficult. At first, I did not understand what the interpreter said, then the interpreter asked where I'm from, and then he switched to a dialect, which I understood. There was noise in the background in the beginning of the call where the interpreter was."

One respondent said:

"The dialect of an interpreter was different from mine. It disturbed my focus on the situation."

One parent said:

"I asked my child who understands both languages. He said that the interpreter was good, and he was also very good in Finnish language."

Another respondent said:

"I understand some Finnish. The interpreter had good vocabulary in Finnish. He could explain difficult terms in assessment discussion to my language."

One respondent said:

"I felt that the interpreter was good. The conversation between me, the teacher, the interpreter and my child was smooth and good. The discussion went well."

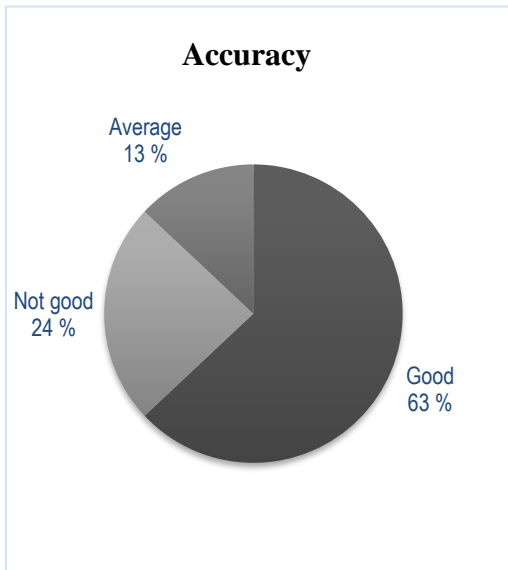Results of percentages of accuracy are shown below in figure 18.

Figure 18 Accuracy

6.12 Currency

All respondents felt that the currency of the service was good. One respondent said:

"This interpreter is perfect for this situation."

Another said:

"I got a call with a teacher and an interpreter. But they weren't in the same place with me or with each other. I got understanding and information about my child's language choice and during the call I made my child's language choice. I can't read, so Wilma's use is impossible to me. It felt good when I learned about important language choices in my own language."

In the interview one parent said:

"This service is great for a situation where I have a lot of concerns about my child's health but I can't contact the teacher because I don't have a common language with the teacher."

One respondent said:

"This service is suitable to so many situations with teacher and school."

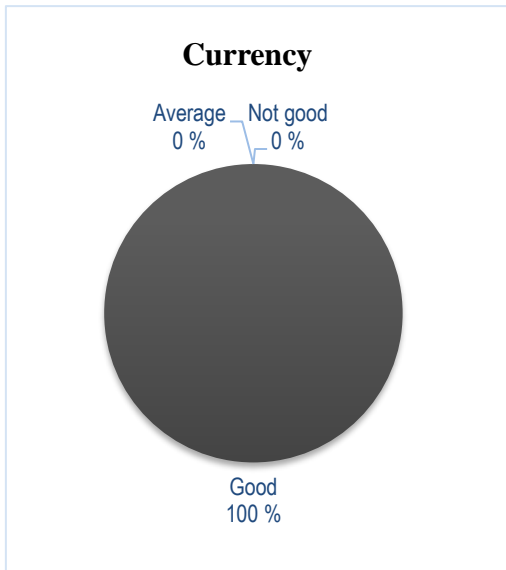Figure 19 below illustrates the results.

Figure 19 Currency

6.13 Security

General attitude towards security of the service was positive. 87 percent of the respondents felt that it was safe to use the service. Respectively one of the respondent felt that it was not safe to use the service. The respondent commented:

"I was afraid that the interpreter that I didn´t see, is familiar with my husband, from which I am divorced. We have had troubles and I dare not talk about sensitive things when someone unknown hears. I felt that I had to be careful not to say anything sensitive."

One respondent said:

"Because the teacher asked the name of the interpreter in the beginning of the interpretation, I became safe. The whole situation was safe for me and my child."

Another respondent said:

"It was safe because the interpreter didn't ask my name. It felt safe to know that an interpreter doesn't know me or know who I am."

One respondent said:

"I liked the fact that the teacher didn't talk about me or the child by name. She used the word student every time she talked about my child. She didn't mention my name to the interpreter at all. The fact that the interpreting service was on the teacher's phone was good. This way my phone number or name was not visible to the interpreter."

One respondent said:

"It felt safe when I heard the name of the interpreter and the place where she was calling."
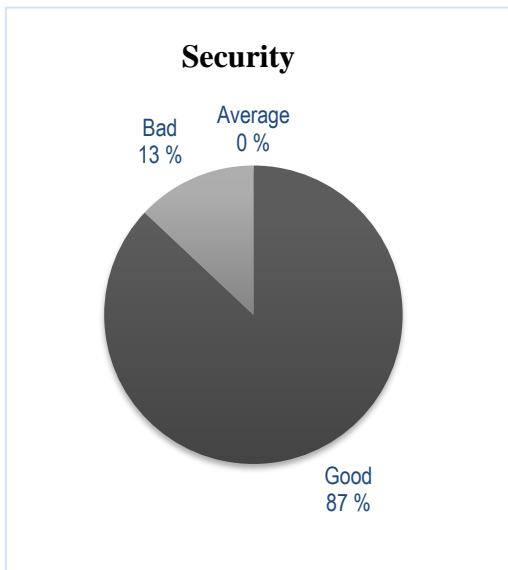
The percentages are illustrated in figure 20 below.

Figure 20 Security

6.14 Willingness to recommend the service to others

According to the interviews all the respondents wanted to recommend the service to others. When asked about the reasons one parent said:

"I would recommend this service to all parents who do not understand everything that is said in school discussions. Especially for interpreting certificates and discussing the child's schooling, this service is good."

Another respondent said:

"I recommend this service to every school. Oh, why this isn't in my second child's daycare. I've had a lot of language problems there."

One respondent said:

"I recommend this service to all foreigners living in Finland who do not understand Finnish. The service will help when you do not understand something."

Another respondent said:

"I would recommend the service to foreign parents. I would also recommend this to the hospital and especially to the emergency department."

One parent said:

"This is a really good thing for a parent whose child needs support for learning. You can ask what you can do at home to make your child´s school go better. When an interpreter was earlier at school in discussion about my child´s schooling, I didn't dare to ask. The situation was so official."

One respondent said:

"I would recommend this to all teachers. This would be super good for teachers."

One parent said in the interview:

"This is a really good thing for my child. I would recommend this to any parent who wants to help their child."

The results of the percentages are presented below in figure 21.

**Willingness to recommend
the service to others**

Can´t say
0 %

No
0 %

Yes
100 %
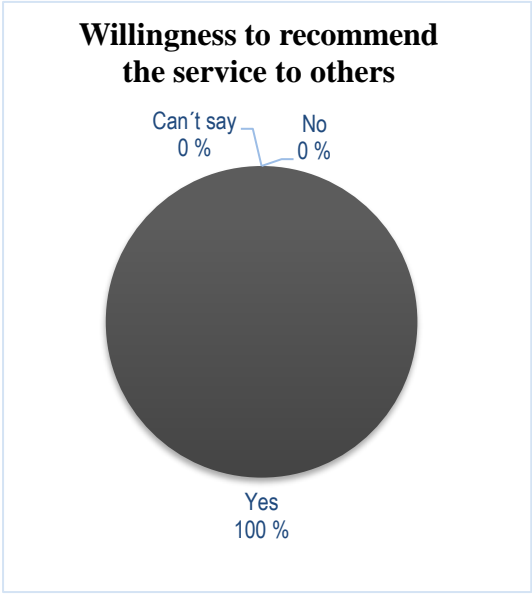
*Figure 21 Willingness to recommend the
service to others*

7 DISCUSSION

In this chapter I will present the outcomes of the study and connect these with the literature on TAM and UTAUT. I`ll present findings and thoughts on research data in connection to the theories used.

When reflecting the results of the research on the theoretical framework, most of respondents found the use of this service ease of use and useful. Perceived ease of use refers to the degree to which a person believes that the use of a system will be effortless. The results show that the use of mobile interpretation services at school was ease of use. All respondents found the service useful. Perceived usefulness is the degree to which one believes that using a particular information technology or system can enhance his/her performance.

As can be seen the biggest difference among respondents were found in accuracy. The results show that there is room for improvement in service accuracy. Respondents' reasons were related to the dialect spoken in the service or the lack of clarity of interpretation due to the telephone network. Some differences were found when examining the results by gender. None of the respondents had used Youpret mobile interpretation service before. In general level the attitudes towards the service were positive.

I found that the general user experience shows very little variance. Willingness to recommend the service to others act as a strong sign of good user experience. The results show that the respondents who were willing to recommend the service to others thought that the service was ease of use and useful.

When looking at the results from teacher's perspective I can say that it would be desirable that schools would provide this type of services, where a parent with an immigrant background can be contacted quickly through an interpreter without having to order an interpreter to travel to school. Interpreting services are used relatively rarely in schools, and hardly at all in short discussions about a learner with an immigrant background.

Looking at the results from the point of view of the learner with an immigrant background, it can be stated that there are situations where parents from immigrant background do not receive the same information as the parents of Finnish speaking learners. From the learner´s point of view, this is not

a good thing. In my opinion, the status of a learner with an immigrant background is not always equal with other pupils when parents are sometimes unaware of important school issues for example, the content of the certificate or the choice of language.

When looking at the results from the security we see that parental non recognition was important to many parents. Many parents did not want his or her child's name to be said and appreciated that the interpreting event was made anonymous. Results from this question show that learner´s families live in different situations that affect home-school collaboration. Sometimes the situation can be so sensitive that it is difficult for a parent to feel safe because, for example, they are afraid of losing their children to another parent.

Different life situations of the families have always taken into consideration in home-school cooperation. Because of language barriers, the teacher does not always know the family situation. Therefore, it is important to take this into account in order to increase the child's best interests. That is why it is important to think about how mobile interpreting services can increase everyone's sense of security. I will write more about this in next chapter, development proposals.

The results of the study confirm the importance of ease of use and usability of the service in technology adoption. The importance of education in immigrant families can also be seen in the results of the study. The study also confirms the inequalities that, due to a lack of language skills, undermine a student's chances of success at school. Information do not always reach parents due to lack of language skills. The study also confirms that parents' thresholds for contacting school on issues of concern are higher due to lack of language skills. This situation may weaken the student's learning at school.

The study did not reveal major difficulties. I was most nervous with the fact that if requests for interpretation by appointment would result in cancellations due to the student's parent being unable to attend, for example due to illness or other reasons. In practice, the biggest challenge at the beginning of the study was to find relevant literature on the topic. I made a plan before I started doing the research and it contributed to the fact that there were no major inconveniences. Also, knowing the families involved in the study in advance made it easy to set up a research plan and schedule. Regular contact with the research supervisor in the research and clear instructions for conducting the research facilitated the conduct of the research.

I could expect this service to be important and needed to support home-school collaboration for the benefit of the child. It was interesting for me to see how a service that I had never heard before works with my learners' parents at school. It was also interesting to find out what kind of user experience they had with the service.

On a personal level, I learned a lot when studying relevant literature on the topic of technology adoption. The theories presented in the study were familiar to me by name, but an in-depth study of them gave me much new knowledge.

8   CONCLUSIONS

Both two objectives of this study have been achieved. I have researched what kind of user experience parents have when using mobile interpretation services. The second objective was to find out what are the main factors affecting for a person to adopt mobile interpretation service.

Many important results emerge from the data. In addition to good experiences and satisfaction with the service, the material also raises an important area for improvement. It would be essential for the interpreter to introduce himself/herself first when using instant request for interpretation. In request for interpretation by appointment, the suitability of an interpreter could be ascertained in advance by the parent. This way, a sense of security would be created for the service, without having to think whether the interpreter knows the parent. In general, the content of interpretation is partially or wholly confidential. This is important even though interpreters have an obligation of confidentiality.

More research is needed to support this issue. With a larger sample, more information and user experience could be collected. For this service to be used in primary schools, this study gives enough information. In my opinion, this service is well suited for early childhood education, pre-school, high school, vocational education, adult education, preparatory education for basic education and post-secondary education with learners from immigrant background. I could not extend my research to all these forms of education. Based on the interviews in my study, this service would support the learner´s school path in all these forms of education.

A study by the City of Vaasa (Vaasa 2020, 1-21) shows that parents' lack of language skills and partly illiteracy are major challenges in their child's educational path. The results of this study show that Youpret mobile interpretation services meet these challenges. In order to use the service with a teacher or school staff, the parent does not require literacy.

As a result of the 2015 refugee crisis and the subsequent immigration trends to Finland, the Finnish school system will continue to attract pupils whose position this study seeks to help. There are also children born in Finland, but their parents have an immigrant background and therefore do not speak the language of the school. For example, preparatory education for basic education teachers should be able to use this service as soon as possible.

As can be seen on these results, the need for this kind of service at schools is great. It remains to be seen how such services are gaining ground in school everyday life to support pupils with an immigrant background and their families. The study published by City of Vaasa on educational pathways for learners from immigrant background and its challenges supports the need for such a service in schools and other forms of education. The fact that the number of learners from immigrant background at schools can be increasing support this.

The study raised an interesting question as to whether anonymous interpretation service in schools should be available. For many respondents, the fact that the interpreter was unknown was important and pleasant. The sensitive nature interpreting at school could be a correlating factor to whether interpretation is conducted on the spot or over a phone. The benefit of phone interpretation for schools is also the fact that travel costs are eliminated and thus the cost of interpreting is reduced. It would be interesting, for example, to calculate the cost of interpreting for one school per year and compare it with the corresponding cost of mobile interpretation services.

It is noteworthy that all participants in the study were satisfied with the service. They would recommend it to parents with an immigrant background and would like the service to be used actively in schools. These responses encourage hope for schools to explore new ways to support the schooling of learners with an immigrant background and to support home-school cooperation, which is key to support learning.

Further research on the continued adoption and user experience of the mobile interpretation services could be conducted with those teachers using the service in preparatory education for basic education.

I have compiled the following use cases to illustrate situations where mobile interpretation services can be used in schools to support immigrant learners and their parents in language challenges, to ensure that learners with immigrant background receive an equal support and to strengthen home-school cooperation.

8.1   Exploitability

8.1.1   Use cases

Mobile interpretation services serves as a translator for learner and parent to gain understanding of words, terminology or contents in various situations.

Use cases are presented below:

	Disputes or divorce situation in a learners´ family	Supports families in difficult situations in sharing information with stakeholders
	Infectious Disease Situations	Gives the family all the information needed in the situation
	Important schedules and excursions	Helps learner and parent to get the essential information
	Serious accident or illness	Allows the learner and parent to get help and information immediately

	Disputes during recess	Enables learner, teacher and parent to get understanding what has happened in an unpleasant situation
	Language or other study choice decision	Allows parent to get essential knowledge concerning important decisions
	Assessment discussion	Allows the parent to get essential information about their child´s schooling
	Report card and questions related to it	Assists learner and parent in grades affiliated to report card
	Discussions and decisions related to learning support	Supports families to get learning support and assistance needed
	Appointments with a school nurse, curator, psychologist or secretary.	A network for learner to get versatile support and assistance

	Orientation with a new learner and the family	Allows learner and parent to get support needed when starting as a new learner
	Fatalities in the family or school community	Enables families to get information, support and counseling in difficult situations
	Timetable in the beginning of the academic year and possible changes during the year	Helps learner and parent to get essential information
	Discussions and decisions with school counselor	Helps learner to develop skill sets, find strengths and grow in career paths
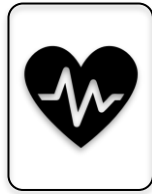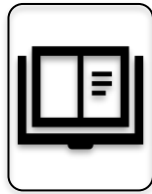
8.1.2   The fields of study to which the service is recommended for

	Early childhood education
	Pre-school
	Basic education
	Flexible basic education

| ★ | Morning and afternoon activities |

| ★ | High school |

| ★ | Vocational education |

| ★ | Preparatory education for basic education |

| ★ | Adult education |

| ★ | Post-secondary education with learners from immigrant background |

| ★ | Preparatory education for immigrants for vocational education |

You can't change the whole world, but you can change the whole world of one person. That's why I did this research.

"I have a dream, I want to be an engineer", said an eager and conscientious little boy in my class. I didn't know what to answer because I didn't know if his dream could ever come true. *But I hope it does.*

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APPENDIX 1 PARTICIPANT CONSENT FORM IN FINNISH

SUOSTUMUS TUTKIMUKSEEN OSALLISTUMISESTA

Suostun vapaaehtoisesti osallistumaan Suvi Dahlstenin opinnäytetyön tutkimukseen. Minulle on kerrottu tutkimuksesta, tutkimukseen liittyvistä yrityksistä, ketkä aineistoa käsittelevät, miten aineistoa käsitellään ja miten aineisto säilytetään. Se, mitä kerron, käsitellään luottamuksellisesti ja siten, että henkilöllisyyttäni ei ole mahdollista selvittää. Minulle on kerrottu mitä varten aineistoa kerätään ja mihin tarkoituksiin sitä voidaan käyttää. Voin keskeyttää osallistumiseni missä vaiheessa tahansa.

Paikka ja aika _____

Allekirjoitus _____

APPENDIX 2 CONSENT TO PARTICIPATION IN THE RESEARCH TRANSLATED IN ENGLISH

PARTICIPANT CONSENT FORM

I voluntarily agree to participate in thesis research of Suvi Dahlsten. I have been told about the research, the companies involved in the research, who handles the data, how the data is handled and how the data is stored. What I tell you is treated confidentially and in such a way that my identity cannot be ascertained. I have been told what the material is for and for what purposes it can be used. I can suspend my participation at any time.

Place and date _____

Signature of the participant _____

APPENDIX 3 THEME INTERVIEW IN FINNISH

Ennen

Ikä	
Sukupuoli	
Aiempi kokemus samanlaisista applikatioista	
Käytättekö tietokonetta arjessa?	
Oletko kuullut Youpretista? Oletko käyttänyt ennen?	
Oletko avoin koettamaan uusia IT-palveluita/applikaatioita?	

Aikana

Miten Youpret toimi? (käyttökokemus)	
Oliko jotain mikä ei toiminut? Miksi?	
Oliko Youprettia helppo käyttää?	
Miksi?	
Oliko Youpret hyödyllinen?	
Miksi?	
Kenelle Youpret olisi hyödyllinen?	
Miksi?	
Oliko käytössä jotain vaikeuksia?	
Millaisia?	
Oliko sinulla odotuksia palvelun suhteen?	
Vastasiko se odotuksia?	
Vastasiko palvelu tarpeisiin joita sinulla on?	

Jälkeen

Suosittelisitteko Youprettia muille?	
Kenelle?	

Miksi/miksi ei?	
Onko jotain mitä muuttaisit palvelussa?	
Käyttäisitkö palvelua uudestaan?	
Miksi? Miksi ei?	
Vastaisiko Youpret kielihaasteisiin koulun kanssa?	
Helpottiko Youpret ymmärtämään lapsesi kouluasioita paremmin?	
Miksi?	
Minkälaisissa tilanteissa Youprettia voisi käyttää koulussa?	
Onko jokin muutos joka saisi käyttämään tulevaisuudessa?	
Oliko Youpret luotettava?	
Mikä oli parasta?	
Onko Youpret tarpeellinen?	
Kenelle? **Suosittelisiko joku läheisesi sinulle tätä palvelua?**	
Miksi?	
Helpottaisiko palvelun käyttö kodin ja koulun yhteistyötä?	
Miksi? Missä asioissa helpottaisi?	
Oliko Youpretin käyttö turvallista?	
Miksi?	
Oliko palvelua helppo käyttää?	
Oliko tulkkaus hyvää?	
Ymmärsikö tulkki koulusanastoa?	
Oliko palvelu helposti saatavilla?	
Onko palvelussa jotain kehitettävää?	

Kiitos osallistumisesta tutkimukseeni.

APPENDIX 4 THEME INTERVIEW TRANSLATED IN ENGLISH

Before

Age	
Gender	
Do you have previous experiences with similar applications?	
Do you use computer in your everyday life?	
Have you heard of Youpret before?	
Have you used it before?	
Are you open to try new IT services/applications?	

During

How did Youpret work? (user experience)	
Was there something that didn't work?	
Why?	
Was Youpret ease to use?	
Why	
Was Youpret helpful?	
Why?	
Who would benefit from Youpret?	
Why?	
Did you have any difficulties?	
What kind of?	
Did you have any expectations for the service?	

Did it live up to your expectations?	
Did the service meet the needs you have?	

After

Would you recommend Youpret to others? Would someone close to you recommend this service to you?	
For whom?	
Why/why not?	
Is there something you would change about the service?	
Would you use the service again?	
Why? Why not?	
Did Youpret respond to language challenges in home-school collaboration?	
Did the service help you to feel better about your child´s schooling?	
Why?	
Did Youpret better understand your child's schooling?	
In which situations could Youpret be used at school?	
Is Youpret reliable?	
What was the best thing in this service?	
Is Youpret needful?	
To whom?	

Why?	
Would using the service facilitate home-school collaboration?	
Why?	
Is the use of Youpret safe?	
Why?	
Was the service ease to use?	
Was the interpretation good?	
Did the interpreter understand the school vocabulary?	
Was the service easily accessible?	
Is there something that should be developed in the service?	

Thank you for participating in my research