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THE IMPACT OF DEMOGRAPHIC CHARACTERISTICS ON DIGITAL TRUST

THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
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ABSTRACT

THE IMPACT OF DEMOGRAPHIC CHARACTERISTICS ON DIGITAL TRUST

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Trust plays an important role in human life nearly in every area and it is an affecting factor in people's lives. With the technological innovation, it also gained importance in online environments. Therefore, the purpose of this study is to examine the impact of demographic characteristics, especially age, gender, civil status, education level, city size and being expatriate on digital trust. Also, this study is purposed to explore the relationship between personality which is measured by using Ten Item Personality Inventory and level of digital trust. e-Trust Survey is used to measure the level of digital trust and it includes ten components under three levels which are technology, people, and process. In this study, 5329 participants from 36 different countries filled out the online questionnaire. 2189 of them female, 2670 of them male and 470 of them described themselves as LGBT-Q. Munzel-Bruner analysis which is non-parametric alternative of MANOVA was conducted on the components of digital trust across each demographic information. Results revealed that age, gender, civil status, education level, city size and being expatriate are affecting factors on digital trust. Additionally, Spearman's correlation coefficient revealed that five personality dimensions were correlated with digital trust.

Keywords: Digital trust, demographic characteristics, personality, causal-comparative research.

ÖZ

DEMOGRAFİK ÖZELLİKLERİN DİJİTAL GÜVEN ÜZERİNDEKİ ETKİSİ

Tufan, Mehtap

Yüksek Lisans, Bilişim Teknolojileri

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Güven, insan yaşamının hemen her alanında önemli bir rol oynayan ve insanların yaşamlarını etkileyen bir faktördür. Teknolojik yeniliklerle birlikte çevrimiçi ortamlarda da önem kazanmıştır. Bu nedenle, bu çalışmanın amacı demografik özelliklerin özellikle yaş, cinsiyet, medeni durum, eğitim düzeyi, şehir büyüklüğü ve gurbetçi olmanın dijital güven üzerindeki etkisini incelemektedir. Ayrıca bu çalışma, On Maddelik Kişilik Envanteri kullanılarak ölçülen kişilik ile dijital güven düzeyi arasındaki ilişkiyi araştırmayı amaçlamaktadır. e-Güven Anketi, dijital güven düzeyini ölçmek için kullanılmakta ve teknoloji, insan ve süreç olmak üzere üç seviye altında on bileşen içermektedir. Bu çalışmada 36 farklı ülkeden 5329 katılımcı çevrimiçi anketi doldurdu. 2189'u kadın, 2670'i erkek ve 470'i kendini LGBT-Q olarak tanımlamıştır. MANOVA'nın parametrik olmayan bir alternatifi olan Munzel-Bruner analizi, her bir demografik özellik ve dijital güven bileşenleri üzerinde gerçekleştirilmiştir. Sonuçlar, yaş, cinsiyet, medeni durum, eğitim düzeyi, şehir büyüklüğü ve gurbetçi olmanın dijital güveni etkileyen faktörler olduğunu ortaya koymuştur. Ek olarak, Spearman korelasyon katsayısı, dışadönüklük, uyumluluk, vicdanlılık, duygusal istikrar ve deneyime açıklık olmak üzere beş kişilik boyutunun dijital güven ile ilişkili olduğunu ortaya koymuştur.

Anahtar Kelimeler: Dijital güven, Demografik özellikler, Kişilik, nedensel-karşılaştırmalı araştırma

*To my beloved husband and
To my miraculous triplets...*

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LIST OF SYMBOLS/ABBREVIATIONS

LGBT-Q	Lesbian, gay, bisexual, transgender and queer
MANOVA	Multivariate analysis of variance
TIPI	The 10-Item Personality Inventory

CHAPTER 1

INTRODUCTION

In this chapter, the background and statement of the problem, purpose of the study, research questions, significance of the study and assumptions are presented as an introduction to the study.

1.1. Background of the Problem

Trust plays an important role in human life nearly in every area. In order to make some decisions, people rely on their trust emotions. Therefore, it becomes an affecting factor in people's lives. With the technological innovation, it also gained importance in online environments because of the increase in online shopping and electronic transactions. In order to make online shopping or not, people evaluate their trust about this online commerce; so that trust becomes an effecting factor for adoption of online commerce [1]. Also, if user has some doubts about the online store, it becomes an affecting factor to be an online buyer [2]. According to Kirs and Bagchi [3] information and communication technologies have been supported by trust. Some people shop online, some do not, some people use technological devices some do not, and this situation awakened academicians and administrators' curiosity.

In online shopping, people need to share some personal information with e-commerce websites. Well designed and developed e-commerce web sites increase people's trust and decrease negative thoughts about online shopping and technological development [4] Therefore, trust becomes an affecting factor for online activities and people's shopping behavior is affected by trust. In the adoption of e-commerce, individuals' personality also can be an affecting factor in addition to trust and this situation invokes

curiosity in academic area [5], [6] . According to Gefen, Benbasat, and Pavlou [7] trust has dimensionality, which are ability, integrity, and benevolence, and also trust is affected by culture.

As technological developments changed the way of shopping, it also started to change concepts. Nowadays, trust has changed to digital trust because of online actions and the effect of trust on these actions. Instead of trust, digital trust has started to be used in digital environment as an affecting factor of people's online actions. Therefore, digital trust has become an interesting concept for academicians and managers. Another interesting concept related to digital trust is affecting factors of it. In the light of previous research, this study tries to explore the impact of demographic characteristics on digital trust.

1.2. Statement of the Problem

Trust has become an important issue for companies, especially with technological developments. These developments directed companies to e-commerce and this direction created new research area about trust. Because having higher trust, affecting behaviours of consumers about the e-commerce. Chen and Dhillon [8] conducted a study about the interpreting dimensions of consumer trust in e-commerce. Results indicated that competence, integrity, and benevolence are dimensions of trust in an Internet vendor. This study also classified the source of trust as characteristic of the consumer, the firm, the website and relation between the consumer and the firm [8].

Another study is aimed to determine profiles of individuals and related factors with e-commerce and e-trust, and the importance of these concepts in Spain [9] They used national questionnaire from 2014 to 2019. Results showed that e-trust is a deciding factor in e-commerce, also the development of equality education contributes to the development of e-commerce and e-trust. About individuals' profiles, gender, age, salary and education have significant differences in e-trust and e-commerce [9]. It includes nearly same independent variables with this study, but it differs in diversity of participants.

Studying on relation between characteristic of individuals and trust or e-trust also nowadays it is called as digital trust may support businesses in the execution of their corporate strategy, market positioning, marketing, cost-cutting, profit-maximizing, effective, and customer-loyalty initiatives. When previous studies examined it is found that there is a need for finding out the relation of demographic information and digital trust in general.

1.3. Purpose of the study

The main purpose of this study is to examine the impact of demographic characteristics, especially age, gender, civil status, education level, city size and being expatriate on digital trust. Also, the purpose of the study is to explore the relationship between personality which is measured by using Ten Item Personality Inventory [10] and level of digital trust.

1.4. Research Questions

This study examined the following research questions:

- RQ1: Is there any significant difference between age groups in terms of digital trust?
- RQ2: Is there any significant difference between gender groups in terms of digital trust?
- RQ3: Is there any significant difference between civil status groups in terms of digital trust?
- RQ4: Is there any significant difference between education level groups in terms of digital trust?
- RQ5: Is there any significant difference between city size groups in terms of digital trust?
- RQ6: Is there any significant difference between expatriate and non-expatriate groups in terms of digital trust?
- RQ7: Is there any relationship between personality and the level of digital trust?

CHAPTER 2

LITERATURE REVIEW

In this chapter, the related literature pertaining to the research questions listed in Chapter One will be analyzed and synthesized. Firstly, the definition of trust and affective factor are presented. Then, definition of digital trust is explained. Lastly, a summary is given.

2.1. What is Trust?

Trust is defined as set of beliefs which other individuals should achieve their expected actions or promises by early psychology and sociology research [11, 12, 13] In addition to that new business research widen the definition of trust; it is defined as expectations that should be fulfilled ethically [14], dependably [15] , and performed based on given commitments by other individuals or by the companies [13, 16, 17]. Another definition is given by Hosmer [14] who defined trust as fulfilled expectations which are accomplished by others based on commitments, honesty and not taking advantage of any type of opportunity when it arises. According to another study, uncertainty, vulnerability, and dependence qualifies the trust [17].

Familiarity also defined as “the precondition for trust” [18]. That means if the individual is familiar with the other individual or company, making some decisions or taking some actions about this individual or company based on trust much more easy according to unknown individual or company. This trust-based decision is actually given based on previous experiences with individual or company [11, 14, 15, 19, 20, 21], therefore familiarity can increase the trust when previous experiences are positive, but if it is not then familiarity can break the trust. This is also applied in business life.

If people have familiarity with the company, then they tend to make online shopping from this company's e-commerce website[13] [18] Familiarity is an important precondition for trust because besides of providing a projection for farther expectations, it helps to have some ideas about what should be expected based on previous relation [18] According to the research conducted by Gefen, even though trust and familiarity have different structure, familiarity significantly affect trust [18].

Trust is an affecting factor nearly in every part of our lives. Especially business relationships can be affected by trust significantly [19, 21, 22, 23, 24, 25] . Also, social networks are affected by trust, because people decide to participate in an activity with other people according to their trustworthiness [11, 13, 18]. In business life, it has an important role in establishing agreements with other companies [22, 26, 27, 28] , it can help to decrease recognized risks [22, 27] establish long-term relations [22, 26, 27]. In other words, quality of social and business relation can be regulated based on trust[11, 13, 18, 22, 29].

Trust is not only important in face-to-face relations but also it is important in the internet world. According to Quelch and Klein [30], trust has a very significant effect on encouraging purchase through the Internet. According to their study, three sources create an impact on trust; these sources are fame of e-commerce in general, purchasers and special e-commerce websites [30]. Other studies also revealed that if there is an uncertainty and dependency[14, 15, 31] in any type of social or economic related actions especially which involves important decisions or new technology, trust becomes as an important factor for these actions. Furthermore, trust has an important role for Web-surfers' decisions about whether download a software from the Internet or not [18, 32].

When factors affecting trust studied,[33] did research about how consumers with Eastern and Western backgrounds form trust in e-commerce and found that cultural values have an impact on forming trust in e-commerce. They revealed that USA consumers favors to have higher tendency to trust in e-commerce than South Korea [6]. However, according to [34], there is no significant differences between countries

in forming trust especially in China, Hong Kong and Taiwan; but results showed that Chinese consumers have higher tendency to trust in e-commerce [6].

2.2. Affecting Factors on Trust

Trust is an important concept in people's lives. In order to fulfill some actions, people evaluate their trust about other people or about this action or about company. Actually, there are some underlying concepts which affect the level of trust. These underlying concepts can change according to the situation. Finegold [35] tried to investigate the gender differences in personality by conducting meta-analyses and found that females have higher level in trust than males. Buchan, Croson and Solnick [36] investigated if there is a relation between trust and gender in the Investment Game. They have found that men have higher level of trust than women, but women are more trustworthy than men. Another study [37] tried to investigate the relation between gender and trust in e-commerce and found that there are minor differences between male and female participants on perception of online shopping. Gender can be counted as an affecting demographic on trust.

In addition, Sutter and Kocher [38] conducted a study to examine the degree of trust in different age groups. They used an experimental trust game and totally 662 participants from different age groups attended this study. Results showed that trust level increases in direct line starting from early childhood to early adulthood but stays fairly in the same level in different adult age groups. Also, Li and Fung [39] tried to investigate age differences in trust in a worldwide sample. They have used the World Value survey and collected data from 57,497 individuals from 38 countries. Results showed that age was positively related to trust in general. Another affecting demographic can be age.

Another study [40] is conducted to investigate the underlying concepts of organizational trust and 83 managerial employees in Southwestern United States participated in this study. Results showed that age, marital status, and work group cohesion have positively related to organizational trust. Furthermore, Lindström [41]

examined the relation between marital status and generalized trust in other people. Totally 28,198 individuals from southern Sweden participated to this study. Results revealed that unmarried men and women and divorced men have significantly low trust. Marital status can be counted as other affecting demographic on trust.

Another demographic concept can be educational level which can be an affecting factor on trust. Hooghe, Marien and Vroome [42] conducted a study investigating the underlying factor of relation between education and trust. Totally, 1931 individuals from Netherlands participated in this study. Results showed that education is strongly related to trust, and it is mostly explained by cognitive ability and occupational prestige. Another study [43] tried to explore the relation between education level and trust and tolerance in Europe. According to result, education level is significantly and important factor for level of trust and level of tolerance for immigrant populations.

2.3. What is Digital Trust?

Digital trust is defined by Gartner [44] as “underpins every digital interaction by measuring and quantifying the expectation that an entity is who or what it claims to be and that it will behave in an expected manner”. KPMG (Klynveld Peat Marwick Goerdeler) explains digital trust from consumer’s point of view and according to this company “it is an outcome that you can influence but not control, where confidence in your digital services drive consumer loyalty, unlocking a new kind of relationship and huge untapped potential [45]. In addition, Joyce [46] explains it as “level of confidence in people, process and technology to build a secure digital world”.

Furthermore, KPMG [45] company have developed a simple model to provide guidance for improving and demonstrating digital trust. This model identifies key attributes which are Reliability, Credibility, Transparency, Security and Integrity. If the organizations give importance to these attributes, they can improve their customers’ level of digital trust about their organizations. Another study [47] also defines security, legitimacy, community, user experience, shareability, and relevance as important pillars of trust. Mubarak and Petraite [48] also explain digital trust in

similar way. According to them “it can be referred to as stakeholders’ trust in the ability of actors, technologies, and processes to build a reliable and secure business network”. Furthermore, the 2017 Digital Evolution Index [49] identifies drivers of digital trust as environment, experience, attitudes, and behavior.

As seen from the definitions, digital trust can be explained from different perspectives, and it can have different drivers. However, there is a gap for demographics as an affecting factor on digital trust in general. Therefore, this study adopted the definition of digital trust made by Joyce [46] who explains it as “level of confidence in people, process and technology to build a secure digital world”. Also, the framework which is developed by Marcial and Launer [50] used as baseline of this study. This framework was created based on the global study on digital trust in business was designed in partnership and collaboration with educational institutions in Europe, the United States, Latin America, and Asia.

2.4. Theoretical Framework

Framework of Marcial and Launer [50] is created to provide a deeper understanding of the theoretical foundations and guiding ideas behind the study "Digital Trust in the Workplace." Additionally, it outlines each theory and principle along with how they relate to one another. Forrester Social Technologic Ladder, Technology Adoption Theory, Management Theory, Information Systems Theory, Software Quality model, General Data Protection Regulation Principles, Digital Citizenship Principles, and Caldicott Principles are included in that framework [50]. In addition, it relates demographic profiles to Technology Diffusion Theory as affecting factor for digital trust. Technologic profiles can be based upon Technology Acceptance Model and social media usage. Technology integration is also explained based on the Innovation Theory in that framework [50]. Therefore, these theories and principles creates the theoretical framework of this study.

Diffusion theory, according to Rogers [51] is a process that takes place through time and has five distinct stages which are Knowledge, Persuasion, Decision,

Implementation and Confirmation. These stages depend on the personality attributes, knowledge or habits of an individual [50]. In addition, Technology Acceptance Model has been improved as a crucial tool for comprehending factors that influence whether people will accept or reject a technology [52]. Therefore, these theories can help to explain affecting factor of digital trust. Furthermore, the Digital Divide and Net Generation can also help to find out the affecting factors on digital trust. With the widespread use of the internet comes a significant social issue known as the Digital Divide [53]. The phrase Net Generation is one of many that describe a particular generation in ways that are pertinent to teaching and learning [54].

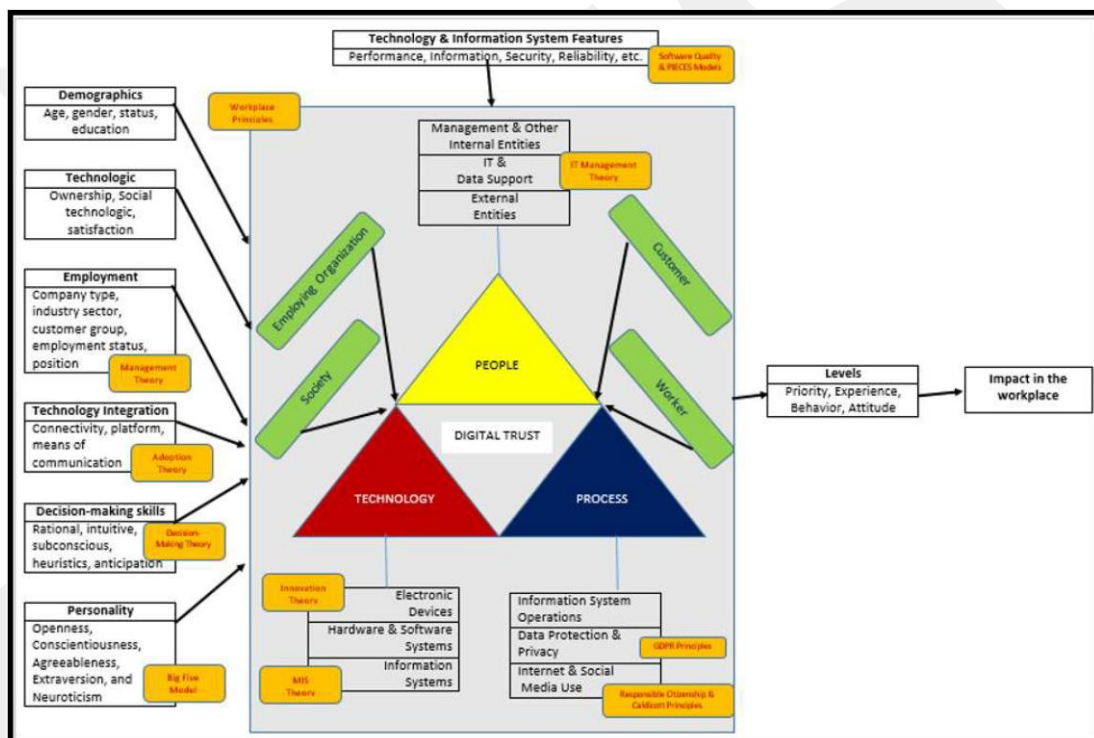


Figure 2.1 Theoretical Framework of the Study “Digital Trust in the Workplace”[50]

Figure 2.1 represents the theoretical framework of the study “Digital Trust in Workplace conducted by Marcial and Launer. Based on these theories and principles Digital Trust survey questions have been constructed under 3 level which are technology, people and process. These 3 level totally have 10 components that are priority level of software quality, hardware and software, electronic devices, information systems, management, and other internal entities, IT and data support,

external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

2.5. Summary

Reviewed studies showed that age, gender, marital status and education level are affecting demographics on trust. This list can be widened by different situations like e-commerce. Previous studies also revealed the effect of trust in the digital world and showed the importance of it. Because of these technological developments and the influence of the Internet on our lives, digital trust has become an important research area. There is a need for more generalized studies about affecting factors on digital trust. Therefore, this study aims to reveal the impact of demographic characteristics especially age, gender, civil status, education level, city size and being expatriate on digital trust. Also, this study tries to find out the relationship between personality and the level of digital trust.

CHAPTER 3

METHODOLOGY

In this chapter, the research methodology of the study is explained under subsections entitled, Purpose of the Study and Research Questions, Design of the Study, Participants of the Study, Data Collection Procedures and Instruments, and Data Analysis.

3.1. Purpose of the Study and Research Questions

The main purpose of this study is to examine the impact of demographic characteristics, especially age, gender, civil status, education level, city size and being expatriate on digital trust. Also, this study is purposed to explore the relationship between personality which is measured by using Ten Item Personality Inventory and level of digital trust. Based on these aims, research questions are listed below:

- RQ1: Is there any significant difference between age groups in terms of digital trust?
- RQ2: Is there any significant difference between gender groups in terms of digital trust?
- RQ3: Is there any significant difference between civil status groups in terms of digital trust?
- RQ4: Is there any significant difference between education level groups in terms of digital trust?
- RQ5: Is there any significant difference between city size groups in terms of digital trust?

- RQ6: Is there any significant difference between expatriate and non-expatriate groups in terms of digital trust?
- RQ7: Is there any relationship between personality and the level of digital trust?

3.2. Design of the Study

In this study, causal-comparative research design, which is one of the quantitative research methodologies, has been employed. In causal-comparative research, researchers look for the reasons behind or effects of existing diversity between or within groups of people [55]. In this study, there are seven different grouping as independent variable which are created from demographic information. These independent variables are age, gender, civil status, academic degree, living city size, being expatriate and personality dimensions. For searching the differences between groups there is need for dependent variable. The dependent variable is mainly digital trust, but it includes 10 components under 3 level; these are priority level of software quality, hardware and software, electronic devices, information systems, management, and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

3.3. Participants of the Study

Participants of the study were determined according to convenience sampling [55] which is a non-random sampling method where units are chosen for the sample based on their accessibility to the “e-Trust Project” [56]. This study’s data have been taken from “e-Trust Project” which is a global study on digital trust in the workplace conducted by Marcial and Launer [56].

Totally 5329 individuals from 36 different countries participated in this study. Frequencies of each country are represented in Figure 3.1. Moreover, 2189 of them female, 2670 of them male and 470 of them described themselves as LGBT-Q. Their ages were changing starting from 18 years old to 59 you old and older; 40 of them are

18 years old or younger, 1262 of them are in the age range of 19-28, 1332 of them are in the age range of 29-38, 1590 of them are in the age range of 39-48, 966 of them are in the age range of 49-58 and lastly 139 of them are 59 years old or older. Distribution of other demographic information which are the civil status (Figure 3.2.), academic degree (Figure 3.3.), living city size (Figure 3.4.), and being expatriate (Figure 3.5.) are shown in the following figures.



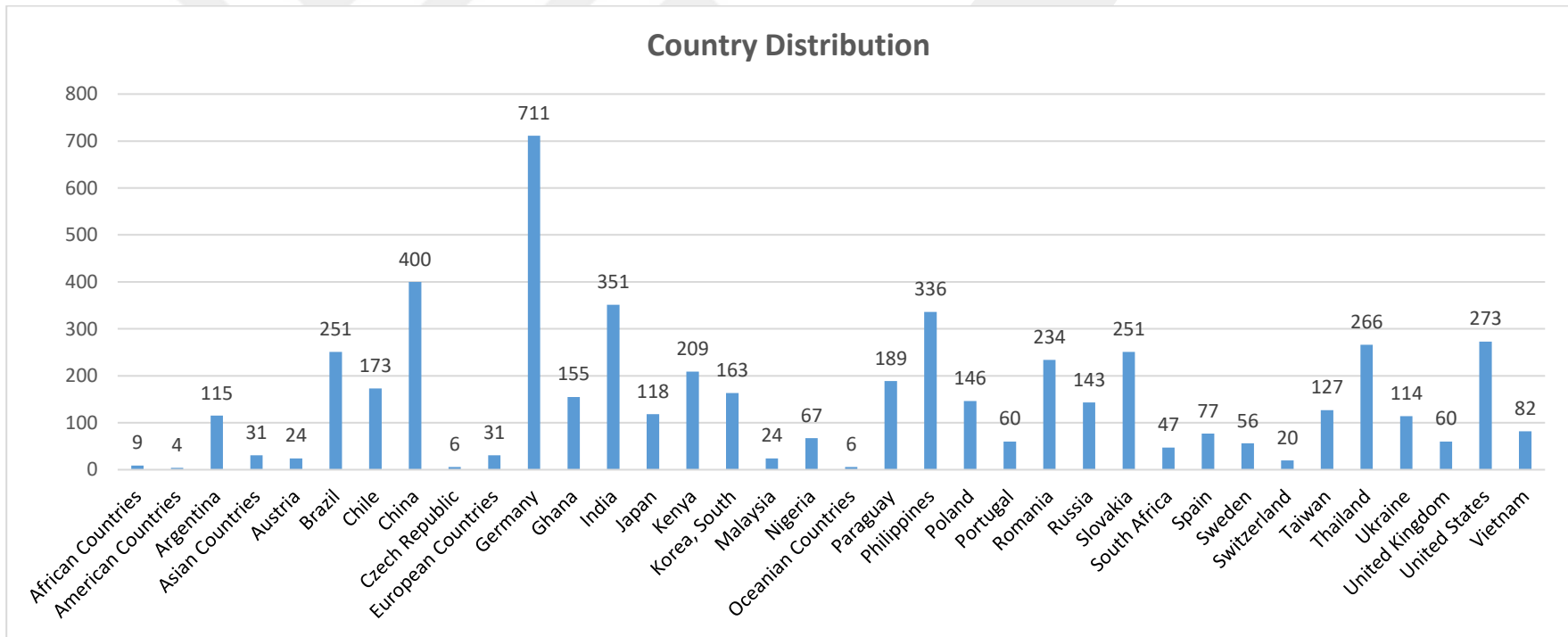


Figure 3.1 Country Distribution

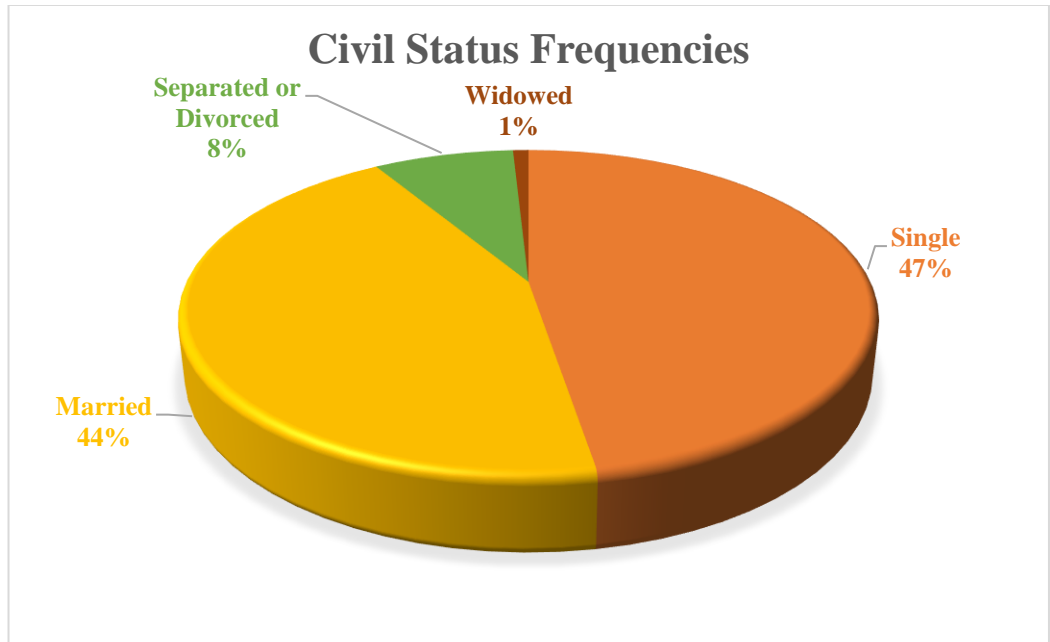


Figure 3.2 Distribution of civil status

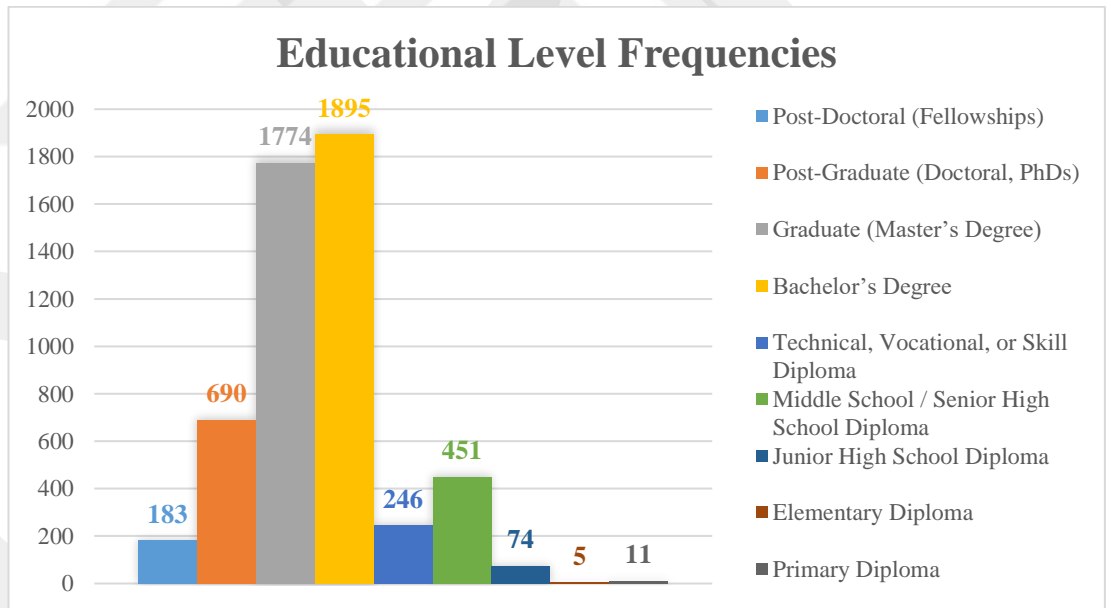


Figure 3.3 Distribution of academic degree

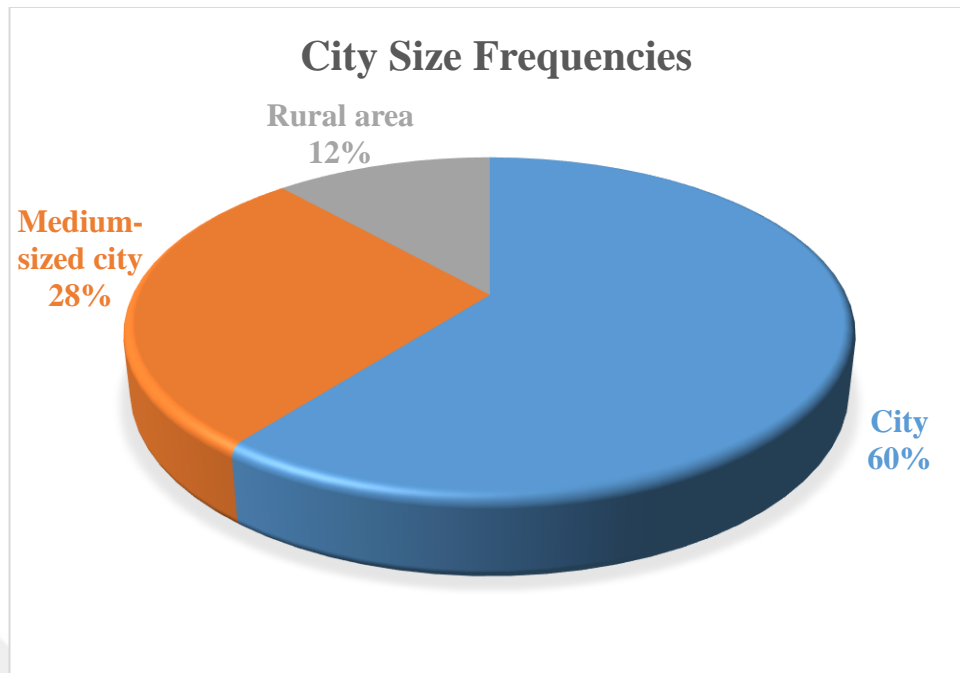


Figure 3.4 Distribution of city size

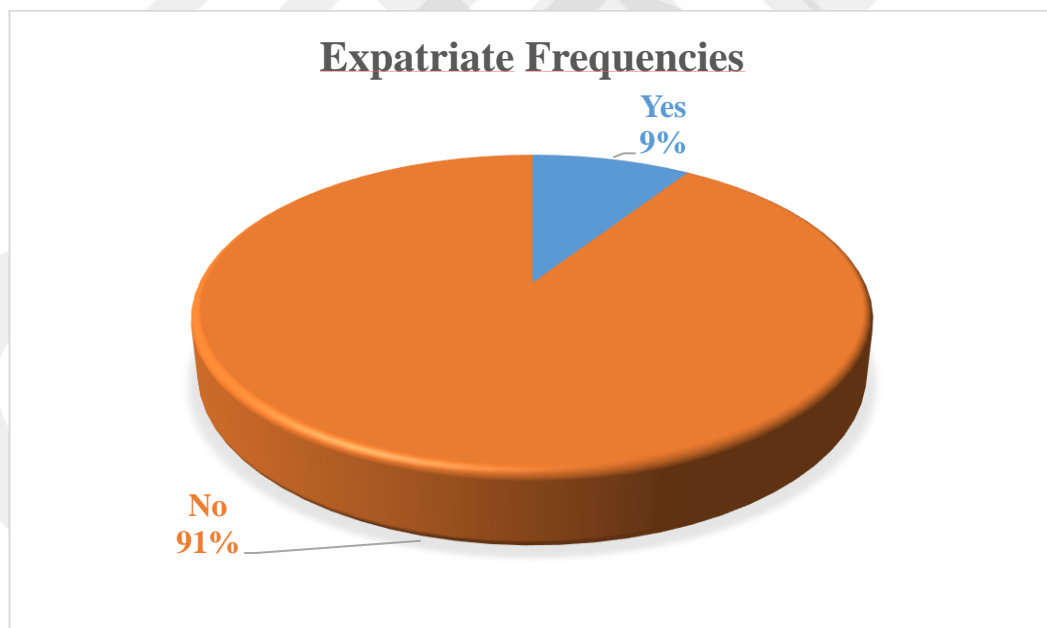


Figure 3.5 Distribution of expatriate

3.4. Data Collection Procedures and Instruments

Demographic information questionnaire, Ten-Item Personality Inventory [10] and Survey e-Trust [56] were used in this study. Demographic information questionnaire consists of age, gender, civil status, education level, living city size, being expatriate. A combination of these questions was formed in an online survey and all data has been gathered.

Ten-Item Personality Inventory: This survey is also called as TIPI and it is used to measure the Big Five personality dimensions by using 10-item inventory [10]. Big Five personality dimensions are extraversion, agreeableness, conscientiousness, emotional stability, and openness to experience.

Survey e-Trust: Also called Digital Trust survey. This survey is created based on global research to understand digital trust emphasizing technology, people and process in workplace. For this study schools in Europe, the USA, Latin America, and Asia are also collaborated and participate in. An applied sciences higher institution in Germany is the project's leader and headquarter. A Center of Excellence in IT Higher Education from the Philippines is co-leading it. It is financed by the European Regional Development Fund [56]. Totally, 376 respondents from Germany, Philippines, China, Japan, South Korea, Paraguay, Russia, Brazil, Thailand, USA, and the United Kingdom participated in this study and filled Survey eTrust for test-retest reliability and internal consistency. Results showed that all subscales of e-Trust survey higher p-value than .05 and demonstrating stability of the test-retest. In addition, satisfactory internal consistency was found for all subscales of e-Trust survey. This survey has technology, people and process dimensions; under these dimensions it includes 10 subscales. These are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use [56].

3.5. Data Analysis

Collected data was analyzed in order to determine whether any significant difference exists between demographic characteristics in terms of digital trust. Demographic characteristics, age, gender, civil status, education level, living city size and expatriate information have been collected. Also, personality information has been collected to examine the correlation between dimensions of personality and level of digital trust.

Munzel-Bruner analysis which is non-parametric alternative of MANOVA was used for this study, because the multivariate normality and the homogeneity of error covariance matrices were violated [57, 58, 59]. Munzel-Bruner analysis was performed on the digital trust components (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use) with age, gender, civil status, education level, living city size and being expatriate demographics. For follow-up analysis, Kruskal-Wallis H tests for more than two categories' demographics (age, gender, civil status, education level and living city size) and Mann-Whitney U tests for two-category demographics (expatriate) were applied. In order to reveal the correlation between these five personality dimensions and digital trust components, Spearman's correlation coefficient is used.

CHAPTER 4

RESULTS

In this chapter, the results of the study are presented according to the research questions of the study. The impact of each of demographic characteristics which are age, gender, civil status, education level, living city size and being expatriate information on digital trust components (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use) explained separately in this chapter. Furthermore, correlation between five personality dimensions and digital trust components are also declared in this chapter.

4.1. Digital Trust Components Across Age Groups

In order to examine digital trust components across age groups, Munzel-Bruner analysis was conducted. For follow-up, Kruskal-Wallis analysis has been conducted for age groups on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.1 Relative effects of digital trust components across the age groups

Age Range	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
18 or younger	0.3658660	0.3856821	0.3744793	0.3578063	0.3550009	0.3823982	0.3707684	0.4556249	0.3626665	0.5164290
age range 19-28	0.5203321	0.4561691	0.4992916	0.4818399	0.5059064	0.4819619	0.4696050	0.4713783	0.4593685	0.4488272
age range 29-38	0.4911193	0.4780540	0.4730343	0.4756099	0.5150169	0.5518202	0.4193986	0.2212516	0.5494183	0.3738366
age range 39-48	0.5266654	0.4964721	0.5053528	0.5134453	0.5486817	0.5870801	0.4972368	0.2801464	0.6152421	0.4408942
age range 49-58	0.5743901	0.5581582	0.5736208	0.5915134	0.6246294	0.6149418	0.6066147	0.5141537	0.6318305	0.5845609
59 and older	0.5286780	0.4697504	0.4715847	0.5112029	0.5627463	0.5339604	0.5210499	0.3711391	0.4905798	0.4637643

Table 4.2 Mean and standard deviations of each component of digital trust across age groups

Age Range	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
18 or younger	-.154	.387	-.230	.665	-.166	.414	-.215	.449	-.201	.389	-.196	.493	-.155	.331	-.063	.385	-.201	.413	.034	.321
age range 19-28	-.045	.426	-.014	.597	-.015	.366	-.050	.430	-.026	.391	-.005	.466	-.045	.371	-.046	.447	.004	.446	-.020	.452
age range 29-38	-.045	.517	-.032	.784	-.042	.534	-.069	.563	-.058	.531	-.049	.640	-.076	.500	-.095	.574	-.053	.594	-.068	.582
age range 39-48	.024	.488	-.032	.922	-.011	.672	.032	.593	.002	.614	-.021	.808	.023	.556	.017	.715	-.031	.771	-.018	.723
age range 49-58	.060	.490	.109	.870	.090	.610	.108	.577	.103	.556	.099	.730	.127	.542	.188	.691	.108	.688	.157	.718
59 and older	.118	.371	.110	.659	.083	.383	.061	.429	.111	.385	.119	.492	.030	.330	-.158	.438	.127	.526	-.057	.447

Munzel-Bruner analysis generated a significant main effect of age groups on digital trust components, $F(13.10, 5329) = 4.26, p < .001$. Table 4.1 and Table 4.2 shows the details of the analysis for digital trust components across age groups. Results of Kruskal-Wallis analysis revealed that there are significant differences in all digital trust components across age groups. When the technology level of digital trust across considered it is found that there are significant differences on priority level of software quality component $F(5, 5329)=97.196, p<.05$; hardware and software component $F(5, 5329)=73.640, p<.05$; electronic devices component $F(5, 5329)=112.051, p<.05$; information systems component $F(5, 5329)=148.697, p<.05$ across age groups. Results also showed that components of people level of digital trust have significant differences across age groups. These components are management and other internal entities component $F(5, 5329)=125.107, p<.05$; IT and data support component $F(5, 5329)=79.543, p<.05$; external entities component $F(5, 5329)=162.953, p<.05$. Lastly, results revealed that there are significant differences across the age groups in components of process level of digital trust; these are data protection and privacy component $F(5, 5329)=146.481, p<.05$; organizational data protection and privacy component $F(5, 5329)= 96.581, p<.05$; internet and social media use component $F(5, 5329)=77.664, p<.05$. Each component details across age groups are presented in the following section.

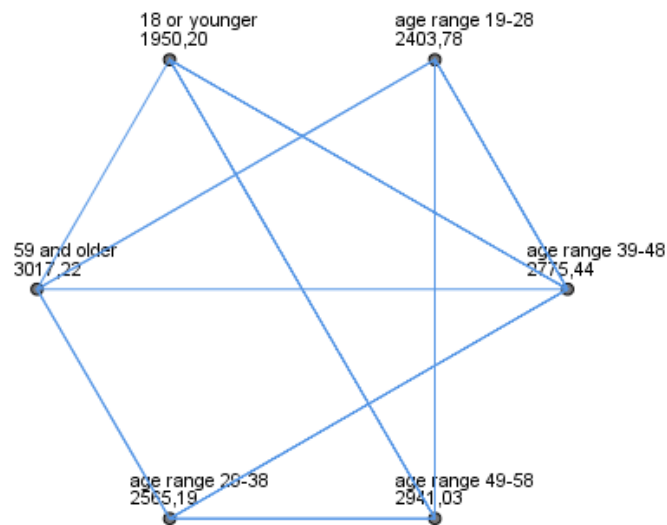


Figure 4.1. Pairwise comparisons of age range in priority level of software quality component

In priority level of software quality component, some age groups have significant differences. Figure 4.1 shows the visual representation of groups' relation. According to results, 18 years old or younger group has significantly less priority level of software quality than age range 39-48 group, age range 49-58 group and 59 and older group (age range 39-48 group: $H=-825.238$, $Z=-3.351$, $p<.05$; age range 49-58 group: $H=-990.828$, $Z=-3.991$, $p<.01$ and 59 and older group: $H=-1067.023$, $Z=-3.865$, $p<.01$). According to results, age range 19-28 group had significantly less priority level of software quality than age range 39-48 group, age range 49-58 group and 59 or older age group (age range 39-48 group: $H=-371.658$, $Z=-6.408$, $p<.01$; age range 49-58 group: $H=-537.249$, $Z=-8.161$, $p<.01$, and 59 or older age group: $H=-613.443$, $Z=-4.462$, $p<.01$). When age range 29-38 group considered, it was found that they had significantly less priority level of software quality than age range 39-48 group, age range 49-58 group and 59 or older age group (age range 39-48 group: $H=-210.248$, $Z=-3.679$, $p<.01$; age range 49-58 group: $H=-375.839$, $Z=-5.781$, $p<.01$ and 59 or older age group: $H=-452.033$, $Z=-3.296$, $p<.01$).

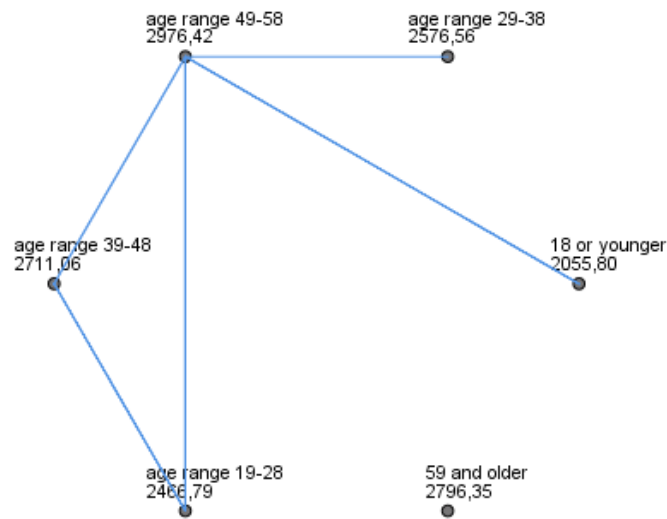


Figure 4.2. Pairwise comparisons of age range in hardware and software component

Figure 4.2 shows significant differences between the age groups in hardware and software component of digital trust. According to the results of follow-up analysis, 18 or younger age group has significantly less level of digital trust on hardware and software component than age range 49-58 group ($H=-920.622$, $Z=-3.709$, $p<.01$). Age range 19-28 group has significantly less level of digital trust on hardware and software component than age range 39-48 age group and age range 49-58 group (age range 39-48 group: $H=-244.267$, $Z=-4.211$, $p<.01$; age range 49-58 group: $H=-505.633$, $Z=-7.749$, $p<.01$). Age range 29-38 group has significantly less level of digital trust on hardware and software component than age range 49-58 group ($H=-399.866$, $Z=-6.150$, $p<.01$). Lastly, age range 39-48 group has significantly less level of digital trust on hardware and software component than age range 49-58 group ($H=-265.367$, $Z=-4.228$, $p<.01$).

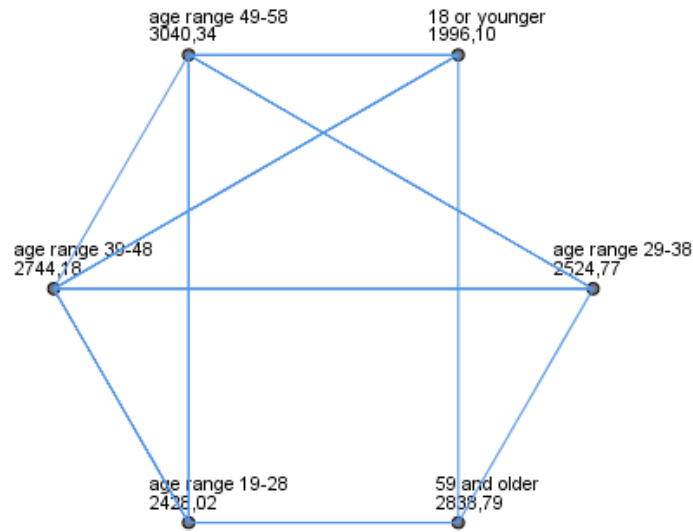


Figure 4.3. Pairwise comparisons of age range in electronic devices component

Figure 4.3 shows pairwise comparisons of age range in electronic devices component. According to that comparison, 18 or younger age group has significantly less level of digital trust in electronic devices component than age range 39-48 group, age range 49-58 group and 59 and older group (age range 39-48 group: $H=-748.075$, $Z=-3.037$, $p<.05$; age range 49-58 group: $H=-1044.237$, $Z=-4.207$, $p<.01$; 59 and older age group: $H=-842.691$, $Z=-3.053$, $p<.05$). When age range 19-28 compared to other groups it is found that this group has significantly less level of digital trust in electronic devices component than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-316.160$, $Z=-5.451$, $p<.01$; age range 49-58 group: $H=-612.322$, $Z=-9.310$, $p<.01$; 59 and older age group $H=-410.776$, $Z=-2.988$, $p<.05$). Also, age range 29-38 group has significantly less level of digital trust in electronic devices component than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-219.408$, $Z=-3.839$, $p<.01$; age range 49-58 group: $H=-515.570$, $Z=-7.930$, $p<.01$). Lastly, age range 39-48 group has significantly less level of digital trust in electronic devices component than age range 49-58 group ($H=-296.162$, $Z=-4.719$, $p<.01$).

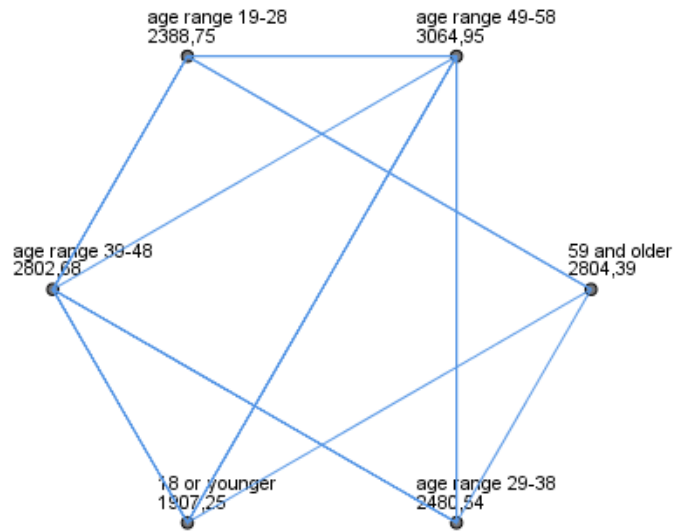


Figure 4.4. Pairwise comparisons of age range in information systems component

When the last component of technology level of digital trust is considered, Figure 4.4 shows the significantly different groups. 18 or younger age group has significantly less level of digital trust in information systems component than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-895.429$, $Z=-3.636$, $p<.01$; age range 49-58 group: $H=-1157.702$, $Z=-4.664$, $p<.01$; 59 and older age group: $H=-897.138$, $Z=-3.250$, $p<.05$). When age range 19-28 group compared to others, it has significantly less level of digital trust in information systems component than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-413.929$, $Z=-7.136$, $p<.01$; age range 49-58 group: $H=-676.202$, $Z=-10.281$, $p<.01$; 59 and older age group: $H=-415.639$, $Z=-3.023$, $p<.05$). Also, age range 29-38 group is significantly different to age range 39-48 group and age range 49-58 group in information systems component (age range 39-48 group: $H=-322.138$, $Z=-5.637$, $p<.01$; age range 49-58 group: $H=-584.411$, $Z=-8.989$, $p<.01$). Lastly, in information systems component age range 39-48 group is significantly different to age range 49-58 group ($H=-262.273$, $Z=-4.179$, $p<.01$).

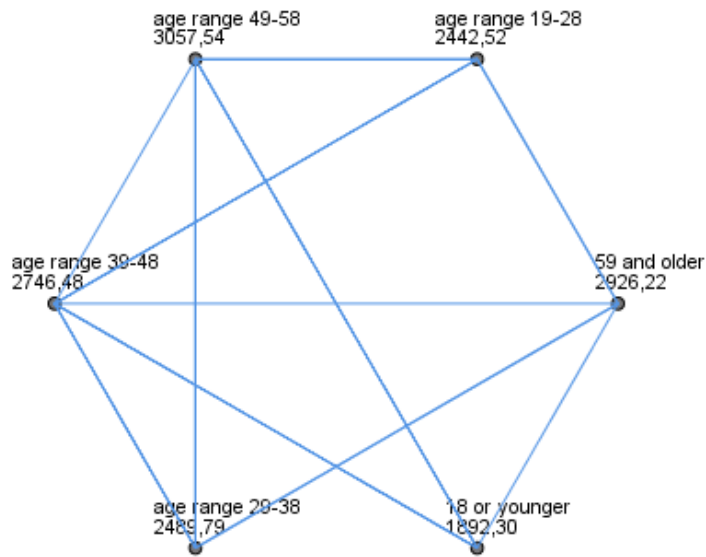


Figure 4.5. Pairwise comparisons of age range in management and other internal entities component

Figure 4.5 shows significant differences between the age groups in management and other internal entities component of digital trust. According to the results of follow-up analysis, 18 or younger age group has significantly less level in management and other internal entities component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-854.180$, $Z=-3.468$, $p<.01$; age range 49-58 group: $H=-1165.238$, $Z=-4.694$, $p<.01$; 59 and older age group: $H=-1033.916$, $Z=-3.745$, $p<.01$). Age range 19-28 group has significantly less level in management and other internal entities component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-303.961$, $Z=-5.241$, $p<.01$; age range 49-58 group: $H=-615.019$, $Z=-9.351$, $p<.01$; 59 and older age group: $H=-483.697$, $Z=-3.518$, $p<.01$). Results also revealed that age range 29-38 group has significantly less level in management and other internal entities component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-256.685$, $Z=-4.492$, $p<.01$; age range 49-58 group: $H=-567.743$, $Z=-8.732$, $p<.01$; 59 and older age group: $H=-436.422$, $Z=-3.182$, $p<.05$). Lastly, age range 39-48 group has significantly less level in

management and other internal entities component of digital trust than age range 49-58 group ($H=-311.058$, $Z= -4.956$, $p<.01$).

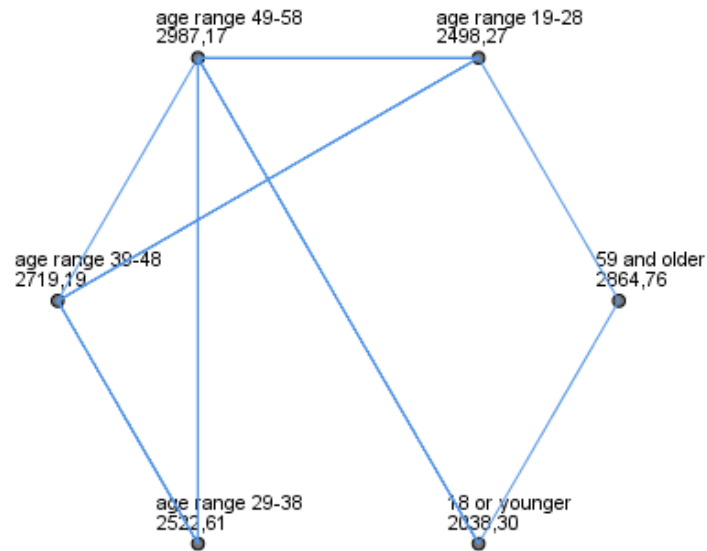


Figure 4.6. Pairwise comparisons of age range in IT and data support component

Figure 4.6 shows pairwise comparisons of age range in IT and data support component. According to that comparison, 18 or younger age group has significantly less level in IT and data support component of digital trust than age range 49-58 group and 59 and older age group (age range 49-58 group: $H=-948.866$, $Z=-3.822$, $p<.01$; 59 and older age group: $H=-826.463$, $Z=-2.994$, $p<.05$). Age range 19-28 has significantly less level in IT and data support component of digital trust than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-220.915$, $Z=3.809$, $p<.01$; age range 49-58 group: $H=-488.891$, $Z=-7.433$, $p<.01$). Age range 29-38 has significantly less level in IT and data support component of digital trust than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-196.583$, $Z=-3.440$, $p<.01$; age range 49-58 group: $H=-464.559$, $Z=-7.145$, $p<.01$). Lastly, age range 39-48 group has significantly less level in IT and data support component of digital trust than age range 49-58 group ($H=-267.976$, $Z=-4.270$, $p<.01$).

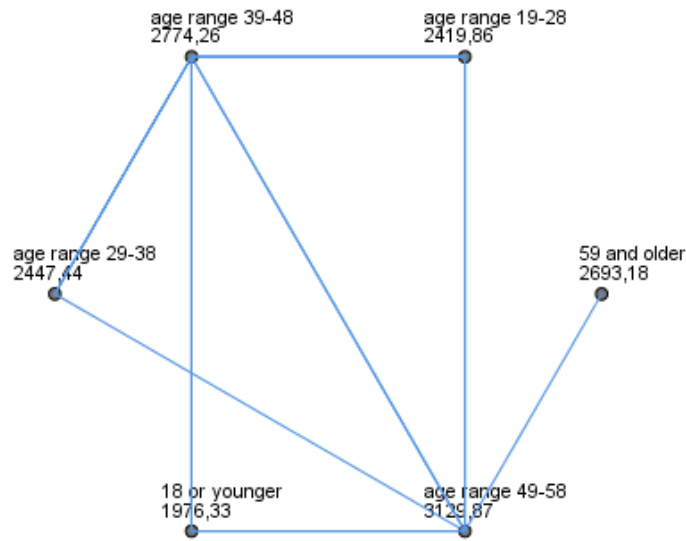


Figure 4.7. Pairwise comparisons of age range in external entities component

When the last component of people level of digital trust is considered, Figure 4.7 shows the significantly different groups in external entities component. 18 or younger age group has significantly less level of digital trust in external entities component than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-797.937$, $Z=-3.240$, $p<.05$; age range 49-58 group: $H=-1153.543$, $Z=-4.647$, $p<.01$). Age range 19-28 has significantly less level of digital trust in external entities component than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-354.404$, $Z=-6.110$, $p<.01$; age range 49-58 group: $H=-710.010$, $Z=-10.795$, $p<.01$). Age range 29-38 has significantly less level of digital trust in external entities component than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-326.822$, $Z=-5.719$, $p<.01$; age range 49-58 group: $H=-682.428$, $Z=-10.496$, $p<.01$). Age range 39-48 group has significantly less level of digital trust in external entities component than age range 49-58 group ($H=-355.606$, $Z=-5.666$, $p<.01$). Lastly, 59 and older age group has significantly higher level of digital trust in external entities component than age range 49-58 group ($H=436.688$, $Z=3.129$, $p<.05$).

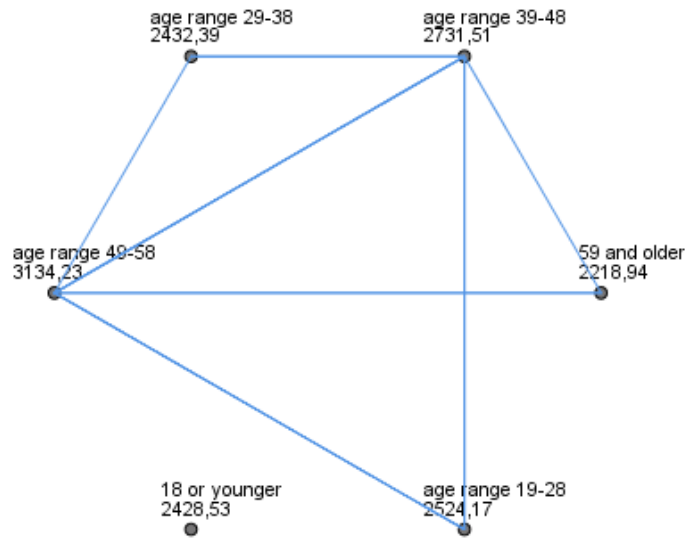


Figure 4.8. Pairwise comparisons of age range in data protection and privacy component

Figure 4.8 shows significant differences between the age groups in data protection and privacy component of digital trust. According to the results of follow-up analysis, age range 19-28 group has significantly less level in data protection and privacy component of digital trust than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-207.344$, $Z=-3.575$, $p<.01$; age range 49-58 group: $H=-610.058$, $Z=-9.275$, $p<.01$). Age range 29-38 group has significantly less level in data protection and privacy component of digital trust than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=-299.120$, $Z=-5.234$, $p<.01$; age range 49-58 group: $H=-701.835$, $Z=-10.795$, $p<.01$). Age range 39-48 group has significantly less level in data protection and privacy component of digital trust than age range 49-58 group ($H=-402.715$, $Z=-6.417$, $p<.01$). Lastly, 59 and older has significantly higher level in data protection and privacy component of digital trust than age range 39-48 group and age range 49-58 group (age range 39-48 group: $H=512.569$, $Z=3.767$, $p<.01$; age range 49-58 group: $H=915.284$, $Z=6.558$, $p<.01$).

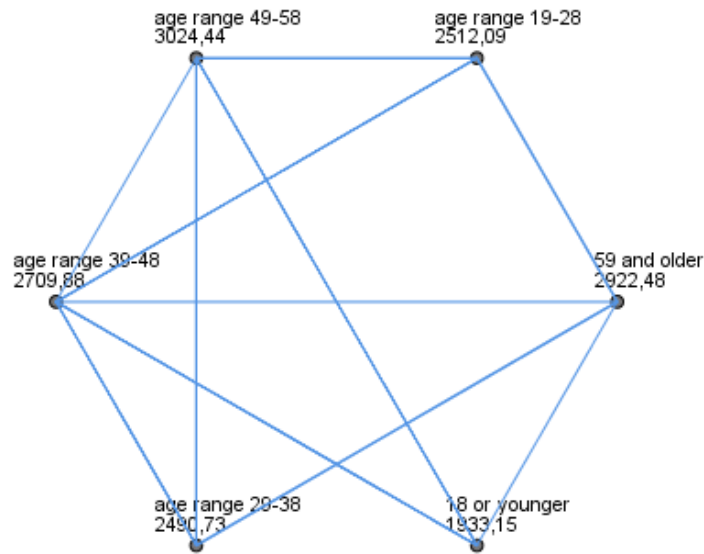


Figure 4.9. Pairwise comparisons of age range in organizational data protection and privacy component

Figure 4.9 shows pairwise comparisons of age range in organizational data protection and privacy component. According to that comparison, 18 or younger age group has significantly less level in organizational data protection and privacy component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-776.731$, $Z=-3.154$, $p<.05$; age range 49-58 group: $H=-1091.289$, $Z=-4.396$, $p<.01$; 59 and older age group: $H=-989.332$, $Z=-3.584$, $p<.01$). Age range 19-28 group has significantly less level in organizational data protection and privacy component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-197.791$, $Z=-3.410$, $p<.01$; age range 49-58 group: $H=-512.350$, $Z=-7.790$, $p<.01$; 59 and older age group: $H=-410.392$, $Z=-2.985$, $p<.05$). Age range 29-38 group has significantly less level in organizational data protection and privacy component of digital trust than age range 39-48 group, age range 49-58 group and 59 and older age group (age range 39-48 group: $H=-219.147$, $Z=-3.835$, $p<.01$; age range 49-58 group: $H=-533.705$, $Z=-8.209$, $p<.01$; 59 and older age group: $H=-431.748$, $Z=-3.148$, $p<.05$). Lastly, age range 39-48 group has significantly less level in organizational data protection and privacy component of digital trust than age range 49-58 group ($H=-314.559$, $Z=-5.012$, $p<.01$).

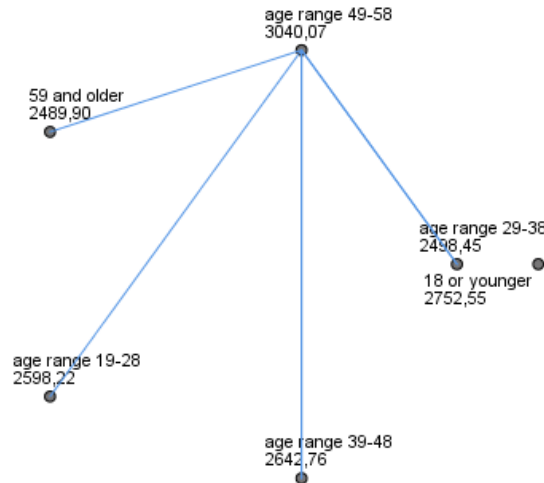


Figure 4.10. Pairwise comparisons of age range in internet and social media use component

When the last component of process level of digital trust is considered, Figure 4.10 shows the significantly different groups in internet and social media use component. Age range 19-28 group has significantly less level of digital trust in internet and social media use component than age range 49-58 group ($H=-441.858$, $Z=-6.718$, $p<.01$). Age range 29-38 group has significantly less level of digital trust in internet and social media use component than age range 49-58 group ($H=-541.619$, $Z=-8.330$, $p<.01$). Age range 39-48 group has significantly less level of digital trust in internet and social media use component than age range 49-58 group ($H=-397.316$, $Z=-6.331$, $p<.01$). Lastly, 59 and older has significantly higher level of digital trust in internet and social media use component than age range 49-58 group ($H=550.175$, $Z=3.942$, $p<.01$).

4.2. Digital Trust Components Across Gender

In order to examine digital trust components across gender, Munzel-Bruner analysis was conducted. For follow-up, Kruskal-Wallis analysis has been conducted for gender (male, female and LGBT-Q) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.3 Relative effects of digital trust components across the gender

Gender	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
Female	0.5053739	0.4962159	0.4931437	0.4873359	0.4917883	0.4996094	0.4877028	0.4755698	0.4972030	0.4879108
LGBT-Q	0.5039432	0.5020343	0.4993068	0.4903206	0.4931719	0.4971792	0.4900572	0.4872329	0.4952914	0.4904357
Male	0.5208062	0.5173413	0.5219784	0.5324940	0.5255872	0.5182555	0.5276185	0.5239007	0.5187553	0.5106828

Table 4.4 Mean and standard deviations of each component of digital trust across gender

Gender	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Female	.002	.488	.009	.761	.004	.511	-.018	.537	-.006	.510	.014	.623	-.017	.475	-.050	.576	.011	.588	-.023	.576
LGBT-Q	-.143	.616	-.069	.923	-.087	.675	-.129	.704	-.108	.664	-.111	.762	-.090	.646	.016	.716	-.099	.715	-.039	.712
Male	.020	.443	.005	.816	.012	.573	.037	.518	.024	.522	.008	.699	.030	.486	.038	.634	.008	.667	.026	.651

Munzel-Bruner analysis generated a significant main effect of gender on digital trust components, $F(3.86, 5329) = 7.85, p < .001$. Table 4.3 and Table 4.4 show the details of the analysis for digital trust components across gender. Kruskal-Wallis analysis showed that there are significant differences in some digital trust components across gender. When the technology level of digital trust across considered it is found that there are significant differences on priority level of software quality component $F(2, 5329)=11.704, p<.01$; and information systems component $F(2, 5329)=13.753, p<.01$ across gender. However, there are no significant differences in hardware and software component and electronic devices component of technology level of digital trust across gender. Results also showed that some components of people level of digital trust have significant differences across gender. These components are management and other internal entities component $F(2, 5329)=7.429, p<.05$; and external entities component $F(2, 5329)=10.663, p<.01$. Yet, there is no significant difference between gender in IT and data support component of people level of digital trust. Finally, results revealed that there are significant differences across the gender in some components of process level of digital trust; these are data protection and privacy component $F(2, 5329)=26.750, p<.01$; and internet and social media use component $F(2, 5329)=9.918, p<.01$; but there is no significant difference in organizational data protection and privacy component of process level of digital trust across gender. Each component details which has significant difference across gender is presented in the following section.

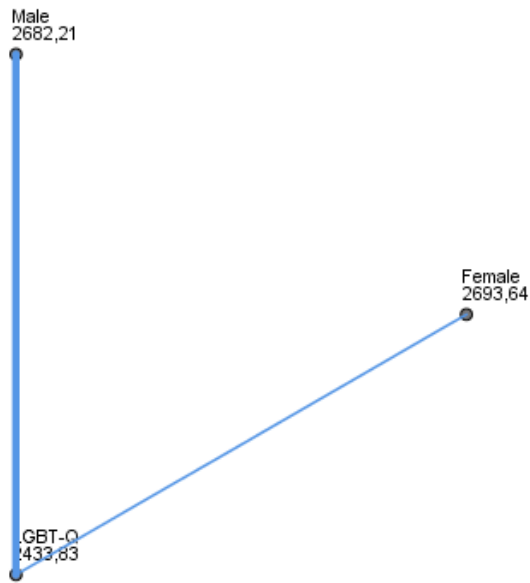


Figure 4.11. Pairwise comparisons of gender in priority level of software quality component

In priority level of software quality component, gender have significant differences. Figure 4.11 shows the visual representation of groups' relation. According to results, LGBT-Q participants have significantly less priority level of software quality than male participants and significantly higher priority level of software quality than female participants (male: $H= -248.380$, $Z=-3.227$, $p<.01$; female: $H=259.803$, $Z=3.322$, $p<.01$).

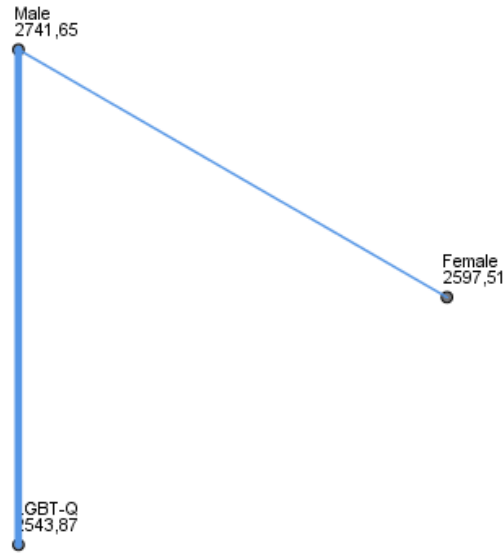


Figure 4.12. Pairwise comparisons of gender in information systems component

When information systems component examined, as seen in Figure 4.12, LGBT-Q participants has less level in information systems component of digital trust than male participants ($H=-197.777$, $Z=-2.570$, $p<.05$). Also, female participants have less level in information systems component of digital trust than male participants ($H=-144.138$, $Z=-3.249$, $p<.01$).

According to follow-up analysis, there is significant difference in management and other internal entities component across gender. However, even if there is difference between LGBT-Q participant and male participant, when it is examined according to Bonferroni correction this is not significantly different. Same situation also happened in comparison between female and male participants. There is difference between female and male participants but according to Bonferroni correction it is not significant.

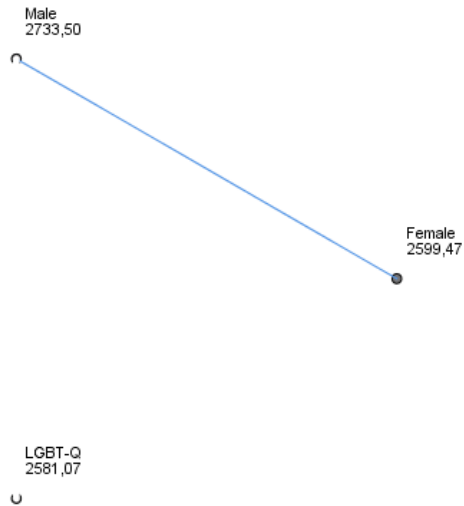


Figure 4.13 Pairwise comparisons of gender in external entities component

Figure 4.13 shows the pairwise comparison of gender in external entities component of digital trust. According to that comparison, female participants have less level in external entities component of digital trust than male participants ($H=-134.032$, $Z=-3.021$, $p<.01$).

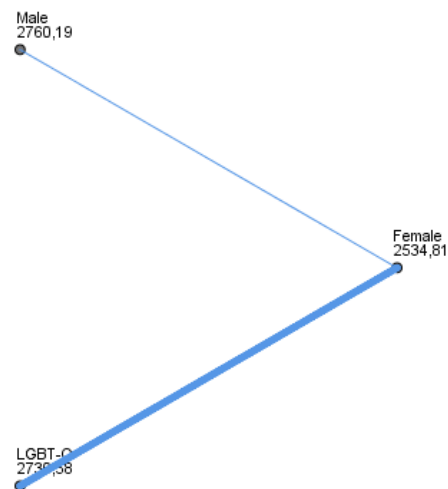


Figure 4.14 Pairwise comparisons of gender in data protection and privacy component

Follow-up results showed that female participants have less level in data protection and privacy component of digital trust than LGBT-Q and male participants (LGBT-Q:

H=-195.769, Z= -2.503, p<.05; male: H=-225.379, Z=-5.081, p<.01). Figure 4.14 presents the visual representation of these differences.

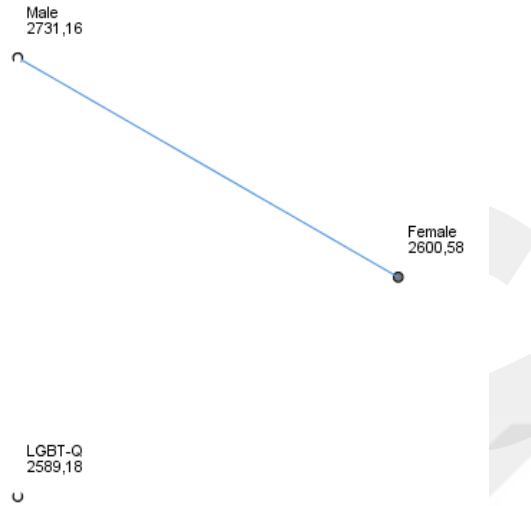


Figure 4.15 Pairwise comparisons of gender in internet and social media use component

Finally, Figure 4.15 shows the visual representation of pairwise comparison of gender in internet and social media use component of digital trust. According to that result, female participants have less level in internet and social media component of digital trust than male participants (H=-130.587, Z=-2.944, p<.01)

4.3. Digital Trust Components Across Civil Status

Munzel-Bruner analysis was conducted to explore digital trust components across civil status. For follow-up, Kruskal-Wallis analysis has been conducted for civil status (single, married, separated or divorced and widowed) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.5 Relative effects of digital trust components across the civil status

Civil Status	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
Single	0.7631761	0.4723100	0.4770632	0.4708132	0.4666014	0.4715195	0.4729664	0.4689648	0.4922653	0.4723389
Married	0.3137235	0.5260138	0.5207095	0.5262811	0.5288233	0.5274086	0.5238748	0.5271970	0.5087664	0.5262337
Separated or divorced	0.2641784	0.5272743	0.5220646	0.5294054	0.5344902	0.5305915	0.5270839	0.5305940	0.5069039	0.5284159
Widowed	0.2652935	0.5258611	0.5208728	0.5285809	0.5334555	0.5304461	0.5269548	0.5313057	0.5072093	0.5284124

Table 4.6 Mean and standard deviations of each component of digital trust across civil status

Civil Status	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Single	-.061	.526	-.051	.791	-.050	.540	-.070	.568	-.050	.523	-.049	.629	-.056	.502	-.016	.574	-.043	.592	-.028	.586
Married	.053	.435	.062	.801	.057	.561	.060	.522	.048	.535	.054	.700	.050	.490	.009	.650	.049	.669	.033	.652
Separated or divorced	.050	.386	-.046	.871	-.024	.626	.085	.496	.025	.555	-.020	.781	.045	.501	.046	.700	-.019	.736	-.032	.703
Widowed	-.032	.528	.025	.849	.055	.552	.027	.601	.061	.548	.131	.665	.137	.494	.002	.636	.055	.649	.119	.729

According to result of Munzel-Bruner analysis there is a significant main effect of civil status on digital trust components, $F(5.96, 5329) = 203.203$, $p < .001$. Table 4.5 and Table 4.6 shows the details of the analysis for digital trust components across civil status. Results of Kruskal-Wallis analysis declared that there are significant differences in some digital trust components across civil status. When the technology level of digital trust considered it is found that there are significant differences in priority level of software quality component $F(3, 5329)=45.596$, $p<.01$; hardware and software component $F(3,5329)=34.581$, $p<.01$; electronic devices component $F(3,5329)=53.267$, $p<.01$ and information systems component $F(3, 5329)=64.903$, $p<.01$ across civil status. In addition, results also showed that all components of people level of digital trust have significant differences across civil status. These components are management and other internal entities component $F(3, 5329)=47.253$, $p<.01$; IT and data support component $F(3,5329)=45.211$, $p<.01$; and external entities component $F(3, 5329)=56.626$, $p<.01$. Finally, results also revealed that there are significant differences across the civil status in some components of process level of digital trust; these are organizational data protection and privacy component $F(3, 5329)=46.307$, $p<.01$; and internet and social media use component $F(3, 5329)=13.108$, $p<.01$; but there is no significant difference in data protection and privacy component of process level of digital trust across civil status. Each component details which has significant difference across civil status is presented in the following section.

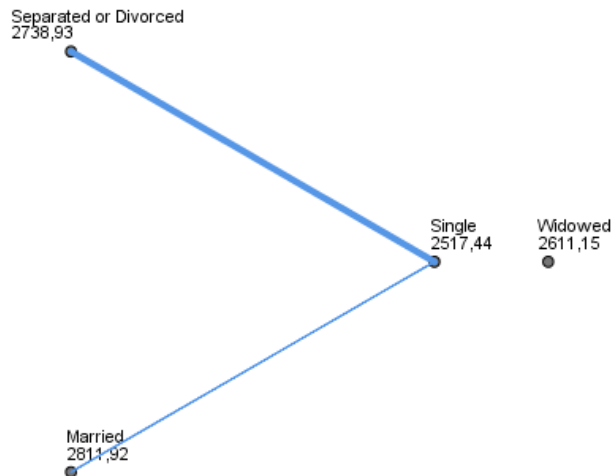


Figure 4.16 Pairwise comparisons of civil status in priority level of software quality component

Results revealed that single participants have less level in priority level of software quality of digital trust than separated or divorced participants and married participants (separated or divorced: $H=-221.489$, $Z=-2.723$, $p<.05$; married: $H=-294.481$, $Z=-6.671$, $p<.01$) (Figure 4.16).

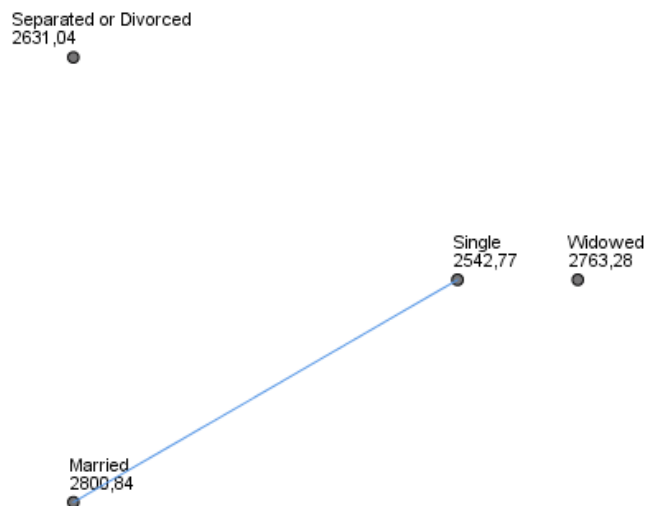


Figure 4.17 Pairwise comparisons of civil status in hardware and software component

Figure 4.17 represents pairwise comparisons of civil status in hardware and software component of digital trust. According to this result there is only one significant difference which means single participants have less level in hardware and software component of digital trust than married participants ($H = -258.074$, $Z = -5.847$, $p < .01$).

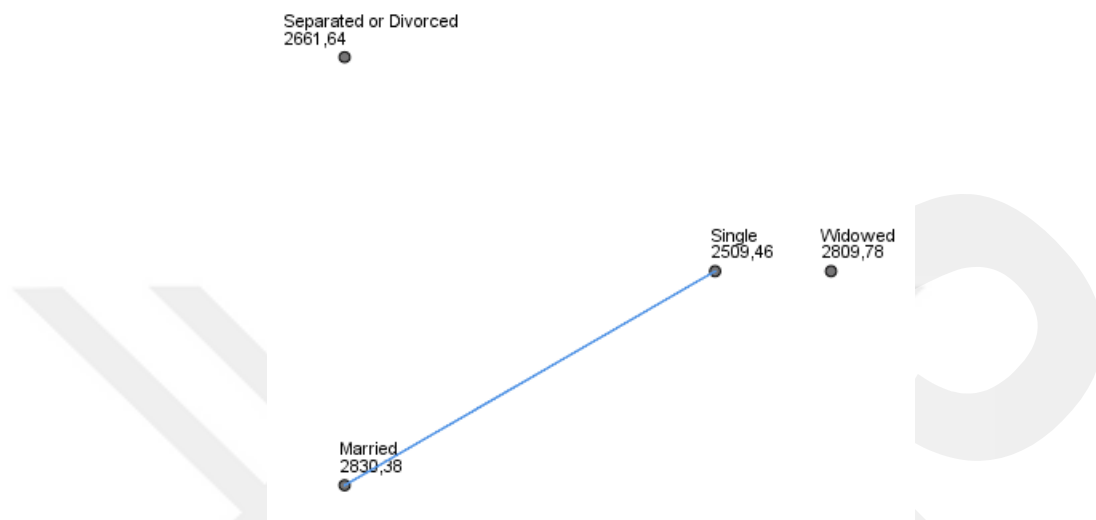


Figure 4.18 Pairwise comparisons of civil status in electronic devices component

In electronic devices component of digital trust, also there is one significant difference. Single participants have less level in electronic devices component of digital trust than married participants ($H = -320.915$, $Z = -7.270$, $p < .01$). Figure 4.18 Represents this difference visually.

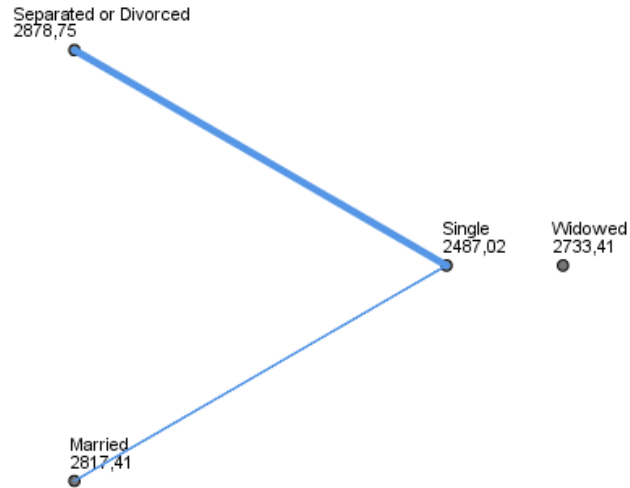


Figure 4.19 Pairwise comparisons of civil status in information systems component

The last component of the technology level of digital trust is information systems. Figure 4.19 Shows significantly different civil statuses. Single participants have less level in information systems of digital trust than married and separated or divorced participants (married: $H=-330.991$, $Z=-7.485$, $p<.01$; separated or divorced: $H=-391.731$, $Z=-4.817$, $p<.01$).

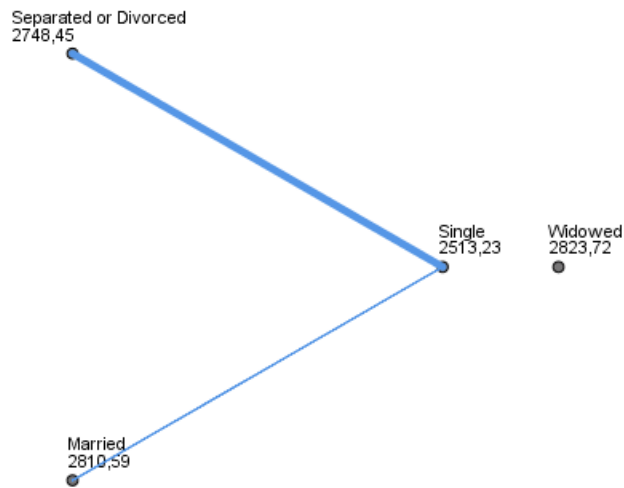


Figure 4.20 Pairwise comparisons of civil status in management and other internal entities component

Figure 4.20 shows significant differences between the civil statuses in management and other internal entities component of digital trust. According to the results of follow-up analysis, single participants have significantly less level in management and other internal entities component of digital trust than separated or divorced participants and married participants (separated or divorced: $H=-235.225$, $Z=-2.892$, $p<.05$; married: $H=-297.364$, $Z=-6.737$, $p<.01$).

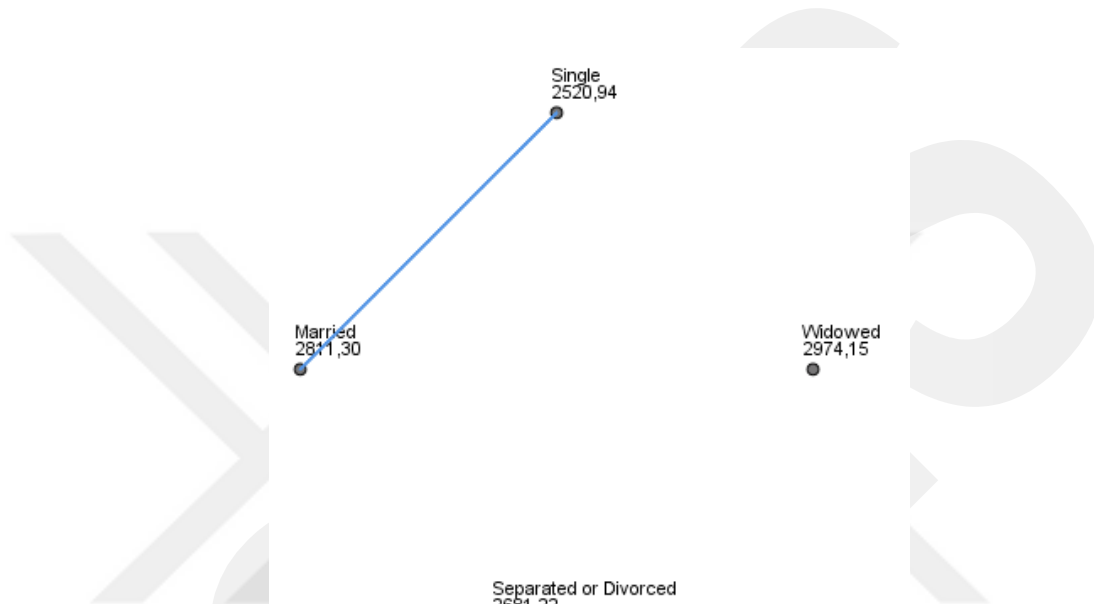


Figure 4.21 Pairwise comparisons of civil status in it and data support component

Follow-up analysis revealed that single participants have less level in IT and data support component of digital trust than married participants ($H=-290.358$, $Z=-6.578$, $p<.01$). Figure 4.21 represent visually the difference between single and married participants.

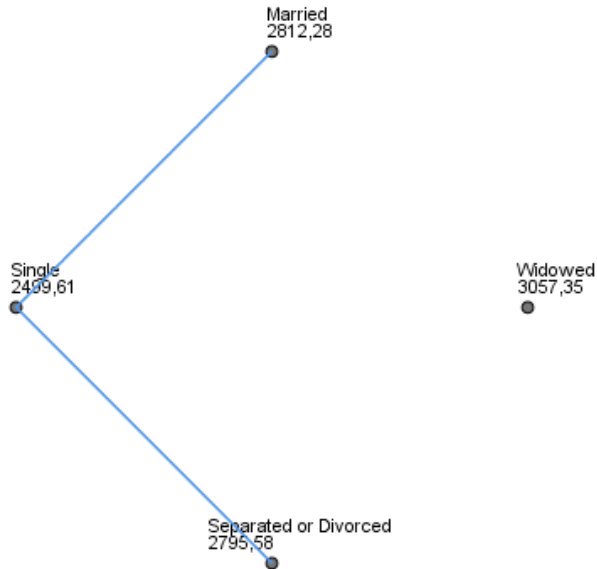


Figure 4.22 Pairwise comparisons of civil status in external entities component
 In addition, Figure 4.22 Shows significantly different civil statuses in the last component of people of digital trust which means single participants significantly less level in external entities component than separated or divorced participants and married participants (separated or divorced: $H=-295.970$, $Z=-3.639$, $p<.01$; married: $H = -312.668$, $Z=-7.083$, $p<.01$).

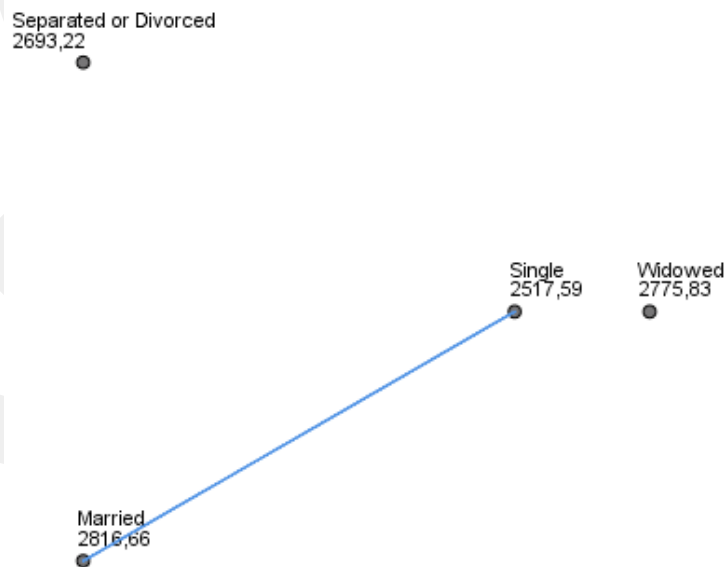


Figure 4.23 Pairwise comparisons of civil status in organizational data protection and privacy component

Figure 4.23 Represents significantly different civil statuses. According to follow-up analysis, there is significant difference only between single and married participants. In other words, single participants have significantly less level in organizational data protection and privacy component of process level of digital trust than married participants ($H=-299.065$, $Z=-6.775$, $p<.01$).

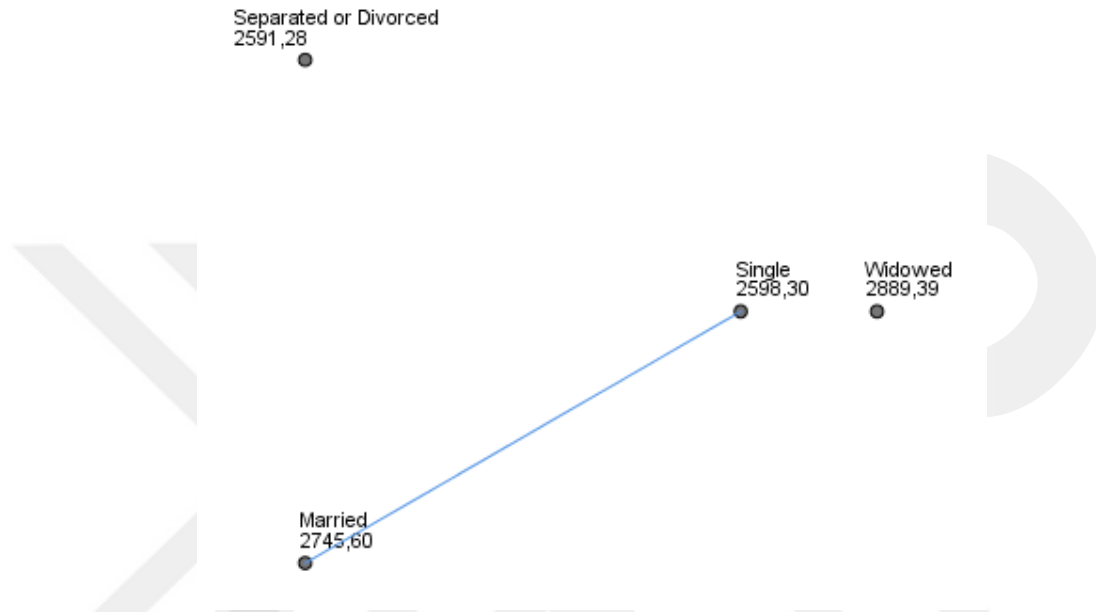


Figure 4.24 Pairwise comparisons of civil status in internet and social media use component

Finally, difference between civil statuses in the last component of process level of digital trust represented in Figure 4.24. According to this follow-up result, single participants have significantly less level in internet and social media use of process level of digital trust than married participants ($H=-147.301$, $Z=-3.337$, $p<.01$).

4.4. Digital Trust Components Across Academic Degree

In order to explore digital trust components across academic degrees Munzel-Bruner analysis was conducted. For follow-up, Kruskal-Wallis analysis has been conducted for academic degrees (Post-Doctoral (Fellowships), Post-Graduate (Doctoral, PhDs), Graduate (Master's Degree), Bachelor's Degree, Technical, Vocational, or Skill

Diploma, Middle School / Senior High School Diploma, Junior High School Diploma, Elementary Diploma and Primary Diploma) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.7 Relative effects of digital trust components across the academic degree

Academic Degrees	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
Post-Doctoral (Fellowships)	0.4943038	0.4732672	0.4772992	0.4542969	0.4520481	0.4578930	0.4668706	0.4929369	0.4726109	0.4882968
Post-Graduate (Doctoral, PhDs)	0.5597273	0.5745508	0.5915124	0.6002049	0.5972271	0.5754419	0.5870067	0.5936596	0.5840216	0.5590126
Graduate (Master's Degree)	0.5084008	0.4710702	0.4898950	0.5273270	0.5099522	0.4999718	0.5029865	0.4591148	0.4902364	0.4427163
Bachelor's Degree	0.5721642	0.6161866	0.6249519	0.6537274	0.6146023	0.6118214	0.6611965	0.7143258	0.6073680	0.6525256
Technical, Vocational, or Skill Diploma	0.5051251	0.4860789	0.4803088	0.4995222	0.4846463	0.4756718	0.4745080	0.4761722	0.5177921	0.5081090
Middle School / Senior High School Diploma	0.4299287	0.4609652	0.4415488	0.4511478	0.4519384	0.4564923	0.4728909	0.4674684	0.4806985	0.4884660
Junior High School Diploma	0.4309131	0.4491134	0.4247432	0.4305399	0.4358259	0.4451788	0.4610278	0.4467682	0.4696998	0.4824027
Elementary Diploma	0.4216792	0.4395810	0.4156097	0.4235803	0.4271888	0.4370913	0.4569763	0.4536509	0.4653253	0.4855508
Primary Diploma	0.4202159	0.4285547	0.4100314	0.4185311	0.4235434	0.4354722	0.4581002	0.4471138	0.4546927	0.4778150

Table 4.8 Mean and standard deviations of each component of digital trust across academic degree

Academic Degrees	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Post-Doctoral (Fellowships)	-.033	.524	-.058	.788	-.033	.513	-.096	.565	-.082	.502	-.079	.601	-.075	.495	-.012	.556	-.033	.547	-.023	.582
Post-Graduate (Doctoral, PhDs)	-.065	.596	-.039	.903	-.022	.644	-.066	.662	-.048	.628	-.045	.745	-.039	.592	.047	.640	-.033	.701	.020	.675
Graduate (Master's Degree)	.068	.386	.003	.811	.020	.577	.054	.487	.034	.533	.018	.724	.029	.477	-.047	.644	.004	.687	-.057	.658
Bachelor's Degree	-.020	.523	.040	.810	.011	.561	.009	.580	.011	.533	.026	.657	.014	.521	.064	.628	.017	.624	.058	.638

Table 4.8 Continued

Technical, Vocational, or Skill Diploma	.032	.403	.014	.710	.003	.451	.012	.500	.014	.465	-.004	.590	-.026	.433	-.060	.589	.032	.549	-.008	.533
Middle School / Senior High School Diploma	-.099	.429	-.080	.659	-.068	.414	-.091	.435	-.066	.425	-.063	.532	-.057	.372	-.095	.481	-.035	.522	-.032	.439
Junior High School Diploma	-.046	.429	-.084	.583	-.054	.358	-.125	.393	-.085	.334	-.058	.435	-.085	.361	-.128	.421	-.022	.448	-.002	.403
Elementary Diploma	-.097	.210	-.066	.408	.001	.167	-.088	.255	-.016	.162	.008	.224	-.013	.119	-.122	.407	.077	.296	.084	.250
Primary Diploma	-.079	.361	-.434	.828	-.137	.533	-.120	.471	-.036	.401	-.051	.625	.034	.304	-.221	.560	-.182	.678	-.098	.559

Munzel-Bruner analysis have been conducted and results revealed that there is a significant main effect of academic degrees on digital trust components, $F(15.14, 5329) = 12.25, p < .001$. Table 4.7 and Table 4.8 shows the details of the analysis for digital trust components across academic degrees. For follow-up, results of Kruskal-Wallis analysis declared that there are significant differences in nearly all digital trust components across academic degrees. When technology level of digital trust considered, it is found that there are significant differences in priority level of software quality component $F(8,5329)=60.921, p<.01$; hardware and software component $F(8, 5329)=33.475, p<.01$; electronic devices component $F(8,5329)=38.634, p<.01$; and information systems component $F(8,5329)=58.524, p<.01$ across academic degrees. In addition, results also showed that all components of people level of digital trust have significant differences across academic degrees. These components are management and other internal entities component $F(8, 5329)=40.421, p<.01$; IT and data support component $F(8,5329)=30.810, p<.01$; and external entities component $F(8, 5329)=31.714, p<.01$. Finally, results also revealed that there are significant differences across the academic degrees in some components of process level of digital trust; these are data protection and privacy component $F(8, 5329)=60.416, p<.01$; and internet and social media use component $F(8, 5329)=35.970, p<.01$; but only there is no significant difference in organizational data protection and privacy component of process level of digital trust across academic degree. Each component details which has significant difference across civil status is presented in the following section.

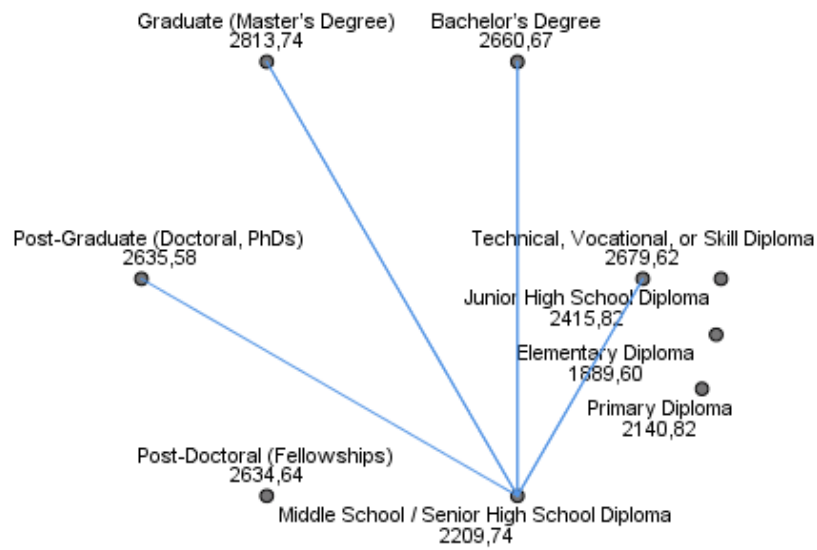


Figure 4.25 Pairwise comparisons of academic degrees in priority level of software quality component

Follow-up analysis revealed that participants who had Middle School/Senior High School Diploma have higher level in priority level of software quality component of digital trust than participants who had Technical, Vocational or Skill Diploma, Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral, PhDs.) (Technical, Vocational or Skill Diploma: $H=469.875$, $Z=3.853$, $p<.01$, Bachelor's degree: $H=450.928$, $Z=5.594$, $p<.01$, Graduate (Master's degree): $H=603.998$, $Z=7.445$, $p<.01$ and Post-Graduate (Doctoral, PhDs.) $H=425.836$, $Z=4.571$, $p<.01$). Figure 4.25 represent visually the difference between participants who had Technical, Vocational or Skill Diploma, Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral, PhDs.).

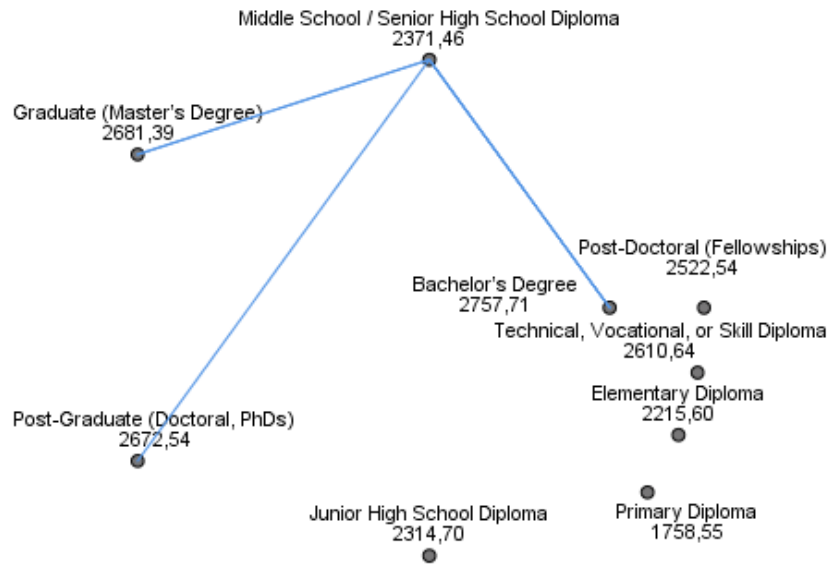


Figure 4.26 Pairwise comparisons of Academic Degrees in Hardware and Software Component

In hardware and software component, academic degrees have significant differences. Figure 4.26 shows the visual representation of groups' relation. According to results, participants who had Middle School/Senior High School Diploma have significantly higher level in hardware software component than participants who had Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral PhDs.) (Bachelor's degree: $H=386.255$, $Z=4.792$, $p<.01$; Graduate (Master's degree): $H=309.935$, $Z=3.820$, $p<.01$; and Post-Graduate (Doctoral PhDs.): $H=301.085$, $Z=3.232$, $p<.01$).

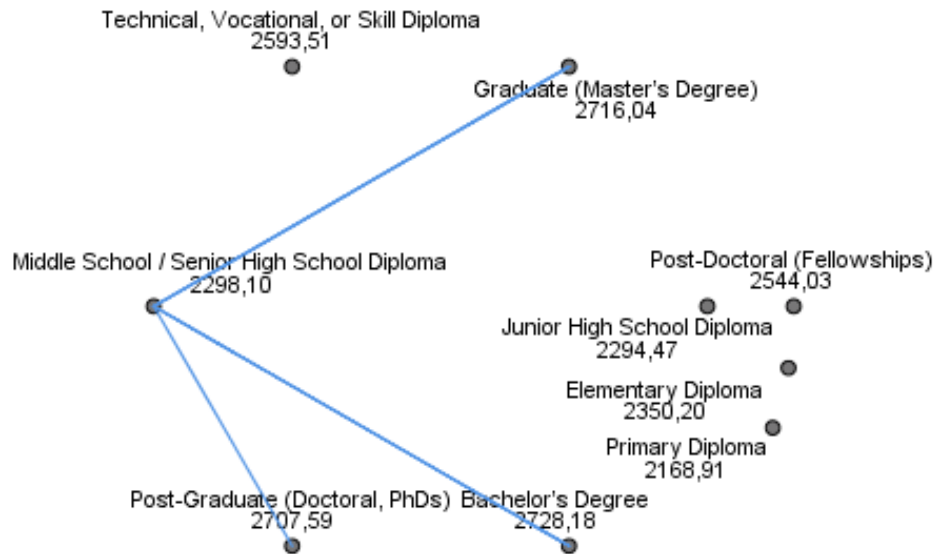


Figure 4.27 Pairwise comparisons of Academic Degrees in Electronic Devices Component

Figure 4.27 Represents significantly different academic degrees. According to follow-up analysis, there are significant differences between participants who had Middle School/Senior High School Diploma, Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral PhDs.). In other words, participants who had Middle School/Senior High School Diploma have significantly higher level in electronic devices component of technology level of digital trust (Bachelor's degree: $H=430.080$, $Z=5.336$, $p<.01$; Graduate (Master's degree): $H=417.938$, $Z=5.151$, $p<.01$; and Post-Graduate (Doctoral PhDs.) $H=409.496$, $Z=4.396$, $p<.01$).

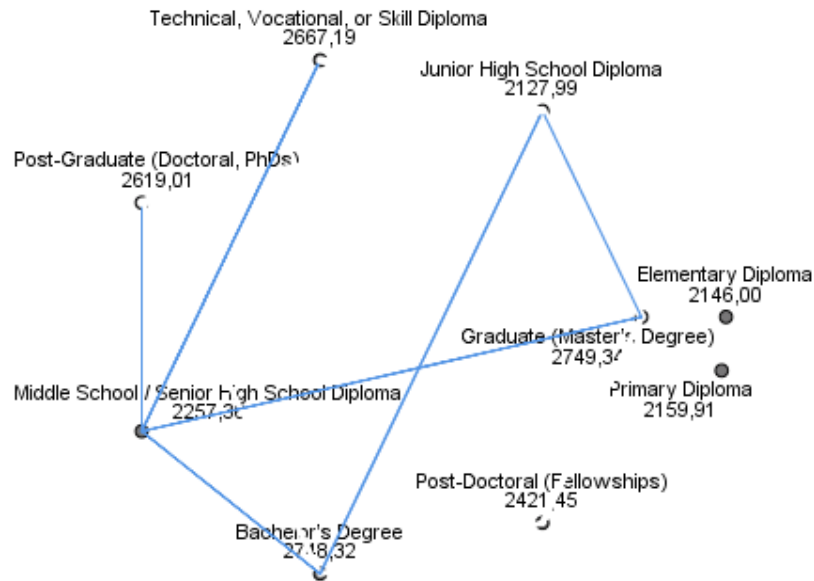


Figure 4.28 Pairwise comparisons of academic degrees in information systems component

In addition, Figure 4.28 Shows the last component of technology level of digital trust. According to this figure, participants with Junior High School Diploma had higher level in information systems component than participants with Bachelor's degree and Graduate (Master's degree) (Bachelor's degree: $H=620.329$, $Z=3.403$, $p<.05$; and Graduate (Master's degree): $H=621.353$, $Z=3.404$, $p<.05$). Also, participants with Middle School/Senior High School Diploma has significantly higher level in information systems component than participants with Technical, Vocational or Skill Diploma, Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral, PhDs.) (Technical, Vocational or Skill Diploma: $H=409.830$, $Z=3.363$, $p<.01$; Bachelor's degree: $H=490.954$, $Z=6.091$, $p<.01$; Graduate (Master's degree): $H=491.978$, $Z=6.064$; and Post-Graduate (Doctoral, PhDs.): $H=361.645$, $Z=3.882$, $p<.01$).

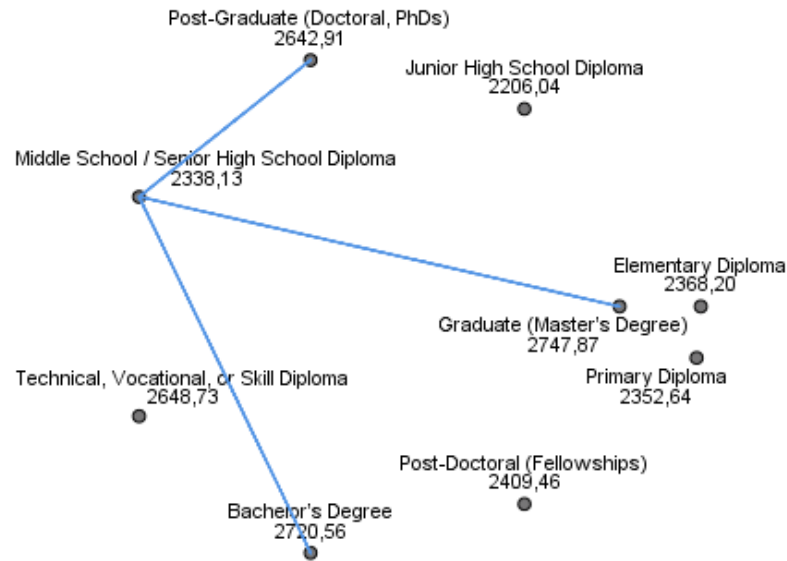


Figure 4.29 Pairwise comparisons of academic degrees in management and other internal entities component

For people level of digital trust follow-up analysis revealed that participants with Middle School / Senior High School Diploma have higher level in management and other internal entities component of people level of digital trust than participants with Bachelor's degree, Graduate (Master's degree) and Post-Graduate (Doctoral, PhDs.) (Bachelor's degree: $H=382.436$, $Z=4.745$, $p<.01$; Graduate (Master's degree): $H=409.748$, $Z=5.050$; and Post-Graduate (Doctoral, PhDs.): $H=304.784$, $Z=3.272$, $p<.01$). Figure 4.29 Shows these results visually.

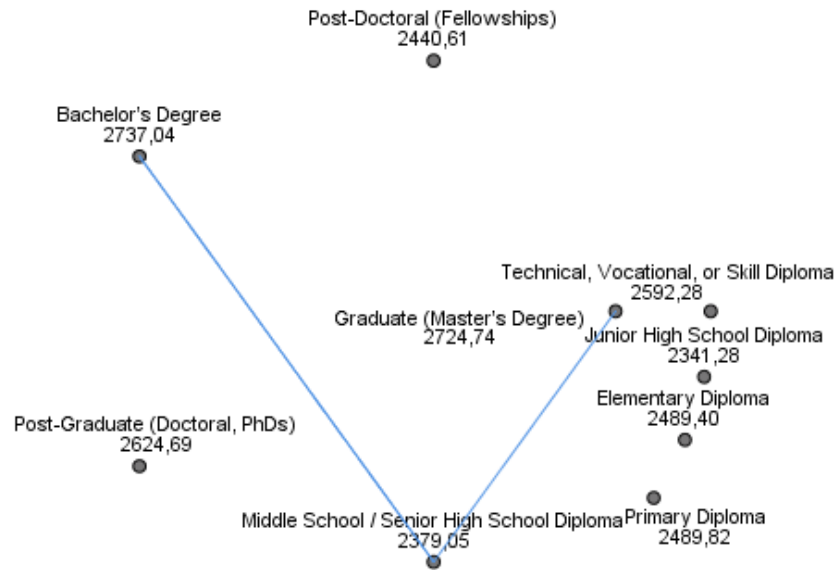


Figure 4.30 Pairwise comparisons of academic degrees in it and data support component

Figure 4.30 Represents pairwise comparisons of academic degrees in IT and data support component of people level of digital trust. Participants with Middle School/Senior High School Diploma have significantly higher level in IT and data support component than participants with Bachelor's degree and Graduate (Master's degree) (Bachelor's degree: $H=357.990$, $Z=4.441$, $p<.01$; and Graduate (Master's degree: $H=345.694$, $Z=4.261$, $p<.01$).

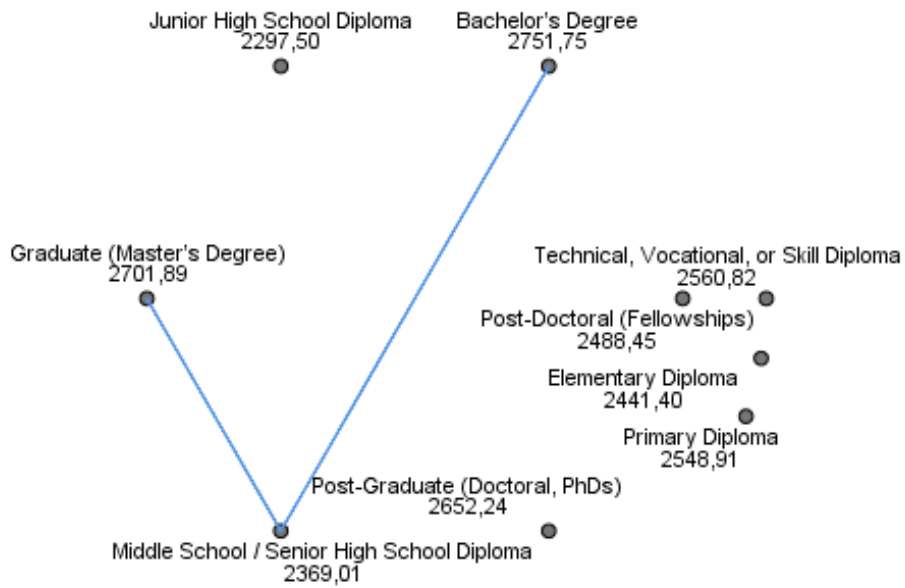


Figure 4.31 Pairwise comparisons of academic degrees in external entities component

For the last component of people level, Figure 4.31 Shows significantly different academic degrees. Again just, participants with Middle School/Senior High School Diploma have significantly higher level in external entities component than participants with Bachelor's degree and Graduate (Master's degree) (Bachelor's degree: $H=382.739$, $Z=4.748$, $p<.01$; and Graduate (Master's degree: $H=332.879$, $Z=4.103$, $p<.01$).

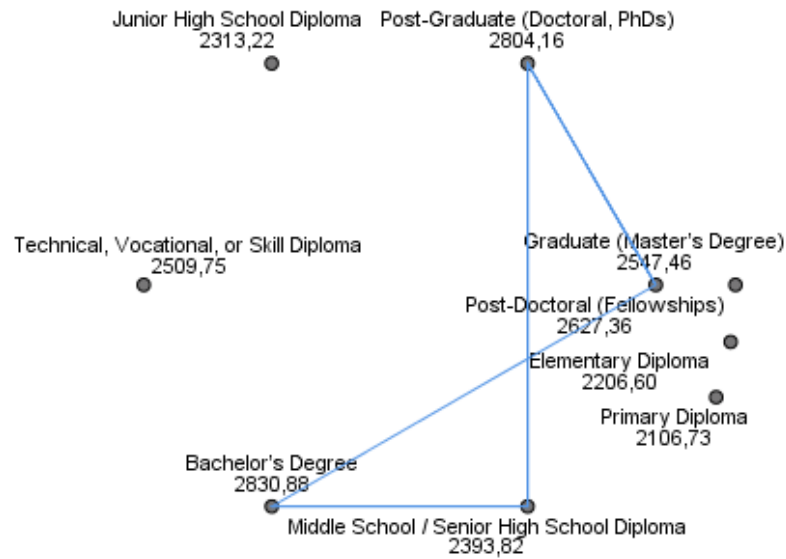


Figure 4.32 Pairwise comparisons of academic degrees in data protection and privacy component

In data protection and privacy component, participants with Middle School/Senior High School Diploma had significantly higher level than participants with Bachelor's degree and Post-Graduate(Doctoral, PhDs.) (Bachelor's degree: $H=437.059$, $Z=5.422$, $p<.01$; and Post-Graduate(Doctoral, PhDs.): $H=410.339$, $Z=4.405$, $p<.01$). Also, participants with Graduate (Master's degree) have significantly higher level in data protection and privacy than Post-Graduate (Doctoral, PhDs.) ($H=256.693$, $Z=3.719$, $p<.01$). However, participants with Graduate (Master's degree) have significantly less level in data protection and privacy than participants with Bachelor's degree ($H=-283.413$, $Z=-5.576$, $p<.01$). Figure 4.32 Visually represents this situation.

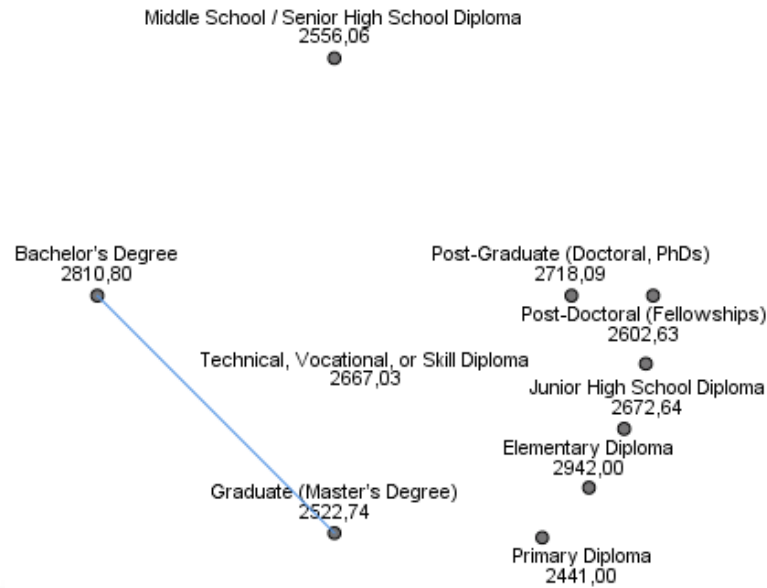


Figure 4.33 Pairwise comparisons of academic degrees in internet and social media use component

Finally, Figure 4.33 Shows pairwise comparisons of academic degrees in internet and social media use of process level of digital trust. According to analysis, there is significant difference only between participants with Graduate (Master's degree) and Bachelor's degree. Participants with Graduate (Master's degree) have less level than participants with Bachelor's degree in internet and social media use component of process level of digital trust ($H=-288.067$, $Z=-5.668$, $p<.01$).

4.5. Digital Trust Components Across City Size

Munzel-Bruner analysis was conducted to explore digital trust components across city size groups. For follow-up, Kruskal-Wallis analysis has been conducted for city size groups (city, medium-sized city and rural area) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.9 Relative effects of digital trust components across city sizes

City Size	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
City	0.6973078	0.5076552	0.5142861	0.5091326	0.5058955	0.5065758	0.5059369	0.5037152	0.5050309	0.5038031
Medium-sized city	0.5430587	0.4968846	0.5038500	0.5024227	0.5068860	0.5057493	0.5043760	0.5093126	0.5084409	0.5040915
Rural area	0.4400675	0.4908907	0.4939300	0.4965265	0.4995069	0.4983843	0.4985337	0.5022716	0.5043197	0.5005457

Table 4.10 Mean and standard deviations of each component of digital trust city size

City Size	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
City	-.011	.522	.033	.810	.011	.570	-.004	.581	.003	.549	.011	.676	-.003	.524	.010	.621	.006	.644	.012	.639
Medium-sized city	.019	.411	-.040	.817	-.007	.560	.023	.499	.009	.515	-.008	.692	.027	.468	.021	.635	-.005	.655	.007	.638
Rural area	-.007	.404	-.079	.730	-.044	.493	-.037	.466	-.040	.485	-.040	.630	-.048	.431	-.103	.563	-.018	.585	-.077	.530

Results of Munzel-Bruner analysis revealed that there is a significant main effect of civil status on digital trust components, $F(4.52, 5329) = 65.811, p < .001$. Table 4.9 and Table 4.10 shows the details of the analysis for digital trust components across city sizes. For follow-up, Kruskal-Wallis analysis have been conducted and results showed that there are significant differences in nearly all digital trust components across city sizes. When technology level of digital trust considered, it is found that there are significant differences in priority level of software quality component $F(2,5329)=7.912, p<.01$; hardware and software component $F(2, 5329)=24.841, p<.01$; electronic devices component $F(2,5329)=12.835, p<.01$; and information systems component $F(2,5329)=12.430, p<.01$ across city sizes. Furthermore, in people level of digital trust, there are significant differences in management and other internal entities component $F(2, 5329)=10.652, p<.01$; IT and data support component $F(2,5329)=6.758, p<.01$; and external entities component $F(2, 5329)=15.558, p<.01$ across city sizes. Finally, results also revealed that there are significant differences across city sizes in some components of process level of digital trust; these are data protection and privacy component $F(2, 5329)=22.327, p<.01$; and internet and social media use component $F(2, 5329)=11.714, p<.01$; but only there is no significant difference in organizational data protection and privacy component of process level of digital trust across city sizes. Each component details which has significant difference across city sizes is represented in the following section.

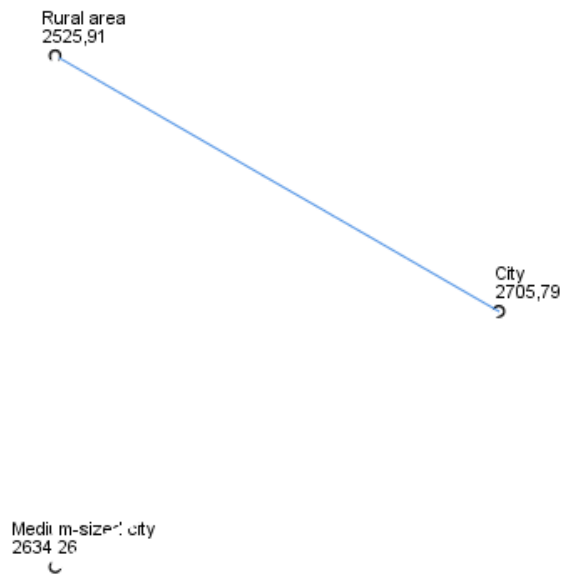


Figure 4.34 Pairwise comparisons of city size in priority level of software quality component

Results revealed that participants who live in rural area have significantly higher level in priority level of software quality of digital trust than participants who live in city ($H=179.881$, $Z=2.663$, $p<.05$). Figure 4.34 visually represents relation between rural are and city.

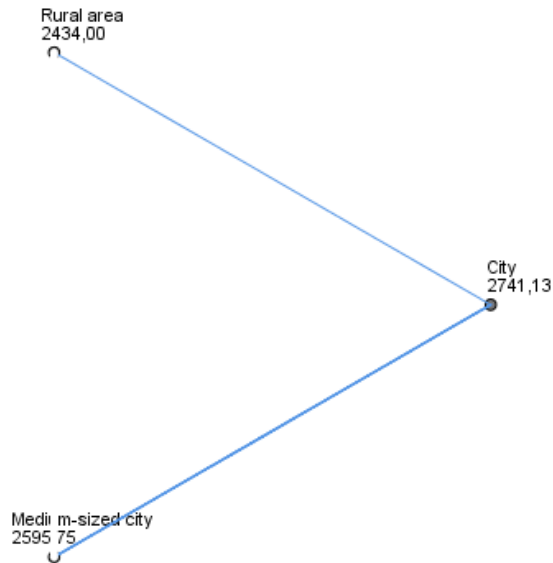


Figure 4.35 Pairwise comparisons of city size in hardware and software component

Figure 4.35 shows pairwise comparisons of city size in hardware and software component of digital trust. According to this result there are significant differences which means participants who live in rural area have significantly higher level in hardware and software component of digital trust than participants who live in city ($H= 307.135$, $Z=4.546$, $p<.01$). Also, participants in medium-sized city have significantly higher level in hardware and software component of digital trust than participants who live in city ($H= 145.382$, $Z=3.013$, $p<.01$).

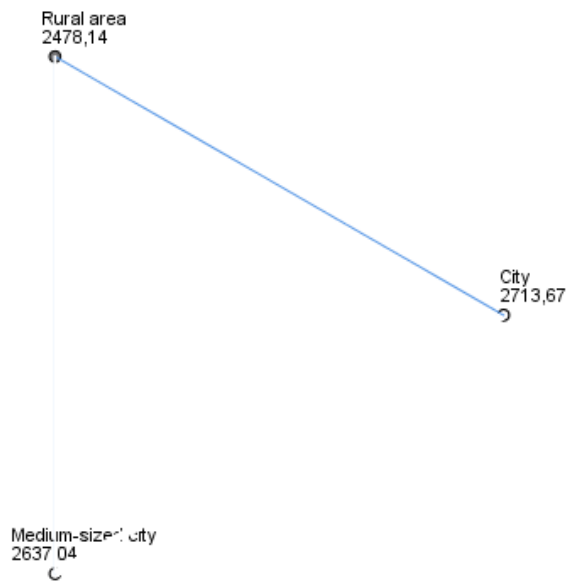


Figure 4.36 Pairwise comparisons of city Size in Electronic Devices Component

Furthermore, Figure 4.36 represents pairwise comparison of city size in electronic devices component. According to the results of the analysis, participants who live in rural area have significantly higher level in electronic devices component of technology level of digital trust than participants in city ($H=235.528$, $Z=3.486$, $p<.01$).

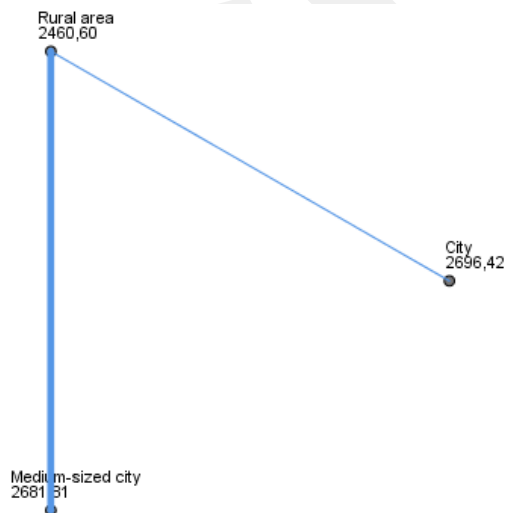


Figure 4.37 Pairwise comparisons of city size in information systems component

Last component of technology level of digital trust is information systems. According to analysis' results, participants who live in rural area have significantly higher level in information systems component than participants who live in medium-sized city and in city (medium-sized city: $H=221.207$, $Z=3.004$, $p<.01$; city: $H=235.813$, $Z=3.491$, $p<.01$) (Figure 4.37).

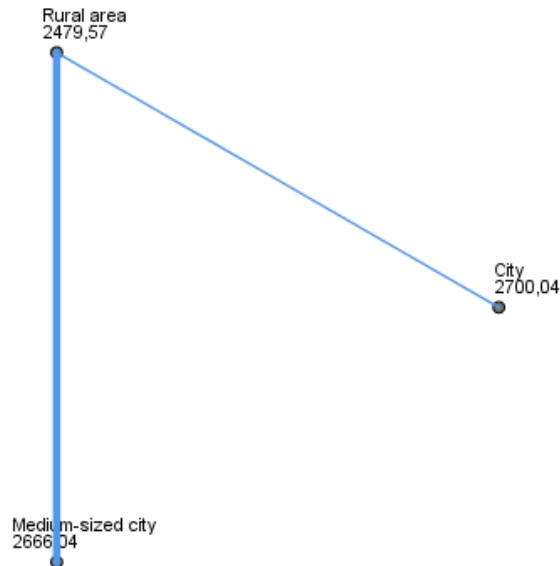


Figure 4.38 Pairwise comparisons of city size in management and other internal entities component

In management and other internal entities component, participants who live in rural area have significantly higher level of digital trust than participants who live in medium-sized city and in city (medium-sized city: $H=186.479$, $Z=2.532$, $p<.01$; city: $H=220.477$, $Z=3.264$, $p<.01$). It is visually represented in Figure 4.38.

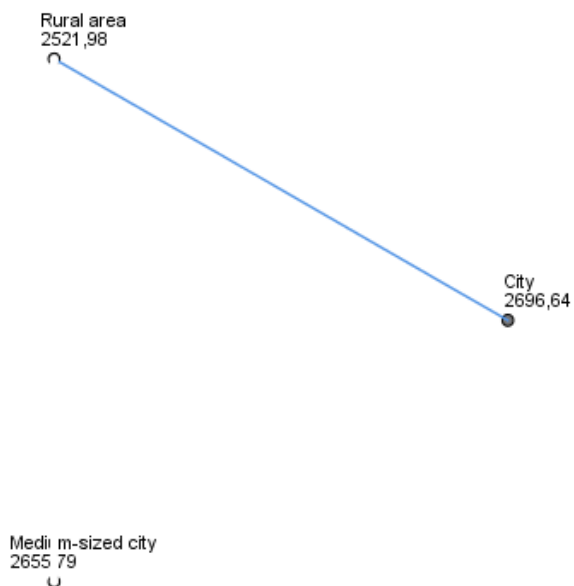


Figure 4.39 Pairwise comparisons of city size in it and data support component

Figure 4.39 Shows pairwise comparisons of city sizes in IT and data Support component of people level of digital trust. According to that result, only participants who live in rural area have significantly higher level in IT and data support component than participants who live in city ($H=174.658$, $Z=2.585$, $p<.01$).

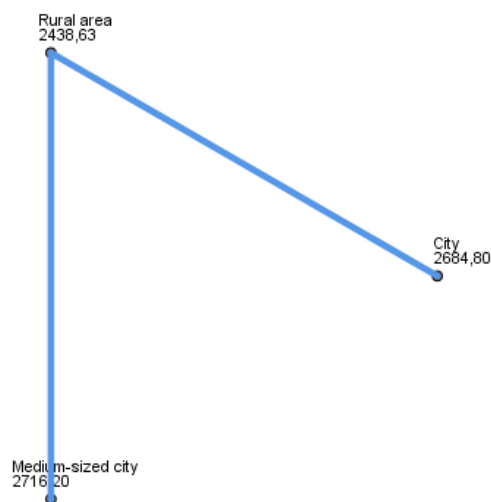


Figure 4.40 Pairwise comparisons of city size in external entities component

Last component of people level of digital trust is external entities which is represented in Figure 4.40. Participants who live in rural area have significantly higher level in external entities component than participants who live in medium-sized city and city (medium-sized city: $H=277.571$, $Z=3.769$, $p<.01$; city: $H=246.717$, $Z=3.644$, $p<.01$).

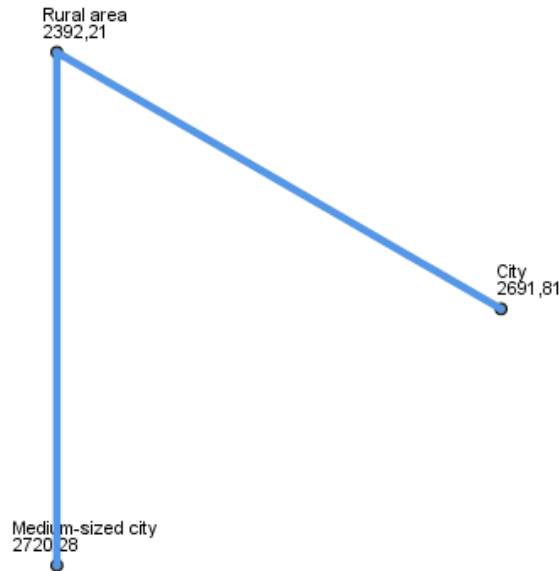


Figure 4.41 Pairwise comparisons of city size in data protection and privacy component

When the first component of people level of digital trust is considered, it is found that again participants who live in rural area have significantly higher level in data protection and privacy component than participants who live in medium-sized city and city (medium-sized city: $H=328.077$, $Z=4.455$, $p<.01$; city: $H=299.602$, $Z=4.435$, $p<.01$). Figure 4.41 Shows the pairwise comparison of this result.

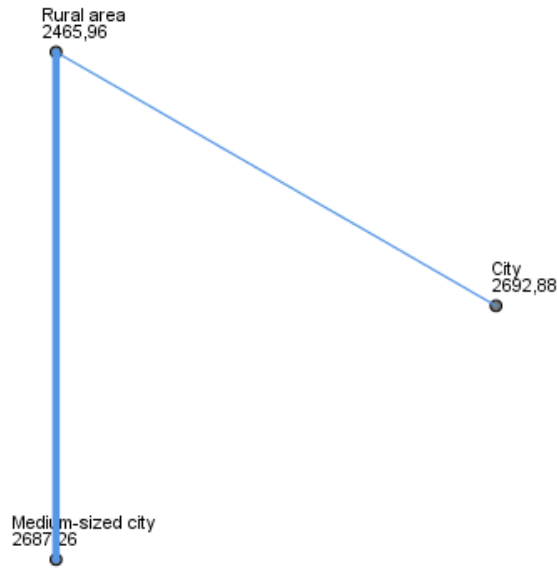


Figure 4.42 Pairwise comparisons of city size in internet and social media use component

Lastly, the last component of people level of digital trust is represented in Figure 4.42. According to the results of follow-up analysis, it is found that again participants who live in rural area significantly higher level in internet and social media use component than participants who live in medium-sized city and city (medium-sized city: $H=221.300$, $Z=3.005$, $p<.01$; city: $H=226.920$, $Z=3.359$, $p<.01$).

4.6. Digital Trust Components Across Expatriate

In order to explore digital trust components across academic degrees Munzel-Bruner analysis was conducted. For follow-up, Mann-Whitney U analysis has been conducted for being expatriate or not (expatriate, not expatriate) on each dependent variable which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use.

Table 4.11 Relative effects of digital trust components across expatriates

Being Expatriate	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
Yes	0.5193606	0.4930804	0.5145964	0.5171739	0.5277213	0.5162121	0.5230215	0.4636209	0.5073516	0.4709697
No	0.4738793	0.4564068	0.4592386	0.4560874	0.4592366	0.4715477	0.4521899	0.4484202	0.4801921	0.4673292

Table 4.12 Mean and standard deviations of each component of digital trust across being expatriate

Being Expatriate	Priority level of software quality components - Technology		Hardware and software - Technology		Electronic devices - Technology		Information systems - Technology		Management and other internal entities - People		IT and data support - People		External entities - People		Data protection and privacy - Processes		Organizational data protection and privacy - Processes		Internet and social media use - Processes	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Yes	.065	.360	-.049	.866	.019	.607	.058	.486	.057	.542	.030	.740	.061	.476	-.081	.666	.001	.709	-.065	.684
No	-.009	.491	.005	.797	-.002	.554	-.006	.552	-.006	.531	-.003	.669	-.006	.501	.008	.614	.000	.634	.007	.621

Results of Munzel-Bruner analysis revealed that there is a significant main effect of civil status on digital trust components, $F(2.01, 5329) = 6.86, p < .001$. Table 4.11 and Table 4.12 shows the details of the analysis for digital trust components across city sizes. For follow-up, Mann-Whitney U analysis have been conducted and results showed that there are significant differences in only three digital trust components across being expatriate. There is not significant difference between the expatriate participants and non-expatriate participants in priority level of software quality, hardware and software, electronic devices, information systems, IT and data support, external entities, organizational data protection and privacy components of digital trust. However, expatriate participants (mean rank=2812.73) have significantly higher level in management and other internal entities component of people level of digital trust than non-expatriate participants (mean rank=2650.14), $U=1107084.00, Z=-2.223, p<.05$. Also, non-expatriate participants (mean rank=2684.50) have significantly higher level in data protection and privacy component of process level of digital trust than expatriate participants (mean rank=2471.14), $U=1273439.00, Z=2.917, p<.05$. Lastly, non-expatriate participants (mean rank=2680.56) have significantly higher level in internet and social media use component of process level of digital trust than expatriate participants (mean rank=2510.30), $U=1254367.00, Z=2.328, p<.05$.

4.7. Digital Trust Components Across Personality

In this study personality data was collected by using the Ten-Item Personality Inventory. According to these data the big five personality dimensions which are extraversion, agreeableness, conscientiousness, emotional stability and openness to experience scores were calculated. In order to reveal the correlation between these five personality dimensions and digital trust components, Spearman's correlation coefficient is used.

Table 4.13 Correlation coefficients between five personality dimensions and components of digital trust

Personality	Priority level of software quality components - Technology	Hardware and software - Technology	Electronic devices - Technology	Information systems - Technology	Management and other internal entities - People	IT and data support - People	External entities - People	Data protection and privacy - Processes	Organizational data protection and privacy - Processes	Internet and social media use - Processes
Extraversion	-,113**	-,094**	-,089**	-,120**	-,103**	-,091**	-,105**	-,087**	-,105**	-,095**
Agreeableness	-,078**	-,172**	-,188**	-,121**	-,169**	-,185**	-,132**	,130**	-,184**	-,165**
Conscientiousness	-,003	,029*	,043**	,035*	,025	,032*	,048**	,059**	,011	,083**
Emotional Stability	,057**	,006	-,004	,020	,004	,007	,017	,114**	,004	,023
Openness to Experience	-,074**	-,033*	-,024	-,036**	-,041**	-,034*	-,026	-,018	-,051**	-,031*

Ns=not significant (p>.05), *p<.05, **p<.01

Result for each dimension and component were shown in Table 4.13. This result tells that extraversion dimension of personality is significantly correlated with the priority level of software quality, $r = -.113$, hardware and software, $r = -.094$, electronic devices, $r = -.089$, and information systems, $r = -.120$, components of technology level of digital trust; also it is significant correlated with the management and other internal entities, $r = -.103$, IT and data support, $r = -.091$, external entities, $r = -.105$ components of people level of digital trust. Furthermore, extraversion is significantly related to data protection and privacy, $r = -.087$, organizational data protection and privacy, $r = -.105$, and internet and social media use, $r = -.095$ components of process level of digital trust.

Table 4.13 also shows that agreeableness dimension of personality is significantly correlated with the priority level of software quality, $r = -.078$, hardware and software, $r = -.172$, electronic devices, $r = -.188$, and information systems, $r = -.121$, components of technology level of digital trust; also it is significant correlated with the management and other internal entities, $r = -.169$, IT and data support, $r = -.185$, external entities, $r = -.132$ components of people level of digital trust. Furthermore, extraversion is significantly related to data protection and privacy, $r = -.130$, organizational data protection and privacy, $r = -.184$, and internet and social media use, $r = -.165$ components of process level of digital trust.

Extraversion and agreeableness are related with all components of digital trust, but conscientiousness is related with just some components. According to the results of the study conscientiousness is significantly correlated with hardware and software, $r = .029$, electronic devices, $r = .043$, and information systems, $r = .035$, components of technology level of digital trust; also, it is significantly correlated with IT and data support, $r = .032$, external entities, $r = .048$ components of people level of digital trust. Furthermore, extraversion is significantly related to data protection and privacy, $r = .059$, organizational data protection and privacy, $r = .011$, and internet and social media use, $r = .083$ components of process level of digital trust. Only it is not related to priority level of software quality component of technology level and management and other internal entities component of people level of digital trust.

Furthermore, emotional stability dimension of personality is significantly correlated with just priority level of software quality component $r = .057$ of technology level and data protection and privacy component $r = .114$ of process level of digital trust.

Finally, openness to experience dimension of personality is significantly correlated with the priority level of software quality, $r = -.113$, hardware and software, $r = -.094$, and information systems, $r = -.120$, components of technology level of digital trust; also it is significant correlated with the management and other internal entities, $r = -.103$, IT and data support, $r = -.091$, components of people level of digital trust. Furthermore, extraversion is significantly related to organizational data protection and privacy, $r = -.105$, and internet and social media use, $r = -.095$ components of process level of digital trust. However, openness to experience dimension is not significantly correlated with electronic devices component of technology level, external entities component of people level and data protection and privacy component of process level of digital trust.

4.8. Summary

All conducted analyses and their results were summarized in the following Table 4.14.

Table 4.14 Research questions, variables, analyses, and results

Related Research Question	Independent Variable	Dependent Variable	Conducted Analysis	Results
RQ1-Is there any significant difference between age groups in terms of digital trust?	Age Groups (18 or younger, age range 19-28, age range 29-38, age range 39-48, age range 49-58, 59 and older)	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use)	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect $F(13.10, 5329) = 4.26$, $p < .001$.
RQ1	Age Groups	priority level of software quality (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences $F(5, 5329) = 97.196$, $p < .05$
RQ1	Age Groups	Hardware and software (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences $F(5, 5329) = 73.640$, $p < .05$
RQ1	Age Groups	electronic devices component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences $F(5, 5329) = 112.051$, $p < .05$
RQ1	Age Groups	information systems component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences $F(5, 5329) = 148.697$, $p < .05$

Table 4.14 Continued

RQ1	Age Groups	management and other internal entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F(5, 5329) = 125.107, p<.05
RQ1	Age Groups	IT and data support component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F(5, 5329) = 79.543, p<.05;
RQ1	Age Groups	external entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F(5, 5329) = 162.953, p<.05
RQ1	Age Groups	data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F(5, 5329) = 146.481, p<.05
RQ1	Age Groups	organizational data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F(5, 5329) = 96.581, p<.05
RQ1	Age Groups	internet and social media use component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences F (5, 5329) = 77.664, p<.05
RQ2: Is there any significant difference between gender groups in terms of digital trust?	Gender (Female, LGBT-Q, Male)	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect F (3.86, 5329) = 7.85, p < .001

Table 4.14 Continued

RQ2	Gender Groups	priority level of software quality (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant differences $F(2, 5329) = 11.704, p < .01$
RQ2	Gender Groups	Hardware and software (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ2	Gender Groups	electronic devices component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ2	Gender Groups	information systems component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 13.753, p < .01$
RQ2	Gender Groups	management and other internal entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 7.429, p < .05$
RQ2	Gender Groups	IT and data support component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ2	Gender Groups	external entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 10.663, p < .01$
RQ2	Gender Groups	data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 26.750, p < .01$
RQ2	Gender Groups	organizational data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference

Table 4.14 Continued

RQ2	Gender Groups	internet and social media use component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 9.918, p < .01$
RQ3: Is there any significant difference between civil status groups in terms of digital trust?	Civil Status Groups (Single, Married, Separated or Divorced, Widowed)	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect $F(5.96, 5329) = 203.203, p < .001$
RQ3	Civil Status Groups	priority level of software quality (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 45.596, p < .01$
RQ3	Civil Status Groups	Hardware and software (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 34.581, p < .01$
RQ3	Civil Status Groups	electronic devices component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 53.267, p < .01$
RQ3	Civil Status Groups	information systems component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 64.903, p < .01$
RQ3	Civil Status Groups	management and other internal entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 47.253, p < .01$

Table 4.14 Continued

RQ3	Civil Status Groups	IT and data support component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3,5329) = 45.211, p < .01$
RQ3	Civil Status Groups	external entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 56.626, p < .01$
RQ3	Civil Status Groups	data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ3	Civil Status Groups	organizational data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 46.307, p < .01$
RQ3	Civil Status Groups	internet and social media use component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(3, 5329) = 13.108, p < .01$
RQ4: Is there any significant difference between education level groups in terms of digital trust?	Education Level	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect $F(15.14, 5329) = 12.25, p < .001$

Table 4.14 Continued

RQ4	Education Level (Post-Doctoral (Fellowships), Post-Graduate (Doctoral, PhDs), Graduate (Master's Degree), Bachelor's Degree, Technical, Vocational, or Skill Diploma, Middle School / Senior High School Diploma, Junior High School Diploma, Elementary Diploma, Primary Diploma)	priority level of software quality (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8,5329) = 60.921, p < .01$
RQ4	Education Level	Hardware and software (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8, 5329) = 33.475, p < .01$
RQ4	Education Level	electronic devices component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8,5329) = 38.634, p < .01$

Table 4.14 Continued

RQ4	Education Level	information systems component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8,5329) = 58.524, p < .01$
RQ4	Education Level	management and other internal entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8, 5329) = 40.421, p < .01$
RQ4	Education Level	IT and data support component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8,5329) = 30.810, p < .01$
RQ4	Education Level	external entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8, 5329) = 31.714, p < .01$
RQ4	Education Level	data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8, 5329) = 60.416, p < .01$
RQ4	Education Level	organizational data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ4	Education Level	internet and social media use component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(8, 5329) = 35.970, p < .01$

Table 4.14 Continued

RQ5: Is there any significant difference between city size groups in terms of digital trust?	City Size (City, Medium-sized city, Rural area)	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use)	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect F (4.52, 5329) = 65.811, p<.001
RQ5	City Size	priority level of software quality (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2,5329) = 7.912, p<.01
RQ5	City Size	Hardware and software (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2, 5329) = 24.841, p<.01
RQ5	City Size	electronic devices component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2,5329) = 12.835, p<.01
RQ5	City Size	information systems component (technology level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2,5329) = 12.430, p<.01
RQ5	City Size	management and other internal entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2, 5329) = 10.652, p<.01
RQ5	City Size	IT and data support component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference F(2,5329) = 6.758, p<.01

Table 4.14 Continued

RQ5	City Size	external entities component (people level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 15.558, p < .01$
RQ5	City Size	data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 22.327, p < .01$
RQ5	City Size	organizational data protection and privacy component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	No significant difference
RQ5	City Size	internet and social media use component (process level of digital trust)	Kruskal-Wallis analysis (follow-up)	Significant difference $F(2, 5329) = 11.714, p < .01$
RQ6: Is there any significant difference between expatriate and non-expatriate groups in terms of digital trust?	Expatriate (Yes, No)	10 components of Digital trust (priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use)	Munzel-Bruner analysis which is non-parametric alternative of MANOVA	Significant main effect $F(2.01, 5329) = 6.86, p < .001$
RQ6	Expatriate	priority level of software quality (technology level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference

Table 4.14 Continued

RQ6	Expatriate	Hardware and software (technology level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	electronic devices component (technology level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	information systems component (technology level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	management and other internal entities component (people level of digital trust)	Mann-Whitney U analysis (follow-up)	Significant difference U=1107084.00, Z=-2.223, p<.05
RQ6	Expatriate	IT and data support component (people level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	external entities component (people level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	data protection and privacy component (process level of digital trust)	Mann-Whitney U analysis (follow-up)	Significant difference U=1273439.00, Z=2.917, p<.05

Table 4.14 Continued

RQ6	Expatriate	organizational data protection and privacy component (process level of digital trust)	Mann-Whitney U analysis (follow-up)	No significant difference
RQ6	Expatriate	internet and social media use component (process level of digital trust)	Mann-Whitney U analysis (follow-up)	Significant difference U=1254367.00, Z=2.328, p<.05
RQ7: Is there any relationship between personality and the level of digital trust?	Extraversion (personality dimension)	priority level of software quality	Spearman's correlation coefficient	Correlated $r = -.113$
RQ7	Extraversion	Hardware and software	Spearman's correlation coefficient	Correlated $r = -.094$
RQ7	Extraversion	electronic devices component	Spearman's correlation coefficient	Correlated $r = -.089$
RQ7	Extraversion	information systems component	Spearman's correlation coefficient	Correlated $r = -.120$
RQ7	Extraversion	management and other internal entities component	Spearman's correlation coefficient	Correlated $r = -.103$

Table 4.14 Continued

RQ7	Extraversion	IT and data support component	Spearman's correlation coefficient	Correlated $r = -.091$
RQ7	Extraversion	external entities component	Spearman's correlation coefficient	Correlated $r = -.105$
RQ7	Extraversion	data protection and privacy component	Spearman's correlation coefficient	Correlated $r = -.087$
RQ7	Extraversion	organizational data protection and privacy component	Spearman's correlation coefficient	Correlated $r = -.105$
RQ7	Extraversion	internet and social media use component	Spearman's correlation coefficient	Correlated $r = -.095$
RQ7	Agreeableness (personality dimension)	priority level of software quality	Spearman's correlation coefficient	Correlated $r = -.078$
RQ7	Agreeableness	Hardware and software	Spearman's correlation coefficient	Correlated $r = -.172$

Table 4.14 Continued

RQ7	Agreeableness	electronic devices component	Spearman's correlation coefficient	Correlated $r = -.188$
RQ7	Agreeableness	information systems component	Spearman's correlation coefficient	Correlated $r = -.121$
RQ7	Agreeableness	management and other internal entities component	Spearman's correlation coefficient	Correlated $r = -.169$
RQ7	Agreeableness	IT and data support component	Spearman's correlation coefficient	Correlated $r = -.185$
RQ7	Agreeableness	external entities component	Spearman's correlation coefficient	Correlated $r = -.132$
RQ7	Agreeableness	data protection and privacy component	Spearman's correlation coefficient	Correlated $r = -.130$
RQ7	Agreeableness	organizational data protection and privacy component	Spearman's correlation coefficient	Correlated $r = -.184$

Table 4.14 Continued

RQ7	Agreeableness	internet and social media use component	Spearman's correlation coefficient	Correlated $r = -.165$
RQ7	Conscientiousness (personality dimension)	priority level of software quality	Spearman's correlation coefficient	Not Correlated
RQ7	Conscientiousness	Hardware and software	Spearman's correlation coefficient	Correlated $r = .029$
RQ7	Conscientiousness	electronic devices component	Spearman's correlation coefficient	Correlated $r = .043$
RQ7	Conscientiousness	information systems component	Spearman's correlation coefficient	Correlated $r = .035$
RQ7	Conscientiousness	management and other internal entities component	Spearman's correlation coefficient	Not Correlated
RQ7	Conscientiousness	IT and data support component	Spearman's correlation coefficient	Correlated $r = .032$

Table 4.14 Continued

RQ7	Conscientiousness	external entities component	Spearman's correlation coefficient	Correlated $r = .048$
RQ7	Conscientiousness	data protection and privacy component	Spearman's correlation coefficient	Correlated $r = .059$
RQ7	Conscientiousness	organizational data protection and privacy component	Spearman's correlation coefficient	Correlated $r = .011$
RQ7	Conscientiousness	internet and social media use component	Spearman's correlation coefficient	Correlated $r = .083$
RQ7	Emotional Stability (personality dimension)	priority level of software quality	Spearman's correlation coefficient	Correlated $r = .057$
RQ7	Emotional Stability	Hardware and software	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	electronic devices component	Spearman's correlation coefficient	Not Correlated

Table 4.14 Continued

RQ7	Emotional Stability	information systems component	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	management and other internal entities component	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	IT and data support component	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	external entities component	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	data protection and privacy component	Spearman's correlation coefficient	Correlated $r = .114$
RQ7	Emotional Stability	organizational data protection and privacy component	Spearman's correlation coefficient	Not Correlated
RQ7	Emotional Stability	internet and social media use component	Spearman's correlation coefficient	Not Correlated

Table 4.14 Continued

RQ7	Openness to Experience (personality dimension)	priority level of software quality	Spearman's correlation coefficient	Correlated $r = -.113$
RQ7	Openness to Experience	Hardware and software	Spearman's correlation coefficient	Correlated $r = -.094$
RQ7	Openness to Experience	electronic devices component	Spearman's correlation coefficient	Not Correlated
RQ7	Openness to Experience	information systems component	Spearman's correlation coefficient	Correlated $r = -.120$
RQ7	Openness to Experience	management and other internal entities component	Spearman's correlation coefficient	Correlated $r = -.103$
RQ7	Openness to Experience	IT and data support component	Spearman's correlation coefficient	Correlated $r = -.091$
RQ7	Openness to Experience	external entities component	Spearman's correlation coefficient	Not Correlated

Table 4.14 Continued

RQ7	Openness to Experience	data protection and privacy component	Spearman's correlation coefficient	Not Correlated
RQ7	Openness to Experience	organizational data protection and privacy component	Spearman's correlation coefficient	Correlated $r = -.105$
RQ7	Openness to Experience	internet and social media use component	Spearman's correlation coefficient	Correlated $r = -.095$

CHAPTER 5

DISCUSSION AND CONCLUSION

The main purpose of this study is to examine the impact of demographic information, especially age, gender, civil status, education level, city size and being expatriate on digital trust. Also, the other purpose of this study is to explore the relationship between personality which is measured by using TIPI and level of digital trust. In order to examine the relationship between demographic characteristics and level of digital trust, descriptive research methodology, which is one of the quantitative research methods, has been employed. Independent variables of this study are demographic characteristics that are age, gender, civil status, education level, city size and being expatriate and also personality dimensions. Level of digital trust, under 10 components which are priority level of software quality, hardware and software, electronic devices, information systems, management and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use, is the dependent variable of this study. For analysis of collected data, Munzel-Bruner analysis which is non-parametric alternative of MANOVA was conducted on the components of digital trust across each demographic information (age, gender, civil status, education level, city size and being expatriate and also personality dimensions). For follow-up analysis, Kruskal-Wallis H tests and Mann-Whitney U tests were applied. Also, in order to reveal the correlation between these five personality dimensions and digital trust components, Spearman's correlation coefficient was used.

According to the results of this study age is a significant affecting factor on level of digital trust. When each component examined separately, results showed that there are significant differences in all digital trust components, which are level of software quality, hardware and software, electronic devices, information systems, management

and other internal entities, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, internet and social media use, across age groups. In order to investigate age group differences follow-up analysis revealed that younger age groups have less level in each of the component of digital trust. Therefore, it can be said that when the individual gets older, level of digital trust increases. Previous studies also strengthened this result [38, 39, 40]. Having low level of digital trust in younger ages can be explained by being exposed to technological innovations more than older ages. Because new generation is born directly the inside of the technology. Therefore, they are also called as Net Generation [54] they are aware of positive and negative sides of technologies. Also, this situation can be explained by the Digital Divide [53] because younger people uses the internet, social media or applications actively. Hence, that situation can affect their digital trust level.

The second independent variable of the study is gender. Results showed that gender is a significant factor on some components of digital trust. These components are priority level of software quality, information systems, management and other internal entities, external entities, data protection and privacy, and internet and social media use. Follow-up analysis revealed that while LGBT-Q participants has less than male, they have higher than female in priority level of software quality component. Male participants have higher than LGBT-Q and female participants in information systems component. Female participants have less level than male in external entities component. Female participants also have less level than LGBT-Q and male participants in data protection and privacy component. Lastly, again female participants have less level in internet and social media component of digital trust. Although different components have different comparisons, meanly it can be said that male participants have higher level of digital trust in some components. When general trust is considered, [35] found a different result. According to that study females have higher level in trust than males. May be digital environment has changed the situation. In addition, [36] and [37] studies which examined relation between gender and trust in digital environment also support the result of this study. This significant gender difference may be explained by Diffusion of Innovation theory [51]. According to this theory, an individual should go through 5 stages to accept an innovation; these stages

are knowledge, persuasion, decision, implementation, and confirmation. Also, these stages are changeable according to individual's attributes, knowledge and habits. In addition, TAM [52] can help to explain this gender differences.

Civil status, which is the third independent variable of this study analyzed based on the components of digital trust. Results revealed that civil status is also an affecting factor on level of digital trust. Also, there are significant differences between civil statuses in nearly all components of digital trust. Only, there is no significant difference in data protection and privacy component of process level of digital trust across civil status. When each components considered, single participants have less level than only married participants in hardware and software component, in electronic devices component, in IT and data support component, in organizational data protection and privacy, and in internet and social media use component. In addition, single participants have less level than separated or divorced participants and married participants in priority level of software quality, in information systems, in management and other internal entities, and in external entities components. Mainly, single participants have less level of digital trust than separated or divorced participants and married participants. [40, 42] also have similar results with this study.

The fourth independent variable is academic degree, and it is found that academic degree is an affecting factor on digital trust. Nearly in all components of digital trust there are significant differences across academic degrees, only there is no significant difference in organizational data protection and privacy component of process level of digital trust across academic degrees. Follow-up analysis revealed that participants who had Middle School/Senior High School Diploma have higher level than participants who had Bachelor's degree, and Graduate (Master's degree) in nearly all significant components of digital trust. Just, participants with Graduate (Master's degree) have less level than participants with Bachelor's degree in internet and social media use component of process level of digital trust. In other words, it can be said that participants who have lower-level academic degree have higher-level digital trust. This result is the exact opposite situation in previous studies [42, 43]. Maybe, participants who have higher-level academic degree are more aware of harmful sides of digital world. Therefore, they can be more skeptical in digital world and have less

level of digital trust. This can be also explained by Digital Divide [53] because participants with higher-level academic degree have more opportunity to reach technological innovations or digital environment than others. Hence, this situation can effect their knowledge about them and so their digital trust.

City size is the fifth independent variable of this study. It is analyzed for components of digital trust and results showed that city size is also an affecting factor on digital trust. According to the follow-up analysis, there are significant differences in nearly all digital trust components across city sizes. Only there is no significant difference in organizational data protection and privacy component of process level of digital trust across city sizes. In all significant components of digital trust, participants who live in rural areas have higher levels than participants who live in city. That means, participants who live in rural areas have higher-level of digital trust than participants who live in the city. This result can be explained similarly with result of education level; because in rural area individuals have less opportunity to reach technological innovations or digital world. When they reach it, maybe they use it without seeing the harmful sides of it. Therefore, they can have higher level of digital trust. This situation also can be explained by Digital Divide [53].

The last independent variable is being expatriate. According to the analysis, it is also an affecting factor on digital trust. However, when follow-up analysis conducted, results showed that there are significant differences between being expatriate or non-expatriate in only three components which are management and other internal entities, data protection and privacy, and internet and social media use. While expatriates have higher level in management and other internal entities component than non-expatriates; non-expatriates have higher level than expatriates in data protection and privacy component and in internet and social media use component.

Moreover, this study is aimed to explore correlations between five personality dimensions and components of digital trust. Conducted analysis revealed that extraversion and agreeableness dimensions are significantly correlated with all components of digital trust. However, the other three dimensions are significantly correlated with some components of digital trust. Conscientiousness dimension has

correlations with hardware and software, electronic devices, information systems, IT and data support, external entities, data protection and privacy, organizational data protection and privacy, and internet and social media use. Emotional Stability dimension has only correlations with priority level of software quality component, and data protection and privacy component. Lastly, openness to experience dimension has correlations with priority level of software quality, hardware and software, information systems, management and other internal entities, IT and data support, organizational data protection and privacy, and internet and social media use components.

In conclusion, this study investigated the affecting factors on digital trust and found that age, gender, civil status, academic degree, city size and being expatriate are affecting factors on digital trust. Also, five dimensions of personality have correlation with digital trust. These are important results especially for business life. If the organizations give importance to these demographics and personality dimensions, they can improve their customers' level of digital trust about their organizations and they can increase their customer number, profit, and loyalty of their customer, quality of social and business relation with their customers and with other companies [11, 13, 18, 22, 29].

Furthermore, trust has a very significant effect on encouraging purchase through the Internet [30]. Therefore, by using the results of this study, companies can encourage customers to purchase online. They can create more appealing campaigns to increase the number of customers. This study can be used as a guidance if any company or any organization wants to increase the level of digital trust of their customers.

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