Does old school trust still apply?

A quantitative study in Sweden using concepts of original trust to highlight their function in a digitized world
Acknowledgement
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Abstract
Title: Does old school trust still apply?
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Background: Opportunities for companies to interact with both each other and consumers expand drastically due to the everyday life that is getting more digital. Something that is important for businesses is loyalty. In order to gain loyalty from a customer, companies need to gain the customer’s trust first. Trust has a significant role when business is conducted, but since there is a larger distance in an online context where there is a lack of direct contact trust gets more vital.

Purpose: The purpose of this study is to explain the impacts of antecedents on trust in an online B2B context.

Hypotheses:
H1: Ability has a positive impact on trust in an online B2B context
H2: Benevolence has a positive impact on trust in an online B2B context
H3: Internalised norms has a positive impact on trust in an online B2B context
H4: Accountability has a positive impact on trust in an online B2B context

Methodology: A quantitative research approach has been used and the empirical data has been collected through a questionnaire.

Conclusion: The hypotheses are being rejected in the conclusion due to lack of significance in the relationship between the concept trust online and the concepts: ability, benevolence, internalised norms and accountability. Since there was no relation the conceptual model was rejected as well.

Keywords: Trust, Trust online, Ability, Benevolence, Internalised norms, Accountability, B2B, Online business.
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1. Introduction

In the introduction the background of the study is presented to get an initial insight of the subject. Furthermore, there is a problematization regarding trust and the four antecedents, which are underlying factors for the study as a whole. The literature gap is explained and it is argued why this study is needed and why in the specific context of online B2B. Lastly, the purpose is stated.

1.1 Background

The Internet has had a great impact on how companies interact with each other (Parasuraman & Zinkhan, 2002). The digital revolution changes the ways of how companies act in order to do business successfully (Mulhern, 2009). Furthermore, Mulhern (2009) discusses how the everyday life is getting more digital, making the opportunities for companies to interact, with each other and consumers, expand drastically. Mulhern (2009) also describes how the digitization has transformed marketing communication into very diverse set of practices.

The study of Karjaluoto, Mustonen and Ulkuniemi (2015) shows that managers should be sensitive of the communication landscape, which is changing. Technology advanced electronic communication (e-communication) is getting more popular, and e-communication is defined as “... an exchange of data or information of any nature between two or more parties whereby the transmission depends on the law of electromagnetism” (Turkanović & Polančič, 2013, p. 194). Their definition is broad, enabling all forms of e-communication to be covered. According to Karjaluoto, Mustonen and Ulkuniemi (2015) when doing business and marketing, e-communication brings positive factors such as cost effectiveness for the company. Even though, many companies seem to not use e-communication to its fullest length, just using a website, e-mail and digital sales materials. They still rely on their offline tools to not lack in personal communication (Karjaluoto, Mustonen & Ulkuniemi, 2015).

Sarapaivanich and Patterson (2015) describe how it is critical for companies to communicate with customers in an effective way to retain their business relationship. Russo et al. (2016) argue that loyalty is important for successful business, and is something companies are investing in. Loyal customers lead to greater profits, indicating the importance of their role (Reichheld & Schefter, 2000; Weinstein, 2002). They have many valuable benefits such as
lower serving costs and their spread of positive recommendations (Reichheld, 1996). Reichheld and Scheftter (2000) further describe loyalty to be the glue in e-business, something companies can not survive without.

Chiou and Droge (2006) and Kim et al. (2015) argue that trust is positively related to loyalty, accordingly Reichheld and Scheftter (2000) believe that in order to gain loyalty from a customer, companies need to gain the customer’s trust first. Trust is an underlying factor when it comes to loyalty, moreover Reichheld and Scheftter (2000) state that the internet has put old rules in a new context, pointing out that trust and loyalty is still very important even though the ways of doing business has changed.

A customer that is loyal online is often willing to pay premium prices and recommend the company to other potential customers, which in turn can give higher profits (Reichheld, Markey & Hopton, 2000). When a customer trust a company online it is more likely he or she share personal information, which enables a more intense relationship (Reichheld & Scheftter, 2000). Furthermore, Shankar (2012) argues that B2B online is more relationship-oriented than B2C online. At the same time, Huang and Wilkinson (2013) state that trust has a central role in business relationships, indicating why companies in an online B2B context should work in a way that enhances the trust they receive from their customers. However, creating trust online can be hard for companies, especially when consumers are unfamiliar with them (McKnight, Choudhury & Kacmar, 2002; Gefen, 2000), highlighting a certain problematic companies need to be aware of. Moreover, trust is found to be the most important factor when choosing a company to do business with online (Reichheld, Markey & Hopton, 2000).

Furthermore, e-business is described to be of impersonal nature, where communication has an even more central role whereas the face to face transaction, which occurs in regular business, is missing (Pavlou, 2002). Since there is a larger distance in an online context where there is a lack of direct, physical contact, trust gets more vital (Brengman & Karimov, 2012).

1.2 Problem Discussion

Trust is considered a key factor in making business (Hoffmann, Lutz & Meckel, 2014), however, it brings a certain problematic for companies today in the online environment since the direct contact with the customer is missing (Wang & Emurian, 2005). Also, lack of trust will have a negative impact on e-commerce since people do not want to share personal
information, which is needed for online business to take place (McKnight, Choudhury & Kacmar, 2002). Calefato, Lanubile and Novielli (2015) discuss how websites does not provide the same opportunity of exploiting the human factors that are present in a traditional face to face meeting, making people need a lot more reassurance before they will trust a company and hand over personal information (Reichheld, Markey & Hopton, 2000). Furthermore, Reichheld and Schefter (2000) argue that customers can not look the sales person in the eyes or touch the products, indicating the difficulty of online business. Hence, building and gaining trust on the internet when there is a lack of personal contact with the customer is a challenge many companies are facing (Wang & Emurian, 2005). It might be argued that trust in an online environment has a more significant role than before due to the amount of business taking place online. Trust building is important in all businesses but Reichheld and Schefter (2000) argue it to be of more importance for online businesses.

In 1995 Mayer, Davis and Schoorman (1995) presented a model with three antecedents of trust. The antecedents have been used in several studies ever since the first development, and are still being used (Rusman et al. 2010a; Rusman et al. 2010b; Calefato Lanubile & Novielli, 2015; McKnight, Choudhury & Kacmar, 2002; Mayer & Davis, 1999; Schumann et al., 2012). The antecedents in the model of Mayer, Davis and Schoorman (1995) are ability, benevolence and integrity, moreover Colquitt, Scott and LePines (2007) have by a meta-analytic test proven that the three antecedents have a statically significant effect on trust.

Mayer, Davis and Schoorman’s (1995) antecedent integrity influenced Rusman et al.’s (2010a) choice of using the antecedent internalised norms in their model. Rusman et al. (2010a) and Rusman et al. (2010b) argue that internalised norms contains several important factors, including integrity as earlier been argued to have a substantial impact on trust (Mayer, Davis & Schoorman, 1995). While integrity has been further developed by researchers (Rusman et al. 2010a; Rusman et al. 2010b), ability and benevolence have been kept in their original form due to their strong impact on trust proven by several researchers (Mayer, Davis & Schoorman, 1995; Colquitt, Scott & LePines 2007; McKnight, Choudhury & Kacmar, 2002; Rusman et al. 2010a; Rusman et al. 2010b). Due to this, ability and benevolence will be kept in their original form in this study as well.
Calefato, Lanubile and Novielli (2015) added a fourth dimension in their model of trust. The fourth antecedent was predictability, a factor discussed but also rejected by Mayer, Davis and Schoorman (1995) due to their perception of its uselessness. Mayer, Davis and Schoorman (1995) excluded predictability by claiming a prediction of a certain behavior does not lead to feelings of trust, solely the prediction of the behavior itself. Calefato, Lanubile and Novielli (2015) on the other hand argue that predictability should be included in trust models since they believe that it plays a fundamental role in the relationship between customer and supplier. Rusman et al. (2010a) use the same underlying explanation of predictability as Calefato, Lanubile and Novielli (2015), but have chosen a broader antecedent named accountability, which includes predictability. Rusman et al. (2010a) argue that accountability answers to the expectations a trustor has on a trustee, whereas the trustee is the supplier and trustor the customer. Due to the use of accountability instead of predictability the coverage in Rusman et al.’s (2010a) study is more comprehensive.

The antecedents in this study are all parts of Rusman et al.’s (2010a) trust model, however their fifth antecedent communality will not be a part of this study. Communality, which is about shared personal characteristics (Rusman et al. 2010b), is difficult to measure and therefore the result of the study can be less reliable and valid. Similarity presented by Johnson and Grayson (2005) has resemblance to communality and is argued to only have impact on affective trust. Since the model in this study will not be divided into affective and cognitive trust, the antecedent similarity/communality will not be relevant.

Ability, benevolence, internalised norms and accountability are all important antecedents in models explaining impacts on trust, and will have a central role in this study through the conceptual model. The four antecedents are influenced by trust models by Mayer, Davis and Schoorman (1995), Rusman et al. (2010a), Rusman et al. (2010b) and Calefato, Lanubile and Novielli (2015). These are all focusing on trust, and not trust online in particular. The original model presented by Mayer, Davis and Schoorman (1995) will be further developed through internalised norms and extended with accountability as a fourth antecedent.

As previously mentioned there are three major antecedents that have been widely researched within the area of trust; ability, benevolence and integrity (Mayer, Davis & Schoorman, 1995; Rusman et al. 2010a; Rusman et al. 2010b; Calefato et al, 2015; McKnight, Choudhury &
Kacmar, 2002; Mayer & Davis, 1999; Schumann et al., 2012; Colquitt, Scott & LePines 2007). Even though they originate from trust, there are studies using them in the same sense when it comes to research within trust online (Gefen, 2002; McKnight & Choudhury, 2006; Gefen, Benbasat & Pavlou, 2008; Bock et al., 2012). It might be argued that assumptions like these are taken for granted, therefore this study will test if the antecedents that impact trust also have an impact on trust in an online context.

The research of Mayer, Davis and Schoorman (1995), Rusman et al. (2010a), and Calefato, Lanubile and Novielle (2015) all focus on a Business to Customer (B2C) context which aligns with most of the research in the area of trust. The predominance of B2C in trust research points out an aspect, which this study is taking into account; the Business to Business (B2B) context. Shan (2008) argues that trust building in the B2B context, more specifically in the electronic marketplace, has not been well studied. Accordingly, there is a substantial amount of research concerning trust and e-commerce within B2C (Reichheld, Markey & Hopton, 2000; McKnight, Choudhury & Kacmar, 2002; Büttner & Göritz, 2008; Brengman & Karimov, 2012; Sekhon et al. 2014). Dowell, Heffernan and Morrison (2013) argue that even though the trust literature has grown over the recent years there is limited research of trust and the development of it in B2B relationships. This indicates that there is more extensive research concerning trust than trust in an online environment. According to McKnight, Choudhury and Kacmar (2002) trust can be hard to establish online when there is no recollection of the company in question, indicating the important role of trust online and why the research of it may advantageously be developed. Shan (2008) points out the lack of research within trust in the B2B context, moreover he states that many researchers argue that trust building for companies within e-commerce is vital, even so, few have studied the relationship between B2B and trust in an electronic marketplace. Research regarding trust in both the online and B2B context is as argued limited, which enables it to get extended further (Shan, 2008).

1.3 Purpose

The purpose of this study is to explain the impacts of antecedents on trust in an online B2B context.
2. Literature review

The literature in the field of trust is discussed in this chapter. Different theories and research are reviewed to get a clear picture of previous literature. Both trust and trust in an online context are reviewed since these provide the basis for the study. Furthermore, the four antecedents ability, benevolence, internalised norms and accountability are thoroughly described.

2.1 Trust

Trust is defined as “the expectations of the parties in a transaction and the risks associated with assuming and acting on such expectations” (Lau & Lee, 1999, p. 343; Deutsch, 1958). Trust is argued to be the willingness to rely on others, based on past experiences and at the same time face a risk. The outcome of trust is hopefully positive, but the risk makes it possible for negative effects to occur (Lau & Lee, 1999). Rousseau et al. (1998) argue that vulnerability is vital for trust to exist, and describe trust as “... a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviors of another” (Rousseau et al. 1998, p. 395). It is also pointed out that the expectations of one part from another have a central role in the field of trust. When trust is created between two parties, they are what McKnight, Choudhury and Kaemar (2002) describe as a trustee and a trustor. The trustor is described as the customer, and the trustee as the supplier (Calefato, Lanubile & Novielli, 2015).

Trust is a subject that has been widely studied throughout the years. Previous research shows that the three antecedents of Mayer, Davis and Schoorman (1995); benevolence, integrity and ability, are often used in the field of trust. These three are the pillars of the model created by Mayer, Davis and Schoorman (1995), which aims to present the trust of one individual for another. Moreover, the model shows how the level of risk in a situation can lead to risk taking in the relationship between two parties. Furthermore, Calefato, Lanubile and Novielli (2015) extended the model with predictability, influenced by McKnight, Cummings and Chervany (1998). McKnight, Cummings and Chervany (1998) used predictability belief as an antecedent in their model “Initial Formation of Trust” and argued that their result needed to be tested empirically. To get a clean measurement of trust McKnight, Choudhury and Kaemar (2002) use three questions, which are rather point on. The questions concern if a person
generally trust people until they prove the opposite, or not. Moreover, their study shows that trusting varies with familiarity.

There is an extensive focus on trust in B2C relationships in previous research (Mayer, Davis & Schoorman, 1995; McKnight, Cummings & Chervany, 1998; Rusman et al., 2010a; Rusman et al., 2010b; Schumann et al., 2012; Calefato, Lanubile & Novielli, 2015) however Huang and Wilkinson (2013) argue that trust is very central in business relationships. Their study focuses on trust in business relations and the dynamics and evolution of it. Trust is something that changes and emerges over time, it is impossible to predict how trust and the relation will develop. Huang and Wilkinson (2013) further argue that trust both shapes and get shaped by the particular behavior occurring; at any time or place, trust in the business relationship influence what actions, interactions and reactions will take place. The outcome affects the degree of trust and the nature of the relationship, which has an impact on the individual’s feelings and beliefs toward the other party. Also, another factor that influences a potential partner is reputation; how a company has behaved in previous relation may have an impact on whether or not trust will develop (Huang & Wilkinson, 2013).

2.2 Trust in an Online Context

Bart et al. (2005) argue trust online to be all factors of websites, internet and technology, highlighting a company’s website to be seen as the starting point to build customer trust. Furthermore, trust online is described to be “a reliance on a firm by its stakeholders with regard to its business activities in the electronic medium, and in particular, its Web site, is important in both business-to-business (B2B) and business-to-consumer (B2C) e-business” (Shankar, Urban & Sultan, 2002, p. 325), indicating the importance of trust online in all business forms. The study of Calefato, Lanubile and Novielli (2015) presents the role of websites (and social media) when companies build trust to their customers.

Trust is more important than before, the online world we live in differs from the real one since there is a lack of face to face meeting (Calefato, Lanubile & Novielli, 2015). Therefore e-retailers are trying to raise consumer trust through social media applications or corporate blogs according to the study of Brengman and Karimov (2012). However, it can be hard for companies to create trust online when consumers are unfamiliar with them (McKnight, Choudhury & Kacmar, 2002), something that also Gefen (2000) points out. Therefore initial
trust has a vital role when it comes to trust online from the consumer’s side. Initial trust is when the relationship between companies and consumers yet do not have a meaningful information or bond with each other (McKnight, Choudhury & Kacmar, 2002). “Before you can begin to build a relationship with a customer, you need to show that you deserve his or her trust” (Reichheld, Markey & Hopton, 2000, p. 176), indicating trust comes first in a relationship. Sekhon et al. (2014) argue that in the process of marketing, trust plays a central role in the exchange relationships between company and customer. It has gotten increased interest from companies, and relationships can not be created without trust.

Büttner and Göritz (2008) describe how customers have to trust the promises online retailers are giving, otherwise they will not become buyers. Both the study of McKnight, Choudhury and Kacmar (2002) and Wang and Emurian (2005) describe trust in an e-commerce perspective and how trust makes consumers overcome perceptions of uncertainty, especially when giving out information about themselves, or purchasing on the internet. Hoffmann, Lutz and Meckel’s (2013) research explores the sociodemographic characteristics of the user and the effect of them in trust online (i.e. who the user is). Reichheld, Markey and Hopton (2000) argue that a customer is more likely to share sensitive information if they trust the company, which also is stated to align with the success of the company. Moreover, trust makes consumers comfortable when making a purchase, something that is vital for e-commerce (McKnight, Choudhury & Kacmar, 2002). According to Caldwell and Clapham (2003) trust is recognized as an important part of the success of organizations, in fact, Shan (2008) mentions trust to be the most important factor in e-commerce leading to success. Accordingly McKnight, Choudhury and Kacmar (2002) describe how lack of trust in the online environment can block e-commerce.

### 2.3 Ability

Ability is being defined as “…that group of skills, competencies, and characteristics that enable a party to have influence with some specific domain” (Mayer, Davis & Schoorman, 1995, p. 717). Having certain skills or high competence in a specific area can help gain trust. The trust is then focused to that area and can not be transmitted to other areas where the competence might be of lower grade. Terms such as competence and perceived expertise are being used as synonyms to ability, indicating the importance of the factors, just expressed in different ways (Mayer, Davis & Schoorman, 1995). Rusman et al. (2010b) include
knowledge, competence and skills as the main constructs of ability. *Knowledge* is about recalling “*facts, concepts, principles and procedures*” (Rusman et al. 2010b, p. 845) in specific areas (Rusman et al. 2010b, McKnight, Choudhury & Kacmar, 2002). *Competence* includes being able to behave appropriate and achieve good results when finding answers to problems in environments that are complex in the actual life. In order to achieve competence, one’s abilities characteristics and expertise should be used (Rusman et al. 2010b). *Skills* comprises to what extent a party have proficiency in how the business should act in order to achieve a specific goal (Butler, 1991; Rusman et al. 2010b).

### 2.4 Benevolence

Benevolence is being defined as “*the extent to which the trustee is believed to want to do good to the trustor, aside from an egocentric profit motive*” (Mayer, Davis & Schoorman, 1995, p. 718). Rusman et al. (2010a) argue that benevolence is an important antecedent in trust and it can be degraded into several factors. To be *willing to help* and more specifically to give support when it is required is one part of being benevolent (Rusman et al., 2010a). Further, it is important to be *available* to another party, which includes being reachable (Rusman et al. 2010b). That the trustee is *sharing* and more specifically gives access to means and information to other parties instead of keeping them is one way of being benevolent (Rusman et al. 2010b; Butler, 1991). In the study of Butler (1991) sharing information was found to be an important factor in trust, this was concluded through two different methods which extend the reliability. To share information openly is something that Colquitt, Scott and LePine (2007) argue to be more risk taking than keeping the information to oneself. However, according to Zolin et al. (2002) the information sharing is essential in order to build trust when there is no face to face communication.

To have *faith in intentions* is also something important in benevolence, to have faith in intentions is to not take advantage of another party and act in that party’s interest. Furthermore, it is essential for a trustee to be *friendly/kind* and easy to interact with in order to be trusted (Rusman et al., 2010b; Johnson-George & Swap, 1982). Thielmann and Hilbig (2015) argue that unconditional kindness is one factor that trust is driven by. The last part of benevolence is to be *caring*, more specified as being “*concerned about other people’s interests*” (Rusman et al. 2010b, p. 845; Sheppard and Sherman, 1998; Olson and Olson, 2000). Calefato, Lanubile and Novielli, (2015) argue that a company that is benevolent cares
about the needs and goals of the trustor which could be of high importance both offline and online.

2.5 Internalised Norms

As for ability and benevolence, internalised norms is argued by Rusman et al. (2010b) to influence trust. Internalised norms is defined as “the intrinsic moral norms a trustee guards his actions with” (Rusman et al. 2010b, p. 845). Rusman et al. (2010b) describe five components of internalised norms as integrity, discretion, honesty, fairness and respect. Integrity is described as to which a party seems “sincere and unable to be corrupted” (Rusman et al., 2010b, p. 845; Johnson-George & Swap, 1982). Several researchers have argued that integrity has an important impact on trust (Mayer, Davis & Schoorman, 1995; Calefato et al, 2015; McKnight, Choudhury & Kacmar, 2002; Mayer & Davis, 1999; Schumann et al., 2012). In order to achieve discretion, a party needs to consider confidentiality, not to spread vulnerable information further (Rusman et al., 2010b; Butler, 1991). Another essential part in internalised norms is honesty, it is about not misleading or give false statements to another party (Rusman et al. 2010b). Further, the party needs to treat other parties the same to be fair (Butler, 1991; Johnson-George & Swap, 1982). It is important to show respect to another party (Rusman et al., 2010b; Butler, 1991; Johnson-George & Swap, 1982).

2.6 Accountability

When Rusman et al. (2010b) introduced accountability as a complement to predictability they explained accountability as “the degree to which a person is liable and accountable for his/her acts and meets expectations of another person” (Rusman et al. 2010b, p.845). Accountability is divided into five factors; reliability, consistency, self-confidence, persistence and responsibility.

When appointments and commitments has been made with another party, it is important to show that one is able to carry out these in order to be shown as reliable. Further, one should “show adequate judgement to act in encountered situations” (Rusman et al. 2010b, p. 845). To show consistency a party needs to have a behavior that can be predicted (Butler, 1991; Rusman et al., 2010b). To show self-confidence, which is a part of accountability, a person
needs to believe it can accomplish a specific task. Further, *persistence* is described as being “stable in the intentions formed to complete a task, irrespective of difficulties encountered” (Rusman et al. 2010b, p.845). *Responsibility* includes accomplish the assigned task and not leave it unfinished. To transact the assignment, one should use his or her capabilities (Rusman et al. 2010b).
3. Conceptual model and hypotheses

The conceptual model includes ability, benevolence, internalised norms and accountability as antecedents of trust online. Trust online is the dependent variable, whereas the others are independent. Previous research shows that these antecedents are fundamental in the field of trust, and are therefore a part of this study. The hypotheses are presented in this chapter and each of the four derives from one specific antecedent.

Previous research shows that the four antecedents (ability, benevolence, internalised norms, accountability) have a positive impact on trust (Mayer, Davis & Schoorman, 1995; Rusman et al., 2010a; Rusman et al., 2010b; Calefato, Lanabile & Novielli, 2015; Colquitte, Scott & LePines, 2007; McKnight, Shoudhury & Kacmar, 2002). This study is in an online context, however Shankar, Urban and Sultan (2002) argue that trust and trust in an online context are intertwined, strengthening why the hypotheses are constructed in the same way. Moreover, since this study takes trust antecedents and tests them on trust online it further strengthens why the hypotheses are formed in the same manner as former research.

It is established that trust has an important role in both B2B and B2C relationships (Shankar, Urban & Sultan, 2002). However, there is a more extent research within trust in the B2C context (Shan, 2008; Dowell, Heffernan & Morrison, 2013), aligning with Lilien’s (2016) argument that there is a knowledge gap overall in the B2B context. There has been a focus on the B2C context in the research for a long time and Lilien (2016) argues that there is a need for more research within the B2B context.

The online B2B market is big and deals with larger value as well as it is more complex than the online B2C market (Lilien, 2016; Shankar, 2012). Therefore, research within the area continuously needs to advance in order to assist companies within the B2B market to develop further. Moreover, B2B online is more relationship oriented (Shankar, 2012), which in extension requires trust (Reichheld & Schefter, 2000), and enhances the usefulness of this study. Since trust is essential for the online B2B context as well, it can be argued why the antecedents advantageously could be used in an online B2B context.
3.1 Hypotheses

The arguments presented above apply for all four hypotheses. Motivations for each specific antecedent in the hypotheses are to be found in the problem discussion 1.2 and literature review 2.3-2.6. Based on the arguments above and the motivations for each specific antecedent, following hypotheses were constructed;

H1: Ability has a positive impact on trust in an online B2B context
H2: Benevolence has a positive impact on trust in an online B2B context
H3: Internalised norms has a positive impact on trust in an online B2B context
H4: Accountability has a positive impact on trust in an online B2B context
3.2 Conceptual Model

The conceptual model is based on the concepts included in the study. It visualizes the relations between the antecedents; ability, benevolence, internalised norms and accountability, and trust. All within an online B2B context, which is illustrated in figure 3.1.

Figure 3.1 Conceptual model (own)
4. Methodology

In the methodology chapter the course of actions for the study are presented. Theory and practical use are both described to get a clear view of how the study was conducted.

4.1 Research Approach

Bryman and Bell (2011) argue that a deductive approach is suitable when the research within the field is well developed. The research within the field of trust has been developed extensively during the years and a deductive approach will be used to explore trust in a new context. A deductive approach begins in the existing theory and based on the knowledge and theory within the field, hypotheses are created. The hypotheses should include concepts that could be translated into phenomena that is possible to explore. It is essential that the researchers have skills in how to translate the hypothesis into operational terms. The theory is tested through the hypotheses, which are either accepted or rejected by the researchers. To be able to test a hypothesis, data need to be collected and the result indicates whether the researchers should accept or reject them (Bryman & Bell, 2011; Malhotra & Birks, 2007). By testing hypotheses, existing theory could be developed gradually (Malhotra & Birks, 2007). To summarize the deductive approach, this is the sequence; theory → hypotheses → data collection → result → accept or reject hypotheses → reformulation of theory (Bryman & Bell, 2011).

In quantitative research researchers use a deductive approach and it is about collecting numerical data (Bryman & Bell, 2011). To put it in a context, quantitative research could be when a phenomenon is investigated with help of statistical techniques (Hair et al. 2011). Bryman and Bell (2011) argue that quantitative research is good for both finding relations and easy to make generalizations from. The generalization was important in this study since a model was tested and there was no strive for finding opinions of a small group of people, aligning with Bryman and Bell’s (2011) arguments of when quantitative research can be suitable. An important factor of quantitative research is to determine causality (Bryman & Bell, 2011). Causality is according to Malhotra and Birks (2007) the relation between variables of independent and dependent character. Explaining the relation between the antecedents ability, benevolence, internalised norms, accountability and trust was the focus of this study therefore it will be a causal design.
4.2 Causal Research Design

The field of trust is well studied and there is information available, therefore this study has taken a conclusive design and not an exploratory. Causal research is one way of conducting conclusive research. Causal research is suitable when there is a well structured problem and the aim is to describe, for example market characteristics or functions (Malhotra & Birks, 2007). It is characterized with specific hypotheses and the representative sample is of large scale. Hypotheses are conducted and later either falsified or accepted depending on the result of the data analyses (Lantz, 2009). A null hypothesis is created prior to the data gathering with a desire to later be falsified for the hypothesis to be accepted. Hypothesis testing is according to Hair et al. (2011) the process of transforming data into knowledge. Four hypotheses were in this study constructed based on the four antecedents: ability, benevolence, internalised norms and accountability.

According to Malhotra and Birks (2007) causality is for example: if X occurs, then the probability that Y will occur increases. In this study a relationship of four independent variables and one dependent variable is to be explained by cause and effect, which Malhotra and Birks (2007) argue causal design does. Bryman and Bell (2011) argue surveys are one way of conducting data in causal research, which was used in this specific study due to their easy spread in a big sample and effectiveness to collect opinions (Ghauri & Grønhaug, 2005).

4.3 Data Sources

When there is a lack of secondary data (from previous research), there is a need for gathering new data, enable answering the aim of the research (Ghauri & Grønhaug, 2005). Primary data is according to Hair et al. (2011) gathered for the same study as it is being used in. The data should be relevant for the subject of the research (Ghauri & Grønhaug, 2005). The primary data in this study was collected through a survey.

4.4. Population and Sample

This study is operating in the framework of case studies since there is a company underlying the choice of study and the specific context; affecting the choice of the sample. Hair et al.
describe case studies as one event at a specific time often connected to a certain company. Even though the company itself did not have a significant impact in this study, it influenced the sample and will therefore be introduced. The company in this case study is Zcooly, an educational game developing company. Their customers are elementary schools in grade 1-6. Due to their customer base, this study is in a B2B context focusing on schools.

According to Hair et al. (2011) a decision regarding which participants should be included in the study is to be taken. First of all deciding if a sample or the whole population, known as a census, should be used. Since the sample in this study is determined by the researchers it is a non-probability sample, whereas judgmental sampling is one way of doing it. In a judgmental sampling “the population elements are purposively selected based on the judgment of the researcher” (Malhotra & Birks, 2007, p. 412). Judgments are used by the researcher to choose the sample that is believed to represent the population being studied (Ghauri & Grønhaug, 2005; Malhotra & Birks, 2007). The judgmental sampling is argued to be suitable in B2B research and in a marketing context (Malhotra & Birks, 2007), aligning with this study due to the B2B angle. The sample in this study includes principals, assistant principals and first teachers (teachers with greater responsibility) in Sweden and they were required to work in schools within grade 1-6.

Green (1991) argues that the sample size is determined by the amount of independent variables integrated in the study. Further, Green (1991) suggests sample sizes should be decided according to this formula: 50 + 8m, where m is the number of independent variables. In this study the independent variables are: ability, benevolence, internalised norms and accountability. Based on this information the minimum sample size was 82 respondents (50 + 8 x 4). However, the sample size of the study ended up at 118 respondents, which is more than required. The gender distribution of the respondents was 81 female and 37 male, the distribution is illustrated in appendix C. The other control variables are presented in the result chapter 5.1.

4.5. Data Collection Method

One way of collecting data is through surveys, which can include questionnaires or verbal interview techniques. When the aim is to find opinions, attitudes and descriptions from the respondents, surveys are an effective tool. It is also effective when researching cause and
effect relationships and is a suitable instrument to collect data when there is a large number of respondents (Ghauri & Grønhaug, 2007).

This study has a quantitative approach using a questionnaire that answers to the relationship between the independent variables (ability, benevolence, internalised norms and accountability) and the dependent variable (trust online). The education level and other backgrounds may vary between respondents and it is important to adapt the questionnaire to the specific sample (Malhotra & Birks, 2007). Principals, assistant principals and first teachers have a similar educational background and therefore the questionnaire was constructed according to these prerequisites.

In the questionnaire the respondents scored statements on a five-point Likert scale from “strongly disagree” (instämmer inte alls) to “strongly agree” (instämmer helt), this is in line with the recommendation of Malhotra and Birks (2007). Further, when using strong anchors as “strongly disagree” and “strongly agree” the response distribution will be more peaked than using weak anchors as “generally disagree” and “generally agree”. When using strong anchors, respondents seem to not use the extreme scale categories resulting in more peaked response distribution (Malhotra & Birks, 2007). The questionnaire was divided into five concepts consisting of 21 components, which led to at least three items of each concept. The components were divided into 30 items in total, which also resulted in 30 questions. This means there were at least three questions for each concept, which was a safety procedure to make sure the questions measure the right thing. Furthermore, the construct is seen as valid if it measures what it is suppose to (Hair et al., 2011). In addition, questions with descriptive data character were asked in the questionnaire to use as control variables, meaning the answers could not be described by random occurrence or be described by a specific gender etcetera.

The questionnaire was sent out by e-mail to principals, assistant principals and first teachers in Swedish elementary schools grades 1-6. The e-mail contained an introduction of the study with arguments pointing out the value of their participation, description of the study’s purpose and a hyperlink to the questionnaire. The questions were not attached in the e-mail, which Malhotra and Birks (2007) argue would have been uninteresting. The e-mail addresses were obtained through municipality and school websites. To make sure not to get missing data from
the questionnaire it was not possible for the respondents to send in the questionnaire until all the questions were answered. The questionnaire is to be found in appendix A.

4.6. Data Collection Instrument

4.6.1 Operationalization

The operationalization is presented in table 4.1 below. The theories from the literature review were divided into concepts, components and items, then formulated into questions used in the questionnaire for this study. All the questions that derived from the operationalization are ought to be found in appendix A.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Component</th>
<th>Item</th>
<th>Reference</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Online</td>
<td>Mistrust</td>
<td>Find reason not to trust</td>
<td>McKnight, Choudhury, Kacmar (2002)</td>
<td>Q1</td>
</tr>
<tr>
<td></td>
<td>Good initial attitude</td>
<td></td>
<td>McKnight, Choudhury, Kacmar (2002)</td>
<td>Q2</td>
</tr>
<tr>
<td></td>
<td>Prove the opposite</td>
<td></td>
<td>McKnight, Choudhury, Kacmar (2002)</td>
<td>Q3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability</td>
<td></td>
<td>Previous behavior</td>
<td>Reputation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expectations</td>
<td>Risk</td>
<td>Lau &amp; Lee (1999)</td>
<td>Q5</td>
</tr>
<tr>
<td></td>
<td>Knowledge</td>
<td>Vulnerability</td>
<td>Rousseau et al. (1998)</td>
<td>Q6</td>
</tr>
<tr>
<td></td>
<td>Competence</td>
<td>Act appropriate</td>
<td>Rusman et al. (2010b)</td>
<td>Q8</td>
</tr>
<tr>
<td></td>
<td>Skills</td>
<td>Proficiency</td>
<td>Butler (1991), Rusman et al. (2010b)</td>
<td>Q10</td>
</tr>
<tr>
<td>Benevolence</td>
<td>Willingness to help</td>
<td>Give support</td>
<td>Rusman et al. (2010a)</td>
<td>Q11</td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td>Reachable</td>
<td>Rusman et al. (2010b)</td>
<td>Q12</td>
</tr>
<tr>
<td></td>
<td>Sharing</td>
<td>Give access</td>
<td>Rusman et al. (2010b), Butler (1991)</td>
<td>Q13</td>
</tr>
<tr>
<td></td>
<td>Faith in intention</td>
<td>Not exploit the party</td>
<td>Rusman et al. (2010b), Johnson &amp; Swap (1982)</td>
<td>Q14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Act in party’s interest</td>
<td>Rusman et al. (2010b), Johnson &amp; Swap (1982)</td>
<td>Q15</td>
</tr>
<tr>
<td></td>
<td>Friendliness/Kindness</td>
<td>Easy to interact with</td>
<td>Rusman et al. (2010b), Johnson &amp; Swap (1982)</td>
<td>Q16</td>
</tr>
<tr>
<td></td>
<td>Caring</td>
<td>Concern about other people’s needs</td>
<td>Rusman et al. (2010b), Calefato, Lanubile &amp; Novielli (2015)</td>
<td>Q17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Concern about other people’s goals</td>
<td>Rusman et al. (2010b), Calefato, Lanubile &amp; Novielli (2015)</td>
<td>Q18</td>
</tr>
<tr>
<td>Internalised Norms</td>
<td>Integrity</td>
<td>Sincere</td>
<td>Rusman et al. (2010b), Johnson &amp; Swap (1982)</td>
<td>Q19</td>
</tr>
<tr>
<td></td>
<td>Discretion</td>
<td>Confidentiality</td>
<td>Rusman et al. (2010b), Butler (1991)</td>
<td>Q20</td>
</tr>
</tbody>
</table>
### 4.6.2 Pre Test

Before sending out the questionnaire in sharp mode it was tested on eight people. The pre test participants contained of two teachers, two teacher students, three economic students and one management CEO. The pre test sample was chosen to get a broader spectrum of opinions from different point of views. The pre test was done to make sure the questionnaire was easy to understand and contained relevant questions. Since the questions were asked in Swedish but the theory was written in English some formulations were pointed out from the pre test participants to not be spot on. This result led to some rephrasing of questions and spelling corrections. Moreover, the questions were assessed by Åsa Devine, lecturer at Linnæus University, to ensure that they were adequate.

### 4.7 Choice of Data Analysis Method

When the data from the questionnaires were gathered, SPSS was used to analyze the data in five steps: data coding, descriptive statistics, reliability analyses, correlation analysis and regression analyses.

#### 4.7.1 Data Coding

Coding is used for the data to be meaningful and numbers are assigned to variables and responses. If using a five point Likert scale from “strongly disagree” to “strongly agree” the answers should be assigned with numbers from 1-5 in the database used to make the analyses (Hair et al. 2011). In this study the highest number was assigned to “strongly agree”

<table>
<thead>
<tr>
<th>Accountability</th>
<th>Not misleading</th>
<th>Rusman et al. (2010b)</th>
<th>Q21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honesty</td>
<td>Not lie</td>
<td>Rusman et al. (2010b)</td>
<td>Q22</td>
</tr>
<tr>
<td>Respect</td>
<td>Respect</td>
<td>Rusman et al. (2010b), Johnson &amp; Swap (1982)</td>
<td>Q24</td>
</tr>
<tr>
<td>Reliability</td>
<td>Follow up commitments and appointments</td>
<td>Rusman et al. (2010b)</td>
<td>Q25</td>
</tr>
<tr>
<td>Consistency</td>
<td>Adequate judgments</td>
<td>Rusman et al. (2010b)</td>
<td>Q26</td>
</tr>
<tr>
<td></td>
<td>Predictable behavior</td>
<td>Rusman et al. (2010b), Butler (1991)</td>
<td>Q27</td>
</tr>
<tr>
<td>Self-confidence</td>
<td>Believe in oneself</td>
<td>Rusman et al. (2010b)</td>
<td>Q28</td>
</tr>
<tr>
<td>Persistence</td>
<td>Stabile in intentions</td>
<td>Rusman et al. (2010b)</td>
<td>Q29</td>
</tr>
<tr>
<td></td>
<td>Accomplish task</td>
<td>Rusman et al. (2010b)</td>
<td>Q30</td>
</tr>
</tbody>
</table>
(instämmer helt) and the lowest number were assigned to “strongly disagree” (instämmer inte alls). In two-category variables, as the descriptive questions of “gender” and “previous interactions with companies online” in this study, numbers of 0 and 1 were assigned in suggestion of Hair et al. (2011). The other descriptive questions had more than two possible answers and were therefore given numbers from 1-7 (as seven was the highest amount of answers).

During the data coding in SPSS it was noticed one respondent’s answers differed from the majority, identified as an outlier according to Hair et al. (2011). The majority had high values in their responses whereas one outlier answered 1 to all of the questions. Either this person had a completely different opinion than the others or he/she did not put effort into reading the questions properly and just went through the questionnaire giving the same answer to all due to laziness. The researchers of this study were well aware of the outlier but decided on not exclude it from the study due to its minor effect to the result as a whole.

4.7.2 Descriptive Statistics
The descriptive statistic is measures of mean, median and mode. The mean, also described as the theoretical average, is the measure centered in the distribution of X (Milton & Arnold, 2003). High means indicate a higher distribution of X. However, the mean is sensitive to extreme values and the result can therefore be affected by this (Bryman & Bell, 2011). Another measure deciding the center of a distribution is the median, which is a halfway point (Milton & Arnold, 2003). Bryman and Bell (2011) argue that the mode describes the most common value represented of the distribution. In this study mean, median and mode are presented for each question in appendix B, whereas the summarized means are to be found in table 5.1 in the result chapter. When describing variance of the answers, standard deviation is a measure of the spread of sample distribution from the mean (Hair et al., 2011). Higher deviation indicates a larger spread of the answers. A symmetrical distribution is when mean, median and mode are located the same. When the distribution is not symmetrical and stretches away from the mean to one side or the other it is skewed (Hair et al., 2011). Centered scores in the answers give a higher peakedness, which is a measure of kurtosis. Accordingly, when the distribution is more spread out the kurtosis will be more flat.
4.7.3 Reliability Analysis

The reliability is important to measure since it can conclude if the result is consistent (Malhotra & Birks, 2007). Reliability is defined as “the extent to which measures are free from random error” (Malhotra & Birks, 2007, p. 357). According to Malhotra and Birks (2007) random errors occurring in research can lead to inconsistency. The measure is perfectly reliable if $X(Xr)=0$, where $X$ is random errors. Hair et al. (2011) argue that one way of measure internal reliability is through Cronbach’s alpha, which tells if the items are measuring the same underlying concept. When measuring Cronbach’s alpha the average of the coefficients is calculated. Hair et al. (2011) claim many researchers to use a coefficient of 0.7, lower coefficients of alpha may be acceptable but is described to have “poor” strength of association. Results in the Cronbach’s alpha will be between 0 and 1 and results below 0.7 will according to Malhotra and Birks (2007) indicate unsatisfying reliability. Aligning with Malhotra and Birks (2007) and Hair et al. (2011) a Cronbach’s alpha level of 0.7 was set in this study. Cronbach’s alpha levels for this study are presented in the result chapter, table 5.2.

Six items were included in the questionnaire with the intention to measure trust online. The first three items measuring trust online were questions McKnight, Choudhury and Kacmar (2002) used in their study when measuring trust. The following three questions were operationalized from the theoretical framework in this study concerning trust. The reason for including all six of the items was to make sure there was a correct measure of the construct and accordingly gave possibilities of removing items if some were to measure the wrong thing. All questions are ought to be found in appendix A.

4.7.4 Correlation Analysis

A correlation analysis shows if there is a correlation between two concepts and if there is significance in the correlation (Malhotra & Birks, 2007; Bryman & Bell, 2011). The statistical significance measures how sure it is that the randomly selected sample could be generalized for the whole population. This measure is not to tell if the result is correct or not, only if the researcher can trust their results. Bryman and Bell (2011) suggest that a statistical significance of $p<0.05$ should be applied, which means it is 95% sure the test is correct and the result does not appear randomly. Accordingly, $p<0.05$ was set as the statistical significance level in this study.
Spearman’s rho is used to find correlation between two variables, often two of ordinal level (Bryman & Bell, 2011), which the variables in this study are. The result will be positive or negative between 0 and 1, closer to 1 indicates a stronger correlation. Negative correlation indicates that one variable’s decrease lead to the other variable’s increase. Positive correlation indicates that when one variable increases the other variable increases as well. If the result is 0, there is no correlation. Zikmund et al. (2010) argue that the correlation should not exceed 0.75 since that indicates they could measure the same thing. A too good correlation is therefore not desirable. In the correlation analysis conducted in this study the correlations between the dependent variable; trust online, and the independents variables; ability, benevolence, internalised norms and accountability, were measured. The specific result from the correlation analysis is to be found in table 5.3 in the result chapter.

4.7.5 Multiple Regression Analysis

Lantz (2009) argues that regression analysis is the most important statistical method when measuring relations between variables and it is commonly used by researchers within the trust field (Mayer & Davis, 1999; Lau & Lee, 1999; Colquitt, Scott & LePine, 2007). Regression analysis studies how one specific variable is dependent on the values of one or more variables. A regression analysis may have several aims, for instance; to describe relations between the variables, to predict how changes in one variable affects the outcome for another variable, to test whether there is a relation between the variables, to create understanding of how important different variables are when explaining the outcome for another variable (Lantz, 2009).

A multiple regression analysis predicts if the outcome from one variable (Y) is controlled by the value of one or several variables (X) (Hair et al., 2011). Variable Y is called the dependent variable since the Y value is assumed to be dependent on the value of X. Variable X is called the independent variable (Lantz, 2009). The regression coefficient (B) “tell us how much of the variance in the dependent variable is explained by the independent variable” (Hair et al., 2011, p. 365). In order to predict one dependent variable in a multiple regression analysis, several independent variables are entered in the same regression equation. For each independent variable, one regression coefficient is calculated. The regression coefficient
describes the independent variable’s relation with the dependent. By using a multiple regression analysis, the researchers can identify the influence that several independent variables have on the dependent variable. Since predictions often depend on several factors instead of only one, this method is more realistic than for example a simple linear regression where one independent variable is included (Hair et al., 2011).

When the correlation coefficient is squared, it is what is called coefficient of determination ($r^2$) according to Hair et al. (2011). The range of $r^2$ is between 0 to 1 and “.. represents the amount of variation explained or accounted for in one variable by the other” (Hair et al., 2011, p. 353). Accordingly, Malhotra and Birks (2007) explain it as the association strength measured between Y and X, whereas the total variation in Y is accounted for how X varies.

In the regression analysis result, it is possible to deduce a F-value. Hair et al. (2011) explain the F-value as describing the statistical significance of the overall model. Model 1 in this study consists of the control variables and model 2-6 consists of all the independent variables, first separately and then in model 6 all the variables are put together. The regression analysis result is presented in the result chapter, table 5.4.

4.8. Validity

The validity answers, according to Malhotra and Birks (2007), to if the characteristics of the measurements are in line with the field of the specific study. Hence, if the construct measure what it suppose to, then it is valid. When there are no errors in the construct measurements there is perfect validity (Hair et al., 2011). To establish validity in this study, content validity and construct validity were used. To assess content validity the constructs should include adequate measures that represent the theoretical construct (Hair et al. 2011). This could be reached by evaluation of a small group of respondents answering to if the items included are appropriate for the study (Hair et al., 2011). Moreover, all theory has been treated with great care, both through literature review and in the operationalization. Hence, the operationalization and structured treatment of the theory strengthens the content validity, ensuring it is of great use for this particular study. To achieve content validity further the items were previewed by a number of pre test participants and also by Åsa Devine, lecturer at Linnæus University.
According to Ghauri and Grønhaug (2005) construct validity differs from content validity since it refers to if the operationalization enables to measure the constructs it was intended to, rather than confirming if the theory is represented in the constructs. The measurement items’ accuracy is what construct validity states (Ghauri & Grønhaug, 2005). In this study the construct validity is displayed through the constructs, which the researchers have formulated with help from theory and previous research. Moreover, another aspect, which might impact the validity is that there could be a difference in the interpretations of words between English and Swedish, since the questionnaire was translated into Swedish and back to English when analyzed. This is something the researchers were aware of and it was taken in concern when the result was presented.

4.9 Ethics

According to Hair et al. (2011) ethical matters appear in many stages of the research process. As a researcher there are four main principles to be concerned of when a study is conducted; if there will be any harm to the participants, lack of consent from the participants, intrusion of privacy and withhold of information (Bryman & Bell, 2011; Diener & Crandall, 1978). A research harming the respondents in any way is seen as unacceptable, indicating the importance of this matter (Bryman & Bell, 2011). In this study, none of the respondents were harmed and moreover they were all aware of the purpose of the study as well as their role; aligning with the statement that information should not be withheld (Bryman & Bell, 2011; Diener and Crandall, 1978). In the questionnaire it was explained why the study was made, why the specific sample was chosen and how everything was handled with anonymity. Therefore, the respondents did not lack in consent or was intruded in their privacy. Moreover, the respondents were free to choose for themselves if they even wanted to participate in the study or not.

The respondents were asked to state their age, gender, job position and years in profession, however it did not expose them or their anonymity since the questionnaire was send out to a large number of people. Hence, it would be impossible for the researches to track the answers back to a specific respondent. According to Bryman and Bell (2011) the matter of anonymity is of great deal and Hair et al. (2011) point out the importance of respecting the privacy of the participants. In this particular study all answers were gathered anonymously, which the
respondents were well informed of when executing the questionnaire, to not intrude in anyone's privacy.
5. Results

In this chapter the results of the study are presented, the results are based on answers from the questionnaire. First, the descriptive data is presented followed by data from the five constructs.

5.1 Descriptive Data

The study contained 118 respondents from a non-probability sample and they were all required to be either principals, assistant principals or first teachers. The descriptive data will be further presented in the following paragraphs through the distributions of job position, age, years in profession and if there had been a previous contact with online companies. For information concerning gender distribution, see appendix C.

In figure 5.1 below, result regarding the work distribution of the respondents is presented. The respondents needed to work as either principal, assistant principal or first teacher to be able to participate in the study. To get a clear view of the job position distribution it is displayed in a chart.

The job position distribution was skewed and principal was the most common occupation. In the sample 83 respondents (70.3%) were principals, 25 respondents (21.2%) were assistant principals and 10 respondents (8.4%) were first teachers. Principals and assistant principals were more accessible and therefore also more representative of the approached sample. Since the e-mail addresses were found on municipality websites and the cover letter explicitly
explained the sample there were no respondents from outside of the sample completing the questionnaire.

The respondents’ age distribution is presented in figure 5.2. The span reaches from 20-29 years old to 60+ years old, with three other age groups in between (5 age groups in total). The age distribution of all of the respondents is illustrated through a chart followed by a more thoroughly description of the result.

Figure 5.2 Age Distribution

The distribution of ages was spread throughout the whole span with a peak on 40-49 years (37.3%). The age span with the second most respondents was 50-59 years (32.2%), third was 60+ with 19.5 percent. There were fewer respondents in the age spans of 30-39 (10.2%) and 20-29 (0.8%).

To see how long the respondents had been active in their profession, it was asked how many years they had been working. Following, the result of years in profession answered by the respondents is presented (see figure 5.3).
The years in profession for the respondents is presented above. The most predominant group was 16-21 years of working in schools, with 31 respondents out of 118. Thereafter it was more even, 17 respondents represented 21-25 years, 18 respondents had been in the profession for 11-15 years, 19 respondents answered 26-30 years and 23 respondents had been working for 31 years or more. Further, there were two groups that did not have as many representatives, 1-5 years in the profession (4 respondents) and 6-10 years (8 respondents).

Since the study concerns an online context, prior contact with online companies was one of the questions in the questionnaire. In figure 5.4 the distribution of prior contact with companies is demonstrated.
The respondents were asked if they have had any contact with online companies while working prior to the study and the result showed a complete equal split between “yes” and “no”. 59 of the respondents have had previous contact and 59 of the respondents had not.

5.2 Reliability and Validity

This study has five concepts that have been tested through the questionnaire. In order to measure each concept, trust online, ability, benevolence, internalised norms and accountability has been broken down into components. These are measured through the questionnaire and after the answers were conducted the parts were merged to get one variable. To be sure that the specific questions within each concept answered the same thing, the reliability and validity needed to be tested. The result of these tests is presented in the following section.

5.2.1 Reliability Test

Table 5.1 shows the Cronbach’s alpha thus the reliability of each concept included in this study. It gives and indication if the items are measuring the same and therefore are reliable (Malhotra & Birks, 2007).

<table>
<thead>
<tr>
<th>Concept</th>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Trust</td>
<td>0.822</td>
<td>3</td>
</tr>
<tr>
<td>Ability</td>
<td>0.906</td>
<td>4</td>
</tr>
<tr>
<td>Benevolence</td>
<td>0.873</td>
<td>8</td>
</tr>
<tr>
<td>Internalised norms</td>
<td>0.892</td>
<td>6</td>
</tr>
<tr>
<td>Accountability</td>
<td>0.847</td>
<td>6</td>
</tr>
</tbody>
</table>

The lowest allowed Cronbach’s alpha for this study was 0.7, which was exceeded by all the concepts: trust online, ability, benevolence, internalised norms and accountability. Closer to 1 means a higher reliability. Ability as a concept had the highest Cronbach’s alpha on 0.906, after, with a slightly lower alpha was internalised norms on 0.892. Benevolence’s alpha was 0.873, accordingly accountability’s alpha was 0.847. The lowest alpha was shown on trust online with 0.822. The Cronbach’s alpha on trust online is measured on three out of six items,
the items with highest alpha. The alpha on all six of the items were 0.745, which was not showing as strong similarity in the measures as only three of them.

5.2.2 Validity Test
The correlation analysis shows if there is a correlation between the independent variables (ability, benevolence, internalised norms and accountability) and the dependent variable trust online. The result from the analysis is presented in table 5.2.

Table 5.2 Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Trust Online</th>
<th>Ability</th>
<th>Benevolence</th>
<th>Internalised Norms</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Online</td>
<td>1.000</td>
<td>-0.005</td>
<td>-0.069</td>
<td>0.079</td>
<td>-0.002</td>
</tr>
<tr>
<td>Ability</td>
<td></td>
<td>0.480</td>
<td>0.229</td>
<td>0.197</td>
<td>0.490</td>
</tr>
<tr>
<td>Benevolence</td>
<td>-0.005</td>
<td>1.000</td>
<td>0.514**</td>
<td>0.224**</td>
<td>0.375**</td>
</tr>
<tr>
<td>Internalised Norms</td>
<td></td>
<td>0.480</td>
<td>0.000</td>
<td>0.007</td>
<td>0.000</td>
</tr>
<tr>
<td>Accountability</td>
<td>-0.0069</td>
<td>0.514**</td>
<td>1.000</td>
<td>0.462**</td>
<td>0.462**</td>
</tr>
<tr>
<td>Job Position</td>
<td>0.229</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Gender</td>
<td>0.079</td>
<td>0.224**</td>
<td>0.462**</td>
<td>1.000</td>
<td>0.365**</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>0.197</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Years in Profession</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Contact Online Comp.</td>
<td></td>
<td>0.197</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.002</td>
<td>0.375**</td>
<td>0.462**</td>
<td>0.365**</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td></td>
<td>-0.0069</td>
<td>0.514**</td>
<td>1.000</td>
<td>0.462**</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.983</td>
<td>0.265</td>
<td>0.101</td>
<td>0.090</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td></td>
<td>0.019</td>
<td>0.007</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.200</td>
<td>0.300</td>
<td>0.046</td>
<td>0.094</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td></td>
<td>0.043</td>
<td>0.011</td>
<td>0.045</td>
<td>0.094</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.644</td>
<td>0.904</td>
<td>0.631</td>
<td>0.072</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td></td>
<td>0.018</td>
<td>0.042</td>
<td>0.073</td>
<td>0.189*</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.847</td>
<td>0.654</td>
<td>0.434</td>
<td>0.041</td>
</tr>
<tr>
<td>Correlation coefficient</td>
<td></td>
<td>-0.298**</td>
<td>-0.025</td>
<td>0.079</td>
<td>0.022</td>
</tr>
<tr>
<td>Sig. (1-tailed)</td>
<td></td>
<td>0.001</td>
<td>0.787</td>
<td>0.395</td>
<td>0.811</td>
</tr>
</tbody>
</table>

*p<0.10; **p<0.05; ***p<0.01; ****p<0.001 N=118

To see if the result is valid, a correlation test was conducted. Zikmund et al. (2010) argue that it is important to ensure that several variables are not measuring the same thing. The result from the correlation test should not exceed 0.750 which none of the correlations in this study do. The correlations in this study lie between -0.069 and 0.514. In order to ensure that the results were statistically significant the accepted significance level was set to 0.05. All results where trust online is included have no statistical significance since they exceed 0.05.
However, all results where trust online was not included have statistical significance, the result are between 0.000 and 0.007.

### 5.3 Averages

In this section the averages of what the respondents answered in the questionnaire is compiled. The results are based on 118 completed questionnaires and table 5.3 presents a summary of the averages of the concepts. The scale used is from 1 “strongly disagree” (instämmer inte alls) to 5 “strongly agree” (instämmer helt). More detailed information regarding each concept is to be found in appendix B.

<table>
<thead>
<tr>
<th>Average</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust Online</td>
<td>2.93</td>
<td>0.82</td>
<td>118</td>
</tr>
<tr>
<td>Ability</td>
<td>4.77</td>
<td>0.52</td>
<td>118</td>
</tr>
<tr>
<td>Benevolence</td>
<td>4.70</td>
<td>0.50</td>
<td>118</td>
</tr>
<tr>
<td>Internalised Norms</td>
<td>4.90</td>
<td>0.39</td>
<td>118</td>
</tr>
<tr>
<td>Accountability</td>
<td>4.76</td>
<td>0.45</td>
<td>118</td>
</tr>
</tbody>
</table>

Table 5.3 presents a summary of the total mean of each concept, also the standard deviation and the number of respondents are presented. The total mean of trust online, which is 2.93, differs from the total mean of the other concepts, which all have a mean between 4.70 and 4.90. The standard deviation shows how the answers from each question differ from the mean. The highest standard deviation in this study was for trust with 0.82 and the lowest was internalised norms with 0.39. The standard deviation of ability was 0.52, benevolence 0.50 and accountability 0.45. This shows that the answers for trust online have a more widely spread distribution than the other concepts.

### 5.4 Hypothesis Testing

In this section the result from the hypothesis tests will be presented. One regression analysis for each hypothesis has been conducted and the result will be presented in table 5.4 below. With the regression analysis result the researcher can decide whether the hypotheses should be accepted or rejected.
Table 5.4 Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>Exp. Sign</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Sum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>2.908****</td>
<td>3.211****</td>
<td>3.253****</td>
<td>2.666****</td>
<td>2.938****</td>
<td>2.692****</td>
<td></td>
</tr>
<tr>
<td>Control Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Position</td>
<td></td>
<td>0.032</td>
<td>0.036</td>
<td>0.027</td>
<td>0.030</td>
<td>0.032</td>
<td>0.014</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.116)</td>
<td>(0.117)</td>
<td>(0.117)</td>
<td>(0.117)</td>
<td>(0.117)</td>
<td>(0.123)</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>0.197</td>
<td>0.198</td>
<td>0.192</td>
<td>0.197</td>
<td>0.197</td>
<td>0.179</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.160)</td>
<td>(0.161)</td>
<td>(0.161)</td>
<td>(0.161)</td>
<td>(0.161)</td>
<td>(0.164)</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>0.043</td>
<td>0.042</td>
<td>0.046</td>
<td>0.039</td>
<td>0.043</td>
<td>0.028</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.113)</td>
<td>(0.114)</td>
<td>(0.114)</td>
<td>(0.115)</td>
<td>(0.115)</td>
<td>(0.117)</td>
<td></td>
</tr>
<tr>
<td>Years in Profession</td>
<td></td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
<td>0.003</td>
<td>0.002</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.064)</td>
<td>(0.064)</td>
<td>(0.064)</td>
<td>(0.064)</td>
<td>(0.064)</td>
<td>(0.065)</td>
<td></td>
</tr>
<tr>
<td>Contact Online Comp.</td>
<td></td>
<td>-0.499****</td>
<td>-0.498****</td>
<td>-0.495****</td>
<td>-0.503****</td>
<td>-0.498****</td>
<td>-0.508****</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.147)</td>
<td>(0.147)</td>
<td>(0.147)</td>
<td>(0.148)</td>
<td>(0.149)</td>
<td>(0.151)</td>
<td></td>
</tr>
<tr>
<td>Antecedents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1 Ability’s Impact on Trust (Q4-Q7)</td>
<td>+</td>
<td>-0.065</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.078 (0.258)</td>
<td></td>
</tr>
<tr>
<td>H2 Benevolence’s Impact on Trust (Q8-Q15)</td>
<td>+</td>
<td></td>
<td>-0.075 (0.148)</td>
<td></td>
<td></td>
<td></td>
<td>-0.221 (0.305)</td>
<td></td>
</tr>
<tr>
<td>H3 Internalised Norms’s Impact on Trust (Q16-Q21)</td>
<td>+</td>
<td></td>
<td></td>
<td>0.052 (0.187)</td>
<td></td>
<td></td>
<td>0.322 (0.356)</td>
<td></td>
</tr>
<tr>
<td>H4 Accountability’s Impact on Trust (Q22-Q27)</td>
<td>+</td>
<td></td>
<td></td>
<td></td>
<td>0.007 (0.167)</td>
<td>0.022 (0.328)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.116</td>
<td>0.118</td>
<td>0.118</td>
<td>0.117</td>
<td>0.116</td>
<td>0.128</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td>0.077</td>
<td>0.070</td>
<td>0.071</td>
<td>0.069</td>
<td>0.068</td>
<td>0.055</td>
<td></td>
</tr>
<tr>
<td>Std. Error of the Estimates</td>
<td>0.786</td>
<td>0.789</td>
<td>0.788</td>
<td>0.789</td>
<td>0.789</td>
<td>0.795</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-value</td>
<td></td>
<td>2.946**</td>
<td>2.473**</td>
<td>2.481**</td>
<td>2.448**</td>
<td>2.433**</td>
<td>1.761*</td>
<td></td>
</tr>
<tr>
<td>Degrees of Freedom (DF) Regression</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.10; **p<0.05; ***p<0.01; ****p<0.001 N=118

S.E (standard error) is presented within parenthesis for each of the independent variables.

All of the hypotheses were rejected since there was no statistical significance in any of the concepts. The accepted significance level (p) was 0.05, which all the reported values exceeded. The lowest value showed 0.367 and the highest was 0.968. Since the values were not 95 percent true (when the significance level is higher than 0.05) there were nothing assuring that the independent variable had an effect on the dependent variable. The value of B can therefore be stated as inapplicable. Due to lack of significance of the relationship between the variables the researchers can not draw any conclusions from the R² and adjusted R². The F-values of model 1, 2, 3, 4 and 5 were significant and therefore accepted, model 6, on the other hand, was not accepted due to lack of significance in the F-value. However, even though model 1 to 5 were significant on model level only one of the control variables was significant and therefore there can only be drawn conclusions from that variable.
5.5 Other Data

The control variables used in this study are: job position, gender, age, years in profession and prior contact with online companies. One out of five control variables was significant, the variable was prior contact with online companies and the significance level was 0.001, which is a very strong significance and this was the case in all the models.

The value of B describes the relation between the independent and dependent variables. If there is a positive number of B it indicates the dependent variable will decrease when the independent variable increases with 1 unit. The independent variable “prior contact with online companies” shows a negative B-value. Hence, when “prior contact with online companies” increases with 1 unit, trust online will decrease with 4.99 percent.
6. Discussion

The discussion centers around the results, theory and what was found interesting over all in this study. It is presented what might have impact the results and why the hypotheses were rejected. Moreover, the result is discussed in many different angles, enabling a broader view of the study leading toward the conclusion.

6.1 Hypothesis 1

H1: Ability has a positive impact on trust in an online B2B context

The mean for ability is high (4.77), which indicates that the respondents perceive knowledge, competence and skills as important factors for online companies to obtain. According to Mayer, Davis and Schoorman (1995) it can help gain trust when companies have certain skills or competences in a specific area. Ability has shown to have impact on trust in an offline context by previous research, however this study can not ensure that ability has a relation to trust online, only that ability is important in an online B2B context. This is due to the lack of significance in the relation between ability and trust online.

Both the constructs ability and trust online are separately measuring what they intend to, however the relation between them can not be explained due to possible randomness. Ability has overall high means (see appendix B), contrary, trust online differs more and the scores 1-5 on the Likert scale are all represented. Trust online does not have the same consistency in the answers as ability, which unable to find a relation between the two constructs. This might be one reason why there is a lack of significance. Moreover, since there is no significance even on model level the hypothesis was rejected already at this stage.

With predominantly high response scores of trust online the hypothesis could have been accepted due to a positive relation. Contrary, if there would have been predominantly low scores represented on trust online there might have been a relation between ability and trust online, however that relation would have been negative. Hence, the hypothesis would still have been rejected.
Ability has been widely used in trust research through the years and discussions concerning possible irrelevance of the concept are lacking. Since most researchers within the field of trust have used ability as an antecedent it might be a reason why trust online researchers have had no doubt in its usefulness within the online context as well.

6.2 Hypothesis 2

**H2:** Benevolence has a positive impact on trust in an online B2B context

The mean of benevolence is rather high (4.70), which indicates that the respondents perceive willingness to help, availability, sharing, faith in intentions, friendliness/kindness and caring as important factors.

That a company is benevolent can be seen as going beyond what is needed and Colquitt, Scott and LePine (2007) argue that sharing information, which is a part of benevolence, is risk taking. Benevolent companies also cares about the needs and goals of the trustor which is considered risk taking as well. To care about the needs and goals of the trustor is argued to be important both offline and online (Calefato, Lanubile & Novielli, 2015). Since the result shows that trust online is low, it might be argued that trust online needs more effort to be gained in an online B2B context. In order to increase trust online, companies might need to be more risk taking and vulnerable to prove they are willing to go beyond what is expected by the customer. Aligning with Zolin et al.’s (2002) argument that information sharing, which is risk taking, is essential for trust to be built when there is lack of face to face communication.

Benevolence has through this study proven to have an important impact online, just like in previous research concerning trust. This study can not ensure that benevolence has a relation to trust online, due to the lack of significance in the relationship.

The constructs benevolence and trust online, which are independent and dependent variables in the conceptual model, are measuring what they intend to. However, there is possible randomness between the two constructs and therefore a relation can not be determined. Benevolence has predominantly high means, which differ from trust online whereas the response scores are mostly centered, though there are some outliers. The lack of consistency in the answers regarding trust online may be a reason why there is no significance between
benevolence and trust online. With more consistency in the result, either high or low scores, there could have been significance and a negative or positive relation between the constructs. As for hypothesis 1, hypothesis 2 was also rejected due to lack of significance on model level.

Benevolence has been frequently used by previous research in the field of trust (Mayer, Davis & Schoorman, 1995; Rusman et al., 2010a; Rusman et al., 2010b; Mayer & Davis, 1999; Schumann et al., 2012), therefore it has also been seen as adequate in the field of trust online (Gefen, 2002; McKnight & Choudhury, 2006; Gefen, Benbasat & Pavlou, 2008; Bock et al., 2012). This could indicate that it is being used unquestioned since trust and trust online are often seen as equal. Since they are equally treated in an unquestioned manner, it could lead to wrongfully interpretations of what trust online really is. There is no assurance that benevolence truly influences trust online and it appears in this study that there are no relations between the two of them.

6.3 Hypothesis 3

**H3:** Internalised norms has a positive impact on trust in an online B2B context

Internalised norms has the highest mean of the four concepts (4.90) even if there is only a slight difference. The high mean could indicate that internalised norms is the most important of the four concepts in an online B2B context. The participants value companies’ integrity, discretion, honesty, fairness and respect, which are factors described by Rusman et al. (2010b). Since these could be seen as evident characteristics it was quite expected they would appear as important. The predominant high response scores differed from the trust online scores that were positioned around the center of the Likert scale, with some outliers. The variance in the trust online result could be a reason why there was no significance in the relation between internalised norms and trust online. Since there was no statistical significance in the relation hypothesis 3 was rejected on model level.

Internalised norms, introduced by Rusman et al. (2010b), includes integrity which is one of the three most common antecedents in trust. Internalised norms is a more extensive antecedent than integrity standing alone. With this in mind there are some disagreements in previous research regarding which concept that is most relevant, however there are no researcher who argue the field to be irrelevant for trust. The result in this study indicates
internalised norms not to have a relation to trust online, which is not in line with earlier research regarding ordinary trust.

The items of internalised norms are measuring the same thing, indicating there is a authenticity in the theory. If some of the items were to measure the wrong things they would not have been accurate to include in the concept.

6.4 Hypothesis 4

**H4:** Accountability has a positive impact on trust in an online B2B context

The mean of accountability is fairly high (4.76), indicating mainly high response scores of the answers to the questionnaire. The high response scores represent the respondents’ agreement to the importance of accountability concerning companies in an online B2B context. Since accountability has high scores, reliability, consistency, self-confidence, persistence and responsibility (Rusman et al. 2010b) are all important for the respondents. There was no significance in the relationship of accountability and trust online. This could be due to the unstable distribution of answers regarding trust online. Further, the lack of significance led to rejection of hypothesis 4 on model level.

The concept of accountability was divided into five constructs, further divided into items. These items were proved to measure the same thing, demonstrating their relevance for the concept and for the study. A poor Cronbach’s alpha would have revealed inaccuracy in one or more items and could have been due to incorrect theory or operationalization in the study.

Accountability has been a discussed concept over the years, Mayer, Davis and Schoorman (1995) rejected predictability, a concept similar to accountability, due to its uselessness. Later the concept predictability was accepted by Schumann et al. (2012) and Calefato, Lanubile and Novielli (2015) among others. Rusman et al. (2010a) and Rusman et al. (2010b) developed the concept further and called it accountability. Previous research has concerned trust and not trust online specifically. Further, the doubt in the concept predictability is in line with the lack of significance between accountability and trust online in this study. This strengthens that Mayer, Davis and Schoorman (1995) might have been right to exclude the antecedent
predictability. It could be argued there is a similarity in their arguments and the result of this study, even though their research is focusing on ordinary trust.

6.5 Other Discussion

In previous research regarding trust online, researchers have used antecedents of trust. However, research exploring antecedents of trust online is lacking. Researchers use the antecedents of trust in the same way in research regarding trust online, not assuring if there is a difference (Gefen, 2002; McKnight & Choudhury, 2006; Gefen, Benbasat & Pavlou, 2008; Bock et al., 2012). The result of this study shows that trust in online companies is low, which could be a result of the lack of face to face communication, which Pavlou (2002), Brengman and Karimov (2012) and Calefato, Lanubile and Novielli (2015) argue to have an impact on trust. The low mean of trust online could indicate that it is even more important for online companies in a B2B context to strive for their customers to trust them, aligning with the arguments by Reichheld and Schefter (2000) that trust is of more importance for online businesses than offline.

Ability, benevolence, internalised norms and accountability are all antecedents of trust and have through this study shown to be perceived as important in an online B2B context. However, there is no significance in the result and therefore there can not be drawn any conclusion regarding the relation between each specific antecedent and trust online. Even though there are no relations between the independent and dependent variables the independent variables are strongly correlated to each other. Hence, they are concept of similar character. Huang and Wilkinson (2013) argue that time and place impact how trust get shaped, which could be an indication why the same antecedents can not be used for trust and trust online. Being online can be very different from being in situations where ordinary trust is shaped and therefore trust may not function the same in the different contexts pointing back at the arguments of Huang and Wilkinson (2013).

The study was made in a B2B context and the respondents answered the questions in the role of their profession. The result showed that they did not tend to trust online companies. An interesting discussion can therefore be held; if they did not trust online companies due to their position and the possibility to have their decisions affect others. As a person with a position of high influence power and decisiveness they might think twice before making a final decision.
that would influence many individuals and possibly the school as a whole. The vast majority of the respondents in this study were principals (70.3%), which in the context of the discussion may have influenced the result. If the respondents, as principals, felt great responsibility and wanted limited risk taking it could explain the low trust online. Furthermore, it might be argued that the result could have been different if the respondents answered the questions as private persons and did not feel the pressure and responsibility, which their position most likely brings. Hence, the widespread result might be linked to that the respondents feel responsible (from their profession point of view) and want to avoid failure which could have an impact on others.

The most predominant group of years in profession was 16-21 years (26.3%) and it might have influenced the result as well. Most of the respondents have been working for many years in their profession and could be set in old patterns. It might be discussed that after that many years feelings of inconvenience and hassle could have a negative impact on the attitude of making business in a rather new way online. Perhaps many of the respondents felt like they did neither have the time or strength to do business online, since it would affect their ways of working. Moreover, the respondents were predominantly older and since the way of doing business has changed in recent past and becoming more digital (Parasuraman & Zinkhan, 2002; Mulhern 2009) it might influence the inconsistent trust online result. Some of the respondents might just not be used to the online context since they have been in the offline environment for a longer amount of time.

Another interesting aspect is that the respondents who had been in contact with online companies in their profession had lower trust online. Why this result emerged could have several explanations, maybe the respondents’ earlier contact with online companies have been bad. The respondents might have felt as if the companies did not put enough effort in the relationship to trust them, something that Huang and Wilkinson (2013) argue to may influence if trust will be developed. Another possible reason might be that the respondents feel more comfortable doing business face to face. Reichheld, Markey and Hopton (2000) believe that in order to build a relationship with a customer, companies need to deserve their trust first. Aligning with the low trust result of this study, it could be discussed that companies might have to work harder in order to gain trust online.
Since all the constructs other than trust online have a more gathered distribution, there could be a discussion concerning the result of trust online and what caused it. Since the original six questions measuring trust online gave inconsistent means it might be questioned if the questions were asked correctly. The widespread distribution of the result could also be due to misinterpretation among the respondents. If the questions regarding trust online were asked differently, the possible misinterpretation could have been avoided. Another possible reason for the distribution of trust online could be that the online context is used in the questions and no specific company or case is mentioned. Lau and Lee (1999) argue that trust is based on past experiences, indicating that presenting an actual company in the questionnaire might have had an impact on the result due to prior perception. The higher value of Cronbach’s alpha on three of the items of trust online led to that they were further used when finding results and drawing conclusions. The questions measured what they intended and therefore the result is an interesting deviation.
7. Conclusion

The study led to the conclusions presented below. The conclusions answer to the purpose and display what was found in the study.

This study proposed a positive relation between the antecedents (ability, benevolence, internalised norms and accountability) and trust online, based on previous research. Previous research has perceived the antecedents to impact both ordinary trust and trust online. However, the result showed that the relation between trust online and the antecedents tended not to comply. Therefore, it can be concluded that trust online and trust are not to be treated equally. Even though the antecedents have no relation to trust online, they are each important constructs in an online B2B context. In short, the antecedents of trust that worked successfully in ordinary trust research did not have the same impact in trust online.

Previous research argue that trust is more important in an online context than offline when doing business and the result of this study showed that trust online is weak. Weak trust online indicates that the respondents do not trust companies online and previous research argue trust to be important, especially online where face to face interaction is missing. Hence, this is something online companies need to be aware of.

Since the hypotheses were rejected it can not be concluded that the concepts have an impact on trust in an online B2B context and therefore the conceptual model will have no relevance. The conceptual model is built on the hypotheses and consequently a rejection of it is inevitable.
8. Research implications

In this chapter implications are presented to share the contribution of the study. There are both some theoretical and managerial implications that derived from this study and they establish what this study contributes to others with, both within research and practical use.

8.1 Theoretical Implications

There are several theoretical implications that derived from this study. The trust antecedents were tested in an online context unlike most previous research. As mentioned before, previous research might have assumed that the antecedents of trust also worked when studying trust in an online context. However, this study actually tested if this was the case and the result showed that it was not. This study also highlights another aspect which most previous research has not, the B2B context. Trust is mainly studied in B2C relationships (Mayer, Davis & Schoorman, 1995; McKnight, Cummings & Chervany, 1998; Rusman et al., 2010a; Rusman et al., 2010b; Schumann et al., 2012; Calefato, Lanubile & Novielli, 2015), indicating why this study is of importance. Moreover, the online B2B context is specifically where the contribution lies.

8.2 Managerial Implications

The result of this study can be valuable for companies operating in an online B2B context. Due to the sample of this study, the result could be particularly important for companies doing business with schools. Companies such as Zcooly, which the sample in this study derived from, could take advantage of the result and use it in order to improve their work with creating trust online among their customers. It is indicated by both this study and previous research (Calefato, Lanubile & Novielli, 2015; Brengman & Karimov, 2012; Pavlou, 2002) that trust online might be more important than trust in face to face meetings. This study showed that there is mistrust in online companies, which is something they should take in concern. However, it is not clear if trust has a specific relation to the studied concepts but it is still shown to be an important factor when doing business, especially online.

Furthermore, it might be argued that previous research is not to be trusted to its fullest length and companies should be open minded when it comes to research regarding trust online. Companies could advantageously start a dialogue with their customers, learning what they
should do in order to increase their trust online. Moreover, a dialogue with the customer might not only clarify what is needed for gaining trust online in the relationship, but also it would bring feelings of openness and the company could use the customers’ point of view in more aspects – which might increase trust online further.

8.3 Limitations

In this section limitations of the study are described to establish what might have limited or impacted the study and its results.

There are some limitations in the study that can be discussed. First of all the “large gap” between research in trust and trust online might have been too big and it might be argued that it simply was too early for a study in this context. Moreover, a quantitative approach might not have been preferable since the field of trust online might have needed more exploratory research in advance. The researchers were aware of a possible gap between trust and trust online. Due to the assumption among previous researchers that the antecedents could be used, the researchers of this study wanted to see if it was the same.

There was a lack of significance in the questions regarding trust online in relation to the antecedents, this could have been due to misinterpretations of the questions leading to an incorrect result. Perhaps this was because the questions were asked inaccurately. It might also have been confusing for the respondents to answer to their general perception of trust online, as it might have been too broad. Their answers could have been based on previous bad experiences or their role of profession impacted their cautious approach.

Due to previous research’s assumption of the similarity of offline and trust online the questions of trust online were formulated the same way as in previous research regarding offline trust. With this in mind, and the fact that the result showed contrary to what was assumed, the theory might have been incorrect leading to wrong measures of the dependent variable.
8.4 Further Research

This study pointed out that trust in an offline and online context are not to be treated in the same manner. Since a predominant number of previous research did treat them the same without testing it first it could be proposed that further research is needed in this area.

There needs to be a more extensive exploratory research regarding trust online. The research needs to be exploratory since the field is not very researched and the same antecedents as for ordinary trust have been used even though differences appear. Further research can explore new antecedents of trust online, which later can pave the way for a new direction within the field of trust online. There could also be more research focusing on solely the perception of trust online to find a more in depth understanding of the concept. In extension that would help finding a clearer view of differences between online and offline trust.

This study did not focus on a specific case or company, rather on an overall perception of trust online. It could be interesting for further research to have a more specific focus to investigate if there are differences regarding this as well. Further, a study where the B2B context is researched in more detail could be interesting, this in order to see how trust online differs between companies in different industries or of different sizes. Since prior contact with online companies had an impact on trust online a more in depth research regarding this phenomena could be of interest for further research.

The study was conducted in Sweden and in order to see if there are differences between countries, further research could focus on other countries as well. Moreover, there could be differences if the parties in the interaction are from different countries compared to interactions where both parts are from the same country.
9. References


Appendix A

Questionnaire
Q1: Företags rykte påverkar om jag kan lita på dem
Q2: Jag utsätter mig för risk när jag väljer att lita på företag online
Q3: Jag är sårbar när jag litar på företag online
Q1: Jag litar vanligtvis på onlineföretag tills de ger mig anledning att inte göra det
Q2: Generellt sett tror jag det bästa om onlineföretag vid första kontakt
Q3: Mitt vanliga förhållningssätt är att jag litar på nya bekantskaper tills de bevisar att jag inte ska göra det
Q4: Onlineföretag ska kunna sin fakta, koncept, principer och metoder rörande deras område
Q5: Onlineföretag ska agera lämpligt när de löser verkliga problem
Q6: Onlineföretag ska uppnå bra resultat när de löser verkliga problem
Q7: Onlineföretag ska utföra sina uppgifter inom verksamheten med skicklighet för att uppnå ett specifikt mål
Q8: Onlineföretag ska stödja sina kunder
Q9: Onlineföretag ska finnas tillgängliga för sina kunder
Q10: Onlineföretag ska ge sina kunder tillgång till information
Q11: Onlineföretag ska inte dra fördel av den andra parten
Q12: Onlineföretag ska agera i linje med den andra partens intresse
Q13: Onlineföretag ska vara lätta att interagera med
Q14: Onlineföretag ska bry sig om den andra partens behov
Q15: Onlineföretag ska bry sig om den andra partens mål
Q16: Onlineföretag ska vara uppriktiga
Q17: Onlineföretag ska inte läcka information om den andra parten
Q18: Onlineföretag ska inte vilseleda den andra parten
Q19: Onlineföretag ska inte ljuga för den andra parten
Q20: Onlineföretag ska behandla alla parter lika
Q21: Onlineföretag ska visa respekt till andra parter
Q22: Onlineföretag ska fullfölja sina åtaganden
Q23: Onlineföretag ska visa lämpligt omdöme i oanade situationer
Q24: Onlineföretag ska ha ett förutsägbart beteende
Q25: Onlineföretag ska tro på sig själva och sin egen förmåga att utföra specifika uppgifter
Q26: Onlineföretag ska vara jämna i sina avsikter att slutföra en uppgift
Q27: Onlineföretag ska fullfölja tilldelade uppgifter
Appendix B
Specific averages for each concept
In this section more specific averages are presented, each concept has a table. All concepts are divided and the mean, median and mode for each question are presented. The blue column shows the total number for each part (mean, median, mode).

Online Trust
Table B.1 shows how the respondents answered on average in the questions regarding if they trust online companies. The mean of each question varies from 2.66 to 3.13, this indicates that the mean of all questions was close to 3 which is in the middle of the 1 to 5 scale. The total mean was 2.93 and both median and mode were 3.

Table B.1 Online Trust Averages

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.75</td>
<td>4.77</td>
<td>4.74</td>
<td>4.81</td>
<td>4.77</td>
</tr>
<tr>
<td>Median</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Mode</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Ability
Table B.2 above presents, which value the respondents has chosen/answered in the questions regarding the ability of an online company. The questions aimed to find how important ability was when the respondents were in contact with an online company. High numbers indicate importance and low numbers less importance. The result for ability was a mean from 4.74 to 4.81 and a total mean of 4.77 on a five point scale. Median and mode are 5 for all four questions regarding ability.

Table B.2 Ability Averages

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.13</td>
<td>2.66</td>
<td>2.99</td>
<td>2.93</td>
</tr>
<tr>
<td>Median</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
**Benevolence**

The results of the antecedent benevolence are presented in table B.3. With a total of 8 question the mean reaches from 4.49 to 4.86, which makes the total 4.70. The median is 5 for all questions, consequently also 5 as a total average. Accordingly, mode has 5 as a total as well which is the highest number on the scale.

Table B.3 Benevolence Averages

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.80</td>
<td>4.82</td>
<td>4.86</td>
<td>4.49</td>
<td>4.57</td>
<td>4.75</td>
<td>4.75</td>
<td>4.58</td>
</tr>
<tr>
<td>Median</td>
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<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Mode</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**Internalised Norms**

Table B.4 shows the result of the questions regarding how important internalised norms were for the respondents when being in contact with an online company. The total mean of 4.90 is close to 5, which is the highest number possible. The mean in each question varies from 4.74 to 4.96. Both median and mode were 5 for all questions.

Table B.4 Internalised Norms Averages

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.91</td>
<td>4.90</td>
<td>4.96</td>
<td>4.96</td>
<td>4.74</td>
<td>4.93</td>
</tr>
<tr>
<td>Median</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Mode</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

**Accountability**

Table B.5 above presents how the respondents answered on average in the accountability questions. The total mean was 4.76 and in the specific questions the mean varied from 4.61 to 4.96. Median and mode were 5 for all questions regarding accountability.

Table B.5 Accountability Averages

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.96</td>
<td>4.82</td>
<td>4.53</td>
<td>4.61</td>
<td>4.72</td>
<td>4.92</td>
</tr>
<tr>
<td>Median</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Mode</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix C
Descriptive Data

The questionnaire had a total of 118 respondents and the gender distribution is shown in figure C.1. There were 68.6 percent female, which equals 81 participants and 31.4 percent male, which equals 37 participants in the total of 118 respondents. The responding distribution is therefore skewed. When finding possible respondents for the survey the random sample was consisting of mostly females.

*Figure C.1 Gender distribution*